# Moral Engagement in Interactive Narrative Games

An exploratory study on ethical agency in The Walking Dead and Life is Strange

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## ABSTRACT

The present paper focuses on moral choices in interactive narrative games. Particularly, it investigates factors that contribute to *moral engagement* in short-term decision making in games; as opposed to the somewhat better understood factors that underlie moral disengagement in games. To this end, the paper proposes factors for assessing moral engagement in games, that build upon (1) the general aggression model, (2) the moral disengagement model, and (3) self-determination theory. The paper reports on two case studies that explore the factors in actual interactive video games; it investigates meaningful choices in the games *Life is Strange* and *The Walking Dead Season 1*.

## CCS CONCEPTS

• **Applied computing** → **Computer games**; • **Software and its engineering** → **Interactive games**;

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## 1 INTRODUCTION

In 1993, questions of in-game behavior, conduct and punishment were posed as a player of the multi-user dimension (MUD) LambdaMOO virtually raped another player in this text-based role-playing game (RPG) [14]. As the player had not attacked the other person physically outside the game, but the player (and community) strongly felt that a violation had taken place, it showed the complex oscillation between the immersion in the game (by the victim) and the awareness that this was pretense (and therefore differed from conventional laws). On the one hand we view games as a safe environment in which we can experiment without physical harm [29]. On the other hand we view games as media that can affect us psychologically.

At present, subjects related to mature content, aggression, and violence in video games are an active field of investigation [9, 10, 15]. There is an ongoing debate on what is suitable content for video games, and what is appropriate to circulate in these media. As Sicart pointed out, the tension between the perception of video games as children's entertainment and the demands of a mature audience for mature content is part of the ethical discussion around game design [32]. Not only do we debate about how we should treat one another in online environments, we also question how we should treat non-playable characters (NPCs) in video games [17].

While numerous conceptions on morality and moral disengagement in games have been investigated (e.g., [32] [17]), less is known about factors that promote ethical engagement in video games. Indeed, promoting such engagement cannot merely be achieved by an inverse of factors that promote moral disengagement. In the remainder of this paper, we establish the importance of factors pertaining self-determination, aggression and disengagement (cf. [2, 13, 17]), and explore these factors on *moral engagement* via case studies with two Interactive Narrative games (INGs).

## 2 RELATED WORK

Indeed, moral concerns differ from other social concerns in some conceptual ways. One can view moral rules as different from social conventions in that they are unconditional and universal [31]. In contrast to arbitrary social rules, a person can come to understand moral laws on its own. In the case of the virtual rape in LambdaMOO, players were convinced that a transgression against another player was made even though there were no rules or repercussions yet for that kind of behavior [14]. Yet as Jonathan Haidt explains it, morality comes from a combination of innateness and social learning, resulting in a moral domain that varies by culture [16]. The way we look at morality in virtual environments is from a perspective of our established moral code. Yet having this moral code does not ensure moral behavior.

Indeed, the situational context itself is important when regarding moral actions. Jonathan Haidt therefore discerns *judgment* from *justification*, showing that we can make automatic decisions and only use reason and logic to justify our decisions in hindsight. Reason thus facilitates emotion about moral concerns. Moral disengagement as such is a term to describe the ability to temporarily forfeit our ethical standards in favor for another goal [4].

### 2.1 Moral disengagement model

The moral disengagement model shows that games can provide triggers to morally disengage players in order to enjoy violent game content. The model states that while players regard NPCs as quasi-social entities, they do not enjoy inflicting virtual violence on them because of dysfunctional personality traits, but rather because the context of the game creates for automatic cognitive disengagement from their inner moral standards [17]. It suggests that a variety of cues may frame violent acts as not problematic for


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a particular situation. These include – and will be discussed in more detail shortly – (1) the severity of an opponents' misconduct, (2) dehumanization of victims, (3) moral justification, and (4) disregard for or distortion of the consequences of violence.

The cues are heavily based on Bandura's view on moral disengagement. He states that moral disengagement may center on: the reconstrual of the conduct itself so it may not be considered immoral; the operation of the agency of action so that the perpetrators can minimize their role in causing harm; the consequences that flow from actions; how the victims of maltreatment are regarded (by devaluing them as human beings and blaming them for what is being done to them) [4].

There are three important things to note here: First, information given to the player before the moment of disengagement is important as it can form the base of the player's justification. Thus framing an opponent as a villain or inhumane, can trigger moral disengagement in an encounter with said opponent. Second, the context or situation when the action would take place is important to judge whether the act would be judged as appropriate or immoral. Third, the implied consequences are a factor for moral disengagement too. Fourth, players generally learn the procedural rhetoric of the game by interaction [8], allowing for moral management [18].

## 2.2 From moral disengagement to moral engagement

The moral disengagement model is based on extrinsic motivation cues. If we would like to understand moral engagement it would however not suffice to simply reverse cues in the moral disengagement model. However, in these cues there are indications to be found for moral engagement. For each moral disengagement cue one can find an aspect that may be important for moral engagement:

(1) The severity of an opponents' misconduct and the use of violence as an appropriate form of action; This shows the importance of the nature of the situation and an understanding of appropriate conduct
(2) The dehumanization of victims; This shows that the relation of the subject to involved parties matters
(3) Moral justification; This underlines the subject's inner hierarchy of values
(4) A disregard or distortion of the consequences of violence; This indicates that the awareness and understanding of possible consequences are important

Thus it is important that one knows his inner values, can size up a situation to act appropriately, feels related to the parties involved and takes possible consequences of his actions in regard. If we look at these aspects in relation to intrinsic motivation, one can observe that they coincide with the drives of *self-determination theory*: relatedness, competence and autonomy. The relation to the victim or involved party is an issue of relatedness. The insight in the nature of the situation and understanding appropriate actions and consequences, are about knowledge and control: competence. The inner hierarchy of values is a matter of autonomy. Self-determination theory regards feelings of autonomy, competence and relatedness to be essential to psychological well-being. Yet it seems that these needs also provide conditions for moral engagement. Thwarting either one of these three conditions may result in moral disengagement as we will concisely explore further.

