

Rise of the machines -

Moral decisions in Detroit Become Human

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### Highlights

FLASHLIGHT: Moral decisions in video games have become increasingly popular. This work in progress project applies established theories on mediated morality (e.g., MIME; Tamborini, 2011) to the cutting-edge video game *Detroit: Become Human*. The in the game implemented feature of displaying world statistics provides valuable information on how players engage in meaningful moral decision within a virtual world. Statistics will be aggregated and analyzed in relation to the available decision time span, the involved characters and different moral foundations.

*Keywords:* moral psychology, decision making, ethically notable games, dilemmas

### Moral decisions in Detroit Become Human

From complex multi-player online-games to casual gaming on the phone – the most common virtual world that younger generations spend a significant time in are video games (Entertainment Software Association, 2018). Past research on gaming has mainly focused on why users are engaging in virtual violence and its related effects (Anderson & Bushman, 2001; Anderson et al., 2010; Ferguson, 2007). However, only few studies tried to disentangle the relationship between virtual violence and its underlying morality (Hartmann & Vorderer, 2010; Krcmar & Eden, 2017). The perception of virtual violence or, in a broader sense, immoral or moral acts are known to be highly dependent on the particular context of the respective game situation (Consalvo, 2009). For example, the controversial and infamous ‘No Russian’ mission in *Call of Duty: Modern Warfare 2*, in which the player could kill civilians, was intentionally designed to invert otherwise meaningless killing into an emotional and reflective experience. And although meaningful gaming sequences can already be found in early video games, the industry seems to attach growing importance on implementing eudaimonic playing (Oliver et al., 2015). Current titles, such as *Life is Strange 2*, focus mainly on engaging the player in a story built upon the player’s own narrative decisions that are often of moral nature. The developers of *Assassin’s Creed Odyssey* established a morally gray environment in which the player is sometimes faced with basal ethical dilemmas with consequences that have both short- and long-term effects. And even in the action game *Marvel’s Spiderman* the grand finale thematizes the dilemma of Peter Parker either saving his aunt or the rest of the population.

This flashlight analyzes specifically moral decisions in the recently published *Detroit: Become Human*. This interactive drama offers a wide variety of moral decisions each with large-scale consequences resulting in a highly branched narration tree.

### **Detroit Become Human**

The narration of the game is set in a near-future version of Detroit in the year 2038. Human-like androids have been established on the mass market and serve for example as mechanics, soldiers, service providers or sex workers, who take over dangerous, tedious or unpleasant tasks. But the public opinion on androids is divided, because besides the advantages, unemployment has increased massively. The user alternately plays the android characters Kara, Markus and Connor (see Figure 1). Kara is a housekeeper android working for Todd, an unemployed drug addict who is violent against her and his little daughter Alice. As Todd has another outburst, Kara decides to oppose her programming of serving Todd and becomes a deviant, i.e. an android with full autonomy, free will and feelings. Kara and Alice try to flee together from Todd and later from Detroit to Canada, where no android laws have been enacted yet. Markus is a caretaker android for Carl, a famous and wealthy painter who treats Markus like a human and encourages him to develop own thoughts and personality. As Carl is attacked by his son, Markus becomes deviant, later joins other underground deviants and becomes their leader to initiate an android revolution. Connor is an advanced prototype of an investigation android who is sent to the Detroit Police Department by CyberLife, the company that produces androids, to assist in cases involving deviant androids. In the course of his missions he starts doubting his beliefs and his programming becomes unstable. During a key scene he (i.e. the player) must decide whether he wants to stay loyal to his creator or join the deviant's revolution.

The characters are played in a third person perspective through 32 chapters. The overall course of the story is likely to be substantially different for each player as decisions and responses in quick time events have severe consequences with sometimes cross-chapter impacts. After the completion of a chapter a flowchart displays the current decision path together with the

omitted options. The flowchart can also display aggregated decision behavior of all player's worldwide who have already played the respective chapter and connected to the PlayStation network.

