Super Mario Bros. 3

by Alyse Knorr

Super Mario Bros. 3

Alyse Knorr

Boss Fight Books
Los Angeles, CA
bossfightbooks.com

ISBN 13: 978-1-940535-13-5
First Printing: 2016

Series Editor: Gabe Durham
Book Design by Ken Baumann
Page Design by Christopher Moyer

for Dad

CONTENTS

PRESS START

Super Mario Bros. 3 touched millions of lives—more than 18 million, to be exact. For an entire generation, *SMB3* is the game we played in the orthodontist's office, the game we talked about incessantly on the playground, and the game we stayed up all night to beat at a sleepover. It's the game whose early gameplay footage compelled us to sit through *The Wizard*; the game we spray-painted onto walls, crocheted into quilts, or even tattooed onto our bodies; and the game whose music we've had stuck in our heads for 25 years. A game designer friend of mine sums it up best: "Honestly, I can't remember a time without *SMB3*. For me, there is no time before *SMB3*."

SMB3 is a touchstone of shared cultural nostalgia, an artifact from a key moment in Nintendo history, a symbol of the golden age of Mario, and one of the most intensely hyped video games of all time. Today's game developers and scholars grew up on *SMB3*—the title where Mario proved he was here to stay.

When I decided to write about *SMB3*, a game that's had a significant impact on my own life, I knew I was

taking on a challenge. It's one of the most beloved games ever, and much has already been written about what Mario means to gaming and to the world. But besides Bob Chipman's *Super Mario Bros. 3: Brick by Brick*, which offers a level-by-level playthrough, no other books focus entirely on this game—on its history, its legacy, and what makes it a masterpiece.

"I would venture to guess that not many people have done a lot of analysis regarding why [*SMB3*] is their best game of all time, and they probably may not have played it since they were ten years old and still maintained that opinion," Necrosoft Games Director Brandon Sheffield told me over Skype. Although he believes *SMB3* is a well-designed game that deserves the credit it gets, "it does not deserve blind praise," he said. "I don't think anything does. And *SMB3* receives a lot of blind praise and parroted opinions, and I think people should go back and think about it a little bit more."

That, I decided, would be my goal with this book. When I set out to learn more about *SMB3*, I wondered: Why does everyone love this game so much? Why do *I* love it so much? Why was it so incredibly successful? And are the answers to all these questions the same?

LEAVE LUCK TO HEAVEN

"How far can you get?"
—opening line of *Donkey Kong* (1981)

It's one of my earliest and most cherished memories. I'm sitting in the den with my dad, holding an NES controller far too big for my four-year-old hands, navigating Mario around the screen of *SMB3*'s level 1-1. I remember my dad patiently explaining to me how to jump and run, and which boxes to bump. I remember the thrill and pride when, after a few tries, I nabbed my very first mushroom.

Once I learned *SMB3*'s basic principles, my dad taught me other games. I would sit on his lap while we laughed at the goofy Tentacles in *Day of the Tentacle*, puzzled over the incomprehensible riddles of *Myst*, and battled through the dark tunnels of *Doom*. But it was *SMB3* that we kept coming back to.

The piece of advice from my father I've always remembered best is: "Never give up and always try your best." During his year-long struggle against Bowser in *SMB3,* my father led by example.

•

Ninety-four bushes dance in time to the music on screen. They're adorable little bushes despite—or perhaps because of—the fact that their sole facial feature is a pair of large eyes. They bob up and down in pairs of big and small, as though 47 mother and baby bushes all went out to enjoy a beautiful day in Grass Land. Except for the word "HELP" flashing over the white castle, and the armed patrolman pacing obsessively at the castle's moat bridge, all seems well here.

SMB3's first world map is a friendly introduction to the Mushroom World. The entire map is contained on one screen, making it easy to see your goal in the bottom right corner. The Mario sprite moves his little feet and hands back and forth quickly—faster than the music, the trees, and the pacing Hammer Brother. Bowser has struck again—this time with the help of his Koopaling children—and someone has to stop him. Mario is ready to get down to business. Are you?

A closer look at the map screen reveals a first glimpse of what's different about *SMB3*. The coins on the paths between levels are a familiar sight, but what are those mushroom icons? We know from *Super Mario Bros.* and *Super Mario Bros. 2* that mushrooms are a good thing, so the sight of these large mushroom houses is immediately tantalizing. And are those *two* castles? An entirely separate fortress (more visually reminiscent of

the castles in *SMB1*) plopped square in the middle of the map blocks your way to the white "HELP" castle at the end. And there are more than three levels on the way to that first fortress! What is this crazy game and what happened to Mario's standard "three-levels-then-a-castle" structure?

•

My mother still uses "Nintendo" as a stand-in word for "video game." The story behind this monolithic game company is one of risk and humility, summed up by their unofficial corporate motto, which is also the meaning behind their name: "Leave luck to heaven." Or, as my dad would say: "Never give up and always try your best."

Nintendo was founded by Fusajiro Yamauchi in 1889 as a wooden stand in Kyoto selling handmade playing cards. Over the next century, while continuing to sell cards (which they still do today), the company would experiment with everything from instant rice to taxicabs to hourly love hotels before returning to its origins selling games and toys.

Nintendo's big turning point in the US came in 1985, just two years after Atari had epically crashed and pulled the entire American gaming industry down with it. After the infamous crash, US retailers considered the video game craze to be just another passing fad, like the Hula Hoop.

But instead of giving up, Nintendo went all in. The company's home consoles were selling well in Japan, and they had hit it big in the American arcade market with *Donkey Kong* in 1981. That game had marked the first appearance of heroic Mario (then named "Jumpman") and his creator, a young staff artist named Shigeru Miyamoto. After Nintendo's space shooter *Radar Scope* had tanked in America, the boyish daydreamer Miyamoto had been tasked with inventing a replacement game to plug into the arcade cabinets—and he had delivered an unexpected blockbuster with *Donkey Kong*.

So in 1985, Nintendo forged ahead with its Famicom (short for "family computer" in Japan) console in America, re-naming it the "Nintendo Entertainment System" to avoid the term "video game," which still spooked retailers traumatized by the Atari Crash. But even with the name change, the console wasn't a hit at either the January or June Consumer Electronics Show, the biggest convention at the time for unveiling new electronics products. Journalists and retailers at the show actually pointed and laughed at Nintendo for daring to resuscitate a dead industry. Meanwhile, focus tests revealed that kids, for the most part, hated the NES.

Nintendo of America CEO Minoru Arakawa's next move was a bold one. As a final test, he decided to release the NES in New York City, the most vicious toy market in the country. When I spoke with Gail Tilden, Nintendo of America's vice president of brand management during this era, she explained the decision with

a Frank Sinatra lyric: "If we could make it there, we could make it anywhere." Accompanying the NES as a launch title was Miyamoto's *Super Mario Bros.* (1985), which pioneered the new genre of scrolling platformer games and featured a revolutionary number of levels, a beautiful color palette, and the classic Mario/damsel/villain triangle gamers already knew from *Donkey Kong*.

The one word that best describes Nintendo of America's three months in the Big Apple is "hustle." The small team spent heroically long hours moving from store to store pitching the NES to retailers, setting up store displays, and hosting publicity events with celebrities playing the NES in stores. The American employees were living the motto of the Japanese parent company, whose president Hiroshi Yamauchi, Fusajiro's great-grandson, often said, "Don't believe that saying, 'Give your all and heaven will take care of the rest.' There is no all. There is no limit to effort."

Slowly but surely, the team's hard work paid off. By Christmas of 1987, thanks in large part to the popularity of *SMB1*, the NES was selling out of stores almost as soon as it arrived. A *New York Times* article from the period noted that "for boys in this country between the ages of 8 and 15, not having a Nintendo is like not having a baseball bat." Two years later, Nintendo controlled 92 percent of the market, and 23 percent of all money spent on toys in America was spent on Nintendo products.

Seemingly overnight, Tilden's workplace went from a company whose foreign name she had to spell out

for friends to a household name. With a per-employee profit margin of $1.5 million per year, Nintendo was Japan's most profitable company. "We did spend a long time and a lot of hard work in ownership in the company and the brand," Tilden said. "It's kind of like watching a kid grow up. Nintendo's name means 'Work hard and the fates will smile on you,' and there are a lot of other minor interpretations, but that was the philosophy. Everybody worked very hard and enjoyed seeing it [succeed]."

For the next several years, Nintendo—and Mario—would rule the video game world. The stage was set for another giant game from the giant company.

•

When we weren't playing *SMB3* together, I would watch my dad play—regardless of whether I was supposed to be in bed. I would sit on the floor beside his wicker rocking chair and watch as he battled through *SMB3*'s wooden airships, with all their cannonballs and Bullet Bills shooting across the screen. My dad's addiction to the game, he told me recently, came from the urge to advance to further levels and worlds—and to stick it to Bowser, who he passionately hated.

He would stay up past midnight playing. When it finally got too late and my mother insisted I go to sleep, I would let her tuck me in, then wait in my bed for fifteen minutes before sneaking down to the bottom of

the stairs to my secret viewing spot. A picture frame hanging in the hallway across from the landing provided a perfect reflection of the TV screen in the den. I would sit on the stairs with my blanket and watch my dad play for hours, silently cheering him on and covering my eyes when he died and got so frustrated he threw the controller at the television set. I idolized my father, and even when he couldn't beat a level, I knew he was the best gamer in the world. My "game over" moment arrived one night after I fell asleep on the stairs and my parents realized what I'd been doing and took down the picture frame.

"I saw you throw the controller a few times," I told my dad recently. "When you got especially frustrated at Lakitu or Boss Bass."

"Jeez, Alyse—why would you do that?" he asked. "I didn't know you were watching."

"Why would YOU do that?"

"Well, you know me."

"What do you mean?" I asked.

"I've been known to get frustrated a few times."

My father is a competitive person, and, in his own words, a bad loser. A personality test called StrengthsFinder revealed that he views the world in terms of winning and losing. The same test labeled me an "achiever." I look at the world not as a competition so much as one big to-do list full of tasks and levels waiting to be checked off. I hate competitive games, but love completion-based games like *SMB3*.

"What did you love about the game most?" I asked my dad.

"I'm sure that part of it was that you and I were doing it together," he said. "We were both trying to win this game. It's not that I was trying to impress you or anything, but my little daughter was watching me play while I tried to beat Bowser, this incredibly bad terrorist."

•

Released in Japan in 1988 and North America in 1990, *SMB3* immediately followed a transition period from arcade games to games designed exclusively for home consoles. This transition marked a big shift in difficulty level. The earliest arcade games were intensely difficult in order to earn more quarters—so difficult that challenging games today are often called "old-school hard." Many of today's games, on the other hand, allow for an unlimited number of attempts, which one writer recently called the "slow death of the game over."

The difficulty of NES Mario games like *SMB3* reflects this fascinating transition. Throughout *SMB3*'s development, as evidenced by unused cartridge content and differences between the Japanese and North American versions of the game, Miyamoto was constantly pulling himself back from making the game more challenging. One of the only complaints about *SMB3* from critics at the time was that it was too hard and needed a save feature; it was the last Mario game to lack one. At the same

time, *SMB3* introduced elements like Lakitu's Cloud (a.k.a. Jugem's Cloud or Cloud Jewel in early North American guides), which let players skip over a level, and nonlinear map screens, which in some cases allowed unskilled players to avoid tough levels completely.

Today, most agree that *SMB3*'s Goldilocks zone of challenge is a huge part of its appeal. *SMB3* married the twitchy reflexive demands of the Japanese *Super Mario Bros. 2* with the more frequent cognitive puzzles of the American *Super Mario Bros. 2*. All of these early Mario games continued the legacy of challenge set by their arcade ancestor, *Donkey Kong*. "'How far can you get?' is a compelling challenge," says Mike Roth, cinematics director at Gearbox Software and level designer for *Medal of Honor* (2010) and *Borderlands: The Pre-Sequel*. "Can you get far enough to accrue lots of points? Can you get far enough to get lots of coins? Can you get far enough to turn your points and coins into extra lives? Can you get far enough to see new worlds?"

•

The only time I've ever felt embarrassed about my Mario skills was when they were too good. I was in graduate school, and my girlfriend Kate and I went over to some friends' house, where they proudly displayed the Nintendo console that Spencer, the host of the party, had dug out of his parents' basement and somehow hooked up to his HD TV. Spencer went

on and on about how hard it was to beat Bowser in *SMB3*—how it was infinitely more difficult to do as an adult than as a kid, and how Bowser was way trickier than he remembered.

"Can I give it a try?" I asked.

Twenty minutes later, Bowser had plummeted to his death and I was flirting with the princess in her dungeon chamber.

"Wow," Spencer said, blinking. "You make it look so easy."

I hadn't played *SMB3* for fifteen years or so, but, in that muscle-memory way of video games, it all came back to me like I was a second grader again. As I played, I felt a bit of urgency to impress Kate and the rest of the group. But what I hadn't considered was that my friends wanted to beat Bowser themselves, and they *liked* that it was hard. They didn't need me to come in and beat him for them. Not only that, but I had revealed myself to be the true Mario dork I was.

"I can't believe I actually won," I lied, blushing. "Must have been luck."

•

Of course, it wasn't luck by any means. My *SMB3* skills came as a result of hours and hours of childhood practice—enough, statistically speaking, to achieve true "expert" status. In fact, one psychological study in the early 2000s measured expertise in children playing Mario

games and found that—big surprise—by sheer practice alone, kids could become verified gaming experts. What I *was* right about, however, was that my friends—and even my dad, as frustrated as he got—wanted the game to be hard.

In his book *The Art of Failure*, game designer Jesper Juul identifies an essential "paradox of failure" in games: People choose to play games that they will fail at even though failure is generally not a pleasurable feeling humans seek out. And it's not just that we're willing to accept failure in games—we *want* to fail, and we don't have fun when we don't initially fail. Researcher Nicole Lazzaro, who studies emotions in games, sums this up by saying, "It's easy to tell what games my husband enjoys most. If he screams 'I hate it. I hate it. I hate it,' then I know he will finish it and buy version two. If he doesn't say this, he'll put it down in an hour."

Roth said he learned this fact—one of his earliest design lessons—while cheating at *SMB3* using his Game Genie. "I was using a cheat called 'moon jump,' which allowed me to jump repeatedly without falling to the ground," he said. "I jumped so high, Mario would be off the screen as the level scrolled until I reached the end. The thrill of 'beating' the game faded as I realized I was just sitting watching the levels scroll past without actually playing them. So there you have it: At a very young age I tried to cheat *SMB3*, which taught me gaming is as much about the journey as it is finishing the game."

As controller-throwers like my father know all too well, while failure is key to making a game fun, too much of it can have the opposite effect. Much of Juul's research is grounded in psychologist Mihaly Csikszentmihalyi's 1990 theory of "flow state," which contends that individuals prefer challenges that are not too easy but also not too hard. Too easy becomes boring, while too hard becomes frustrating. Atari founder Nolan Bushnell summed up a modified version of this theory with his famous "Bushnell's Law" for arcade games: "All the best games are easy to learn and difficult to master. They should reward the first quarter and the hundredth."

•

When I was eight, my parents divorced and my dad moved to another state, but I didn't stop playing games. In fact, after my dad moved, I probably played them more than ever before. I graduated from *Day of the Tentacle* to *Sam and Max Hit the Road*, and from *SMB3* to *Super Mario 64* (*SM64*).

After my dad moved, he would call every night at 8:00 p.m. to talk with me and my brother. There were nights when I had a lot to tell him about, or, once we got a new computer to play games on, a lot of questions to ask him about how to fix it. But many nights I wouldn't have anything to say, or I'd be in the middle of something, so I'd rush to get him off the phone while

he asked me how my day at school was or what was going on in my life. More than a few times, I would be playing a video game, totally distracted. Looking back now, I imagine him sitting alone in his house, night falling outside, as he pressed the phone to his ear and listened to each of my one-word answers.

•

Many factors contribute to a player's flow state in *SMB3*, but the most important is the game's level design. *SMB3*, like its Mario game forefathers, carefully paces new content to create a constant state of challenge and learning. According to Ryan Mattson, an independent game developer with level design experience on *Bioshock 2* and many others, *SMB3*'s levels exemplify a concept called rational game design. Every block, power-up, and enemy is meticulously placed to create challenges that, with enough practice, are always surmountable. Subtly and intuitively, *SMB3*'s levels teach you how to play and how to improve through the game alone—no tutorial, manual, or in-game text are ever necessary.

Take level 1-1, for instance. I can remember playing this level as a four-year-old and having such a difficult time with it, whereas now I breeze through it, finger glued to the B button in one long sprint. I fly up to the clouds in the sky and collect the 1-Up waiting for me there, then visit the pipe cave with coins in the shape of

a "3." *SMB3*'s first level immediately sets the tone for a game packed full of secrets.

In fact, gaming critics often use *SMB1* and *SMB3*'s first levels as textbook examples of in-game mechanical tutorialization. *SMB3*'s level 1-1 begins almost exactly like *SMB1*'s 1-1—the player approaches a set of question blocks at almost the same time as a Goomba. If the player times her jump wrong or fails to jump, she learns that Goombas are dangerous. Alternatively, her first jump may cause her to rebound off the blocks and back down on top of the Goomba, illustrating that Goombas can be killed. In *SMB3*, the Super Mushroom power-up is introduced next, followed by a pipe containing a fireball-spitting Venus Fire Trap that teaches players to duck and dodge.

It's what comes next that gets interesting. The next question block to appear on-screen is located on the ground next to a Koopa Troopa, those goofy snapping turtles who patrol the Mushroom World. Killing the Troopa and kicking its shell can either purposely or accidentally hit the question block, and, as long as you grabbed the level's first mushroom, a leaf will pop out of the block and slowly flutter down. This is *SMB3*'s game-changer.

"It's an advanced technique to get there," Mattson says. "Not a lot of people who have come to a Mario game for the first time are going to do that move in that way and see that, but there is going to be that sense of, 'Wait a minute, this question brick is on the ground

and I usually get that with my head—how am I going to get this thing?' So anybody who's actually invested in understanding that will pretty quickly see that the shell can hit it and knock it out."

Once the player grabs the leaf and turns into Raccoon Mario, the game introduces flight. As the player proceeds right, she encounters a long "runway" occupied by two Goombas and a Paragoomba (a Goomba with wings), which subtly reinforces the flight motif. At the end of the runway is a bottomless hole. Overhead, a string of coins stretches up into the sky—far too high to reach by jumping, and out of range of any platforms or other means of accessing them. Between the Paragoomba, the runway, the hard-to-reach coins leading up, and the shrill audio feedback that comes when the P- (or "Power") Meter maxes out during a sprint, the game has provided you with everything you need to learn to fly.

"I came back to this after years of having not played it, and I saw the question brick on the ground, and I knew that Raccoon Mario was in the game, but I didn't remember that they introduced it in 1-1," Mattson says. "When I saw the coins going up into the air I thought, 'Did they actually introduce Raccoon Mario in world 1-1? This is crazy! This is the first level—why would they give you this amazing power so early?' But there's the player philosophy of 'Never hold onto your grenades,' and I guess the same is true for game designers who think, 'We've got a cool new thing, so let's show it to players right now.'"

Legend has it that Miyamoto delayed *SMB3*'s 1-1's design until completion of the other levels so he could teach all the skills that the game requires in this introductory environment. And indeed, entirely through placement of items and enemies, level 1-1 teaches players how to jump, crush enemies, collect items, crouch, kick shells, sprint, fly, use tunnels, and find secrets—all within the first few minutes of play and with no on-screen text. "Great game designers still strive to teach the mechanics of their games to players in such an effective way without breaking away from the action," Roth said.

Unlike its immediate successor, *Super Mario World*, all the text that appears in *SMB3* serves narrative functions, with a few cryptic, far-from-clear hints mixed in: Princess Toadstool's letters, dialogue from Toad in mushroom houses and minigames, or the kings' and Toad's dialogue in castles. When it comes to game mechanics, instead of text, *SMB3* dialogues with players through the gaming experience itself—the world map, toolbar, and P-Meter feedback. In a contemporary gaming world chock full of text-based instructions, *SMB3* is a breath of fresh air, empowering players and imbuing the game itself with a sense of mystery.

•

When my brother David lost a baseball game as a boy, my dad would tell him that as long as he had fun,

that's all that mattered. But the truth is that losing over and over again can get discouraging. *SMB3* is no *Mega Man* (a famously hard game) but it's still pretty hard—hard enough to make some people throw their controllers at the TV set. That's why, even though the player may fail hundreds of times, *SMB3* offers incremental rewards along the way, encouraging the player and reminding her that she's progressing, learning, and improving—which adds to the game's addictive quality and flow state.

SMB3's main reward system is coins, which offer a constant, low-level prize that encourages exploration, guides the player to secrets, and teaches game mechanics, like 1-1's coins leading into the sky. 1-Ups, on the other hand, are a high-level reward strategically placed in levels so that they often operate more like traps than prizes. After *SMB3* came out on other console platforms, players could save their progress, which lowered the stakes significantly and made 1-Ups feel less important and "game overs" less devastating.

Encounters with wandering Hammer Brothers on the map also offer prizes, as do the spade and card matching minigames. In fact, each level ends with a minigame as Mario jumps into the flashing icon box for a chance to win extra lives or even a fireworks display—a mechanic that built off the slot machine minigame from *SMB2* USA. The points system holdover from the arcade days provides another kind of reward (albeit a much more abstract one), and another way to compete.

Then there are the mushroom houses, which mark another first in the Mario franchise. The world map screen allowed *SMB3* to introduce an inventory that could be stocked up with items players collected from mushroom houses, Hammer Brothers, and minigames. This made sense for a game with as many levels as *SMB3*, allowing it to cater to beginners as well as advanced players by incorporating an added layer of strategy. Players could choose when to deploy their items, some of which affected Mario's appearance and abilities within a level while others affected the map screen.

For modern players, the minigames in *SMB3* (or the Super Mario Galaxy franchise, where minigames still pop up today) feel like a fun diversion—an introduction of chance into a game that otherwise shuns luck for muscle memory. But Miyamoto attributes the endurance of the entire franchise to *SMB3*'s minigames. In a recent interview, he said that Takashi Tezuka, his righthand man and *SMB3* co-director, added minigames to *SMB3* and *Super Mario World* to keep the gameplay from getting stale. Miyamoto called it an "almost obsessive idea […] that if we [didn't] add new elements, fans of the previous games [wouldn't] be satisfied." At some point after *SMB3*, Miyamoto said he instituted a temporary ban on Mario minigames and asked his team to focus more on gameplay. "But if we hadn't put in any minigames when we did, the series might have ended there," he said. "Perhaps the series still exists today because there was once a time when we floundered around a bit."

•

Not even rewards can help you get through level 1-4, a perfect example of what makes *SMB3* challenging. 1-4 takes place on platforms high up in the sky and introduces *SMB3*'s new auto-scrolling mechanic, which forces you to progress at a certain pace and requires that you fine-tune your aerial leaping skills. It's the easiest of the game's auto-scrolling levels, but it's an intimidating preview of what's to come.

As if to emphasize the dizzying heights that Mario traverses in 1-4, the background contains another type of cloud—one with a hypnotic swirl instead of cute eyes, like the 1-1 and 1-2 clouds. It's almost as though those earlier clouds were stratus clouds, close to the earth, and now Mario is high up with the cirrus clouds, precariously leaping over enormous drops.

Of course, if 1-4 is too difficult for you, you can skip it. Both 1-3 and 1-4 are optional levels, but players who want to access the mushroom house (and/or nab the warp whistle) can just play the far easier 1-3. *SMB3* lets players choose their challenges.

