

PLATFORM STUDIES

SUPER POWER, SPOONY BARDS, AND SILVERWARE

The Super Nintendo Entertainment System

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Introduction: Welcome to the Dark Side

This book is about the Super NES—more precisely, it is a book about a certain framing of the Super NES as the technological enforcer of economic and cultural corporate wars in the video game industry. This book is about Nintendo, how it lived the “16-bit console wars” of 1989–1995, and why it went from great to good to bad to worse in the span of 20 years. Ultimately, it is a critical history of Nintendo’s fall from grace, from the height of the Golden Age brought by its 8-bit NES console (1985–1990) through a waning Silver Age with its 16-bit Super NES (1990–1996) that ultimately led to a prolonged Dark Age with the Nintendo 64 and Game-Cube consoles (1996–2006). The bulk of the Super NES’s lifespan is thus intricately tied to Nintendo’s Silver Age, when things began to go wrong for the firm. Figures 0.1 and 0.2 contain some console sales and market share data that easily drive that point home; as can be seen, were it not for the sudden and unexpected “Wiiivival” of 2006, Nintendo’s long slide downward would have brought them ever farther away from the spotlight and into the darkened margins of home video game consoles.¹

“But,” the gamer who grew up with the console objects when reading this, “the Super NES is routinely hailed as one of the best consoles of all time! It had an incredible library of games!” And this is true. Osamu Inoue’s *Nintendo Magic* presents the typically held (if overly positive) view when discussing the belated arrival of the SNES against its rivals: “In the end, the delays in the SNES’s development only stoked the fires of fan enthusiasm, and the 16-bit wars ended with the leading brand Nintendo’s overwhelming victory” (Inoue 2010, 135). Witness Retro Gamer’s hardware profile of the console and its section, “Why the Super Nintendo was great”: “Nintendo’s 16 bit powerhouse represents the true ‘Golden Age’ of

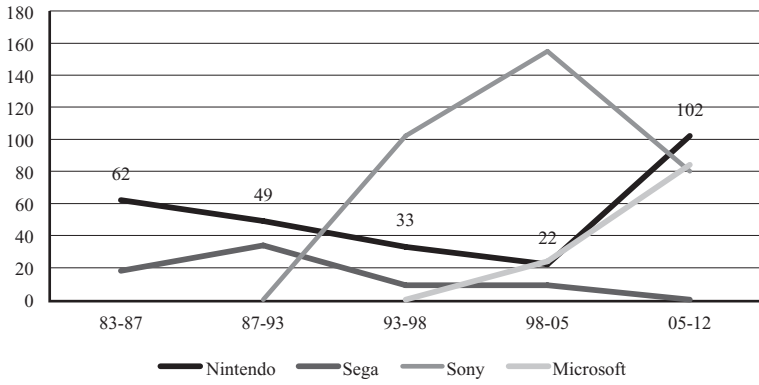


Figure 0.1 Lifetime worldwide Nintendo home console sales, in million units, compared with competitors from 1983 to 2012.

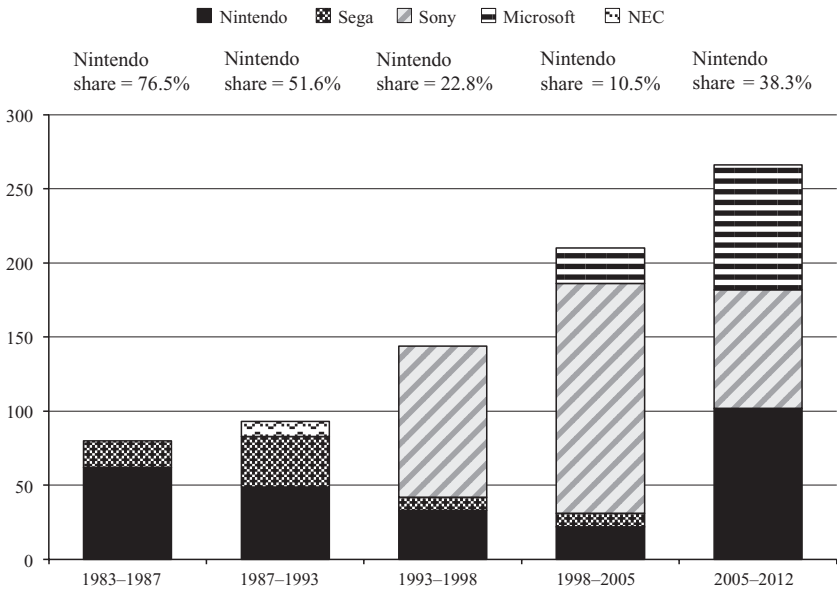


Figure 0.2 Nintendo's market share derived from lifetime worldwide console sales.

