Narrative Expression, Player Agency & Collaborative Storytelling in Video Games

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A research paper submitted to the University of Dublin,

in partial fulfilment of the requirements for the degree of

Master of Science, Interactive Digital Media.

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Acknowledgements

I would like to thank my supervisor Charlene Putney for all of her guidance with this research paper. I would like to thank all my friends in this course, who have been an inspiration this year as well as great company during the long work hours and innumerable cups of tea! I would also like to thank my brother James for his attentive eye and insight in proofreading this paper. I would especially like to thank my parents, Sheila and Kevin, for inspiring me to pursue this degree for making this year possible.

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Master of Science, Interactive Digital Media.

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2016

Abstract

This paper explores narrative styles, player agency and player expression in video games. In his keynote speech at PAX Australia 2015, Warren Spector, veteran game designer, spoke about how too often storytelling in games limits player interactivity. There is a desire to see video games make more of the player experience and what is unique to the medium. Spector broke games into low, medium and high narrative expressions. This paper examines several different game titles under each expression level as case studies. The goal of this paper is to explore and distill some of the techniques and tools used by some developers in crafting video game narrative, in order to create a lens through which future developers could develop their game stories, and also to ask: what in narrative is unique to gaming?

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I. Introduction

Throughout all of human history, we have always told stories. Storytelling is certainly one of the most ancient forms of culture, used to delight, educate, incite and inspire countless generations. Our stories cover the breadth of our human experience; they can "transport the audience on a thrilling journey into an imaginary world...reveal the dark secrets of human behavior or inspire the audience with the desire to do noble deeds." (Miller, 2008, p.4) The most recent development in the long tradition of storytelling has been the rise of digital technologies. The digital world has brought us new and exciting ways of telling stories through interactivity, in which "members of the audience can become active players in the narrative and can even have a direct impact on it." (Ibid. p.5) Video games exemplify this quality more than any other media, being "powerfully effective at actively involving users in a fictional experience" (Ibid. p.254).

Video games offer us a unique set of storytelling tools. They are experiences created though the player's performance with the game environment – an experience fundamentally different from other media. Interactivity with the story and the gameplay that surrounds it means that continuity, which we are accustomed to in other media, is always being challenged. The linearity of storytelling is disrupted by both player agency, the player's ability to influence the story, and player expression, their ability to express themselves through play.

In his keynote speech at PAX Australia 2015, Warren Spector spoke about storytelling in games and how too often they limit player interactivity. Spector is a veteran game designer, famous for such titles as System Shock (1994), Deus Ex (2000) and Epic Mickey (2010). Video games, he says, have the potential to express stories in different and unique ways, compared to any other medium. Spector told the audience of game developers that "...we are all part of a medium nothing else can do: collaborative storytelling. And I think it's important that we embrace that capability." (Mawson, 2015) He feels this is an under-utilised aspect of video game design, and he desires to see

game developers put a greater emphasis on this kind of storytelling. Spector broke games in categories of low, medium and high narrative expression, which is an indication of player agency and potential for the player to express themselves in their performance and experience of the game.

This paper will make an examination of levels of narrative expression and player agency in video games by exploring the concepts through several different games as case studies. The ultimate goal of this paper is to explore and distill some of the techniques and tools used by some developers in crafting video game narrative, in order to reveal what is unique in video game storytelling and how future developers may take advantage of the medium. Chapter II will set out to scrutinise some of the differentiating characteristics of video game narrative versus traditional narrative in other media. Chapter III will establish the paper's methodology and define the key terms; exploring the concepts proposed by Spector and developing a lens through which games can be examined.

Chapters IV through VI are concerned with case studies of games. Chapter IV will deal with 'Low' expression games, in which storytelling is immutable. *Grim Fandango* (1998) stands as an example of traditional adventure game storytelling. *Gone Home* (2014) demonstrates a much more modern and novel approach to narrative. Chapter V will explore 'Medium' expression games, which feature branching narratives and illusion of choice. The Walking Dead (2012) and Heavy Rain (2010) both feature these as core concepts, but integrate it into their narrative in very different ways. Chapter VI will look at the 'High' expression games. This includes the Mass Effect series (2007, 2010, 2012) which built player agency and choice as a central philosophy throughout the three games. The Deus Ex series (2000, 2003, 2010), started by Spector himself, will also be examined. These games exemplify the fusion of gameplay and narrative, driven by player agency and expression. Finally, Chapter VII will conclude and codify the techniques examined, as well as take a look towards the future of storytelling in video games.

II. Narrative in Video Games

Video games offer us a form of narrative different to that of traditional media, such as books and films. In any good story, the listener should have a desire to act on it, to probe and question it, to further explore and understand it. The difference in a video game story is that the listener is now the player, and has the power to take action. The stories of video games are told through an interactive lens; the player is both within and acting upon the story through the game mechanics. Adams gives us the following definition:

"An interactive story is a story that the player interacts with by contributing actions to it. A story may be interactive even if the player's actions cannot change the direction of the plot." (Adams, 2010, p.160)

The interactive story is often built by the melding of storytelling with some form of challenge – in video games, this is the gameplay. This can be represented in a variety of composition structures. For example, the story and gameplay could be quite separate blocks, with storytelling being a reward for completing gameplay sections. Alternatively, the storytelling and gameplay could be closely entwined in a more holistic and cinematic experience. Ultimately it is dependent on the style of game and story being told. There are fundamental challenges in crafting stories for video games. The writing process is made more elaborate since "the storyteller must predict, account for, respond to, and smoothly integrate the actions of the participant into the experience." (Schell, 2014 p.298)

Numerous story structures are possible in interactive stories. The most basic is the *linear story*. The player only controls the rate of story progression through the rate of their interaction, but they cannot alter the narrative – it will always tell the same tale. There are *non-linear branching stories*, where the plot may diverge into different lines based on player decisions. The consequences of decisions could be felt immediately or

deferred and occur later in the story. In some video games, decisions become cumulative and are summed together in influence or reputation systems, such as a good-evil alignment axis. Branching stories may also give rise to multiple endings. Foldback or multilinear stories feature a plot which "branches a number of times but eventually folds back to a single, inevitable event before branching again and folding back again to another inevitable event". (Adams, pp.173-174) These story limit player choices, but allow for a simpler and more tightly authored writing process.

Warren Spector considers video games to be "the medium of the 21st century" (Walker, 2015). In order to truly achieve this status, Spector believes that game narrative design needs to be reimagined towards emergent or collaborative storytelling, away from the more filmic experiences that make up the majority of new games today. He claims a shared authorship is something that only the video game medium can achieve. Fitting similarly with the narrative structures mentioned, Spector breaks games into categories of low, medium and high narrative expression: low referring to linear stories, medium to branching and multilinear, and high to collaborative storytelling. These levels are not evaluations - 'high' level games are not inherently better than 'low'. All the styles of narrative are equally valid, but low and medium games are not making "a great job at exploiting what makes video games different" (Mawson, 2015) Even though Spector mentions several games he considers are in the 'high' category, such as Mass Effect (2007) and Deus Ex: Human Revolution (2011), overall, he argues designers can do more. While the video game industry is very commercially orientated, there is an artistic imperative to explore the medium and see what its limitations are. Large and successful developers are in a financially privileged position and independent developers are in a more artistically liberated position; both can consider developing more experimental narratives.

III. Methodology & Defining Terms

Methodology

The methodology behind this paper is primarily a qualitative analysis of several key games as texts; building them into case studies where the structural elements behind their narrative styles can be revealed. The games I have chosen to study are games with which I have had prior experience, having dedicated many dozens of hours of play time to them. They are also games that Warren Spector specifically cites as having the qualities of particular narrative expression levels, with the exception of *Grim Fandango* and *Gone Home*. My own findings, through the game analysis, will be explored in conjunction with evidence from game developers and other parties who have spoken or written about these games or the concepts behind them.

Key areas to be explored in the games will include, where appropriate: game mechanics, interface, conversation systems, narrative style and character or story perspective.