And it needed to—its predecessor *SMB2* Japan was not released in America because, among other reasons, Nintendo's American staff thought it was too hard. If *Donkey Kong*'s massive success began with the failure of *Radar Scope*, and *SMB1*'s with the failure of Atari, then *SMB3*'s success began with *SMB2* Japan's perceived shortcomings in the US.

Miyamoto didn't have a sequel in mind as he worked on *SMB1*, and when he was asked to make one, his expanded role as director of Nintendo's R&D4 division (the research and development team originally created to develop Miyamoto's ideas) prevented him from putting in as much time as he had with *SMB1*. So instead of coming up with a brand-new game, his team followed an arcade tradition and simply made a much harder version of the first game, with cruel surprises like poisonous mushrooms and sudden brutal windstorms. This game, released in Japan as *SMB2*, was so difficult—and so graphically similar to *SMB1*—that Nintendo of America declined to release the game in the US as *SMB2*.

Howard "The Gamemaster" Phillips, one of Nintendo of America's earliest employees and most memorable spokesmen, was one of *SMB2* Japan's most vocal in-house critics. He argued that good game design can surprise players with pleasing novelty, but shouldn't surprise them by unexpectedly stripping away their progress.

Juul's research backs up Phillips's take on the game: One of Juul's studies found that when players fail in a video game, they want to feel like their failure is their own fault, not the game's fault. Again, this seems paradoxical, since in day-to-day life we generally like to blame our failures on anyone but ourselves, but if a game is too sadistically hard for the average casual gamer to think they even have a chance, it won't be as fun.

So, to give Nintendo of America a suitable *SMB1* sequel, a young designer was called in to re-skin an existing game called *Yume Kōjō: Doki Doki Panic*, a game that had nothing to do with Mario and was set in the Middle East. This re-skinning meant that the game released in America as *SMB2* in 1988 felt drastically different from *SMB1* in both gameplay and appearance. *SMB2* USA let you choose between playing as Mario, Luigi, Toad, and Princess Toadstool (she didn't go by the name "Peach" in America until *Yoshi's Safari* in 1993, though her name was "Peach" from the get-go in Japan). No matter which character you chose, your main method of defeating enemies was not to jump on their heads but to throw vegetables at them.

•

My dad believed in practice. When my preschool teacher told my parents I wouldn't succeed in school because I couldn't cut with scissors, he started doing arts and crafts projects with me every weekend. When I struggled with math in kindergarten, he created extra math worksheets for me to complete as soon as I got home from school. (We joke now that this is the reason I became a writer.) When my brother joined a little league team, my dad spent hours with him in the yard working on his pitching skills. My father knew that math and pitching, like many difficult endeavors, can

be tough because they're psychologically daunting—a truth I'm all too familiar with.

During a recent several-hours-long phone conversation about *SMB3*, I mentioned to my father that I tend to be more afraid of failure than I am confident in my ability to succeed, and that this fear drives everything I do.

"I'm going to tell you something that you may not know about yourself, and that's that you do have confidence in yourself," he replied. "You can do anything that you put your mind to, and I believe that you believe that. And at the bottom line, that is confidence. That you know you have the ability to do it. Your best is always good enough. Period."

•

SMB3 is a game that rewards practice, not luck. All it really takes to be good at the game is time investment—and that's why it lends itself so well to speedruns. Succeeding in an *SMB3* speedrun is about memorizing consistent, precisely timed game events through lots and lots of practice, which can lead to a stunning level of mastery over a fairly simple system. "Essentially, playing *SMB3* is similar to riding a bike after many subsequent plays," writes rhetorician Aliyah Hakima. "With enough practice, a player is able to internalize the external memory system of *SMB3* and to beat a level with his/her eyes closed or while paying attention to something else."

I love this about *SMB3*—the way it rewards a player's intimate familiarity. I love the feeling of knowing a level down to its every block, of having internalized it so deeply I can run through it practically without looking.

Many of my other loves are similarly mechanical. I love running, for instance, because essentially all you have to do to be a good runner is get out and run regularly. I still often fear failure, but I take comfort in knowing that with many challenges, I can always learn and improve simply by investing more time and energy. In *Nintendo Magic*, Osamu Inoue's profile of Nintendo, Inoue offers yet another interpretation of company president Yamauchi's corporate philosophy: "Composure in failure, humility in triumph […] When not favored by fortune, stay composed and work hard. When blessed with luck, remain humble and put forth your best effort." My dad never mentioned talent or luck to me growing up—instead he said, "Never give up and always try your best." It's an inherently hopeful, optimistic outlook, appealing, like *SMB3* itself, to both achievers and competitors alike.

In the real world, failure rarely feels fun, and the fear of failure can be paralyzing. My father's philosophy prepared me for this reality, granting me confidence and hope for the times I'm unsure whether my best can be good enough and solace in the times when it isn't. And for those times, I still have *SMB3*, where—unlike the real world—great effort always yields great reward. It's the meritocracy we wish we lived in—a place where we can do anything.

ENTER HERO

"Hello! How have you been? It's been such a long time since we've seen each other."

—"A Message from Mario,"
SMB3 instruction manual (1990)

"Mario! Mario!" yells the man in the blue shirt, pumping his fist in the air and lifting his eyes skyward. A boy and girl quickly join him—"Mario!"—then two boys and their mother, then more and more people until the camera zooms out to reveal a crowd of thousands screaming "Mario!" and pumping their fists into the sky. An electric guitar shrieks an ascending note slide as the camera continues to zoom out all the way into outer space, revealing that the entire planet is calling out for Mario and forming an image of his face with their bodies.

"He's back," a deep voice intones as the yellow *SMB3* box appears on screen. "All you had to do was ask."

This TV commercial is not too great an exaggeration of how the world reacted to *SMB3*. Upon the game's American release, copies of *SMB3* were carefully

rationed so that demand outpaced availability, which caused a hysteria of excited game-buying. *SMB3* sold out of its first 250,00 shipped copies just two days after its US release date, February 12, 1990. The NES cartridge eventually earned a Guinness World Record for best-selling game not packaged with a console system.

News outlets breathlessly covered the story of the game's enormous hype, sometimes mispronouncing "Nintendo" ("nine-ten-dough") and almost always using the same perspective: "It's the game all the kids want and parents can't get their hands on!" Polls at the time revealed that more children recognized Mario than Mickey Mouse.

The truth is, *SMB3* was bound to be a hit. Fans *had* asked for it—Japanese consumers wanted something new and different from their version of *SMB2*, and Americans wanted something not quite as new and different from theirs. Mario was an established hero by this point, but American fans longed for a return to the jump-n-stomp play style of *SMB1*—and they had waited for it for years now.

SMB3 delivered the sequel these fans craved: the return to *SMB1*'s play style and the culminating step in the Mario franchise. *SMB3* took everything that was great about the first game and made it bigger, better-looking, and more fun. In the words of Nintendo Enthusiast reviewer Giancarlo Bellotto: "A lot of Nintendo's long-running series have a game where they realize their full potential, a turning point

where the quality of the series dramatically increases." Bellotto argues that NES games in particular—such as the Zelda or Metroid series—tend to create a promising formula in a new game and then fulfill it to its highest potential in a sequel. *SMB3* represents this turning point not only for the Mario franchise but for Nintendo itself.

SMB3 managed to stay fresh by introducing new ideas into the Mario experience instead of re-branding another game or recycling *SMB1*'s graphics. *SMB3* featured more levels, secrets, power-ups, songs, enemies, and moves, as well as more refined pixel art. The game's astounding number of new features, many well ahead of their time, included cooperative and battle multiplayer modes, themed worlds, an overworld map, minigames, a status bar with sprint meter, and an inventory system. And for the first time, Mario could swim *and* run through a level—it wasn't all or nothing.

SMB3 was Miyamoto's vision of video game design made plain—a game with more flexibility, player control, openness, and freedom than any Mario game before, which made the game approachable for players of all skill levels. "If *SMB2* Japan was only tightening control around the player to increase its difficulty, *SMB3* was going to try and tend to a more progressive and pleasurable curve of increased difficulty," writes Raphaël Lucas for Geek-O-Matick.

As for *SMB2* USA, despite its good sales numbers, Howard Phillips called it an "aberration": "It just didn't

have Mario in its DNA, and not just literally in the form of its origins, but also in the form of where it ended up and the overall integration of everything," he said. "*SMB3* was just so well-integrated. Every component worked well with every other component. Everything made sense and felt right. *SMB2* never achieved that, and that's just because it didn't have the DNA and it also didn't have the attention that *SMB3* had."

If Miyamoto had taken a step back with *SMB2* Japan, he was totally immersed in *SMB3*'s development from the start. Miyamoto poured himself into the design process, producing what some see as his best work.

"He spent so much energy on that title," Phillips told me. "There wasn't any shortfall […] from the very early times that I saw it. […] From a gameplay standpoint, I was just humbled and stood back in awe of Mr. Miyamoto, given the fact that at that time, there was actually a little question of whether or not it was a fluke on some of his earlier games and whether he'd gotten long in the tooth or not. *SMB3* just proved that if he was allowed to focus—if he wasn't spread out over a dozen games—that he really had a magic touch and magic sensibilities."

•

Those magic sensibilities created a game that brought together millions of children, including countless brothers and sisters like me and my brother David. Growing

up, David and I both favored action figures over Barbies and playing sports over playing house. We invented games like Scooter Soccer, built forts in the woods, collected Pokémon cards, and waged Toy World Wars, which involved dumping all the toy boxes onto the floor and using every single action figure we owned to wage an all-out war between good and evil. In a chaotic swirl of colorful plastic and mismatched weapon accessories, Batman, Street Sharks, and the X-Men fought against Shredder, Darth Vader, and Mr. Freeze.

But nothing brought us closer together than Mario games. It all started when I was nine or ten. As I hopped, hammered, and tail-flapped my way through *SMB3* for the umpteenth time, I decided to take on the role of teaching David, four years younger than me, how to play. I felt pride when he beat levels, and power when showing him how to handle moves I had already mastered.

At some point, though, I realized that teaching David to play meant there was less time for me to play. I solved this problem with a form of manipulation still legendary in my family. I tricked my brother into watching me play *SMB3* by convincing him that watching me play was far more interesting than playing it himself.

Over time, I got used to having an audience as I traversed through the various worlds again and again. It felt like I was performing. I had a co-conspirator who would cheer when I beat a level, "ooh" and "aah" when I pulled off an especially adept move, gasp when I came

close to dying, and heave a sigh of relief when I miraculously eluded an enemy. Eventually, having David's support became more important to me than my initial goal of hogging the controller.

When I asked my father about this stone-cold manipulation of my brother, he said it wasn't really manipulation at all since my brother loved to watch me. My dad said he remembered David being enraptured by my skill, voluntarily sitting beside me and watching me play for hours, just as intently as I had once watched my father play. "The difference between you playing while David watched and me playing while you watched was that you would always be explaining to David what was going on in gory detail, whereas I was pretty silent," he said.

When we overheard our parents' arguments during their divorce, David took their anger to heart. He was a sensitive little kid, and sometimes he would run into his bedroom and throw himself onto the bottom bunk of his bunk bed, crying. I understood it was my job as the big sister to take charge and comfort him—to try to play the hero.

But David wasn't much of a talker, and neither of us had the words to discuss what was going on around us. So we played video games instead. We escaped to the room with the console, shut the door, immersed ourselves in the world of *SMB3*, and talked about that. And it worked.

•

When *SMB3* came out in North America, the NES was five years old and the SNES was already in development, so Nintendo knew that strong sales of the game might add to the next console's success. For Miyamoto, this meant one last hurrah for his beloved character on the NES—one last chance to push the console to its technological limits, maximize its abilities, and, in his own words, "provide the [NES] with the ultimate Mario."

As such, *SMB3* marked Mario's first big technological evolution on a home console. The 8-bit NES was showing its age by the time *SMB3* came out, since Sega and NEC had already introduced more powerful machines. But Miyamoto had the support he needed from Nintendo's hardware engineers. During the age of *SMB3*, Gail Tilden told me, Nintendo's hardware and software teams worked hand in hand. Unlike third-party game developers, Nintendo's in-house designers had the advantage of pushing the hardware team to develop technologies that would make possible their visions for unique gameplay experiences. *SMB3*, she said, is a great example of this teamwork in action.

Several technical developments allowed *SMB3* to take big steps forward in its size and graphics. First, *SMB3* used a new technology called Character Generated Computer Aided Design (CGCAD) that made programming the game's images more efficient. Rather than saving each graphical feature pixel by

pixel, this tool compiled together into a bank all the shapes used to create graphics the game and assigned them each a number. The NES could then read various number series and combine the shapes into graphics in real time onscreen.

In addition, a special chip inside the *SMB3* cartridge called the MMC3 (Memory Management Controller)—a lot like the Super FX chip later used on the SNES—made possible features like screen splitting (which allowed for the inclusion of the status bar on the bottom of the screen), diagonal scrolling, and enhanced graphics like animated tiles (such as the moving question marks on blocks or the zooming card strips in the Spade Panel minigame). *SMB2* USA had used this same chip, as did later NES games like *Kirby's Adventure*.

SMB3 also utilized a cutting-edge form of graphics called parallax scrolling that consisted of overlapping 2D planes. "Through the use of multiple planes of imagery—one behind the other—which scroll through the screen at different rates, a sense of depth can be achieved" writes game studies scholar Mark Wolf. It's not quite 3D, but it's more than simple, flat 2D—and it's the effect that lets you drop behind the screen when you crouch on a white block.

"There is something special when a game squeezes more magic out of the same hardware platform," designer Mike Roth said. "It wasn't until I got into the industry that I realized just how impressive a task that is. I now appreciate the challenge of creating a sequel.

You must identify what made your game a success and iterate on the design without losing the core experience that attracted your original audience."

Even with these increased technological capabilities, memory constraints continued to significantly shape Mario game design as late as the 90s: "[Designers] had to figure out how to do interesting and new things with really, really limited resources, and if you can figure out how to work inside those constraints and make something interesting, I think you've done some amazing work," designer Ryan Mattson said. "A lot of people today take for granted the amount of power we have."

But rather than looking at technical constraints as a limitation, early Mario development teams saw them as an interesting challenge. Miyamoto often refers to the 8-bit era as an exciting time when his team imagined the possibilities rather than worrying about what they couldn't do. Akihiro Saito, a former Nintendo developer, notes that Japanese culture tends to adopt a more playful attitude about design, seeing constraints as opportunities in art forms like the tight, hyper-condensed haiku, or woodblock prints made from very simple materials. In other words, relying on limited tools can yield more complex and beautiful results.

Today, many experts, including Ed Fries of Atari, compare coding under these constraints to writing poetry—an art form, like programming, measured in lines, and one where intense constraint and tight rules often result in particularly creative language and

ideas. Early constraints were even fun for programmers, according to former Nintendo president Satoru Iwata. "In this day and age, if someone tells you to do something with 30 bytes, you can't do anything," he said in an interview before his death in 2015. "But back then, we'd be like, 'That's ten blocks!' […] At the time, when someone came to me and said, 'I'm having trouble because there isn't enough memory,' I was—to be honest—really happy. Seeing if you could achieve programming for the same functions with a smaller amount of memory was one way for a programmer to show off."

•

The designers showed off, too. *SMB3* was one of the last games from an era when levels were still drawn by hand before being programmed. *SMB3* assistant director Hideki Konno, who worked on the game's maps and characters, remembers "painstakingly" drawing levels with designer Katsuya Eguchi using tracing paper over graph paper. The hand-drawn aesthetic shows in the careful attention paid to artistic detail and variety.

Level 2-1, for instance, immediately sets up the aesthetic difference between World 2 (Desert Land), and World 1(Grass Land), which establishes that each world will look and feel different in the big universe of *SMB3*. In 2-1, we seem to have been thrown into either a pyramid construction zone or the ruins of old

pyramids. Bricks glint in the sun, and some even jump of their own accord, giving us the pleasure of smashing bricks from above instead of from below. The ground is flat and sandy, a new type of cloud hangs in the sky, and still more pyramids tower in the background. 2-2 introduces sandy hills and pits of quicksand as well as a cool, refreshing desert oasis. And World 2's first fortress feels completely different from World 1's fortress: Instead of a shiny block floor and ceiling, this fortress features bigger, sandy-textured gray blocks. Instead of boiling hot lava, this fortress is full of stone-faced Thwomps and ghostly Boos—lending it an older, haunted feeling that fits nicely into the ancient pyramid ruins motif.

SMB3's art employed not only more variety, but also more refined textures and animations. The clouds, bricks, trees, and ground are all textured using simple, geometric patterns—little dots on the ground turn a green surface into grass or a yellow surface into sand. Pipes and pillars cast shadows, and tiny circular bubbles float around Mario underwater. Other small touches add dimension, as well—the bricks shine, the coins all cast shadows and rotate in the air (making you want to grab them even more), and the question mark on the question blocks scrolls rapidly across the surface, as though it's a Vegas slot machine just begging to be played.

While generally cartoonish and surreal in style, and never exactly realistic, the art does have clever representational moments, like shaping pyramids and castle turrets out of golden blocks in (Desert Land and

Sky Land respectively) or using flower sprites instead of bushes on the World 4 (Giant Land) map screen to indicate that on Big Island, flowers are as big as bushes.

When I asked Phillips what stands out to him the most about *SMB3*, his answer was the game's brightness—both literally and metaphorically. "There were some lighter colors in it that were much brighter, and that just made it feel new," he said, adding that the cartoonish yellow box exemplifies this look. "It definitely seemed like a breath of fresh air […] It's kind of like *The Wizard of Oz* where suddenly things are in color—it was just so vibrant."

This brightness could also be used to create tension in the gameplay, Ryan Mattson points out, through variation across levels. The heavily saturated green of some of the beautiful outdoor environments contrasts almost painfully with the dark and desaturated colors of the fortresses; cool, serene underground pools follow angry red lava levels.

•

Inhabiting these bright worlds are some of the quirkiest enemies of any Mario game. Many of these baddies were variations on existing enemies from *SMB1* or *SMB2* USA, like the sledge, boomerang, and fireball varieties of Hammer Brothers or the Buster Beetle and Para-Beetle subspecies of the original Buzzy Beetle. *SMB3* also added more subspecies of the frowning tiny

Goomba, including the Micro-Goomba and the winged Paragoomba. Goombas, one of the franchise's most famous enemies, weren't added into *SMB1* until play testers complained the Koopa Troopas were too tricky to beat. Toward the end of *SMB1*'s development, the shiitake-like creatures were added as a way to include an enemy that was more of an obstacle than a monster. Although they're known as "Kuribo" in Japan, meaning "chestnut person," their English name "Goomba" resembles the Hungarian word for mushroom, "gomba," and the Italian word "cumpa," which is slang in certain dialects for a close associate or adviser.

My personal favorite *SMB3* enemies are Boos and Chain Chomps. *SMB3*'s Boo ghosts are charmingly shy—they only pursue you when your back is turned to them. If you face them, they will freeze and cover their eyes. The Boos, which in Japanese are called Teresa—from the verb *tereru* meaning "to be shy"—resemble the Japanese *hitodama*, a kind of human soul "will o' the wisp." They were inspired by designer Takashi Tezuka's wife, who was shy in public but had a furious temper when her husband spent too many late nights working on games. The Boos' full Americanized name is "Boo Diddley," after R&B artist Bo Diddley.

Chain Chomps are black circles with teeth, chained up to a block, that will lunge at you when you come near. These unique villains were inspired by a bad childhood incident Miyamoto had with an aggressive dog on a chain. Miyamoto almost used Chain Chomps in an

early Zelda game (and they eventually made cameos in several Zelda games, including *A Link to the Past*), but they felt like a much better fit for *SMB3*'s surreal world. Here's an interesting bit of trivia: If you're crazy enough to stand around and wait for a Chain Chomp to lunge at you 47 times, its chain will begin to flash, and on the 50th lunge, the Chain Chomp will break away from its block and fly away, hitting Mario if he blocks its path.

Most of *SMB3*'s enemies are just like the Chain Chomp—playful, memorable, and cute, like the little snappy muncher plants or dopey "Spikes" (the smiling black-shelled green tiny guys who vomit up black spikey balls and then throw them at you). Even the bumbling Koopa Troopas are a little cute.

This is exactly why the game feels so intense when the enemies stop being cute. Venus Fire Traps and Piranha Plants, for instance, are not cute. They are creepy. Unlike everything else in the game—even the hills and clouds—these menacing plants have no eyes; they're just a big, sharp-toothed mouth with leaves, like the plant monster from *Little Shop of Horrors*. Likewise, few enemies have a face in the barrage of guns, missiles, cannons, and bombs of the airships and World 8 levels, so they feel colder and more impersonal, like they're out to kill you in a much more "realistic" way than the rest.

•

I only realized recently how fitting it was that, as I grew up playing *SMB3* with my brother, we were battling a network of sibling bosses. Legend has it that the seven Koopalings are all caricatures of seven of *SMB3*'s development team members. Although they were initially written into the story as Bowser's children, they have since been orphaned. Miyamoto recently stated that in current Mario mythology, the seven Koopalings are in fact not Bowser's children, and that Bowser's sole child is Bowser Jr., who first premiered in *Super Mario Sunshine* in 2002.

What makes the Koopalings so fun is their hilarious personalities. Various Koopalings ride around on circus balls, shake the entire ship with their monstrous weight, and glare at you through super cool shades. They're each unique individuals with their own size, shape, attitude, and special weapons, adding variety to the game and making the final battle of each world feel more important—a big step up from *SMB1*, where Bowser, or his Koopa twins, looked the same in every battle.

The Koopalings, and many other enemies in *SMB3*, were named by Dayvv Brooks, who worked on localizing *SMB3* and *SMW* and, interestingly enough, also played all the gameplay footage that appears in *The Wizard*, the 1989 feature-length film that included several minutes of *SMB3* gameplay before the game was released in America. In the Japanese version, the Koopalings didn't originally have names, but they later adopted the American names.

Perhaps inspired by their microphone-like wands and punk rock hairstyles, the American localization team named the Koopalings after famous musicians:

- Iggy Koopa is Iggy Pop.
- Larry Koopa is U2 drummer Larry Mullen Jr.
- Lemmy Koopa is Motörhead's Lemmy Kilmister.
- Ludwig von Koopa is Ludwig van Beethoven.
- Morton Koopa Jr. is singer and talk show host Morton Downey Jr.
- Roy Koopa is Roy Orbison (complete with horn-rimmed glasses).
- Wendy O. Koopa is Wendy O. Williams, the lead singer of the Plasmatics.

Tilden said the Koopalings' names created a bit of a worry at the time, since they played off of real names that Nintendo didn't own. In fact, one or two names had to be changed in development for this very reason—perhaps Morton, with the conspicuous star over his left eye, was actually inspired by Gene Simmons or Paul Stanley of KISS?

SMB3's localizers also worked hard to make the sounds of enemy names resonate in English the same way they would in Japanese. Three of *SMB3*'s new enemies—Thwomp, Boom Boom, and Ptooie—captured in English the onomatopoeic names common in Japanese. In *SMB3*, for instance, Chain Chomps are called Wanwan (the Japanese interpretation of a dog's

bark—which we finally get to hear in *SM64*!), Koopa Troopas are Nokonoko (the sound of walking nonchalantly), and Koopa Paratroopas (Koopas with wings) are Patapata (the sound of wings flapping). "Thwomp" translates to "Dossun" and "Boom Boom" to "Bunbun," an onomatopoeia for the sound of buzzing around. The English onomatopoeic "Cheep Cheep" fish becomes less adorable and more bubbly in Japanese as "Pukupuku," meaning "glub glub."

In general, onomatopoeic words (*giongo*) and mimetic words (*gitaigo*) are more common in Japanese. While an English speaker might say "The dog barked at me," a Japanese speaker might say "*Inu ga wanwan to naita*," which means "The dog cried wan-wan"—and this wouldn't be considered childish. Still, a handful of *SMB3* onomatopoeic names are unique to English, like the Bob-Omb, which is more onomatopoeic than the Japanese name Bomu-hei, or "bomb soldier."

