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Designing Compelling Quandaries through Mechanics and Agents in Choice-Based Games

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Abstract

Investigation into the effects of mechanics and agents on decision-making in games revealed potentials for players to be motivated by gameplay rewards or narratively developed characters, which aids in the accomplishment of acquiring a desired outcome. This is based upon intended behaviours and expectations of the simulation. It was found that the systems of a game should aim to accompany its fiction harmoniously to avoid the negative aspects of 'ludo narrative dissonance'. Quandaries should be presented with the knowledge of psychological theories that influence an individual's perspective on the consequences of actions in consideration of the playable avatar. The design of feedback awarded to the player effects the emotional investment to problem solving, either encouraging or discouraging moral engagement.

Introduction

Games are used as manipulative devices that set up a system of special rules and controllable agents for the player to interact with that leads to an intended conclusion, constructed by the designer. The player is allowed the freedom to perform through the suspension of disbelief within the 'magic circle' (Huizinga, 1938) of the virtual world when they are presented with a variety of options to obtain an outcome of which they feel they have earned. Ethical reasonings of reality may not need to be applied to a simulated network of responsibilities and requirements, dependent on the player's desired gameplay experience (Sicart, 2019), which may lead to morally questionable actions. When the simulation requires moral dilemmas to be solved as an integral part of the core mechanics, it will place further emphasis on the overarching effects of the player's proposed choices, encouraging premeditation and reflection.

There are ethical expectations the player will have towards the genre of game they are partaking in, altering the way they react to and solve a problem. The necessity of an emotive response from the player to affect decision-making results in the implementation of a morality system within the game, determined by a presupposed ethical framework that decides what actions are needed to trigger the measurement of morality and how this information will be presented to the player to interpret (Bosman, 2019). Though the product of a moral dilemma does not necessarily have to feel significant to the player, it must achieve a level of satisfaction for it to feel valid as an option to affect. The ability for the player to make choices during gameplay is made meaningful and effective through its rewards, solidifying the player's agency over the virtual world. Exploring how these compelling quandaries are made will ensure an understanding of how the power of choice becomes an engaging part of play.

The player is willingly bound by the agent they possess throughout the game to make these choices and influence their outcomes, providing context on decisions within the narrative. Making decisions that impact the character the player controls is a key part of meaningful play (Salen, Zimmerman, 2003), therefore the established role of the avatar within the game world and their allowance of player agency is important to consider from a design perspective in all genres of choice-based play. Whether the controllable agent is a 'blank slate', given only a defined role void of complex personal goals, or a 'characterful' pre-written agent with their own persona, will change the need for the player to consider them as a character in their choice-making, adding new layers to problems. Analysing the ways in which different characters are constructed to fulfil meaningful play will reveal their impact on the player's perspective of compelling quandaries, making difficult situations easier or harder to approach. This dissertation aims to examine the design of specific game spaces in choice-based play and evaluate the effect of characterization of the player avatar on these

decisions. An extensive review of existing literature will be conducted as the method of secondary research before this knowledge is applied to the deconstruction of game examples in a case study.

The Application of Mechanics

Despite the initial notion of games allowing a disconnect from the constraints of reality's ethics that mould our decision-making, the simulation will undoubtedly demand the player to deconstruct situations during play to figure out the potential gains and consequences they may receive (Sicart, 2011) to generate engaging challenges. This key component of the medium allows for the designer to direct the moral compass of the player through interaction with the defined rules of the game space with limited choices that are either directed towards or against a person's engrained moral values. The setting will present the player with fictionalised dilemmas they have never encountered outside the game world, though they may mimic real events that call for the player to act upon them with the knowledge they have gained from their own life experiences. To realise the ethics of a particular video game, it is necessary to analyse what the player is being forced or persuaded to do (Sicart, 2011) and how the player will engage with rules to ascribe meaning to them (Domsch, 2013).

The constructed events of a game will act as a basis for the development of the player's moral decision-making within the specific space. The "virtuous" player, as defined by Sicart, will approach a moral conflict with a reflective attitude and make assessments based upon "what the right choices and behaviours are" (Lewis, Weaver, 2012), whilst remaining aware of the limitations and implications of the game rules. It is likely the player will adopt this mindset within games that set up a morally aware world that shifts in its tone alongside the domino-effect of the player's choices, typically presented by the altered attitude towards the controlled avatar that exists within the fictional space as the player's actor and

reinforcer of their consequential actions. This notion is supported by Lange's 2014 study, demonstrating an overwhelming majority of players who expressed "a preference for playing 'good' characters in ethically notable role-playing games".

Players who choose to make "antisocial choices" that are perceived as immoral in the game world will be made to feel a sense of guilt by the conclusion they unlock to give reason to the purpose of considering the morality system during gameplay, though dismissing the player's ability to have true agency over their decisions will not allow for compelling quandaries to occur, as behaving morally wrong in the simulation does not necessarily translate to reduced enjoyment (Lewis, Weaver, 2012). When options are separated into a binary 'good and bad' rating to calculate the 'right and wrong' decisions that lead to a 'success or fail' state of the game, the illusion of choice becomes exposed to the player as nothing more than the game's rules pushing them in a certain direction of behaviour, rather than being granted the freedom to act upon their own intended values.

