

Shigeru Miyamoto: Game Designer

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At the 2000 ECTS show in London, Nintendo unveiled its GameCube console for the first time in Europe. Following some demo footage of the GameCube's capabilities, a middle-aged Japanese man with shoulder-length hair, one of Nintendo's game designers, came onto the stage to unveil a video demo of the new Pokémon game, "Meowth's Party". As the music got pumping, surprisingly, so did the Japanese game designer. As the crowd cheered him on with synchronous clapping, the designer danced up a storm, demonstrating his hip moves and his air guitar to boot. But who was this man? Who was this dancing fool of Nintendo's? Why, who else *could* it be? As NintendoWeb so eloquently puts it, Shiggy was just getting jiggy.

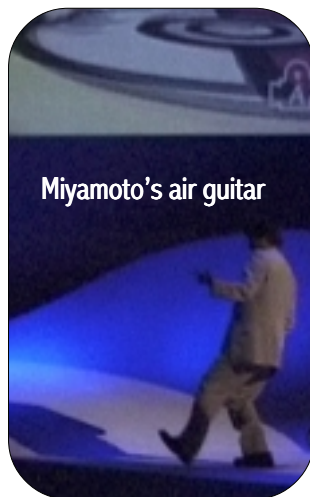
Shigeru Miyamoto, creator of such classics as Mario, Zelda, and Donkey Kong, has for over two decades shown the world his idea of fun not just in his oddball dancing bouts, but in his video games as well. His games have undoubtedly shaped and still influence today's video game industry. They easily serve as the high standard of video game design and have served as such since Miyamoto's first creation. "When a game created by Miyamoto hits stores, Nintendo sees a corresponding spike in the number of game systems sold" (Mowatt, par. 11). Often referred to as the greatest game designer of all time, Miyamoto is revered in an almost god-like fashion. Many refer to great game design as being blessed by the "Miyamoto Magic," but this phenomenon is easily explained by Miyamoto: "To me, [creating video games] is all about fun" (Griffiths, par. 7). Perhaps it's just that simple.

Born on November 16, 1952 in Sonebe, Japan, Miyamoto grew up in a very low-tech world, where fun had to come from his own imagination. He was very adventurous as a child, exploring the hillsides, creek beds, and small canyons beside his home. Miyamoto also loved reading, drawing, and painting – early signs of his budding creativity. When the family moved to Kyoto, Miyamoto met new friends with whom he went on adventures with, exploring forbidden places and holding secret meetings (Sheff 44-45). In school, Miyamoto was often scolded for daydreaming during lectures. Instead of schoolwork, he concentrated on drawing comic books and scenery. His mother

encouraged his creativity, supporting him through art school even though many said Miyamoto had "lost his way" in life (Griffiths, par. 4).

After five years at the Kanazawa Municipal College of Industrial Arts and Crafts,

Miyamoto graduated with a degree in industrial design, but had no



Miyamoto's air guitar



The GameCube



Shiggy gets jiggy at the ECTS show

clue as to what his next step would be (Burnham 247). Luckily, his father was old friends with the president of Nintendo Company Limited, Hiroshi Yamauchi. Miyamoto asked his father to set up an interview for him, and although Yamauchi was reluctant, he granted this favor to his old friend. After two separate meetings with

Miyamoto, Yamauchi hired him as Nintendo's first staff artist and also assigned him to be an apprentice in the planning department (Kent 46). Though Miyamoto didn't have any programming experience, he was not clueless about video game design. In college he had spent countless hours playing in arcades, and for the first few years at Nintendo he had helped design characters for games like "Sheriff". Moreover, Miyamoto had been designing games on his own time, but his ideas were repeatedly rejected by Nintendo (Muldoon, *The Legend*, par. 3-5). As fate would have it though, Miyamoto was soon given the opportunity of a lifetime. Nintendo's first venture into America, the arcade game "Radarscope", had flopped. Because he could not spare any other designers for the job, Yamauchi gave Miyamoto the task of creating a game that would save NCL's American branch (Timberman, par. 4).

