Case History:

Historical Perspective on

The Legend of Zelda

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Introduction

The Legend of Zelda, arguably the most popular series of adventure games for any gaming system, includes eight games on four consoles (three on the Game Boy (Color)) and spans a period of 15 years, with another installment going to be released for Nintendo's next console, the Gamecube. My focus in this paper, a historical perspective on the development of the **Legend of Zelda** series, will focus on three of those games, **The Legend of Zelda** for the Nintendo Entertainment System (NES), **A Link to the Past** for the Super NES (SNES), and **Ocarina of Time** for the Nintendo 64 (N64).

Nearly every game in the Legend of Zelda series has some elements that qualifies it as a Legend of Zelda game: the hero is a young elf-boy named Link who is trying to save his princess Zelda from the clutches of the evil villain, Ganon, who Link must vanquish to finish the game. In order to defeat Ganon, Link has to collect several pieces of the Triforce, which are scattered throughout Hyrule, the virtual world of the Zelda games. There are a few exceptions to these rules, such as **Majora's Mask** for the Nintendo 64, but the game play always follows a couple of rules. You can expect the environment to be expansive and immersive, taking many days to explore for the latest Zelda game. There will also be many sub-adventures, or mini-quests, in addition to the primary task of rescuing Zelda, which must be completed before confronting Ganon. The game will be difficult to finish, but not impossible, with many mental puzzles that must be solved in order to progress through the game. And of course, the graphics and sound will be impressive in all respects.

The mastermind behind each of the games in the series, as well as the creator of the Mario, Donkey Kong, and Starfox games, is Nintendo's famous game designer Shigeru Miyamoto. Ironically, the president of Nintendo, Hiroshi Yamauchi, first hired Miyamoto, an artist at that time, as a favor to a friend. Miyamoto in turn designed the arcade game Donkey Kong, which was a runaway hit in the United States, with demand reaching incredible proportions. Thus, the game design career of Miyamoto was born. As the arcade boom declined, Nintendo saw the potential for a kind of home entertainment system and designed the Family Computer (Famicom) for the Japanese market. At the same time, Miyamoto was finishing the development of a game, Super Mario Bros., that would directly influence the design of the first **Legend of Zelda** game and would be hugely popular when the Famicom was released in the U.S. (redesigned and renamed the NES). After the success of Super Mario Bros., Shigeru modified and improved upon it's game concept and created the **Legend of Zelda**, which would become hugely popular and introduce America's children to the adventures of Link. Since then, Miyamoto has created all of the Zelda, Mario, and Donkey Kong games and, as general manager of Nintendo's Entertainment Analysis and Development Department, he has had input on many other Nintendo games. David Scheff writes, "It's impossible to calculate Miyamoto's value to Nintendo, and it's not unreasonable to question whether Nintendo would have succeeded without him," [SCH]. With such an impressive list of past releases and several more upcoming titles, including the next game in the Zelda series, it is no wonder that Miyamoto is considered by many in the industry to be the greatest game designer in the world.

History of the Legend of Zelda

At the height of the NES's popularity in the late 1980s, Nintendo had nearly 90% of the market share, and in 1992 "the company profited more than all the American movie studios combined and the three television networks combined," [SCH]. The **Legend of Zelda** series has always had a bright spot in the history of Nintendo, each game in the series often being released with enormous anticipation and thereafter being hailed as the best game yet released. While much of this is media hyperbole, most of the praise is well-founded and a great deal of Nintendo's success and popularity is due to series such as the **Legend of Zelda** that are developed only for the Nintendo console and have a gigantic, worldwide fan base.

One of the oldest companies in the entertainment business, Nintendo has been in existence since around 1889, where it began by making and selling Japanese-style Hanafuda playing cards (and has stayed in the family since then – the current president is the great-grandson of the founder). Incidentally, the Japanese symbols for the word "Nintendo" roughly translate in English to "leave luck to heaven." It was not until the late 1970s that Nintendo become involved in the video game industry, first creating several arcade games (the most famous of course was Donkey Kong), then releasing the NES in the United States in 1985. A year later in 1986, Miyamoto finished the first game in the Zelda series and Nintendo released **Legend of Zelda**, which would become the first Nintendo game to sell one million copies (besides Super Mario Bros., which was packaged with the NES). It was during this period that Nintendo reached the height of its popularity, defining a new video game market from the days of Atari, but one that

was controlled by Nintendo. Part of Nintendo's domination of the market is due to the "key-chip" that Nintendo built into the console. This chip, patented by Nintendo, disabled the console unless a complementary chip was present in the game cartridge. Thus, publishers were required to get a license from Nintendo, allowing them to engineer the chip, in order to publish games for the NES. Because Nintendo was so popular, publishers would get a license from Nintendo on the condition that they did not publish games for other companies. In this way, Nintendo was able to maintain market domination, despite Sega having released a slightly better system during the same period.

