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Handling Complex Media

The Legend of Zelda: Hey Listen! This Needs to be Preserved!

I. The Legend of Zelda (1987)

In 1985 Nintendo released the Nintendo Entertainment System (NES) to the American market. The Legend of Zelda was released in 1987 and has since become one of the most popular series of all time. Taking its cue from the early VCS Adventure game the first Legend of Zelda was a side-scrolling platformer that allowed players to explore an environment and then move off-screen to another environment. The player controlled a boy named Link who must collect the pieces of an object known as the Triforce in order to save Princess Zelda. The game uses a simple controller layout consisting of a directional pad (or d-pad) and an A and B button. The Start button allowed players to pause the game. The Select button showed the players inventory.

The gameplay consisted of moving Link around a series of environments, encountering enemies, and solving dungeon puzzles. Link is armed only with a sword at first, but more weapons are available as the game progresses. Once Link recovers all the pieces of the Triforce he faces the final boss and in defeating him saves Hyrule. The game difficulty increases as Link finds more dungeons: enemies become more difficult to kill and puzzles become harder. If Link dies he is returned to the point he starts in the game, or if in a dungeon, the start of the dungeon. Depending on the players skill the game can take several hours or days to complete.

For play the game requires the NES system itself, an NES controller, and the game cartridge itself. The NES system used a RCA connector (for composite video) to connect to the television. For NTSC it displayed at 256 x 240 pixels with a 16 color display. The game cartridge was a form of Read-Only Memory (ROM), a storage medium for programs and data. Nintendo was, and still is, highly protective of its games and original iterations of the cartridge actually contained specially fitted screws to prevent tampering.

Today, the game is available on several websites either to download or play live. In order to play a ROM file on your computer you would need an emulator. There are several free programs available for both Mac and Windows platforms. The live emulations do not quite measure up to the original game, both in terms of operation and display. While the image is similar to the original title, the audio is distorted or incomplete. Gameplay is also different due to the nature of the keyboard. Most emulators use an A, W, S, D configuration for direction movement. Spacebar fires your weapon. These non-licensed emulations were usually created by hackers and other game aficionados who do not have preservation in mind, but simply want to make the game available.

Nintendo itself has “ported” the game to many of its later devices. It appeared on the Nintendo Gamecube and Gameboy Advance, along with its sequel The Adventures of Link. The original is also available through Nintendo’s latest console, The Wii, via the virtual shop channel. Nintendo offers downloadable content to players through a shop channel which features both original and past releases from Nintendo’s catalog. The game can be played by turning the Wiimote horizontally and functions exactly the same as the original NES controller. This version is virtually identical to the original release, with some language corrections.

In order to preserve the original title several peripherals must be preserved also. However, emulation can also be viewed as a viable preservation strategy for this game.

Due to the simplistic nature of the game much of the original user experience can be easily recreated with minimal changes. Though playing the game on your computer rather than a console is a slightly different experience, it is functionally the same. Providing the user with virtually the same experience as playing on the console (for the purposes of this report I tried both and despite the audio problems, it was basically the same game). Nintendo itself is also performing preservation by migrating the game to newer console versions. Though this content is proprietary it could be reasonably assumed that they would continue to migrate The Legend of Zelda into the future.

The other option for preservation is to acquire all the original items necessary to play the game. The NES system is not scarce and can be obtained through ebay or another source. The problem comes with connecting the system to a modern television. The RCA connector option is still available on some televisions, but composite video has become a thing of the past and a specific cord is required to connect the NES to the television. If the system does not work even after connected then it becomes a hardware issue. Most of the hardware used in the original system has become obsolete or scarce, so while it might be possible to repair hardware damage the tools might not be able to be found.

II. The Twilight Princess (2006)

While there have been many iterations of the Legend of Zelda series after the original, The Twilight Princess incorporates several different gameplay and hardware developments. Released jointly with the Wii Console in 2006, The Twilight Princess furthered the adventures of

Link and incorporated the then-revolutionary sensor controller that the Wii popularized.