videogaming as the likes of Konami, Squaresoft, and even Nintendo itself have arguably never been on better form than when designing games for this machine” (Retro Gamer 2013, “Super Nintendo” entry). Or Don Reisinger from CNet’s article, conveniently titled “The SNES Is the Greatest Console of All Time”:

In essence, the NES was the building block of American gaming in the ‘80s and the SNES was first console to be drastically different (and better) than its predecessor. [...] Instead of releasing a veiled copy of the NES to get in on the fight with Sega earlier, Nintendo created a follow-up that was worthy of the “Super” moniker and gave developers the license they needed to create the legendary titles that we still play today. (Reisinger 2008)

Throughout this book, I will argue the opposite of these accounts on every point mentioned. The Super NES was not a powerhouse, and it does not represent a Golden Age but rather a Silver Age (more on this later). The Super NES was neither drastically different nor better than its predecessor. It was a veiled copy of the NES released too late to play catch-up with Sega. The “Super” moniker was just *markethin*: thin marketing. Nintendo didn’t give anything to developers; it was forced to concede some control because they fought for it and went to look elsewhere. The only point I won’t dispute is whether game developers have “arguably” never been on better form than at that time.

The Platform With a Thousand Faces

Now, even in the face of the arguments I will develop here, the Super NES still continues to be regarded as a highly successful platform. Why is that? Answering this question requires us to change the way we think about platforms and eschew the traditional question “What is a platform?” for another one: “What is a platform *to whom*?” The Super NES was an incredibly strong platform filled with high-quality games for gamers; it was a one-tracked and short-sighted vision by Nintendo to keep its stranglehold on the market, a strict and intransigent tool of control against independent game developers, a giant leap forward in controller ergonomics, a conservative cement that resisted game genre experimentation, the site of schizophrenic promotional practices, a refuge for concerned parents, flash over substance, and the list could go on. The Super NES asks us to recognize the paradoxical situation where a game console can

be recognized as a great platform sporting an extensive library of high-quality titles by gamers, rake in good profits for its owner, and yet simultaneously weaken its overall positioning and long-term success. In short, it asks us to consider for a moment how we evaluate a game platform's success.

Conventional wisdom declares the SNES successful because it sold more units than the Genesis, with reported lifetime worldwide sales of 49.1 million SNESes (Nintendo Co. 2016a) against an often-cited 29 million Geneses.² If we take a step back and look at the broader history, however, the SNES period is when Nintendo lost close to half its market share while Sega's tripled. We could thus declare the SNES a failure due to its inability to maintain the status quo. Perhaps we should count the number of games produced for a platform because, after all, gamers buy consoles to play games. Or maybe we should count the total number of software sales because games that don't sell are only unwanted clutter and expenses for their publisher. However, platform owners may not care that third-party developers' games do not sell if their own games are selling and the profit margins are high; maybe the only metric we should measure is the platform owner's hardware and software revenue. But do immediate profits qualify as "winning" when market share has shrunk? After all, conventional economics and business studies describe market share as a valuable long-term strategic advantage. And on and on it goes.

In this light, the Super NES stands as Nintendo's Pyrrhic victory, a symbol of its stubborn and uncompromising conservative nature. This much can be gathered from its name. The Super NES is exactly that: it's the NES, only "Super," whatever that means. The name betrays the console's rushed development, Nintendo's will to capitalize on the NES's success, and the relative emptiness of its proposal to consumers. It almost feels like a newer, improved version of its NES rather than a unique new console. Incidentally, that's exactly what many people gathered back then: the *Economist* claimed Nintendo was set to launch "a professional version of its best-selling 'Famicom'" (The Economist, August 18, 1990, 60). Even in contemporary writings, people make that mistake: When Daniel Sloan reviews the Famicom's success in Japan, he sandwiches a sentence in the middle of the discussion to the effect that "an upgrade came in 1990 with the 16-bit Super Famicom" (Sloan 2010, 70). In other words, the SNES, as a souped-up "Famicom 2.0," is not terribly interesting technologically, encouraging game developers to keep doing what they were doing, only slapping a "Super" on it.

