

Authored Agency: Exploring the Language and Grammar of Video Games

by

Allen Kwan

**A Thesis
presented to
The University of Guelph**

**In partial fulfilment of requirements
for the degree of
Doctor of Philosophy
in
School of English and Theatre Studies**

Guelph, Ontario, Canada

© Allen Kwan, January, 2016

ABSTRACT

**AUTHORED AGENCY: EXPLORING THE LANGUAGE AND
GRAMMAR OF VIDEO GAMES**

Allen Kwan
University of Guelph, 2016

Advisor:
Professor Alan Filewod

This thesis is an examination of narrative structure of single-player story-driven video games, shifting the focus toward the exploration of their design and methods by which game designers and authors are able to use the language of interactivity in order to convey meaning to a video game player. Although the role of the player is important in examining video game narratives, it is only recently that scholars and critics have begun to examine the role that the game designer has in creating the conditions that allow for meaning to be created in the first place. This thesis examines the narrative structure of video games by exploring the major attempts to define a language of video games and using this criticism to suggest a greater shift toward considering how many moments of interactivity are purposefully designed in order to encourage a specific interpretation of the game's narrative. The thesis surveys a significant number of video games to help illustrate how player interactivity is specifically authored and uses this survey to provide context for a more in depth discussion of major single-player story-driven video games released in the last few years. This thesis concludes that a new framework for studying narratives in video games and authoring video game narratives is needed, suggesting that moments of carefully controlled interactivity are the building blocks of the language of video games.

Contents

Chapter 1. Introduction.....	1
Chapter 2. A Grammar and Rhetoric of Interactivity and Bounded Agency.....	34
Chapter 2.1. Full Simulation.....	39
Chapter 2.2. Simple Gameplay Mechanics.....	44
Chapter 2.3. Misdirection.....	52
Chapter 2.4. Metatextual Narratives.....	57
Chapter 2.5. The Anti-Game.....	65
Chapter 2.6. Forced Player Agency.....	78
Chapter 2.7. Embodied Agency.....	91
Chapter 2.8. Scope.....	93
Chapter 2.9. Gameplay Limitation or Constraint.....	98
Chapter 2.10. Empowerment.....	101
Chapter 2.11. The Grammar and Rhetoric of Video Games.....	103
Chapter 3. The Dissonance of Play.....	105
Chapter 3.1. Ludonarrative Dissonance.....	105
Chapter 3.2. Negotiating the Cutscene.....	137
Chapter 4. The Fight for Control and Agency Run Amok.....	154
Conclusion.....	196
Works Cited.....	204

Chapter 1. Introduction

This dissertation is in part a response to the emphasis scholars have placed on the interactive nature of video games and the implication that video games are a medium that necessarily privileges the player and player agency. While players are center-stage in a video game and make the decisions that influence the outcome of a video game, this dissertation argues that the game designer carefully crafts every single-player action in a game in order to provide the illusion of choice. As such, the argument put forward here is that the video game is as much an authored medium as novel or a film and that a formal study of how games are authored should be considered. Given the tremendous scope of video games as a medium, this dissertation will focus on single-player story-driven games in order to illustrate how game designers are key to creating meaning in video game narratives. These particular types of games are specifically designed to convey a story to the player, and as such, the decisions that game designers make in these games can be easily contextualized within the narrative framework of traditional non-interactive media. That is, these types of games typically have standard formal elements of narrative such as plot, setting, characters, and themes. Other genres of games can be as authored as single-player story-driven games in order to elicit specific responses from players, such as the so-called Skinner box effect purposefully designed into free-to-play games in order to encourage players to spend time or money on the game. But for my purposes, limiting the scope to a particular subset of games allows for a more in depth discussion of how games can be authored so that they follow the formal conventions of other forms of media. My explanation of why I am focusing on this particular subset of games is expanded on further on in the introduction.