### **Data Preparation**

Already ten weeks after the release of *Detroit: Become Human* in May 2018, 1.5 million players had spent 20 million hours within the game (Morgans, 2018). Although I cannot assume that all players provided their data in the world statistics, it is safe to expect that the size of the sample is more than sufficient<sup>1</sup>. To access the statistics of all decision paths, every possible outcome had to be played at least once. This is an extremely complex endeavor, because chapters have three or more endings and entire sections of the game cannot be played without certain prerequisites from far earlier storylines. By now I completed almost 70% of all the chapters and the remaining 30% are completed more than half. After total completion of all story branches three independent and trained coders will screen all decisions and decide whether they are ethically notable or not. Ethically notable in-game situations are defined in line with Zagal (2009) as “situations in which their [the players’] understanding of an ethical system is challenged, or by creating moral tension between player’s goals and those posed by the narrative and the gameplay of a game” (p. 1). Additionally, coders will note how many options the respective decision has, which character (Kara, Markus or Connor) has to make the decision, which other characters are present or directly affected by the decision (human vs. android) and whether the decision has to be made under time pressure. After merging relevant decisions, coders will assign each moral situation a moral foundation of the MIME (Model of Intuitive Morality and Exemplars; Tamborini, 2011). The MIME includes the five mental modules,

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<sup>1</sup> I am in contact with the developing studio of *Detroit: Become Human*, who might be willing to share the exact numbers with me. Unfortunately, at this time I have not received any information, yet.

harm/care (related to empathy and violence), fairness/reciprocity (related to justice considerations), loyalty (related to common good and in-group behavior), authority/respect (related to dominance hierarchies) and purity (related to sanctity and contamination)(Haidt, 2001; Tamborini, 2011). I decided to add the sometimes proposed sixth foundation of liberty/oppression (related to domination and coercion)(Iyer, Koleva, Graham, Ditto, & Haidt, 2012), because it appears specifically relevant to the story of the game. Analyses of the coded data will then display prevalence of moral decisions in general, prevalence of each moral foundation as well as aggregated decision behavior for options that either violate or uphold moral believes. Analyses will also test the following hypothesis:

H1: A higher percentage of players choose prosocial options (upholding moral believes).

H2: The decision behavior varies across characters (Kara vs. Markus vs. Connor).

H3: The decision behavior varies depending on time constraints (time limit vs. no time limit).

As this in an ongoing project, I unfortunately cannot display any analyses yet. However, I am confident that I will present the results at the upcoming ICA conference. As a preview example, one of the first possible decisions within the game will be introduced here: Connor, the investigator android, enters a hostage scene where a deviant is threatening a young girl. Before taking action, Connor must examine the crime scene and can find an exotic fish floundering in the remains of a shattered aquarium. The player can then decide to either rescue the fish or leave it on the floor (see Figure 3). World statistics show that 70% of the players examined the fish, divided into 64% who saved it and 6% who left it (updated August 10, 2018).

### **Discussion**

Investigating decision behavior as in the case of *Detroit: Become Human* and aggregating it in a theoretically driven process is a promising approach to analyze virtual moral decision

making and its circumstances. However, it has to be stated that the investigated decisions are only related to one specific game. Results and conclusions cannot be transferred directly to other video game scenarios. Additionally, it should be stated that *Detroit: Become Human* is an exceptional case as the player engages in the story of android, i.e. non-human, characters. It can be argued that this has an effect on moral engagement and decision making. However, the graphical and narrative depiction of the androids permits the conclusion that they serve as socially and humanly perceived agents equal to other “real” human characters in the game. Furthermore, I have no insight in the processing method of the aggregating algorithm that produces the world statistics. Although I am in contact with Quantic Dream, the developing studio of *Detroit: Become Human*, it is unknown to me how many players (in absolute numbers) are associated with the world statistics and how players who play chapters more than once contribute to the data. Also, the percentages display solely decision behavior regardless of the underlying motivation, intention or other factors (e.g. personality) of the players. Additionally, it is plausible that games like *Detroit: Become Human* attract a certain kind of video players, which might consolidate itself in the statistics. Further research should therefore investigate moral decision making across various games and gaming genres not only in a descriptive manner, but also within an experimental setup.