Key Terms

These are the key terms essential to this research paper, as they are concerned with the core concepts of the study, which I define as follows:

- Agency refers to the player's ability to make decisions in the game. This can be in the narrative, such as choosing one story arc over another. It also occurs in gameplay, where the player chooses one gameplay approach or style over another.
- Expression is a result of agency, and allows the player to express themselves through the narrative decisions and gameplay choices. Expression could be considered the player's ability to role-play, to immerse themselves in the game, to act in the game in

a way that pleases them, and to feel that they extracting something unique from their play.

The following generally describes the levels of narrative expression, as described by Warren Spector (Mawson, 2015). These will be thoroughly examined through case studies of games within the categories:

- Low expression games have strictly linear plots that the player is driven along. These games appear more akin to cinema or traditional storytelling, in which the story is immutable. An alternative approach to explore such a story is through environmental storytelling, allowing the player to expose the narrative through their exploration of the predetermined and fixed game world.
- Medium expression games offer the illusion of choice in storytelling or gameplay. The
 player is offered choices which gives them a feeling of control. However, this sense of
 control is illusionary and only superficially impacts the game narrative and outcomes,
 though when disguised well it will only be exposed through repeat play-throughs.
 These kinds of games are specialists in making strong efforts to emotionally entangle
 the player with their choices.
- High expression games have a larger degree of player agency and shared authorship of the narrative. They allow the player to have a fuller manipulation of the story, having long running consequences throughout the narrative and sometimes across games in a series. This is difficult to realise without falling back to illusion and is often limited as development of such titles becomes vastly more expensive than more linear games. The player also has the freedom to express themselves highly through the agency they are given in both narrative and gameplay they can truly feel unique in their experience and performance in their game.

Levels of Narrative Expression

The following table codifies the levels of narrative expression into their essential elements – narrative structure, level of player agency and level of player expression:

	Narrative	AGENCY	Expression
Low	Linear, Immutable	None/Low	Low
MEDIUM	Non-Linear, Illusion of Choice	Low/Medium	Low/Medium
High	Co-Authorship, Collaborative Storytelling	High	Medium/High

Case Study Breakdowns

In the following chapters, I will examine each game at different narrative expression levels as a case study. The table below breaks down the games and the most essential quality to their narrative expression:

CHAPTER IV: LOW	Grim Fandango	Gone Home		
	(traditional storytelling)	(environmental storytelling)		
CHAPTER V: MEDIUM	The Walking Dead series	Heavy Rain		
	(illusion of choice in narrative)	(illusion of choice in gameplay)		
CHAPTER VI: HIGH	Mass Effect series	Deus Ex series		
	(agency in narrative)	(agency in gameplay and environment)		

IV-A. Low Expression – Grim Fandango

Overview

Grim Fandango is a story-driven adventure game by Tim Schafer, developed and published by LucasArts in 1998. It was the company's first 3D adventure game. However, for many it marked the end of the golden age of LucasArts adventure games development, which first started in 1987 with Maniac Mansion and gathered renown for over a decade with iconic titles such as The Secret of Monkey Island (1990). Grim Fandango was popularised for its excellent writing, voice-acting and art direction, which is a fusion of film noir, art deco design motifs and Aztec/Mexican culture surrounding the afterlife and the underworld. In 2015, the game received a high-definition remaster for PC, Mac, iOS and Playstation 4, developed by Tim Schafer's company, Double Fine Studios.

Story Synopsis

Grim Fandango is set in The Land Of The Dead, in which the protagonist, Manny Calavera, works as a travel agent for the Department of Death, arranging packages for recently departed souls on their way to the Ninth Underworld, the land of eternal rest. Each soul (who are portrayed as *calaca*, Mexican skeletal figures) must undertake a four year journey, unless they led an especially good life. In that case they earn a coveted ticket on the Number Nine – a train that completes the journey in four minutes instead of four years!

However, Manny – suave, debonair, yet seemingly hapless – uncovers corruption in the system when he is unable to find a ticket for Mercedes "Meche" Colomar, who led essentially a saintly life. The game takes place over Manny's own four year journey of the soul, in which he tries to track down Meche and stop the corruption in the land of the

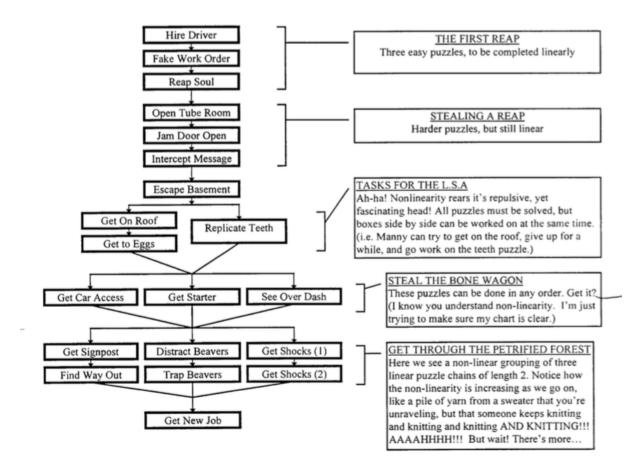
dead. Gameplay takes place over one day of each of the four years of Manny's story. Each chapter ends with Manny in a meagre situation, such as the end of year one, where he has just become a mop-boy at a café. However, the next chapter begins a year later with Manny having turned his fortune around; by year two Manny has become owner and turned the café into a casino and club. Over the game, Manny grows as a character, atoning for his past mistakes.

Game Mechanics

Grim Fandango's gameplay takes place mainly between exploration and conversation modes. In exploration, the player guides Manny around the environment, where he can interact with specific characters and objects. The player must solve puzzles – some intuitive, others bizarre – in order to complete objectives and progress the storyline. The current objectives are usually established by cutscenes, which tell the story and give the player direction. Puzzles are solved by some combination of interacting with the environment, using collected items with the environment and/or conversation with NPCs. Conversation is also commonly used to provide plot exposition, characterisation and hints on the puzzle mechanics.

The game features a strictly linear story; there are no deviations in the storytelling or possibilities of completing puzzles using multiple methods, since "gameplay elements are completely scripted: the player has no choice in or control over these sequences". (Kromhaut and Forceville, 2013) There has been a strong attempt to camouflage this design however, "[a]s Tim S[c]hafer...explains, the challenge of game design is to 'lead the player along' a predetermined pathway without 'making them feel that they are being controlled.' Few, if any games, rival Grim Fandango for artfully meeting this challenge." (Squire & Jenkins, 2002) There are usually multiple objectives to complete a game section (each year of the game) and these can often be completed in any order,

giving the player some feeling of agency. However, the bizarreness and obscurity of the puzzles can lead to an ambiguity about which puzzle or objective in particular is actually being acted upon – too often Manny has a pocket full of random items, leading the player to use attrition on a puzzle, by trying everything in order to find a solution.



The layout of the puzzles of Year One in *Grim Fandango* shows some non-linearity, but with ultimately linear conclusions (Schafer et al., 1996).

Character Perspective

As a game inspired heavily by film noir, *Grim Fandango* is deeply filmic in its perspective. The game "uses fixed camera angles, specially crafted for each scene. This creates a very cinematic feel to the game, but is rather rigid. With this cinematic style, there is no room for improvisation or interactions outside of those for which camera angles have been crafted. In that capacity, *Grim Fandango's* cinematography is fairly

inflexible." (Tomlinson et al., 2000) With this fixed perspective the player is heavily guided by the designer and lacks freedom to explore the colourful environment independently.

Conversation Mechanics

Some of *Grim Fandango*'s most memorable moments come during conversation, through Schafer's witty and colourfully written cast of characters. Conversation provides crucial context for the game; by talking with NPCs, both characters and the game world become more actualised and developed. Conversations do not contain a significant amount of gameplay – they are primarily used to enable world building, with hints about puzzles and objectives seeming secondary. Brusk and Björk (2009) argue that conversation provides the player with some freedom of choice, in that they "can also be regarded as a way to socialize with the other characters, as some of the choices have less or no impact on game progression", often in the form of comedy. Despite defining the games sense of humour and being a great source of characterisation, there is little agency or expressiveness to be found in these choices, as the player can only pick from a list of "canned text responses" (Ibid.) rather than choosing between a range of lines expressing different viewpoints.