•

My little brother is not so little anymore. In fact, he's 6"2' and built like the wide receiver he was for all of high school and college, and he's got his first adult job working as an environmental consultant. When I visit him in Atlanta, I find myself sitting in his bachelor-decorated apartment with him and my dad, killing time before we go visit a cousin. What better way to spend these 30 minutes than to play a video game?

David picks up a controller—it looks tiny in his enormous hands—and turns on the latest Call of Duty game on his Xbox One. My dad and I are quickly lost and dumbfounded by the game playing on the screen. The online multiplayer skirmishes are fast and deadly—one wrong move and you're toast, killed not by a cute cartoon turtle but by an actual twelve-year-old sitting somewhere in Michigan or Korea or wherever. It's a perfect game for someone as competitive as my brother because when he wins, he's beating a real, live person.

"Want to play, Alyse?" he says, smirking and handing me the controller.

"I'm not going to be good at this," I say, but take it anyway. My first-person shooter skills hit their high point with *GoldenEye 007* for the N64, and even then, they were pretty average.

As I play, I feel like my dad must have felt when we urged him, as kids, to try *SM64*. I'm killed over and over again, usually seconds after I respawn. It's infuriating to be killed and not understand why you were killed, and even worse to be killed and understand exactly why but lack the skill to prevent it from happening. There's no flow state at all. *Who sniped me?* I think. *That's a grenade? Which button should I have pressed? I wasn't fast enough!*

But David steps in and patiently explains why I'm getting killed. He shouts out instructions after each time I respawn, and, after a while, the time it takes me to be slaughtered is no longer ten seconds but a whole minute. Little by little, I'm learning from him.

•

Back in 1990, it wasn't snipers or smoke grenades we had to worry about but Lakitu and Boss Bass—the two enemies who took the most lives from me, my brother, and my father by a long shot. The *SMB3* strategy guide introduces Boss Bass with the simple note that "He's big, he's bad, and he's hungry!" followed by, "We think you'll dislike Boss Bass"—the understatement of the century. Boss Bass is a giant fish with the coloring of a red and white Cheep Cheep fish who patrols the water into which levels 3-3 and 3-8 periodically sink, waiting to devour you in a single gulp. He's more like a pit of lava or a bottomless hole than a Cheep Cheep or Goomba, because with Boss Bass, you only get one chance. One "hit" from Boss Bass and you literally disappear into his mouth and are never heard from again. He's the Jaws of the Mario universe.

The design of Boss Bass levels is brilliant because of the terrifying vulnerability you feel when the land sinks down and you're within his gulp-zone. It feels so personal when he eats you—it's so belittling to be swallowed by a stupid fish, and if you're anywhere near Boss Bass (who can jump, by the way) when he opens his mouth, you *will* be a goner. If you fall into the water while Boss Bass is on the other side of the screen, you have only a few seconds to pull yourself out, and no moment in the game is more panic-inducing than this one.

You can throw all the turtle shells and ice blocks you want at Boss Bass, and it's quite satisfying when he goes belly-up, but, maddeningly, he'll come back moments later (the same Boss Bass, revived from the dead? A mega-boss returning to avenge her son's death like Grendel's mother in *Beowulf*?). What's more, the ice block could melt in your hands just as you're about to throw it at Boss Bass, who will promptly laugh (in my imagination) and then eat you (in reality).

Equally intimidating is Lakitu, a returning *SMB1* villain who rides around in a cloud above your head and throws spiked green balls down on you. Lakitu's projectiles rain down faster than an airship level's cannonballs or missiles, and in more unpredictable patterns. They also turn into spiny-shelled Koopas once they've landed on the ground, making it a bad idea to go slowly through a Lakitu level. According to Miyamoto, Lakitu (or "Jugemu" in Japanese, meaning "long life with no limits," probably because, like Boss Bass, he respawns even after he's been killed) is the character he most resembles. Miyamoto sees their similarities in being "very free, floating in the air, going anywhere." But while this free-spirit, boyish genius character has become the common public perception of Miyamoto the man, Miyamoto the head designer of *SMB3* was anything but directionless.

MASTERS OF PLAY

"The exploration, the creativity, the colorful worlds, the challenge; it's all there. The Mario games that followed SMB3 *built on it meaningfully with stupendous additions, but ultimately they were merely adding extra paint to an already perfect canvas."*

—Henry Gilbert, GamesRadar

SMB3's ENTIRE DEVELOPMENT TEAM consisted of just eleven people: Miyamoto and Tezuka as directors and designers, four additional designers, four programmers, and Koji Kondo as composer. During *SMB3*'s two years of development, Miyamoto's days at the office had no definite start or end time, and he often stayed up working late into the night. Miyamoto acted as more than just a designer on *SMB3*—he was mentoring his entire team, guiding them, and bringing out their best ideas, just as his mentor Gunpei Yokoi had famously done for him during the design of *Donkey Kong* nearly ten years before.

Miyamoto was leading his team on a quest for fun. He has said many times that he's always been more interested

in designing toys than designing games, and the word he uses most often to describe his design philosophy is "fun." Although he's pioneered innovations with character, narrative, and hardware, Miyamoto's design philosophy privileges gameplay over everything else.

Achieving this vision for *SMB3* meant personally drawing levels with his small group of four young designers (Katsuya Eguchi, Hideki Konno, Hiroyuki Kimura, and Kensuke Tanabe—the director of *SMB2* USA), and straightforwardly pointing out tiny details about how he'd like the levels to look, down to how many blocks should appear between enemies. In a recent edition of the "Iwata Asks" Nintendo interview series, Eguchi said that while working with Miyamoto, he learned how to strategically introduce aspects of the game. "He's very particular about first impressions," he said. "And if you change it just like he says, then it feels much better to play. I've seen that over and over again."

Konno, who wrote many of the enemy specs for *SMB3*, said that rather than talking about the "essence of Mario" during *SMB3*'s development, Miyamoto focused on asking, "Is that fun?" and "Does that feel right?" For example, Konno struggled with the mechanics of the Micro-Goomba enemy, tiny Goombas who swarm around Mario and stunt the height of his jumps. At first, Konno tried to make Mario heavier and slower when the Micro-Goombas clung to him, but the result didn't feel right.

Miyamoto rejected two of Konno's demos, saying, "Despite all this effort, it's probably just not going to be

fun like this." It was Miyamoto who came up with the solution—instead of making Mario heavier or slower, he inserted an invisible block above Mario's head so that when he jumped, he bumped against something. "It was a really simple solution, and when I made it just like he said, it was great," Konno said. "Lots of times after that when I've run up against a wall, he's come up with a completely different approach."

SMB3 co-director Takashi Tezuka often gets overshadowed by Miyamoto in discussions of Mario's history, but he provided important guidance for the team and came up with many of *SMB3*'s most important ideas—as well as a lot of the cute art. "You know, he wanted to draw eyes on just about everything," Eguchi said of Tezuka.

But cute elements like the world map screen's dancing hills with eyes had to be kept in check, Eguchi said, in order to make *SMB3* appealing to as broad an audience as possible and resist the common opinion that Mario was solely for younger players. "Looking at the drawings, [Mario] does have sort of a 'cute' appearance, but I feel we've always tried to maintain the heroic, admirable image that everyone's looking for," Eguchi said. "Then again, looking at *Mario 3* […] the game has sort of a cutesy aspect to it, I suppose. When I look back, I wonder if we could have done some things differently here and there."

The team couldn't update level data without the help of one of their four programmers, which meant they

could only experiment with level designs twice per day: once in the morning and once in the afternoon. Konno said that the team felt exhausted toward the end of the development period, but Eguchi adds that Miyamoto's "pickiness" kept them focused on perfection. "He doesn't think at all about the work involved in fixing something," Eguchi said of Miyamoto. "If it'll make the game even a little bit better, Miyamoto-san's always been unhesitant about making changes."

"There is an allegedly—I hope apocryphal—saying that I've heard about development at Nintendo," said James Clarendon, senior software development engineer at Amazon Games Studios. "'The scariest sound you can hear is that of Miyamoto's footsteps coming down the hall.' The implication here is that if he's coming to you, it means he's got an idea and there's a lot of existing work that's going to get thrown out."

Indeed, ROM hacks delving into the *SMB3* NES game cartridge reveal a wealth of unused content that shows some of the design team's rejected development decisions, including:

- two versions of Mario with pink overalls instead of blue;
- a number of alternate enemy designs, including gold Cheep-Cheeps and green, fast-flying Para-Beetles;

- a spike-and-wheels graphic, a propeller graphic, a skull graphic for the map screen, and an alternate version of the Magic Ball won in fortresses;
- a sliding Hammer Mario graphic (Hammer Mario can't slide in the actual game, probably because the team wanted to allow players to crouch on hills and hide from enemy fireballs);
- alternate minigames involving dice and cards, hosted by a Hammer Brother and a Koopa Troopa instead of Toad;
- and a cool little adobe-style fort graphic for the map screen.

The cartridge data also includes a number of unused levels, some of which appear to be either first drafts or more challenging versions of existing levels, perhaps revealing an initial desire to make the game even harder than the finished product.

Many of these alternate levels seem to exist solely for the game designers, so that they could test out mechanics in-game. These are some of the most bizarre of all. One unused level, for instance, features a series of waterfalls Mario must swim straight up, while another seems to enter outer space. Several levels are impossible to beat since they don't include an exit. The cartridge contains gray levels, green fortresses, and levels with a pink sky or stacked cloud platforms. There's a level full of Tanooki Suit bonus rooms, a World 7 Hammer Brother (the final version of this world contained none),

an early version of the famous World 5 wind-up shoe level, and a water/sky hybrid level with a secret exit.

•

SMB3's designers left something else on the cartridge—something they could have easily eliminated for space purposes. That feature is the two-player mode. With its two-player playthrough and battle options, *SMB3* is the first game in the main Mario console franchise to allow cooperative bonding (or fighting) during play. If my brother and I bonded over me teaching him how to play, then my best friend Erin and I bonded over trying to destroy each other again and again in *SMB3*'s battle arena.

Erin was my randomly assigned roommate during our freshman year of college. The first time we spoke on the phone, we made plans for what we would each bring for our room: who would contribute a mirror and who would provide a floor rug.

"Now let's talk about the important stuff," I said to her. "I'm going to bring my Nintendo 64."

"Awesome!" she said. "I can bring my Super Nintendo, but not the games, since they're my neighbor's."

"I have tons of games!" I told her. "I'll bring them all!" And just like that, our friendship began. Throughout our first year living together, we played many games, but the one that got the most air time was *SMB3*—in particular, *SMB3*'s battle mode. The battle mode is essentially an

elaborate minigame based on the original 1983 arcade game *Mario Bros*. The course contains three levels of platforms, with two pipes on the top level that spew out crabs, flies, and Spinies. The way to win in battle mode is to shove your opponent into these enemies, paralyze her with jumps from above or below, or, of course, hit the "POW" block that shakes the entire room and leave her helpless to one of the baddies.

There are few feelings on earth more frustrating than getting beat at the *SMB3* battle mode. While you may have grown used to getting beat in Mario games by a giant ape or a giant turtle or a giant plant emerging from a pipe, it's a totally unfamiliar experience to be beat by your own friend who had the nerve to hit the "POW" block *just* as you were about to squash that insect for a few extra points. The *SMB3* battle mode gets personal.

•

Several other games from this time period likely influenced *SMB3*'s design decisions. Games from the late 1980s like *Dragon Warrior*, *Final Fantasy*, and *The Legend of Zelda* introduced large worlds perfect for exploration and epic quests. The game Miyamoto almost certainly had on his mind as he worked on *SMB3* (since he worked on them simultaneously) was *Zelda II: The Adventure of Link*, which combined a top-down tile map (like *SMB3*'s even more fully explorable

world map) with a side-scrolling view for towns, battles, and dungeon levels.

Fairy tales and Disney movies continued to influence *SMB3* as much as they had *SMB1*. *Alice in Wonderland*, which Miyamoto has said inspired him to include a mushroom that could make Mario grow in size, played an even bigger role in *SMB3*, with its super-sized World 4 creatures. In addition, the Koopalings' airships closely resemble Captain Hook's flying pirate ship in *Peter Pan*, and would go on to make another appearance in *SM64*'s final world, Rainbow Ride.

SMB3's biggest influences of all, however, were its Mario predecessors. Though it was never originally intended as a Mario game, *SMB2* USA is Miyamoto's all-time favorite Mario game to play. "[*SMB2* USA] was a game that just had a very different sort of feel," he said in an IGN interview. "I think we had such a loose approach to it, we really came up with something interesting."

As different as they might seem, *SMB2* Japan and USA both bridge gaps between *SMB1* and *SMB3*. *SMB3* incorporates the play style and mechanics of *SMB1* and *SMB2* Japan, but resembles *SMB2* USA more closely in its art, graphics, and more open level design. Any continuity from *SMB1* to *SMB2* USA to *SMB3* probably exists because several of the same members of Nintendo's R&D4 team worked on two or all three games. In addition, *SMB2* USA and *SMB3* were most likely in development simultaneously, since,

as Jon Irwin points out in his book *Super Mario Bros. 2*, *SMB3* was released in Japan merely two weeks after *SMB2* USA hit stores in America.

SMB3 carried over from *SMB2* USA a focus on world-building. Although *SMB1* included distinct worlds, each ending with a castle, these worlds had no unique theme or name. These early worlds, writes William Audureau in his book *The History of Mario*, "were remnants of an era when game designers still thought in terms of levels rather than worlds or universes; the levels were put together without any real logic, except perhaps to reach a fortress every four levels, which was already a lot at the time." Unlike the Japanese *SMB2*, *SMB2* USA took a big step toward themed, varied worlds like desert worlds, an ice world, a sky world, and some grassland worlds—all similar in theme to later *SMB3* worlds, which would each become even more distinct. In addition, the ability to travel backwards within a level, across terrain already covered, occurred for the first time in a Mario game in *SMB2* USA, and would hugely open up the potential for secrets and exploration in *SMB3*.

In the end, as Irwin reminds us, the experiments of *SMB2* USA opened new doors for *SMB3*. Irwin points out, for instance, that when it comes to *SMB2* USA, "the joy of controlling characters with differing abilities may well have influenced the power-up suits of the beloved *SMB3*."

•

Though *SMB3* made many impressive aesthetic and technical leaps from its predecessors, the game is much more than the sum of its parts. Something intangible happens when they're all put together. *SMB3*'s designers, James Clarendon said, created a "coherent and cohesive gameplay experience—a 'core loop' in which all the game's aspects tie together and build off each other."

For example, *SMB3*'s inventory system was nothing unique for this time, but the difference between *SMB3* and other games that featured inventories is that the items available in *SMB3* felt more cohesively tied to the game's narrative and aesthetic. "*Alex Kidd in Miracle World* let you purchase a power bracelet that let you shoot lasers out of your fist for one level, or a gyrocopter that allowed you to fly instead of walk, but these had little connection to the world of *Alex Kidd* itself," Clarendon said by way of example. *SMB3*, however, gave players items like World 5's green wind-up shoe, the Hammer suit, or Lakitu's Cloud, all of which felt delightfully like stealing the enemy's weapons and powers—a feature that anticipates Kirby's power-stealing abilities, which would debut in *Kirby's Dream Land* in 1992.

SMB3's minigames like the roulette Spade Panel, the "memory match" N-Mark Spade Panel, Toad houses, and the two-player battle mode that Erin and I loved so much were all tied cohesively to the rest of the content, the franchise history, and even Nintendo's playing card roots.

Plenty of other games at the time already had bonus rounds, Clarendon mentioned, "but contrast visiting Toad's house or matching clear and common Mario iconography with the disconnected experience of *Psycho Fox*'s 'ghost leg' minigame. *Tapper's* mysterious masked soda can shaker is only present for the bonus rounds and you never interact with him again."

For designer Mike Roth, *SMB3*'s feeling of cohesion is ineffable: "There are plenty of explanations as to why *SMB3* has been able to stand the test of time," he said. "However, the true answer may be a bit uncomfortable for us designers out there: 'It's just magic.' There is no one mechanic or experience in *SMB3* that you or I can claim as the core feature that kept bringing us back. Picking up coins? Not really. Shooting fireballs? Maybe. Yet you cannot deny with all the aspects of play woven together, there is something undeniably, incredibly pure and fun about the experience. This 'fun' transcends the technological limitations of the hardware and stands the test of time as new games and consoles come and go."

Playing *SMB3*, Howard Phillips said, "you felt like you were just the master of play. And that's something that not all games are good at—in order to present difficulty, they present novelty and they basically punish you during the novelty phase. *SMB3* didn't punish you during the novelty phase—it said, 'Yes, you're a very skilled Mario player, so have at it. All of the surprises are going to be wonderful and good. And we're also going

to give you some additional control with the tail and the ability to fly and things like that.' Those things that stood out were great additions and not ones that took away your mastery. It only enhanced your mastery."

•

It takes a lot of practice to feel like a master of World 2's panic-inducing sun level. As soon as you see it on the map, you know something different is coming. It's not a numbered level, but rather a small sandy patch stitched onto the map. It's easy to dread this level—to hate the angry sun in the top left corner of the screen (where it typically resides in a child's drawing of a sunny day) and the way it swoops down and stings you (or melts you?) over and over again, demonstrating how the heat in this wide expanse of desert can truly kill you.

Your best strategy for avoiding the vicious sun is to run as fast as possible. But a brilliant monkey wrench is thrown into this plan when a windstorm comes out of nowhere right in the middle of your sprint, disrupting your straight, fast run-through and sweeping you backwards directly into the path of the horrible sun. A precisely timed jump will fling you over and through the windstorm on your way to the end of the level, but no matter how many times you play, it's easy to forget just when the storm's going to hit. There's no better feeling than when you finally nail the P-speed jump, soar over the wind tornado, and touch back down to

sandy earth again, with only a short distance left to the safety of the level's end.

•

The reason *SMB3* feels so good to play is because it perfectly incorporates all the ingredients of excellent "game feel," an intuitive term that's easier to experience than to define. Essentially, game feel is the sensation of moving a character around a digital space; it's the feeling of control—the "tactile, kinesthetic sense of manipulating a virtual object," writes designer Steve Swink in his book *Game Feel*. Swink says that game feel can be an "invisible art" or an "overlooked aspect of game creation," and yet it's arguably the most important element of a game. Great game feel makes a game fun because it puts players in control and immerses them in the experience, with predictable, responsive mechanics they can steadily improve on until they're experts.

In Miyamoto's games, Swink argues, enjoyable game feel comes from simplification. Miyamoto "regarded the feel of a game artistically, as a composite aesthetic experience," Swink writes. "At a time when the field was dominated by engineers who […] drew on complex, literalistic metaphors like the gravitational pull of black holes or landing a spacecraft on the moon, Miyamoto brought a refreshing, naïve perspective. He simply wanted to make fun, colorful games about whimsical characters that felt good to play." In addition, Swink argues that Miyamoto's holistic approach to game

design—taking into account hardware and game controller specs along with software—creates excellent game feel, starting with *SMB3*'s grandparent *SMB1*.

SMB1's looser, more responsive, and less exact game controls made Mario's movement feel more nuanced and less stiff than it had in *Donkey Kong*. In *Donkey Kong*, for instance, Mario's jump was a rigid and unchangeable arc. In *SMB1*, the jump became more nuanced: Holding down on the Jump button for longer made Mario jump higher and players could move Mario in the air mid-jump. *SMB3*, in turn, introduced another new jump mechanic—rebounding off an enemy added more height to a jump. *SMB3*'s emphasis on exploration necessitated an even more fluid control feel, and anyone who (like me) has played *SMB3* before encountering *SMB1* might feel like as though *SMB1*'s controls drag in comparison.

In *SMB3*, Mario's movement became so nuanced that he could run, skid, slide, fly, tail-whack, ground-pound, throw hammers, swim like a frog, and slow his descent by fluttering—an incredible variety of available movements considering the small number of buttons on the NES controller. At the same time, though, the controls didn't depart too radically from *SMB1*—instead, *SMB3* refined them, built on them, and presented players with novel situations in which to use them. "The player is constantly challenged by the level design to improve and develop real, actual skill with the controls," Clarendon noted, like "learning how to run when the ceiling full of spikes is

falling, mastering the analog-ness of jumps to learn how to time them juuuuust right, and giving the player a safe respite to experiment with the Tanooki suit."

SMB3's sound and visual effects, which Swink calls "polish," also make the game feel extremely satisfying to play. Small details in the art and animation, whether it's Star Mario's awesome somersault jumps, the map screen shuffle of the Hammer Brothers between levels, the dust Mario kicks up when he changes direction mid-run, or the tiny explosion sound and animation that accompanies brick-smashing—all of it contributes to the overall immersive effect of playing *SMB3*.

So, too, does the game's physics. *SMB3*'s physics are so nuanced that a specific rule dictates how a mushroom will fall out of a bumped question block. When I was a kid, I thought this mechanic was totally random until I heard a schoolyard legend that the mushroom would fall toward whichever side it was bumped on. Believing this rumor lost me a lot of mushrooms. In fact, the physics follow the opposite rule—hitting a box from the right side will cause the mushroom to fall out of the left, and vice versa. It's a realistic scheme, albeit a hard one to expect young players to notice on their own. And there's nothing more disappointing than when your mushroom goes the wrong way out of the box and dives straight into the fiery lava.

Flying wouldn't feel nearly as satisfying without just the right gravity system, and *SMB3* built off the exquisite in-game physics first developed in *SMB1*.

Equations in *SMB1*'s programming code created speed, positioning, gravity, acceleration, and deceleration in the virtual world. Holding the B button slightly altered these equations and allowed Mario to run and accelerate faster, which becomes even more intense in *SMB3* with the addition of the P-Meter's feedback.

Equally as important as gravity to *SMB1*'s and *SMB3*'s physics is friction. *SMB1* has much less friction between Mario and the ground he runs across than, say, *Excitebike*, where you can practically feel your wheels digging into the dirt. According to Swink, *SMB1* and *SMB3*'s particular type of friction makes controlling Mario feel delightfully "slippery," "loose," and "sloppy," like he's a "bar of soap sliding across wet tile." Of course, in World 6, Ice Land, an increased form of this slipperiness becomes a nuisance, but in the other worlds, the ability to zip around levels, crashing into blocks and never having to stop, is what makes Mario so fun to control.

•

Though not as distinct as the differences between *SMB2* Japan and *SMB2* USA, the North American version of *SMB3* was not the same as the version released in Japan. For starters, the Japanese *SMB3* was harder than the North American version, possibly due to perceptions, after the *SMB2* Japan debacle in the US, that American players needed easier games. The decreased difficulty of

the North American *SMB3* came down to one simple change: In the Japanese game, if Mario takes a hit in a suit he becomes small Mario, whereas in the North American version, he becomes "Super" Mario. And so *SMB2* USA's legacy continued—Japanese games were harder than American games even when they were the same game.

Another key difference between the Japanese and North American versions of *SMB3* is Princess Toadstool's response to her rescue. In the Japanese version of her dialogue, she delivers a kind of third-person traditional "ending": "Thank you! At last, peace has returned to the Mushroom World. The end!" Writer Michael P. Williams points out that the Japanese text is not clear on whether this final "The end" is the princess or the game itself speaking, or whether Mario or the player is being addressed, but the politeness level of "The end!" changes from formal to informal, suggesting a cute, subtly playful tone, like "Theeeee End!" In the North American version, Toadstool gets even more playful and casual, with the addition of a friendly inside joke referencing *SMB1*'s repeated castle-ending schtick: "Thank you. But our Princess is in another castle…Just kidding! Ha ha ha! Bye bye." It wasn't uncommon for American game translators and localization teams at the time to deviate from the Japanese script and add franchise-referential inside jokes like this send-off, and *SMB3* is full of them.