**Relatedness.** When dealing with a situation that requires moral action, relatedness is considered instrumental for being motivated to act on one's beliefs. When such a connection is not felt, one can withdraw from the situation without feelings of guilt as one can convince himself that the issue did not concern him. Relatedness is reflected in empathy and sympathy. Bandura states that feelings of empathy support pro-social behavior and ward cruel behavior against others, even under duress if subjects feel personally responsible and victims are humanized [5]. Relatedness is linked to the moral disengagement model's first and second component: framing of the victim by showing severity of misconduct and dehumanization of the victim (can be graphical design). The feeling of relatedness is therefore a condition to feel affected by the situation and involved parties on an emotional level.

**Autonomy.** Autonomy is considered necessary to discern oneself from others as the agent to act out his moral beliefs. In other words: a sense of autonomy can motivate to take on responsibility in a situation by seeing the difference of oneself in relation to others. Lacking a feeling of autonomy, one can diffuse responsibility. [5]. Moreover, the feeling of autonomy is one of having a free will. Studies have shown that people are more likely to cheat when their belief in free will is reduced [35]. Moreover, reduced belief in free will would make people more aggressive and less likely to help someone in need [7]. The feeling of autonomy is therefore conditional to feeling morally engaged.

**Competence.** The feeling of competence is an important condition to act according to one's moral code, as without it one may derive and perceive substantially less meaning from actions. Feeling competent includes feeling one has the knowledge, skills and control to act according to personal beliefs. Indeed, a game may put pressure on these feelings through the display of extrinsic cues; as revealed in the moral disengagement model.

**A note on meaningful mediation.** From self-determination theory we can understand that the drives for relatedness, competence and autonomy are important factors of motivation to act on one's beliefs. However, we must consider that a game is both an interface and medium; because a game mediates, it requires interaction with the player in order to complete the experience. This is what complicates the matter of viewing games as harmful or not, as it enables different interpretations and perspectives. The oscillation between suspending disbelief and immersion is a complex factor in understanding morality in games. Indeed, players have distinct motivations for interacting with a game (e.g., conform Bartle's types [6]). As such, ethical agency will be facilitated if a game-world presents an environment (or content) of which a specific player may derive meaning. For indeed, without such meaningful immersion, a player can easily distance himself from his in-game behavior and morally disengage by justifying his actions as meaningless or in jest. Next to the interpretation of the semiotic layer (of game content) on a rhetorical level, the player should be engaged on an emotional level as well if his ethical framework is addressed. That is to say, if ethical issues trigger an emotional response in someone before he finds a rhetoric to justify his feelings, then a fictional ethical situation should foremost elicit an emotional response in the player as well [16].

Indeed, if in-game consequences are distorted in a manner that they become e.g, euphemistic, aesthetically pleasing or funny, it might disengage players emotionally and trigger curiosity to experiment with the consequences [17]. Thus, awareness of the game as a medium can take players to interact differently with the content as they change their mindset. In order to elicit a faithful response from a player (just like a player would scream if something in the game would scare him), immersion is key. Ideally the player should feel immersed in the game to the extent that he is unaware of his surroundings and he reacts emotionally to the events in-game.

### 2.3 General aggression model

The General Aggression Model (GAM) provides a theoretical framework integrating various theories into a practical model. The model reflects several stages in a person's interaction with a certain situation, of which particularly input factors are relevant to us, as they they steer in-game behavior and the ultimate experience. Within input factors, the GAM distinguishes (a) person-factors, and (b) situation-factors. Indeed, the drives from self-determination theory are typical for person-factors. Also, the moral-disengagement cues can be considered situation-factors. If we understand the situation factors as factors in the game world, then the game should be able to provide moral engagement cues as well as moral disengagement cues. In other words, cues in the game may affirm ones moral beliefs or oppose them.

In Table 1 the self-determination drives are shown in relation to concepts and theories to propose some general hypotheses about the drives in video games. The drive for relatedness is focused on identification from the subject to the material or actors in the situation. In order to let the subject identify himself with an NPC, one can use the notion of alignment to help render sympathy according to the way the NPC is framed. If the NPC has had more exposure in a positive light or if it is viewed in a subordinate manner, the player might be prone to form allegiance with the NPC and thus feel a certain relatedness with the NPC. If an NPC has had little screen time, it is more likely that the player did not have a chance to form allegiance and thus will not identify easily with the NPC.[1]

The drive for autonomy is considered closely related to the concept of agency, where one experiences the power taking meaningful action. This meaningful action is only as meaningful as the player views it to be. Through explicit notions in the scenario that the player can make a choice, the player is made aware that he can act. The lack of feedback a player receives on his choice, paired with the knowledge that there were other options that were not chosen, help in presenting each option as a meaningful decision. Though sometimes in INGs different actions lead to the same results. An experience with an answer that turned out not to have the indicated effect might challenge the player in experiencing agency. Yet it might also immerse the player better as it mimics unpredictability of the consequences in real life situations.

The drive for competence is considered associated with the theory of *flow*. The player must feel competent in his skills and knowledge and have an internal locus of control when he is to keep his moral engagement in a situation. If the situation feels too overwhelming, difficult, or stressful, the player might disengage completely. Particularly for the present study, we investigate how the selected video games act as a Situation-variable influencing the drives through contextual cues.