After reviewing the schematic drawings of "Radarscope", Miyamoto decided Nintendo needed something completely different. He had often regarded the "shoot-'em-up and tennis-like games that were in the arcades at the time" as "unimaginative [and] simply uninteresting to many people" (Sheff 47). Miyamoto wanted video games to tell stories, and the story he told was "Donkey Kong".

Released in 1981, "Donkey Kong" was Nintendo of America's first smash hit (Trueman, par. 1). Not only did "Donkey Kong" bring NOA the success it needed to stay afloat in the American market, but it also revolutionized the way video games were made.

"Before 'Donkey Kong'," explains Miyamoto, "those who were making the video games were the programmers and engineers, not the character designers and other artists" (Muldoon, *The Father*, par. 8). Miyamoto knew nothing about programming – for "Donkey Kong", he did the designing and handed the game off to a programmer who implemented his design. This was, perhaps, the first time the formal concept of a game designer or game artist was realized in such a way.

Not only was the process of game designing revolutionary, but the outcome was as well. "Donkey Kong" debuted in a video game environment comprised of a homogeneous entity of space shooters and "Pong" knock-offs. "Games at the time were

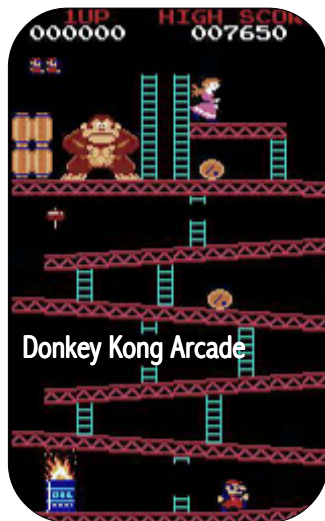
pretty much a variation on one another: You shot at things, they shot at you, and eventually you were overwhelmed by either sheer speed or numbers until you lost. Then you entered your name in the high-score memory and challenged your friends to beat you” (Trueman, par. 4). In a sense, “Donkey Kong” was a rebel because it defied typical gaming expectations. It wasn’t like the other games out there. Where “Radarscope”, a variation of “Space Invaders”, failed, “Donkey Kong” succeeded.

Unlike the other games out on the market, “Donkey Kong” provided a “compelling storyline” to follow (*Donkey Kong Synopsis*, par. 6). The story involved a stumpy carpenter and his pet gorilla, who escapes and captures his girlfriend, Pauline. The gorilla climbs to the top of various construction sites and buildings, and the carpenter’s job is to save his girlfriend, all the while avoiding the barrels that his pet is throwing down at him. Because of the unusually detailed storyline that was created, featured characters were introduced to the gaming world. “Donkey Kong” was one of the first video games to do this (Timberman, par. 4). The ape in the game was called “Donkey Kong” and the carpenter’s name became “Mario”. These characters would appear in countless future Nintendo games.

The creation of music for the game also gave “Donkey Kong” an inventive edge. Though other games also featured music, Miyamoto took game music to a higher level. No longer was music considered secondary to the overall design of a game. Miyamoto wrote the music himself, composing it on an electric keyboard (Sheff 48). “The music – or sounds – in [the old] days was just terrible. Because the pure engineers and programmers – who had no knowledge at all of music composition – had to make music and sounds for the games. They were just terrible, incredible, unthinkable in those days” Miyamoto said (Muldoon, *The Father*, par. 5). It was obvious that every detail, even the background music, was important to Miyamoto, who, as one of the first game designers, was able to make sure that every aspect of the game followed through with his original intent.

Yet when sales representatives Ron Judy and Al Stone of NOA first played the game, “they almost quit on the spot” (Burnham 247). It was an expected reaction. Brinking on the edge of complete bankruptcy, Judy and Stone were banking on Miyamoto’s game to save their livelihoods as well as NOA’s. They were expected to put all of their faith in a game they were told would be called “Stubborn Gorilla”. It is no wonder they almost left the company.

