Framing the Dilemma: The Influence of Immersion in Ethical Choice Making

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Ethical choices are a feature present in a number of video games that gives players the ability to test their ethical values. However, ethical choices are not always driven by rationality or ethical thinking in video games: immersion, gameplay design decisions, and flow sometimes help developers nudge players' actions. We argue that understanding how choices are framed within the complex expressive medium "video game" and how immersion deriving from expressive complexity plays into that framing does foster our comprehension of the dynamics of choices in diverse contexts, in particular of morally charged choices. Furthermore, game designers' decisions regarding gameplay mechanics, and particularly default choices, highly impact on the behaviors expected by designers in different situations, and on the resulting perception of such expectations in the mind of the player. Lastly we argue that the loss of self-consciousness afforded by imaginative immersion and gameflow [15] leads to de-empathizing ethical thinking in moral-oriented choice-making in video games. Employing Bizzocchi and Tanenbaum's [4,5] close-reading techniques, we reflect on the implication of these aspects on players' ethical choice-making, and how the architectures of a game mirror, generate or enhance different behaviors regarding moral decisions. Quantic Dreams' *Detroit: Become Human* will be used to address our questions.

CCS CONCEPTS • Applied computing~Arts and humanities •**Human-centered computing~Human computer interaction (HCI)~Empirical studies in HCI** •**Applied computing~Computers in other domains~Personal computers and PC applications~Computer games**

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1 INTRODUCTION

The relationship between video games and ethics has never been an easy one. Media is riddled with concerns about the influences that games featuring violence may have on children. Politicians have made a habit out of pointing fingers at video games whenever a young adult, who happened to play games, has partaken in violent behavior [41]. While researchers found no evidence for those claims [11,34,45], given the complexity of the connection between media representation and the player's actual behavior, the perceived lack of ethics in video games has been criticized by researchers and the public alike since their invention [2]. In our view, a viable solution would be to allow for critical reflections within contemporary games. Since interactivity and choice-making are at the heart of games, the medium offers unique chances to support ethical thinking.

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Schrier [38:1,cf. also 25] argues that "[e]thical thinking is a critical component of twenty-first century citizenship" and therefore game design needs to support the practice of ethical choice-making. She sees a responsibility in game design to include "[c]ritical thinking skills, such as interpretation, perspective taking, and reflection" [38:2]. In this paper, we embrace approaches from cognitive narratology and media studies in combination with Bizzochi's and Tanenbaum's [4] *Close Reading* technique to analyze Quantic Dream's *Detroit: Become Human* [35], a game discussed by scholars and game enthusiasts for its handling of moral dilemmas [cf. e.g. ,9,22,32]. Our aim is to deduce the complex markers of ethical choice making from this game to give a general set of possible ways to include and use ethical choice making in game design. We argue that understanding how choices are framed within the complex expressive medium "video game" and how imaginative immersion and gameflow deriving from expressive complexity play into that framing does foster our comprehension of the dynamics of choices in diverse contexts, in particular of morally charged decisions. We will first introduce the framework and the methodology on which we will base our own interpretations of *Detroit: Become Human*'s ethical choice making architecture. We will then present our findings, connected with examples from our close reading, before coming to our conclusions.

2 FLOW IN COMPLEX SYSTEMS AND ETHICAL CHOICE-MAKING VIA DEFAULT CHOICES

In this work, we want to avoid settling on a particular ethic [13], instead we agree with Schrier that the act of "ethical thinking" [38:2] is more important than the specific ethics as a set of moral codes behind it. By using the term "ethical choice making" we are primarily interested in the sheer possibility for an evolving cognitive process, rather than an already-decided fact. We define an ethical choice as one that shows responsibility, respect, fairness and caring to an individual or a group. In addition, different options must be considered in the act of choice-making before choosing the one that is most beneficial [24:16]. Ethics relying on self-reflection and even moral mistakes are, in the framework of ethical thinking, just an opportunity for growth and development [14:1]. Schrier states that interpersonal relationships are especially important, since they foster emotions, more specifically empathy, which is the foundation for ethical choice-making [38:854]. Another important underpinning is enabling the exchange of ideas and perspectives between people or NPCs, meaning an exchange inside and outside of the game [38:855]. Indeed, in a time of distant communication, Nussbaum [31] argues that people need "narrative imagination. This means the ability to think what it might be like to be in the shoes of a person different from oneself […]."Again, Schrier's [38:854] own framework for games that deal with ethical choices consists of a few pillars that, according to her, should be implemented in game design. She also states that giving appropriate, meaningful feedback is vital, which is, by Salen's and Zimmermann's [37] standards, a feature of well-designed games [cf. 37]. Lastly, she states that iteration should be encouraged by incorporating, for example, replayability of scenarios [38:857–858]. All these aspects, we argue, are intercurrent and necessarily interwoven due to the complex-systemic nature of video games, and of the expression mechanisms they rely upon.