Beyond Technology: The Commercial Platform

To put it as bluntly as I can, the SNES makes a boring case for a platform study, in the usual sense of the term defined by series editors Ian Bogost and Nick Montfort: “Platform studies is about the connection between technical specifics and culture. In one direction, it allows investigation of how particular aspects of a platform’s design influenced the work done on that platform” (Bogost and Montfort 2009a). Fortunately, another direction is available: “In the other direction, it looks at how social, economic, cultural, and other factors led platform designers to put together systems in particular ways” (Bogost and Montfort 2009a). Montfort and Consalvo’s (2012) piece on the Sega Dreamcast provides an example of the latter by focusing on Sega’s development policies with the console. Thomas Apperley and Darshana Jayemanne (2012, 12) situated this approach within the “material turn” of game studies: “the materiality of platforms can be turned [...] also] outwards to focus on the organizational structure that allows the platform to be produced.”

I want to push this direction further and consider platforms not only as technological objects but also as the embodiments of marketing forces that shape the creative works performed on that platform. This conception of the platform is perfectly suited for Nintendo’s stringent controlled environments. The first criterion from which game developers and publishers select a platform is often the business realities of the platform. No one delves into the arcane programming and technical constraints of SNES game development without making sure they will be able to actually release and market their game.

Robert Pelloni found that out when he spent reportedly five years and 15,000 hours making “Bob’s game,” a one-man project for the Nintendo DS. Nintendo would not send Pelloni a software development kit (SDK) needed to actually produce the game for the platform because Pelloni had no secure office space, staff, or other indicators of him acting as a business rather than an individual. This situation shows how the business practices of platform owners can shape the creative expression of game developers just as much as technological constraints. Platforms are not technology constructs that exist by themselves, with cultural or marketing considerations gravitating somewhere around them; a platform *is* a technology *and* a culture *and* a marketing construct, and these elements are indissociable. Thus, I have consciously named the various economic models described in the book with the same initials as their host platform or corporation, as appropriate; the Nintendo Entertainment System and the Nintendo Economic System, for instance, are flipsides to the same coin.

Thus, although the Super NES may be rather straightforward as a technological platform, it brings a unique opportunity to expand and even redefine how we view game platforms, by putting (perhaps counterintuitively) business and marketing first, culture second, and technology last. In these terms, a platform is a device meant to regulate and protect a firm's market, and platform studies can benefit from a corpus of academic work that has seldom been integrated in game studies: business studies and its neighboring fields of innovation studies, economics, and management studies, which can be seen as forming a second kind of platform studies. Accordingly, one of the central contributions of this book is to articulate the dual nature of platforms as participating in both business-to-consumer (B2C) commerce and business-to-business (B2B) interactions. In Nintendo's case, the discrepancies between the two are so important that the most apt description of the firm becomes "an iron hand in a velvet glove". I will term the need to achieve balance between the fun-loving toy company image and the gravely serious tech firm at heart (Harris 2014, 133–134) the surface-and-core duality, and I will return to it throughout the rest of this book.

Kline, Dyer-Witheford, and de Peuter's framework of *Digital Play* (2003) conceptualizes the games industry as an *Interaction of Technology, Culture, and Marketing*, with three interlocking "circuits" that influence each other and collectively define the three main facets of digital play, along with their actors. The cultural circuit involves cultural texts and meanings, "the practices or activities associated with both designing and playing games," and designers, games, and players. The technology circuit involves digital artifacts, hardware and software infrastructures, and programmers and users. The marketing circuit deals with "research, advertising, and branding practices," commodities, and marketers and consumers (Kline, Dyer-Witheford, and de Peuter 2003, 50–53). Adopting this model, the book presents the interactions of these three circuits to understand the Super NES, which explains the oddities of its title.