Nintendo moved from the static controller layout to a remote that was able to display movements using an infrared sensor bar placed at either the top or bottom of the television. By connecting a separate controller called a Nunchuck, players could move using a control stick. For many of the first games released for the Wii, the Nunchuck was unnecessary as gameplay revolved around the movements of the player (most notably in the included game Wii Sports). For Twilight Princess players used both controllers, one for movement and the other for aiming. Much of the game is based around the aiming of various weapons. The game also incorporated Wiimote movement into fighting. By swinging the Wiimote players can perform various fighting moves and combinations.

The game itself follows the standard plot of all the Zelda games. The protagonist, Link, must save Hyrule from an unknown enemy. The main difference is the introduction of a shadow world that allows Link to transform into a wolf. Like the original the game is a mix of puzzle solving and fighting enemies and bosses. However, the game features a number of side quests and missions that earn players bonus items. Players are also offered a broader range of weaponry as they progress through the game. Up to four items can be equipped at a time, controlled by the B button (the sword can always be utilized by swinging the Wiimote). Players can access both an inventory and item bar to change out weapons and check the status of their game.

The game is also far more complicated than previous iterations, often taking players weeks to complete. Each new dungeon features harder and harder challenges as the player journeys to defeat the final boss.

The requirements for the Wii are more complicated than those for the NES. Firstly, an RCA connector is needed for hookup to the television. A sensor bar is needed to communicate with the Wiimote, and finally both the Wiimote and Nunchuck are required for play.

From the simpler preservation needs of the NES, *Twilight Princess* now requires seven different pieces to play. While, the Wii is available at nearly every major retail outlet today (both here and abroad) the game world is constantly evolving. Nintendo would hypothetically re-release *Twilight Princess* for later consoles, but by that point gameplay might have entirely changed. Many companies are experimenting with virtual reality and incorporating more of the body into gameplay. For those users the experience of *Twilight Princess* will be markedly different and may not even be possible.

Emulation also presents a large difficulty. To translate *Twilight Princess* to a computer-based environment involves a number of technical challenges. How would the motion portion of the gameplay be included? Would a smaller sensor bar need to be attached to a computer to emulate the movement of a remote? Would the remote also need to be smaller? How would the graphics be rendered? All of these questions are difficult to answer at this point in time, but many of the Wii games will have serious preservation challenges for future archivists.

III. The Phantom Hourglass (2007)

The *Phantom Hourglass* was released in 2007 for the Nintendo DS, Nintendo's portable console after the Game Boy Advance. The console featured a dual screen interface with the bottom usable as a touch screen. The DS could connect to wireless and included a mic, which will become important later. Much like early Nintendo consoles, it used slot-load cartridges with a proprietary ROM format contained within it. The touch screen is controlled using a pen stylus

stored in a slot on the console itself. Later iterations include: The DS Lite, DSi, and DS XL. Each version differs only marginally. The DS Lite is a smaller version and has lower memory, processor, and display specifications than the original DS. However, it can still play the same games as the DS. In fact, each iteration can play every game released for the DS console, which is almost a form of preservation. Due to the ubiquity of the console future generations would theoretically have greater access to at least one of these consoles.

Due to the touch screen format of the DS, *The Phantom Hourglass* does not use buttons. Players move and interact with objects through the stylus (although movement can be controlled via the D-pad). Certain movements of the stylus will perform certain functions for Link. This is mostly used in weaponry and fighting modes. Inscribing a circle anywhere on the screen will have Link perform a spin move. Another component of gameplay is the use of the built-in microphone. When play begins users are immediately prompted to shout into the mic in order to move forward in the game. For those without working mics (or for later emulation purposes) continuing the game is impossible without completing this task. The use of the mic is not frequent, but occurs more than once in the game.

As mentioned above, the DS is not in short supply being sold not just in America, but Europe and Asia as well with virtually the same specifications. For archivists this means that the availability of the console will be, hopefully, ensured. However, the games themselves are fragile. Measuring only 35.0 mm × 33.0 mm × 3.8 mm they are small and easily breakable. However, they have been the cartridge used by the last five portable consoles for Nintendo, even the latest the Nintendo 3DS. Nintendo shows no immediate plans for developing drastically different consoles, however this could change depending on what competitors are doing.

Emulation does not present as great a challenge for The Phantom Hourglass with the advent of touch-screen technology. Outfitting a version of the game for a tablet PC or iPhone/iPad would present nearly the same gameplay experience and provide new users with the content.

References

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