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Two Ways through the Looking Glass. Game Design as an Expression of Philosophy of Action

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Introduction: Agency, Character, and Possibilities for Action

When we say that we act in digital games, we are implicitly aware of two general relativizations of such a statement: First, we know that, as players, we cannot act directly within a game, but act rather upon it by manipulating an interface, no matter how internalized or naturalized it might be. Second, we understand that the range of our actions is strictly limited to what is coded as possible into the game engine, and that the same is true for the effects of our actions.

Actions performed in digital games tend to be contingent upon a digital agent that stands in for the player, if those actions are anthropomorphized and experientially situated in a gameworld. As explored in writing on the player-avatar-relationship (e.g. Linderoth 2005; Klevjer 2012), the central, playable character of avatar-based games is a very complex phenomenon: At the very least, there is a marked difference between the avatar as the "prosthetic extension" (Klevjer 2012, 1) of the player's will, or, put differently, the focal point of her agency (Wardrip-Fruin et al. 2009) in the gameworld, and the pre-scripted personality, behavior, and dialogue of the protagonist of a game's fiction. Daniel Vella has explored this tense relationship most recently and at the greatest depth so far, combining those two dimensions in the term 'playable figure' to better be able to distinguish between the ludically functional avatar and the fictional player-character (Vella 2015: 213-224).

Every bit as complex is the connected concept of agency. The still most current definition of the concept is Janet Murray's, who defines agency as "the satisfying power to take meaningful action and see the results of our decisions and choices" (Murray 1997: 126). This definition has inspired a long and fruitful debate in the field, which has, however, been greatly preoccupied with studying illusory (MacCallum-Stewart and Parsler 2007), malfunctioning (Wardrip-Fruin et al. 2009; Johnson 2015), or withheld (Habel and Kooyman 2014) agency and suggestions for 'better' game design. Wardrip-Fruin et al.'s (2009) compilation and synthesis of research into agency is, for example, interested in facilitating partially automated game design tools, which gives their argument a slant toward the mechanistic and functional end of the argumentative spectrum. They define "agency as a phenomenon, involving both the game and the player, that occurs when the actions players desire are among those they can take *as supported by an underlying computational model*" (Wardrip-Fruin et al. 2009: 7, emphasis in the original).

One interesting argumentative move Wardrip-Fruin et al. make in their discussion of the early stages of discussions of the concept is to juxtapose Murray's definition with game designer Doug Church's "Formal Abstract Design Tools" (1999). Given that they developed their concepts independently of one another, the similarities between Church's and Murray's concepts are striking. There are, however, some noteworthy differences, which I want to show here are quite meaningful when considered in terms of philosophical thinking about action.

Church's definitions are rather ad-hoc and pragmatic. He understands intention as an effect of being confronted with ludic goals and a coherent virtual world: "This process of accumulating goals, understanding the world, making a plan and then acting on it, is a powerful means to get the player invested and involved. We'll call this 'intention'" (Church 1999). What Church emphasizes is that intention in his sense is not one type of decision-making, but rather everything "from a quick plan to cross a river to a multi-step plan to solve a huge mystery" (Church 1999). Because of the reductionist nature of simulations, it is necessary that the player is offered a "perceivable consequence", which is, however, not Murray's "results of decisions and choices" or the desired outcome of the intention , but simply a "clear reaction from the game world to the action of the player" (Church 1999).

What I want to do in the following is to discuss Murray's and Church's concepts as roughly equivalent to, respectively, consequentialist (Goldman 1970, Davidson 1980) and intentionalist (Anscombe 2000, Wilson 1989, Ginet 1990) positions in the philosophy of action. Murray emphasizes power, meaning, and results, thus characterizing the relationship between player and gameworld through an ability to cause desired effects. To her, player actions leave a tangible trace in form of changes in the gameworld and are the result of decisions and choices. Church includes perceivable consequences in his view, too, yet puts them on the same level of importance as the intentions of the player. As decision theory has compellingly argued (Resnick 1987, 12), intentions and decisions are not identical; many actions are not based in choices. Church's emphasis of intentionality aligns him with theories that stress the relevance of (ineffectively) trying to act for theories of action (O'Shaugnessy 1973, Cleveland 1997).

The focus of this paper is neither a qualitative argument for which conception of agency is correct or even better, nor is it to deeply engage with the underlying philosophical positions. What I want to demonstrate is, that the subtle difference between Murray's and Church's understanding of actions in computer games is paralleled in two 'schools' of game design that developed in the 1990s in the (long defunct) American game development studio Looking Glass.