Marketing: Nintendo's Super Power

By studying the circuit of marketing, I am pursuing a direction identified by both Consalvo (2006, 134: "Researchers of new media must continue to examine not only cultural products, but also the business practices that lead to the production and circulation of these products") and O'Donnell (2011, 85: "We have not spent enough time looking at the folks who make games or at the broader system that they are a part of"), among others. Too often the various organizations involved in the games business (individual game developers, development studios, publishers, distributors, and

retailers) are more or less lumped together in the catch-all category of “the video game industry,” whereas in truth their motivations, goals, desires, and responsibilities are often divergent. To say that “the industry wants to sell games and make money” is no more helpful than to declare that “gamers play games to have fun.” Just as the important work of game studies scholars has allowed us to go beyond the simple “gamer” term and identify different types of game players, with varying interests and value systems for approaching games, we need to unpack the “industry” and recognize its various actors for what they are: different elements playing unique roles in a larger system.

Considering platforms as part of a business ecosystem allows us to position them as sites of struggle between conflicted and conflicting parties. It provides a unique key to understanding not only some of the technical choices behind the hardware of the system but also some of the aesthetic or design choices that can be found in some of the software on offer on that platform.

A survey of literature from business studies, economics, and management will allow us to further clarify the relationships among gamers, consoles, and games in the game industry, and to highlight the contributions and specificities of Nintendo and other hardware firms. What’s a platform to its owner? How can the two traditions of platform studies, from game studies and business studies, respectively, benefit each other and allow us to better understand the complex corporate context in which the Super NES inscribes itself and the restrictions it imposes on game developers and their creative output?

Technology: The Super NES as Silverware

Computers are hardware machines meant to run software programs, and the relationship between the hardware’s configuration and the software as expressive practice forms the backbone of platform studies. The “hardware” category, of course, predates computers, and in its original sense, it designates the miscellaneous assemblage of durable goods and tools used in the household to perform various actions, whether by humans or machines—anything from hammers and screws to door handles and window sills, including wires, plumbing, and utensils. It makes sense to think of computer hardware as such, insofar as computers are tools for software developers to make things with.

Sometimes, however, things are not so simple. Think of utensils. Many homes typically use functional flatware (knives, spoons, forks, etc.) in their everyday lives, saving a set of silverware (known as a silver service in Britain or *argenterie* in French) for special occasions. Language comes

into play here, as Carolin C. Young writes: “Americans often use the term ‘silverware’ with casual, democratic optimism to refer to dining utensils of any material. Properly, the word defines any object fashioned from silver, Sheffield plate, or silver electroplate” (Young 2014, 256). Before the 20th century, America put its vast amounts of silver from the West toward producing ever-larger sets of silverware, with different items specially made for everything from lobster forks to potato chip dispensers. Because this specialized equipment required a great deal of care to maintain, it was reserved for the wealthiest strata of society or the most formal occasions, where demonstrating wealth was par for the course.

This analogy describes well a number of the SNES’s peculiarities. The SNES, as a technological platform, is a collection of components tailor-made for specific purposes—making the kinds of games Nintendo was making—rather than a flexible all-around hardware solution. Silverware also requires constant polishing, which must be done by someone knowledgeable in the treatment of silver (a silversmith or silver butler); likewise, Nintendo’s platform required specialized knowledge of the device’s operations to yield the right results, the kind of expertise that only the wealthy could afford. Finally (and perhaps obviously), there is no added functionality to silverware over regular flatware, apart from the fact that it looks nicer. Maybe the tool even starts to program its user, like Maslow’s Hammer: “I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail” (Maslow 1966, 15). As silver shines when polished, it formats people in spending a good deal of time polishing it. This admittedly harsh description applies to the Super NES as well, which formatted game developers in sticking to tried-and-true game formulas, carefully worked on and improved, and coated with the shiny polish of nice graphics throughout its lifetime. Hence, the framing of the SNES as ushering in a silver age, a period of tranquil, easy-going stability that follows the glorious but momentous summits reached during a golden age.³

