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Monsters Can Make Music Too: Musical Design in Undertale

Back in the early 2000s, a man named Daisuke "Pixel" Amaya wanted to make a video game, but wanted it to not be compromised by big publishers and development teams. He had already made a game called *Ikachan*, but it never gained any major traction. This desire eventually became *Cave Story*, a masterpiece in storytelling and game design that inspired a treasure trove of hidden game development geniuses to pursue their dreams. Nowadays, indie games are just as well-received as big-name, AAA games, with Markus Persson's Minecraft becoming one of the best-selling video games of all time (Dizon). In recent months, a new indie game took the world by storm, that being *Undertale*. On PC game distribution service Steam, 98% of the over 18 thousand user reviews are overwhelmingly positive ("Undertale on Steam"). Toby Fox's hit indie role-playing game is loved because it pairs innovative game mechanics with one of the most unique stories in gaming, but the true reason why it is such an incredible work of art was because of none of those things. No, *Undertale's* true strength is in its musical design, mostly because it amplifies the elements that already made the game so strong. Toby Fox may be an incredible programmer and game designer, but above all of that, he is an incredible musical composer, and his musical talents help showcase his other abilities even better than otherwise.

Before diving into music, however, understanding how the game works is imperative.

Undertale tells the story of a young gender-ambiguous child who falls into the world of the

monsters. The monsters have been sealed off from the world of the above by a magical barrier, and unless the player character can find a way to either break through or destroy the barrier, they will be trapped in the underworld forever. This story may seem guite simple at first, but *Undertale* focuses heavily on defying player expectations. Tyler Hicks says in his review of the game on GameSpot, "Undertale's opening cinematic hints at a cliché RPG where you awake in a mysterious world and embark on a journey in hopes of returning to your normal life," (Hicks), and he is completely correct with that statement. Players can surmise that the silent protagonist wants to return to the surface to do whatever he/she was doing before. But as Hicks wrote in the next sentence: "you quickly discover that looks can be deceiving," (Hicks). The character never once states that he/she wants or needs to escape, being silent and all, but players holding the controller just assume that that is what needs to be done. Because of this, players might ignore certain aspects of dialogue and go about *Undertale* like any other RPG, killing whatever they encounter for experience points to make their character stronger. Doing this, however, ignores the morality system in the game that allows you to spare any enemy you encounter, and if players kill even one seemingly insignificant enemy in the game, *Undertale* will make them feel horrible for doing so. In fact, should they kill the first major boss of the game, one of the more important characters in the game, an anthropomorphic flower by the name of Flowey, tells them how horrible of a person they are. Should they decide to reload an old save file and spare her after already killing her, Flowey still chastises them for killing her the first time. As Richard Cobbett puts it in his review on PCGamer's website, "well, you get what you deserve," (Cobbett). The monsters in the game may be monsters, but that does not mean that they are all bad, and especially do not deserve to die. All this said, *Undertale* makes an incredible

statement about how people approach a video game. But it is the music that makes all of these elements stand even stronger.

The soundtrack's greatest strength is its cohesiveness, and it accomplishes this cohesiveness through leitmotifs, reoccurring musical melodies that are associated with a particular character or theme. Almost every one of the 101 tracks in the 130-minute OST can be directly associated musically with another track in the OST, and for a game with as massive a soundtrack as *Undertale*, that is an accomplishment. As an example, one of the first characters the player will meet in the game is a goat monster named Toriel, who is bar none the nicest character in the game. She knows the world outside of the first area is a dangerous place, and so the player has to have a boss battle with her to either kill her and get by, or to convince her that he/she has enough determination and inner strength to survive the unknown. The battle theme here, "Heartache", is a really touching track, and is perhaps one of the more memorable tracks in the game. The main theme from this song is never heard of again until one of the last boss battles in the game, against the king of the monsters, Asgore. When the player hear bits and pieces of "Heartache" in Asgore's battle theme, redundantly titled "Asgore", this communicates to the player that Asgore and Toriel are related in some way, and this subtextual message is delivered before the twist is revealed that Toriel is actually the monster world's missing queen. This hints to a key narrative point before it even happens, and enables players to think more about the story than they would have otherwise.

For a second, more complex example, should the player character choose to kill everything in the underworld, this triggers a different story progression known as a genocide run.