Desensitisation of Gameplay

Moral problems in video games can become easier to solve once its ethical framework has been learned and understood through the visible feedback of the game or after the extensive experimentation of the limited outcomes (Bosman, 2019). Iterations of inputs is encouraged by the save/reload system of games, making all choices reversible and promoting an instrumental approach to behaviours rather than making use of intuitive wisdom (Sicart, 2013). Games such as *Crusader Kings 3* (Paradox Development Studio, 2020) that place little to no emphasis on the difficult emotional reflection the player should undertake from the potential impact of their choices desensitises quandaries into "tame moral problems" (Bosman, 2019), though instead relies on more substantial player agency and mechanical benefits to allow choices to remain compelling. The game allows the player to assign their own motivations to a blank canvas avatar, who acts as a set of statistics that is built upon to

face different random world encounters and achieve certain gameplay goals. Narrative events are proposed only as interesting prompts to engage with, asking of the player to consider their own needs when obtaining a satisfying outcome tailored to their playstyle, achieved by a lack of deeper character building that exposes the complex mind of characters within the world that may sway the player's decisions through their reactions towards 'good and bad' acts.

Figure 1: Image of *Crusader Kings 3* (Paradox Development Studio, 2020) displaying a choice within the core gameplay (Purchese, 2022)

The player is motivated to decide based on the indication of how it will affect their stats as part of the mechanics, which will change the way they are able to perform throughout the game and increase the probability of certain narrative options later. The player is calculating their decisions independently, remaining aware of their avatar's role within the world and the level of effect of this without stagnating on the thought of their personal feelings as a character, as this moral thinking is not a necessary requirement of the function of the game's core systems. In a game like *Papers, Please* (Pope, 2013), characters are provided with more depth to begin to activate the player's moral thinking so they consider their decisions beyond the set rules of the game, providing more "wicked" dilemmas (Bosman, 2019). Similarly to *Crusader Kings 3,* there are pre-set branching paths for the

player to follow, though the choices are presented in a more expansive environment that attempts to resemble evocative real-world issues, fitting to its story-rich genre as opposed to *Crusader Kings 3's* strategy-focused genre.

Through their blank avatar, given the assigned role of a border inspector, players of *Papers, Please* will become adept at shuffling through documentation and finding discrepancies as they decide the fates of those they approve or deny entry to, a decision-making process that creates a sense of satisfaction from skill-building through repetition (Morrissette, 2017). Going against the game's rules when coming to decisions will result in mechanical penalties, such as reduced income for self-sustainment, though the player is instead rewarded with positive feedback from more characterful NPCs due to choosing the supposed morally correct outcome on the world. Though these NPCs remain relatively simplistic in terms of depth, this change allows players to begin considering in-game characters when contemplating quandaries, rather than just the benefits to themselves as a player. In these instances, the player's in-game acting may start to be tailored by the more profound narrative for emotional gain, rather than mindlessly engaging with game rules where the player will generate their own sense of fun through mastery of mechanics (Koster, 2013).

Figure 2: An image from *Papers, Please* (Pope, 2013) demonstrating a moral dilemma to consider during decision-making as part of the core mechanics

Arranged Scenarios

The plot device of ethical dilemmas should complicate the player's choice-making to encourage the use of their own moral compass to inflict agency (Sicart, 2019). *Fallout: New Vegas* (Obsidian Entertainment, 2010) utilises explorative role-playing in a reactive world that judges 'good' and 'evil' actions through a Karma system alongside the opportunity to engage with a series of diverging storylines that are connected to the game's Reputation system, activated by the behaviours they choose to adopt. Branching quests can lock players out of certain content and item rewards, ensuring quandaries remain complex and fulfilling through a mechanical incentive. Varying dialogue options from surrounding characters that are provided with deeper personality traits as an individual also reinforces the actions of the player to determine how profound of an impact they have truly made, as well as how to interpret and internalise the results of these choices. Though the controlled avatar begins as a blank slate, the player is given much more substantial agency over defining their character as either a self-insert, reflecting how they themselves would respond to scenarios, or a specific

generated persona that correlates to the desired faction the player wishes to join. All aspects of consequential decision-making relate to the game's defined factions, changing the ways in which the player is viewed by others within the world. A player may be defined as an overall 'evil' person by the Karma system, such as from choosing to kill distinct morally good characters, though will continue to be viewed highly by a specific group of people they have gained positive Reputation with, ensuring these systems work together to make an otherwise binary measurement appear more nuanced. Exploring different locations and completing certain quests that do not involve core factions does not lead to positive or negative Reputation, allowing the player to freely interact with the world in ways that don't impact how their character is portrayed.