Culture: Spooky Bards

Most people don’t get to meet bards nowadays, and if they did, chances are they wouldn’t insult them by referencing utensils—unless they happened to play *Final Fantasy II* on the Super NES. The memorable line “You spooky bard!”, hurled by the sage Tellah at the poor bard Edward during a dramatic scene, has been circulating over the Internet ever since the Internet took off. Back in 1991, however, it spread around through friends chatting in the schoolyard, video game magazines, and the nascent pre-Internet network culture of Bulletin Board Systems (BBS) and UseNet Groups. The

“spoony bard” expression harks back to that estranged time of yore (bardic emphasis intended) when video game culture ebbed and flowed in these distinct channels, Japan was the epicenter of game hardware and software production, and translating and localizing video games from Japan was often an expedited task.

Weird as it may sound, “spoony” is a valid English word (although an archaism), which the Merriam-Webster online dictionary defines as such: “1: silly, foolish; *especially*: unduly sentimental; 2: being sentimentally in love.” This is a perfectly accurate way for the sage Tellah to describe (and mildly insult) the bard Edward, with whom his daughter Anna eloped in the game’s fiction. But it also perfectly describes the role and attitude that many gamers harbor regarding their preferred video game platform (e.g., what the Internet refers to as “Nintendo fanboys”). I posit that, in effect, gamers too often become spoony bards, foolishly enamored with their video game machines, sentimentally—and unduly—attached to them, and singing their praises far and wide for anyone to hear. The Super NES, the “queen of 16-bits” as the French call it (see Audureau et al. 2013 or *JV Mag* 2015), certainly had its share of spoony bards, in part, because it rode on the success of the NES and its Nintendo Generation. This latter reality highlights the importance of properly situating the SNES among its historical context.

The SNES in Video Game History, Beyond Legendary Luminaries

In a way, the study of any platform is always historical to some degree. But beyond that general sentiment, I feel that Nintendo’s home consoles are too important and had too decisive an impact on the games industry and video game history at large to be treated without privileging a historical angle. As it will soon appear when reading the various chapters, to understand the SNES is to understand its situation and the role it played in video game history.

Since Leonard Herman’s *Phoenix: The Fall & Rise of Video Games* (1994), a number of books presenting the general history of games have been written by journalists and learned game enthusiasts (Ichbiah 1997, Kent 2001, DeMaria and Wilson 2002, Donovan 2010, etc.). These writings are typically a mix between summaries of factual data and interviews of the key actors who were part of the events. They chronicle the tribulations of companies, consoles, games, and individuals, with a focus on sales data, market penetration rates, major “milestone” game releases, clever advertising campaigns, stunts at trade shows, and social controversies caused

by a few games. These general books are complemented by other works that focus on a particular region, historical period, or account.

Given Nintendo's importance in the video game industry, it should come as no surprise that multiple books, papers, and articles have already been written about the firm and its games. A fair portion of these writings can be characterized as positivistic and often admiring narratives, including *Power-Up: How Japanese Video Games Gave the World an Extra Life* (Kohler 2004), *Nintendo Magic* (Inoue 2010), and *Super Mario: How Nintendo Conquered America* (Ryan 2012). Ironically, considering its title, David Sheff's seminal 1993 book *Game Over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children* paints a brightly colored picture of Nintendo of America due to the novelistic style and "Nintendo insider" point of view. Among generalist writings, Tristan Donovan's *Replay: The History of Video Games* (2010) and Steven L. Kent's *Ultimate History of Video Games* (2001) also provide good examples of this "celebratory insider view," which is also found in Florent Gorges' otherwise excellent ongoing *History of Nintendo* series (begun in 2008).