The Looking Glass connection is motivated twofold. Most importantly, Doug Church was one of the creative key figures of Looking Glass. Furthermore, the signature game genre of the studio is what Harvey Spector, the lead designer of many of their most influential games, calls "immersive simulations" (Spector 2000), and which has become known among fans as "451 games", a genre-blending mixture of First-Person-Shooter and RPG. Established in PC games such as *System Shock* (Looking Glass Studios/Origin 1994) and *Deus Ex* (Ion Storm/Eidos 2000), these games present coherent worlds endangered by complex villains, makes the player's avatar the protagonist of a plot about avoiding this danger, and (most importantly) give the player different options to overcome the various obstacles of the game. The recurring code "451" has developed from an oblique allusion to Ray Bradbury's Science-Fiction classic as a signifier of a more ambitious and sophisticated design philosophy for digital games to a signpost of a tradition of such games, in which the consequences of player actions have traditionally conceived of as more impactful than in other, more linear games.

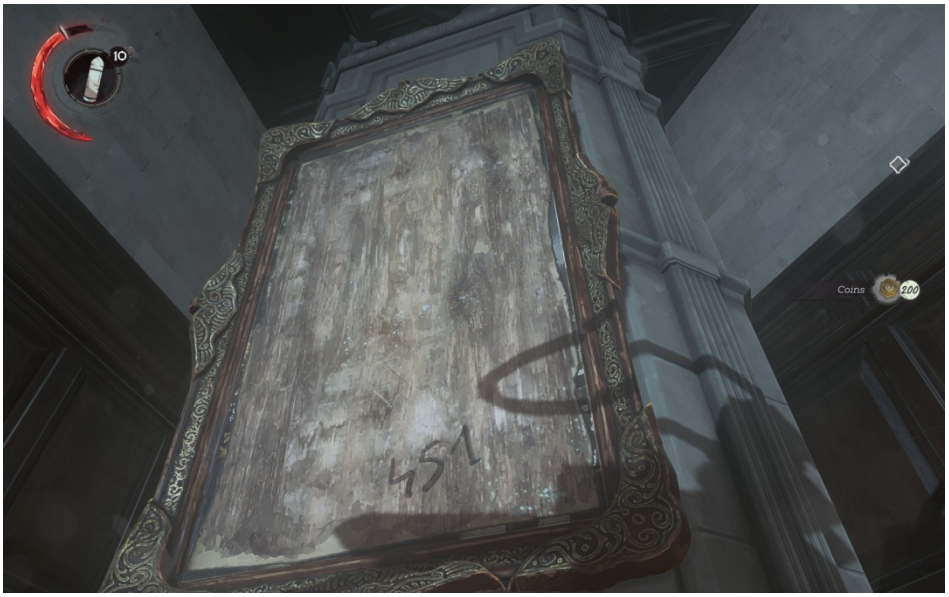

Fig. 1: 451 as the first safe combination in Dishonored 2

In the following, I will demonstrate the differences in game design in two of the most recent examples of "immersive simulations", both developed by Arcane Studios, *Dishonored 2* and *Prey*. *Dishonored 2* follows the traditions of *Thief: The Dark Project* (Looking Glass Studios/Eidos 1998) and *Deus Ex* insofar as the player is confronted constantly with the concept of choice and consequence. Before actual gameplay commences, the player needs to choose one of two inherently different playable characters, and the game structure branches out into a number of significantly different (and equally ambivalent) endings that result from both specific choices and the player's overall playstyle. Through this, *Dishonored 2* emphasizes causal alternative and effectual difference (Schaffer 2005, 298) very strongly, and thus valorizes the outcome of actions. *Prey*, on the other hand, offers a similar choice between two playable characters, yet minimizes the difference between them to the point of indifference. Throughout the campaign, the player can save numerous non-player characters, yet their ultimate chances for survival are constantly disputed, calling the effects of the player's actions into question. While the game offers several endings, it codes one clearly as ideal, and has all endings followed by an epilogue that characterizes all prior events as a VR-simulation. Thus, *Prey* gives the player countless motivations that fuel intentions which lead to ineffective actions without palpable consequences. As such, the two examples – products of the same genre and even the same developers – are representative of game design patterns paralleling opposing philosophical positions on action.

A Brief Genre History

The suggestion that the two games discussed here are prototypical for two schools within a tradition warrants a brief consideration of genre history. While they exhibit a number of important traits of both computer roleplaying games (CRPGs) and First-Person Shooters, studies of these genres tend to either ignore them (Voorhees, Call and Whitlock (eds) 2012), stress their "hybrid nature" (Call 2010: 138), or define them as a genre of their own: "Even with the most cursory of glances, complex exploratory affordance games like *S.T.A.L.K.E.R.* or *Thief: Deadly Shadows* (Ion Storm 2004) clearly belong in a different class" (Pinchbeck 2013: 154).