A contradiction between the expectations of gameplay and the impact of the player's actions within the overarching cultural setting of the game (Sicart, 2009) can sometimes become evident and result in the "ethical cognitive friction" of the player. Ludo narrative dissonance (Hocking, 2007) will cause the player to see narratively immoral acts as a mere means of progression through a level required by the core gameplay, therefore subconsciously separating these actions from the perceived heroic persona of the controlled avatar and ultimately their own sense of heroism. Gameplay scenarios that are an essential means of filling in the gaps between narrative threads to ensure the player is immersed in the act of skill building are not considered as a factor in the measurement of morality. The player is granted the ability to view their decision-making in these instances as inconsequential and unnecessary to overanalyse as a potential off-putting punishment, leading to enhanced enjoyment in a medium that relies on replay value and the addictive nature of learning from mistakes (Koster, 2013). When the opposition between the ludo structure of the game and the narrative structure is made clear (Seraphine, 2016), the player could be led to begin to question whether their actions are truly being acknowledged within the fictional world, the

key element to producing compelling quandaries through morally fuelled storylines rather than solely personal mechanical gain.

Red Dead Redemption 2 (Rockstar Games, 2018) acknowledges the player's agency during casual world traversal interactions, such as when they kill innocent people, which affects the game's Honor system negatively and aligns with the ethical expectations of reality. These "micromoral" events, as defined by Sicart, gain importance over time, as opposed to "macromoral" events that have an immediate significant consequence, allowing players to reflect on the slow build-up of decisions and the reasons behind them, ensuring the evaluation of one's habits and motivations occurs (Nay, Zagal, 2017). Even if a decision is not evidently made to appear substantial towards the main narrative paths of the game, they can still provide moral meaning to the player and be seen as a "narratively relevant event" (Domsch, 2013) to gain further insight into the character they are controlling, especially when this avatar is prewritten and is intended to act as a main motivator in the equation of choice-making. Viewing a situation in the context of a defined characterful avatar and acknowledging their position in the game world will aid in shaping them as a persona for players to attach an emotive response to, as what matters is how they feel as a hero (Sigman, Bourassa, 2015) for this to be able to translate to the player's feelings of accomplishment.

Despite the implementation of micromoral events affecting the player's Honor system, *Red Dead Redemption 2* poses examples of the binary 'good' and 'bad' states becoming skewed to align the game's rules with the structure of its narrative, as seen in a mission requiring the player to break a member of their gang out of prison. In the context of Arthur Morgan's predetermined goals as a developed character, his actions are in his benefit and therefore the player's, resulting in a typically negative behaviour in the eyes of an overall world setting being portrayed as positive. Though many 'good' lawmen are killed by Arthur in this mission, this does not count towards the Honor system or effect the way Arthur is

viewed by others in the various endings. Players are only judged outside of these scripted missions, taking away from their apparent ability for agency. Both Karma and Honor in their respective games are a basic scale that maps to the game's rules to understand the player's actions, algorithmic from a design perspective to reduce the scope of a problem and allow plausible solutions to be uncovered (Sicart, 2013). Ultimately, it is default that "players think strategically, not morally" due to the very nature of game design, and it is a requirement of the developer to provide the player with the ability to make informed decisions, leaving a game prey to "predictable outcomes" that won't challenge a player's ethical thinking to complicate contextual dilemmas.

Player Feedback

Games that wish to challenge players emotionally for deeper thinking in choice-based scenarios rely on participants voluntarily choosing to play ethically and detach themselves from the typical freedom of simulated experiences (Sicart, 2013), instead seeking a rich dynamic, responsive fiction of which they can invest in to influence (Chauvin et al., 2014). Considering the lasting effects of intricate problems in relation to the player avatar's role within the narrative makes them demanding to approach, as with real quandaries that may require a conclusion of coping rather than solution (Whitbeck, 2011), though the fundamental traditions of game design oblige these problems to always be solvable as a resolution to actions (Sicart, 2013). The mechanical system's forced acceptance of its binary beliefs as a means of constant progression can present ludo narrative dissonance (Seraphine, 2016) where the player feels bound and suppressed by the structure of the simulation. The challenges that are formed from these "wicked problems" (Boseman, 2019) can be either presented as implicit or explicit to the player in terms of their player feedback during aspects of gameplay and storytelling. When implicit, the subtle changes developing in the background that cause the player to arrive at their ending remain unpronounced, prompting the reflection of actions

at the game's conclusion and imposing the evaluation of "behaviours in light of ethical thinking, rather than ludic strategic thinking" (Sicart, 2013). Explicit feedback visibly brings to attention the criteria of the morality meter (Bosman, 2019) for the player to track and learn the inner workings of the system, which may influence opportunity for the disregard of premeditation in achieving a result and make decisions less compelling.

Fallout: New Vegas informs the player of the game's view on their decisions through notifications that appear after an action is completed which is recognised by the systems. These notifications indicate a rise or decrease in Karma or faction Reputation, though does not reveal an exact numerical value that can be consistently measured, instead acting as a less precise reminder to remain aware of the ethical attachment to inputs in the playable space. The changing view of the player character in the eyes of the fictional world can be discovered in the player's status menu if they wish to view their current position in the game, which displays one of five main personality types including 'very good', 'good', 'neutral', 'evil', and 'very evil', simplifying the complex nature of morality to fit the gameplay systems.