Another question is worth asking: What are these histories founded on? Traditionally, Nintendo is as tight-lipped a firm as they come:

Nintendo prefers not to have its management discussed by outsiders, even eschewing praise. As a result, despite the company's success, opportunities for individual interviews are extremely rare, and there are essentially no publications that deal with Nintendo's management. [...] At the root of that corporate culture is the assumption that even if they were to discuss their management, outsiders wouldn't understand—an eminently Nintendo-like notion. Thus, not seeing any point in such discourses, they practice rigorous information control, consistently keeping exposure to the minimum possible. (Inoue 2010, 8–9)

Hence, Nintendo histories come from a limited number of first-hand interviews, constantly replicated and hinted at, to the point of becoming hearsay, rumors, and "misinformation echo chambers" that ultimately twist and bend video game historiography (Therrien and Picard 2014). When fan website owner "tsr" interviewed Atari programmer Ed Logg about his implication in Tengen and their development of a *Tetris* cartridge for the NES without Nintendo's authorization (a legal saga covered in Sheff's 1993 book *Game Over*), the discussion quickly addressed the issue of historical point of view:

EL [Ed Logg]: The books are definitely ... They talked to Peter Main and [Howard] Lincoln [from Nintendo of America].

tsr [interviewer]: Like Game Over.

EL: Yeah, in particular. It's definitely from their side of the story. (tsr, c.2000)

Because our current Nintendo histories are both rare and positivistic, they slip from rumor into legend, becoming alluring, impressive, greater-than-life affairs. They typically present the objectives of key Nintendo personnel and the obstacles they had to tackle, inviting the reader to identify with the protagonists and celebrate the witty and audacious solutions to their problems. The cast of characters may be presented as the *dramatis personae* (word for word in Parish et al. 2015, 12–17; implicit in the “history of NOA” [Nintendo of America] chapter in Harris 2014, 35–59) and typically star Howard Lincoln, Minoru Arakawa, and Hiroshi Yamauchi, with supporting roles by Shigeru Miyamoto, Gunpei Yokoi, and Masayuki Uemura, and the arch-villains Michael Katz and Tom Kalinske of Sega of America, Hayao Nakamura of Sega of Japan, and Senators Joseph Lieberman and Herb Kohl of the US Congress. In the opposite corner, Blake Harris’ *Console Wars* (2014) turns the tables to offer Kalinske’s point of view, painting Nintendo of America as the tyrannical empire against which the underdog Sega of America rebels and wrests victory.

Whichever side we’re on, this case nicely illustrates how much of video game historiography is built on the theory of great men (and here I really mean *males*⁴), exceptional heroes responsible for steering the course of history through their leadership, wisdom, initiative, or daring. I’ll have none of it. To riff off Thomas Carlyle’s (1841) profession of faith in the impact of great men, I’ll note, in the form of a lament rather than an admiring salvo, “The history of the [video game] world is but the biography of great men.” Following Carl Therrien (and Paul Ricoeur), these are still “voluntary witnesses,” and they deserve to be confronted with “involuntary witnesses”—“other relevant traces that might not be so generous with words, and whose meaning must be deciphered” (Therrien 2015). I don’t want to interview and write biographies of individuals; I want to study Nintendo, the faceless corporation, even while it hides behind its reassuring Mario mascot.

To do this, I’ll focus on a kind of resource vastly underused, in my opinion, in games history: game magazines from the period, as well as actual game boxes, manuals, and advertisements. This approach allows us to look at the diversified discourses and rhetorics that were used by game publishers, platform owners, game reviewers, and, in some cases, typical players of the time, thus yielding insight on how these games and systems

were received by their contemporaries. In a way, this book aims to look past the celebrated plumber and into the plumbing hidden behind, the criss-crossing network of pipes through which the capitals—technological, cultural, and economic—flow.

Against the Techno-Deterministic Narrative: The Issue of Periodization

Video game history faces a problem common to any historical work—that of periodization: “Video game history is usually told as a story of hardware not software: a tale of successive generations of game consoles and their manufacturers’ battle for market share” (Donovan 2010, XIII). The “16-bit generation” (or “fourth generation”) is thought to start with the release of the Sega Genesis, unfolding through the console wars with Nintendo’s Super NES, and ending with Sony’s PlayStation. These planets populate the system of home video games, with various asteroids of no consequence, such as the Neo Geo, CD-i, and CDTV erratically bouncing around (and the metaphorically apt Saturn floating somewhere far away, off course). Two problems arise with this orthodox historiographical mapping.