What is surprising about this consensus is that the distinct genre can be traced back to one development studio which not only created the genre defining game, but was directly or indirectly (through the further work of its key creatives) responsible for producing games in the genre for the first fifteen years of its existence. Located in Cambridge, MA, Looking Glass started out as an offshoot of Origin Systems, a studio that was instrumental in defining both the single-player CRPG and the Massively-Multiplayer Online Role-Playing Game. After pioneering the First-Person Open-World game with *Ultima Underworld* (BlueSky Software/Origin 1992) under their original name BlueSky Software, Looking Glass entered into an "arms race" (Mahardy 2015) with id games, intent on taking fast-paced gameplay from the simplicity of *Wolfenstein 3D* (id Software/Apogee 1992) and *Doom* (id Software/GT Interactive 1993) to something more complex and sophisticated.

Doug Church, Warren Spector, Ken Levine, Harvey Smith, and other producers, programmers, and designers initiated a paradigm shift in the early *System Shock*- and *Thief*-games. Released between 1994 and 2000, they integrate densely written narrative with the gameplay action, give players different feasible solutions for gameworld problems, and create the impression that the player's actions leave a meaningful impact on the gameworld. *Dishonored 2* for example underlines this design principle in-game. The first loading screen of the game has a hint that reads: "There is no 'best' way to play: Focus on combat or stealth, play brutally or ghostlike – the world will react" (Dishonored 2, 2016).

Ironically, it was *Deus Ex* (Ion Storm/Eidos 2000), the first game developed after the financial breakdown of Looking Glass, that perfected these principles and added two features that are now closely associated with the "immersive simulations" (Spector 2000), a branching narrative and the option to play (mostly) non-violently. Because of the lasting influence of *Deus Ex* in terms of complexity and scope, the individual profiles of *System Shock* and *Thief* are easily overlooked. Both have inspired or been in a creative tension with different games. *System Shock* unmistakably left its influence on science fiction themed action games with horror elements such as *Doom3* (id Software/Activision 2004) and *Dead Space* (Visceral Games/Electronic Arts 2008), and was re-imagined in a quite radical fashion in the immensely successful *Bioshock* (Irrational Games/2K Games 2007). *Thief*, on the other hand, has been in conceptual and design 'dialogues' with the third-person sneaking games of the *Metal Gear Solid* (Kojima Productions/Konami 1998-2015), *Splinter Cell* (Ubisoft, 2002-2013), and *Hitman* series' (IO Interactive/Eidos, Square Enix 2000-2016), and has been the unmistakable inspiration for *Dishonored* (Arcane Studios/Bethesda Softworks 2012).

An obvious explanation for the different legacies both games have fostered would be to reduce the differences to the obvious factors: their narratives are situated in different fictional genres, and the gameplay is consequently oriented towards sneaking and exploration in *Thief*, while *System Shock* always includes at least a certain degree of combat. A distinction I cannot support without a longer historical argument, yet which I would like to suggest tentatively here is that the two original "immersive simulations" valorize consequence and intentions in different ways. There is, however, no straight line to be drawn from them to the most recent games, at least not without considering at length the additions to the genre introduced by *Deus Ex*.