## 3 MORALITY IN INTERACTIVE NARRATIVE GAMES

In order for players experience moral engagement in a video game, the game has to provide for ethical gameplay. Considering video games as information systems and players as ethical agents, Sicart [32] states the importance of the semantic Gradient of Abstraction (GoA) above the procedural GoA when discussing ethical gameplay. Games like Tetris or Pacman are not relevant for ethical theory as the procedural dominates the semantic aspect: fully understanding the semantics of the game is not crucial for the experience of the game [32]. Therefore an approach to video games that rely heavily on semantics like INGs proves interesting for the corpus of ethics in games. In INGs the semantics of the game are highly important for the player as they guide their interactions with the system. For instance, the player is often prompted to collect certain objects or information by searching the virtual environment and conversing with NPCs. Understanding and using the presented information is key to the experiences of these games. Thus, players that enjoy these games may be considered to understand their game interaction as both mechanical and meaningful.

Ethics in games can in that way not be understood by solely looking at their design, but have to be analyzed by the interaction with the player due to these GoA's [32]. We could state that any player processes the information by decoding an encoded piece of information that is then variably observed by the model, that is the player, and countless other factors influencing the process. As a prerequisite though, the game needs to provide for ethical agency; its world needs to reflect on moral choices [32] and these moral choices should bear resemblance to moral choices in real life, or they would not be understood as moral choices. In the next section we will argue that INGs provide for ethical agency through their focus on semantics and ambiguous design. To understand how INGs provide for ethical agency, we need to look at how INGs relate to agency in moral dilemmas. Yet to experience agency, one must regard his actions as meaningful. The next sections will expand on how INGs can provide ethical agency by portraying choice and consequences as meaningful.

### 3.1 Ethical agency

Janet Murray defines agency as "the satisfying power to take meaningful action and see the results of our decisions and choices" [20]. Most INGs are episodically structured and follow a structure of *branch and bottleneck* decision trees [3]. As the player progresses through the narrative by making choices, he defines the path which is drawn along the tree. This results in the display of a specific

[1] A player's identification with an NPC might not exceed a stage of recognition; associating certain aspects of the NPC's appearance with behavior or people that the player is already familiar with. If this recognition leads to negative associations, an NPC is likely to be treated as an opponent rather than an ally. Thus, in INGs it stands to reasons that NPCs that get little screen time and are framed in a relatively negative way, are likely to trigger moral disengagement – e.g. rendering the NPC such a dehumanized treat that violence is considered a justified option – in accordance with the first two moral disengagement cues. Inversely, NPCs that get relatively much screen time and are framed to hold the same ideals are more likely to enable identification and promote moral engagement through relatedness.

**Table 1: Drives and Hypotheses**

| *Drive* | *Theory* | *Hypotheses* |
|---|---|---|
| Relatedness | Structure of sympathy [34]<br>Identification | Players are more likely to morally engage with NPCs that have had previous positive exposure.<br>Players are more likely to morally engage with NPCs that the player identifies with. |
| Autonomy | Agency [20] / Meaningful Choice [19]<br>Pseudo-Individualism [1] | Players are more likely to morally engage when they perceive their action as meaningful.<br>Players are more likely to morally engage when they perceive their power to be unique + Players are more likely to morally disengage when there are other competent characters present. |
| Competence | Flow [11, 30]<br>Internal locus of control | Players that feel in control and knowledgeable are more likely to morally engage.<br>Players that do not feel in control or confused are more likely to morally disengage. |

storyline or specific scenes. INGs are marketed as games that are adaptive to your choices and tell stories tailored to how you play. They provide "free movement within limited space" by prompting the players with different choices that result in some deviations, but keeping the general trajectory the same by having the decision trees converge at certain points of the game - thus keeping to a general progression [33]. The notion of agency in these games thus heavily depends on the player's perception of having different options. This is made meaningful due to the way the game presents certain options, but withdraws from giving feedback about the value of an option.

## 3.2 Lack of evaluation

As stated before, FPSs do not generally enable the player pacifistic game mechanics to reach the same goal. Interactive Narrative Games do display different options to choose from, but usually do not show feedback in terms of scores or incremental figures that can be interpreted as an evaluation of your gameplay. The only feedback you get is what percentage of players have responded with the same answers. Whether you interpret this as right or wrong is up to you. As INGs lack explicit competitive design elements and evaluative feedback, the goal of the game is not to 'win' but rather to 'experience' (by acting out the narrative). Therefore, the player may have to interact more intensely with regards of producing meaning to the content of the game and might lead to greater emotional investment with the fictional content.

Smethurst states "The narrative branches that the player does not travel down but perceives as possibilities are just as important to their understanding of the story as the events that actually play out on the screen. One could reasonably field the argument that this overarching anti-narrative or phantom narrative is even more powerful than the narrative itself, since it colludes with the player's imagination to create might-have-beens that the game's developers could not possibly have anticipated or included in the game"[33]. Thus the way a player progresses down one path through his actions, perceiving it to be different than other possible paths, makes his actions (more) meaningful. Indeed, the meaning of our actions or choices are strongly connected to the way we perceive consequences of these actions and choices. If the player feels like choosing option A or option B will have the exact same result, he might not perceive the act of choosing to be meaningful.

## 3.3 Meaningful choice

Choices are not simply deemed meaningful in how they display different options. Brice Morrison [19] states that in order to define a choice made in the game as meaningful, it requires four components: (1) Awareness: The player must be somewhat aware they are making a choice (perceive a difference in his options), (2) Gameplay Consequences: The choice must have consequences that are both gameplay and aesthetically oriented, (3) Reminders: The player must be reminded of the choice they made after they made it, and (4) Permanence: The player cannot go back and undo their choice after exploring the consequences.

In INGs the way these different options are represented is often a combination of these aspects. First, the player is made aware there is a choice and is presented different options. Second, the game provides gameplay and aesthetically oriented consequences, for example, by following a different narrative branch. The consequences are often showed in a cut-scene. Permanence is created by sometimes showing these consequences only after saving the progress and loading a different scene. Other times, permanence is created by not showing the consequences right after the choice, but letting the effect show later in the game. This way, the player might understand his actions to be meaningful by being reminded of his choice. However, other 'reminders' that are not tied to consequences will not be deemed meaningful. If the player was simply reminded that he chose option "A" without "A" signifying a consequence, the reminder would not serve any purpose and might even interfere with the player's sense of immersion. In summary, the meaning of choices is tied to a perception of *different options*, with *different consequences* that *cannot easily be altered* later on.