The first and easy-to-find problem is that, although these generations typically last five or six years, late entrants may take years before entering the market, each release may be years apart across different regions of the world, and each console may also take years in each market before achieving success. Hence, the third-generation Nintendo Famicom was released in 1983 in Japan but only in 1987 in Europe—the same year NEC released the fourth-generation PC-Engine in Japan, which also gave it a full three years of lead time on Nintendo’s 1990 entry in the 16-bit generation. Coming up with a single timeline of “generations of game consoles” across regions not only distorts the wide spectrum of gaming practices (arcades, computers, and mobile and social network games are all left unaccounted for with the console-based model) but also induces a false sense of synchronicity and teleology in the deeply chaotic nature of video games. This problem ties into the second, more pernicious problem.

At first sight, the “generations” model appears to be a problematic but straightforward form of technodeterminism (the belief that the progress of technology alone is what determines the unfolding future of games). However, things are not so simple: If we were to focus on 16-bit processor technology alone, we’d have to start the 16-bit generation with the Mattel Intellivision in 1979. Instead, we treat the latter as a second-generation console—a rival to Atari’s VCS (or 2600). This shows how the classical periodization in video game history really *isn’t* technocentrist.

Rather, we define our history according to a number of historical centers determined from market success, and market success comes through corporations brandishing superior technology as a lure to rein in tech-savvy gamers, who flock toward the newest bright machines like moths to a flame. Our history is one of corporate dominions, of game consoles as kings ruling over Kingdom Videoludica. We chronicle who rules and define their competitors as forming one period, until some rival manages to wrest power.

This notion is particularly evident when looking at the transition between the fourth and fifth generations found in usual games historiography. The abundance of consoles that hit the market between 1991 and 1994 are put into either the fourth “Nintendo vs. Sega” generation (the Philips CD-i, Commodore CDTV, SNK Neo Geo, and Pioneer LaserActive) or the fifth “PlayStation” generation (the 3DO Interactive Multiplayer, Atari Jaguar, FM Towns Marty, and Amiga CD32). We could instead recognize all these machines as forming their own “generation 4.5,” occupying the interstices between two generations. But we don’t build history from the odd attempt or the failed coup; we declare another generation to be opening when the kings Nintendo and Sega announce new consoles, designating potential heirs to the throne. Therefore, generation-driven periodization does not trace technological development: it celebrates market success and popularity by organizing history as a series of rulers and their reign, retroactively structuring conflicts born from their triumphs.

In the context of periodization, this book is not only about the SNES or the console wars of the fourth generation. Rather, I examine the Super NES across three historical continuums. For marketing, I present a history of business models in the video game industry and explain how Nintendo pioneered its own unique business model with the NES, how it clung to and adapted it during the SNES years, and how it lost to the newer network-based model that Sony brought with the PlayStation. For culture, I frame the American Video Game ReNESSance as a cultural period in the history of video games in North America, situating the SNES in its wake and before the “MTV” redefinition of video games that Sony (and Sega) brought. For technology, I posit two larger technological trajectories in video game history and examine how the Super NES negotiated a path through them: the transition from 2-D to 3-D graphics and from cartridge to CD-ROM data storage. Through each of these contexts, the Super NES appears as a transitory object, a stopgap or hinge on the doors of video game history, a sliver of silver between two golden ages.

Overview

The journey into the Super NES will take us on a dive, roughly linearly from marketing to culture and into technology and back to the surface from technology to culture and then marketing. We will also cover the SNES roughly chronologically, from the broader context of video game history and Nintendo's arrival in North America with the NES to the development and marketing of the SNES, its release, and the many alternative technologies and cultural forces that have surrounded or changed it through its later years, until it was dethroned by Sony's PlayStation.

Chapter 1 introduces some of the literature on the games industry in business and management studies and provides a general-level overview of key concepts and frameworks used to discuss it. It traces the historical development of Atari's business model with the 2600/VCS and, in the process, questions and nuances the commonly held assumption that the video game industry follows the "razor and blades" model of giving away the razor to sell the blades. The limits of that analogy are explained as the rest of the chapter focuses on the establishment of Nintendo's business model with the NES in North America, one that I describe as a self-party model and that differs on important points from the orthodox view of the games industry and first-party platform owner models.

