Encouragement of moral decision-making and ethic	cal
gameplay in the <i>Undertale</i> video game	

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Table of Contents

1. Introduction	1
2. Research background	1
3. Theory	5
3.1. Mental models and dialogue design	5
3.2. Decision-making and problem solving	6
3.3. Human selective attention	7
3.4. The role of emotions in HCI	8
4. Analysis	9
4.1. Tutorial – changing mental models	9
4.2. Waking the player as an ethical agent	12
4.3. Disengagement factors	14
4.4. Undertale dialogue design	18
5. Conclusion	23
References	26

1. Introduction

This thesis analyses the dialogue and game mechanics in the video game *Undertale*. It uses game studies as the research method, and its goal is to identify and examine the affordances this game uses to encourage the player towards certain types of moral decisions and how such positions promote waking the player as an ethical agent. In order to achieve this, it will be a close reading on *Undertale*, which uses theory mainly from the field of Human-Computer Interaction (HCI) in order to identify and analyse the significance of those affordances. This research will, therefore, be focusing on combining the strands of humanities and game design within the field of game studies.

Video game research is still a relatively young field, and while there is an increasing number of studies that examine these particular topics, there is still a relatively small number of studies conducted that combine these two strands. Furthermore, I believe this type of research can, not only widen our understanding on the topic, but also offer some real-life implications on the field of game design.

The noun 'Gameplay' will be used frequently in this study. Oxford Learner's Dictionaries (n.d.) defines it as 'the features of a computer game, such as its story or the way it is played, rather than the images or sounds it uses'. In this discussion, however, the noun will be used to discuss the story of the game, the ways it can be played, and its features. Furthermore, as it sometimes is relevant for the analysis, it will be discussed alongside some imagery and sounds that occur only as a result of certain types of gameplays and add something different to the user experience.

This thesis aims to answer the following questions: How does the dialogue of the game promote or afford moral decision-making? How do the problems players have to solve promote or afford moral decision-making? How are emotions connected to ethical gameplay?

2. Research background

Games like *Undertale*, where the player is presented with explicit moral decisions, according to Weaver and Lewis (2012), represent an interesting case where typical disengagement factors are

either completely or partially absent, and the player is acting as an ethical agent (pp. 610-611). While immoral behaviour is still possible in these scenarios, the moral disengagement necessary to make such antisocial behaviour feel appropriate or acceptable is absent; thus, making these choices would require such an amount of conscious rationalisation that it makes them unlikely (Weaver & Lewis, 2012, pp. 610-611).

Undertale is an independent RPG (Role-Playing Game) video game created by Toby Fox (2015), where the player does not have to kill or destroy anyone, and the enemies can be defeated non-violently. RPGs are often defined loosely as play activities that revolve around a rule-structured creation, such as tabletop or video game environment, and the enactment of characters in a fictional world (Deterding & Zagal, 2018, pp. 46). It is also typical for this genre to have some sort of rules for character progression, task completion, and combat resolution. The genre is also often considered as a violent one, which is why the notion of not having to kill or destroy anyone differs from the traditional games in this genre, such as *The Witcher*, *Dark Souls*, *World of Warcraft*, or *Dragon Age*, which are all examples of some wildly popular RPG games.

When it comes to character progression in RPGs, it is common to use 'HP' (Health Points), 'LV' (Level), and 'XP' (Experience Points) to measure and track the player's progression during gameplay. HP signifies the amount of damage a player is able to take in a combat situation. If these points run down to zero, the player usually loses the game and has to start over, or from the previous saving point. The player can often gain more health points from different items, visiting a save point, or as a reward when they level up. In order to level up, the player usually has to earn certain amount of XP, which can be earned by slaying enemies. When the player finally levels up, they often have the ability to gain XP faster and their 'health bar', which signifies the maximum amount of HP they can have, usually grows in size.

In the prologue of the game, gamers are introduced to the back story: humans and monsters used to rule over Earth together, until a war broke out between the two races. In the end, the humans were victorious, and they sealed the monsters underground with a magic spell. Next, the story jumps to year '201X' and the place is identified as 'Mt. Ebott'. The following images show a small child climbing the mountain, tripping on something and falling down to a hole on the mountain's surface. The player is then asked to name the human child. After the player has locked in their choice, the child wakes up on a bed of golden flowers, at which point the player learns that this child is the 'Player Character' (PC), i.e., the character whose role the player adopts and plays as in the game

world. This is where the player's journey begins, and they can start controlling the PC and influence how the rest of the story plays out.

When the player leaves the first room, they meet the first Non-Player Character (NPC): a talking flower who introduces themselves as Flowey the flower. At first this character appears friendly; he smiles, acknowledges that the player must be new to the Underground, and offers to teach the player how things work there. Soon after, however, the true nature of this character is revealed, as he fools the player and state alongside an evil grin: 'In this world it's kill or BE killed.' Before Flowey can make his killing strike on the player, however, another NPC steps in and saves them just in time. This monster introduces herself as Toriel, the caretaker of the ruins. In the game setting, she works as the player's guide through the tutorial part of the game, i.e., the first of the five main areas of the game. The way the player chooses to play through this area, determines in great length how rest of the story will play out.

There are mainly three different ways the player can choose to play through the game: they are commonly known as 'the pacifist run', 'the neutral run', and 'the genocide run', which then result to one of the three main endings to the game: 'neutral', 'true pacifist', or 'genocide' (Undertale.Fandom, n.d.). The main objective of the game is to get out of the Underground. During the pacifist run, the player actively chooses to use the possibility to defeat all the enemies they encounter non-violently and befriend them. In the genocide run, the player has to make the active choice to kill every living thing they encounter during the game and wipe out all the monsters from every area. When the player spares either some or most of the characters but kills at least one enemy they encounter during gameplay, it results in the neutral run. Additionally, in order to reach the true pacifist ending, the player has to complete the main objective twice; whether the player completes the first playthrough in neutral or pacifist manner, the monsters stay trapped in the Underground. Only in the end of the first playthrough, does the game provide the player with a hint on how to reach this ending.