Figure 3: Image from *Fallout: New Vegas* (Obsidian Entertainment, 2010) displaying a positive change in the player's Karma through a UI notification (NexusMods, 2019)

Figure 4: Image of all 5 Karma levels seen in *Fallout: New Vegas* (Obsidian Entertainment, 2010) (Fallout Wiki, 2013)

In comparison, *Red Dead Redemption 2* shows Honor to players in the form of an arbitrary bar that slowly increases or decreases over the course of the game to display the exact progress of the player's choices as a guide, which reveals the process of how much 'good' or 'bad' percentage the game must assign to a task through a numerical value, failing in reflecting the ways morality is determined in reality and creating ludo narrative dissonance. Games such as *Papers, Please* that do not visibly quantify a person's morality to adhere to a mechanical system and make this value known when presenting compelling quandaries allow for a more instinctive approach that comes with acting in games. Becoming aware of a game's systems will emphasise its "two-dimensional" nature and cause "selective morality" to occur as players seek the most advantageous outcome (Bosman, 2019), making narrative dilemmas appear simpler and therefore less difficult to solve.

Figure 5: Image from *Red Dead Redemption 2* (Rockstar Games, 2018) highlighting the game's Honor bar, a visual indication of the morality system (GamePressure, 2022)

To combat issues presented by ludo narrative dissonance that dampen compelling quandaries revolving around a game's narrative elements, the designer should perhaps consider limiting the information they choose to give players to cause them to act in ways that are unpredictable yet based on the values they desire to bring to the possibility space (Sicart, 2013). In this instance, the systems at play will become ambiguous and void of clear direction as a result, perhaps providing an inadequate amount of information to the player regarding the choices they make, though in doing so the designer will widen the potential for further agency to be applied to gameplay. The more an individual plays a game, "the easier it becomes to anticipate its global behaviour" to "better anticipate the consequences of their actions" (Chauvin et al., 2014). The application of uncertainty is "crucial for creating challenge" so that quandaries remain unexpected and stimulating, though the ways in which the players engage with the game's systems cannot be anticipated to ensure successful ethical gameplay takes place (Bosman, 2019). In considering this, games aiming to deliver

compelling quandaries should not attempt to push the player towards behaving in an ethical way to fit a linear narrative by only rewarding moral actions and punishing immorality, as this only encourages acting for mechanical benefit instead of emotional investment. A choice should simply be presented, as the designer may only suggest the values their players should adopt to cooperate with a predetermined set of rules (Sicart, 2013), whilst their input will complete the experience through the act of 'co-authoring'.

The player is responsible for the story and the direction it takes within the medium, which provides only a "constrained space" (Chauvin et al., 2014) that contains a narrative as opposed to being its own form of narrative as seen with films or books (Domsch, 2013). Players are therefore empowered to "become authors of their own virtual reality" in games that do not create a conflict between the imposed narrative and the ideas expressed by players (Chauvin et al., 2014), providing a space for creativity through role-playing (Sicart, 2013). This would, however, require the designer to "surrender the power they have over the story" (Makedonski, 2012) without the goal of telling a specific story, as seen in player-focused games like *Crusader Kings 3.* "Textural narratives" (Domsch, 2013) such as cutscenes may only lead to increased opportunities for interference with the ludic system whilst simultaneously emphasising a disconnect between player and their controllable agent through the removal of interaction, however, such techniques also build upon the foundation of the game world to form a stronger understanding of the avatar as a character and create a psychological attachment that guides decision-making in place of apparent gameplay mechanics.

The Effect of the Player Agent

The application of ethical thinking when approaching quandaries is evidently dependant on the avatar the player has been given to embody. When given the ability to

decide the persona of their undefined agent, players may ask themselves whether they wish to enter the game world as a character “realistic and similar” to themselves, an “idealised version” of themselves, or as “someone distinctly different” (Loewen et al., 2021). Though the “ludic motivations” (Lewis, Weaver, 2012) of the player may lead to a less impactful moral foundation being transferred to the mind of the avatar, it is likely the influence of one’s “real-world” ethical decision-making in the game environment will be applied as a frame of reference, especially when the laws of physics have been established through its narrative to ensure it is understood as a real-life simulation (Domsch, 2013). The player may independently design characters that are able to exist within the limits of the fictional setting’s rules, instead choosing to base their behaviours on a chosen role, though avatars on average are seen to be “congruent with users’ true personas as part of the extended self” (Belk, 2013) and are unlikely to be majorly different from a person’s actual or idealised identity when given the option, as playing as an individual of improved moral fibre is “essential to many gamers” (Consalvo, 2016).

The playable avatar’s available gameplay actions are other times written to centre around them as a unique character the player cannot determine themselves, providing all inputs with context which guides the player along a cohesive path that develops their persona. Traits that are ascribed to the controlled character often become extended to their users, as evidence suggests the need for affiliation with avatars (Fong et al., 2022), where the ways in which they are perceived influences “perceptions of the partner” (Nowak, Rauh, 2008). The avatar is used as a tool to understand the world the player is entering (Klevjer, 2006) and is expected to maintain “constant responsiveness” to the capabilities of techniques in gameplay interactions (Vella, 2015), being unable to “act of its own accord”, though removing influence over the ‘playable persona’ using scripted events to begin giving the avatar its own sense of agency within the simulated environment demonstrates its evolution into a distinct

character. This dramatic event exposes the ontological frame of the "game-as-heterocosm" (Vella, 2015) and contrasts with the notion of avatars being a prosthetic extension of their players (Klevjer, 2007), highlighting the interchangeable view of the player figure as either avatar or character (Vella, 2015) which may alter the acceptance of moral responsibility through delegation with the 'third-party' embodied role. The player can therefore choose to view in-world consequences as relevant only to the separate being of the character where their only moments of agency are provided through texturally irrelevant gameplay progression, making decisions less compelling in a narrative sense.