Conclusion

While *Grim Fandango* certainly falls into the 'low' expressiveness category, as outlined by Spector, it does not in any way make it a less enjoyable storytelling experience or game. Indeed, there are hints of the concept, as outlined in the design document (Schafer et al., 1996), through the non-linear puzzle order and the witty, impactful conversations that nonetheless are not essential to gameplay. This demonstrates a degree of ubiquity of agency and expressiveness in game design. Despite being

extremely linear, the effort to cast a veil on this means it is not a limiting experience, but still a pleasing story to enjoy. Even though the game was the first 3D adventure title by LucasArts and received near-universal positive commendation, *Grim Fandango* did not save the adventure genre, which faded to obscurity by the end of the 1990s and early 2000s. However, as we shall see in exploring 'medium' expression games, almost a decade later a new form of the genre arose, with choice and consequence built into its core.

IV-B. Low Expression - Gone Home

Overview

Gone Home was released in 2013, both developed and published by The Fullbright Company. It is a "first-person exploration game that is firmly focused on narrative rather than challenge." (Sloan, 2014, p.4) Despite taking less than two hours to complete, the game was very well received by critics, holding a Metascore of 86 (Metacritic, 2016), and being praised for its atypical storytelling and progressive themes. Setting itself aside from other first-person titles on the market, *Gone Home* dispenses with action, violence and overwrought storylines, leaving intact only its environment and its coming-of-age story. The style of the game was heavily influenced by Bioshock (2007), a game that coupled together both action and a narrative mostly expressed through a wary and vigilant exploration of the environment. This is unsurprising since nearly all of the four person team at Fullbright had previous experience on Bioshock titles. However, the setting of *Gone Home* is much more mundane and domestic, and its narrative experience is perhaps more akin to traditional storytelling, being "something normal people could relate to: a family's ordinary travails." (Bogost, 2013)

Story Synopsis

Gone Home takes place in Oregon in the mid-90s. The player takes on the role of 21 year old Kaitlin Greenbriar, arriving home after spending a year in Europe. Home is not familiar however, as her family has recently moved into their late great uncle's mansion, Arbor House. Arriving late at night, with a storm raging outside, Kaitlin discovers that her family is not there, finding only a note from her sister Sam on the door of her new, unfamiliar home. Through exploring the artefacts of the house, Kaitlin discovers numerous subplots, the mysterious history of the previous owner of the house, her

father's career, and her mother's doubt about her marriage. In her year of absence, it feels like Kaitlin is learning who her family is again through their possessions around the house. The primary story arc is centred around Kaitlin's sister, Sam, and her relationship with a girl from school, Lonnie. Through notes that litter the mansion, Kaitlin discovers Sam's blossoming friendship and later romantic relationship with Lonnie. The overall theme is welcome, but rare in video games: "a journey of queer self-discovery." (Ibid.)

Game Mechanics

Gone Home is focussed on exploring the environment of the family's vast mansion. The player has only basic movement controls, walking and crouching –designed similarly to the typical first person shooter. Most objects found can be interacted with, and smaller items can be examined for closer inspection through zooming in. Anything that can be read also has its own zoomed view for legibility. There is no visual interface to speak of, except for the initial tutorial and optional tooltips, making Gone Home feel distinctly unlike a game at all.

The mansion is not completely open from the start, as many doors are locked. By exploring, keys can be found to open doors, or occasionally hidden passages can be discovered. Early in the game it becomes clear that there is something hidden in the attic, so gaining entrance becomes the primary goal. The story of the game is revealed through exploring books, notes, cassettes and other personal artefacts. There is the occasional puzzle, such as finding a combination for a lock, though the game does not attempt to be challenging; enjoyment is found in the almost voyeuristic journey through the unfamiliar domestic environment.

Narrative Style & Perspective

From a first-person perspective, Kaitlin becomes the catalyst through which the player views the environment of *Gone Home*. The player is immediately drawn into the same context as she is: exploring her unfamiliar family home and attempting to understand what has happened and where everyone is – all in the midst of a raging storm, which creates a very foreboding atmosphere, where the player expects something sinister to happen. However, "the game slowly dismantles this expectation, until you are left with only the embarrassment of having had it in the first place". (Ibid.)

Koenitz et al. (2015, p.16) argue that *Gone Home* demonstrates examples of embedded narratives. While the overall framing narrative is Kaitlin's exploration of her empty family home, there are numerous embedded narratives discoverable by "by exploring the house and its contents – the furniture, notes from the inhabitants, audio cassettes and other personal items – the interaction patches together the narrative of her sister's disappearance and the parents' attempt to resurrect their marriage." They remark that the spatial exploration and puzzle solving is in the same vein as Myst (1993), another game which defied conventional design in video games.

Gone Home creates a feeling of freedom and agency for the player through its sense of discovery. The game has an immutable, linear narrative but the sensation of this is mitigated through its slow-paced, low pressure mechanics. The player is free to explore at their leisure and immerse themselves in nostalgia for the 90s that permeates the game: spending time reading stories written by Sam; or listening to her cassettes of Riot Grrrl music by bands like Bratmobile and Heavens to Betsy. With effortless challenge, once the initial sense of foreboding is overcome, the player can approach Arbor House with curiosity over intensity. The effect is surprisingly liberating, even though the paths of exploration are ultimately restricted and guided carefully by the developer.

Unfortunately, as the player unlocks more of the house, there is a sense that its immersion is illusionary and fleeting. The house itself starts to feel far too large and also barren, its design is "empty, furnished to a minimum, the same sideboards and books, the same fixtures and accessories repeating from room to room." (Bogost, 2013) There is a lack of character to the environment, making it feel less like a home and more like a stage, full of inauthentic props. Sloan (2014, p.17) argues that *Gone Home* creates "hyperrealities not historical representations" through its heavy use of American 90s nostalgia items as cultural signifiers. This surrealism makes the stage of *Gone Home* seem more like the set of a 90s sitcom rather than a genuine space. There is nothing wrong with this of course, but the absence of authenticity does impact the narrative, making it seem less mature and more adolescent, even "amateurish, forced, [and] heavy-handed." (Bogost, 2013)

Conclusion

Gone Home stands uniquely as a novel way to express a linear and fixed story – a welcome oddity in gaming as much as in traditional storytelling media. It is comparable only perhaps to Dear Esther (2012), which has a less mundane setting and more fragmented story. The game also demonstrates how the world design may affect the perception of the narrative. Gone Home has a tenuous grasp on immersion. While it is very involving when there is still the initial sense of foreboding due to the atmosphere. However, this illusion is broken when the game starts to feel too safe and the house too prefabricated. This could be attributed to the small team size at The Fullbright Company. Unfortunately, for a game based purely on exploration, it lacks graphical and environmental detail, leaving a game world that can occasionally feel very staged and unremarkable.

Despite its linearity and underdeveloped world-building, the game fosters a sense of exploration and discovery in the player that makes the initial play-through experience feel liberating and unbounded. *Gone Home* is a very true representation of an interactive story, with a narrative accessed purely through interactivity.

V-A. Medium Expression – Heavy Rain

Overview

Heavy Rain is an action-adventure game and interactive drama released in 2010 and developed by Quantic Dream. Written and directed by David Cage, the game is heavily stylised as a mystery/thriller film as well as film noir. The story is structured into over fifty different scenes or 'chapters' in which the player directs the actions of one of four different protagonists. The characters investigate their environment and face challenges in the form of QTEs (Quick Time Events), which test the player's perception and dexterity. The game is remarkable for having a very impactful branching narrative leading to over twenty different endings or epilogues – each of the four characters may have very a different fate depending on what the player chooses and how they play the game.