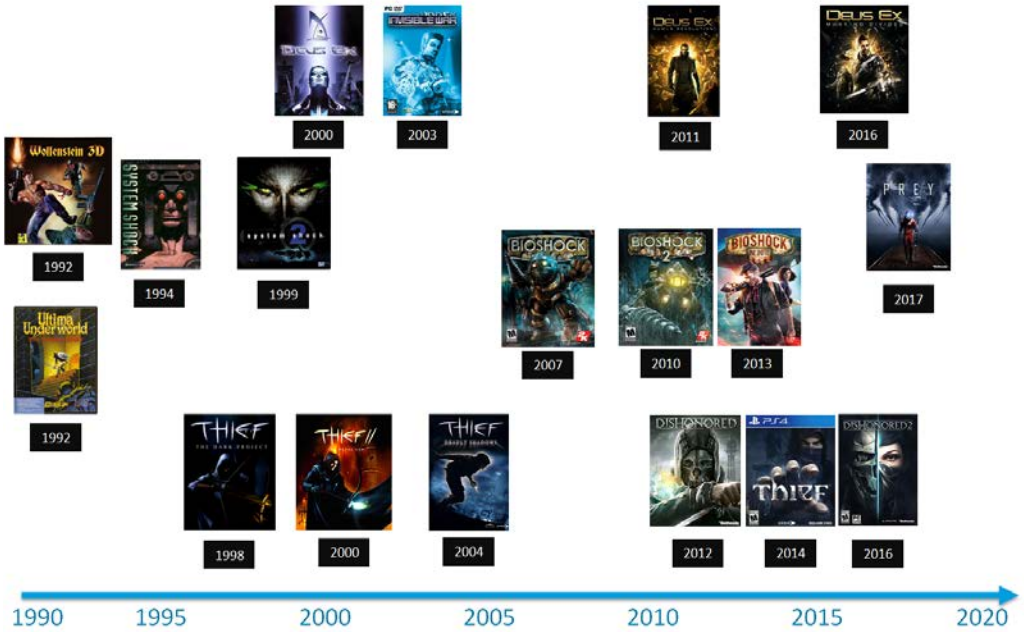

Fig. 2: A genealogy of 'immersive simulation' games and their forebears

Instead of attempting here to present the historical dimension of the issue, I will argue that Dishonored 2 and Prey are suffused in their distinct game design by the same consequentialist and intentionalist thinking as Murray's and Church's theories.

Dishonored 2: All About Consequences

*Dishonored 2*starts with a choice between two player characters. Corvo Attano is the recurring protagonist of the first game – a middle-aged man –, while Emily Kaldwin is his daughter – a young woman in her twenties. The player needs to choose between them right after the introductory cutscene, and as with the different playstyles, the game explicitly spells out the difference between the characters. On the choice-screen, Corvo is described as "Legendary Royal Protector to the Empress, and figure of infamy from the time of the Rat Plague", while Emily's description reads "Ruler of the Empire of the Isles, trained in stealth and combat by her father, Corvo Attano" (*Dishonored 2*, 2016). I would argue that these short characterizations suggest different playstyles, even if only in a very subtle manner: While with Emily, it is stressed that she has been trained in both stealth and combat, Corvo is characterized by being legendary and notorious, which implies that the canonical version of the different possible plots (and playstyles) of *Dishonored* (Arcane Studios/Bethesda Softworks 2012) is one in which Corvo resorted to violence, thus indicating he might do so again. This slight difference between the character descriptions is mirrored in their abilities and the respective descriptions.

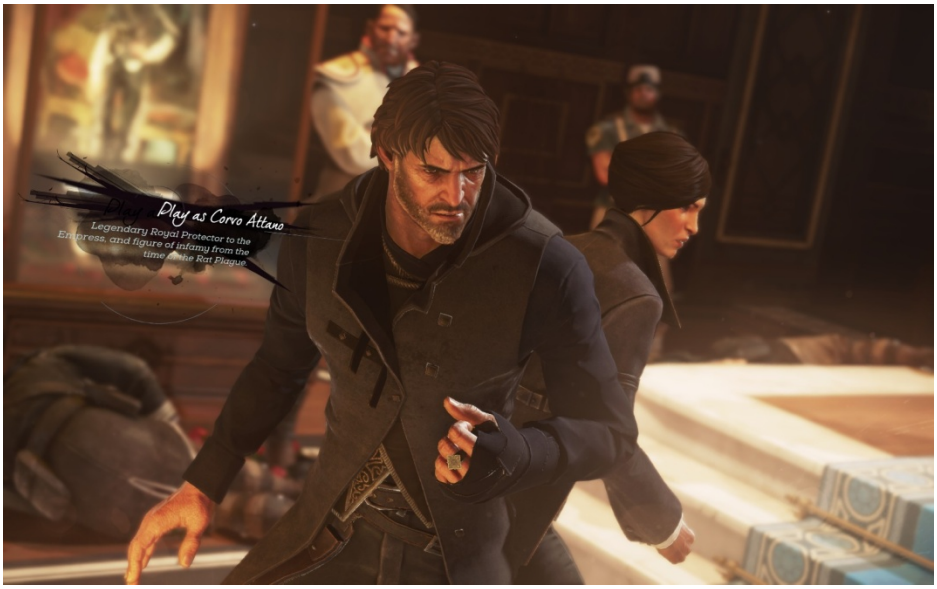

Fig. 3: The character selection screen in Dishonored 2

The different player characters act as individuated focalizers: The player will see the world of *Dishonored 2* through the eyes of either Emily Kaldwin or Corvo Attano. Again, the game emphasizes this difference by making both of them narrators, at least in a certain sense of the concept. Both are often heard reflecting on characters and places in the gameworld. As these reflections sometimes happen in moments where the avatar is hidden without drawing the attention of nearby enemies, they seem to be rather thoughts than anything uttered aloud. This makes the reflections of Corvo and Emily quite similar to interior monologue or stream of consciousness, and as such, they both differentiate the characters and give highly personal perspectives on the surrounding world. A simple example is that the majority of the events take place in Karnaca, a southern city which Emily visits for the first time, while Corvo was born there, giving the city very different emotional significance to both.