It is typical for RPGs to have areas which create a map of the game world. In Undertale, there are five main areas in the Underground: 'Ruins', 'Snowdin', 'Waterfall', 'Hotland', and 'New Home' (Undertale.Fandom, n.d.). The game starts from the Ruins, which is also the tutorial area of the game. The way in which the player chooses to complete the area, defines whether the main game objective of the rest of the game is the genocide or neutral/pacifist run. If the objective is the genocide run, the contents of the rest of the areas will slightly differ from the other run options,

which is further discussed in the analysis. Once the player completes the objective to complete the tutorial area, they arrive to Snowdin; a small, snow-covered town consisting of an inn, shop, 'Grillby's' pub, a library and some houses. Next area, Waterfall, is set, as the name suggests, in an area with multiple underground waterfalls. Hotland, on the other hand, is an area inside an underground volcano. The final area of the game is called New Home, which is very similar to the Ruins, and some parts of it are even exact or rebuilt copies of the tutorial area.

Furthermore, in RPG games, it is common that the player has to complete an objective in order to unlock and move on to the next area. Often the player has to, for example, defeat a certain NPC. These NPCs are often called 'bosses', and these final encounters with them that unlock the next area are referred to as 'boss battles.' This same model is used in *Undertale*; the player has to defeat either 6, 7, or 10 main bosses, depending on which route they are playing (Undertale.Fandom, n.d.). Again, this is further discussed in the analysis.

Once the player has completed the objective in order to leave the tutorial area, and the enters the actual game, the first new NPC they encounter is a skeleton, dressed in a hoodie, joggers, and a pair of sneakers. This character introduces himself as 'Sans the skeleton'. He tells the human that he is supposed to be on watch for humans, but that he does not really care for capturing anybody. His brother, Papyrus, however, he describes as a 'human-hunting FANATIC.' Sans then asks the player to do him a favour by playing along to his brother's games, some of which in the game setting become puzzles that the player has to figure out in order to advance in the game, while others merely turn out to be jokes to keep the player entertained and engaged with the game.

As the player proceeds through the game, they have random encounters with different kinds of monsters, whom they can choose to fight or defeat non-violently, for example by talking to them, petting them, or dancing with them. They will also have a possibility to learn more about the war between the monsters and humans, and that the monsters need the power of seven human souls to break the barrier that has kept them underground all this time. The monsters have collected six souls so far and the coffins of other children who have fallen before the player and have been killed can be found in a room near the throne room. Another important feature that the player learns during the game, is that the timeline in the Underground is resetting. The only two characters who seem to know about this feature besides the player are Flowey and Sans. These two characters that also seem to have special abilities and keep appearing throughout the game.

In this thesis, I will focus on the dialogue and the story of the game. I will also focus on some of the game mechanics, in order to identify and discuss affordances they provide in terms of moral decision making and problem-solving during gameplay. I will then further discuss the role of emotions and selective human attention in those terms.

3. Theory

This study builds mainly on theories in HCI that offer insights into mental models, human selective attention, decision-making, and the role of emotions in decision-making, as they each provide important perspectives to players' inner world during gameplay.

3.1. Mental models and dialogue design

The user's internal representation that reflects their understanding of a problem or system they are interacting with is called a 'mental model'. It is formed and built through interaction with the environment, or in this case, the game, by associating previous knowledge in the user's long-term memory (LTM) with new incoming information from the context and the demands of the task (Van der Veer & Puerta-Melguizo, 2003, pp. 60-61). According to Van der Veer and Puerto-Melguizo (2003), to a certain degree, this representation contains not only structural information about the properties of the system, but also functional knowledge about the task to perform (pp. 60-61). Furthermore, they point out that mental models are naturally-evolving models, which means that they are constantly changed and refined as additional information is acquired (Van der Veer & Puerta-Melguizo, 2003, pp. 60-61). This understanding of mental models important for the following reasons: when it is possible to conceptualise the internal models players draw on when playing video games, it is possible to plan and design dialogue for the games that encourage morally sustainable decision-making during the gameplay. Mental models are also a notable factor when it comes to decision making, which is further discussed in the section 3.2.. Suchman (2007) explains in her book *Plans and Situated Action* that a user's plan to conduct a task cannot be perfectly anticipated, as it is not predetermined; rather, the mental models rather work merely as a recipe for how the user approaches a situation (pp. 51-68).

According to Van der Veer and Puerta-Melguizo (2003), distinction between structural and functional knowledge of the system can be made; 'structural mental models' ("what is") provide the user with a detailed understanding of the system, whereas 'functional mental models' ("how to") represent the users knowledge of the properties and how to use the available functionality of the system needed to perform a specific task (pp. 59). In reality, when interacting with a system, the models that the player uses, are neither purely structural nor functional, but rather an accumulation of multiple partial explanations the user combines when interacting with a system; this is called a 'distributed model' and it is firmly based on the user's previous existing knowledge and experience of similar systems (Van der Veer & Puerta-Melguizo, 2003, pp. 59).