Story Synopsis

In *Heavy Rain*, the characters investigate the mysterious Origami Killer, a serial killer who kidnaps young boys and drowns them in rainwater. The primary characters are Ethan Mars, Madison Paige, Norman Jayden and Scott Shelby. Ethan is a troubled man, who loses his son Jason in an accident in the game's prologue. He suffers now from his grief, blackouts and a fear of crowds. During one of his blackouts, his other son, Shaun, is taken by the Origami Killer. Given a series of clues by the killer, Ethan must endure trials to prove himself and rescue his son. Madison Paige is a journalist who suffers from insomnia. She meets Ethan and begins her own investigations into the case, and also (if the player chooses) becomes romantically involved with the troubled father. Jayden is an FBI profiler working with the police on the Origami Killer case. He uses an augmented reality device to help with the investigation, but suffers from an addiction to a drug that mitigates the side effects of the technology. Scott Shelby, a former cop, is a private

investigator looking into the murders. During the story he partners with Lauren Winters, the mother of a previous victim. It is revealed in the course of the game that the killer, as a child, lost his brother in an accident where he drowned in rainwater – their drunken, abusive father refused to help – and this incident spurred him towards his distinct murders. During the penultimate scenes in the game, it is revealed that Scott is in fact the Origami Killer and has been gathering evidence in order to destroy it. In the final scene of the game, depending on the player's actions, the three other characters confront Scott and attempt to rescue Shaun. However, depending on the circumstances some of the characters may not have survived or found the location. Shaun may live or die and Scott may be defeated or claim victory. The numerous

possible arrangements of the game's final scene lead to its great variety of endings.

Narrative Style & Mechanics

Both the narrative and gameplay of *Heavy Rain* are heavily based on the idea of player agency. However, this is a contestable notion: it would be more accurate to say the game is built on the *illusion of choice* rather than actually presenting the player with agency. Wei argues that the game's story is heavily authored and that the "narrative design of Heavy Rain is all about disguising its prescribed narrative structure and giving players the control that is just enough to feel critical to the narrative experience." (Wei, 2011) David Cage, writer and director of the game says that this becomes necessary otherwise "your story is so torn and twisted that it doesn't mean anything and you're not in control. You want to allow the player to be the co-author as long as the result is great." (Richmond, 2010)

Throughout the game, during more domestic moments, the player is required to control nearly all actions of the character in the scene. Bogost (2011) calls this a "prolonging" and that by lingering "on the mundane instead of cutting to the consequential" the

player is drawn to empathise with the characters in their 'normal' actions – showering and dressing or making dinner, for example. This also conditions the player into having a strong sense of agency over their character. However, when it comes to many key decisions in the story, agency is removed from the player and the characters start acting on their own imperative. Short (2010) argues that the twist revelation of Scott as the Origami Killer is inconceivable. He was a character she "developed in tandem with the game's authors" but "that twist negated the meaning of every truly interesting choice I'd made in the game up to that point". This demonstrates a point where *Heavy Rain* changes from a player's story to a writer's story.

In addition there is a fundamental problem with the majority of the game's 'decision making' mechanics. The game's sequences "are narratively about choice, [but] interactively they are framed as challenges." (Short, 2010) These challenges are skill based, not agency based – decisions are made for the player depending on their skill level (and the game can be quite challenging), removing the player as an effective coauthor of the story.

Interface

The interface of Heavy Rain is interesting but ultimately troubled by inconsistency, which seriously hampers the player's ability to make meaningful decisions. The groups of inputs are the analog stick, face buttons and triggers. The analog stick is fairly intuitive as commands usually reflect the real movement of the action required (e.g. a 180° turn to twist a key in a lock). However, the face buttons are randomly assigned to actions, which, along with a lack of colour coding of the icons, can become confusing in fast QTE action sequences. Assassin's Creed (2007) uses a more intuitive concept – each button references a part of the body – that Heavy Rain might have benefitted from. The trigger buttons are typically used for actions involving a left-right binary or for objects

that have a trigger feel to them, like guns or pedals. While this is intuitive, the game will often break with the conventions it has established.

The game makes deliberate use of distortion of the interface – blurring, shaking or obscuring the icons. While this is used for dramatic and empathetic effect, it also removes agency from the player by disrupting their ability to choose, which can lead to an outcome that was unintended. There is also an inconsistency in its presentation and perspective: the distortion is sometimes from characters perspective, e.g. their emotions or physical state causing distortions, and sometimes from the audience, e.g. the actions are upside-down because the character also is, in the framing of the scene.

Rather than using traditional canned text responses, *Heavy Rain* makes use of emotional cues when faced with dialogue decisions. A keyword is used to express an emotion in reaction to the last heard line – this seems to be an excellent way to condense the character's reaction into a quick, understandable word. However, as with the main interface, the game often obscures the responses by blurring or shaking the text or spinning the words around the character. There is also no colour matching to the face buttons, making it more difficult to know which button corresponds to which emotion, especially when the other distortions are present. While this adds to or reflects the tension of a scene, it also pulls a veil over player agency and expression.

Conclusion

Heavy Rain entangles notions of agency into gameplay, with numerous branches to the narrative, resulting in its various endings. Through interaction, from the mundane, normal 'prolonging' to the most painful of tasks, the game builds a strong emotional connection between the player and characters. The variety of outcomes, and even premature, permanent character deaths, mean that each play-through can be a incredibly different experience. Once the great twist in the story is known, the player

may choose to play the second time through in a very different way. However, the majority of 'decisions' in the game that affect the outcome are down to the player's skill, not to their ability to choose. While there are also decisions the player has direct agency over, the ambiguity and distortion of the interface severely restricts the player's ability to make decisions that effectively express themselves.

Consistency is an important part of engaging the player – if there is agency and expressiveness to be had the player needs to know where the boundaries of it consistently lie. Heavy Rain unfortunately lacks this consistency by constantly moving its goalposts – it changes its rules on a whim, even after laboriously establishing them with the player initially in the game.

V-B. Medium Expression - The Walking Dead

Overview

The Walking Dead is a story-driven adventure game and interactive drama developed by Telltale Games. The game is structured episodically, like a television series. The first series of the game was released between April and November 2012 on a variety of platforms. Based on Robert Kirkman's The Walking Dead comic book series, it follows original characters sharing the same fictitious universe, rather than attempting to emulate Kirkman's work directly. Although it was not Telltale's first series, the game was seminal in bringing new life to the adventure game genre, which had fallen out of popular favour since the early 2000s. The Walking Dead broke away from the traditional adventure game mould, deemphasising puzzle solving and instead focussing on the story and character development through intense dialogue and Quick Time Events (QTEs). The gameplay centres around mediating the interpersonal conflict of the survivors, and developing character relationships and emotional attachments through decision-making, especially between the playable character, Lee Everett, and Clementine, a young girl he takes under his care.

Story Synopsis

The Walking Dead is set in a post-apocalyptic zombie outbreak in rural Georgia in the United States. Although there is some minor crossover with Kirkman's story of Rick Grimes, Telltale's story is an original one. The player controls Lee Everett, a history teacher being transported to prison for murder. However, the situation goes from bad to worse when the car crashes to avoid a pedestrian on the highway. Lee escapes but not before he is attacked by the now undead police driver he was with. He escapes into a suburban neighbourhood where he encounters a young girl, Clementine, who Lee saves from her undead babysitter. Over the course of the game, Lee becomes a

surrogate father/older brother figure to Clementine, protecting her from the threatening new world they inhabit, but also caring for her and teaching her how to survive. Together they band with other survivors, and it is the actions of Lee that changes how relationships form. The story is one of survival – the protagonists are not there to save the world from the zombie threat, rather, they simply are victims of circumstance. In this intimate and personal story, Lee is faced with the challenge of doing what is best for Clementine, even at the ultimate cost of his own life.

Episodic Mechanic

The first series of *The Walking Dead* was broken into five episodes, each released months apart. Player decisions carry from episode to episode. While the overall story arc was known, work took place between episode releases, meaning that many story details were not fixed. This meant that Telltale was able "to adapt to the things people are finding interesting" (Bruner & Connors, 2013) since they tracked the metrics of player decisions online and sought reactions on gaming message boards. Co-founder of Telltale Games, Kevin Bruner, explains the benefits of an episodic approach on one of their previous games, *Sam & Max Save the World* (2006-2007):

"In Sam & Max Season 1, fans HATED the Soda Poppers, so we started to torture them as the season went on. We eventually sent them to Hell. Then they were the first characters you saw in Season Two, to which Sam says: 'What the hell are you doing here!?'. Totally due to working in 'real time'!" (Ibid.)