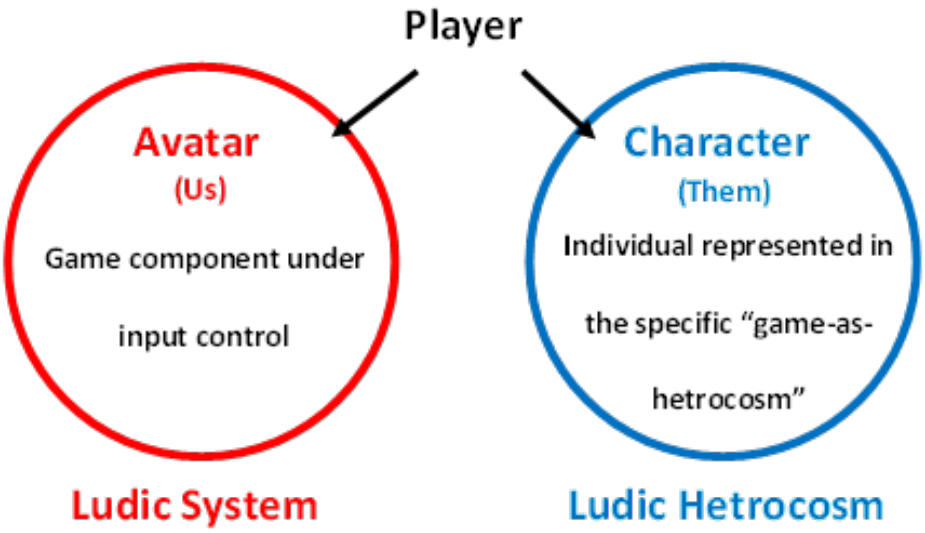

Figure 6: A diagram displaying the theory of the player's view of the avatar as an extension of themselves in the Ludic System shifting to the view of them as their own character in the Ludic Hetrocosm (Vella, 2015)

Only when the player consciously aligns their actions with the characterful avatar will they partake in the act of role-playing, as opposed to a disregard of moral accountability when facing quandaries. Established "values, desires, and obligations of the character in relation to the game world" (Willumsen, 2018) allows players to decide the 'right' decisions from their perspective to apply ethical thinking, as determining how best to behave becomes

easier when requirements are instilled into the player by their avatar. As such, the avatar has the important duty of channelling behaviours in virtual spaces (Fong et al., 2022). This has potential for the ability of choice to feel less fulfilling as the player is bound to the needs of the character, though when stepping into the headspace of the set persona, this may instead make for a more engaging and informed experience, so long as the character's choices appear to drastically affect the outcome of the game. The player will want to be able to see who they can make their character become, tailoring them to their liking to make gameplay more meaningful, though are limited to defining only the finer personality traits of the playable agent. As seen in *Red Dead Redemption 2*, Arthur Morgan is a fleshed-out character progressing along a path of his own goals to reach his conclusion, a journey the player will embark on through accompaniment in place of a personalised player experience, and though the player has input on how moral or amoral he is in his approach to scenarios, the character will always be Arthur. Iconography within the character's design, as well as knowledge of their relationships to NPCs within the narrative that form their motivations, helps to strengthen their identity to ensure they are understood and form a fondness with the player that will persuade them to help their agent succeed, as "character complexity can present itself in situations with any amount of avatar control" (Willumsen, 2018).

Theoretical Reasoning

Quandaries become compelling when the player has been given the opportunity to empathise with the defined playable character and see the world through their eyes. In a game like *Detroit: Become Human* (Quantic Dream, 2018), which is heavily supported by its narrative and the influence of characters on decision-making with a less mechanics-focused design, the effectiveness of this writing by the developer is essential in building an emotionally rewarding player experience. Each avatar must be developed with the knowledge of intuitive human behaviours and remain both distinct and realistic in their ambitions for

them to become relatable to players, creating a natural transition from playing as the self to adopting a persona where actions and dialogue options do not feel forced and are thematic to remain in-character. A study which examined the gamer-avatar relationship in *Detroit: Become Human* saw participants caring for their avatar and subsequently feeling "responsible for its well-being" (Craig et al., 2020), wanting to perform on their behalf. This applies a layer of tension towards major events within the narrative that may not develop their character in the ways they intend unless remaining aware of the game's responses to choices wrapped in moral implications. It has therefore been found that the role the player assumes in games has a notable effect on decision-making, though further consideration of theories is needed to realise how this is achieved through characterisation to diminish personal agency over gameplay values.