Understanding mental models is essential when examining user interfaces, especially when studying dialogue design. Dialogue is frequently used in video games to guide the player toward appropriate action. In RPG video games the dialogue may, in some cases, simply give direct instructions to the player, or in others, merely contain clues of the appropriate action. During the dialogues with the monsters in *Undertale*, for example, the NPCs teach the player how the gamemechanics work; Flowey directly instructs the player to use the arrow keys to move the red heart (which signifies the player's 'soul') in the fight-mode window, while the frog-like monsters and Toriel often offer clues and tips about combat resolution and appropriate actions. As Van der Veer and Puerta-Melguizo (2003) point out, when it comes to dialogue design, it is important to relate to both human goal-driven behaviour and the user's natural mental models of the situation (pp. 54). Furthermore, when designing dialogue for the appropriate mental model, it is crucial, not only to determine what the user needs to know and who the different users are, but also to understand what the requirements are based on this knowledge as the dialogue should fit the functionality of the system (Van der Veer & Puerta-Melguizo, 2003, pp. 61). As the user interacts with the game, they receive feedback from the system, which then allows them to create new representations on how the system is functioning, updating their mental model.

Mental models and dialogue design are also both important factors in understanding the player's decision-making process, as they are both used to guide the player toward appropriate action during gameplay.

3.2. Decision-making and problem solving

Problem solving is often analysed in terms of a problem space (Proctor & Vu, 2003), which consists of an initial state, a goal state that is to be achieved, steps for transforming the problem from the initial state to the goal state, and constraints on application of the operators that must be satisfied (pp. 47-48). The process of problem-solving itself can be viewed as a search for a path that connects the initial and goal state (Proctor & Vu, 2003, pp. 47-48). First, for this process to be effective, the search for the right path has to be constrained to a limited number of possible solutions.

It is a common in the violent video games that during gameplay the player encounters monsters, or other type of opponents, they are supposed to defeat. The goal is to gain more Experience Points (XP), Health Points (HP), money or other commodities, and level up. Players that are familiar with the genre would already have this mental model when starting the game. *Undertale*, however, challenges these mental models related to the genre by actively encouraging the player towards taking a different kind of approach; the fact that in this game the player does not have to kill or destroy anyone is mentioned very early on the 'about' page of the official website of the game (Undertale, n.d.), as well as for example on the top and 'features' section of its *Steam* online game store site (Steam, n.d.). Therefore, most new players would most likely have access to this information, thus allowing them to update their mental model to support a non-violent approach, when starting the gameplay. In other words, this mental model would, therefore, effectively support moral decision-making during gameplay. Additionally, to further support moral decision-making during gameplay, it is important to understand the role of human selective attention and emotions in human-computer interaction.

3.3. Human selective attention

Human selective attention has an important role to play in filtering and selection of information (Chua et al., 2003, pp. 28). Chua et al. (2003) argue that attention can be thought of not merely as a single function, but rather as a collection of information-processing activities, which are important for the user's perceptual, cognitive and motor skills (pp. 28). The role of selective human attention is to help the user to find relevant stimulus characteristics necessary for selecting and executing the appropriate action as effectively as possible (Chua et al., 2003, pp. 28). The user's attention can, therefore, be mediated by using correct kind of stimulus displays and inputs, clear distractors, to guide the player toward appropriate action.

In *Undertale*, for example, the yellow colour of the monster's name (or pink, depending on a trivial decision at the beginning of the game) accompanied with text '____ seems reluctant to fight you.' indicate when the monster is ready to be spared; the game attempts to bring the player's attention to ending the fight non-violently. Attention can also be directed, for example, by using symbols for objects from different semantic categories in order to help the player associate the symbol with a particular action. The user interface on *Undertale*'s fight mode includes a sword-symbol next to the word "FIGHT", a sound-symbol next to "ACT" (as in "striking a friendly conversation"), a pouch-symbol next to "ITEM", and an X-symbol next to "MERCY" (as it is effectively for exiting the fight mode) options. These symbols themselves give clues to the player about the functionality of these choices, which help improving their existing mental models of the functionality of the system. There are also many similar kinds of distractors in the form of colour, font, capitalisation, and other stimulus displays and inputs used in the game.

These distractors also trace back to moral decision-making as the stimuli is provided in order to guide the player's attention toward appropriate action and relevant information. Using the colour yellow in the normally grey-scale background catches the player's attention, forcing them to pause to acknowledge the new option (exiting the fight mode by sparing the NPC). This clearly indicates that the game mechanics are actively trying to guide the player toward particular action, which here translates to ending the battle non-violently.

3.4. The role of emotions in HCI

Emotions are a fundamental component of being a human; they not only motivate action, but also add meaning and richness to the human experience. Even in the field of HCI it is now generally understood that a wide range of emotions play a critical role in every computer-related, goal-directed activity, and in order to understand the human relationship with technology, it is important not only to focus on the cognitive side of things, but to also first understand emotion. In fact, it is even argued that it would be impossible for a human-being not to engage their emotional systems, at least subconsciously, while having a thought or performing an action in the first place (Brave & Nash, 2003, pp. 82).

As human beings are naturally empathetic creatures, users are likely very quick to recognise and react to depictions of basic emotions when interacting with on-screen characters (Brave & Nash,

2003, pp. 83). Depictions of basic human emotions also works to encourage moral decision-making as seeing the NPC's emotions may negate dehumanisation and wake the player as an ethical agent in gameplay situations. There is also growing evidence that players may intuitively perceive video game characters, not just as 'dead pixels on the screen' but as social beings that also deserve proper moral treatment (Hartmann et al., 2014, pp. 311). It is, therefore, likely that the player would interact with NPCs as if they were characters in the real world and treat them accordingly. Weaver and Lewis (2012) found in their study that players who made antisocial choices while interacting with on-screen characters during gameplay reported more feelings of guilt, compared to those who behaved morally (pp. 613). This would then, presumably, encourage the player toward ethical gameplay and moral decision-making. Weaver and Lewis (2012) further concluded that in cases where the players were not morally engaged or actively identifying with the NPCs and reacting to them as if they were real, they felt less guilty for their immoral choices during the gameplay (pp. 613). This in turn suggests that if the player is provided with appropriate disengagement factors, they are less engaged as an ethical agent during gameplay, making antisocial decision-making possible.