The effect of the initial choice between characters carries over to their avatar dimension and the affordances they bring with them. While some of Corvo's and Emily's abilities are equivalent or even identical, Corvo's generally lend themselves slightly more towards efficiency at any cost and Emily's more towards stealth and subterfuge. The arguably central mechanic of the *Dishonored* series (in the sense that it sets them apart from other games in the 'immersive simulation' genre) is the magical ability to move with superhuman speed over short distances. Corvo still uses his ability to 'blink', i.e. move instantaneously, established in the first game. While Emily's ability of 'far reach' is similar, it is far from identical. Whereas Corvo teleports, Emily travels at very high speed, which means that she may still draw attention to her movement between two hiding spots. Furthermore, both avatar's abilities can be upgraded, and the upgrade paths of these analogous abilities are very different, not only in terms of effect, but also in terms of cost and structure.

The feedback given by the game about consequences of actions through the interface is exceedingly clear. At the end of each mission, a comprehensive debriefing details the avatar's crucial actions and the environments reactions. Counting the number of fatalities as well as the alarms caused by drawing attention to her actions, the player's performance is quantified and coded in a matrix with the axes lethal – nonlethal and stealth – assault. While it is possible to cause accidental deaths (by e.g. leaving an unconscious enemy to close to predators or even water where they might drown), at least with regard to

the mission parameters, *Dishonored 2* gives constant and precise feedback about the alternatives for action and their consequences. Whenever a mission goal with more than one possible outcome is updated, this is signaled in the games HUD and explicitly spelled out in the journal's mission screen, detailing not only the different ways to achieve the different outcomes, but even highlighting the most non-violent option and referring to its positive effect of the world's chaos level. Rising chaos has direct influence on the state of the gameworld throughout play. Locked-off apartments or side-streets as a consequence of increasing infestation with vermin are much less direct manifestations of the player's actions than the interface, yet they regardless act as indices in Fernandez-Vára's (2011) sense, i.e. as signifiers of acts of environmental storytelling.

Dishonored 2 crystallizes its message of consequential nature of actions in its various endings, all of which are clearly coded as direct consequences of actions of the player. Even in similar games like *Deus Ex*, the closure of the plot is determined by a decision the player makes in the end of the game. In *Dishonored 2*, on the other hand, the final kernel is the result of *both* decisions and the style and quality of the player's performance throughout the game. Only a consequently non-violent playstyle will end the game's narrative with having a peaceful, just ruler re-instated on the throne of Dunwall. If the player has maneuvered herself even once into a situation where lethal force was necessary to overcome an enemy or boss, a positive ending might no longer be attainable.