What especially interests us is the intersection between choice making in moral decisions and the notion of immersion. Immersion can be understood as "the feeling of being enveloped by different social norms and engaged in an intense learning situation. It is also associated with the feeling of being transported into a non-immediate reality in the context of mediated representations [30,cf. also 39,40]. The first kind of immersion we are interested in is achieved when the challenge of the game exactly matches the skill of the person playing it. Ermi and Mäyrä call this 'gameflow' [cf. also 23]: "In this highly intensive state, one is fully absorbed within the

activity, and one often loses one's sense of time and gains powerful gratification." [15:2] Gameplay experiences are experiences that include for the most part learning and rehearsing, which are processes exercised to internalize knowledge [cf. 15,17,26]. Another form of immersion, however, is being immersed within the fictional worlds of the game. This is taken up by Murray [30:15] with her metaphor of the holodeck, which proposes "an illusory world that looks and behaves like the actual world. […] [Players] participate in stories that change around them in response to their actions." Ermi and Mäyrä [15:9] call this 'imaginative immersion', defining it as the state in which story elements become central, players start to identify with game characters and are subsequently absorbed in the stories and worlds.

In our theoretical frameworks, we also want to address the complexity of games to understand that complexity. Narrative comprehension involves "integration of different layers of information— rich percepts, sensorimotor experiences, attentional structuring, retrieval of memory images, and complex meaningful contexts stitched into pattern" [18]: in video games, it is indeed common to find ecological and ubiquitous narratives experienced through enactive perception and embodied cognition. Even more, games comprehension often requires scaffolding of attentional focus, epistemic contextualization, and patternization for meaning-making and meaningful interaction. These mechanisms present many mutual interactions and feedback loops, so that patternized context cognitively informs the structuring of attention and, together with it, guide the sensorimotor experiences on the basis of memories, and affect the storyworld and gameworld, which in turn form the meaningful context, and so on, in a cycle. All these "layers of information" therefore form a complex system delivered to the player through the video game, forming what we will call "expressive complexity" [cf. 27,42]: a complex system of intercurrent, interdependent and interoperating semiotic modes and media (perceptual, embodied, mnemonic or cognitive) which present emergent features [as defined by 12]. Among these is imaginative immersion.

Interactivity and choices are at the heart of games. Choices usually provide immersion as the players are acting instead of interpassively being acted upon [43:2]. We argue, however, that while the freedom afforded by interactivity and performativity are an essential part of games [44:78–79], a certain way of beating the game is perceived as the preferred way by the player, consciously or subconsciously, by offering the best experience in form of gameplay, loot or other rewards. This limits the frame in which ethical choices are made. In political and social science, the term "nudge", coined by Thaler and Sunstein, describes a form of influencing citizens' behavior without restricting their freedom of choice. Hansen and Jespersen [20:6] add that "human decision-making and behaviour […] is often influenced in systematic ways by subtle, seemingly insignificant changes in the decision-making context". These subtle ways of influencing the players in their choices, be it obvious choices as in dialog options or more subtle ones such as deciding to avoid a foe or killing it, are embedded within the architecture of the game in different ways, which sometimes require complex-systemic understanding. Taking these together, they form the concept of "preferred playing" (upcoming Meier 2021), coined in relation to Stuart Hall's famous "preferred meaning" as the process of the preferred way of meaning-making delimited by the position of a certain element in relation to other elements in a medium [19:9]. While Hall differentiates strongly between the dominant code and the meaning-making done by those decoding it, in video games those practices partly fall together. In games, the act of playing is inevitably connected to meaning-making [cf. 28]. A player generates a certain form of text by simultaneously reading the code presented and acting upon the framework they perceive.

We are interested in what kind of preferred playing a game does offer in regard to ethical choices, and if the game pauses or enforces immersive moments to a certain extent, be it to allow for ethical decision-making or to deny it. But as stated, choice-making in games is not a free and limitless process. Games often feature a rather rigid choice architecture, limited by, for example, rules, goals, the world and the gameplay. Within that architecture, one choice is especially marked and is often an indicator for the preferred playing, nudged by the developer and subsequently chosen regularly by the player, believing it to be in his or her best interest. Default options are therefore not always explicitly marked as the default, but implicitly employed as such to reduce the cognitive effort of the consumer and maximize profit [8:530]. Default choices are often encoded within the visual, auditive and narrative design of games, as well as in the gameplay, which in its shape and emphasis stresses a certain way of acting within the game world.