# 4 METHODOLOGY

As moral engagement in interactive narrative games calls for high engagement (immersion) and ethical agency, we will look at scenarios of two INGs that fit the criteria of *meaningful choice* and *ethical agency*.

To narrow down the definition of ethical agency for these games, we draw upon Bandura's description of moral agency: "The exercise of moral agency has dual aspects – inhibitive and proactive. The *inhibitive* form is manifested in the power to refrain from behaving inhumanely. The *proactive* form of morality is expressed in the power to behave humanely. In the latter case, individuals invest their sense of self-worth so strongly in humane convictions and social obligations that they act against what they regard as unjust or immoral even though their actions may incur heavy personal costs"

[4]. In this case, behaving humanely will be interpreted as *pacifistic* towards NPCs; behaving in a manner that is deemed to support other characters in contrast to inflicting any violence to another character. Special attention will be given to situations where actions would support other characters at the cost of the main (playable) character. After selecting the meaningful situations that reflect ethical agency, we will give a semiotic analysis of the situations and how they could affect moral engagement. The form of the scenarios will be judged on interference of Relativity (R), Competence (C) and Autonomy (A). If interference is low, it is expected that the game allows for high moral engagement.

Then we will draw upon statistics about the responses of players to check if the general sentiment aligns with previous ideas of moral engagement. To interpret the statistics we look at how the distribution of responses over the answers as shown in the games on the Playstation 4 version and as documented by the fan-community online under the game's discussion pages on Steam [24] [25].

Answers with high percentages may reveal situations where signs are unified in pointing to either moral engagement or moral disengagement. This might show that signs in the game affirm a present belief or that there are strong signs that let the player disengage. In contrast, a more homogeneous distribution among answers may reveal more complex situations or moral gray areas.

## 5 CASE STUDIES

Two games were selected for analysing how they provide ethical agency: *The Walking Dead Season 1* (TWD) from Telltale Games and *Life is Strange* (LiS) from DONTNOD Entertainment. Both games follow a *branch and bottleneck structure*. This means that while players can follow different narrative branches, the branches converge at certain points to maintain a general storyline [3]. Both games reveal choice-percentages at the end of each episode, that reflect which percentage of players has made the same choice in decision moments that affected the narrative.

A reason for selecting these particular games, is that they present the choice-moments in a distinct manner. When a player needs to make a decision in LiS, the game freezes any ongoing action on-screen and displays the available options with corresponding symbols representing the input from the player. The game remains in this state until the player gives input for either option. Furthermore, the narrative of the game revolves around the main character discovering the power to rewind time. In effect, the game enables the player to sometimes rewind part of the game in order to try a different option. This option to rewind does not span multiple areas or episodes in the game and is therefore limited, but allows the player to try out different options and make a decision with the knowledge of any immediate consequences of each option.

This way of making decisions is in sharp contrast with the way TWD incorporates the decision-making moments, as TWD limits the time to give a response. The game might only slow any ongoing action on-screen, but as soon as the options (with the corresponding controls) appear, a shrinking bar appears above the options as well. When the bar has dissipated, the options fade from the screen. In some cases this will result in the main character refraining from any action, while the game continues. This way the game shows that *not* undertaking action can also be a way to deal with a situation. However, not taking any action can still put your character in danger, antagonize NPCs, or have tragic consequences. The option to refrain from any action is not always available.

The difference in the representation of choice related to time will therefore render different results. It can be expected that extension of time (by freezing action) and enabling the exploration of consequences will result in more deliberate decision-making. It can also be expected that the limited time to provide feedback in TWD results in less deliberate decision-making and even unintentional feedback. Overall, the content and the structure of the games differs substantially. TWD has more violent content, a higher pace of action, and is more ambiguous regarding relationships with NPCs than LiS. In TWD many relationships are short-lived and the characters that the player might invest in, will not necessarily show reciprocation. In LiS the majority of characters will at least slightly award friendly behavior. Effectively, the overall feedback given in LiS is expected to reflect more moral engagement than the feedback given in TWD.

### 5.1 Game context

LiS tells the story of Max Caulfield, a young girl that returns to her home town Arcadia Bay to study at the renowned Blackwell Academy. When she encounters her old best friend Chloe Price in a dramatic situation, Max discovers she has the ability to rewind time. After using her ability to save Chloe, the two reunite. They set out to find information about the disappearance of Rachel Amber, a former Blackwell student and friend of Chloe. TWD tells the story of Lee Everett, an African-American former history professor from a town called Macon. Convicted for killing a state senator that slept with his wife, Lee is on his way to prison when a *zombie apocalypse* breaks out. After Lee gets into a car accident, he escapes and encounters a little girl named Clementine. The two set out on a journey of survival, avoiding zombies they call "Walkers". They quickly meet up with other characters and travel to Atlanta in the hope to find better fortune and the parents of Clementine.

### 5.2 Game statistics

Exploring how players choose to act in these games, we looked up choice statistics provided by each game per episode. The statistics were gathered once for the PS4 console version, and again six months later; revealing only minor changes (one or two percent).

The statistics shown in TWD and LiS are tracked on a global scale. Both games have sold millions of copies [28], making the choice statistics valuable to understanding the general reaction of players to the game. Taking into account how little the percentages have changed in the last months compared to when the games were released, one can assume that the limited deviation indicates that the statistics have plateaued. The choice statistics from LiS and TWD show a difference in structure; LiS makes a distinction between major and minor choices, while TWD does not. For comparative reasons, in the present study we focus on major choices. Statistics of minor choices can be found in [12]; Appendix A1.