4. Analysis

The analysis aims to answer the above research questions by connecting the above theory with further examples of the game mechanics and dialogue that afford moral decision-making and encourage the player to act as an ethical agent during gameplay.

4.1. Tutorial – changing mental models

As discussed earlier in this thesis, the player's mental models have a significant impact on how the player chooses to act in gameplay situations. It is, therefore, beneficial to first identify these mental models, before investigating what kind of affordances are used to change these existing mental models.

A typical player of a game would presumably already have some kind of a mental model of the game before the gameplay. This is created by combining information about previous gameplay

experiences and information about the game itself. The player very soon learns that the game belongs to the RPG genre, which would invoke the player's mental model of a typical game in the genre. Although the genre is often a violent one, the player is likely to quickly learn that there is a way to resolve the encounters with the NPCs non-violently, either from the description of the game or from the dialogue.

The introduction to this new mental model starts early during the tutorial part of the game, which is meant to teach the player how the game mechanics work and introduce them to the story of the game. Very soon after arriving to the Ruins, the player encounters the character Toriel, who tells the player that as a human in the underground, monsters may attack them, but they should 'strike up a friendly conversation' to stall for time, instead of fighting. If the player follows this advice, they will soon meet new characters in the area who give them more information on how to solve these conflict situations: they tell the player to 'act' a certain way or 'fight' until the player almost defeats them, and the monsters might not want to battle them anymore. They continue to ask the player that if a monster does not want to fight them anymore, they should 'use some MERCY'. The next monster will hint the player that the name of a monster turns yellow when it is ready to be 'SPARED' and finally, leave the human with the notion that this might be an option that they might have to use even if their name is not yellow. The latter advice comes in handy fairly soon in the game as, in order to leave the tutorial area and start the real adventure, the player has to battle Toriel, and the only way to defeat her non-violently is to keep sparing her until she lets the player go.

```
"Ribbit, ribbit. (Excuse me, human.)
(I have some advice for you about battling monsters.)
(If you ACT a certain way or FIGHT until you almost defeat them...)
(They might not want to battle you anymore.)
(If a monster does not want to fight you, please...)
(Use some MERCY, human.) Ribbit."
```

This dialogue with the NPCs closely mirrors the visual design of the window that appears when the player gets an encounter and enters the fight mode. The enemy moves to the top of the screen and on the bottom of the screen appear four basic choices: 'FIGHT', 'ACT', 'ITEM', and 'MERCY'. If the player decided to fight, they would choose the first option. This action changes the bottom half of the window to a target that the player has to hit at the right time by pressing the space key to

make maximum damage to the enemy. If the player chooses to take a non-violent approach, however, they will choose to 'act' instead, which opens a range of new options. These options vary from monster to monster, but always include the option to 'check', which then gives more information about the NPC and often contains some kind of a clue the player can use to figure out which set of actions works with this particular monster.

```
"Ribbit, ribbit. (I have heard you are quite merciful for a human...)"

"(Surely you know by now a monster wears YELLOW name when you can SPARE it.)"

--

"(Remember, sparing is just saying you won't fight.)"

"(Maybe one day, you'll have to do it even if their name isn't yellow.)"
```

The player is therefore, encouraged to pay close attention to the dialogue, as it continuously offers new information about the functionality of the system. The PC is a silent character, so the communication with the NPC characters is limited to certain actions and options. The NPCs are still very eager to communicate with the PC through dialogue, and through dialogue the player has a chance to learn more about the story, the NPCs, and the various game mechanics. Not only does the game actively use characterisation and different colours to direct the players attention, it uses these mechanics to also change the mental model of the player, encouraging non-violent gameplay instead of merely attacking the enemies.

As the player moves around the Underground they may find, receive, and buy different kind of items, some of which can for example restore some of the player's health or give other type of enhancements and advantages during the fight. Those items can be accessed through the 'item' option. The final option, 'mercy', will most often include two choices: 'spare' and 'flee'. Both of these options can be used to end the encounter. In most fights, the option to 'spare' is not immediately available, and the option, along with the monster's name, will turn yellow only when the player has completed the necessary actions. When the player ends the encounter this way, they may earn gold, i.e., get a reward. If the player for some reason chooses to skip the encounter, or their health drops dangerously low during the battle, they can, at any point, use the option to 'flee' in order to end the encounter. Random encounters may simply be skipped this way, but when it comes to boss battles, the player can use this option simply to stall for time or to go back to purchase additional items, but is unable to continue the story until the boss encounter has been resolved. This way, the player is forced to engage with this moral dilemma in order to advance in

the game and cannot simply avoid it. In the next section, I will further discuss the affordances found in *Undertale* that actively support moral decision-making and work towards waking the player as an ethical agent during gameplay.

4.2. Waking the player as an ethical agent

According to Sicart (2013), ethical gameplay is the moment during gameplay in which the player is not applying any social or strategic thinking to engage with the game (pp. 31). Instead, the player is forced to apply a type of decision-making process that Sicart (2013) calls 'ludic phronesis', which can be defined as the 'practical wisdom' guiding the player based on moral arguments in the context of game experiences (pp. 31). Ethical gameplay typically happens in a context where the game allows different types of thinking and acting, so that the player as an ethical agent can be invoked, and players can be made to feel responsible for their choices when they are encouraged to apply ethical thinking to their gameplay dilemmas (Sicart, 2013, pp. 31). Furthermore, the players usually interpret, accept, and act according to their own values in the game world (Sicart, 2013, pp. 35).