Yet it was exactly this reaction that foretold the boundless success that “Donkey Kong” would achieve. Miyamoto’s innovation wasn’t easily understood. Judy and Stone saw a game that was even worse than “Radarscope”, but Miyamoto knew his game would succeed. Perhaps it was at the moment when Judy and Stone



saw a Nintendo employee completely addicted to the new arrival that Judy, Stone, and Miyamoto all finally saw eye to eye. After watching Miyamoto’s genius in action, Judy and Stone decided to give “Donkey Kong” a chance – perhaps the best decision of their lives. “Donkey Kong” went on to sell over 80,000 machines in the US and became “the second most popular license of the Golden Age of videogame arcades, surpassed only by Namco’s ‘Pac-man’” (Brunham 247). Both Judy and Stone became multimillionaires.

From that day on, Miyamoto’s career took off and never came back down. He had created a stellar hit, and Nintendo wasn’t likely to keep him as just staff artist any longer. After working for over a year on games for Nintendo’s Game & Watches,

Miyamoto was called into Yamauchi’s office and made head of Nintendo’s newest research and development team, R&D4. The goal for this R&D team was to create “the most imaginative video games ever” (Sheff 49). The results that came from it forever-changed Nintendo.

Drawing from the success of “Donkey Kong”, Miyamoto brought back a familiar character from the game. The little carpenter who lost his ape was to star in one of Nintendo’s most successful games – “Super Mario Bros.”

Mario was turned into a plumber and paired with his skinnier and taller brother, Luigi. The adventure they embarked upon, much like in “Donkey Kong”, involved saving a damsel in distress. This time around, however, Mario had found a new woman in his life by the name of Princess Toadstool. It was up to Mario and Luigi to save her from her kidnapper, Bowser. Traversing through a land of giant, green pipes (fitting for two plumbers), mushroom-like Goombas, turtle-like Koopa Troopas, Bullet Bills, Piranha Plants, and more, Mario and Luigi brought Nintendo an arcade smash hit, as well as dominance in home video games for the next decade (*Super Mario Bros. Synopsis*, par. 2).

In 1985, Nintendo packaged “Super Mario Bros.” with the debut of its US version of the Famicom, the NES, short for Nintendo Entertainment System. One of the first run-and-jump side-scrolling platform games, “Super Mario Bros.” “set the standard for all future videogames” (Pemberton, par. 8). “Instead of simply climbing ladders and moving around on platforms, players now controlled [Mario] as he ran through a seemingly endless, brightly colored countryside” (Kent 299). Though “Super Mario Bros.” was not the first side-scrolling game – “Scramble”, “Defender”, “Super Cobra”, and others had appeared years before (Kent 299) – it was certainly the first side-scrolling game to gain such popularity, selling over 50 million copies to date (Pemberton, par. 8). The proliferation of “Super Mario Bros.” no doubt influenced the design of games for years to come. “Side-scrolling platform adventures became a staple of home console

games” (*Super Mario Bros. Synopsis*, par. 6). Until the advent of 3D gaming technology, the side-scrolling platform was one of the most common platforms for adventure games. Even with the introduction of newer technology like the Sony Playstation, side-scrolling games were still being developed, including Konami’s popular “Castlevania: Symphony of the Night” and Ubi Soft’s “Rayman”.

Yet not only was the “Super Mario Bros.” platform influential, but also the content of “Super Mario Bros.” introduced a host of new gaming elements that are still widely used today. “[‘Super Mario Bros.’] introduced the world to countless innovations that today are an essential part of almost every video game designer’s palette – power-ups, hidden areas, extra lives, and end-of-level bosses” (Pemberton, par. 8). One of the more popular aspects of the game was the variety and magnitude of its Easter eggs (Kent 300). The hidden secrets a player could find ranged from extra lives to entire new worlds. The only way to get to these Easter eggs, however, was to explore the game – a large part of Miyamoto’s intent. Scheff contests that Miyamoto brought many of his own experiences as an adventurous child into the game itself (51). Much of the popularity of “Super Mario Bros.” can be attributed to this adventurous aspect of the game – players are encouraged to think beyond the normal bounds of a typical game. Even after beating the game, “most people continued playing ‘Super Mario Bros.’ to find all of Miyamoto’s Easter eggs” (Kent 300).