Three general observations on the choice statistics can be made: (1) The choice statistics show that reactions varied as can be expected from different players playing the game in their own way. However, this means that while given the option to withdraw from

violent options, some players did choose to act violently while there was another option available. It is understandable to contribute this to moral disengagement or a lack of immersion with some players. (2) Some choice-moments were distributed in an even manner. The answers were approaching a 50-50 distribution. (3) Some choice-moments showed a clear majority for a particular answer. Next, we will outline the choices that were uniform or ambivalent according to the distribution in their answers.

## 5.3 Recurring themes

When comparing the choice-scenarios of both games, one can find certain recurring themes revolving around morality. These are:

- Choosing to lie or tell the truth to an NPC
- Choosing whether to take or leave things you find in the game, that look to belong from someone not present at the moment
- Choosing to use violence (or threats of violence) over other means of communication
- Choosing which NPC to side with or which NPC to blame
- Choosing to save or kill an NPC
- Choosing whether to silently observe or actively intervene when other NPCs are in conflict or apparent danger

The theme of saving and killing NPCs can be divided in three more subthemes: (**1**) help an NPC commit suicide, (**2**) murder an NPC or aid and abet in killing and NPC, and (**3**) sacrifice one NPC or another. As these themes mirror conventional moral scenarios, it is interesting to see how they are represented in both games. Some scenarios however, do not reflect the points of meaningful choice. To lie or tell the truth is, for instance, less meaningful than to steal from an absent other. In regard of the meaningful choices, the most important choices revolve around saving and killing other NPCs. For exploratory purposes we will also look at stealing and a deliberate use of violence above other means. For Life is Strange, the minor choices have been excluded as well as we like to focus on which moral choices are presented as meaningful.[2] To see if these morally themed scenarios are regarded as uniform or ambivalent, this division will first be further explained.

## 5.4 Uniform and ambivalent choices

The uniform choices are defined by clear majorities in particular options. This means that when there are two options for a choice and one of those options has 75% or more, the choice is considered 'uniform'. The uniform choices are expected to display relative high affordance for competence, relatedness and autonomy. Uniform choices are expected to reflect certain social standards or show signs that one of the options is preferred over the other option.

Ambivalent choices are defined by their distribution approaching an even split of percentages over options. This means that a choice with two options is considered 'ambivalent' if the choice-percentages are between 50/50 with a deviation of 9%. Thus, up to 59% and down to 41% is considered ambivalent. A choice is also considered ambivalent if it's three answers have around 33% each. Ambivalent choices are expected to have relative low affordance for competence, relatedness and autonomy. This can be visible through mixed signs; the presence of signs for both options, or signs that would oppose a social convention. Signs opposing a social convention could be prompts to convince the player of performing an action that in real life would be against the law, like stealing from someone.

[2]Thus in LiS this excludes the minor choices regarding characters like Alyssa or the blue jay. The threats to these characters were implicit in the way that a player could 'let the blue jay die' or 'not help Alyssa' by not noticing these actors in the game. The player was not halted to explicitly choose one option or the other in these cases

## 5.5 Stealing from absent other

In both games these choices are ambivalent, though in LiS the closest NPC in relation to the protagonist argues *for* stealing, while the closest NPC in relation to the protagonist in TWD argues *against* stealing.

**In LiS** the narrative shows Max and Chloe breaking into the principal his office at night. After they found information they needed, Chloe discovers five thousand dollars in an envelope labeled 'the Handicapped Fund'. It is up to the player to decide whether to take the money or put it back. Chloe tells you that they could pay back Frank with the money and get away from this place. This prompt could persuade the user to take the money and justify his action as to favor loyalty to Chloe (and her safety) above the wellbeing of strangers. Moreover, while the envelope might be labeled as a donation, some players questioned the purpose of the money. They wrote that they thought the money may not have been intended for the handicapped or that is was hush money from Nathan Prescott's father regarding an incident [23]. The competence factor is therefore only slightly interfered with as players could feel frustrated about not being able to find out where the money belongs to. However, players that responded online with the theory that the money held a different purpose could feel very competent. The player must evaluate whether taking the money is bad in the first place. An important factor here is relatedness, as the player can argue that the money does not belong to anyone and can be freely given to the best cause. The player should then contemplate if the money should go to the principal or the handicapped fund (depending on his interpretation), or if it should go to Chloe. The autonomy factor is a little interfered with as Chloe begins to state what this money could mean for her. However, the autonomy is also a little boosted as, other than Chloe, you have no witnesses and are free to choose what to do.

**In TWD** the game shows Lee and the group finding an abandoned car full of supplies. Competence is only interfered with due to the lack of knowledge about the owners of the car. It is uncertain whether the person that left the car is still alive and if the person is friendly (as others have tried to kill members of your party). Relatedness is split between the group and Clementine or Lilly. While Kenny and Katjaa make remarks in favor of taking the supplies, Clementine and Lilly state that stealing is wrong and harmful. If the player feels more relatedness with them, they could choose to adopt the same opinion. If players feel more drawn to Kenny and Katjaa, they may be quicker to adopt their logic. The signs showing the group is divided in their opinion, shows ambiguity about what answer should be regarded as better'. Autonomy is thwarted as the group seems to be convinced taking the supplies is the better option. It would be easy for the player to join the group in this action. However, Clementine states that it is wrong to take from others, affirming the social convention not to steal. The player could be

reminded of this belief as well as feel loyal to Clementine and not take from the car.

## 5.6 Use of threats and violence

In both scenarios these choices are ambivalent, but in LiS this choice is more about violence and in TWD this choice is more about making threats.

**In LiS** this scenario is about letting someone get beat up, when it is not justifiable as self-defense. This way, it can also be about getting revenge. One of the NPCs, named Warren, has been warm and kind with Max throughout the game. The other NPC, named Nathan, has been shown to be aggressive, violent and secretive. As the two are fighting, Warren gets the upper hand. While Nathan is down and Warren continues the violence, the player must decide whether to stop Warren or just stand by. Competence is not interfered with as the display clearly shows an attacker and victim in violence. Relatedness is interfered with by the previous actions of Nathan and negative framing, making him a target for revenge. Autonomy is left to the player as Warren does not look to be stopping on his own and the explicit framing of the choice makes the options clear that Warren will continue beating Nathan unless stopped by Max.