Each of the NPCs has a distinctive, unique personality, as well as dreams, and motivations that separate them from the other monsters. Additionally, each monster has a unique pattern of actions which can be used to defeat them non-violently. When the PC interacts with the characters, either in a conversation or in a fight, the human-like faces and emotions of the NPC are clearly presented as they react to the player's actions. As stated above, users are likely to recognise depictions of basic emotions when interacting with on-screen characters (Brave & Nash, 2003, pp. 83). This means that by offering these types of visual cues, it is more likely that the player will react to these depictions and is invoked as an ethical agent.

Typically, computer games give the player the option of using checkpoints (sometimes referred to as savepoints) as a way of saving their progress. This allows them to go back to an earlier save to undo and replay their actions. According to Sicart (2013), games are usually designed so that they do not invoke the player as an ethical agent, since they are usually designed for instrumental play (pp. 31). Even when it comes to moral dilemmas in video games the players are often given the option of saving the game and going back if they do not like the result of their action and explore other options in the future (Sicart, 2013, pp. 31). Even though this is also technically possible in

Undertale, the game mechanics slightly differ from typical computer games; the game does not simply wipe away the player's earlier actions without consequence. The game mechanics are designed to remember every choice the player makes during the game, and they will be reminded of their actions. For example, when the player has their first boss fight against Toriel and wins it non-violently, their conversation with Flowey after the boss fight will go as follows:

"Clever. Verrrryyy clever.

You think you're really smart, don't you?

In this world, it's kill or be killed.

So you were able to play by your own rules.

You spared the life of a single person.

Hee hee hee...

I bet you feel really great.

You didn't kill anybody this time.

But what will you do if you meet a relentless killer?

You'll die and you'll die and you'll die.

Until you tire of trying.

What will you do then?

Will you kill out of frustration?

Or will you give up entirely on this world...

... and let ME inherit the power to control it?

I am the prince of this world's future.

Don't worry, my little monarch, my plan isn't regicide.

This is SO much more interesting."

However, before figuring out the way to defeat Toriel non-violently, the player may try to take heed of the earlier advice from the monsters to 'fight until you almost defeat them,' accidentally kill off the character and may wish to go back and re-do the fight. If they do so and this time defeat her non-violently, when Flowey appears to congratulate the player for making it so far, the NPC will confront the player of their previous action:

'Clever. Verrrryyy clever.

You think you're really smart, don't you?

In this world. it's kill or be killed.

So you were able to play by your own rules.

You spared the life of a single person.

Hee hee hee...

But don't act so cocky.

I know what you did.

You murdered her.

And then you went back, because you regretted it.

Ha ha ha ha...

You naive idiot.

Do you think you are the only one with that power?

The power to reshape the world...

Purely by your own determination.

The ability to play God!

The ability to 'SAVE.'

I thought I was the only one with that power. But...

I can't SAVE anymore.

Apparently YOUR desires for this world override MINE.

Well well.

Enjoy that power while you can.

I'll be watching.'

The dialogue does not seem to be directed to the PC, but the player directly. The NPC breaks the fourth wall by addressing the player directly, confessing that they share the same ability and appear conscious about the player's instrumental choices, and unlike the other characters, Flowey will remember the choices that were made earlier in the game even if the player goes back and changes what they did. This affords to encouraging moral decision-making as this way the game does not allow the player to simply explore different routes and options during the gameplay without waking the player as an ethical agent to think about their actions.

4.3. Disengagement factors

Violent video games often tend to use different kinds of moral disengagement factors to alleviate the player from moral concern during the gameplay. Hartmann et al. (2014) identify some of the most influential factors as: justification of the portrayed violence, distorted portrayal of

consequences, and dehumanisation of opponents (pp. 310-311). It is also typical for the narratives and general scenarios of violent video games to feature a black-and-white conflict in which a (good) human protagonist fights against (bad) non-human creatures in a setting that is at least partly fictional (Hartmann et al., 2014, pp. 326). Disengagement factors allow the player more freedom in terms of gameplay options; they allow the player to use instrumental rationality during the gameplay without invoking them as an ethical agent in the process. This gives them an opportunity to explore different options and strategies before deciding on their final course of action without feeling guilty or otherwise emotionally burdened by their earlier choices.

The narrative of *Undertale* is also based on the aforementioned typical setting; PC is a **human** child battling against non-human creatures, **monsters**, in a fictional, fantasy setting. The game, from the very beginning, attempts to make the player question who are the 'bad' and who are the 'good' guys of the story.

Violent video games often provide moral cues that offer some sort of justification for virtual violence. According to Hartmann et al. (2014), several studies suggest that violent video games often tend to justify virtual violence by using four reasons: the act of violence is serving a higher good; the enemy is portrayed as a perpetrator of heinous acts, the victims of violence consist of groups that are commonly perceived as less worthy of protection, and finally, by rewarding rather than punishing violence (pp. 313).

We can find several justifications for virtual violence even in the world of *Undertale*. Even though the game is marketed as 'the RPG game where you don't have to destroy anyone' (Steam, n.d.), the very first thing the player learns is that there has been a war between monsters and humans. Moreover, very soon after the game starts, these monsters start trying to attack the PC, causing them damage, and often threatening to kill or capture them, simply because they are human. In this setting, the player could easily justify the use of violence as a method of self-defence or even to serve a higher purpose by continuing/finishing the war between monsters and humans. Furthermore, if the player pays close attention to the dialogue, scripts, recordings, and other available information during the gameplay and accesses most of the locations, they may learn of many disturbing measures the monsters have come to, in their attempt to escape the Underground. These measures include sacrificing several human children who have fallen into Underground before the PC, with the intention to use their souls to escape, capturing the PC's soul being the final step to complete their plan. The evidence arguably warrants another justification for virtual violence at least against

some of the characters.