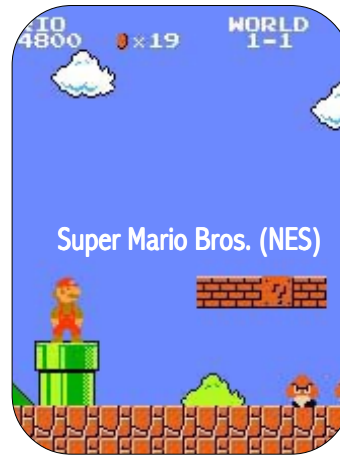
Soon after the creation of “Super Mario Bros.”, Miyamoto began working on another game that would, again, encourage players to test the limits of video game possibilities. Much like in the creation of “Super Mario Bros.”, Miyamoto took experiences from his childhood – his time spent wandering the nearby wilderness of Sonebe and even simple adventures in his own house. “The memory of being lost amid the maze of sliding doors in his family’s home in Sonebe was re-created in [this next game]” (Sheff 52). Miyamoto wanted the player to experience what he had felt as a child. Through this next game, Miyamoto

attempted to “impart the sense of exploration and limitless wonder to players” (Vestal, *History of Zelda*, par. 2). He achieved all of this through a boy named Link and the legend of Zelda.

“The Legend of Zelda” was the first of its kind. Unlike the side-scrolling “Super Mario Bros.”, in *Zelda*, the player guided Link from an overhead three-quarters perspective, with the ability to move up, down, and side to side. “Before its release, gamers had never seen an action title with such a nonlinear, detailed, and expansive world” (Vestal, *History of Zelda*, par. 4).

Link’s goal in the game was to uncover the eight pieces of the Triforce of Wisdom, which were hidden throughout the vast world of Hyrule. But in order find the pieces and save the princess

Zelda, Hyrule had to be



explored. “Whereas turn-based RPGs

focus on advancement and improvement, *Zelda* focuses on roaming, exploration, and the total game experience” (Vestal, *History of RPGs*, par. 23). Miyamoto’s vision for a world where the player could have the freedom to explore and discover adventure had been fully realized. “The Legend of *Zelda*” provided a stage where limits seemed endless and adventure surfaced around every corner. Because of this, *Zelda* was the first game in a whole new video game genre, the action-adventure RPG, forever impacting the future of RPG and adventure style games.

“It’s the best blending of a full and intriguing story line with the huge, detailed worlds that you have in role playing games. You get a story that’s not interrupted with turn-based computer tabulated fights. It’s an adventure game for RPG players and an RPG

for anybody” (Baxter, par. 3). While there were similar games that had come out before *Zelda*, including “Dragon Quest”, *Zelda* was able to distinguish itself from the RPG genre. “[‘The Legend of *Zelda*’] was the first to feel less like a convoluted programming exercise and more like a true adventure” (Vestal, *History of RPGs*, par. 20). Unlike the slower-paced, numerical gameplay of RPGs of that time, *Zelda* combined fast action with puzzling dungeons.

Not only was the gameplay innovative, but *Zelda*’s exterior packaging set it apart from other games as well. Instead of the typical gray exterior, Nintendo housed *Zelda* in gold, so players knew the game was special before they even started playing. Upon Miyamoto’s request, Nintendo also included a ten-year internal battery, which allowed players to save their games. *Zelda* was the first game to include such a feature (Kent 354). Prior to this save system, players could only record their progress in games by using passwords. “Unfortunately, because passwords are prone to human error in their transcribing and reentering, a single misinterpreted character could mean the difference between the Final Dungeon and the very, very beginning” (Vestal, *History of Zelda*, par. 5). This creative new feature set the standard for the RPG and RPG-like genres. A save

system became a necessity, rather than a feature of such games, and has since evolved into the memory cards used in today’s consoles.