3 MARKERS OF ETHICAL GAMEPLAY IN DETROIT: BECOME HUMAN

We relied on close reading as the heart of our analysis of the ethical choice markers in *Detroit: Become Human*. Quantic Dream's *Detroit: Become Human* [35] is an adventure game with a widely branching narrative apparatus (with 85 endings [46], not all of which are distinctive) and complex moral dilemmas. The player follows the story of three androids in their intertwined journeys, in 2038 Detroit. The three characters are: Connor, a detective android who hunts "deviants", androids that developed self-awareness, Kara, a housekeeper android who protects Alice from her violent father; and Markus, a caregiver android who becomes the leader of a pro-androids-rights movement. The game employs complex system theories also at the level of the plot: deviants are androids whose software generates computations complex enough for self-awareness to emerge, strongly resembling the "Strong AI" view in philosophy of artificial intelligence [7,10]. The game received favorable reviews from both critics and players, and has been acclaimed particularly for its narrative design. As a frame of reference, we agreed to close-read the first 4 of 32 chapters of the game. We enriched our experience by watching *Let's Plays* to perceive the visual clues in the *mise-en-scène* as well as the options given within the game without the rush of the in-game countdown that leads to intuitive decisions. We later played the rest of the game, to make sure that the markers which are introduced in the first 4 chapters remain consistent. When categorizing the markers, we relied on Bizzocchi and Tanenbaum's framework which has been introduced in their close reading of Mass Effect 2 [5:3–4]. We added the category of Gameplay as part of the Narrativized interface, while combining Character and Emotion, as they are closely connected in *Detroit: Become Human*.

3.1 Narrative arc

In accordance with Bordwell & Thompson [6] and Marie-Laure Ryan [36], Bizzochi and Tanenbaum [5:3] define the Narrative arc as the "logical sequencing of narrative events in time and space."

3.1.1 Framing of the game

We argue that the dramaturgical depth and the moral biases of the narrative arc are already established well before the game starts. When compiling the shaders, an unskippable process, the game shows different android models with short descriptions like "works 24 hours a day, 7 days a week". Androids, anthropomorphic beings, are already introduced as objects, or even slaves, as they do not have working times. The depth and importance of choices is even more pronounced when choosing the difficulty, which is divided into "Experienced" and "Casual". "Experienced" is described as: "I want immersive gameplay with advanced controls, a fair challenge,

where mistakes can mean losing a character." By making clear that characters can die, every decision becomes grave. Lastly, the female narrator states right before the start of the game: "Don't forget: this is not just a story. This is our future." With these intradiegetic and extradiegetic dispositions, the game begins.

3.1.2 Cultural biases

The game actively plays with historical, genre-specific and evidence-based tropes. Connor reminds us of the noir-inspired rookie detective in contemporary police series, who forms a bond with his more seasoned partner (such as in Fincher's 1995 movie *Seven* [16]); Kara is a woman trapped in an abusive relationship, who emancipates herself because of her motherly feelings for the girl Alice; and Markus' story resembles that of a slave who then becomes a revolutionary. These tropes already come with a clear moral understanding that is rooted in most western historical education. The fact that no elaborate introduction to the core concepts is needed, adds, in our view, to the imaginative immersion, making it easier to dive into the narrative complexity of the story itself. Not much context is necessary to understand the situation of the protagonists and it can be deduced that many ethical choices are based upon the mindset that comes with teaching about such stereotypes, deeply rooted in players' understanding of the world.

3.2 Storyworld

The storyworld is, in Salen and Zimmerman's words, a "space of possibilities" [37]. It is the narrative space in which the player can act through a character or avatar. Every chapter in *Detroit: Become Human* is situated in a different area of the futuristic city of Detroit. The areas are very small, often situated within houses, but are, as a trade-off for the lack of space, extremely detailed. This density has been balanced by affording a slow pace for exploration: characters often walk rather than run and environments are generally quite static, without major changes occurring without players' input. Players are therefore given the possibility to explore in detail the informationally dense storyworlds, also through attentional focusses (marked with an eye-shaped icon) enabled in specific areas. Through these design decisions, players can understand the complex ecological narrative organization, heavily employed in the game.