In this genocide run, the player generally can kill enemies very easily because they gain experience and power over time, however there are two major roadblocks in this kind of run, as two characters throw everything they have at you to try and stop you from killing all of the monsters. The first of these battles features a theme called "Battle Against a True Hero". This song begins with a simple, yet dramatic piano theme which eventually turns into a chiptunepiano symphony of sorts with the same theme throughout. This theme is seen another time in the genocide run, but it is also found in the exact opposite form of playthrough where the player kills absolutely no one. If this happens, a secret 6th chapter of the game is revealed, and living in this area are sad, deformed monsters known as amalgamates. When you fight - or rather, try to spare the amalgamates, this theme reappears in small segments, but in a slower, slightly distorted fashion that makes it seem almost disturbing in nature. This is because, similar to how the first genocide boss is using every last ounce of life to try and stop the player from killing all of the monsters, the amalgamates are in a decidedly similar situation, where they basically have lost all physical character and devolved into a disgusting mess. The distortion of the medley further emphasizes this slow decomposition. Both situations are related, but in completely different ways. The only time these completely different ideas are connected is through these two songs in the soundtrack.

Because the soundtrack has the ability to connect ideas that were not there in any other way, this also allows for players to pose further questions about the narrative that they otherwise would not have thought about. An example of this is found in a relatively obscure track that plays when a bird carries you over a chasm back to a previous area, appropriately titled "Bird That Carries You Over a Disproportionately Small Gap". This song, used in a fairly unique situation,

actually contains a sped up version of a song that is central to important to one of the later characters in the game, Alphys. The bird and Alphys are seemingly unrelated, but because of this musical connection, it is possible that they might actually be related somehow. This point is not by any means integral to the plot, and if it was, that would be a really bad design choice, but the fact that Alphys' theme is clearly present in this completely obscure track means that it had to be an intentional decision. If this was the case, then clearly there had to be some reason he connected these two themes together in this way.

A second example lies in the boss battle theme for a ghost named Napstablook, called "Ghost Fight", which is one of the only jazz tracks in the OST. This song appears again in a more big band setting when you fight a possessed dummy about halfway through the game, which makes sense given that the ghost possessing the dummy is related to Napstablook. Where things get puzzling is when you fight a spider named Muffet and the melody appears yet again, but in a version with less jazz and swing to it, called "Spider Dance". The spider, from what the game shows us, is clearly not dead, and has no association to the ghosts whatsoever. Because of this, the fact that this melody appears again is quite confusing. It is possible that the themes are connected because both spiders and ghosts are scary, but the game takes place in a world of monsters - everything is based on something that society deems to be scary. A popular fan theory regarding this was posted on Reddit by user pumpkinbot, who writes: "But then I thought about Napstablook himself. He's a Napster bloke. He remixes music all day long and uploads them to music sharing sites.... Napstablook took Spider Dance... and remixed [it] to make his own theme," (pumpkinbot). This second theory makes a lot of sense, but the game never once mentioned or even hinted at the idea that a character could use his own music for his boss theme.

but the music led people to think deeper than the game's surface level. It is incredible that a minor musical decision like that resulted in players looking incredibly deep into the narrative and lore of this small, low-budget indie release. The fact that a video game soundtrack can do that is simply incredible, and no other aspect of the game does it quite like the music.

While the soundtrack is incredibly cohesive, what strengthens it even further is, coincidentally enough, its dissonance. Like many other traditional J-RPGs (Japanese role-playing games), Undertale features an overworld in which the player walks around, and then a separate screen and interface for battles. The battles feature a completely different visual design than the overworld, opting for a monochrome color scheme as opposed to the overworld's more colorful visual style. To compliment this aspect is the music, which features instruments and synthesizers in the overworld, but 8-bit inspired chiptune music for battles. This clearly draws a line between the two screens in a way that few other games do, but it is when those lines begin to blur that the sound track truly becomes incredible.

One major motif in the game is its constant ability to break the fourth wall. The aforementioned example of Flowey criticizing the player for reloading an old save to prevent the death of a character he/she killed is a prominent one, and probably the first one a typical player would encounter. The interesting thing about these fourth wall breaks, however, is that most times they happen, the music morphs. The chiptunes and real-world instruments combine and make something completely different. For example, one of the most important characters in the game, Sans, is essentially the player's moral compass, becoming the player's best friend should they spare people, or becoming their worst enemy should they decide to commit mass genocide.