The version of *SMB3* I played with my brother David and my roommate Erin was part of *Super Mario*

All-Stars, released for the SNES in 1993. *All-Stars* contained updated versions of *SMB1*, *SMB2* USA, *SMB2* Japan (called *Super Mario Bros.: The Lost Levels*), and *SMB3*. In the *All-Stars* version, thanks to the SNES's 16 bits, *SMB3* had richer graphics, more animations, a larger color palette, and a save feature. Plus, Luigi is no longer just a green version of Mario—he has his own distinctive tall and thin body.

One of the biggest changes in the SNES version is that the Koopalings have turned the world kings into different types of creatures than in the original. Some of the revised animals include ones that appear in other Mario games, including *Super Mario World*. For instance, in the NES version of *SMB3*, the king of World 3 is transformed into a *kappa* (a Japanese water goblin), but in the SNES version, he is transformed into a Dino Rhino from *SMW*. The series has continued in this self-referential tradition for game after game, constantly mining itself for content and finding more ways to cohere.

•

At the time of its release, *SMB3* received extensive praise from the gaming press. *Mean Machines* gaming magazine editor Julian Rignall praised *SMB3*'s "utterly fabulous playability," and others touted its graphics and combination of cognitive and skill-based puzzles. In *Computer and Video Games* magazine, which scored

the game 98 out of 100, editor Paul Rand called *SMB3* "the Mona Lisa of gaming" and "astoundingly brilliant." Another writer claimed it was "absolutely impossible to put down for anything less than a fire alarm—and even then you find yourself weighing down the odds."

Early reviews of *SMB3* tended to focus on the game's:

- creative, humorous aesthetic;
- detail-oriented, precise gameplay and responsive controls;
- map screen and inventory system, which offered new opportunities for players to strategize and personalize their gameplay;
- variety of challenging enemies and obstacles;
- approachable learning curve;
- expansive, well-designed levels with creative features like sinking islands;
- wealth of areas to explore and secrets to discover;
- nuanced animation (Mario's walk included more frames than in any previous Mario game, and the sprite allows for new poses such as sliding and ducking while holding his cap down);
- expanded library of sounds and music;
- and excellent replayability, offering players the chance to create new challenges for themselves even after beating the game.

At the time of its release, "*Super Mario Bros. 3* […] revived the sense of wonder that made *Super Mario Bros.*

so special," historian Tristan Donovan writes. "*Super Mario Bros. 3* became, both critically and commercially, the culmination of Nintendo's journey from unknown Japanese toy maker to global video game giant."

Howard Phillips offered *SMB3* one of its first reviews, long before it hit shelves. During *SMB3*'s era, Nintendo used a quality control in-house rating system for all games—both Nintendo-made games and third-party licensed games. Each new title was ranked by three people on a scale of one to five for a variety of traits, including gameplay and graphics. Several staffers (including Phillips), game counselors, and a couple hundred customer service representatives taking phone calls were all a part of this system. "Out of all those groups, I consistently rated *SMB3* higher than the other groups [did]," Phillips said, "For me, when I saw it, I thought, [this is] not just another game, and it's not just a fun and challenging game—it was truly a *quintessential* video game. And that's how I rated it. If not *the* top-rated game, [*SMB3* was] the second top-rated game I ever gave during my time at Nintendo rating hundreds of titles."

"Well you know that now I have to ask you what your highest rated game was," I prompted Phillips during a phone interview.

Phillips gently declined to answer. "I don't want to spoil anybody's party," he said. "There were a number of games that were all great, so whether it was the SMB series, *Legend of Zelda*, games like *Metroid*—there were a

number of games that were just phenomenal. Once you get into that environment, does it make a difference if you take one step further up the mountain? I don't think so. Once you get to the top, you can't go much higher."

As much as the world loves *SMB3*, Miyamoto himself has mixed feelings about it. "I look back and play some of these games and there are a lot of places where, to be honest, I'm a little embarrassed," Miyamoto told *Time*. "I look at *Super Mario 3*, and [feel] like, 'This was it?! This is what we thought was good enough?' That being said, I do have new understandings of that work. The balance in that game is what it needed to be at that time. It really was. And so, even seeing all the limitations, I'm very happy with what we created and I wouldn't change it."

SMB3 was the last game on which Miyamoto had a "designer" credit. From here on out, his name appears only as "producer" and "director." It was also, as Phillips indicated, the game where he proved that his successes with *Donkey Kong* and *SMB1* were not a fluke—the game where he earned his status as a legend. If *Donkey Kong* was Miyamoto's breakthrough and *SMB1* his revolution, then *SMB3* was his masterpiece.

MARIO'S MELODIES

"Swing your arms from side to side
Come on, it's time to go!
Do the Mario!"

—*Super Mario Bros. Super Show* (1989) lyrics

Inside World 3's tall white castle, located on an island that looks just like Japan and sitting in the exact spot where Nintendo's Kyoto headquarters would be, a small green *kappa* wearing a crown sits on the throne. A mushroom courtier is leaping in the air and scream-crying piteously, "Oh it's terrible! The king has been transformed. Please find the magic wand so we can change him back." The throne room music sounds dire and squealy, just how I imagine this mushroom creature's voice. Right from the start, the music sets the mood.

What follows next is one of the simplest, coolest cut scenes ever: Mario confidently walks toward the airship just as it leaves the earth, timpani pounding in the background like a call to war. It's as if the Koopas have been waiting out back behind the castle on their airship

and have just now decided to take off. Narratively, the airship implies that the Koopalings invaded the Mushroom World from elsewhere. (Maybe from World 8, Dark Land? Is that their home? No wonder they want to leave.) They're like Viking conquerors mixed with pirates mixed with monsters, all inside a Disney cartoon.

Mario jumps onto the anchor and shimmies his way up to the main docks just as the airship's long, slow opening notes begin to play—notes that mimic the ship's foreboding, slow-moving auto-scroll, hammering home the militaristic invading conqueror theme. The song culminates in a series of repetitive quick, staccato higher notes that up the urgency even more dramatically before dropping away and leaving only the ominous timpani to start the loop all over again.

Cannonballs and Bullet Bills crawl through the air at a decidedly unrealistic pace, but their slow movement, combined with the auto-scrolling, makes for a dangerous environment cluttered with hostile projectiles. The abrupt *thud* of the cannons feels much louder than the music; it's tailored to give you a jumpy feeling as you try to precisely time your leaps to land directly on top of the cannonballs and knock them out of the sky—all without rebounding yourself into another cannonball. Just a bit off and you're dead.

Fitting World 3 (Water Land)'s ocean theme, this airship is blue, and it also features a new enemy—flames. All in all, the flames are one of the easier obstacles to avoid

on an airship, but the fact that the (annoyingly adorable) tiny-wrench-throwing gophers resurrect even after you've destroyed them makes this airship more difficult.

Once through the pipe at the ship's stern, I come face to face with pouty, pink-bow-wearing Wendy O. Koopa, and the Koopaling fight music begins—a driving beat in the percussion and melody that urges Mario to get down to business!

Wendy, the sole female Koopaling sibling, is a tough boss. What makes the Koopalings hard to beat is their erratic movement—they are the exact opposite of the predictable, standard fortress bosses, the Boom-Booms. Koopalings jump at wildly different levels, and they wield wands that can shoot out any number of harmful objects.

In Wendy's case, those objects are colorful inner tubes. The tubes bounce around the room after she's shot them out and clutter things up on the screen. The sole solution is to beat her *fast*. I die several times while trying to defeat Wendy, and it's hard not to start taking things personally. Getting killed by the Koopalings feels much more annoying than getting killed by falling into a pit of lava: They look like smug brats, and as an added slap in the face, their stupid airship flies away from you once you've failed, forcing you to to trudge across the map screen again to find it. (If you re-enter the castle once the airship has flown away, the frantic mushroom courtier will urge you back to the battle: "Hurry! Hurry! Get the Magic Wand back from Little Koopa.")

I must be taking things very personally during this fight with Wendy, because my girlfriend Kate, sitting next to me on the couch working on her laptop, mutters, "You know, you make lots of constipated sounds when you're playing, and your body gets all tensed up."

"You should write a book about me writing a book about *SMB3*," I tell her. I think I'm starting to scare the cat, who's been sitting on my other side blissfully unaware, until now, of the epic ongoing struggle beside her.

Nevertheless, the payoff when I finally defeat Wendy is worth it. Once she's been routed, she runs away (instead of blowing up, like the fortress bosses) and drops the wand. Even after Wendy's left the chamber, the thumping battle music continues, but the instant I pick up the wand (or leap up and catch it in mid-air, which is much cooler), the fast beats cease and eight triumphant, ascending notes play, holding long on the last note to proclaim my victory: dun-dun-dun-daaaah, dun-dun-dun-DAAAAH!

The ship blows up and I'm treated to another awesome cut scene: This time, of Mario falling back down to earth again from the destroyed airship, all while a raining string of notes falls down with me. The wand makes an adorable squeal as it bounces off the floor into the king's hand (should I have been more careful with that?) and a regal, proud melody—similar to the one I heard when I first caught the wand—plays as the king thanks me for restoring him to his human form, which looks remarkably like Mario.

Try playing this all over again with the sound on "mute" and it won't be the same experience—not even close.

•

The original *SMB1* soundtrack contains some of the catchiest and most memorable tunes in all of gaming, from the classic opening seven notes ("ba-da-da duh-da DA, dun") to the underworld's groovy low "denim denim denim." It was this exact problem that intimidated legendary composer Koji Kondo when he returned from his work on *SMB1*, *SMB2* Japan, and *SMB2* USA to write *SMB3*'s soundtrack. Kondo has said that *SMB3*'s main "overworld" theme, used in level 1-1 and many others, was the hardest piece he ever had to compose, mostly because when he started work on *SMB3*, he knew he had to come up with a catchy Mario theme that was different from, but just as good as, *SMB1*'s iconic main theme—the piece of music that, to this day, he's proudest of composing.

"The [original] *Super Mario* theme itself was almost a little too empowering," he told US Gamer. "That indelible impression it left in the user's mind with how it matched up with what Mario was doing on the screen—that was a big mountain to climb when we started working on the music to *Super Mario 3*."

To make *SMB3* sound different from the Latin-inspired *SMB1*, Kondo decided to use a slightly slower reggae style with a more prominent bass and beat. World

5's ground map screen theme, with its solo opening timbale drum roll, exemplifies this new style.

"But when I think about [this style] now, I'm not so sure it was a good idea," Kondo said, laughing, in a recent Iwata Asks interview. "It may not have really matched the rhythm of the game. There was actually one other candidate song. Right up until the end, Tezuka-san and Miyamoto-san and I were debating which one to use." *SMB3*'s soundtrack was such a struggle to compose, Kondo said, that he went into his work on *SMW* with a set of lessons learned on what not to do. He even confessed that he's "been told that most of [the *SMB3* songs] don't make much of an impression," in part because the game had so many songs.

But no matter what Kondo might think now, *SMB3*'s soundtrack undoubtedly marked a big step forward for Mario game music, featuring increased sonic diversity but also a musical coherence that ties the game's many worlds together. For instance, *SMB3*'s fortress and airship music both use silence and chromatic leaps in similar ways, creating an unsettling feeling in hostile environments. And *SMB3*'s underwater level theme is similar to the map themes of Worlds 3 and 4, both of which are islands: Each has a slower melody, more flute, and little percussion.

As is typical of Kondo's music, *SMB3*'s catchy soundtrack is tightly connected to gameplay rhythms, seamlessly setting the mood of each world and level while also emulating the player's emotional and physical

gaming experience. In fact, Kondo's game music is often in sync with the console CPU's internal clock, which explains why some players can beat Mario levels with their eyes closed, timing their jumps to the music. In *SMB3*'s case, the three different main level themes indicate to the player what type of level they're in. The 1-1 theme is laid-back, ambly, and syncopated, encouraging exploration and wandering. "In other console platformers (such as the Mega Man series)," notes historical musicologist Dana Plank, "the music is often at a faster tempo, and it seems to function a little like a gameplay metronome, driving the player through the environment at a fairly swift pace. I am struck by how Kondo's music seems to suggest exploration within the time limit. The music seems to say, 'Try every pipe! Break all of those blocks! You have time!'"

The 1-2 theme, on the other hand, is frantic, with jumpy chromatic runs up and down the scale, and accordingly, it's usually used in levels with moving platforms and tricky jumping—including, of course, auto-scrolling levels like 1-4. In the underworld theme, low notes create a darker feeling that matches the cave setting. This song also creates a sense of continuity across early Mario games, since it's a remix of *SMB1*'s original underworld theme. *SMB3*'s ending credits theme and Power Star theme are also variations of the *SMB1* originals.

"This kind of franchise continuity is important," Plank said. "Note how themes carry over in other

series such as Metroid, Legend of Zelda, and Final Fantasy. Why is it important? Because the player, ostensibly, forges an emotional connection to this music, and the game acknowledges the veteran players' dedication and loyalty to the brand while still giving it a fresh take. The player can have a wonderful moment of processing fluency when they recognize a familiar tune from an earlier installment in the series."

Those aren't the only familiar tunes you may hear in the *SMB3* soundtrack. As pointed out on TV Tropes' "Suspiciously Similar Songs" page, the game's airship theme resembles, fittingly, the militaristic march "Mars: The Bringer of War" from Gustav Holst's orchestral suite "The Planets." And while I can't at all hear their comparison between the 1-2 theme and the Buggles' "Video Killed the Radio Star," I find very striking the similarity between the 1-1 theme and Ringo Starr's version of the (much slower) song "Sentimental Journey."

•

Like early game design's "programmer-poets," Kondo has stated that his favorite hardware system to compose for was the NES because its technical constraints made him feel like he was solving a tough puzzle. 8-bit and 16-bit consoles, said Plank, often produced a kind of "forced minimalism," much like haiku, in their game music.

The NES gave Kondo a miniscule two kilobytes of RAM to work with, so *SMB1* was limited in its

number of songs and length of songs, and relied on clever repetitive loops. *SMB3*'s songs were still based on repetitive loops, but, thanks to the MMC3 chip, there was room for many more songs—which was useful, considering that the game had far more levels and more diverse worlds that required more diverse music. In addition to the distinct tunes used for each map screen, fortresses, bosses, airships, and minigames all have their own songs, too. *SMB3* featured several unique songs that we only hear at one point in the game—songs like the Bowser fight tune, the credits song, or the song for Princess Toadstool's dungeon, which is itself a remix of the ending theme to *SMB2* Japan.

The game is so full of sound that the silent title screen can feel a bit out of place. The game begins with the famous rise of the red curtain, revealing Luigi and Mario standing on opposite sides of a tile floor against a black background. Luigi jumps up, rebounds off Mario's head, and lands again just as the words "Super Mario Bros. 3" (with a raccoon tail shadow behind the 3) crash down to the middle of the screen. In the animation that follows, Luigi and Mario play around and demonstrate how to become Raccoon Mario; how to crush Goombas; how to grab, kick, and stop turtle shells; and even how to slip behind the stage. This introduction to the game's basic mechanics acts like an arcade game's "attract" feature—except that, unlike an arcade game attract screen, the *SMB3* title animation is completely, almost eerily silent. The first sound you

hear when you play *SMB3* is the feedback from pressing Start—the same rising fourth interval (and same notes) as the sound you hear when you grab a coin.

Kondo says this silent title screen (*SMB*'s title screen was also silent) was an intentional choice. "We just didn't feel there needed to be music on the title screen," he told US Gamer. "At that point, we thought that, until the game started, it wasn't necessary to have music on the title screen. So we just didn't have anything prepared for that."

While most 8-bit consoles had four channels to produce sound, the NES had five. Game composers like Kondo could assign each channel to produce certain components of a piece of music. The "noise" channel, for instance, typically produced percussion sounds, while the triangle wave often produced the bass. The NES's DPCM channel—the one that set it apart from other consoles of the time—was specially designed to play compressed samples (low-quality digitized recordings of real instruments or voices). Often, this meant recorded voice sound effects like the "Cowabunga!" in *Teenage Mutant Ninja Turtles III: The Manhattan Project*. But other composers, including Kondo, began to use the DPCM to incorporate a wider variety of more realistic percussion sounds—a technique he first experimented with in *SMB2* USA.

The biggest technical development in *SMB3,* then, was its use of percussion. In *SMB1*'s soundtrack, percussion had been generated entirely on the noise channel.

For *SMB3*, however, Kondo created percussion sounds using both the noise channel (often for hi-hat cymbals) and the DPCM channel, which could sample a greater variety of instrument sounds like timpani, wood blocks, timbale drums, or bongos. This approach created a much more varied and satisfying percussion section on *SMB3*'s soundtrack that can be heard right from the get-go in the World 1 map theme's head-bopping full drum kit, complete with a tom-tom fill. For another example of *SMB3*'s enhanced drum power, compare *SMB1*'s underworld theme to *SMB3*'s: the difference is all in the drums.

•

If history is any judge, Kondo was right to feel intimidated about composing *SMB3*'s soundtrack. *SMB1*'s songs do seem to be the most recognizable and nostalgia-inducing from the franchise, perhaps in large part simply because *SMB1* was the first home console Mario game many consumers ever played. And it's true that critics, scholars, and historians have paid much more attention to the music of *SMB1* than *SMB3*—*SMB*'s music was recently the subject of an entire book for Bloomsbury's 33 1/3 series, for instance.

In some ways, this represents the primary problem in comparing *SMB1* to *SMB3*. *SMB3* is in almost every way a better game than *SMB1*, but *SMB1* is the easier game to remember simply because it was the first. But

while *SMB1*'s music is memorable because it's iconic, *SMB3*'s music is special for the very reason that it's less memorable—because it's even more deeply entwined with the play experience and can't be easily parsed out. It exists as part of the game's whole rather than as a separate, stand-alone element. If *SMB1*'s soundtrack is a five-course meal of a few very memorable individual dishes, *SMB3*'s soundtrack is a big, messy, but perfectly seasoned pot of jambalaya. Or maybe turtle soup.

ALL THE WORLD'S A STAGE

"...and all the men and women merely players."

—from William Shakespeare's *As You Like It*

"*Super Mario Bros. 3* never happened." So concludes a long-standing conspiracy theory about *SMB3*. The conspiracy is this: The Mushroom World was never in trouble. The princess was never kidnapped. All of *SMB3* was just a play. Proponents of this theory point out the curtain that comes up at the beginning of the game's title screen and closes again after the final credits. In addition, many of the platforms in *SMB3*'s levels resemble set pieces in the way they're bolted to the background, with big shadows behind them, or hanging from the roof and running on tracks like stage machinery. Plus, Mario completes each level by exiting into a blackened "backstage" area. "Mario was never once in any real danger," one meme version of the theory says. "You were merely the audience."

Even more colorful is Gearbox cinematics director Mike Roth's variation of the theory. He argues that *SMB3* is a retelling of the events in *SMB1* in the form of a play. "In this retelling, Mario embellishes how formidable of a foe Bowser was," Roth says. "Suddenly, Bowser has rolling tank fortresses and hovering airships for his mini-boss henchmen. Do I believe this theory? Maybe. I enjoy it in the sense that it makes the Mario canon feel more in-depth. But I'm not sure if it was a deep narrative statement, or just an aesthetic style."

In a Nintendo UK *Mario Maker* promo video released in the fall of 2015, Miyamoto finally confirmed for the world the truth behind the *SMB3* theater theory—and all without saying a word. In response to the question "Was *Super Mario Bros. 3* all just a performance?" Miyamoto, who remains silent throughout the entire video, thinks for a moment and then nods vigorously, a small, sly smile spreading across his face. He's performing his answer, of course, just as he's performing his role as a kind of Nintendo company mascot in the promo video.

After *SMB3*, Miyamoto extended a theatrical element to the entirety of the Mario franchise. Consider the fact that Bowser helps Mario in *Super Mario RPG: Legend of the Seven Stars*, or that Mario, Luigi, and Peach, despite being Bowser and Wario's mortal enemies, often gather with them for friendly games of golf, tennis, or go-karting. Miyamoto has said repeatedly that this is possible because the characters

are all just actors playing roles. For Miyamoto, having a wide range of characters in the same universe makes him feel like he's "the owner of a talent agency," where characters can be enlisted to appear in any game he wants. "If you're familiar with things like *Popeye* and some of the old comic characters, you would oftentimes see this cast of characters that takes on different roles depending on the comic or cartoon," he said in one interview. "They might be a businessman in one [cartoon] or a pirate in another. Depending on the story that was being told, they would change roles. So, to a certain degree, I look at our characters in a similar way and feel that they can take on different roles in different games. It's more like they're one big family, or maybe a troupe of actors."

SMB3's theatrical theme has its roots in kabuki, a type of Japanese theater that often breaks the fourth wall and playfully or dramatically brings the actors and audience closer together. Mario breaks the fourth wall in *SMB1* when he faces the player as he falls off screen after dying, or in *SMW* when he gives the player a thumbs-up after beating a level. On *SMB2* USA's "choose your character" screen, Mario, Luigi, Toad, and Princess Toadstool line up for your approval on a curtained stage and react happily if you pick them. After *SMB3*'s overt theatricality, stylistic elements of kabuki continued to appear in games like *WarioWare: DIY*, *New Super Mario Bros.*, *Paper Mario*, and *Super Mario 3D World*.

Kabuki often features animal costumes and masks, which factored heavily into entertainment and spirituality throughout ancient Japanese history. The oldest Japanese mask artifacts date as far back as 10,000 BC. Clay or wooden masks resembling animals, mythical creatures, spirits, monsters, gods, or heroes could be used in dramas, dances, religious ceremonies, or, today, video games. *Super Mario Bros. 2* author Jon Irwin argues that *SMB2* USA's deadly Phanto masks are inspired by noh, a form of Japanese theater originating in the 14th century that incorporated elegantly carved masks.

•

If *SMB3* is all a play, then Bowser might be a man wearing a *kigurimi*, a kind of monster costume inspired by mythical beasts, animals, or insects. This would make sense given the Japanese pop cultural history of "suitmation," in which humans dressed in monster costumes crushed tiny cities in *tokusatsu* monster movies like *Godzilla*.

Monsters inject any story with instant drama and intrigue. Mario's mortal enemy was inspired by Gyūmaō (or "Ox-Demon King"), a character from *Alakazam the Great*, a 1960 anime adaptation of the classic Chinese novel *Journey to the West*. When Miyamoto's early drawings of Bowser (whose title in Japanese translates to the impressive "Great Demon King Koopa") looked more like a turtle than an ox, Miyamoto ran with this concept

and began to draw him to resemble the game's other turtle enemies.

Two explanations exist for why Bowser (a.k.a., "King of the Koopas") and his army of turtles are called "Koopas." The first, according to historian William Audureau, is that while Miyamoto and Tezuka contemplated what to name the villains at a Korean restaurant, they ordered a dish called *kuppa* in Japanese ("gukbap" in Korean). Miyamoto mistakenly believed the dish was spicy barbecue, which he thought suited the personality of his villains (though it's actually more of a vegetarian rice soup).

An alternate theory is that Bowser and his minions are named after a legendary Japanese creature called a *kappa*. According to folk tales, kappa, also known as river children, have reptilian skin and a turtle shell, and they draw their power from a bowl of water perched on top of their head. Kappa love to eat cucumbers and small children, but don't worry—you can steal a kappa's power by bowing to him. They're so polite they'll always bow back and let their magic water leak out of the bowl.