The technological advances and original gameplay of *Zelda* helped to boost the game to the top of the sales charts in 1987, right next to “Super Mario Bros.” (Timberman, par. 7). That year, “‘The Legend of *Zelda*’ became the first new generation home video game to exceed sales of one million units” (Nintendo, par. 29). *Zelda* was a huge success, and Miyamoto had struck gold thrice.

As Miyamoto’s fame and stature grew, so did NOA’s presence in the US. Yamauchi attributed much of the success of NOA to Miyamoto’s games and soon promoted him to producer (Sheff 53). As producer, Miyamoto oversaw production of several games at the same time, instead of working from game to game. Miyamoto’s games soon

became one of the largest selling points of Nintendo's systems, with each new Nintendo home console debuting with a Miyamoto original.

The success of "Donkey Kong", Mario, and Zelda all spawned multiple sequels and offshoots. For the NES alone there were over 10 new games produced from the original three. And with each successive system that Nintendo came out with, Miyamoto was given the opportunity to design his original games in completely different ways. Some have speculated that one of the mistakes Nintendo has made is reproducing Miyamoto's games so repeatedly. "Sadly, I'd have to say that there have been too many 'modern' renditions of classic games" said Dave Dienstbier, head of Iguana Entertainment (Muldoon, *The Legend*, par. 19). Yet despite the criticism and fears of banality in these "modern renditions" of Miyamoto's games, the majority of these games have shown astounding innovation and originality.

"Mario 64", which came out for the Nintendo 64 in 1996, was "truly the first 'classic 3D game'" (Timberman, par. 12). Though other companies attempted to pull off the 3D feel in their games, nobody had achieved the complete 3D freedom that was possible in "Mario 64".

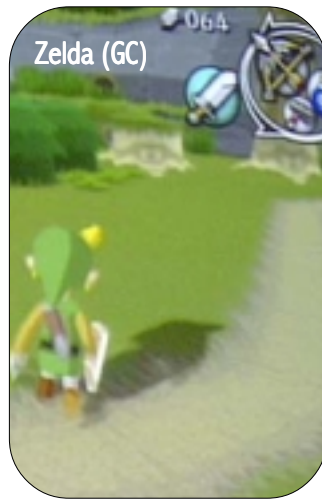
Because the engine created for "Mario 64" had been so sophisticated, many game developers learned 3D game design techniques directly from the game. Said Benoit Arribart, project manager for "Mission: Impossible" for the N64, "['Mario 64'] set up a standard for 3D third-person games. The camera, and the main character handling, in 'Mission: Impossible' were really inspired by 'Mario 64'. The outdoor camera mode was internally called the 'Mario mode' by the 'Mission: Impossible' development team" (Muldoon, *The Father*, par. 15).

Miyamoto's N64 sequel for "The Legend of Zelda" also won great praise, bringing 3D gaming to an even higher level. Often referred to as the best video game of all time, "The Legend of Zelda: Ocarina of Time" expanded upon the 3D standard that "Mario 64" had established. Miyamoto contests that while "Mario 64" uses roughly 60 percent of the N64's total power, Zelda uses about 90 percent (Fielder, par. 6).

At its debut, "Zelda 64" provided the most

powerful and seamless 3D environment. Coupled with outstanding gameplay and storyline, Zelda easily broke records for pre-sell for any video game to date and received resounding acclaim from the entire gaming community (Nintendo, par. 39). "The presentation and world design were without peer. Every environment was rendered with fantastic depth and attention to detail. While other titles have since tried to create a coherent 'world', 'Zelda 64' did it first" (Vestal, *History of Zelda*, par. 54).

Miyamoto also went on to create new, original content as well. Games like "Star Fox" and "F-Zero" for the Super NES became hits of their own, prompting their own sequels in the N64 and GameCube.