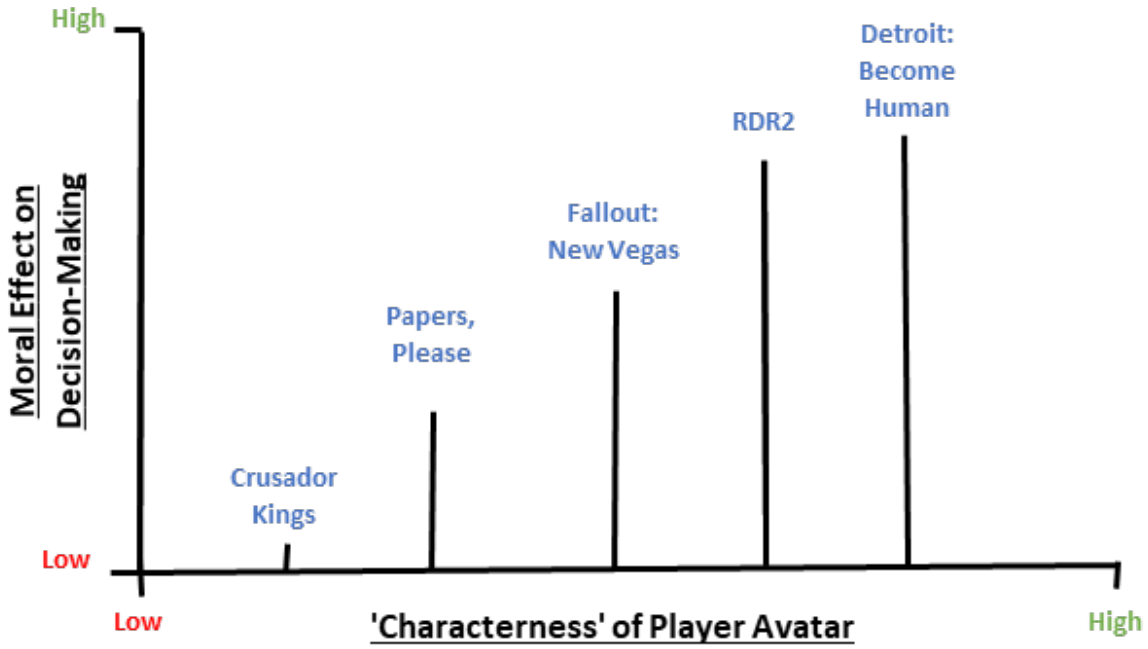

Figure 7: A visual depiction of the effect of an avatar's character fullness on the player's moral decision-making

Player reports of their psychological states when playing "character-based" games as opposed to "self-based" games demonstrates the act of 'immersion' occurring through

identifying with a “contextualised character” rather than a blank slate agent or a “proto-character” that is provided with limited expressive attributes (Tu et al., 2022), as one would see from a basic mascot. The spatial perspective afforded to the player may increasingly impact their view of the playable avatar as a “separate entity”, where identifiable features become clearly displayed in an “allocentric” third-person game instead of placing the camera in the avatar’s field of view as to merge with the player’s sight, simultaneously obscuring the character model’s detailing. “Egocentric” first-person games may only reveal the main character to players within textural cutscenes in a break from ludic elements, visually dividing actions during gameplay as belonging to the player from narrative arcs belonging to the character. The process of ‘becoming’ the character throughout all aspects of their journey relates to the theory of the Proteus effect (Yee, Bailenson, 2007), which relies on the concept of individuals conforming to “stereotypical behaviours” inferred from the digital figure as one transforms their mindset as a “pervasive human desire”.

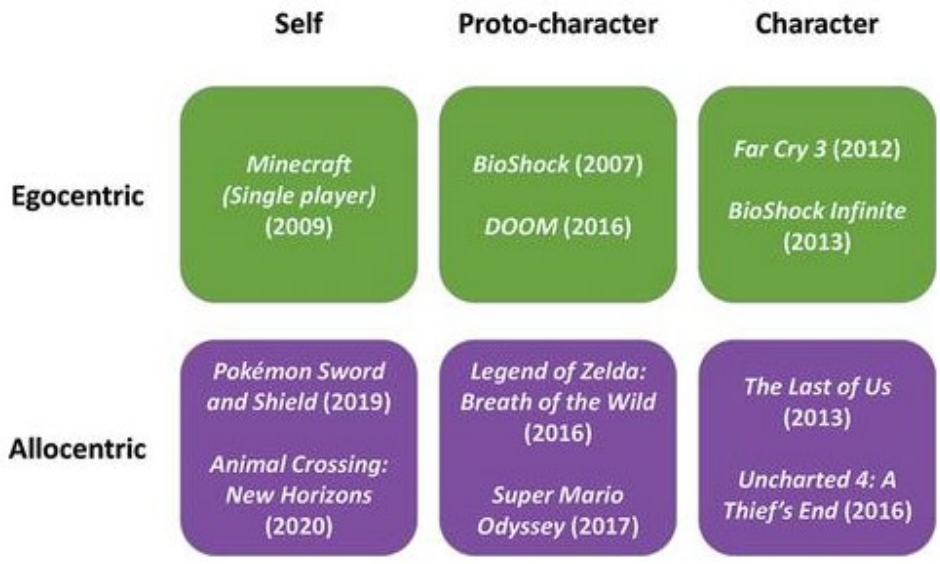

Figure 8: Image of the Two Game Dimensions of “Characterness” and Spatial Perspective (Tu et al., 2022)