Like all children, I was fascinated by monsters as I grew up. As a kid playing *SMB3*, the character I felt most connected to was not Mario but Bowser. According to psychologist Ernest Dichter, monsters capture our attention because they are representations of our subconscious guilt. "Horror films horrify and fascinate us because they show us forces out of control," Dichter wrote in 1960. "What is horrifying is that the uncontrollable monster is, in many aspects, really ourselves."

As a young girl, the attractions I had for other girls felt monstrous and dangerous, and when I was aware of crushes I had on girls, I saw myself as a lumbering Bowser-like freak. I feared what would happen if I didn't keep my desires under tight control—I didn't know what they meant, and I wouldn't try to find out for a long, long time.

Instead, I put on a mask inside the safe world of games. I vicariously experienced the non-threatening platonic love between Mario and Princess Toadstool. The most romance there ever is between the two is a kiss on Mario's nose or a chaste cake baked by the princess to thank him. Still, it's clear they're together. Nintendo's video celebrating *SMB3*'s 25th anniversary, for instance, ends with a title screen reading "Mario saves Peach FOREVER" and a big heart surrounding the two characters.

This always-implied, never-fulfilled romance is what captivated me most about *SMB3*. In a game, we're capable of actions impossible in real life, whether that's turning into a frog or rescuing—or even desiring!—a princess. Games create possible worlds, or, as Juul puts it, "playgrounds where players can experiment with things they would or would not normally do." In this way, games are just like plays. In a play, you can shed the expectations of reality and be anyone you want—you can *play*. Costumes, both in and outside of games, offer limitless freedoms to explore, to hide, and to reveal. And stages—whether in a game or in a theatre—are perfect sites for exploration.

This is exactly how I used *SMB3* as a young girl who liked girls. It was utterly thrilling to be able to chase the lady of my dreams—even if I had to do so from inside the virtual *kigurumi* costume of a demon turtle monster or the overalls of a short, mustachioed Brooklyn plumber.

•

Mario wears his own fair share of costumes throughout *SMB3*. The game expanded the Mario franchise's transformation theme by adding to *SMB1*'s mushroom, star, and fire flower a range of wackier, more imaginative costumes and power-ups. More recent Mario games have gone even further, giving players the power to turn into a bumblebee, a cat, and a flying squirrel. *SMB3* set the stage for all of this.

In fact, *SMB3*'s costumes were originally supposed to be even weirder than they actually ended up. Tezuka was the first to suggest that Mario wear animal costumes. Historian William Audureau suggests that Tezuka was inspired by a 1988 Japanese Sega arcade game called *Altered Beast* in which the main character can turn into a bear, tiger, werewolf, or dragon. Perhaps because of this influence, all of *SMB3*'s suits were originally going to be fantasy-themed. One of the first creatures Miyamoto's team considered for an *SMB3* costume was a centaur.

The Japanese team eventually decided this Western mythological creature was too strange (and probably

too hard to animate), so they chose instead the *tanuki*, a real-life animal (called the raccoon dog in English) found throughout East Asia and often imbued in Japanese folklore with supernatural powers. In the Japanese version of *SMB3*, what we call "Raccoon Mario" (obtained with a leaf) is called "Tail Mario." The Tanooki Suit is the one that lets you turn into a statue; *SMB3*'s American localizers altered the spelling of "tanuki" to "tanooki."

Miyamoto, a fan of Western movies, had wanted Mario to ride on a dinosaur ever since *SMB1*. The technical constraints of the NES hardware, however, prevented this option. Even with *SMB3*'s graphics-expanding MMC3 chip, it was impossible to portray two character sprites moving simultaneously onscreen, and Miyamoto would have to wait until *Super Mario World* to introduce Yoshi, Mario's dino-mount. But the suits *SMB3* ended up with instead were more than enough—they're one of the most cherished aspects of the game.

•

Of all the worlds in *SMB3*, World 5, Sky Land, is my favorite. For starters, it's got the biggest secret of any of the world map screens. With just three levels, the map screen you start off with seems tiny, and there's no final castle anywhere to be seen. You might assume that one of the pipes will take you to the rest of the map screen, as it does in World 4, but then there's that strange spiral

castle to the west, and those clouds down at the bottom of the map, both of which are immediately intriguing.

World 5 also features the single rarest power-up in the entire game. For the average Mario player, it can be hard to remember which level is the awesome Kuribo's wind-up shoe level, a favorite of countless gamers. But as soon as you enter level 5-3 and see the strange landscape, which scrolls "backwards" from right to left, you just know you're in this magical level.

Perhaps nothing can better reflect the creativity, bizarreness, and humor in *SMB3*'s design than those little Goombas hopping around in their green wind-up shoes. By bumping a Goomba from below, you can kick him out of his shoe and hop into it yourself. Riding in the shoe allows Mario to jump even higher than in the Frog Suit—holding the Jump button after landing on an enemy sends you flying high into the sky. It's also a blast to finally be able to jump on top of Spiny shells, Munchers (those black Pac-Man plants), and Venus Fire Traps without getting hurt.

As soon as I get into the shoe and the physics of the jump change, I feel like a kid again, having so much fun I can hardly stand it. What are these Goombas even doing in these adorable shoes, anyway? And who the heck is Kuribo? While it might be fun to imagine him as a giant from World 4's Giant Land (where Mario is tiny and all the enemies are huge) with shoes big enough for Mario and the Goombas to jump around in, the reality is far more dull. Remember: "Kuribo" is really

just the Japanese name for "Goomba," but the localizers apparently forgot to translate this item name fully to "Goomba's Shoe." What was obvious to a generation of Japanese kids became a tantalizing red herring for American players.

In the end, part of the genius of Kuribo's Shoe is that it's a rare commodity that doesn't occur in any other level—nor can it travel with you after this level. Kuribo's Shoe follows the supply and demand law of scarcity that Nintendo used when first putting *SMB3* out into the world—if it's rare and hard to get, people will crave it more.

•

As I grew up, my father taught me how to do much more than play video games. He taught me how to throw a football and hit a baseball, and when I said I wanted to be a catcher, he taught me how to squat in my pads and catch pop-up fouls. I loved the bright colors and mascots of pro football team uniforms, and I loved the feeling of the catcher's mask covering my face—how just by putting it on, I felt stronger and braver, like a whole new person. When I asked my dad once why girls weren't allowed to play baseball or football like boys, he said he didn't have a good answer, but that if I tried my best and never gave up, I could play football if I wanted to. Then he bought me a kid-sized Dallas Cowboys jersey and helmet.

After my parents divorced, my dad moved to Miami and flew up to Georgia every other weekend to see me and David, and the three of us would stay at his parents' house. There, David, my dad, and my grandma Mimi would play football and pickle together in the backyard. Mimi had grown up running, climbing, and riding her bike around the big Philadelphia park she lived in, where her father was an Irish immigrant groundskeeper. She was always the "fourth man" for all the sports her three brothers played, and I've always felt close to Mimi for this very reason—we were the family tomboys. We could throw on a helmet or a jersey and become anything we could imagine.

•

Of course, *SMB3* wasn't the first game to ever include cool suits. But, as with so much about this game, it packaged them in way that perfectly fit with the rest of *SMB3*'s world. The suits offered players new mechanical powers like non-stop flight, powerful jumps, the ability to throw hammers, and more precise control over swimming—all of which let Mario explore his environments more deeply and take down his enemies in novel ways. And, for the first time, power-ups like the Hammer Brother and Tanooki Suits combined offensive moves with defensive moves.

SMB3's suits—a brand-new addition to the franchise—were more outlandish than previous power-ups.

There's some logic behind the mushroom's abilities—after all, real mushrooms such as the *amanita muscaria* can cause powerful and sometimes dangerous hallucinations, often of dramatic shifts in size. There's even some logic behind the magical Kuribo's Shoe, which comes straight out of fairy tales about enchanted boots. But Western audiences may wonder why a leaf gives Mario raccoon powers.

According to Japanese folklore, tanuki and foxes have the power to transform their appearance (and even turn into humans) by putting a leaf on their head. While foxes often use this power to tempt people, tanuki do so simply for mischievous fun. The Raccoon or Tail Suit is probably the most iconic (and most common) power-up in the game. Raccoon Mario appeared on the box art and *Nintendo Power* strategy guide, and for good reason. With *SMB3*'s new power of flight, exploration had never felt more exciting.

You can thank Tezuka for this feature—he's the one who first suggested it. Originally, the team had decided they wanted to put a tail on Mario that would allow a spin attack. According to legend, tanuki possessed eight special traits that brought good fortune, one of which was a large, strong tail.

"But then, once we had the tail on Mario, we thought: 'We've got this great tail. Isn't there something else that we can do with it?'" Tezuka remembered in one interview. "So then the next thing we started to do was to have the tail kind of flutter back and forth, and

we thought that that's kind of like a propeller, so that flutter motion would make Mario a little bit lighter, so he could jump further. But once we started doing that, it felt so good that we said, 'Let's just make him fly.'"

In a meeting early in the game's development, Tezuka broached this with the team by flapping his hands and pretending to fly. "Mario would go like this and he'd fly, right?" he asked the team. "Don't you think that would be great fun?"

Many of the first popular arcade games like *Asteroids* and *Space Invaders* had involved flight as a basic starting premise, and from the beginning of *SMB1*'s development, Miyamoto was interested in setting game action in the sky. Influenced by the cloud-hopping monkey in *Journey to the West*, Miyamoto created cloud-dwelling Lakitu; he also toyed with the idea of giving Mario a flying rocket and a laser gun. But due to the NES's limitations on vertical scrolling, Miyamoto had to settle for occasional trips to the clouds on a beanstalk. In *SMB2* USA, players could fly on magic carpets and, as Princess Toadstool, briefly hover.

The MMC3 chip inside *SMB3* cartridges finally let Mario take to the skies. At first, the team considered allowing Mario to fly at any point in the game. But Toshihiko Nakago, the game's main programmer, pointed out that this would render the obstacles and power-ups on the ground pointless. Nakago suggested forgetting the idea entirely, but Tezuka loved the game's sky levels. Eventually, Tezuka proposed a system that

worked: flight requires a build-up of speed over flat space a distance eight times the width of Mario's sprite. If players sprint across such a distance while wearing a Raccoon Suit, the P-Meter maxes out and plays a high-pitched tune indicating that players can jump into the sky and fly.

"I'm not sure who came up with the name, but we all referred to this as 'the runway,'" Nakago said. "At that point, we looked again at the maps and completely reworked the levels so that Mario would have places where he could take off from."

The designers still did include an item that allows Mario to take off at any time, runway or no runway. The rare and powerful P-Wing gives players a constant full charge on their P-Meter, allowing them to fly anywhere, anytime for the duration of one level. In a recent Iwata Asks interview, Nakago noted that the P-Wing was the model for *New Super Mario Bros. Wii*'s Super Guide, which appears if players fail to complete a stage a certain number of times. When it's used, the Super Guide takes control of a player's sprite and completes the level for them—indicating that *SMB3*'s P-Wing may have been intended to help unskilled players complete tough levels.

Nakago's most interesting revelation, though, was that the "P" in P-wing may not stand for "power" after all: Nakago said that the P-Wing was in fact a Koopa Paratroopa's wing. Perhaps Mario steals not only Goomba's Shoe and Lakitu's Cloud but also Koopa

Paratroopa's wing! But that doesn't explain all the other "P" items in the game: the Magic Ball with the "P" on it, P-Switches, or the P-Meter. They could simply all stand for "power" (Nintendo's advertising catchphrase at the time was "Now you're playing with power"), but other theories exist, too. Does the "P" on the switch stand for "press me," or for "pow," as in battle mode? Or could the "P" in P-Wing stand for "Princess" or "Peach," since she is, after all, the first one to give you the item after you beat World 1?

•

As a small child, I received a very useful acting lesson from my mother that I used on birthdays and holidays. For instance, on my seventh birthday—the last one before my parents divorced—the whole extended family was sitting in the living room, which was reserved for extra special occasions. I was working my way through my gifts, the first of which—I could tell just from the skinny shape of the wrapped box—was a Barbie. An inevitable "girl gift" from a well-meaning family friend who had no idea that I hated dolls and dress-up and playing house.

My mother raised her eyebrows at me from across the room and mouthed the words "Thank you," which I then mumbled to the gift giver, holding the Barbie up and smiling a big fake smile. My mother and I had a system. After birthdays and Christmases with relatives

who didn't know me very well, she would take me down the street to the Toys "R" Us or Walmart, where we would exchange the Barbies for Batman or Ninja Turtle action figures. Then I'd write my relative a very polite thank-you note for the doll.

I could always count on my mother to understand my toy preferences, even though she longed to have a daughter she could play dress-up or Barbies with. I remember her once taking me down into our basement and snapping open the brass latches of a mildewed pink pleather case packed full of her old 1960s and 70s Barbies. They wore bright yellow flight attendant outfits and plastic go-go boots. Their hair flew everywhere in wild cowlicks from years of neglect. "Aren't they just so cool?" my mother asked hopefully.

The closest my mother ever got to playing dress-up with me was when she tricked me. "You know, the Ninja Turtles wear ribbons," she said one day while brushing my hair in the mirror. Why I believed her then, I'm not sure. My only guess is that I confused their bandana masks for hair ribbons. Either way, I did end up wearing a ribbon that day. Score one for Mom.

But the truth is, for all my obsession with "boy toys" and video games, I felt sorry for the Barbies lying alone downstairs in their musty old case, and sorry for my mother that I didn't like playing with them. I wanted to please her. I wanted to be able to play with her the way I played with my dad. But my acting only went so far—I could pretend, but I couldn't change.

That's why, when my parents pulled a final surprise box out of the kitchen on my seventh birthday, and when I saw that it was not Barbie-shaped but big, rectangular, and heavy, I was ecstatic. I tore the wrapping paper off the box and saw the trademark Nintendo logo staring up at me. I was speechless with joy.

"What is it, Alyse?" my mother asked, prompting me to explain the box to our guests, who were all, with the exception of my father, clueless about the sacredness of the gift I had unwrapped.

"It's a *Super* Nintendo," I whispered.

"To play your video games on…?" my mother prompted.

"Yeah."

The Barbie-gifting family friend glared down at me. "Well isn't that nice?" she drawled in a thick Southern accent. Video games were not an appropriate activity for little girls.

•

The second half of World 5 takes place entirely in the clouds above the island below—that spiraly castle leads you straight up into the sky, revealing a brand-new cloud-based map screen. In World 5, where flying is a key survival skill, *SMB3*'s central flying theme reaches fruition. P-Wings, Super Leaves, and Tanooki suits are priceless treasures in these clouds.

For instance, if you have flight capabilities, 5-4 begins with precisely enough cloud-platform runway to

allow you to take off. Once he's up in the sky, Mario can keep flying between cloud platforms across the whole level. If you're stuck on the ground, however, this level is a hellish race of spinning bars and tiny platforms requiring big, precise jumps.

Or there's 5-5, a level where *the whole ground is made of donuts*, those panic-inducing pink blocks with holes in the middle that fall just seconds after you set foot on them. Donut blocks, which made their franchise premiere in *SMB3*, are designed to do the exact opposite of what real-life donuts do: make you move quickly. Without flight capability, 5-5 is a mad race through Paragoombas and Koopa Paratroopas across ground that could give way at any second.

Then there's 5-9, World 5's last level and easily one of the hardest in the game. I'll admit that after multiple attempts, I didn't ever beat it during my playthrough for book research purposes. Instead, I used the Lakitu's Cloud item to skip it, praying I would beat the airship on my first try so I wouldn't have to go back and beat 5-9. This hellscape auto-scrolls diagonally as you leap across huge distances between tiny platforms. And the auto-scrolling is *fast*—so fast that you must make split-second decisions on jumps before the auto-scrolling kills you, all while that familiar frantic song from level 1-2 spurs you along. As if that weren't enough, one truly awful enemy follows you around as you jump—the flying Fire Chomp, a black ball with a fang-filled mouth and a fiery tail. The flames he spits out gravitate toward

you with an uncanny homing instinct, and it's usually too hard to kill him without falling to your death. Let's leave it at this: If ever there were a level to save your P-Wing for, it's this one.

•

When I interviewed Kristina Bell, an instructor of communication at High Point University writing her dissertation on gendered identity in The Walking Dead game series, I planned to focus on representations of gender in video games. I didn't anticipate that the topic we'd talk about most was the Ninja Turtles.

I felt like I was hearing my own life story as I spoke with Bell, who grew up a tomboy obsessed with *Teenage Mutant Ninja Turtles*, *ThunderCats*, and *He-Man*, and who, at McDonald's, would ask her mother to request a boy toy because she didn't want to ask for one herself. (I did the same thing.) To get her female friends to play Mario with her, Bell said she would bargain with them—Barbie for ten minutes, then Mario for ten minutes.

"I think I kind of confused people," Bell said. "I still had relatives that gave me a Barbie every year, and I would rip them apart. I had a drawer upstairs in the playroom in the attic and my mom went upstairs one day and found 30 dismembered Barbies in the drawer. It was all heads and legs and torsos. She must have thought she had a little serial killer. I just hated them."

This is the trouble with tomboys. We're often defined by what we're not—by what we don't like rather than what we do. We don't wear dresses or makeup, we don't like to play tea party, and we don't like Barbies or pink. But we're also not boys. On the kindergarten playground, I wasn't interested in skipping rope with the girls, but when I tagged after the boys to play Ninja Turtles, they scolded me and told me I could only be April O'Neil, the Turtles' spunky reporter/eye candy. They damseled me.

Bell, on the other hand, found ways to play in the middle. Like many young female-identifying tomboys (myself included), Bell preferred playing as female characters, but could adapt and play as male characters or males reinterpreted as female. She would pretend to be Wonder Woman, but also Robin Hood and Indiana Jones, jumping over pretend lava in her socks. She even invented a new Ninja Turtle called Raphaelette.

When it came to video games, Bell loved playing as a heroic princess in *King's Quest IV*, and she was thrilled to be able to play as Princess Toadstool in *SMB2* USA. But for the most part, games from the 80s and 90s rarely offered a chance to play as a female character, so she found creative alternatives. In *Quest for Glory*, for instance, Bell "queered" her character to better align him with her own gender identity. Although the character was male, he had long blonde pixelated hair that could pass as a woman's, so Bell assigned him the gender-neutral name Kris. "I thought I could be a

woman if I wanted to or I could be him *as* a woman," she explained.

Bell's queering of her character's gender fits nicely with the theories of philosopher Judith Butler, who argues that gender is neither biologically innate nor socialized, but rather a constant performance. Gender isn't something you *are* but rather something you *do*. Different social settings, rules, and expectations can either permit or disallow certain gender performances, and people can learn how to "do" gender through popular media such as film, television, and video games, which all usually conform to gender stereotypes.

Studies show that between the ages of four and six, children perceive gender in the way that Butler does—as a performance. It's not until they reach age seven (and have spent more time in school) that children start to see gender as limited to two binary extremes and perform their gender accordingly. At this age, boys and girls often separate into distinct groups on the playground, engaging in their own separate forms of play and setting boundaries felt strongly by kids in the middle like me.

I was struck as I spoke with Bell about how much I had longed for a friend like her growing up. Bell, too, said she had very few female friends who played video games, and remembers being the only girl reading *Nintendo Power* at the school library. When I told her my story about the Ninja Turtles on the playground, she laughed in sympathy. "*I* would have played with

you!" she said. And now I wonder: If she had, would I have felt less like a monster?

•

The close runner-up for most famous costume in *SMB3* has to be the Raccoon Suit's cousin, the Tanooki Suit. The tanuki has been famous in Shinto folklore since ancient times and is one of the oldest mascots in Japan. Many Japanese folktales feature tanuki as revered magical creatures known as *bake-danuki* (ghost tanuki)—mischievous tricksters with shapeshifting powers. In fact, "tales of tanuki playing tricks on people include legends of them transforming into kettles or monks, turning leaves into money or horse dung into a delicious meal," Edward and John Harrison write in their book *Idle Idol: The Japanese Mascot*.

The tanuki first took on its "idol" form in the 1600s in the Japanese town of Shigaraki, where residents fashioned tanuki into ceramic statues for good luck. At the end of the 1800s, tanuki statues began popping up in restaurants to signify that they serve tanuki soba noodles, a dish that had originated in a restaurant close to Tokyo's Tanuki Bridge.

Today, restaurants, stores, bars, and some homes, especially in the rural provinces, display tanuki statues and shrines believed to house a tanuki's sleeping or hiding spirit. The shrines are said to bring good luck, customers, and financial fortune. These tanuki statues are usually

chubby and clad in big straw hats. They're often holding bottles of booze and empty wallets to symbolize the pleasures—and excesses—of eating and drinking.

And speaking of excesses, by far the best thing about tanuki is that they're said to draw power from their enormous testicles, which on some statues are as large as the tanuki himself. On playgrounds across Japan, students sing: *Tan-tan-tanuki's bollocks ring, the wind's stopped blowing, but they swing-swing-swing!* "Many stories also involve a tanuki stretching his large testicles to the size of eight tatami mats," write Harrison and Harrison. "Tanuki have been shown in comic art using their scrotums as blankets, raincoats, drums, and even parachutes." This leads me to wonder whether Tanooki Mario is using just his tail to fly and spin-attack.

In his statue form, Tanooki Mario references Jizo, a form of the Buddhist bodhisattva Ksitigarbha. Because Jizo statues abound throughout Japan, Mario could, by turning into a Jizo statue, essentially become invisible and blend in to his surroundings. Jizo is also a protector of children, which may have been Nintendo's way of transmitting a family-friendly message to its consumers.

None of these references, of course, would have come through to an American audience. As a kid, I just thought it was random and cool that Tanooki Mario could turn into a statue. Miyamoto himself knew that players outside Japan would be unlikely to understand

any of these cultural references—he just didn't care. "I liked the idea so much that I wanted to keep it in the game," he said.

TOPOPHILIA

"More delicate than the historians' are the map-makers' colors."

—from Elizabeth Bishop's "The Map"

No matter how hard the icy levels are to traverse, there's no doubt that *SMB3*'s World 6 is beautiful. The map gleams white with giant icebergs and frozen mountains, snowy islands and frosty rivers. To the northwest is a small inlet with waves rippling across the water. As I stare at the map screen, I keep getting the feeling I've seen this map somewhere. And that's when it hits me—it looks just like a map of Anchorage, Alaska, where I live now. The inlet to the northwest is right where Cook Inlet should be, and that row of hills to the east could be the Chugach mountains. The green pipe marks the southern downtown border, in the exact location of my apartment.

At 26, after living my entire life in the South, I packed up everything I owned and moved to Alaska, a place I'd seen only in movies and reality TV shows.

My reason for moving there was exactly the same as the characters in all those movies—I wanted to explore.

•

Before the Atari Crash of 1983, home console games were heavily influenced by arcade games, in which the same screens repeated again and again as the difficulty increased. This worked for arcades since the goal was to get kids to spend as much money as possible by losing quickly. There was little need for level design variety in an arcade game, since casual play and ruthless reflex challenges were the goals.

Miyamoto decided that games for the home console should work differently. The goal with a home console game is to get a kid (or the kid's parent) to buy the game, enjoy it for a long time, and beat it so that they'll want to buy the next game (preferably on the next new expensive console, as my mother often lamented to me). A by-product of this shift was that games needed to have more expansive worlds. "The object is not endless replay," writes J.C. Herz in *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds*. "The object is to explore the latest videogame universe until the sidewalk ends. Then you buy a new world."

SMB3 epitomizes this emphasis on exploration over high scores. *SMB3* let us explore gloomy caves, snowy mountain peaks, sticky sewers, islands of giants, and

heavens full of coins. We plunged into flooded fortresses and climbed up castles to the sky, poked around ancient pyramid ruins and sprinted across oppressive desert wastelands patrolled by a furious sun. For all its breathtaking speedruns, *SMB3* is also a game of slow, methodical exploration and secret-finding.