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Figures

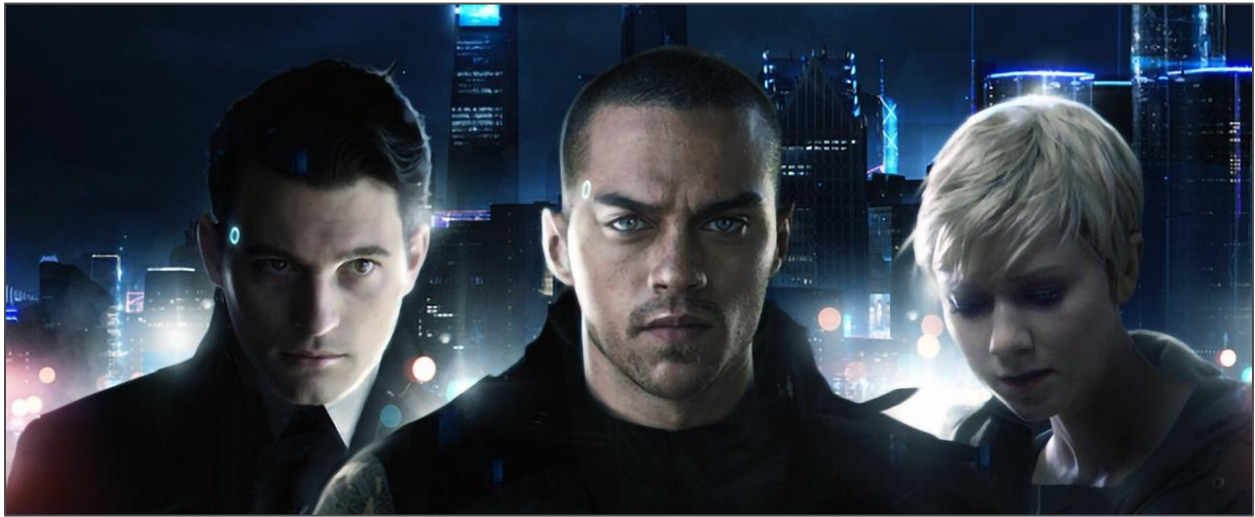


Figure 1. Main characters of *Detroit: Become Human*. From left to right: Connor, Markus and Kara. Retrieved October 19, 2018 from <http://www.quanticroam.com/en/#!/en/news>.

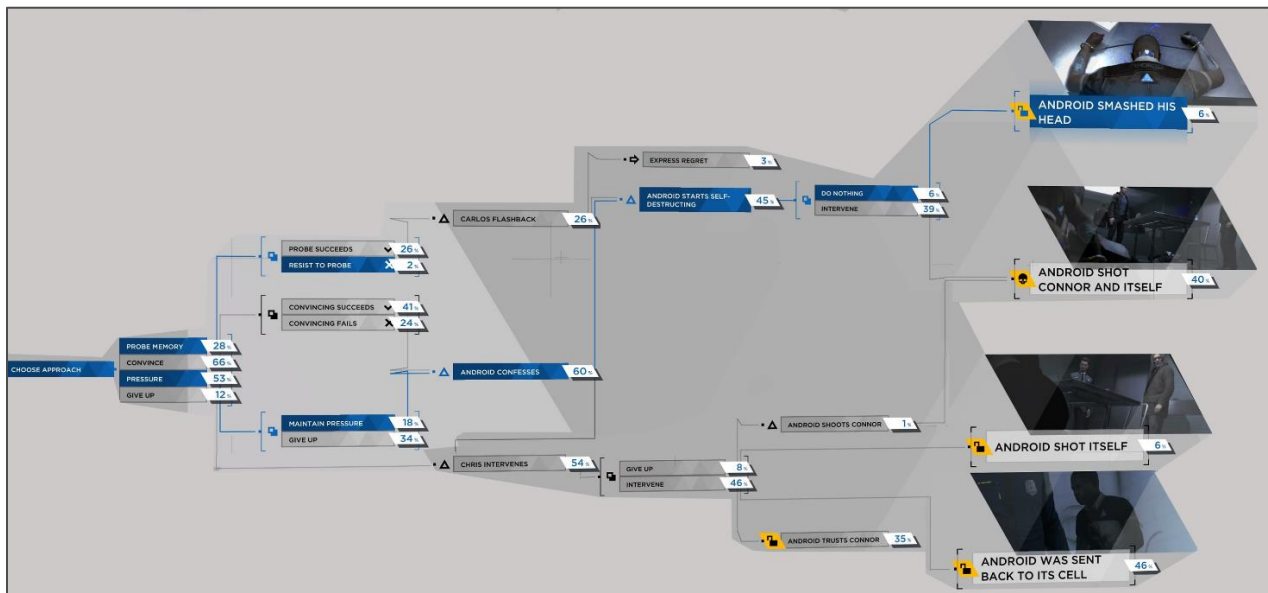


Figure 2. Extract of the flowchart of chapter 9 “The Interrogation” in *Detroit: Become Human*. Blue boxes highlight the currently activated decision path, whereas grey boxes display options that have not been chosen during the current play through. The yellow skull indicates that one of the main characters has passed and yellow locks mark a cross-chapter impact of the respective

incident. Percentages display the worldwide decision behavior of players who contributed their data through the PlayStation network. Retrieved August 24, 2018 from the university's PlayStation account.



Figure 3. Screenshots of chapter 1 “The Hostage” in *Detroit: Become Human*. Connor examines the fish and he (the player) can decide to leave or to save it.