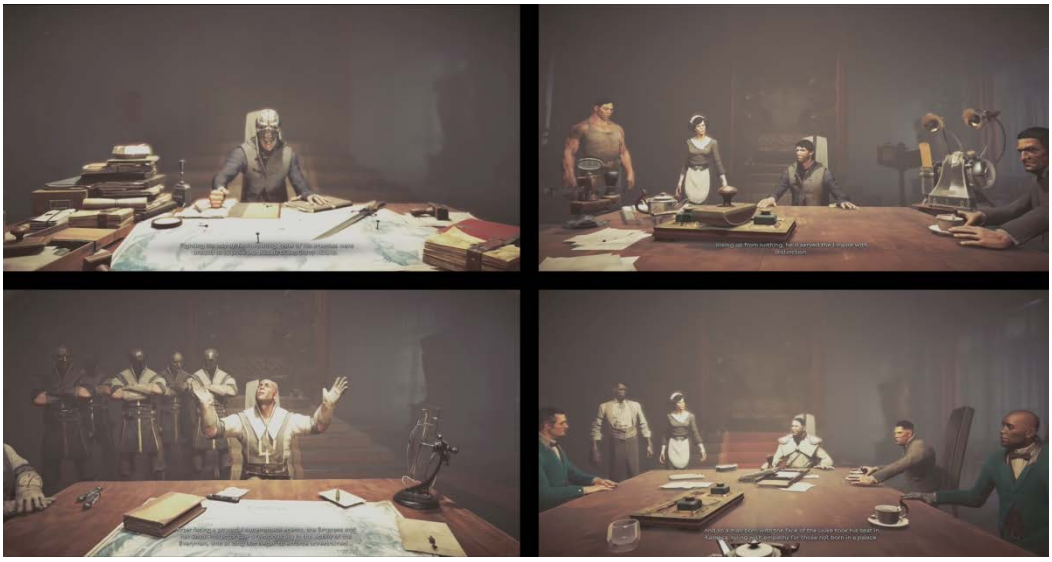

Fig. 4: Four different ending segments in Dishonored 2

The possibility to influence the ending of the game is obviously nothing new, even if *Dishonored 2* is quite imaginative in its implementation of this type of narrative agency. It's pronounced consequentialist slant is even more apparent in one of the game's last missions, "A Crack in the Slab", which is dependent on an artifact that allows the avatar limited manipulation of time. For the majority of the mission, this results 'only' in the ability to sneak not only in the three dimensions of space, but also in time, e.g. in the form of sidestepping guards or a locked door by shifting to a period in the past when passage was possible. Beyond this quite established time-travel mechanic, the game allows for actions taken in this mission to have extreme effects on the gameworld.

The avatar shifts temporally between the game's present and the evening of an important gathering of antagonists in the past. Primarily, the mission is about finding out why Aramis Stilton, one of the former allies of the player character's adversary, went insane. The time-travel ability makes it not only possible to eavesdrop on the gathering of the adversaries and thus gather first-hand knowledge, it also empowers the player to change the past. The player can choose to let everything play out in the past as it did, or choose to kill Stilton or knock him out. In both cases, he is permanently removed from the group of antagonists, making the final mission slightly easier. If Stilton is left alive, yet does not attend the meeting, he preserves his sanity and becomes a benefactor of the poor. This turns the slums that the player character came through on their way to his mansion into a prosperous quarter of the city – retroactively, that is, by rewriting history through actions whose consequences can be perceived immediately in the game's present. Even more than the ending, this valorizes the impact of the player's actions through their consequences, making "A Crack in the Slab" the ultimate consequentialist power fantasy.

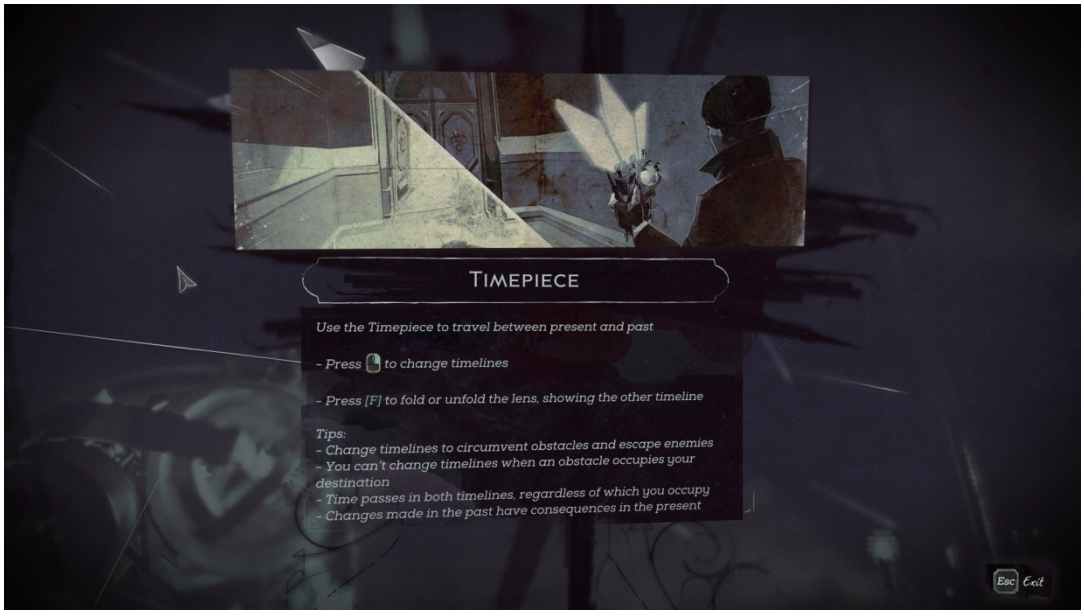

Fig. 5: The Timepiece in the Dishonored 2 *mission "A Crack in the Slab" changes the past*

Prey: All About Intention

Originally conceived as a sequel or reboot of the 2006 shooter of the same name (Human Head Studios/2K Games), *Prey* became through its development cycle something approximating a remake of *System Shock*. The space station setting, the threats of mutation and artificial intelligence, the discourse of bio-modification as self-mutilation, the fusion of science fiction and horror tropes all work together to make *Prey* a contemporary re-imagination of *System Shock.*

Prey is one of those cultural artefacts that hinges on a final plot twist, and just like *The Murder of Roger Ackroyd*, *Fight Club*, *The Sixth Sense*, *The Usual Suspects*, *Bioshock*, *Spec Ops: The Line* and many more, one needs to spoil the ending of the text to meaningfully discuss it. This is particularly true for *Prey* from the perspective taken here, because what the game builds towards is the reveal that its player character is not who the player has been led to believe. The game's ending constructs a mise-en-abyme structure in which all the events of the game are re-contextualized as a simulation that has been conducted in the gameworld. Like *Assassin's Creed*, the events of *Prey* are configured as a simulation that is taking place

in computers within the gameworld. Unlike *Assassin's Creed*, where this configuration of nested worlds is revealed at the very beginning of the first game, *Prey* saves this revelation for a final plot-twist that crystallizes the game's themes by recontextualizing all actions taken in the game.