After years of three-level *Donkey Kong* games, *SMB1* had offered players 32 levels, and *SMB2* USA had 20, but *SMB3* ballooned all the way up to 90 levels, many of which aren't even required for players to beat in order to win the game. *SMB3* introduced to the Mario universe the key concept of non-linearity by offering many paths to the same goal, which appealed to a wider range of skills. As Jeff Ryan puts it in his history of Mario, "This game, more than any other before it, was built to reward the completionist. Simply winning wasn't the goal anymore. The new goal was to visit every location the game offered, do every activity, soak in each experience. This wasn't a race, it was an amusement park."

Others have echoed this claim—in fact, a handful of game historians have suggested that *SMB3*'s themed worlds and levels were inspired by a trip that Miyamoto and several members of Nintendo's R&D4 team allegedly took to Disneyland in 1987. It's not a totally crazy idea—*SMB3* and the Mario games that followed it (especially *SMW* and *SM64*) do feel, in many ways, like theme parks with small worlds inside of them to explore. Each world, like each of the distinct lands at Disneyland, has a unique visual theme and

mood created by its music, landscape, map, aesthetic, and castles—which often bear a striking similarity to Cinderella's castle at the center of Disneyland.

And don't forget that in Disneyland, it's totally normal for people to dress up in animal costumes—sound familiar? What's more, Raphaël Lucas compares the game's wooden airships and tanks to the ships in Disneyland's Pirates of the Caribbean ride. He goes so far as to point out that *SMB3*'s auto-scrolling feature, which "imposed the rhythm for the player" and added a new kind of pressure, could have been influenced by the relentless, controlled forward motion of a Disneyland ride.

Miyamoto himself has never said he had theme parks in mind when designing *SMB3*, but he has mentioned it in connection to *SM64*: "It was as if we were building up an amusement park," he said of that game's development. "We first found our location. We purchased the mountain, and afterward, we thought of some interesting things we wanted to implement on the mountain." *SMB3*'s theming of worlds "may seem cliché now, but it was incredibly inventive at the time and the 2D action genre still relies on this pacing," writes GamesRadar's Henry Gilbert. "Every Mario game that follows it, no matter how great, is indebted to this structure."

•

Just one glance at level 6-1 lets me know that things are different in this world. A coat of snow covers the ground

beneath my feet, and a platform of ice blocks hovers in the air ahead. The sky is a pattern of alternating light blue and white diagonal stripes, evoking a blizzard of driving snow and sleet.

Jumping onto the ice block platform in front of me gives me a quick lesson in *SMB3*'s unforgiving slippery ice physics. Like level 1-1, I start 6-1 off by jumping onto a platform, receiving a mushroom, and then facing my first enemy—a Venus Fire Trap of a similar breed as World 1, but this time bouncing a black spiked ball in its mouth. I get a slippery running start toward him and leap into the air—and then get smacked by the black spiked ball. What would have been a simple move in tame Grass Land is made tricky here by the ice. My timing feels off, my movement awkward and chaotic on the tractionless surface. Ice Land's main challenge isn't abominable snowmen or polar beasts—it's the weather itself.

•

Alaska has always attracted a diverse range of humanity—adventure seekers, nature lovers, artists, restless spirits, those running from something and those looking for something to run toward. Or, in my case, all of the above. More than any other reason, though, I wanted to live in Alaska to live in Alaska. I love traveling, and it doesn't matter what I'm doing when I get to a new place—I just want to see it.

It's this sense of novelty—this "desire to see the next thing," as Steven Johnson puts it in his book *Everything Bad Is Good for You*, that gets people hooked on games. Exploration and the conquest of virtual space have always been a theme in games. Board games like checkers and Sorry! represent space to be conquered, and they served as an important inspiration for *SMB3*'s overworld map.

Kids in particular need to have spaces to explore that are separate from adult-controlled places like school and home—places like the tree forts David and I built in our backyard woods. Game studies scholar Henry Jenkins defines "topohophilia" as "the heightened sense of belonging and ownership that children develop as they map their fantasies of empowerment and escape onto their neighborhoods." When outdoor space isn't available, or doesn't feel like enough, video games provide a more expansive site for imaginary potential. Through its exploration and conquest themes, *SMB3* gave children a sense of control over their environment and a virtual playground for curiosity.

Exploration and narrative go hand in hand in *SMB3.* Chasing after Bowser gives you a reason to traverse the Mushroom World, and there's a sense that he's retreating from Mario until you finally reach his front door at the end of World 8. Mario's travels, then, take the form of conquest. When you beat a level in *SMB1*, you take down the enemy flag and hoist your own flag over the castle. When you beat a level in *SMB3*, the level is marked with an "M"—a brand that marks that space as

yours. After you beat a level in *SMB3*, you can't go back and play it again—once you've been there, it's over. The fortress crumbles away. It has served its purpose.

•

The map screen—the tool that helped users explore *SMB3*'s worlds—was just as revolutionary as the themed worlds—not in terms of technology, but in how cohesively it was integrated into the game. "An overworld map was nothing new, but *SMB3* did something different," software development engineer James Clarendon said. "Earlier titles such as Sega's *Kenseiden* also had an overworld with a geography and a *raison d'etre* (feudal Japan), but there was little to separate it from being a glorified level select menu. *SMB3* makes the overworld part of the game. It gives a true sense of progression through themed worlds where there is a clear and established flow: You can see the roads that connect the levels, you can mentally build a path to the goal, and the branches enable players to skip (or expend resources to avoid) difficult levels."

Even better, *SMB3*'s map screens meant that gameplay was no longer limited to levels themselves anymore. On the map screen, players could chase the Koopaling airship around, paddle in a canoe, use special map screen items (like the Anchor, Music Box, Hammer, or Lakitu's Cloud) or find unique map screen secrets via pipes and brick-breaking. Meanwhile, the Hammer Brothers created

unpredictable challenges on the map screen and offered players one more type of minigame and reward. I'm not sure if the Hammer Brothers were supposed to be guards, mercenaries, trolls, or just traveling jerks, but they are the perfect set of "brothers" to rival our heroes.

Furthermore, while the warp features of *SMB1, SMB2* USA, and *SMB2* Japan had been embedded within levels, *SMB3*'s takes place on the map, via the Warp Whistle. Miyamoto first used the warp zone concept in the arcade version of *Excitebike*, in which players could choose which of three levels to start from so they could skip levels they'd already mastered.

SMB3's whistle makes the warp feel much more climactic than *SMB1*'s room of three pipes. The whistle's eerie melody (which is the same song played by the Warp Whistle in *The Legend of Zelda*) and white tornado (also the same one from *The Legend of Zelda*) add a mysterious ambience as you're whisked off the screen to an entirely different map—the island of pipes named "Warp Zone" that may technically count as the ninth world of *SMB3*. As Bob Chipman points out, the Whistle, which actually resembles (and sounds like) more of a recorder or flute (it's called "recorder" in the Japanese translation and "magic flute" in Spanish and German), marks the first time in Nintendo history when game designers self-referentially recycled sounds and sprites from a different Nintendo franchise, perhaps to point out the "gameness" of the game—one of *SMB3*'s many inside-joke secrets.

In short, *SMB3*'s map screen offers the player a way to explore each world's diversity, challenges, rewards, and—perhaps most importantly—its scale and complexity. With a big, colorful map charting your every step, the sense that you're on an epic quest had never been stronger than in *SMB3*.

•

The most common question people ask you if you live in Alaska is: "How do you deal with the winter?" The funny thing is that this is a much better question to ask someone in the South, where freak winter snowstorms usually shut down roads, close schools and businesses, and even kill the power grid. But what they're really asking about is the darkness, not the snow. Anchorage gets about five hours of sunlight on its shortest day of the year, and even for these five hours, the sun is dim and weak on the horizon, already exhausted just after it's finished rising. December and January are hard, dark months, especially for Alaskan newbies like me.

But no one ever asks about the flipside. No one asks: "How does it feel to live in constant light during the summer?" "What do you do with the incredible amount of energy you have when the sun stays up past midnight?" "How big does the world feel when you've got so much time to explore it?"

•

Of course, the best thing about *SMB3*'s extensive focus on exploration is the seemingly endless number of secrets: secret items, secret shortcuts, secret ghost treasure ships, secret bonus rooms, secret coin heavens, secret areas within levels, secret warp whistles, secret map screen areas, secret Easter egg references from the game's creators, secret inside jokes, and so much more. Perhaps nothing testifies better to the vast number of secrets in *SMB3* than all the different access points to those secrets—hidden pink music boxes, vines, pipes, and P-Switches—not to mention platforms in the sky and quicksand. Every *SMB3* lover remembers the wonder they felt the first time they fell through a white platform and landed behind the world or the first time they found that game-changing invisible 1-Up at the top of the stairs in Bowser's castle. One of the great joys of *SMB3* is that once you find a secret, you *never* forget it.

•

Level 6-5 is one of *SMB3*'s toughest maze levels. The first step of escaping this seemingly exit-less underground ice cave is understanding that the level *is* a maze—and not in the traditional sense. You've got to remember two things: (1) *SMB3* rewards exploration, and (2) *SMB3* is all about flying. Most players run out of time and die at least once before they catch on to this level's secret. The

trick is that there's no way out of the cave down on the ground, because the maze's exit is in fact *overhead*, in one of the nooks and crannies in the ceiling above you. It's easy to overlook this, especially since the game has until now conditioned you to believe that flying never happens in caves. Caves in *SMB3* are, for the most part, claustrophobic environments with low ceilings, where a Fire Flower will do you much more good than a Super Leaf.

It was a new experience for me, too, when I stepped into my first ice cave inside the Kennicott Glacier in Alaska's Wrangell Mountains. I was nervous as I sprinted through the cave's entrance to avoid falling rocks the size of basketballs, one of which nearly nicked me. To my surprise, though, once I was inside the enormous, glowing blue bowels of the cave, I felt safe. I was no longer worried, as I had been before the hike, about the cave falling in from the crushing weight of the glacier above it. I wasn't even worried when we walked into the cave's deepest chamber and turned off our headlamps, revealing the darkest dark I'd ever seen in my life—an entire absence of the world and a blackness so thick it felt breathable.

Caves were the first dwelling place of humankind—or at least the first place we thought to leave our art behind—and they play a big part in Mario's story, too. The most famous anecdote about Miyamoto is that, during his childhood, he stumbled into a mountain cave near his house that later inspired the exploration

ethos he imbued into his games. The cave itself shows up quite literally in the underground levels of *SMB1* and *SMB3*, but permeating the whole game is a sense of wonder at the world around us. And that's just the thing about caves, which Plato knew well: You're a different person when you step out of them than when you stepped inside. The cave you've explored is no longer new—but you are.

Mario may have clumsily slipped his way through World 6 of *SMB3*, but as the Mario franchise went on, he adapted to cold climates, just like I did. In *SM64*, he could beat penguins in ice-slide races, and by *Super Mario Galaxy*, he could control ice with the Ice Flower. By the time *New Super Mario Bros.* introduced the Penguin Suit, Mario had become a true snow expert. In many ways, this is what the Mario franchise is all about—developing an evolving sense of mastery both within and across games. And though I'm not racing any penguins down ice slides, I know that with every passing winter, I grow a little more comfortable in my sub-arctic home.

•

Beating World 6's Lemmy Koopa (who rolls around precariously on top of a green ball) yields a letter from Princess Toadstool hinting at the location of a warp whistle, to which she's attached (maybe it's like an email?) a P-Wing. "Please retrieve the Magic Whistle

hidden in the darkness at the end of the Third [sic] world," she writes. "I have enclosed a jewel that helps protect you." What Toadstool means by "third world" is not World 3, Water Land, but rather level 1-3, where you can nab a whistle by ducking on a white block until you fall through it and behind the level's scenery. The whistle is indeed hidden in the dark "offstage" area at the end of the level.

Several of the princess's letters are similarly cryptic. The letter at the end of World 3, for instance, tells you that "The White Block contains magic powers that will enable you to defeat your enemies." What is the white block? An ice block? A bouncing musical note box? Lakitu's Cloud? The music box item attached to Toadstool's letter, which lets you put map screen Hammer Brothers to sleep with a cute lullaby? Or is she tipping you off to the fact that you can slip behind the stage in 1-3 by ducking on the white platform block?

If it's this last option, then both the World 3 and World 6 letters point you back to a secret hidden in an earlier part of the game—something the World 4 letter does, too, when Toadstool writes that "the thief who stole the whistle has escaped to the east side of the Sand Dunes" (referring to a hidden whistle in World 2, which the manual actually calls "Desert Land").

The only explanation for the belatedness of these three letters is that the game is urging you to go back and play it all over again once you've already beaten it once. As gaming scholar Sean Fenty puts it in an article

on nostalgia in gaming, "It is here to which we want to return—to the sheer joy of beginning to know another world and the contrast between that world and the one in which we normally reside." Like an Alaskan cave, and like our memories themselves, *SMB3* constantly asks us to re-enter its harsh-yet-surmountable terrain and explore even deeper.

MARIO THE CONQUEROR

"I give you… Video… Armageddon!!"

—Announcer, *The Wizard*

The bar is called Smoke and Barrel, and it's located in the heart of Washington, DC in a neighborhood called Adams Morgan, where it's spring break every weekend. Adams Morgan is like Never-Neverland—with all its colorful bars and clubs, it's a place where patrons of all ages never have to grow up. Smoke and Barrel specializes in whiskey, and that's what my friend Darby and I are drinking as we battle through World 3 of *SMB3* at our table in the basement, avoiding the work we should be doing for our grad school classes. Instead, we are here dodging the jaws of Boss Bass, coming just inches from being devoured each time the level sinks down into the treacherous waters. Smoke and Barrel made the genius move of putting an NES console into this little nook of the bar, and we made the genius move of sitting next to it.

"Do you want to warp or not?" Darby asks.

"I don't know—I don't know when the bar closes," I reply. It's an unspoken understanding between us that the key objective here is not to play as many levels as we can—the more levels the better, sure, but we cannot leave this bar without defeating Bowser one way or another.

"I guess we should warp," she says.

We warp to World 7, Pipe Land, and are greeted by its smoky, jazzy map screen music and a labyrinth of green pipes. When we first turned on the system, giddy with joy to find it in the bar's dark basement, it displayed the flashing fuzz common of old NES consoles. Our first solution, like any good children of the 90s, was to blow on the cartridge, but that didn't work. (It turns out that the blowing fix was more of a myth or placebo effect and may actually cause more harm than good to a cartridge.) I finally got the antique NES working by wedging my bulky flip cell phone into the console on top of the game, pressing it down firmly onto the machine's circuits.

As the night goes on and we pass the controller back and forth after each death or completed level, bar patrons crowd into the basement, occasionally jostling our table and filling the room with their voices. But our full focus is on beating this game—a game that debuted twenty years ago and can still make us feel like we're kids again. Correction: right now, in this DC dive bar, we *are* kids again.

•

SMB3 inundated American kid culture like no game ever had before, with a marketing campaign surpassing that of any other video game at the time and rivaled by few to this day. Nintendo marketed *SMB3* "in much the same way as a movie studio might nurture hype about its latest blockbuster film, spending months building consumers' anticipation to a fever pitch," writes historian Tristan Donovan.

The game had TV commercials, McDonald's Happy Meal toys, *Nintendo Power*'s first ever stand-alone strategy guide, the Nintendo PowerFest championships, and a staggering amount of merchandise and memorabilia (including toys, clothes, food, and a whole lot more). *SMB3* even had a space on the small screen. *The Super Mario Bros. Super Show*, Nintendo's first TV show, had premiered in the fall of 1988, but *SMB3* had a show all its own—a 1990 NBC TV cartoon called *The Adventures of Super Mario Bros. 3*.

SMB3 represents Nintendo at the peak of its reign over the American game market—a golden age of Mario. It was the last Mario game before the onslaught of the Console Wars with Sega in the 1990s, during which the very brand identity Nintendo had built for itself through the Mario franchise—sweet, cartoony family fun—would become a liability for Sega to mock.

During the *SMB3* era, Nintendo still ruled the industry. Between the merchandising, media, *Nintendo*

Power magazine, and game counselor hotline, Nintendo as a company, wrote David Sheff in 1993, had enacted a "sudden, pervasive infiltration of America." Nintendo "became a culture unto itself."

"At the time," Gail Tilden said, "if you just look at the charts, Nintendo was the sole player with the NES in the hardware marketplace […] so your choices were amongst various games for the NES. We had crushed the Sega Master System. There just wasn't anything else. Right at that time, Nintendo just *owned* the video game marketplace in terms of hardware, so a first-party title like [*SMB3*], with this quality and this marketing campaign, just absolutely had huge potential that everybody would want. It was a must-have, blockbuster kind of thing."

For this reason, *SMB3* touched the lives of an entire generation born between 1975 and 1990. Some scholars already use the term "Nintendo Generation," and Herz argues that video games are such an important part of childhood that "if Citizen Kane took place in the twenty-first century, Orson Wells would be sighing 'Mario!' instead of 'Rosebud.'" In his book *Extra Lives: Why Video Games Matter*, Tom Bissell recalls a conversation at a gaming conference with someone who noted that "By 2020, there is a very good chance that the president will be someone who played *Super Mario Bros.* on the NES."

The numbers back this up. Just three years after *SMB3*'s release in North America, a survey of middle-class 7th and 8th graders found that 67% of girls spent an average of two hours per week playing video

games at home, and 90% of boys spent an average of more than four hours per week. And chances are that they were playing *SMB3*. In the period just after *SMB3*'s release, Nintendo controlled roughly 80% of the home console video game market, and one in three American homes (about 30 million) had a Nintendo console.

Nintendo's sheer market domination, Howard Phillips pointed out, meant that *SMB3* was omnipresent for a few months. The seasonal timing of when it hit stores helped, too: "[*SMB3*'s] release time was particularly unique, being an early spring release," Phillips said. "If you think of it more as the user experienced it, it's not just 'what' but 'when.'" In February of 1990, he noted, kids were coming out of the holiday gift season into a game-release void between the second half of winter and the spring. Nintendo had begun to focus slightly more on handheld gaming, and aside from the more cerebral *Final Fantasy*, which appealed to older players, there weren't many new home console games out there to play—so everyone played *SMB3*.

"*SMB3* just took over," Phillips said, "and for players, the experience was not just that they played it by themselves, but that *everybody* was playing it. And that was one of [Nintendo of America President Minoru] Arakawa's tenets for the success of a product or the success of a good game was that everybody would be playing it at the same time, so you could get that kind of shared synergy of kids talking with their friends, talking in the playgrounds, talking at school—that everybody's

playing the same game. And then it makes it much more kind of a collective, fun shared thing."

Phillips believes the game's timing mattered even more than any of Nintendo of America's marketing efforts. "Certainly, by that time Nintendo was cranking up their marketing machine with [former Nintendo of America Executive Vice President of Sales & Marketing] Peter Main and spending a whole lot of money on marketing," he said, "but from a player's perspective—yeah, you know it's out there, and players knew about all the games back then."

Thanks to *Nintendo Power*, which kids subscribed to and shared with their friends, Phillips said, "every kid knew just about every game that was coming out that was in the top two-thirds of the offerings for that period. So when *SMB3* came out, everybody knew about it anyway. So additional marketing and television? Big deal. Really, the awareness was there. It was more about informing parents so that parents would say, 'Oh that's the game—it looks nice, it doesn't look threatening. That's a game from Nintendo, the good guys, and maybe I should buy that game for my kids, or support them in their desire to spend the money they got for Christmas from grandma.'"

It helped, too, that *SMB3*'s launch was delayed in North America, increasing the anticipation for the game tremendously. After *SMB3* released in Japan in October 1988, America had to wait an entire sixteen months to get the game due to a ROM chip shortage "caused by a

combination of rising demand and US trade restrictions on Japanese chips," according to a *New York Times* article from November 1988.

On the other hand, the game's delayed American release could have been a strategic decision. "We went from 32 game titles in 1988 down to 19 games in 1989 so we could produce more of the games people wanted," Nintendo spokesperson Bill White said in a *USA Today* article from March of 1989. "We think it would be premature to release [*SMB3*] in America in 1989 while *Super Mario Bros. 2* is still selling so well."

No matter what the cause, the delay paid off. "Very few games in the history of video gaming," writes Corbie Dillard for Nintendo Life, "have experienced the type of pre-release anticipation that *Super Mario Bros. 3* enjoyed." In the Christmas season of 1990, eleven months after its American release, *SMB3* was still the number two highest-selling toy in the US, second only to the NES itself, while *SMB2* USA managed to retain a top ten spot in a list curiously absent of Zelda titles. Mario was clearly here to stay—a 1992 study by Market Data Corporation found that 96% of people knew Mario and 83% liked him.

These numbers could result from a particularly "sweet spot" *SMB3* occupied in advertising history, says Morgan Romine, the former captain of the all-girl-gaming team the Frag Dolls. Romine now works as a community and online marketing manager for Ubisoft, and she says that a massive advertising campaign like

SMB3's would likely fall flat today. During the early 90s, she says, game marketers were able to target an audience of young males who hadn't been jaded by the years of video game ads leading up to the Atari Crash and didn't yet feel cynical about being marketed to, as many of today's gamers do.

•

SMB3's unparalleled success took place at a time when Nintendo of America's marketing and advertising departments were growing, maturing, and beginning to specialize in specific areas. Gail Tilden, one of the heroes of early Nintendo of America, knows a thing or two about marketing at Nintendo. She managed branding, marketing, and PR efforts for the NES's American launch in New York and went on to run *Nintendo Power*, America's first major video game magazine.

During the *SMB3* years, Tilden said, Nintendo of America was "hiring a larger pool of marketing talent. Where previously people like myself had been young and grown in-house, they brought in some out-of-house talent […] these different people who came in who had different backgrounds in a variety of marketing disciplines. So you [had] a dedicated PR department, a dedicated promotions department, a dedicated advertising department, and a dedicated group of people who work directly with the retailers and make sure everything is merchandised properly and that things were in stock at

all time [...] The maturing of the company as an organization in the US and the explosion of getting bigger is all aligned around the timing of this game."

SMB3 was also one of the first games for which Nintendo of America felt safe launching such a massive advertising campaign. The Atari crash, which had occurred less than ten years before, had loomed over the company during the *SMB1* and *SMB2* era and set the tone for many of its marketing efforts. Essentially, Nintendo of America knew that if they disappointed players with bad games, as Atari had, it could sink the entire industry. To prevent this issue, Tilden said, the main goal with early NES game box art, ads, and *Nintendo Power* features was to never oversell.

"Back in the *Pong* days, people would have a game of *Pong* called [something like] 'Table Tennis,' and there would be an image on the front of either a painting or a picture of two people who were slamming ping pong balls," Tilden said. "But then when you opened it up and you put it in your TV, it was a monochromatic thing where you slid two paddles across with a dot, and we thought that that oversell had contributed to people's disappointment with the first generation. So in the 1985 [NES] launch, we took a back step to that approach [of] not very famous pixel-type of packaging to not over-represent what was going on in the game."

This approach, apparent in the pixelated box art of games like *SMB1*, *Excitebike*, and *Metroid*, lasted for about two years, Tilden said. "By the time *SMB3*

launched, we were using colorful graphics because we were no longer worried that people would be disappointed about what they found in the box."

"The hype for *SMB3* was so intense that I feel like you could have put anything on that box and people would have still gone crazy," I said to Tilden over the phone.

"Yeah, well, probably so," Tilden said. "It was a pretty big departure at that time."