But the success of Miyamoto's games didn't stop there. The characters that Miyamoto created for his games exploded into other markets. Nintendo won promotional campaigns with Pepsi and McDonald's, in which Miyamoto's characters served as the pitchmen. In 1989, the second sequel to "Super Mario Bros.", "Super Mario Bros. 3", was featured in the movie *The Wizard*, building up the hype for the next Mario game. When the game finally came out, it went on to gross over \$500 million (Sheff 191). In 1993, Nintendo again reappeared on the silver screen, this time with its own feature movie *Super Mario Bros.* (Kent 482). Miyamoto's characters came out on television, as well, with a Donkey Kong cartoon airing in the early 80s and Mario-featured shows like *The Super Mario Bros.*

Super Show (1988), and *Captain N: The Game Master* (1990). "For several years running, Nintendo shows were numbers one and two on NBC's Saturday-morning schedule" (Sheff 192). In 1991, there was even an album of Mario songs released by MCA.

Miyamoto's characters became so prevalent that in the 1990s, Mario was more recognizable to children than Walt Disney's Mickey Mouse (*Super Mario Bros. Synopsis*, par. 7). "There were 'Zelda' board games, 'Donkey Kong' watches, and 'Mario' everything" (Sheff 192). Nintendo saturated the market with its fun-loving characters, and children ate it up. Soon, Mario became a household name, with Donkey Kong not far behind (Muldoon, *The Father*, par. 4).

A key factor in the success of Miyamoto's characters was the unending supply of sequels and offshoots. "When Nintendo broke from its traditional Mario-style game with 'Punch Out' in 1983, Donkey Kong could still be seen sitting in the audience" (Kent 306). With games like "Mario Golf", "Mario Kart", and "Super Mario RPG", it became impossible to think about Nintendo without associating it

to one of Miyamoto's characters. A game created for the N64 and GameCube, "Super Smash Bros.", featured solely Nintendo characters, most created by Miyamoto himself. Miyamoto's characters became so intertwined with the Nintendo name that much of the success of Nintendo can be attributed to them. "People went

to stores asking for the 'new video game system that plays the Mario game'" (Kent 306). The creation of such popular characters has not only helped enormously in the sale of video games, but it has also created a trend in video game design – the dependence upon a mascot to help sell games and systems.

After seeing the success of Miyamoto's characters, many companies tried creating flagship characters of their own. Sega used Sonic the Hedgehog to hock its Sega Genesis, and Sony has used Lara Croft in countless ads promoting its PlayStation. Even NEC relied on Bonk, a character from one of its debut games, "Bonk's Adventure" (Kent 449). None, though, have ever surpassed the popularity that Miyamoto's characters have achieved. "Arguably more famous than Pac-Man, Mario has become

the face of the video game industry” (*Super Mario Bros. Synopsis*, par. 8).

Though it may be true that Mario has become the face of the video game industry, it is just as easily stated that Miyamoto has become the face of the video game industry. Miyamoto’s games have shaped and molded the video game industry that exists today. Through his genius and innovation, he has affected the lives of millions of players and non-players alike. Since the start of the Miyamoto legacy, video games have evolved from a child-corrupting phenomenon to simply another form of entertainment, with Nintendo sitting on top for most of the ride. It is because of Nintendo that video games have reached such a pervasive position in society, and it is because of Miyamoto that Nintendo was able to do this. David Sheff once said, “It is impossible to calculate Miyamoto’s value to Nintendo, and it is not unreasonable to question whether [Nintendo] would have succeeded without him” (Timberman, par. 15).

Miyamoto, who will be turning 50 this year, shows little of the extreme successes he has achieved. He still rides his bike to work everyday and “despite having overseen titles amounting to sales of over 250 million, he doesn’t receive any kind of royalty” (Pemberton, par. 15). Interviewers speak fondly of Miyamoto’s humility and grace, while fellow game designers extol his unending talents. Said Peter Molyneux, designer of “Populus” and “Dungeon Keeper”, “He is without doubt the greatest games designer in the world. No one else comes close” (Muldoon, *The Father*, par. 17).

As Miyamoto gears up for the upcoming releases of his next Mario, Zelda, and “Star Fox” sequels for the GC, he is once again pushed into the spotlight. Over a decade removed from the initial successes of his first creations, Miyamoto is faced with a towering wall of expectation. When confronted with questions about how he will go about creating yet another masterpiece, Miyamoto can only reply, “I think it is nothing more than destiny” (Sheff 55). ◆

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