Chapter 2 presents the basic conditions that were in place, both internally at Nintendo and more largely in the video game market, when the decision to develop and release a 16-bit system was taken. The marketing, launch, and launch titles of the Super Famicom and Super NES are described, which allows me to challenge the orthodoxies laid out in chapter 1. I argue that platform owners do not sell technology to gamers but rather a ludic promise that needs to be expressed in specific games—launch titles—which become rhetorical moves in larger discourses. I also argue that consoles are heaps of trouble for people rather than desired objects, and system specs are worthless.

Chapter 3 examines the discourses that shaped the anticipation and reception of the Super NES. I study a number of game magazines from the period and consider their varying implications with platforms. By going back to the sources and some later developments of paratext theory, I show how problematic the culture of game magazines in the United States (through *Nintendo Power* and *Electronic Gaming Monthly*) has treated technology, finding three categories of technological discourses: technobabble, buzzwords, and technoliteracy. Ultimately, this shows how the gaming industry's relationship with technology is far from a straightforward affair, and particularly so for Nintendo.

Chapter 4 is dedicated to the technology of the Super NES. It describes the limited processing and memory units, the audio system, controller, and hardware design, before opening an in-depth discussion of graphics in video games through its graphical infrastructure and unique “Mode 7” visuals. I introduce the concept of graphical regimes as a way to discuss the two separate aspects of graphics: the “polish” of special effects and increased graphical complexity and fidelity, and the interactive possibilities that are tied to the visual construction of a game. A discussion of video game genre and innovation dynamics shows how Nintendo’s game development and publishing strategy for the SNES enforced a certain conformity to traditional gameplay genres, rather than favoring free-reign experimentation like other platforms, which promoted different technological standards.

Chapter 5 explores the larger technological revolution that video games went through during the SNES’s lifespan in the early to mid-1990s: the move from 2-D to 3-D graphics and gameplay. The Super NES’s steps in that direction, and how Nintendo negotiated this paradigm shift, further characterize the relative lack of innovation the firm displayed during the 16- and 32-bit eras of video game history. The various meanings of the term “3-D” are described through a number of practices, including technical drawing, geometry, art history, animation, and live-action film. I situate Nintendo’s Mode 7 among this landscape of approaches to tridimensionality, as well as the inclusion of polygons in latter games thanks to expansion chips in cartridges. I also discuss some of the planned (or almost complete) games that Nintendo canceled in the waning years of the SNES, projects that highlight the firm’s resistant approach to innovation.

Chapter 6 develops the cultural image and identity of Nintendo as a corporation and the trials and tribulations it had to go through during the SNES’s life. It briefly covers the corporation’s history from playing cards to the NES to identify the focus on family that has remained at the heart of Nintendo. I also present a cultural period of video game history I dub the American Video Game ReNEssance and the cultural redefinitions of video games due to Sega’s advertising campaigns and the *Mortal Kombat* and *Night Trap* controversies that led to the creation of the Entertainment Software Rating Board. Nintendo had the rug swept from under its feet and needed to adapt its Super NES, and its entire game library and corporate image, to respond to the changes in demographics brought by the maturing of its “Nintendo Generation.”

Chapter 7 chronicles the fall of the SNES by focusing on its failed (and recently surfaced to stardom thanks to a prototype unit being found in

2015) peripheral, the CD-ROM player. The importance of multimedia as a technological trajectory of the late 1980s and early 1990s is established before I chronicle (as best I can) the suite of vague agreements, turn-arounds, betrayals, and unholy alliances that were spurred by the secretive corporations Nintendo, Sony, and Philips. I then explain Sony's innovative business model and how it enlisted a high number of game developers and took the market by storm. Although the CD-ROM format is usually described as a technological innovation, I show that it is also a commercial innovation which revolutionized game distribution thanks to specific commercial affordances given to game developers and publishers that favored innovation.

This concludes our overview. Now come ye all! Step up to the gates and hear my song. Spoony as I may be, I will take you on a tour of Nintendo's walled garden, and show you how the alleys were paved and how they decayed, how the young visitors came and were lured away, and the silvery shine to stain gave way. Welcome to the tour. Welcome to the dark side.

How the Super Nintendo Entertainment System embodied Nintendo's resistance to innovation and took the company from industry leadership to the margins of videogaming.

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