It helped, too, that marketing, printing, and graphic design technologies had all advanced and could now represent the game in a more colorful, aesthetically pleasing way. In fact, for Tilden, *SMB3* marks a new era of graphical representations of Mario in advertising materials. Nintendo of America now had "more access to colorful images […] that ended up being used on T-shirts or lunchboxes or iconic imagery," Tilden said. *SMB3*'s box art, for instance, featured a colorful cartoon Raccoon Mario grinning and flying across a bright yellow background.

Still, the legacy of the Atari Crash and the lingering impulse to avoid disappointing customers prompted a tremendous focus on quality control in the marketing of *SMB3*. "At this time period, the absolute number one goal […] was that the consumer would be satisfied with the gaming experience, and that they'd want to keep buying [games]," Tilden said.

To ensure quality, Nintendo of America instituted the internal ratings system that Phillips had discussed with me. The ratings games received, Tilden said, were

"influential in Nintendo providing additional support to make sure that those [high-quality] games got awareness with the consumer. So with *Nintendo Power*, for example, I would see all those ratings and that would be how we would decide what would go on the cover."

In other words, games with the highest ratings, like *Mike Tyson's Punch-Out!!* or *The Legend of Zelda*, received extra attention. If a licensee developer was pouring money into a crappy game, doing tons of advertising for it, and buying a lot of cartridges from Nintendo, Tilden said, that didn't matter—without a good in-house rating score, a game would not go onto the cover of *Nintendo Power*. It's no wonder, then, that *SMB3* received the marketing blitz that it did.

•

For early Nintendo of America, Minoru Arakawa was ultimately the one making all the risky marketing decisions.

"Mr. [Hiroshi] Yamauchi in Japan owned Nintendo, but Mr. Arakawa was at the time our leader in America," Tilden said, "and remember that at the time, except for them talking on the phone and maybe some kind of fax machine, there wasn't regular communication or crossover between markets. So it was really Mr. Arakawa's decision and moxie on when we were going to go all in and do interesting, creative things, like the idea that you would do a test market in New York City.

"He's the man, I'm telling you," she continued. "He was the most inspirational leader and we all would have followed him off of a cliff like lemmings. He would have to make a decision to buy and manufacture, and how big the marketing campaign was going to be for a game like *SMB3*, because it's not like you could just burn some more discs. He would have to decide, six months in advance, 'I'm going to buy five million cartridges, and we're going to put them on boats and they're going to get over here. We're going to buy all this TV time and do huge campaigns.'"

One of Arakawa's biggest gambles was starting *Nintendo Power* magazine. Arakawa had seen the success of gaming publications in Japan, and thought they would translate well into American kid culture. "There was no video game publishing industry at the time [in America], because of course everyone knows that the whole industry basically folded before the NES came, so we were re-creating everything," Tilden said. *Nintendo Power*, published from 1987 to 2012, set a magazine industry record for how fast it reached a circulation of more than a million and a half subscribers. Each issue of the magazine included tips, strategy, reviews, and behind-the-scenes articles about game development. For its first ten years, *Nintendo Power* accepted no outside advertising, meaning that it was essentially a Nintendo promotions tool that fans paid to read.

Although *Nintendo Power* was certainly a marketing tool, Tilden asserts that the magazine's purpose went

deeper than just promoting games. "It was a marketing vehicle, but […] the mission statement of the magazine was to help consumers to be more satisfied with their game purchases," she told me. "If you remember, at this time we still had a concern that people would buy games that they didn't enjoy, and if a family made too many poor purchasing decisions—purchasing products that weren't terrific—then they would walk away from being involved with the NES. The magazine was a component of marketing, but in a customer service way."

Strategy guides emerged from the same mentality. *Nintendo Power* started as an every-other-monthly magazine, but for *SMB3*'s release, the team decided to publish, for the first time, a player's guide as an entire issue. *Nintendo Power* had published a two-part guide for *SMB2* USA, and Nintendo had separately published two "pocket guides" for *The Legend of Zelda* and *Dragon Warrior*. *SMB3*, though, received the magazine's first fully dedicated issue guide. After the success of this guide, *Nintendo Power* began to issue a player's guide every other month to fill in the gap between regular issues. Tilden also used the guides to increase subscriptions by sending one as a free gift with a new subscription. The essential purpose to the guides, however, was the focus on quality control that pervaded the company at the time.

"Nintendo still had the opinion that we wanted to make sure that anyone who invested in a game […] would be satisfied with the game and would have a resource for finishing it, and that would motivate

[them] to continue to purchase more games for [their] library," Tilden said. "Whereas if you played games and you got stuck or you couldn't figure out a way, then your parents might say, 'You know what? I bought you that game and you didn't even [finish it].'"

•

When I was seven, I treasured few possessions with the level of reverence and awe as I did my *SMB3* strategy guide—volume 13 of *Nintendo Power*. I carried the glossy magazine around with me on car trips, to school, and to my treehouse fort. I read it and re-read it long after I had beaten the game multiple times, and long after I had moved on to other games. I pored over every word and image like it was a religious text.

The guide itself is a beautiful artifact—the striking red cover displays Raccoon Mario preparing to fight a line of Koopalings charging down a mountain, with Bowser looming overhead. Inside the guide, the cartoon art and playful language immerses you in the game almost as much as the game itself. Chain Chomps, for instance, are described as "the most frustrated villains in video games" since they "ge[t] no respect." And in case you weren't aware, the big pyramid at the end of World 2 is officially called "The Great Pyramid of Mushroomkhamen."

The coolest element of the guide, of course, is its maps, which feed players' topophilia like nothing else.

The guide's 84 pages consist almost entirely of maps—the essential tool for proper secret-finding. Looking through the guide, which my dad purchased along with the game back in 1990, explained a lot for me about how he had found some of these bonus areas that would have been nearly impossible to locate on one's own. The guide reveals the location of the Warp Whistles, coin heavens, treasure ships, and certain pipes that can only be traversed in a Frog Suit. It also explains how to make special white mushroom houses appear and describes several methods of creating unlimited "1-Up factories," including the famous "oscillating Koopa technique" (kick a Koopa shell so that it bounces back and forth between two obstacles and continuously knocks out respawning enemies like Bullet Bills or Spinies). The guide even indicates—when it can with certainty—which item you'll receive from each Hammer Brother and Toad's house (some Toad's houses always give the same item, no matter which box you pick; others offer a randomized selection that the guide can't predict for you).

Over the phone, I asked Tilden how *Nintendo Power* created guides for secret-heavy games like *SMB3* without spoiling too much.

"They are very careful about not revealing spoilers," Tilden said. "We are not generally supposed to show the final boss and the last scene, and with *Nintendo Power* we were very respectful of that—not spoiling the surprise unless it had been two or three months and we were talking strategies and tactics for beating a final boss.

It is true that you could look ahead, but my experience watching many, many people use those guides is that they did use them to try to figure out what they were supposed to do." And even with the help, Tilden pointed out that games like *SMB3* still required "a lot of dexterity": "So even if there was a call-out that said, 'There's going to be three mushrooms coming out of these pipes here' or something, *I* still wouldn't be able to jump up those pipes!" Tilden laughed. "*I* couldn't freeze a turtle and kick it and make it knock all the things out of my way—no way."

It's true that the guide and maps do spell out a lot of the game's secrets and strategies explicitly—but not everything. For instance, the guide leaves you completely on your own for beating Bowser. Unlike previous levels, Bowser's castle gets no detailed map—only a few cryptic hints and screenshots, but none of Bowser's actual chamber. The last page of the guide features a big cartoon sketch of Bowser with a panel reading: "Congratulations—you've reached the door to Bowser's Chamber! Do you think you're ready? You better be, because from here you're on your own! Up and at 'em!!! The Mushroom Worlds [sic] are depending on you!"

Spoilers or not, playing while using the guide was undeniably fun. "My son used to say, 'Bring home the games *and* the guide' the day they came out," Tilden said. "He always wanted those. And my backyard neighbor had the *Legend of Zelda: A Link to the Past* guide. He wore it out till the pages fell out."

Actually creating the guide's maps was a technical feat for the time, according to Tilden. "The idea that you would make maps with call-outs was a very challenging thing to do," she said. "Imagine: You couldn't videotape and then digitally put it together in a computer. There was no such thing. They were actually taking photos and making maps from the games. There were a couple of Japanese companies that had strong expertise [at this]. In fact […] for the first three years or so, all of the artwork [for *Nintendo Power*] was done in Japan. We […] planned what was going in the magazine and we wrote it here, but they did the graphics in Japan and we would fly to Japan and work with them and do all the proofing over there and then bring it back over here to print it."

Tilden said she's particularly fond of *SMB3* because it was a game big enough to warrant an entire strategy guide. "*SMB3* represents for me a big leap where a game is no longer compared to an arcade game—when playing at home is better," Tilden said. "It's a game that requires long, long play sessions and the goals aren't an immediate, 'get a high score' type of thing. The ability for a game to be so long playing and sustaining was a very new thing. It really does for me represent a pretty big shift in that direction."

•

The one *SMB3* marketing initiative that could possibly rival *Nintendo Power* is *The Wizard*, a 1989 feature-length film whose entire reason for existing was, in no uncertain terms, to promote *SMB3*. Although *The Wizard* does have a plot (essentially identical to *Rain Man*, but with no Oscar-worthy performances), Sheff sums it up in his early history of Nintendo like this: "*The Wizard* was less a piece of art than a one-hundred-minute advertisement for Nintendo that millions of families paid to see."

The movie follows Fred Savage's character Corey as he journeys with his younger brother Jimmy to the video game championships in California, all in the midst of a family crisis. The climax of the movie, however, is not the emotional, healing moment between the family members at the end, but rather the big reveal of *SMB3* in the tournament's final round. This scene contains ten minutes of yet-to-be-seen *SMB3* footage, rife with errors and inconsistencies: The announcer calls world 1-3 "world 2"; Jimmy either completes level 1-5 in seconds and we never see it or it's skipped; audience members seem to know what the warp whistle does even though no one has never seen *SMB3* before; and the tournament is judged on a bizarre scoring system that has left fans scratching their heads for years.

The Wizard hearkens back to a pre-internet age when American children could not watch a trailer for a game—the film offered a rare chance to score a sneak preview of a hotly anticipated title. After they did see the gameplay footage, American kids had to wait two

more long months before they could get their hands on the game, building the excitement to a fever pitch.

And for all its lapses of both logic and style, *The Wizard* helped bring video games—*SMB3* in particular—into mainstream culture, and it certainly succeeded as advertising. The timing of *The Wizard* was made possible thanks to *SMB3*'s sixteen-month delayed US release. "That gave them the opportunity to have this inserted film where that type of advertising and promotion hadn't existed before," said Stefan Hall, Associate Professor of Communication and Chair of Media Production and Studies at High Point University.

And *The Wizard* doesn't stop at advertising *SMB3*. It also advertises the NES, *Nintendo Power* magazine, and Nintendo's counselor hotline, too—not to mention numerous games including *Double Dragon* and *Ninja Gaiden*, and, of course, the unfortunate Power Glove. "I love the Power Glove," movie villain Lucas reverently murmurs in one famous scene. "It's so bad." While Lucas is probably using 90s slang "bad" meaning "good," a modern viewer might take his view of the poorly-designed Power Glove at face value.

Watching *The Wizard* now makes me feel extremely nostalgic for my childhood, mainly because of the wonderful ways it follows all the conventions of 90s kids' movies. Like young Miyamoto exploring the cave, children in 90s TV shows and movies were always doing crazy things on their own with absolutely no parental supervision. Kids in movies like *The Wizard* and *Blank*

Check and *Home Alone* were constantly running away from seriously creepy adults, and even the babies in *Rugrats* had lives entirely independent of their parents. At the same time, there was always a feeling that everything would be okay—you could, in *The Wizard*, for instance, safely ride on the back of a strange motorcycle gang's bikes, no problem. Kids had their own lives, their own lingos (complete with swearing, of course), and their own adventures for which they'd pack important supplies like, in Fred Savage's case, a rubber goblin mask and a fake spider.

•

When a game inundates a generation the way *SMB3* did, it becomes a powerful object of nostalgia—which is hardly a new phenomenon, when it comes to gaming. Back in 1994, *Newsweek* published an article called "Nostalgia Has Its Own Pitfalls" about gamers visiting museums to play classic arcade games. Nintendo and Sega had each, at that time, released a newer version of the Atari 2600's 1982 *Pitfall* for nostalgic gamers. "Nostalgia sets in pretty quickly when it comes to computers," the authors noted.

In the case of *SMB3*, Mario conquered not only the market share, but tens of millions of American kids' hearts and minds. After the frenzy of excitement preceding the game's release and then the joy of playing it, we're left as adults with an intense nostalgia not only

for the game itself, but for the feeling of anticipation that led up to it.

Phillips's take on folks nostalgic for *SMB3* is that the game's cartoonish, childlike aesthetic aligns perfectly with the innocence of youth itself, creating powerful, happy memories in players' minds from a time when games were starting to lose their innocence. More sophisticated and violent games like *Ninja Gaiden*, *Final Fantasy*, *Double Dragon*, and *Castlevania* were darker in both palette and theme, appealing to an aging audience. *SMB3*, on the other hand, had a fun, simple story and a playful tone.

"It was just a joy and wonder to play [*SMB3*]," Phillips said. "It was one of the last times that you believed in Santa Claus or the last time you went to Disneyland as a kid and thought it was all semi-real. It represented that simple, positive, upbeat perspective on the world and gameplay. Look at all the other titles that were coming out at the time. No other title presented such a joyful escape from all the trials and tribulations of being a kid at that time period. Further on, it was just kind of more serious, like, 'Are you really the sci-fi warrior that you say you are?' —it was more hardcore and more of a serious tone, whereas Mario was, 'Yahoo, can you fly? Can you fly further? Can you look goofy?'"

It's no wonder, then, that we're nostalgic today for *SMB3*'s simple world full of wacky Frog Suits and glaring Goombas. "I hear regularly from fans from the 8-bit Nintendo days," Phillips said, "and one of

the more common things that people will say is when they just relate, with twinkles in their eye, how cool it was—when they mention a game that they played, when they mention that they played with their brother or their father or their best friend, or that they used to get the magazine and read it under the covers with a flashlight at night because they didn't want their mom to know. They're kind of relating all these just wonderful moments when they felt like they could truly be a kid."

•

All this raises an important question: Can we ever objectively discuss *SMB3*'s quality? Can we ever truly isolate the game's features from nostalgia? I've gone on for pages about what I think is so right about this game—but has that just been my nostalgia talking all along? Or my love for my father and brother? Or am I just a product of Nintendo's crafty marketing master plan?

To tackle these questions, I had to find a gaming expert who could be as unbiased and un-nostalgic about *SMB3* as possible—a tall order, to be sure. I hit the jackpot in Necrosoft Games Director Brandon Sheffield, who, due to family financial constraints, did not have an NES and therefore only played a minimal amount of *SMB3* as a child during Nintendo's heyday; he became more familiar with the game later in his life. As such, he's a Nintendo skeptic devoid of the nostalgia that plagues many of the rest of us.

"I came upon this stuff when the cultural zeitgeist had already passed, so I was appreciating [these games] on their individual merits," Sheffield told me over Skype beside his avatar image of a Pomeranian in a wine glass. He said that even for those in the industry, it can be difficult to separate childhood nostalgia from objective appraisals of older games—though that doesn't stop websites and bloggers from making countless "Top 10 Best Games of All Time" lists.

So what does this skeptic actually think of *SMB3*? "As far as Nintendo games go, it's probably one of the best ones for me," Sheffield said. "*SMB3* has a lot of weird secret messiness to it, which I like. I like that it has imperfections and weird one-off things in certain areas that you won't find in other parts of the game. I like the way that it doesn't force its secrets on you. It doesn't tell you, 'Hey, if you crouch on this white block for five seconds, you can fall behind the world.'"

As we deconstructed my *SMB3* love together, Sheffield mentioned something I hadn't yet considered: A game like *SMB3* offers a particularly potent type of nostalgia because it wasn't just the first great platformer *I* ever played—it was one of the first truly great platformers *ever*. That's partly why games like *SMB3* became archetypes of what a great game looks like. Our early impressions are hard to separate and analyze objectively, Sheffield said, because of the huge impact these ground-breaking games left on our minds.

"They say your first love defines—or at least partially influences, let's say—the way that you have future relationships," Sheffield explained. "And with games, since they are subjective experiences that can be very deep and meaningful for people, I think it's a similar [influence]."

I took this as a chance to ask Sheffield the questions that had been weighing heaviest on my mind: Do I think *SMB3* is the best game of all time simply because it was the first game I ever played? Or because I played it with my father? Or because I was brainwashed by Nintendo? Or because it's objectively a beautiful, well-designed game?

"I would say that it is a well-designed game, certainly," Sheffield said. "I would *not* say it's the best game of all time. But I would say that it's very plausible that it's *your* best game of all time."

My best game, and my first love.

EVER ONWARD

"All play means something."
—Johann Huzinga, *Homo Ludens* (1955)

Every time I play *SMB3*, I get excited about Bowser's castle. I can still remember how exhilarating my first glance inside it was—after all the levels and worlds and airships and Hammer Brothers, I had finally arrived. The urgency of being so close to the princess—the anticipation of liberating her from Bowser's clutches—filled me with excitement, and I felt like a powerful hero.

The truth is that I loved rescuing Princess Toadstool, even though Mario actually spends seven-eighths of the game rescuing kings—an interesting twist on the franchise's damsel in distress formula. In *SMB3*, as opposed to other games in the franchise, the motivations behind Bowser's kidnapping seem more political than personal—Bowser is the warlord general of a massive army (including a navy and air force in World 8, Dark Land, and all his Koopaling commanders) seeking total domination over the Mushroom World, and he doesn't

snatch Toadstool until he's about to lose the war. As you traverse these first seven lands, the princess serves not as typical damsel but as guide, sending you letters throughout your journey that somehow make *SMB3*'s narrative feel more urgent than *Donkey Kong* or *SMB1*.

As a kid, I couldn't wait to receive those letters from the princess. In my memories, they were long and full of declarations of love, desperate pleas for help, and little pink lipstick kisses all over the paper. But re-playing the game as an adult, I see that the letters were mostly just a couple of sentences long and all quite practical, not romantic in the least. For instance, Toadstool writes in her World 1 letter: "Greetings, If you see any ghosts, be careful! They will give chase if you turn away. I have enclosed a jewel that helps protect you. Princess Toadstool." The tone resembles a professional memo more than a love letter, although she does include a picture of herself (or maybe that's just part of her stationery?) on the bottom left corner of the letter. In her big pink shoulder sleeves (hey, it was the 80s), with her hands clasped, she looks a bit like she's praying.

After World 7, the letters suddenly end when Princess Toadstool is kidnapped. Shockingly, the game's final letter is from Bowser himself! "Yo!" he begins—and any American 90s kid could tell you that all bullies begin conversations with "yo"—"I kidnapped the Princess while you were running around. She's here in my castle, if you dare to try and rescue her. Ha ha ha [because what self-respecting evil

villain doesn't include an evil laugh in their written correspondence?]… King of the Koopa."

This discrepancy in Toadstool's letters is the biggest way that my nostalgic memories of *SMB3* conflict with reality. For a long time, the way I remembered it, the princess sends you her correspondence from Bowser's dungeon, begging you to rescue her throughout the whole game. But my memory failed me—she is a completely free individual for those first seven worlds. It seems I remembered the princess the way I always wanted her to be—a damsel I could reach, save, and even love.

•

If *SMB1* defined the platform genre, *SMB3* perfected it. Through its perfect storm of pure quality, ideal timing, and an incredible marketing blitz, *SMB3* had a lasting influence on future platformers and Mario games, leaving behind a legacy of revolutionary concepts. As Henry Gilbert puts it, "The reason millions still buy every new Mario game more than twenty years later is because of *Super Mario Bros. 3*."

Many of the *New Super Mario Bros. Wii* series games, along with *Super Mario 3D World* and *Super Mario 3D Land*, contain throwback elements from *SMB3*, including the Raccoon and Tanooki Suits, Koopalings, Boom Booms, mushroom houses, inventory screens, world themes, and music. And, much to the joy of fans,

Miyamoto decided to include the *SMB3* art theme in *Mario Maker* for the WiiU, along with that of *SMB1*, *SMW*, and *New Super Mario Bros. Wii U*. As a kid, I never would have dreamed that one day, I could make my own *SMB3* levels. But now I can.

Perhaps *SMB3*'s most powerful legacy lies in the way it impacted many of today's game designers who grew up playing it, like Ryan Mattson and Mike Roth. Mattson said he'll let players be the judge of whether, as a designer, he's internalized the lessons he learned in *SMB3*—but he hopes he has. "Maybe this is a question I should ask now in job interviews [I conduct]," he joked. "'What do you think of *SMB3*? Tell me about how they tutorialize the game mechanics.'"

In the end, just as game designers believe *SMB3* is more than just the sum of its aesthetic and mechanical parts, the game's legacy works in much the same way. *SMB3* is so much more than just a game: it's my dad and your dad and my brother and your sister and *The Wizard* and the Happy Meal toys and the strategy guide and that playground legend about killing the sun in World 2. And there's no doubt that it's now part of the gaming canon.

•

Today, it may seem like an obvious choice to make the final boss stage look different from all the others, but this wasn't possible in *SMB1* with the cartridge's limited storage capacity. The final castle in *SMB1* looks just

like all the others before it, and even though it's much harder, it just doesn't feel as climactic. The same is true for Bowser himself. In *SMB1*, all the Bowsers look the same, and they throw hammers and jump in similar ways as the game's Hammer Brothers. We know, as we play the last castle of *SMB1*, exactly what the final boss will look like. The same can't be said of *SMB3*.

Inside as well as outside, Bowser's castle looks wholly different from any other area in the game. The castle is made of menacing, bright red, unbreakable bricks. The castle's first room contains three stone statues of Bowser that shoot lasers at you from above. It's an entirely unexpected trap, and a novel obstacle to learn to dodge. From the first moments of this castle, it's clear that we won't be facing a mere repeat of enemies we already know.

After traversing the laser-statue room, I climb some stairs to an elevator platform and take the elevator up, then ride a donut down through a narrow corridor, lending the impression that I'm sneaking around and infiltrating Bowser's castle, dodging lasers and shimmying through tight passageways. Next, I climb up some steep stairs past a sneaky candle flame that follows behind me like a Boo and three orbiting Roto-discs that look a lot like disco balls). At the top of the stairs is a hidden block containing a 1-Up. This helpful item basically guarantees that, as long as you can make it this far into the castle (which isn't hard), you have as many attempts to defeat Bowser as you need.

I travel down the stairs, passing the same three orbiting disco balls, and enter an enormous chamber with a giant lava pit for a floor and a series of small, trickily-spaced donut platforms floating high above to the ceiling. Because what castle would be complete without a giant room full of lava? As a kid, I used to wonder why the castles and fortresses in video games (especially Mario games) never had normal castle rooms, like bedrooms or a kitchen. Is the whole point of the castle just to be a trap to fight against Mario? Or is it normally more of a lived-in castle, and Bowser just rigged it up *Home Alone*-style right before Mario showed up?

Either way, jumping around on the donut platforms in the large fire room provides access to four different platforms to the right, two of which lead to slightly different configurations of Bowser's final chamber, where the monster lurks inside.

•

The final Bowser battle in *SMB3* feels appropriately epic. The music that plays during this battle is intense—a heroic, urgent blend of synthesized clarinet and thrumming bass. Adding to the excitement is the fact that Bowser himself looks and moves like no other villain in the game. First of all, he's the largest. He's as big as one of World 4's giant Hammer Brothers, yet he jumps higher, rapidly butt-stomps down on top of you,

and breathes fire (although it turns out that a glitch makes you invincible to Bowser's flames if you stand right next to him). For the most part, Bowser fights by hurling himself at you: He attacks Mario by jumping down on top of him from above, just as Mario has attacked most of his enemies throughout the game. But Bowser, unlike the Koopalings and the Boom-Booms, cannot be jumped on. He can't be defeated by brawn alone—it's through outwitting him and using his own strength against him that you can beat him. Each time Bowser butt-slams down at Mario, he destroys a layer of the red brick floor. After Mario dodges him enough times, he'll create a hole in the floor and fall right through it to his death.