The theory found reason to believe the appearance of the virtual self the player embodies influences actions to conform with the societal expectations of the in-game universe to receive a specific favourable reaction. When considering these findings in relation to predetermined characters in place of character generation that allows adjustments to human features, it must be questioned if a player's decision-making being affected by the position they are stepping into is the Proteus effect in earnest, or if they are otherwise 'learning' from the values of the character in a similar sense to the influence of peers in reality. In this case, player's may simply be interpreting and acknowledging the mental state of their playable avatar to inform them in approaching decisions, not necessarily altering themselves based on their characteristics. This thinking alludes to the theory of mind (Premack, Woodruff, 1978), which will see players displaying the capacity to act as their character through perceiving how they are feeling to explain and predict how they would react in situations, even if this may differ from one's own beliefs and intentions. Studies reveal how an initial impression of a digital NPC agent's personality and attitude is quickly formed to motivate users to perform a certain behaviour (Cafaro et al., 2016), with continuous adaptation of the agent based on player interactions producing realistic engagement that allows for a trusted relationship to be formed. This increases the likelihood of further communication as the player learns the patterns of behaviours that will lead them towards their most preferred outcome.

It can also be argued that those intending to proceed with the simulation appropriately are only 'playing along' and are in fact not exhibiting a desire to connect with characters on a psychological level, being pushed towards strategically altering emotional responses due to the inherent game systems enforcing this, a point covered in discussions on the Proteus effect when examining previous research on 'Transformed Social Interaction'. Achieving apparent 'immersion' through an assigned characterful avatar can sometimes be unsuccessful, as reported by players of *Detroit: Become Human* who more frequently chose options regarded

as immoral by the game's choice-based system when playing as the character Kara, who is framed as a caring, motherly figure that would not gravitate towards these behaviours if given full agency of her own. Even when recognising the player's acceptance of the avatar as a separate being of intelligent thought, this does not always see an erasure of ludo narrative dissonance (Seraphine, 2016). Contextual factors are however of value to consider as influencers in these instances, including which avatar out of the main cast is currently being played, and gameplay elements such as time pressure. The lowest amount of "moral transgressions" was seen when playing as the character Markus, whose actions evidence a far greater impact on the "greater good of society" (Holl, Melzer, 2022), which may promote the need for a larger universal reaction as a more prominent reinforcer of success than the responses of a singular person.

As well as this, the mechanical feature of a timer being integrated with many decisions that will progress the branching narrative can skew the results of investigations into the compelling effects of the characterful agent on choice-making during quandaries. Though theories suggest this may alter moral sensitivity (Katsarov et al., 2017), affording little room to process actions, findings in the case of *Detroit: Become Human* indicate a more "intuitive reasoning" (Holl, Melzer, 2022) is seen in players as they are denied the chance to over-analyse, a common expectation of the gaming experience. Contrasting with the concept of 'becoming' a character, individuals can approach a task in a "flow state" when mechanics are designed to accompany its narrative, where one can seamlessly engage in an activity with deep focus and avoidance of abrupt disruptions that pose contradictions to actions (Csikszentmihalyi, 1990). If presenting the player with decisions that impact the morality of their character and the feedback of NPCs, all outcomes should make sense for how they are portrayed in the game world whilst simultaneously granting the agency for the player to

mould their personas as they develop, a balance that enhances the product of quandaries during gameplay.

Ineffective Examples

Ignoring the intended motives of the player in favour of adhering to a strict storyline or rules creates "a tension between structure and freedom" (Sicart, 2013) and puts games at risk of exhibiting moral issues in an ineffective manner that hinders the gameplay experience alongside decreasing satisfaction from accomplishing various outcomes. As seen in situational examples from *Red Dead Online* (Rockstar Games, 2019), missions granting the player the choice to commit immoral acts undermine the supposed negative route of the game by contextualising the player's inputs as good overall through portraying the victims of these actions as morally 'bad' characters within the narrative. This gives opportunity for reassurance if player's wish to experience all aspects of the game without receiving emotional repercussions, whilst also keeping the behavioural inputs of the avatar in line with their built persona, though removes the ability of agency over role-playing as the antithesis of the expected behaviours of reality and ultimately leads to alternate endings seeming less worthwhile.

In the case of *Bioshock* (2K Games, 2007), the option of rescuing or harvesting the Little Sisters becomes straightforward on a mechanical level, as the player is granted substantial currency throughout the game regardless of gameplay consequence from choosing the morally correct option of forgiveness, though also makes no effort to develop the Little Sisters as characterful NPCs that provide emotional benefit to saving them. Ludo narrative dissonance also surfaces when comparing this sudden agency to the game's fiction, where players are unable to control whether they help the benefactor Atlas or not, emphasising the problem of futile quandaries (Hocking, 2007). Even when the game "quantizes the output of their actions", the player's values should be made to drive decisions and remain responsible

for actions that develop them as moral agents (Sicart, 2013). It is possible for games to consider the use of ludo narrative dissonance to their advantage when designing systems that integrate with their proposed narrative, as seen in *Vampyr* (DONTNOD Entertainment, 2016) where its protagonist faces the dilemma of curing citizens through his predefined role as a doctor whilst needing to obtain blood to survive as a vampire, encouraged by the gameplay incentive. It is expected of realistic human representations to be dissonant in nature as a complex character that justifies the act of storytelling with meaningful purpose (Seraphine, 2016).