During his keynote speech at PAX 2015, Warren Spector said that he "love[s] The Walking Dead, but the choices you have to make; they're compelling choices...but they're designer driven, not player driven...Every choice in a game like this has been pre-scripted and handwritten by a designer somewhere, and the effects of that choice have been predetermined by the developers." (Saed, 2015) While this may be partially

true, by being able to react to fan feedback between episodes, Telltale Games is able to effectively keep their design directed towards the player and their writing towards being a "player's story". Lead writer Sean Vanaman says that, by the final episode of the series, "we knew what we did well, we knew what we didn't do well, we knew what people are emotionally responsive to, we learned from a number of mistakes." (Klepek, 2013) This adaptability is unique to Telltale Games, having only been made possible under recent internet technologies. Episodic structures are beginning to come out in other games, such as *Life* Is *Strange* (2015), but it will be interesting to see if they adopt the use of metrics in the same way as Telltale.

Game Mechanics

The mechanics of *The Walking Dead* are fairly basic; the weight of the gameplay comes from the development of emotional attachment to characters and the player choice that affects them. The game is divided between free play and primarily scripted sequences. Free play allows the player to control Lee, directing him to speak with different characters or interact with the environment. There are few puzzles to speak of in the game and those that are present are very basic, used more to control the pacing of the game than anything else. The game's QTEs are also very basic, with failure only resulting in death for the player character, which will then reload the last checkpoint. This consequence-free gameplay means that the player is under reduced pressure to rush their decision-making process.

The most important system in the game, however, is the conversation mechanic. This system was inspired by games like Mass Effect (2007), but sought to improve on it, by creating a system of more naturally delivered dialogue: "Traditional dialogue trees don't present a believable rhythm to a conversation and make it a task to exhaust dialogs. Moving away to a more natural dialogue system was huge for us." (Manuel, 2013) Unlike

many other game conversation systems, *The Walking Dead* seeks to avoid good/evil dichotomies and instead approach conversation, choice and consequences in a more neutral yet nuanced fashion. As episodes progressed and the metrics on player choices came in, the writing changed. There was an effort made to avoid any hint of suggestion of one option being superior when it came to major decisions, in order to not bias the player and force them to think about their decisions.

Narrative Style

The Walking Dead has a narrative that initially seems to be branching, but in reality folds back – Telltale calls it a "tailored narrative" (Klepek, 2013). The philosophy stresses that "choices feel important as opposed to being merely mechanically important." (Ibid.) Rather than having choices that affect the whole world of *The Walking Dead*, Telltale emphasised decision-making that affects the relationships between characters who are ultimately powerless to change their situation. As such, the game is better seen "as a 'role playing' game than a 'choose your own adventure', though there is obviously lots of choosing." (Ibid.) As nearly all choices are character related, they become much more emotionally entangled and meaningful for the player; "meaningful choices put the player right into the story and allow them to interact with a fictional world in ways no other medium allows." (Manuel, 2013)

Smethurst and Craps coin the term 'interreactivity' to refer to two-way interactivity in which "both player and game react to one another in a feedback loop." (2014, p.5) The Walking Dead evokes strong emotion in the the player, affecting their decision-making, and successfully creates emotionally charged moments through the theme of trauma. Smethurst and Craps (2014, p.3) argue that "games work with the concept of psychological trauma in ways that are unprecedented in other media". The game represents this by presenting the player with "weightier moral quandaries in which

there is no obvious 'right' choice" (Ibid. p.13). By hiding what other outcomes might have achieved, the game's choices are false choices, "used to create the illusion of a richly branching narrative without spending the resources necessary to do so." (Mawhorter et al., 2014) Choices in *The Walking Dead* often have the same (usually tragic) outcome, regardless of choice, but decisions can weigh heavily on the player, wondering if they could have done something different. Killham (2013) presents a large chart that demonstrates just how linear the story ultimately is over all the episodes. The player is encouraged to identify and empathise with the other characters by the game's use of close-ups revealing very meaningful facial expressions, challenging the player to "try to understand the motivations of the other characters in order to make good choices." (Smethurst and Craps, 2014, p.16)

Even with a 'tailored narrative', the game allows for a high degree of player expression, by providing greater nuance in dialogue, including often the option to purposefully remain silent. Nearly all of the player's decisions have some effect on their relationship with Clementine: "Everybody's been saying you have no idea, questioning your ability to take care of this girl. Now is the moment where you have to prove yourself, and you can express that anyway you want. It's yours. The game lets you do your right thing." (Klepek, 2013) Clementine becomes something of a moral compass for the player; she becomes a lens through which the player evaluates their options before making a choice, adding "an extra layer of complexity to interpersonal negotiations, as the player must continually weigh the individual (and very different) needs of Lee and Clementine against the needs of the group." (Smethurst and Craps, 2014, p.11) And while the overarching narrative may be rather linear in how it progresses, every decision builds in agency. Telltale's writing reflects this as they were concerned with "player agency and making the player feel like they are in control of the story, and that often constrains what characters can say and do." (Bruner & Connors, 2013)

The final scene of the game, one of the most poignant, satisfactorily accounts for the meaningful and emotional decisions made in the game. Lee, dying and soon to turn into to a walker, can either ask Clementine to shoot him or leave him. However, the player can abandon their agency and say nothing. Depending on the kind of personality the player imbued Lee with, Clementine "does actually look back at everything that's happened and she'll decide if she wants to do it or not." (Klepek, 2013)

Conclusion

The Walking Dead is able to create a strong illusion of choice for the player while still maintaining a tight rein on its story by using a foldback narrative structure over a branching one. Decisions often don't matter in the grand scheme of the game – some characters will always die regardless of what the actions that the player chooses. However, choices feel very meaningful because they are heavily entangled with emotion and empathy for the other characters. There is an intensity to the choices, especially in these life-or-death situations, that allows the player to effectively express themselves as Lee. The context of the situation as well as the masking of alternative outcomes means that the actual limitations of player agency feel less apparent. As a active participant in the actions of the story, the player is forced to face difficult moral choices, always shaded in grey, that may lead to deep introspection, even after the game is over. Warren Spector argues that "Telltale's scripts force players to think for themselves and about themselves" (2015a) It is hard not to be emotionally moved and changed by Lee and Clementine's story arc – Telltale, like any good storyteller, provide a cathartic experience.

VI-A. High Expression – Mass Effect

Overview

Mass Effect is a trilogy of games developed by the Canadian studio BioWare. The first in the series, Mass Effect, was released on Xbox 360 (and later PC and Playstation 3) in 2007 to great critical and commercial acclaim. The sequels followed in 2010 and 2012. The games are an amalgamation of several genres: action, role-playing, and third-person cover-based shooter. BioWare has a long history of excellence in developing role-playing games, having created numerous well regarded franchises, such as Baldur's Gate (1998), Neverwinter Nights (2002), Star Wars: Knights of the Old Republic (2003) and Dragon Age: Origins (2009). Mass Effect was an entirely original intellectual property for the company. It was highly praised for its writing, characters, voice acting and the depth of its universe and lore. Moreover, the game was seminal in the agency it allowed players in affecting their experience and story outcome.

Story Synopsis

The universe of the Mass Effect series takes place in the year 2183, where humanity has discovered faster-than-light travel and the numerous alien races that together form the Citadel Council. The player takes control of Commander Shepard, an elite soldier of the Human Systems Alliance, who commands the Normandy, an advanced space vessel. Throughout the trilogy of games, Shepard uncovers evidence of an ancient race of machines, the Reapers, who periodically wipe all advanced life from the galaxy. In the first game, Shepard must stop agents of the Reapers, Saren and the Geth, as well as prove to the galaxy that the Reaper threat is real. In the second game, Shepard battles the Collectors, who are abducting entire human colonies for the Reapers, and forms a squad for a suicide mission against them. In the third game the Reapers have invaded

the Milky Way and Earth; Shepard must unite the conflicted races of the galaxy against the ultimate threat. The universe of Mass Effect has a rich lore that is well developed throughout the series. The various alien races have complex histories, cultures and relations that the player can immerse themselves in.