When the player defeats Flowey in the final boss battle, they are given the change to either kill or spare the character. The defeated NPC himself even urges the player to kill him for all of the crimes he has committed, as he feels as though he deserves it. He also further threatens the PC by stating that he has learned nothing and will continue to do evil unless the player kills him.

Distorted portrayal of consequences is also suggested to be an effective disengagement factor. For example, when the player inflicts damage on another PC or NPC during gameplay, or even kills them, they are not forced to witness any continued physical or psychological suffering of those characters (Hartmann et al., 2014, pp. 314). This is a common feature in violent video games as it prevents the on-screen violence from feeling like an irritating or distressing experience for the player. In *Undertale*, if a player kills any of the NPCs, most of the monsters will simply turn to dust and disappear. Thus, the consequences of the immoral act are quite minimal in terms of witnessing any type of suffering of the victims. As an exception, however, this is not the case with the boss monsters: if the player defeats a boss NPC using violence, they are going to witness strongly emotional, or even distressing, response from the character. This works as a non-dehumanising factor and would presumably discourage the player from taking further violent action during the gameplay.

Dehumanisation of the characters means that the opponents in the game are stripped away from their human qualities (Hartmann et al., 2014, pp. 312). One way to do this, is to use language; some words have strong positive and/or negative connotations and different mental models. Some definitions of the word *monster*, according to Merriam-Webster online dictionary (n.d.) are:

"an animal of strange or terrifying shape"

"one who deviates from normal or acceptable behavior or character"

"a threatening force"

As all of these definitions can be perceived highly negative, anyone who is familiar with the meaning of the word, would most likely share a similar mental model of the object of the word. More similar kind of examples of dehumanisation can be found in the language of *Undertale*; as another example, these monsters the player encounters are, in typical RPG fashion, referred to as 'enemies.' 'Enemy' according to Merriam-Webster online dictionary (n.d.) is:

"one that is antagonistic to another"

[&]quot;something harmful or deadly"

"a hostile unit or force"

Again, the definitions of the word are highly negative, which may further enforce a negative mental model. It may also often make it easier to view these characters as a group less deserving of protection, thus providing the player with moral cues justifying virtual violence.

Moreover, like in many other RPGs, the game mechanics of *Undertale* also reward violence; during the genocide run, which is another main storyline for the player to discover, the player is encouraged via various mechanisms to simply slay every single NPC character in the game. Choosing this gameplay is an active decision the player has to make at the beginning of the game, because in order to trigger this storyline, the player has to begin the process during the tutorial. In order to complete this storyline, the player has to search for monsters and random encounters, fight, defeat the monster by bringing their health to 0 and keep repeating the process until the checkpoint in the area says there are no more enemies left. Another indicator is that the random encounter window will simply say 'but nobody came,' which lets the player know that the area has been cleared. Whenever the player wins an encounter by slaying the monster, the PC is rewarded with more gold, XP, LV, and HP, essentially making them stronger and defeating enemies easier.

Once the player has cleared the tutorial area in this manner, and won their first boss battle against Toriel, the storyline and mechanics for rest of the game, including the small details, change; instead of the usually uplifting background music, the player is now met with eery soundscape, and the PC character starts sometimes moving by itself, as if the player no longer has full control. The player is no longer met with small puzzles and they miss encountering the majority of the characters along the way. These factors decrease the feelings of immersion, which means the player is less emotionally involved during this type of gameplay, making violent or otherwise immoral actions easier. Moreover, the player receives significantly more rewards in this gameplay but will miss on majority of the game's story, and quirky characters, and some areas are closed to the player. As a result, the gameplay time can also often be significantly shorter when the player is focused on the singular task of killing the monsters rather than spending time on learning the wider story of the game. Furthermore, as the player advances in the game, they may find many items, which allow them to inflict more damage, allowing the player to use this in their advantage if they wish.

However, playing the genocide route means that the player has to confront more boss battles compared to the other runs, and as mentioned above, they have to witness the suffering of those NPCs attempting to make this conscious decision at least uncomfortable to the player. Furthermore,

the dialogue design of the feedback that the player receives from the system in this gameplay option, is strongly suggesting that the human player in this scenario is the true monster, which essentially becomes a role that the player must choose to play in order to complete the game objective.

In the end it is up to the player to decide which ending they want to accomplish. In order to complete either the True Pacifist or Genocide storyline, the player has to make an active decision in the beginning to play in a certain way, complete the main objective this way, while filling a set of requirements to reach the desired ending. In order to reach the true pacifist ending, the player has to first complete the neutral run, after which the game offers the player a possibility to reach the true ending. Additionally, the player has to defeat all enemies non-violently, befriend three pivotal NPCs during gameplay, and has explored the hidden 'True Lab' area (Undertale Fandom, n.d.). To complete the Genocide run, the player has to wipe out all monsters in each area of the game until none remain, including the bosses (Undertale Fandom, n.d.). If all of those requirements are not met, when the player completes the main quest, it results to the Neutral ending, which varies slightly based on different decisions the player made during the individual gameplay (and possible earlier playthroughs). Especially in the case of completing the genocide run, or even triggering it in the first place, the player has to make several conscious choices to act in an antisocial manner.