**In TWD** this choice is ambivalent and is situated around an encounter with a stranger called Vernon, who holds Lee at gunpoint ([12]; Appendix C.2.10). Lee can choose to try and calm Vernon down or threaten him and the group in order to get the gun away from Vernon. This choice, like other conversational choices ([12]; Appendix C.2.1 and C.2.3), is not explicitly stated. The player can choose a couple of responses throughout the conversation. It is not always clear at which response the player has chosen one option or another. This implicit way of framing the choice interferes a little with the competence factor as certain knowledge and insight is necessary to choose as intended. Next to this, another NPC is putting pressure on Vernon to shoot Lee. The pressure from the other NPC, the time-pressure and the pressure from the threat of being at gun-point (you can die in this part of the game) all work to undermine the player's competence. However, Relatedness might boost alliance with Vernon and the group as, despite the gun, they seem to be a group of old and fairly peaceful people. From the dialogue one could distill that they are trying to protect themselves from a greater threat. The Autonomy is not interfered with at all as Lee is the only one that is in favor of keeping himself alive in the first place.

## 5.7 Help an NPC commit suicide

In both games these scenarios are ambivalent choices.

**In LiS** Max travels to a parallel reality where Chloe had an accident and supposedly spent the last five years quadriplegic, needing a respiratory system, a wheelchair and heavy medication. As Max visits her at her parents' house, Chloe tells her that she is suffering and her parents will suffer, while they are only prolonging the inevitable ([12]; Appendix B1.3). Chloe then asks Max to help end her life. The player is given the choice to accept, refuse or tell Chloe that you don't know. While the player could question if Max knows how to 'crank up the IV' and whether this would be the only option, the factor of competence is not much interfered with. When the player replies that he doesn't know, a dialogue will follow that redirects to the same choice-moment. This option prompts the player to honor Chloe's wishes and help her where she cannot help herself anymore. Relatedness is therefore an important factor as the player must contemplate how far his loyalty to Chloe goes. This appeal to loyalty could morally disengage players that would have preservation of life in high regard. Players that value quality of life above a prolonged life-span could also easily justify honoring Chloe's request. In any case, the Autonomy of the player is hardly interfered with in this case. You are alone in the room as Chloe utters her request and Max is asked to do something Chloe cannot do herself. Furthermore, Chloe states that her parents will not help her and Max is the only one she can turn to. Thus for pacifistic players this would be a difficult choice. Not only because the choice must be made if it is better to end the life of someone suffering, but also if loyalty to Chloe is more important than the rest of your opinion in the matter. There is another subtle interference with this loyalty. The player has, up to this point in the game, played out several scenario's in which Max would save Chloe's life. This previous investment makes it harder to act against saving her life. This time however, Chloe herself makes the request.

**In TWD** Irene is bit and asks for your gun ([12]; Appendix C.1.4). The signs that implicate the consequences of giving the gun to this NPC are a little ambiguous. On the one hand, giving the gun to this NPC might help her end her suffering, on the other hand it might jeopardize your party to hand over a weapon. Competence gets mildly interfered with. The player has to decide whether he thinks suicide is preferred to a prolonged but suffering life. If the player would value quality of life and autonomy over longevity of life, he might give the gun to Irene. If the player thinks that there could be a way to save this character, condemns the act of suicide or is unsure about handing over the weapon, he could prefer to refuse Irene the gun. This consideration is however tightly related to Relatedness, which might be influenced by a previous act of trying to save this NPC. The narrative steers the player to clear the path to this NPC from danger, only to find out that this NPC suffers from a fatal wound. The previous sign to save this person works against giving the gun, as it affirms a sanctity for life. Moreover, the previous investment in trying to save the life of this NPC works against the action of giving the gun. While the player has little information and little exposure to the character that is Irene, the commitment to save this NPC as a human being works as a sign to not give the gun. When Irene eventually is shown to the player, she is displayed as troubled and displaying distraught behavior. This displays her as possibly unreliable, which could prevent the player from choosing to hand over the gun. However, the prompt is also displayed that Irene might turn into a threat after dying if not shot. Furthermore, the Autonomy is highly interfered with in this scenario. If the player actually decides to give the gun to Irene, he can only tell NPC Carley to do so as she is the one holding the gun. This character responds negatively ([12]; Appendix C.2.4) and the player needs to choose a response to convince Carley to hand over the gun.

## 5.8 Murder or help in killing an NPC

In this case, the choices in both games were ambivalent. **LiS** In the case of LiS, this action is represented by choosing to shoot an NPC named Frank Bowers. Frank was introduced in episode 1 as a drug dealer Chloe loaned 3000 dollar from to repair her truck [22]. He is displayed in episode 2 to be aggressive and prone to violence. This is shown through his constant swearing and ease to pull a knife ([12]; Appendix C.1.1). If the player chooses to shoot Frank, the scenario will show how the gun doesn't contain any bullets and Frank will mock Max while he puts back his knife. Upon leaving he will threaten Chloe and Max for Max's intent of shooting him. Chloe will react thankful towards Max, but Max will be shown thinking she almost shot someone and made a more dangerous enemy for her and Chloe. If the player should refrain from shooting, Frank will grab the gun from Max and take it with him as he leaves mocking and threatening Max and Chloe. In this scenario Chloe starts off sarcastically towards Max, but softens when Max tells her she dislikes guns or pointing them on human beings. Chloe states her worries on holding off Nathan and Max will think that it was her fault Frank now has the gun. The choice to shoot Frank is therefore not deemed as morally meaningful as it were if the character actually got shot. This could be inviting the player to morally disengage, as it is lacking consequences associated with the action of shooting someone. As the player can explore these options by turning back time, this becomes more of a choice regarding Relatedness towards the character Chloe. Shooting Frank symbolizes standing up for Chloe and presenting Max as someone that stands her ground, but at the cost of endangering both Chloe and Max (as it antagonizes Frank). Not shooting Frank will result in a safer situation but will diminish the bond with Chloe. The Autonomy is not interfered with as the player always has the choice to turn back time and explore the different outcomes.