The player is given agency to make decisions throughout the games and these decisions carry on between games, using save imports. The choices range from the mundane to the epic, from choosing how to treat squad-mates to deciding the fate of an entire race.

Perspective

As a story driven series, Mass Effect uses a large amount of cutscenes. Armando Troisi (2010), lead cinematic designer of Mass Effect 2 (2010), describes these cutscenes as 'Interactive Cinematics'. They are not only a narrative tool to further convey the story, but also a game system, with which the player can interact and influence. Furthermore, Troisi describes it as a BioWare philosophy crucial to creating their style and a satisfying player experience.

Perspective is crucial to any interactive story, and this manifests in two ways in roleplaying video games:

• Subjective: this is the traditional computer role-playing model and was the style of all BioWare games pre-Dragon Age¹. Sometimes known as 'The Gordon Freeman Effect' (after the famous silent protagonist from the Half-Life (1998) series), the subjective experience is one where the player and the avatar (i.e. the playable character or PC) are one in the same – the player imbues their character with personality, like a tabletop role-playing game. Dialogue choices are often verbatim,

¹ Although Dragon Age: Origins (2009) was released two years later than Mass Effect (2007), its development cycle was much longer, having been announced a year earlier than Mass Effect, at E3 2004 (Blevins, 2004).

in the form of dialogue lists. An excessive amount of dialogue is required by other characters for exposition, talking *at* the player, since the player is unvoiced. This leads to less drama and tension in the dialogue. Coupled with the temporal disruption from the absence of real-time conversations – a consequence of unvoiced player responses – this leads to a lack of cinematic quality.

• Objective: this is the perspective chosen for Mass Effect, wherein the avatar is not a projection of the player and their personality, but an independent character with their own voice, motivations and values. In this perspective, the player becomes more of a voyeur, as they observe the main character from a more cinematic, albeit more distant, perspective. Troisi (2010) claims that this leads to a more empathetic connection between the player and their character, because they can engage with them as a person. In the Mass Effect series, the player's avatar is Commander Shepard. While the player may customise their Shepard's first name, class, gender, back story and appearance, and affect Shepard's choice and demeanour through the games, Shepard is still a separate entity from the player. The player has agency to choose direction, but rarely specific actions in cinematics. The character may act on their own imperative, or in reaction to their situation without the player's consent. This perspective may appear to remove agency from the player, not bestow it. BioWare's solution for this is what they coin 'The Agreement'.

Narrative Style & 'The Agreement'

In order to allow for greater writing freedom, while still respecting the player's agency, BioWare developed what they call 'The Agreement'. This is a covenant made with the player to guide them through the interactive story experience. Troisi (2010) describes it as "a set of rules that binds the designer to the player, and the player to the game."

These are rules that govern choice and expectation: does a design or writing choice obey the rules and make sense within the confines of 'The Agreement'? Furthermore, from the player's objective perspective, it allows them to access their avatar in a meaningful and intuitive way, enhancing their sense of agency and empathy. Essentially, it is a tool to learn the player's intended narrative expression, allowing it to become more ubiquitous within the game. The rules are explained as follows:

The interface for choice is predictable

Mass Effect utilises a dialogue wheel for conversation options. Since each response may only have a short amount of text, responses are not verbatim as they would be in a list system. However, the wheel overcomes this limitation and significantly enhances it. It does this by giving the player emotional reactions based on the context, rather than explicit reactions i.e. the player tells the character what to feel, not what to do. The games are "singular in that they give (gameplay) consequence to dialogue options in themselves (rather than through the action they provoke), strengthening the idea that the way someone leads a conversation is actually an integral part of how they (role)play a game." (Domsch, 2013, p. 40) The interface has two main layers of predictability. The first is that each section of the wheel is always mapped to the same kind of emotional response:



The example wheel above demonstrates the style of mapping responses in Mass Effect.

Paragon (more virtuous) responses always sit at the top, whereas renegade (more ruthless) responses are always at the bottom. This means players can intuitively respond

in a conversation – rather than choose words directly, they choose tone and emotion. Furthermore, the 'behavioural player', as Troisi puts it, is determined to express themselves as a particular character, e.g. pure paragon or pure renegade. Predictability is essential to allow this, as it is too easy to misinterpret responses without a predictable dialogue model.

The wheel is further clarified by the second layer of predictability: the paraphrase. The paraphrase is a short derivative of the outcome of the choice presented to the player. This allows the player to make the distinction between, for example, using verbal hostility instead of initiating violence.

A third layer of predictability is down to design. The wheel uses "a colour-coding system to indicate...different styles" (Domsch, 2013, p.126). Paragon is always blue and renegade red. These colours are used as a universal motif in the series, highlighting other characters, locations and events as a particular alignment.

Choice produces results that the player expects

This rule dictates that choices must always reflect the subtext or risk breaking the player's immersion. Troisi gives the example of Shepard being able to accuse of shopkeeper of classism out of nowhere. He asserts that if there was some preface for this accusation, such as overhearing a conversation, then it would make contextual sense. Without context, the choice is rendered confusing and absurd. There is a risk of 'railroading' (i.e. giving the player less agency due to breaking the game rules) that must be avoided. Paraphrasing needs to be very concise or sometimes "the answer actually made by the player character will stray rather far from the significance offered as a choice to the player." (Domsch, 2013, p. 40)

Give the player the choices they want

This rule is perhaps the most difficult to fulfil as it involves a degree of mind reading. What choices will the player want and when? Part of this is knowing the emotional arc being created, how it will affect the player, and how the player is likely to want to express themselves. From Mass Effect 2 on, this is achieved by what BioWare call the 'interrupt'. These are 'take control' QTEs where the player is presented with the real-time option to engage in a visceral, physical and emotional action, tied either to paragon or renegade values. Doing nothing is also an option, though sometimes inaction is a hard decision for a player to swallow – interrupts come at emotional peaks which are often begging the player to act. These sequences use 'telegraphing' in a similar way to paraphrasing, giving a glimmer of what the action will be, by suggesting some context. The writers are adept at guiding the player emotionally through the narrative, so although options are sometimes limited, the player has been put in the correct emotional state to accept what they are offered.

It is the player's story

Many games play like films that the player can only observe. Troisi cites *Uncharted* (2007) as an example of a "writer's story" – a narrative where the writer has complete control over all the beats. However, games like Mass Effect focus on the "player's story", in which the writer is providing the tools and medium through which the player coauthors their experience.

The Mass Effect series has hundreds of plot points, each of which carry from game to game. Between the first and second instalments, over one hundred decisions carry over, resulting in over seven hundred plot hooks reliant on decisions from the previous game. This gives a huge breadth of different outcomes and experiences. Troisi highlights that the 'small stuff' can be the most significant, even if only a tiny minority (he estimates

2%) of players get to experience the resulting content. Subtle changes to the game universe can give the player a sense that they are truly affecting it.

Conclusion

Troisi (2010) argues that interactivity is a potent narrative device that is not seen enough in game cinematics. All too often players are treated to a filmic cutscene where they can only "sit back and watch" – a bizarre contradiction, since the player is sitting waiting eagerly with a controller in their hand. This is perhaps a remnant of writing and direction styles in game development that are more heavily influenced by cinema, and the failure to recognise the potential engagement the player can have with cinematics (hence the title of Troisi's talk: Get Your Game Out Of My Movie!). Troisi urges developers to explore this potential by always making a conscientious decision around perspective, whether subjective or objective better suits the narrative and the player's needs. Also, developers need to recognise or discover their 'Agreement' with the player – and stick to it.