Should the player do the latter, they will encounter him at the end of the game for the hardest boss battle in the game. Originally, the fight with Sans was going to feature a song that is now titled "Song That Might Play When You Fight Sans" but was later cut and replaced with a new track, "Megalovania". This track was prominently featured in small fan projects he worked on in the past, but he rearranged it for this game. The track begins with solely chiptunes, as it is, after all, just another boss fight. But as the fight progresses, it becomes clear that Sans knows that there is a player holding the controller, and as the music continues, real world instruments, most notably some electric guitars and drums, flood the sound to form a brilliant combination of the two sounds the game used throughout. This accentuates the point that at this point in the game, the player has killed pretty much everyone else, so the only thing that matters is Sans. And Sans knows that the player did it just because they wanted to see what happened if they tried, but because it is just a "game", they don't care. But Sans does, because it is his world that is at stake. Megalovania may be a fan favorite track because it is a catchy song, and that may be true, however it is this uncommon blurring of lines that makes this one of the greatest parts of the soundtrack.

One of the main characters in the game does something incredibly extravagant after the player either defeats or spares the previously mentioned Asgore in battle during a mixed or pacifist playthrough. When this happens, that character, who will not be named, gains an incredible amount of power, which leads to a final boss battle completely unlike any other. Instead of the monochrome visual style, the boss looks like something made in Microsoft Paint, and this is done intentionally. The boss does incredibly cheap, fourth-wall-breaking things, such as making save states and reloading them, or crashing the game at will, until the player can

manage to gain some extra power of their own to combat it. To compliment this completely intimidating battle, the music for this battle switches between chiptune and synth as the battle progresses, because now, until they defeat this boss, when the player opens the game, the only thing they can do is fight the boss. There is no overworld. There is no backup save to reload to. The game is this fight and vice versa. Because of this, the music adapts to emphasize the significance of the battle. Both this and the Sans example demonstrate how the music in *Undertale* is able to play with player expectation in a way that few other video game soundtracks ever have before. The aforementioned "Battle Against a True Hero" is another good example, but the reasoning behind that musical fusion is much more complex from a plot and lore standpoint.

For a cheap indie computer game, *Undertale* does a lot of things right. It tells an admittedly cliché story in a completely new way, and provides incredible insight into what games are, and what they do for people. It also features an innovative battle system, beautiful art, witty humor, and a colorful cast of characters. But none of this would have been executed nearly as well as it has without the game's absolutely phenomenal soundtrack. It not only uses leitmotifs to connect characters and plot threads together in ways players could never have predicted, and it used dissonance to make two aspects of the game feel completely different only to combine them later on. Even more incredibly, it was made by the same team that developed the game; a team of only one man. It is, without a shadow of a doubt, the greatest soundtrack a video game has seen in years, and it should be competing with movie and opera scores for some of the most innovative, brilliant soundtracks ever conceived.

Works Cited

- Cobbett, Richard. "Undertale Review." PC Gamer. PC Gamer, 28 Sept. 2015. Web. 10 Nov. 2015.
- Dizon, Jan. "15 Best-Selling Video Games Of All Time." Tech Times RSS. 13 Feb. 2015. Web. 10 Dec. 2015.
- Fox, Toby. Undertale. Toby Fox, 15 Sept. 2015. Video Game. 8 Nov. 2015.
- Fox, Toby. Undertale OST. Toby Fox, 15 Sept. 2015. MP3 Digital Album. 10 Nov. 2015.
- Hicks, Tyler. "Undertale Review." GameSpot. CBS Interactive, 20 Sept. 2015. Web. 10 Nov. 2015.
- "[Minor Spoilers?] I JUST REALIZED SOMETHING ABOUT NAPSTABLOOK'S THEMES."

 Reddit. Reddit, 23 Oct. 2015. Web. 10 Nov. 2015. https://www.reddit.com/r/Undertale/comments/3pyzjq/minor-spoilers-i-just-realized-something-about/.
- "Undertale on Steam." Steam. Valve Corp., 15 Sept. 2015. Web. 10 Dec. 2015.