4.4. *Undertale* dialogue design

Undertale's dialogue design clearly encourages moral decision-making and affords towards waking the player as an ethical agent. Apart from the player, two of the game's main characters, Flowey and Sans, seem to have special powers. They continuously appear in and out of the game, even when not interacting with the player; they even appear to have abilities that allow them to move through walls or teleport from one place to another. The notion that they keep appearing this way suggests that they are keeping an eye on the player throughout the gameplay. They also occasionally refer to the game mechanics, which suggests that they are aware of the player's abilities. These affordances remind the player of the consequences of their actions; they are not the only one who know and remember exactly which choices they make during the playthrough. They will also frequently interact with the player throughout the storyline and confront or warn them of their actions.

One such confrontation happens quite late in the game, when the player reaches New Home and enters a game location called 'Last Corridor'. The room resembles a huge hall with gigantic pillars; at the entrance, the player finds a box (which can be used to manage items in the game), and a save point. After walking around halfway through this corridor, the player meets a familiar figure, Sans. During the first pacifist or neutral run, he explains the player what XP and LV mean in this game: XP stands for 'Execution Points', and LV, or 'LOVE', stands for Level of Violence. He then proceeds to ask the player to look within themselves and ask themselves if they feel like they have made the right choices. After a pause he tells the player that it does not matter what they say, as long as they are honest with themselves. He tells the player that after they leave the corridor, they will meet the king, Asgore, of whom the player has been warned about since the beginning of the story. He says that this encounter will define the future of the Underground: if the player chooses not to fight, Asgore will take their soul and destroy humanity, and if they kill Asgore and go home, the monsters will remain trapped in the Underground. He then leaves after saying that as long as the player follows their heart, he believes they can make the right choice and that they are all counting on them. This affords to making the player feel responsible for their last decisions in the game, and encourages moral decision making. Furthermore, this interaction, regardless of the style of gameplay, works as a reminder that Sans has been following the player's actions throughout the game, and are there to give a form of judgement based on their choices. After this dialogue, the player is free to resume the game.

If the player is playing the genocide route, however, this interaction unfolds very differently; Sans will attempt to stop the player and prevent them from progressing. This results in a boss fight that the player has to defeat in order to progress, and it is arguably one of the most difficult ones. This would suggest that the game is not going to make it easy for the player to complete the game in a violent manner. The dialogue and game mechanics resulting to the boss fight are also an interesting example:

```
"heya.

you've been busy, huh?
...

so, i've got a question for ya.

do you think that even the worst person can change...?

that everybody can be a good person, if they just try?"
```

The human character on the screen takes a step forward without the player's initiation

```
"heh heh heh heh...

all right.

well, here's a better question.

do you wanna have a bad time?

'cause if you take another step forward...

you are REALLY not going to like what happens next."
```

The human character takes another step closer to Sans' character without the player's initiation, and this initiates the boss fight against Sans. At this point of the story, the game mechanics lead the game so that the player has less and less in control of the PC. Arguably, this could be seen as a further disengagement factor, allowing the player to immerse in the role of the uncontrollable 'monster' that the game is suggesting them to be. If the player has completed the neutral and/or pacifist route before playing the genocide route, Sans will even try to appeal to the player's emotions:

```
"listen.

i know you didn't answer me before, but...

somewhere in there. i can feel it.

there's a glimmer of a good person in you.

The memory of someone who wanted to do the right thing.

someone who, in another time, might have even been...

a friend?

c'mon, buddy.

do you remember me?

please, if you're listening...

let's forget all this, ok?

just lay down your weapon, --"
```

Again, the dialogue tries to encourage moral decision-making by showing that the NPC remembers the player from an earlier timeline and knows that the player is capable of making the 'right' choice. This is a strong appeal to the player's emotions; in this case, the player has already completed neutral and/or pacifist run, which would mean they have, in an earlier playthrough,

befriended the character. The player would have then, presumably, made an emotional attachment to the character, and reminding the player of that is likely to cause them to have an emotional reaction to the above dialogue.

When the player arrives in the throne room after defeating Sans in the boss battle, they hear the king talking to himself, saying that he had never seen a flower cry before, and as the player approaches and he notices them, he states that they must be the one 'that flower' just warned him about. This suggests to the player that even Flowey is now scared of them. This all works to further appeal to the emotions of the player, attempting to make them feel uncomfortable about their way of playing the game and their choices.

The interactions and consecutive dialogue with other bosses and major characters also strongly afford moral decision-making. As described above in the thesis, soon after the PC meets Sans, they also meet his brother, Papyrus. This NPC is another skeleton, who in turn is dressed in a homemade armour, and is very excited to meet the human. He soon announces that he is going to capture the human so that he can become a member the royal guard. He makes multiple such attempts in form of puzzles throughout Snowdin, and finally, in order to move on to the next area of the game, the player has to engage in battle with him. Sans often appears with Papyrus in these encounters. Engaging with these puzzles and the dialogue with these characters humanise the NPCs, as well as the bond between these two characters. This is one of the multiple examples of the kind of meaningful and complicated relationships the game's NPCs have with each other. Inflicting harm on any of these characters would then, consequently, inflict some sort of suffering on other characters. Therefore, the player would be more likely to feel guilty for acting in an antisocial manner, as there are wider consequences for their actions against an individual NPC.

During neutral or pacifist run, the player has an opportunity to learn more about many of the major characters as individuals and even befriend them; latter being a prerequisite to reaching the true pacifist ending. These encounters with the NPCs further influence moral decision-making and are likely to wake the player as an ethical agent during gameplay, because by learning about the characters and frequently interacting with them, the player is likely to form an emotional attachment to some or all of these characters.