While BioWare has clearly developed a strong model for crafting games with high level narrative expression, it appears this is a difficult and costly process. In Mass Effect 3 (2012), BioWare had turned against some of their philosophy, reducing the complexity of their conversation wheel, leading often to only binary choices. The ending of the trilogy sparked a huge amount of controversy and vitriol, as players felt the ending did not account for all the decision making and agency they had experienced in the rest of the series. (Schell, 2014, p.311) It took the narrative from the player and became a "writer's story", allegedly because the majority of the writing team was excluded from crafting the ending (Harmon, 2012). This ultimately led to a downloadable 'Extended Cut', in which many fan complaints were addressed. (Muzyka, 2012)

Mass Effect demonstrates the unique power of video game narrative. Through agency, players are called to immerse themselves in the rich lore of the universe they make decisions in, expressing themselves by crafting its future though the hundreds of plot points in the series. Although there is an overarching story that cannot be undone, the degree of freedom of choice across a series of three games means that each playthrough becomes an entirely new experience for the player.

VI-B. High Expression – Deus Ex

Overview

The world of the *Deus Ex* series of action-RPG games is set in a dystopian cyberpunk future, where biomechanical augmentation of the body and 'human guided evolution' have become a reality, at the cost of a society controlled by manipulative, self-serving corporations. Core to the philosophy of the series is "an extreme devotion to systems over scripting and player choice over hand-holding" (Remo, 2010). This is expressed as non-linear level design coupled with a variety of gameplay styles.

The first game, Deus Ex (2000) was developed by Ion Storm, with the design being led by Warren Spector. A sequel, Deus Ex: Invisible War was designed without Spector and was released in 2003. It received less praise than its predecessor, owing to its focus on some of the best features of the original game to the exclusion of others. It would be eight years until the next game in the series was released. Deus Ex: Human Revolution came out in 2011 to great acclaim, bringing new life to the series and incorporating the best aspects of the previous games. Serving as a prequel in the story, the game was developed with expressive game mechanics and an open-ended nature as core principals, balancing authored control with player choice.

Story Synopsis

The series of *Deus Ex* games deals with themes of class, liberty, conspiracy and the ethics of transhumanism. In the original *Deus Ex*, the player controls JC Denton, a nanotechnologically augmented agent of UNATCO, an anti-terrorism organisation. The world of *Deus Ex* is in a spiral of destruction, amid class wars and a lethal pandemic, the Grey Death. In fighting against terrorists who have stolen vaccine for the plague, JC uncovers a vast global conspiracy, involving shadowy organisations. The prequel story *Human*

Revolution, depicts a world on the brink of unlocking human augmentation technology. The player controls Adam Jensen, head of security for Sarif Industries, who are the leaders in the augmentation field. Following an attack on their headquarters, where the science team is killed, Adam, mortally wounded, is outfitted heavily with mechanical augmentations, replacing large parts of his body. Amid the increasing societal tensions surrounding such technology, Adam becomes embroiled within the sinister and violent politics in his search for the terrorists who attacked him. The Deus Ex series gives players an uncomfortable insight into a future built on technology in control of those with no responsibility toward greater society. Through choices made throughout the games, the player is ultimately able to create a response to such a world.

Gameplay Mechanics

Deus Ex spans a variety of genres, combining first-person shooter and role-playing game elements. This gives the games a wealth of mechanics, such as combat, stealth, hacking and persuasion/social. This is brought together with "a highly successful branching narrative structure, actively encouraging ethical engagement in the player over mindless violence, and is still frequently cited as one of the pinnacle achievements of the genre." (Pinchbeck et al., 2006) The variety of mechanics opens up a wealth of play styles: the player can express themselves as a running, gunning death machine; a stealthy ninja skirting the rooftops; a hacking expert manipulating security systems; or anything in between. Crucially, deciding on one style of approach does not exclude others – a failed hacking attempting, sounding off alarms, could be answered with a stealthy retreat into a ventilation system or an all-out gun battle. As a result, Deus Ex "promises an elaborate and fairly open world where the player will probably expect to be able to solve problems in any number of ways." (Juul, 2011, pp.111-112) This is different from other games, such as Mass Effect, which use fixed classes to create different

gameplay scenarios. In *Deus Ex*, nearly all options are always available, though they can be made easier by specialising in an area over the game.

Level Design

A large part of the success of the open-ended nature of Deus Ex is down to its level design. The maps in Deus Ex are large and fairly open, limited initially by the player's small pool of skills and abilities, which can be expanded through progression the game. Rather than taking the player down a predetermined path, the levels are like "a maze with a central objective point in the middle and dozens of potential routes in reaching it" (Schwarz, 2011) Each route is detailed and different, providing new perspectives and opportunities by "featuring multiple zones, levels of elevation, indoor and outdoor areas, multiple floors within buildings, alternate routes from all angles." (Ibid.) The multiplicity of routes mean that there is content the player may not see the first time though, which could be considered a costly waste of resources by some developers. However, the agency created by the level design allows the player to experience the game in the style best suited to them, and to creatively form their own tactics, rather than have to adapt to tactics that the game enforces.

"In every environment and mission, alternate routes offer players a variety of gameplay experiences. A stealthy player will avoid an entire combat arena, opting to skulk through a vent or traverse a dangerous rooftop. Explorative players will also find many rewards for exploring; some numerical such as credits or experience points, while others are more tangible such as advanced weaponry or augmentation upgrades." (Donatelli, 2012)

Early areas in the game readily present a more obvious variety of approaches, enticing the player into discovering their niche and into learning to examine the game world as a place of various possibilities.

Skills & Abilities

While many routes can be accessed purely through navigation, there are some that require the player to utilise particular skills and abilities. This adds another layer of complexity as the player often needs to choose which skills and abilities to focus on. In the post-human societies of the series, extraordinary skills are achievable through human augmentation, giving the player access to superhuman powers, such a soundless running, enhanced jumping, impossible strength, or x-ray vision. The abilities acquired throughout the game allow the player to explore familiar environments in new ways, similar to 'Metroidvania' style games, inspired by Nintendo's Metroid (1986). This system allows players "to approach a wide variety of scenarios and complete them using the toolset given to them by their skills, augmentations and abilities - sometimes in ways that the game's developers never anticipated." (Schwarz, 2011)

Choice and consequence

Enabled by the level design and skill set available to the player, Deus Ex becomes a series focussed on choices and "the consequence of choice, letting [players] play the fantasy the way they want, letting them explore the maps and find creative ways to achieve their objectives." (Remo, 2010) True to Warren Spector's philosophy, the series allows players to effectively "express yourself through the themes and possibilities." (Ibid.) This became core to the development of *Human Revolution*, which emphasised the game design and mechanics first, and then built the story around it. The game game design focussed on "what gameplay you'll do and the story elements you need to cover" (Ibid.), putting player experience and expression over a heavily authored vision for game.

The first game has a particularly groundbreaking moment, in which "the third unstated option of killing an ally in what is presented as a binary choice leads not only to the player's surprise at the success of the act, but the characters in the game itself seem to be equally surprised, even as they desperately come up with ways to cover up the

player's actions." (Schwartz, 2011) The possibility of this action seems like it should be game-breaking – it was "not one that the game telegraphed" (Ibid.) – and yet falls within the mechanical rules of Deus Ex that the player has learned. With the series design geared towards contingencies, "the nature of the gameplay itself allows for the player to make a choice, and the game is equally cognizant of that potential outcome." (Ibid.) Choosing this hidden option reveals a huge shift in the narrative well in advance of where it would occur otherwise, demonstrating a functional marriage between mechanics and storytelling, in which "the developers can utilize the player's understanding of the real rules to access narrative in the fictional world that is otherwise inaccessible in other media." (Jackson, 2009, p.45) This offers a truly unique experience for the player, where they can achieve a truer expression in the game scenarios. For the imaginative player, there is almost always a completely unapparent 'option C' to choose instead. Indeed, throughout Deus Ex: Human Revolution, the player can play entirely as a pacifist if they wish, avoiding or stunning enemies – a far greater challenge, but one that can be seen as a more skilful and even morally superior option.

Narrative Style & The 'Assumed Persona'

The narrative in the Deus Ex games reveals itself in multiple ways. The overarching plot is largely revealed in a cinematic style, including a mix of first-and third-person conversations as well as cutscenes. However, for the player who is inclined to look for it, a huge amount of plot information can be uncovered through the environment, similar to games like System Shock 2 (1999), Bioshock (2007), and Gone Home (2013). Much of the deeper detail of the story is found in searching through emails on personal computer, usually only achieved through hacking or through found books, notes and PDAs. This embedded narrative provides for greater immersion into the story and the rich universe of Deus Ex.