However, with their success, Nintendo became complacent and did nothing to further their stance in the video game market, content to continue producing games for the 8-bit console while it was popular. Sega meanwhile developed and released a 16-bit system, the Genesis, in 1989, to try to get some of the market share back from Nintendo. The Genesis did very well, but still could not compete with the sales of the 8-bit NES and handheld Game Boy, which was released the same year. For example, Super Mario Bros. 3 was released that year, selling seven million copies by the end of 1990 and another four million in Japan, going on to become the greatest-selling video game in U.S. history. In 1989, Super Mario Bros. "grossed over $500 million just in America. In the field of entertainment, only the movie E.T. has made more revenue," [HART]. However, realizing they were losing some of their market share to Sega, Nintendo decided to begin work on a 16-bit system and released the Super NES two years later in 1991. Unfortunately for Zelda fans, it was not until April 1992, that **A Link to the Past** was released, the first Zelda game for the SNES and the third game in the series (**The**

Adventures of Link was released in 1989 for the NES). **A Link to the Past** utilized the new 16-bit processor to produce the largest Zelda world to date, encompassing two different worlds (Hyrule and Dark World) and a memorable cast of characters (Zora and Agahnim), which is why it remains a favorite in the Zelda series for many fans.

It was around this time that Sega discovered that the Super Nintendo's processor was nearly twice as slow as the Genesis and thus Sonic the Hedgehog was born, the antithesis to Mario and family-oriented characters of Nintendo. Sonic the Hedgehog was basically designed to highlight the differences between the processing speeds between the systems. Suddenly, Nintendo was no longer the only system kids were playing and a fierce competition began between Sega and Nintendo for the rights to the market. Sometime thereafter Sega released the Sega CD, a console add-on that used CD-ROMs instead of game cartridges, so Nintendo began looking into CD-ROM technologies with electronics giant Sony. The console developed in secret by the two companies was tentatively called the Playstation, but soon thereafter Nintendo cancelled the partnership after Sega CD sales proved to be unsuccessful. Ironically, this turned out to be a huge mistake however as Sony redesigned the console and released the Playstation in 1995, eventually overtaking Nintendo in sales and gaining the title of most popular console in North American, Europe, and Japan. Ever since the release of the Playstation, Nintendo has been trying to regain the popularity and market share they once held in the 1980s, but have been unable due to the competition from Sony, Sega (who seems to have finally gone under), and now Microsoft. In 1996, the Nintendo 64 system was launched in the U.S., one of the most successful console launches in the industry (topped by the Sega Dreamcast a few years later), outselling the Playstation by

a small margin. The N64 console possessed an impressive list of features, but the most stunning were the innovative controllers designed by Nintendo. The new controllers kept the control pad and button configuration from the SNES's controllers, but completely redesigned the ergonomics and introduced the c- and z-buttons. The controller now had three prongs, one in the middle and on each end, that one could grip instead of having to hold the edges of the controller. Soon after the release of the N64, the most highly anticipated and talked about game in the Zelda series (which will most likely be eclipsed by the release of the Zelda game for the Gamecube) was released in 1997, **Ocarina of Time**. This game has been heralded as one of the best games ever by members of the industry and, in my opinion, meets and exceeds every expectation one would have for the best game ever.

Historical Analysis

In order for the creation of the **Legend of Zelda**, the first game in the series, two breakthroughs, technological and conceptual, were needed, which is why the game is considered revolutionary by many. Prior to the year **Legend of Zelda** was released, games only had the ability to scroll in one direction due to the limitations imposed by the technology of the game chip. However, the **Legend of Zelda** was designed with a new chip, the MMC1[1], that allowed screen elements to scroll vertically or horizontally at the same time. Thus, a whole new dimension was added to games, offering worlds that could be explored in any direction (in 2-dimensions). This was a necessary innovation

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[1] **Metroid**, released the same year as **Zelda**, is credited as being the first video game to use the MMC1 chip. [NIN]

for the type of game Miyamoto envisioned: one in which players could spend days exploring a virtual environment. "'Both Mario and Zelda are based on the same concept of making a miniature garden, which the players can explore rather freely,' says Miyamoto, 'They have to become creative and independent – they need to think about what they should do next,'" [TECH]. In addition, the MMC1 was the first chip to provide on-board memory, which could be used to save the progress of a game. No longer was playing a game a one-shot experience. Now, the progress of a game could be saved and picked up again at any time, giving the game a feel of continuity between playing sessions. With the introduction of the MMC1 chip, game designers were not restricted any longer in the kind of games they could design.