When the player reaches the neutral ending, sparing both Sans and Flowey, these NPCs appear one more time to interact with them. The PC receives a phone call from Sans, telling them how things in

the Underground turned out after they left. These events greatly depend on which NPCs the player decided to spare during the playthrough, and most of the spared major characters will join the conversation with a personal message to the PC. If the player killed any of the NPCs they encountered during their run, the dialogue would reflect that, making the player feel responsible for their actions one more time. Furthermore, this call would also remind the player that even though they completed the main objective of the game, the monsters still remain trapped in the Underground. Soon after this conversation, confused Flowey appears on the screen:

```
"Why...?
Why did you let me go?
Don't you realize that being nice...
... just makes you get hurt?
Look at yourself.
You made all these great friends...
But now, you'll probably never see them again.
Not to mention how much they've been set back by you.
Hurts, doesn't it?
If you had just gone through it without caring about anyone...
You wouldn't have to feel bad now.
So I don't get it.
If you really did everything the right way..
Why did things still end up like this?
Whv...?
Is life really that unfair?
Say.
What if I told you...
I knew some way to get you a better ending?"
```

If the player killed any NPCs during their playthrough, Flowey will also pass judgement on those choices during this interaction. This dialogue is also attempting to appeal on the player's emotions, providing motivation for another playthrough in order to reach the true pacifist ending. This adds another main objective to the second playthrough: freeing the monsters from the Underground.

Flowey will then provide the player with clues on how to achieve this 'better ending,' and if they decide to follow his advice during the second playthrough, they may reach the desired ending.

5. Conclusion

The aim of this thesis was to answer my three main research questions through analysis of the affordances found in *Undertale* video game that support ethical decision-making and waking the player as an ethical agent during gameplay. In order to achieve this, I decided to do a close reading on the game, focusing primarily on the dialogue design and game mechanics that add to those affordances.

I chose *Undertale* for my close reading because it sets an interesting example of an RPG video game, where typical disengagement factors are mostly absent, and the game mechanics and dialogue design clearly encourage moral decision-making, while actively attempting to wake the player as an ethical agent. This way it deviates from the traditionally violent RPG genre and challenges the player to adopt a new mental model. As earlier research suggests, the most efficient way to achieve this is through dialogue design. Dialogue is also one of the significant factors that afford moral decision-making during gameplay.

Then, how does the dialogue of the game promote or afford moral decision-making? The dialogue that teaches the player about non-violent game mechanics starts very early in the gameplay and the player is actively encouraged to take a non-violent approach until the very end. These affordances work towards changing the player's existing mental models and encourage moral decision-making during gameplay.

The constant appearances of Flowey and Sans remind the player that these characters are watching over the player; they do not only remember the player's actions in the active gameplay, but also all the earlier choices the player may have made in any earlier playthroughs, including the actions the player may have made before going back to an earlier save. Furthermore, they frequently engage in dialogue with the PC, often warning or judging them based on their actions. These game mechanics further constitute as significant affordances towards moral decision-making and discouraging instrumental gameplay, thus, invoking the player as an ethical agent.

The dialogue of the game often attempts to appeal to the player's emotions, which affords invoking them as an ethical agent during gameplay. The motivation for this is that when the player acts an active ethical agent, they tend to make more morally sustainable decisions. Players can further be made to feel responsible for their choices during gameplay by encouraging them to apply ethical thinking to the gameplay dilemmas they face (Sicart, 2013, pp. 31). Moreover, in order to provide a context for ethical gameplay to happen, the game needs to allow different types of thinking and acting (Sicart, 2013, pp. 31). Hence, the way the problems players have to solve during gameplay are presented, has a significant effect on promoting or affording moral decision-making and invoking the player as an ethical agent.

The player learns very early in the game that completing the main objective, leaving the underground, can be achieved non-violently. Therefore, even if the player has an earlier mental model that does not support this approach, they are soon able to update their mental model to correspond to the feedback from the system. This new mental model will then further support moral decision-making and ethical gameplay; after learning this, the player has to make an active decision to act a certain way, as acting in an antisocial manner is no longer part of the new, updated mental model, whereas defeating the enemies non-violently requires significantly more mental effort.

While the random encounters in the game may be skipped by fleeing, the player has to resolve multiple boss battles in order to advance in the game and complete the game objective. This way, the player is forced to face the ethical dilemma of either destroying the NPC or finding a way to defeat them non-violently while the NPC is actively attacking the PC.

Emotions play a significant role in every computer-related activity; emotions motivate action, and thus play an important role in human decision-making process. Most of *Undertale*'s NPC characters are very humanised, down to easily recognisable facial expressions and individual personalities. It is, therefore, more likely that the player would react to and treat these characters as if they were real people. As a consequence, the player would experience feelings of guilt when acting towards these characters in an antisocial manner, thus making it an unlikely choice. Furthermore, since the players usually interpret, accept, and act according to their own values in the game world (Sicart, 2013, pp. 31), they are likely to then intuitively apply their own moral values when making decisions during gameplay when the appropriate disengagement factors are not present. This way the player is invoked as an ethical agent during gameplay. Finally, this study suggests that there is a strong

relationship between the mental models of the player and the dialogue of the game, as well as the player's actions and emotions during gameplay situations.

While the findings of this study are consistent with earlier research, they offer a general overview of some of the affordances the *Undertale* video game uses to encourage moral decision-making and ethical gameplay. However, the amount of material for this thesis ended up being quite overwhelming; instead of focusing on multiple aspects of this game, I could have chosen to take a more singular perspective, such as choosing either game mechanics, dialogue, or differences in gameplay options as my primary focus. This way I could have provided more detailed discussion of those affordances, whereas now this discussion remains rather superficial.

This study provides multiple examples on how game mechanics and dialogue design can be used to afford moral decision-making during gameplay, and while these can have many practical implications on the field of game design, there are also several possible directions for further research. As concluded above, there is a strong relationship between mental models, dialogue, as well as decision-making and emotions during gameplay. Each of these topics could be further studied in a more focused manner or in context of other games and different genres.

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