The games present the lead character from an objective perspective, split between first- and third-person views. The playable character is shaped to a degree by the player, but also has their own strong views on the world they inhabit. For example, JC Denton, early in Deus Ex, has the conviction that law and order is paramount, perhaps even over liberty. The player takes on what Jackson calls an 'assumed persona': "because the player inhabits an assumed person that has its own personality, it can offer a different way of thinking that the player does not have, and therefore allow the player to see the world from that mindset without being awkward or cumbersome." (Jackson, 2009, p.23) Such a character may seem to limit agency for the player, but is useful in integrating the player into the fictional world, and the views that they would hold had they been raised under the circumstances of such an environment. The assumed persona "can be used as a springboard by the developers to extrapolate on how the world has come to be the way it is, and how [the player's character] can possibly hold the view [they] do." (Ibid.) Over the course of the game, the player has often has agency to shape their character, not only through their words, but through their actions. NPCs react to the player's expressed play style, whether it is a ruthless gunslinger or a stealthy pacifist. In addition, the character changes naturally with the plot, as new information, to both the character and player, informs their worldview. By experiencing the world as an assumed persona, the player character is "beyond being a flat or round character because the player gradually comes to see the world through his or her eyes. This change is not one the player witnesses the character undergo, but rather one that the player assists the character to undertake." (Ibid., p.25) By inserting the player into the character's perspective, giving them an insight into the character's persona and providing a justification for it, limitations in player agency become acceptable as part of that persona. Moreover, the player, assuming the character persona, experiences a deeper immersion through essentially being indoctrinated into the pre-existing worldview of that character, which can then be challenged and broken in the progression of the narrative – a truly metamorphic experience.

Conclusion

The power of the Deus Ex model is that it provides opportunities for both player agency and expression in role-playing a character, narrative and gameplay. The open-ended nature creates a "feeling of accomplishment and satisfaction that comes from knowing that your skill set, augmentation choices and play style were what enabled you to find something..." (Schwarz, 2011) Deus Ex empowers the player through their choices, rewarding yet challenging different kinds of play style and expression. The success of the series is due in no small part to the success of its liberating design.

This style of design is undoubtedly time-consuming and expensive to produce. There is a large amount of content that may not be seen by players on their first play-throughs, or even by a majority of players overall. This is the cost of the open-ended model. It also raises "the question of consistency – that players can perform actions that they have been tied into believing they can do. It can be a problem when the representation of the game cues the player into attempting to perform an action that is not implemented in the rules." (Juul, 2011, p.112) The mechanics and design in Deus Ex quickly elevate the expectations of the player. When giving the player such a malleable world and large skill set, 'experimentation' is bound to happen and the developer must be prepared to account for it.

VII - Conclusion

Narrative in video games can be presented in many forms, based on different levels of player interactivity, agency and expression. Some of the most defining features identified are choice and consequence, world-building through embedded narratives and the range of character and narrative perspectives.

Choice and Consequence

Choice is the defining element of co-authored and collaborative storytelling in video games, and indeed a key feature of gaming in general. Choice can be purely part of structuring the narrative, as seen in *The Walking Dead* and *Heavy Rain*, or it can be an integral part of the game systems and mechanics, demonstrated by *Mass Effect* and *Deus Ex.* In discussing choice, Warren Spector argues that it shouldn't be about binary oppositions – choose good over evil, law over chaos – but rather it should be about the "revelation of consequences", because "choices without consequences are meaningless." (Spector, 2015b) The choices in the games studied are sometimes binary, but also frequently offer the player a more nuanced approach to choice. This creates "opportunities for players to test behaviors and then see the consequences of those behaviors. Given the chance, players will judge for themselves whether the benefits gained by making a particular choice were worth the cost of making it." (Ibid.) This is especially true in games like *Deus Ex*, where choice is championed in both narrative and game systems. Even games as linear as *Grim Fandango* and *Gone Home* offer us a glimmers of choice, illusory or not. Any interactivity, by its very nature, creates choice.

Embedded Narrative

In video games, a break in continuity from the larger plot gives time for exploration of the game world. Storytelling does not have to stop though, as narrative can be embedded in the very environment, as seen in Gone Home, Deus Ex and Mass Effect. Embedded narratives create a continuous way for the player to be immersed within the story. They build a rich and interesting game world that the player can feel truly a part of. Gone Home creates intimate and involving narratives through the voyeuristic exploration of a mundane environment, demonstrating that even in a domestic setting, there is much room for interest and intrigue. Deus Ex uses embedded narratives to create the sense of a fully realised and living world. Exploring hacked emails gives the player access to many secrets, which deeps the themes of conspiracy, as well as giving the player a better understanding of the politics and their own significance in the game world. Mass Effect created a universe with Tolkienesque depth and nuance, full of interesting peoples with rich histories and cultures that the player benefits from understanding. The effective world building means that the player feels well informed and even motivated on the galactic scale decisions they may make.

Perspective

Perspective, according to Jackson (2009, p.36), asks how the player is situated in the unfolding narrative of the game. In this paper we have seen numerous types of perspectives: both subjective and objective; well-defined characters we observe on their transformative journeys, like Manny Calavera; characters whose journeys and demeanours we can shape, like Lee Everett; characters whose personality, past and future are expressed by the player's agency, like Commander Shepard; and even characters with personalities that the player themselves assume, like JC Denton. In interacting with, shaping, and being shaped by their personalities (through 'interreactivity'), the player is immersed in the world of the playable characters. Warren Spector argues that the playable character is "of secondary and, in many ways, irrelevant in narrative terms - nothing but a vessel into which you pour all of your preferences and prejudices, your hopes and dreams." (Spector, 2015c) They are a conduit

through which the player can experience the narrative, shaping their experience by expressing themselves through their agency. The narrative is always asking the player questions: "what path should I take?", "what values are important to me?", "what kind of person am I?", and differences in perspective change what questions can be asked.

Final Thoughts

If we are truly to pursue games as a medium telling new types of stories - co-authored or 'collaborative' storytelling - we must continue to probe what makes the medium unique. Spector argues that "linear media answer questions; games ask them and allow players to provide the answers." (Spector, 2015c) Player agency allows players to choose their answers, their expression colours their responses with shades of meaningfulness. Further examination of this area is welcome and necessary to further develop our understanding of the video game medium. There are many more titles worthy of discussion from the history of gaming, such as Blade Runner (1997), which tells a branching, real-time detective story, where choices change the very history of the protagonist; or Alpha Protocol (2010) an espionage role-playing game with a range of mechanics rivalling Deus Ex, but also a complex system of choices leading to intrigue, strong allegiances or shocking betrayals. We can also look to current developers who place choice as a core philosophy, such as BioWare with Mass Effect: Andromeda (est. 2017) or Eidos Montreal with Deus Ex: Mankind Divided (est. 2016). We should look with great interest to see how these companies continue to integrate and innovate choice in their games.

Choice is impactful on storytelling because it both empowers the player and emotionally involves them with the content of the story. Arguably, in games where the narrative is the primary focus, choice creates a more involving gaming experience,. However, beyond choice, there are many aspects common to the games examined. They

feature great characters, with well developed and nuanced personalities, who often follow their own development arcs: *Grim Fandango* is made by its amazing cast of characters; Mass Effect is perhaps most popularised for the relationships and camaraderie developed with the diverse crew of the Normandy. Moreover, the games tell stories that are journeys, cathartic experiences which forever change the characters involved, whether it is Kaitlin's revelation about her sister in *Gone Home* or Lee Everett's growth as a father figure *The Walking Dead*. However, in experiencing firsthand the metamorphoses that the protagonists undertake, the player too, travels their own journey and experiences change and growth. As in all forms of media, evocative and memorable writing is what epitomises great narrative. With the power to bring about both wisdom and introspection, stories in games may long continue to delight, educate, incite and inspire us.

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