3.2.1 Level and spatial design - "the ethical path"

Paths are arranged within game levels so that players are facilitated in gathering knowledge for the upcoming ethical choices, which is done by interacting with objects or characters. Each level, and each clue within it, works like an argument which slowly builds up for the increased gravity of later decisions, using a number of direct and indirect communication vehicles, sometimes rooted in empathetic understanding of characters' emotions, situational context, or pre-formed stereotypical knowledge, other times through dialogues and text-reading. In order to miss part of this argumentation, interactions must be actively avoided, when possible. In the beginning of the first chapter, for example, in front of an illuminated aquarium in an the otherwise dark room, lies a fish. The fish confronts the player with the first ethical choice: when interacting with it, Connor can either put the fish back in the aquarium or let it lie on the floor and die. Players make their choice by mimicking the movements of the character: press up to leave, down to knee and save the fish. This mimicking adds to the gameflow of that very moment. We argue that the player feels an urge to change something in the gameworld instead of interpassively watching things change, therefore it is more likely that the fish is being saved, making the ethical choice the default choice of that scene. And indeed, the game rewards the player with a short

cutscene of Connor and the fish as well as with a text in the right corner, stating that a "software anomaly" was detected within Connor. The game here also hints to a conflict resulting from humane behavior. The rest of the chapter, set in an apartment, is designed so that the different hints scattered across the rooms elicit empathy for the situation of the deviant android that now keeps a girl as a hostage. Following the ethical path feels natural due to the narrative and interaction design (imaginative immersion) as well as the movement-like controls (gameflow), making it the preferred playing of the scene: if players develop empathy towards the android, they can master the final confrontation with him without losing Connor.

3.3 Character and Emotion

The category of Character not only refers to player characters, but also to non-player characters alike. *Detroit: Become Human* provides the player with three different characters, namely Connor, Kara and Markus. Each of them is only playable in about one third of the chapters, and their paths are often intertwined. They have, due to their distinctive backgrounds, jobs and psychology, a narrative credibility [1:355–357], which most players, we argue, try to act upon. We combine the aspect of Emotion with that of Character because, due to the complexity of the characters, they are prone to elicit emotions. We argue that the story is primarily character-driven, oscillating between acting within the character and witnessing the character [33]. The game's soundtrack reveals that all tracks are character-specific. Livingstone and Brown [29] regard music as being the key to emotional reactions from the player.

3.3.1 Character design

Detroit: Become Human has a very distinctive narrative design that makes clear who deserves empathy and therefore is easier to agree with. Androids are framed as being humane and beautiful, while remaining fragile in their victimized position. Humans are unpredictable, greedy and flawed. Following the needs and desires of androids appears to be morally right. This theme is introduced in the very first scene by showing Connor, who has well-proportioned traits and big, dreamy eyes, looking at floor numbers in an elevator as if he were nervous, thus showing weakness that elicits empathy. We later hear in the news that Connor is the very first android being employed as a detective, which explains his behavior. Among the first humans we encounter is a woman who calls Connor a "thing" and screams "Why aren't you sending a real person?". The same scenario can be observed in most other chapters. Kara is owned by Todd, a male, middle-aged drug addict, who is violent towards his own daughter Alice, and who treats Kara like an electronic appliance. In Markus' chapter, the closest person to him, a painter, is framed as being caring, while all other humans are greedy and malicious like the painter's son, whose accusations lead to Markus being charged with murder. Very different are also the environments in which the three androids are presented to the players: Connor is shown in a crime scene where he is in a position of central importance; Kara finds herself in a shop, waiting for her owner to pick her up after being repaired; Markus is surrounded by the quietness of a park, but soon proceeds to the noise of a public square with protesters and preachers. The three spatial environments in which the protagonists are presented necessarily elicit different attitudes towards them: when controlling Connor, players expect to see and perform as a professional; with Kara comes a sense of subjection and fragility; Markus evokes a sense of injustice and inequality. The characters in the game develop due to their interpersonal relationships with the respective NPCs of their storyline and between each other, such as with Kara's protective role towards Alice. The protagonists of *Detroit: Become Human* fulfill several points that Schrier deems important for ethical gameplay, such as

relationships between characters and the possibility to change perspective, which is here met by playing three characters as well as by interacting with NPCs that have their own views and ideologies.

3.3.2 Rewarding the ethical

The encounter with the fish in the first chapter already established that a certain set of ethics is preferred. Saving the fish rewards the player with a short cutscene, while exploring the depths of other characters' dilemmas like that of the android in the first chapter or that of Alice in the fourth, leads to the stories' respective "good" endings. By "good" we identify those where no character dies or is severely hurt. This is made very clear in the first chapter, when the likelihood of success of the mission is explicitly shown as a number that rises when interacting with clues. Acting ethically in the game's moral framework leads to positive endings. This is demonstrated when successfully negotiating with Daniel, an android that is holding a child hostage in the first chapter: even though Daniel is shot as soon as the hostage is freed, the alternatives are either that the girl or Connor die by falling off the skyscraper or by being shot. However, in this case, succeeding is not entirely positive: the shooting of Daniel is staged brutally: The camera lingers over the shoulder of the sniper who kills the deviant, framing the player as responsible, three bullets hit the android in slow motion, leading to blood splashing while the player is doomed to observe this without being able to act. The android dies after saying "You lied to me, Connor" and again the "software anomaly detected" message is shown while the girl cries. This conveys to the player that every unethical choice might lead to loss and bloodshed, while, as shown before, choices that include respect and empathy towards each other are rewarded. The best ending here, as described above, shows the nuanced ethics within the game world, and this makes the player aware of the inequalities between humans and androids.