What added the most urgency for young Alyse in this fight was being able to see the door to the princess's cell, red and obviously locked up. She was just within reach. Here again, it's the little details that make this battle so delightful—the way Bowser looks left and right after each ground slam, as though he's lost track of where Mario is and then says to himself, "Oh *there* he is" as he turns toward me and breathes more fire. After the intricacy of each of the Koopaling sprites and fighting styles, Bowser does not disappoint. He's beautifully drawn and detailed, with lots of personality, but not in a silly way like the Koopalings. This version of Bowser looks a lot like how he's rendered today—orange hair, green spiky shell, and horns. In fact, he looks much more like his current self than the *SMB1* Bowser, who

stood about as tall as Super Mario and looked much thinner and greener.

Fighting Bowser now feels like sparring with an old friend. We both know we're cool with each other. I don't hate him the way my father does. I can relate to his outsider status; I can feel his loneliness. There's something sadly funny and pathetic about the buffoonish way Bowser defeats himself in this level. Mario beats him not by force but by trickery, cunning, and defensive moves. Poor Bowser often dies this way. As much as he might seem to have his act together, he often gets killed by his own hubris—leaving an axe dangerously close to a bridge or narcissistically handing you tiny throwable Bowser wind-up toys during a fight. Here, Bowser dies by falling from a great height—the same way that Donkey Kong dies in Mario's debut.

In many respects, the comfortable, familiar way I feel about Bowser reflects the way I feel about *SMB3* as a whole: As I have changed and aged, the game has been a constant. *SMB3* is still exactly the way I remember it. The only thing that's different now is me: Now I know why I wanted to save the princess so badly, and now I know that the game's basic premise was never really about saving the princess after all.

Nostalgia is a bittersweet longing to return to a happier time or place; it's a bittersweet feeling because you can't actually return. But through games, you can. Games don't change, and because of their timelessness, they offer a chance to actually return to a virtual place

from your past and re-play that past. I don't play with action figures or throw the football in the backyard anymore, but I do still play *SMB3*. I can still experience that old feeling of connectedness I had with my brother and my father anytime I want.

•

My friend Kirsten got her NES at age seven, but was too afraid to play *SMB3* for long because she had anxieties about dying in the game—so she watched her mother play instead. "She'd come to help me through a tough part at my request, and then I'd beg her to beat the whole level for me," Kirsten said. "I can still clearly remember the night she beat Bowser—it's a really happy memory for me."

Research on the psychology of video game nostalgia shows that the games that stick most powerfully in our memories remain there not because of the game itself, but because of who we were with when we were playing it. Though I may have worried that nostalgia biases me in my affection for *SMB3*, the truth is that my nostalgia is not for *SMB3* itself but for my my dad, my brother, and my friends. Kirsten has a daughter of her own now—an adorable three-year-old named Mira, and she said she can't wait to start playing games with her. "So far she likes to hold a controller and mash the buttons if I'm playing," Kirsten said. "She likes when the Mario characters [in

Super Mario 3D World] are dressed up as cats, and she will just hit 'A' repeatedly and tell me proudly, 'Look, my kitty is jumping!' It's really fun, minus the zillion lives she wastes—but she is worth any number of 'game overs.'"

I hope my future son or daughter likes video games and Mario, but maybe they'll prefer Barbies instead. No matter what, I have two great role models to follow. Like my father, I'll share with them the things I'm most passionate about. Like my mother, I'll respect their preferences no matter what, and give them the toys they want to play with most—and maybe trick them, occasionally.

•

After you've dumped Bowser out of his chamber, the red locked door in the corner explodes and turns into a tantalizing, shiny portal as the game goes totally silent, just like the title screen. This image—the sparkling door leading to a chamber containing a beautiful princess—defines my childhood. It doesn't matter if it's my first time beating Bowser or my 100th, if I'm 7 or 27—I'm overjoyed when I finally get to enter the chamber and rescue the girl.

The princess's chamber music is a beautiful, victorious melody that evokes delicacy, dignity, and femininity. I enter from the left side of the screen and see Princess Toadstool in the corner, far away from the door, kneeling on the floor and crying with her face in

her hands. Unlike future blonde iterations of the princess (including the SNES *All-Stars* remake of *SMB3*), this sprite is a brunette—and if she looks familiar, it's because she's the same sprite as the one used in *SMB2* USA. The room is dark at first, but as soon as I enter, sun rays suddenly stream in and Toadstool stands up and walks toward me. I meet her in the exact middle of the room and we stand facing each other like we're the bride and groom at a wedding.

Perhaps this battle and its closure feel so important to me because they represent a battle between all of my selves. When Mario-me slays Bowser-monster-me, it's the self of my dreams slaying the self of my subconscious guilt—that representation of myself as an uncontrollable, unnatural beast. And when Mario-me rescues princess-me, it's my bold hero self turning on the lights and finally leading the locked-in self out of her dark prison cell.

Princess Toadstool seems to recover fine from her kidnapping incident, quickly snapping out of her tearful despair to deliver the humorous, chaste send-off that sums up her flirtatious but never-quite-fulfilled relationship with Mario. Just as the plot of a romantic comedy makes you wait and wait and wait for the kiss at the end, the Mario franchise keeps you playing forever with the repeated denial of that kiss. Each time a Mario game ends, you think, "surely this time Mario and the princess will kiss, settle down together, and make a go of it."

Or at least I always thought so. The constant, just-out-of-reach potential for Mario and the princess represented, for me, the potential to one day find a happy ending of my own—a dream I will finally get to realize when I marry my fiancée Kate. For millions of people, Super Mario Brothers games filled this role in some way, creating a world of endless possibilities waiting just around the corner. The princess was always in another castle, but Mario plugged along. He endured hardships. He battled through them. I knew that eventually, one day, he—and I—would impress the girl enough to fall for us. In the Mushroom Kingdom, anything was possible.

•

Over Christmas of 2014, 24 years after the last time we played together, I played *SMB3* with my father. I gave him an NES USB controller as a gift and set up an emulator on his laptop. Then we sat down on my grandmother Mimi's couch, in the house where I had spent so many childhood weekends with him when he came to Georgia to visit, and played.

He had just found out some heart-breaking news—that his beloved pet bird Nelly had escaped after an incident with a friend's german shepherd. When he called me earlier in the day to tell me, it was the first time I'd ever heard him cry. And now here he was, collecting coins and mushrooms in level 1-1 right in front of me.

As I watched my dad play, I was filled with disappointment. He was a disaster. He looked worse than he had when he tried to play *SM64*. He moved slowly and awkwardly, never working up his speed or any kind of dexterity or confidence. He managed to get a leaf in 1-1 but missed the runway's opportunity to fly up to the 1-Up cloud platform.

"Dad, do you remember how to fly?" I hinted.

"Yes," he grunted, immersed in total concentration. He had totally lost his touch.

After he painstakingly worked his way through level 1-1, I couldn't help but ask if I could have a try. I took the controller from him and started 1-2—and immediately realized that the controller's B button wasn't working. I went into the game's settings and fixed the problem, then handed the blocky controller back to my dad.

With the B button working, he played like a pro again, flying around the screen at full speed and crushing enemies. Within the next few levels, he found a secret coin room that I didn't even know existed (me, the person writing a book about the game) and gave me a tip about how to get a star card at the end of each level (which I did already know, thank you very much).

While Kate drank tea in the kitchen with Mimi, my father and I sat on a chair in the dark, glued to the game just as much as we were twenty years ago. He made it to the beginning of World 3 in about 30 minutes. The sun level in World 2 gave him a challenge, and he was just as frustrated by Boss Bass as he was when I was

four (though he didn't throw the controller this time). I played a couple of levels with him (as I fought the Koopaling boss of World 2, he cried, "Alyse, remain calm!"), but for the most part, I just watched.

As we sat there together, the hour getting later and later, I felt just like a kid again—that feeling we all seek in games. I didn't want to go to bed. Correction: I didn't want *him* to go to bed. I just wanted him to keep playing. I wanted him to win—no, I wanted him to keep going forward, to never stop, and to never give up.

NOTES

Extended list of Mario, Nintendo, and gaming history resources, along with *SMB3* videos, trivia, tips, and tricks available at http://supermariobrothers3.tumblr.com/.

Sources consulted for multiple chapters:

Arsenault, Dominic. "System Profile: The Nintendo Entertainment System (NES)." *The Video Game Theory Reader 2.*, edited by Mark J.P. Wolf. Taylor & Francis, 2009.

Audureau, William. *The History of Mario*. Pix'N Love Publishing, 2014.

Birch, Nathan. "Mario Almost Had a Centaur Suit? 13 Things You Might Not Know About 'Super Mario Bros. 3.'" Uproxx, March 11, 2015. uproxx.it/1RoCr0j

Chipman, Bob. *Super Mario Bros. 3: Brick by Brick*. FanGamer, 2013.

Donovan, Tristan. *Replay: The History of Video Games*. Yellow Ant, 2010.

Fenty, Sean. "Why Old School Is 'Cool': A Brief Analysis of Classic Video Game Nostalgia." *Playing the Past: History and Nostalgia in Video Games*, edited by Zach Whalen and Laurie N. Taylor. Vanderbilt University Press, 2008.

Hakima, Aliyah M. "Beyond Button-Pushing: A Look at Suasion in Gameplay Through Player, Memory, and

the Rhetoric of Gameplay." Thesis. University of Alabama, 2003.
Herz, J.C. *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds*. Little, Brown and Company, 1997.
Irwin, Jon. *Super Mario Bros. 2*. Boss Fight Books, 2014.
Iwata Asks Interview Series, *Super Mario Bros.* 25th Anniversary, Vols. 1-5. bit.ly/1Pesdcs
Jenkins, Henry. "Complete Freedom of Movement": Video Games as Gendered Play Spaces." *The Game Design Reader: A Rules of Play Anthology*, edited by Katie Salen and Eric Zimmerman. MIT Press, 2006.
Jenkins, Henry, and Mary Fuller. "Nintendo and New World Travel Writing: A Dialogue." *Cybersociety: Computer-Mediated Communication and Community*, edited by Steve Jones. SAGE Publications, 1994.
Kent, Steven. *The First Quarter: A 25-Year History of Video Games*. BWD Press, 2005.
Kent, Steven. *The Ultimate History of Video Games: From Pong to Pokémon—The Story Behind the Craze That Touched Our Lives and Changed the World*. Three Rivers Press, 2001.
Lucas, Raphaël. "Une Petite Histoire de Super Mario Bros." Geek-O-Matick, July 12, 2013. bit.ly/1RObVhl
McLaughlin, Rus. "IGN Presents: The History of Super Mario Bros." IGN, September 13, 2010. bit.ly/1Wczrn3
Moseley, Roger and Aya Saiki. "Nintendo's Art of Musical Play." *Music in Video Games: Studying Play*, edited by K.J. Donnelly, William Gibbons, and Neil Lerner. Routledge Music and Screen Media, 2014.
Mushroomkingdom.net.
Ryan, Jeff. *Super Mario: How Nintendo Conquered America*. Portfolio/Penguin, 2012.
Ryckert, Dan. "Mario's Creators Answer Burning Questions About the Series." Game Informer, September 10, 2015. bit.ly/1J5SEoF

Sheff, David. *Game Over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children*. Random House, 1993.
Superluigibros.com.
Wolf, Mark J.P. (editor). *The Video Game Explosion: A History from PONG to Playstation and Beyond*. Greenwood Press, 2008.
Wolf, Mark J.P. *The Video Game Theory Reader 2.* Taylor & Francis, 2009.

Press Start

1. 18 million statistic: The *SMB3* NES cartridge sold approximately 18 million copies worldwide, according to Jeff Ryan and many others. However, the game's unit sales across all platforms likely total more than twice this figure. Adding up the sales of *Super Mario All-Stars* (10.55 million), *Super Mario All-Stars 25th Anniversary Edition* (2.24 million), *Super Mario Advance 4: Super Mario Bros. 3* (3.698 million), and the Wii Virtual Console edition (1 million) puts the game's total sales as of 2009 at more than 35 million. This does not include sales numbers for the 2014 Nintendo 3DS and Wii U Virtual Console releases, which I could not acquire. For the most part, these sales figures come from wikis and could not be verified with Nintendo.
2. The quote "For me, there is no time before *SMB3*" is from an e-mail interview with Mike Roth, cinematics director at Gearbox Software.

Leave Luck to Heaven

1. Yamauchi quote on how "there is no limit to effort": Osamu Inoue and Paul Tuttle Starr's *Nintendo Magic: Winning the Videogame Wars* (Vertical, 2010).

2. *New York Times* article quote: "Nintendo Scores Big" by Douglas C. McGill (1988).
3. "Slow Death of the Game Over" article by Kyle Orland. *Escapist Magazine*, June 5, 2007. bit.ly/1J5SEF7
4. Study on expert behavior in children: Stephanie S. VanDeventer and James A. White's "Expert Behavior in Children's Video Game Play," from *Simulation & Gaming*, Vol. 33 No. 1, March 2002.
5. Miyamoto quote on the "obsessive idea" of minigames: Iwata Asks.
6. Miyamoto lacked time to focus on *SMB2* Japan: Rus McLaughlin.
7. Juul study on players' desire to feel as though failure is their own fault: "Fear of Failing? The Many Meanings of Difficulty in Video Games" from *The Video Game Theory Reader 2*, edited by Mark J.P. Wolf and Bernard Perron. Routledge, 2009.
8. Additional sources consulted include:
    - Patrick Curry's "Everything I Know About Game Design I Learned from Super Mario Bros." from *Well Played: Video Games, Value and Meaning*, edited by Drew Davidson. ETC Press, 2009. bit.ly/1lbI6Zs
    - Rusel DeMaria and Johnny Lee Wilson's *High Score! The Illustrated History of Electronic Games* (Osborne/McGraw-Hill, 2002).
    - Florent Georges, Benjamin Daniel, and Isao Yamakazi's *The History of Nintendo 1889-1980* and *1980-1991* (Pix'N Love Publishing, 2012).
    - Harold Goldberg's *All Your Base Are Belong to Us* (Three Rivers Press, 2011)
    - Bill Loguidice and Matt Barton's *Vintage Game Consoles* (Focal Press, 2014)
    - Jeremy Parish's *The Anatomy of Super Mario, Vol. 1* (2013)

- Nick Paumgarten's "Master of Play: The Many Worlds of a Video-Game Artist" from *The New Yorker*, December 20, 2010. bit.ly/1k74cv8
- Erik Voskuil's *Before Mario* (Omaké Books, 2014)
- Mark J.P. Wolf's *Before the Crash: Early Video Game History* (Wayne State University Press, 2012) and *The Medium of the Video Game* (University of Texas Press, 2002)

Enter Hero

1. 250,000 copies sold out: "Mario 3: Titan Returns" by David Landis, *USA Today*, March 16, 1990.
2. Miyamoto quote on the "ultimate Mario" for the Famicom: William Audureau.
3. Akihiro Saito quote: Roger Moseley and Aya Saiki.
4. World 4 map screen flowers are as big as trees: Bob Chipman.
5. Miyamoto quote about being like Lakitu: "Profile: Shigeru Miyamoto; Chronicles of a Visionary," by Jeton Grajqevci, N-Sider, 2000. bit.ly/1NamJOx
6. Additional sources consulted include:
   - Chris Kohler's *Power-Up: How Japanese Video Games Gave the World an Extra Life* (BradyGames, 2004)
   - "The Making of Super Mario Bros. 3" in *Nintendo Power*, Vol. 10, 1990.

Masters of Play

1. Miyamoto quote on *SMB2* USA from Samuel Claiborn's "This Is Shigeru Miyamoto's Favorite Mario Game," IGN, June 15, 2012. bit.ly/1SQV9x8
2. Miyamoto quote from *Time*: "The Mythology of Mario: Q&A with Nintendo's Legendary

Shigeru Miyamoto," by Evan Narcisse (2010). ti.me/1WczJuc

3. Additional sources consulted include:
    - The Cutting Room Floor
    - Jeton Grajqevci's profile of Miyamoto
    - Paul Rand, Tim Boone, and Frank O'Connor's "Super Mario Bros. 3 Review" in *Computer and Video Games Magazine*, Issue 120, November 1991. bit.ly/1n3PcB8
    - Matt Regan and Julian Rignall's "Nintendo Review: Super Mario Bros. 3" in *Mean Machines*, Vol. 13, October, 1991. bit.ly/1J5SHkb
    - Sharon Sherman's "Perils of the Princess: Gender and Genre in Video Games" from *Western Folklore*, Vol. 56 No. 3/4, 1997.
    - VGFacts.com

Mario's Melodies

1. Kondo US Gamer quotes: "Super Mario's Maestro: A Q&A with Nintendo's Koji Kondo," by Bob Mackey, (2014). bit.ly/1RoCKby
2. Additional sources consulted include:
    - Famitracker.com
    - Andrew Head's "Evolving Style in the *Super Mario Bros. 3* Soundtrack" in *Forbes & Fifth* (2013). bit.ly/1ZJyzXk
    - Christian Nutt's "The *Mario* Maestro Speaks" in Gamasutra, December 10, 2014. ubm.io/1glmLdx
    - Leonard J. Paul's "Droppin Science: Video Game Audio Breakdown" from *Music and Game: Perspectives on a Popular Alliance* (Springer VS, 2012).

- Andrew Schartmann's *Koji Kondo's Super Mario Bros. Soundtrack* (Bloomsbury Academic, 2014).

All the World's a Stage

1. *SMB3* theater conspiracy meme: "Super Mario Bros. 3 Was a Stage Play, My Mind Is Blown." Giant Bomb (2010). bit.ly/1Olhhwg
2. Miyamoto's "talent agency": Nintendo Channel SMB 25th Anniversary Interviews (2010). bit.ly/1RuQH7V
3. Miyamoto "Popeye" quote: Ryckert.
4. Kabuki: Moseley and Saiki.
5. Juul quote on how games are "playgrounds where players can experiment with things they would or would not normally do": *Half-Real* (The MIT Press, 2011).
6. Tezuka quote ("Once we had the tail on Mario"): Mike Epstein's "This Is Why Mario's Tanooki Suit Used to Fly, and Why It Doesn't Anymore" in Kotaku, June 15, 2011. bit.ly/1WcA2VV
7. Tezuka quote ("Mario would go like this"): Iwata Asks.
8. Nakago quote: Iwata Asks.
9. Miyamoto Tanooki quote ("I liked the idea so much"): Audureau.
10. Additional sources consulted include:
    - Brvar, Mozina, and Bunc's "Prolonged Psychosis After Amanita Muscaria Ingestion" from *Wien Klin Wochenschr*, Vol. 118 No. 9-10, 2006.
    - Justine Cassell and Henry Jenkins' *From Barbie to Mortal Kombat: Gender and Computer Games* (The MIT Press, 2000).
    - Harrison and Harrison's *Fuzz & Fur: Japan's Costumed Characters* (Mark Batty Publisher, 2011) and *Idle Idol* (Mark Batty Publisher, 2010).

Topophilia

1. Miyamoto *SM64* amusement park quote: Kent's *The First Quarter*.
2. Henry Gilbert GamesRadar quote: "Why Super Mario Bros. 3 Is One of the Greatest Games Ever Made" (2012). bit.ly/1Olhi3m

Mario the Conqueror

1. Blowing on cartridges hurts more than it helps: "Did Blowing into Nintendo Cartridges Really Help?" by Chris Higgins at Mental Floss, September 24, 2012. bit.ly/1ra0GRi
2. 7th and 8th graders survey: Jeanne B. Funk's "Reevaluating the impact of video games" from *Clinical Pediatrics*, Vol. 32 No. 2, February 1993.
3. Nintendo market share information: *Encyclopedia of Consumer Brands*, Vol. 3, edited by Janice Jorgensen. St. James Press, 1993.
4. Corbie Dillard's Nintendo Life article: "Super Mario Bros Turns Twenty" (2010). bit.ly/1RoCMQG
5. 1992 Market Data Corporation study: Sheff.
6. *Newsweek* article "Nostalgia Has Its Own Pitfalls" by Annetta Miller (1994). bit.ly/1SX6Br8
7. Gamers feel particularly nostalgic for the first game they ever played: Fenty.
8. Additional sources consulted include:
    - Bissell's *Extra Lives: Why Video Games Matter*
    - Frank Cifaldi's "Nintendo Power: Remembering America's Longest-Lasting Game Magazine" in Gamasutra, December 11, 2012. ubm.io/1lbIQxA

- Patricia M. Greenfield's "Video Games as Cultural Artifacts" from *Journal of Applied Developmental Psychology*, Vol. 15 No. 1, 1994.
- Raymond Roel's "The Power of Nintendo" from *Direct Marketing*, September 1, 1989.
- Kevin Wong's "How We Played with Power: the Secret History of 'Nintendo Power'" in Complex, December 2, 2013. bit.ly/1SQVoIq

Ever Onward

Sources consulted include: Matt Alt's *Hello Please! Very Helpful Kawaii Characters from Japan* and Joris Dormans's "Beyond Iconic Simulation" in *Simulation & Gaming*, Vol. 42, Oct. 2011.

ACKNOWLEDGEMENTS

I am endlessly grateful to Gabe Durham and Michael P. Williams for their support, generosity, and incredible editorial eyes throughout my research and writing process. Thank you to Ken Baumann and Christopher Moyer for their beautiful design work, and to Ryan Plummer, Joseph M. Owens, and Nick Sweeney for their rigorous copyediting.

For her patience, pep talks, and writing advice, thank you to Kate Partridge. For an eternal supply of Mario fun, thank you to my family. For workshopping feedback, my thanks to Erin Barnett, Siwar Masannat, Darby K. Price, and Jenny Owen Youngs. For assistance translating research materials from French to English, a big thank-you to Gilles Gouze de St. Martin.

My deepest gratitude to the following individuals who let me interview them for this book: Kristina Bell, James Clarendon, Stefan Hall, Ryan Mattson, Howard Phillips, Dana Plank, Morgan Romine, Mike Roth, Brandon Sheffield, Ryan Thompson, and Gail Tilden.

I very much appreciate the support of my colleagues in the UAA English Department, as well as the resources

provided by the UAA library and interlibrary loan staff. I am also grateful to the National Park Service staff at Big Cypress National Park for providing the time and space to complete my first draft of this book.

Finally, I would like to extend a heartfelt thanks to the following individuals for sharing with me their personal memories of *SMB3*: Erin Barnett, Ben Bever, Judy Blotnick, Kirsten Clodfelter, Caroline Crawford, Fatal1ty (Johnathan Wendel), Sarah Katz, Rachael Lussos, David McDonald, Jeff Rickel, Aly Russo, Jake Rzepka, Sam Slaughter, and Becca Watts.

ALSO FROM BOSS FIGHT BOOKS

1. *EarthBound* by Ken Baumann
2. *Chrono Trigger* by Michael P. Williams
3. *ZZT* by Anna Anthropy
4. *Galaga* by Michael Kimball
5. *Jagged Alliance 2* by Darius Kazemi
6. *Super Mario Bros. 2* by Jon Irwin

7. *Bible Adventures* by Gabe Durham
8. *Baldur's Gate II* by Matt Bell
9. *Metal Gear Solid* by Ashly & Anthony Burch
10. *Shadow of the Colossus* by Nick Suttner
11. *Spelunky* by Derek Yu
12. *World of Warcraft* by Daniel Lisi

★ *Continue? The Boss Fight Books Anthology*