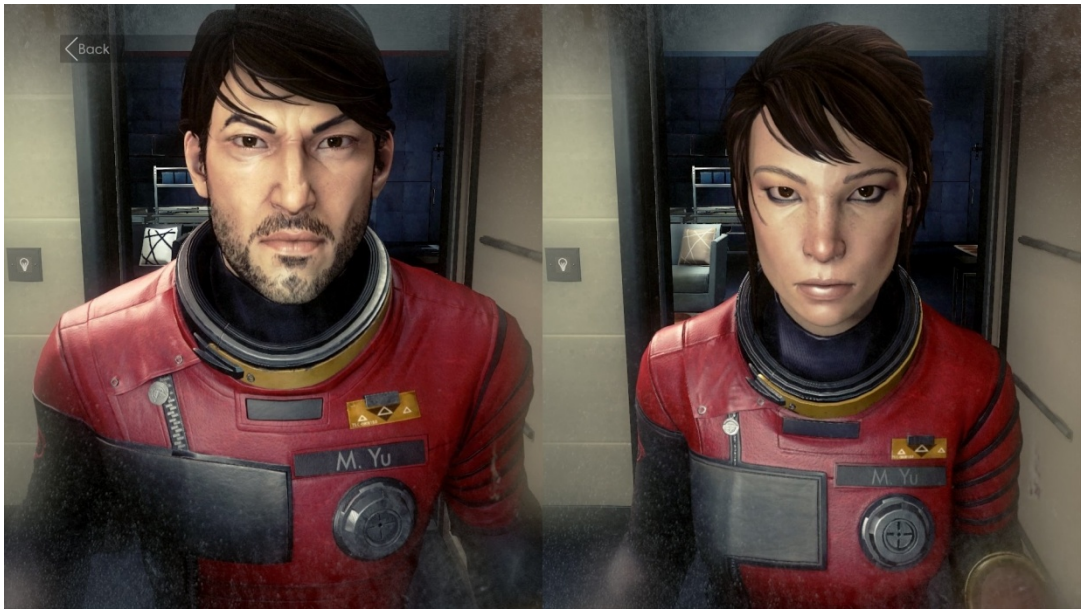

Fig. 6: The Character Selection Screen in Prey

Prey, just like *Dishonored 2*, starts with a choice between two player characters. The choice is, however, quite literally cosmetic. In terms of abilities, the female and male versions of Morgan Yu are identical. In the family photos found in the Yu family's quarters, the male and female versions switch places without any additional changes. The power relations between the head of the evil corporation TranStar, older brother Alex Yu, and his sibling do not change whether he is dealing with a brother or sister. The only perceivable difference lies in the personal items scattered around in Morgan's apartment at the beginning of the game. In male Morgan's bathroom, ties are hanging from hooks where there are necklaces strung up in female Morgan's bathroom. Where he has a satchel case, she has several handbags. But even their private quarters are for the greater part identical, because Morgan Yu is defined most clearly through their identity as an engineer (who will have an electronics lab next to their bed, no matter their sex) and a family member.

More than this non-consequence of avatar choice (which, by its nature, only becomes apparent upon replay), *Prey* foregrounds questions of cause and effect in its opening section. In the first fifteen minutes of gameplay, Morgan Yu is wakes up in their apartment and goes to work, which means participating in an experiment their brother Alex has set up. The experiment goes wrong, Morgan is sedated, only to wake up to the exact same scenario as the previous day. It quickly becomes clear that Morgan has volunteered to be the test subject in a long-time study of the side-effects of memory implants, living through a simulation of the same day over and over again. When the simulation breaks down, Morgan's only way out of their apartment is to smash the balcony door, revealing the beautiful vista outside to be nothing but a projection onto a one-way mirror.