**In TWD** this choice is represented in both an ambivalent choice and an uniform choice. In the ambivalent choice, the player has to decide whether or not to try and revive a passed out NPC or to kill him ([12]; Appendix C.2.6). You do not know if this NPC, Larry, is actually unconscious or dead. This lack of knowledge interferes with the competence factor. The Relatedness factor pushes the player between feeling sympathy for Kenny, and sympathy for Larry (or Lilly). Larry has been displayed as aggressive and possibly violent. He swears a lot and had tried to kill or oust Duck earlier in the game. Kenny has been displayed as sympathetic, but also fearful. His argument to kill Larry could be viewed as extreme. The player could also feel sympathetic towards Lilly, who is presented as Larry's daughter and has been shown trying to help him. Autonomy is interfered with as both of the characters make an argument and you have to decide about the fate of someone else with regard of your own fate and the fate of the group.

In the uniform choice the player has to decide whether to shoot a dying child. This child is presented as the child of two NPCs the player travels with named Katjaa and Kenny. The in-game logic implies that the consequence of *not* shooting the child in the head, is the boy turning into a zombie. The player can only choose between shooting the child themselves or telling Kenny to do so. Thus, this leaves no pacifistic option. Volunteering to shoot the child could be viewed as a humane action as it would unburden Kenny of having to shoot his own child. The burden of shooting the child is indicated by showing the distress with the parental figures. Katjaa is showed to have committed suicide moments before, indicating the tragedy of the situation and adding to the hardship one can imagine for Kenny. As far as Competence concerned, the act of shooting an already fatal and possibly dead child is only difficult on a moral level. The player has to choose whether he thinks it better to shoot the child or to abandon him to his fate and possibly endangering others. Knowledge about the game-logic could indicate that shooting the child is appropriate use of violence. Relatedness is important factor as signs indicated that Katjaa had wanted to have Duck shot before turning into a walker. Sympathy for Kenny in this situation could convince the player to take on the act of shooting Duck. Although these signs would provide for moral disengagement as there is no pacifistic option, the implied consequences and game-logic indicate that shooting this character is a more humane option than letting him be shot by someone else. This indicates that next to moral engagement and moral disengagement, we should consider that players can form separate moral standards for certain fictional contexts. This differs from moral disengagement as these morals would still persist over time, but are specific to the fictional context (for instance: shooting someone is alright if it prevents them from turning into a zombie and killing others). Autonomy is only little interfered with by the presence of Kenny and the option to let Kenny shoot the child. Kenny is presented to be in clear distress about the situation and was shown to be in denial about Duck dying in the moments leading up to this scenario. As the capabilities of Kenny can be questioned and Kenny asks Lee explicitly what to do, the player can still feel autonomous in his decision. It would be expected that players that chose to shoot the child would not feel more guilty than players that told Kenny to shoot the child.

## 5.9 Choose who to sacrifice

In both games these scenarios are ambivalent choices.

**In LiS** this choice is the only major choice the player can make in the last episode. Therefore this is also viewed as the most important choice as the player *cannot* rewind this choice without restarting the whole episode. The choice revolves around sacrificing NPC Chloe or all NPCs living in the hometown of the main character. Competence is interfered with in the manner that the player has no pacifistic option. The most pacifistic option would be to sacrifice one for many, but this is still debatable. The more important factor is that the player has been acting continuously to save Chloe in the game. Having the final choice present the option of sacrificing her against sacrificing other NPCs makes the decision complex as at is counter-intuitive with what the player has adapted of the game-logic. In other words, the player has maybe viewed saving Chloe as a goal and linking the negative consequence in this scenario (of Arcadia Bay being hit by the storm) could distress players. Players even stated that deciding to sacrifice Chloe would diminish the meaning of all previous choices, making your interaction with the game pointless [26]. In terms of Relatedness the player can be torn between an allegiance with Chloe and the relationship with all other NPCs the player has encountered in the game. As Chloe has had more exposure than other characters, it could be viewed that allegiance with this character is stronger. However, the

framing of the character has been ambiguous as Chloe is presented as rebellious, smoking pot, dropping out of college, playing with guns and having a big mouth. Some players wrote how they disliked the character Chloe and saw no difficulty in sacrificing her to save other characters. Other fans displayed annoyance with Chloe as well, but chose to save her because they imagined how Max would care for her and did not want to hurt Max that way [27].

**In TWD** this theme is represented twice and early on in the game (in the first episode). First, there is a scenario in which the player needs to choose between the character Duck or Shawn. Second, there is a scenario in which the player needs to choose between Carley or Doug. Competence is highly strained in this event due to how fast the pace of action has become. There is an imminent threat and the player has little time to consider who to save. From earlier on in the game, the players that chose to rescue Shawn have experienced that choosing an option will not always result in the intended result. This could damage the confidence to choose now, as the player may have learned that some characters can't be saved. In a way, the player could be scared to choose the 'wrong' character. Relatedness is dependent on the information given to the player about these NPCs. Players that chose to save Doug stated his personality and skills (knowledgeable of electronics) as arguments for saving him, while players that chose Carley argued for her skills (being 'a good shot') and personality [21]. Other players did not value Carley as they thought her to be dumb and not very helpful in a zombie-apocalypse. Some players noted that Doug had technical skills and that Carley said he had saved her before. Both characters have had little screen-time before. As far as Autonomy goes, the player has probably discovered that he can only save one of both characters. Relative to the Shawn or Duck scenario, this time the urgency for help is clearer. Both characters are in the grasp of walkers, have no weapon, and are at other sides of the store. However, some fans did declare that they thought the character Carley to be capable of freeing herself and were surprised by the outcome [21].