In addition to changing the technology of future games, the **Legend of Zelda** built upon the conceptual shift in game play that **Super Mario Bros.** had introduced. Before the release of **Super Mario Bros.**, video games were still designed under the arcade model of gaming: accumulate as many points as possible, getting your name on the high score list, with a limited number of lives. Before the release of the MMC1 chip, when continuity in games was not possible, nearly all of the games produced for the home console market were arcade translations. This design concept made sense in the social-centered arcade community, but not in the home market where the player, now experiencing the game alone, has an unlimited amount of playing time. The release of **Legend of Zelda**, and the chip that made it possible, caused a shift in the design philosophy of many home video game companies, from arcade-centered games such as **Donkey Kong** to "continuity"-based games such as **Legend of Zelda**. Designers, realizing the potential of on-board memory, could now develop games with a broader

storyline and that provided playing stimulus over a period of weeks instead of hours. In this way, **Legend of Zelda** greatly influenced the way games in the home market were designed. Indeed, the birth of strategic and fantasy role-playing games is often credited to Miyamoto and the Zelda's design team.

In 1991, the 16-bit SNES was released in the U.S., followed by the release of the much-anticipated **A Link to the Past** a year later. Unlike the first game in the series, which revolutionized the video game market, **A Link to the Past** took the successful game play and design foundation of **Legend of Zelda**, and created a much improved environment and cast of supporting characters. "'We tried to make it as easy as possible for the player to move Link,' reveals Miyamoto, 'When it comes to developing characters, we think of the new game systems first, and their increased capabilities and then later think about the characters, to use the advanced ideas in the new systems,'" [TECH]. Taking advantage of the 16-bit processor, **A Link to the Past** boasted a larger world, more difficult and complex dungeons, and more numerous and expanded quests. This latest Zelda game provided the player with a more interactive environment than previous Zelda games. Dungeon puzzles required more interaction from the player, such as shooting raising or lower the water lever in a maze, and Link could now speak to villagers, many of whom offer clues as to how to solve these same game puzzles. However, there were no major innovations in **A Link to the Past**, which was simply an improved version of the first game in the series. Nintendo would wait until the next game in the series to revolutionize the market again.

It is interesting to note that slightly before the time when **A Link to the Past** was released, Sega had exposed the processor speed discrepancy between the Genesis and SNES and created Sonic the Hedgehog to highlight the fact. This development caused a backlash against Nintendo in the younger age group, who found the attitude of Sonic more appealing to Mario. The generation of kids who first became hooked on Nintendo in their youth were growing up and, as is typical of adolescent youth, developing rebellious attitudes towards authority and society. Rebellious youths could more easily relate their own feelings of rebellion with the type of attitude Sonic was designed with. Thus, part of the reason Nintendo lost part of its market share to Sega is simply due to a percentage of their fan base growing up and developing defiant attitudes on society. Interestingly enough, it seems that **A Link to the Past** was largely unaffected by this shift in cultural attitude because all age groups seemed to rate it well and it enjoyed fantastic sales upon its release.

The most hotly anticipated game in the Zelda series to date has been **Ocarina of Time**, released in 1997 for the N64, selling nearly 2.5 million copies in a month and a half. Not only was **Ocarina** the largest Zelda game yet, requiring a minimum of nearly 70 hours to complete, but it revolutionized nearly all aspects of the traditional Zelda games and indeed most games on the market. The world created for **Ocarina** is truly amazing, with everything in the environment fully rendered and life-like, giving the game a very realistic feel. The power of the N64 processor is certainly evident in this game, as nearly everything in the world reacts to the player's actions. "'I think Zelda 64 is utilizing about 90 percent of the N64 potential,' says Miyamoto. 'When we made Mario 64 we were simply utilizing 60 to 70 percent,'" [BAX]. In addition, the sound effects of **Ocarina** are

astonishing, with environmental effects throughout – birds chirping, water running – and wonderful background music for the different areas of the game. **Ocarina** also utilized the N64 controllers to their fullest, using the c-buttons for item selection and the z-button for targeting, an innovation the play control is centered upon and one of the most important of the game – without intuitive player control, most players would get frustrated and give up without experiencing the rest of the game. Every aspect of the game – graphics, sound, and play control – act to further immerse the player into the environment Miyamoto has created and the effect is truly remarkable. "'Throughout the Zelda series I've tried to make players feel like they are in a kind of miniature garden. So, this time also, my challenge was how to make people feel comfortable and sometimes very scared at the same time.'" [BAX]. With this game, Miyamoto's vision of a miniature garden is realized.

Conclusion

It would be tough to find another series of games that has found more success, or had more influence on the industry, than the **Legend of Zelda** series produced by Nintendo. And it would be difficult to imagine Nintendo without the **Legend of Zelda.** The games offer an unparalleled blend of graphics and sound with character development and storyline, resulting in an amazing, immersive gaming experience. Based on the history of the series so far, one almost expects a Zelda game to be ground-breaking in some way and, from current reports, it seems that the next game in the series will not disappoint.

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