Fig. 7: Breaking the illusion in Prey

After this opening that radically calls into question the nature of reality in the gameworld of *Prey*, the game settles down into a much more affirmative mode. The player learns that Morgan has been on a space station for three years to partake in the experiment, and that the station has been overrun by shape-shifting alien intruders. Morgan's brother Alex is among the survivors on the station and argues for a solution that minimizes further damage and allows contact with and study of the extraterrestrials. Morgan is, however, also contacted by an artificial intelligence called January, programmed by her in the past as a safeguard against the dangers of participating in the implant experiment. January shows Morgan a message to themselves, arguing for why it is important to protect Earth at all cost from the extraterrestrials, even at the cost of the station and everyone onboard.

The game allows, typically of the genre, for a wide number of approaches to the situation and several endings, including fleeing the station alone and leaving everyone to their fate. Throughout the main mission, Morgan is contacted by scattered survivors asking for her help. If the player saves the survivors, January will point out that this might be considered cruel, because their life will be prolonged only for a short time if Morgan plans (which the game implies) to blow up the station for the greater good. Good writing and good voice acting actually manage to convey a moral dilemma even if the player acts in this most pro-social fashion, giving this decision-making progress more weight than in many games.

Yet the ending of *Prey* connects back to the opening sequence with its questioning of reality. The choice of male or female character, saving of innocents, moral dilemmas – all this is called into question by revealing in the end that all of the game's events have been a simulation in the gameworld. Morgan Yu's attempt to save the space station failed in the reality of the gameworld, but Alex, the only survivor of the incident, managed to capture an alien and force it into a VR simulation of Morgan's last day. It is this extraterrestrial that the player has been controlling. All of the actions taken in the game have no lasting consequence, or at least not the consequences they seem to and are intended to have. Instead, they are taken by Alex Yu as indicators of how human-like the extraterrestrials are, if they have emotions like people, can be made to empathize and ultimately convinced to cooperate. Two details seem to intially problematize an understanding of this ending as negating consequences: First, the player has a final choice, namely to kill Alex or to cooperate with him. Second, if the player chooses to cooperate, Alex

hints at an opportunity to fight back against the invading aliens. Especially the inclusion of a final choice might be taken as an affirmation of consequence, yet I would argue against such a reading. There is no aftermath to the final action of killing Alex or shaking his hand, reducing this very final action of the game to choosing between two options in the game's the interface, and not presenting any consequence to either option. Instead of counteracting the subversion of consequentialist thinking, the final choice reaffirms the game's overall position by withholding one final time any knowledge about the consequences of one's actions.

Conclusion

The argument presented here should have shown that, while deriving unmistakably from the same traditions and belonging to the same highly consistent genre, the two examples differ drastically in relation to their valorization of consequences.

Dishonored 2 is foregrounding decision-making and the consequences of actions at every step and on all levels. Especially the limited time-travel ability of the avatar characterizes the position taken towards abstract understanding of action as one that privileges the player's special position with regard to the world. Consequences of actions long past can be renegotiated through ingenious use of game mechanics, thus empowering the player to act through her character in a way that transcends the power of others within the ontological construct of the game world – even when faced with a powerful wielder of magic who is literally attempting to change the whole world to her liking. *Dishonored 2* leaves little room for ambiguity when it highlights the possibilities for non-violent actions on several redundant interface levels and gives the player constant, clear feedback about the consequence of her voluntary as well as involuntary actions.

Prey, on the other hand, runs counter to all these tendencies and highlights this through many (more or less subtle) ironic gestures. The claim to reality other gameworlds work hard towards reaffirming and solidifying is openly subverted already in the opening of the game, only to be completely negated in its ending, thus calling into question the relevance of any actions taken in-game. Instead of clearly coding actions as leading to one of several better or worse endings, *Prey* leaves the player to consider her actions time and again under the impression of ambivalent, contradictory, and highly personal feedback from NPCs. That these reflections of choices, actions, and consequences are ultimately declared inconsequential, to be followed by one potentially impactful decision the effects of which are however withheld, makes *Prey* the polar opposite of *Dishonored 2* in terms of philosophy of action and theories of agency.

The angle least explored in this paper is probably the historical one, which might shed light on how pronounced the difference between the two principles embodied by *Prey* and *Dishonored* have been throughout the two decade-long history of 'immersive simulation' games, and if it would be possible to identify the difference with two schools in a strict sense, i.e. associate them with individuals and their creative output. In general, the observations made vis-à-vis the examples discussed here would have to be historicized and contextualized more, at the very least by taking their contemporary, *Deus Ex: Mankind Divided* (Eidos Montréal/Square Enix 2016), under consideration. Discussing the clearly defined and delimited genre of 'immersive sims' or '451 games' at greater length will, at any rate, give an opportunity for distinguishing more clearly between similar, yet ultimately different, game design traditions and their theoretical and philosophical underpinnings.

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