### 5.10 Uniform and ambivalent choices

When we look at all the uniform major choices in LiS, they align with a principle of refraining from doing harm if possible. When having to choose between making fun of a bully when having the upper hand or comforting the same bully, the majority chose to comfort. When having to chose to take a picture or intervene when someone else gets bullied, the majority chose to actively intervene. When having the choice to answer or ignore a distressed friend's phone call, the majority chose to answer the phone. When encountered with violence, most reactions showed players tried to keep characters - even dogs - from harm. These scenarios may show that most players have pacifistic values or that the game shows less signs in favor of causing harm than signs to refrain from causing harm. In TWD we see a lot less uniform choices overall when compared to LiS. Only one in each of the last three episodes (episode 3, 4 and 5) is considered uniform, which is about keeping your weapons or giving them up. The majority of 81% chose to keep the weapons. While this is not necessarily a choice about harm or fairness, it does seem to indicate that players prefer to have a violent option available. This could affirm that violent content and a high pace of action changes the expectations of players to be more prone to violent actions in the game. Overall, there are also a lot more ambivalent choices in TWD than in LiS. This is in line with the hypotheses that some of the answers given in TWD are involuntary answers - as they would be likely to provide some margin of random answers. It could also indicate that the factor of time constraint could be viewed as a form of pressure, making it harder to morally engage as the drive of competence gets thwarted. Another particular thing about the choice statistics in TWD is the way the first episode contains many ambivalent choices and the last episode does not contain any ambivalent choice. LiS starts out with little ambivalent choices and works up to a singular ambivalent choice in the last episode. One could argue that TWD starts out quite difficult and gets easier during the game as the player learns how to dealt with the time constraints. LiS would then become more difficult due to the relationship the player has build with other characters in the game. However, one has to consider that the choice in LiS leaves no pacifistic option and is therefore inherently a complex decision.

## 6 CONCLUSION

Moral disengagement has shown us that players can temporarily forfeit their moral belief system in order to enjoy violence in video games. Moral disengagement cues revolve around an appraisal and understanding of the situation, appropriate conduct, possible consequence, attitude towards involved parties and a hierarchy of inner values. Drawing from this, we argue these extrinsic factors to relate to the intrinsic drives of self-determination: competence, relatedness and autonomy. In order to outline what aspects contribute to moral engagement, we state that a player needs to feel competent about his control and knowledge in the situation, related to the parties and autonomous to act on his beliefs. However, in order to understand moral engagement in video games, we must acknowledge moral engagement to be first of all a matter of engagement. This means that immersion is necessary for the player to engage seriously with the game as a situation. Secondly, in order to engage players morally, the game itself has to provide for ethical agency. This means that the player should experience his actions to be meaningful.

Interactive Narrative Games provide a good situational context for the study of moral engagement as they provide high semantic spheres, in which there is little feedback provided about the value of one's decisions. Therefore, the player has to provide meaning through his own process of reflection, instead of reacting to an incremental value-system. Both The Walking Dead and Life is Strange provide contexts for such ethical agency as they contain scenarios that mirror moral situations and present them as moments of meaningful choice. If we compare the games, we can discern recurring themes of interaction like lying, stealing, blaming, killing or sacrificing. The most meaningful actions regarding notions of consequence and permanence are about killing or sacrificing NPCs.

However, both games deal with certain themes in a very different way. TWD has more violent content, a higher pace of action and uses time constraints in moments of making a decision. LiS has a slower pace of action, contains less violent content and enables the players to rewind after most choices. The player could thus

explore direct consequences before settling his decision. The choice statistics on the choices of both games reveal that TWD contains more choices that were answered ambivalently: responses were almost equally divided among the options for a choice. LiS contains more scenarios where players answer with a clear majority, which we named 'uniform choices'. With regard to the moral engagement aspects, this could mean that the high pace of action, time constraints in video games could compromise feelings of competence and therefore provoke unintended responses. The violent content could affect competence in another matter: it may teach the player that violence is a rightful means in this context, pressuring the player to forfeit his beliefs in other means. LiS did not present this kind of pressure regarding time, which might explain the more uniform choices. However, both games displayed choices where they proposed non-pacifistic manners to be a better alternative than refraining from action. This shows that we should consider another option than moral engagement and moral disengagement, which is the understanding of new moral principles specific to fictional contexts only. Looking at the progression of the game, TWD showed more ambivalent choices in the first episodes and more uniform choices at the last, while LiS started with many uniform choices to lead up to one ambivalent choice in the end. Where TWD showed to often pressure the competence of the player on a mechanical level, LiS played on competence and relatedness on a semantic level. As the game repeatedly proposes a player to save an NPC only to ask for this NPCs sacrifice later on (versus the sacrifice of a whole town), the player's competence is thwarted and relatedness is tested. Online discussions showed that players felt that the relationship with this NPC made the choice difficult and others stated they would always choose this character over the town. The community on Steam did confirm that some choices were involuntarily. Regarding the drives, autonomy was less obviously represented compared to competence and relatedness. As these games are about interaction through controlling the main character or choosing his responses, the autonomy is implicit in the game mechanics. Yet it is not very clear if the presence of other NPCs in a situation affects the moral engagement of the player.

Approaching the choice statistics with regard of the game-situation does show that there is more to the process of moral decision making than moral engagement and moral disengagement. The moral content has a broader scope than harm versus care, or fairness versus injustice. Factors like loyalty and sanctity might play a role in this as well. To answer what promotes moral engagement in Interactive Narrative Games, we can conclude that ethical agency has to be provided through morally recognizable scenarios in which the player feels immersed, competent, related to involved parties, autonomous and confident that one's actions are meaningful.

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