Conclusion

The design of compelling quandaries will differ between games dependant on the intended player experience that is expected of the chosen genre, acknowledging the role given to the player and how this is best intertwined with the goals of gameplay for an engaging experience. The player requires the freedom to perform within the medium, and with careful crafting of narrative elements and systems, they will be naturally guided towards informed yet exciting conclusions, shaping the play space to be both productive and meaningful (Sicart, 2013). The player faces no requirements to apply ethical thinking when approaching scenarios and may only be motivated by the intricacies of mechanical gain through personal rewards when the simulation disregards tonal shifts to the setting in response to actions. Mental conflicts occur through emotional investment, which is achieved through the building of defined characters that supply further depth and fulfilment to the player's journey.

Black and white choices that contain the agency of the player in favour of preserving an established persona may result in uninspired quandaries and a disconnect between player and avatar. The digital agent must mould to the intended behaviours of the player with a

world that reacts accordingly, keeping character portrayal consistent to allow for their mindset to be understood through inference. Decisions should remain informed through contextual clues and intuitive reasoning with the avoidance of direct formulaic feedback to produce more evocative dilemmas. The use of systems such as D&D's alignment of moral attitudes, which could be seen as more nuanced when compared to the standard binary measurement, may make choices richer in consideration of the fiction as a reflection of reality without punishing experimentation. Further investigation into subtler categories of behaviours will reveal the ways in which these concepts can be applied to gameplay and narratively relevant agents to present quandaries that players will have compelling influence over with more prominent reflection of morality.

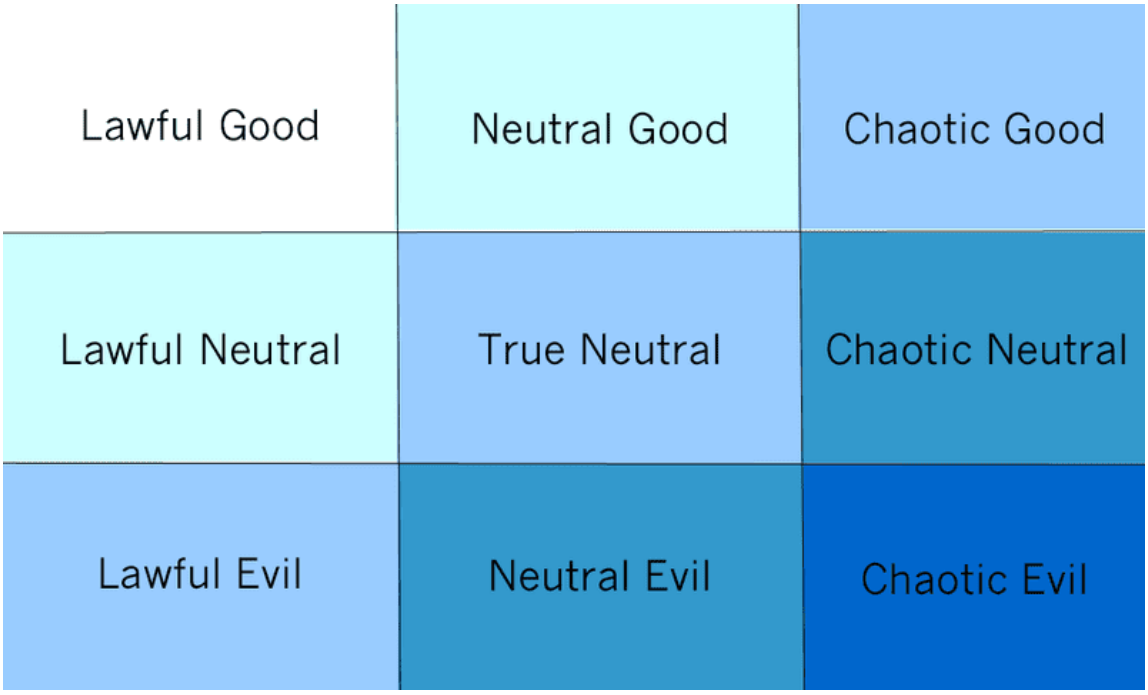

Figure 9: Image of D&D's diverse personality alignment chart (Studio 360, 2016)

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Figure 6: *A diagram displaying the theory of the player's view of the avatar as an extension of themselves in the Ludic System shifting to the view of them as their own character in the Ludic Hetrocosm (Vella, 2015).*

Figure 7: *A visual depiction of the effect of an avatar's character fullness on the player's moral decision-making.*

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Figure 9: Studio 360 (2016) *Image of D&D's diverse personality alignment chart.* Available at: https://www.wnyc.org/story/the-chart-that-explains-everyone-character-alignment/ (Accessed: 5 January 2023).