3.4 Narrativized interface and gameplay

The narrativized interface is what connects the story and the interactive aspect of games [4]. For us, this also includes the broad category of gameplay.

3.4.1 Narrativized interface

The game presents both homodiegetic and heterodiegetic user interfaces during gameplay [cf. 3] and even though the former have a stronger narrativization, it is the most heterodiegetic ones that carry information capable of directing players' choice-making. Indeed, as already mentioned, an overlayed window shows fluctuation in a number of parameters and thus nudges players towards certain directions or decisions in dialogues. For example, the results of Connor's negotiations with Daniel are shown via a heterodiegetic interface showing the "trust" gained, in percentage: Getting to 100% concludes the mission in the most ethically acceptable way. In a similar fashion, spatial exploration is rewarded by showing the player lockers unlocking or notes acknowledging the discovery of new interactions: The more a player explores the informationally rich environment, the more ethical decisions will be based on proper understanding of the underlying narratives. Therefore, we believe that the interfaces rewarding more informed players are a way of nudging them towards certain ethical decisions.

3.4.2 Iteration

In accordance with Schrier's claim that ethical gameplay is possible if iterations of the same events are possible, *Detroit: Become Human* offers iterations on different levels. The game offers a high amount of replayability,

since it distinguishes between endings that are perceived as "good" and "bad" by the community. "Good endings" include the survival of all characters, Connor sympathizing with the deviants, Markus not giving in to rage, Connor becoming friends with Hank and Kara fleeing with Alice. The game, however, is iterative on several levels. The flowchart in the game shows different paths branching within chapters, that already hint towards undiscovered options. There are key moments marked with a lock symbol, as well as the maximum high score, which lets the player know how much of the chapter they have explored. Each chapter can be played from several checkpoints (at least from two, the start and a 'save point' in the middle). While the density of information, especially regarding ethical choices, is high, the segmentation into chapters makes it easier to come to decisions within the given moment. We would argue that this careful balance of information and gravity adds to the imaginative immersion.

4 CONCLUSION

Including ethical reflections in video games has been identified as a good practice by researchers, some of whom even deem it necessary in our contemporary society. Due to their participative and performative nature, and to the cognitive and active agency they enable, electronic games give players a framework that allow critical reflections and a moral benchmark. This is also afforded by imaginative immersion, with which players are given the possibility of facing ethical choices by embodying different actors, and enhanced by the opportunity to replay the same scenes to evaluate different results of the same situation when changing the moral attitude.

Adding further to the advisability of including ethics in video games is the success of those titles that already feature it, like our case study of Quantic Dream's *Detroit: Become Human*. Our analysis of the markers and of the framing of moral choices in this game shows that ethics could be included on different levels in games: the storyworld, with the design of levels and the construction of the spatial environments, the characters design and the emotions they elicit, the rewarding mechanisms, and even the narrativized interfaces and gameplay mechanics and affordances. All these elements could be similarly employed in a number of other games to raise moral reflections and critical thinking over important ethical issues, which could both determine a greater success for a title and deepen its message. This could be particularly useful in first person shooters and related genres, which traditionally disregard such issues in favor of a dynamic gameflow. We have shown that ethical thinking and gameflow are indeed not necessarily in a conflicting position, but rather that they can reinforce each other.

Our analysis also pins a number of ways in which developers can nudge players towards certain ethics, through complex expressive means. We have shown how, in the interplay of different semiotic modes and media, the design of a single layer of information can impact the dynamics of choices in more-than-combinatorial ways. Our complex-systemic approach allows us to regard all elements as potentially productive of systemic change, in a butterfly effect [cf. 21]. We have also elaborated on the multiple ways of designing default choices through the use of visual, auditive and narrative clues, as well as choices in gameplay design, which reward or even facilitate a certain way of acting – showing empathy, in our case - within the game.

All these affordances are to be carefully considered when designing a game, for including ethical thinking is likely to improve players' experiences, games replayability, narrative depth, and societal impact of video games.

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