I will draw on a deep archive of these types of games in order to develop an extensive

understanding of the many methods that games can be considered authored texts. This archive will be culturally diverse, including games from North America, Europe, and Japan, but also chronologically diverse, including games from the late 80s up to the present. By using an expanded archive of primary texts, I will be able to illustrate that these ideas about authorship are not limited to a specific or smaller number of games, but that they are the common building blocks of storytelling that can be found in any game. I will show that designers have purposefully manipulated how a player can interact with a game in order to engender an affective experience based on a player's expectations of agency not only throughout time, but throughout cultures as well. A Japanese developer from the 80s uses the tools that an American developer will still employ when designing a game now.

Using this archive, I will provide a larger understanding of how games can be authored, and then use case studies to illustrate how some of these principles can be applied to games in greater detail. As such, the first chapter provides an introduction to the scholarly attempts to atomize the concept of gameplay and player interactivity into the base units of a grammar that describes the language of video games. With an understanding of the various attempts to formalize a language of interactivity, or the system of meaning that is informed by this understanding of video game grammar, we can begin to see how game designers have always had access to a grammar of games that allows them to exert authorial control over a work that seemingly privileges player interaction. Implicit to this understanding of the language of interactivity is that video games draw heavily from the visual language of film, television, and theatre. However, the language of interactivity – and the grammar that describes this interactivity – is what distinguishes meaning creation in a video game from these other forms of media. The second chapter continues this broader introduction to the language of video games by first

considering the concept of “flow”, a mental state designed to encourage the affective experience in a player, suggesting how game designers can maintain an immersive narrative experience by not disrupting a player’s feeling of flow. This chapter will then illustrate how player agency itself can be atomized into the component parts of a language of video games through an exploration of interactive rhetoric, or in other words, how game designers can use the grammar of interactivity in a specific manner in order to create rhetorical meaning. This chapter will do this by providing an exhaustive taxonomy of the many ways in which interactivity agency can be manipulated by the game designer in order to convey a meaningful affective experience, but also by supporting this taxonomy with real-world examples and case studies. Chapter three examines two special cases where player agency and meaning are in conflict with each other.

Ludonarrative dissonance and the continued use of cutscenes in games introduce a series of design challenges that shatter the illusion that players are the ones in control of a game and a game’s narrative. Finally, chapter four examines spaces where players and designers meet, creating points of conflict in how meaning is created in games. If designers are not careful about properly contextualizing moments of agency, then they can expect a violent reaction from a player in response. By the end of this dissertation, it should be clear that interactivity itself does not imply that games are a medium where players construct narratives, but that interactivity is more of an interpretive action. It is true that moments of interactivity or affordances of player agency are what set games apart from other media. However, it is in these moments where the player is allowed to feel in control of a text that a game designer is able to exert their authorial influence onto the player. Moments of agency merely present the player with the illusion of choice, and in the end a game designer has as much authorship over their text as a writer or a film director.

Let's begin by considering a specific example of the intersection between designed interactivity and the affective experience that a player has when engaging with this moment of interactivity. *Call of Duty: Advanced Warfare* (2014) begins with a prologue that throws the player into the middle of a war between North Korea and South Korea. The player character, Jack Mitchell, is deployed to Seoul with his best friend Will Irons as part of the American response against the North Koreans and by the end of this level, the player watches helplessly as Will Irons sacrifices himself in order to ensure the success of the mission. If this description of the opening of the game is terse, it is only because this level does very little more than simply provide context for the following scene in the game, one that is meant to provoke a deep emotional response but has become a subject of mockery and derision. After the mission in South Korea ends, the player is transported forward in time to Will Irons' funeral. Surrounded by mourning family members and soldiers in dress uniforms, the player watches as Will's father touches Will's casket before he walks off screen. When the game returns control to the player, the only prompt the game gives to them is "Hold X to Pay Respects", prompting them to press a single button on the controller in order to try to sympathize with the complicated emotions that Mitchell must be feeling as he stands in front of his friend's coffin. Attempting to replicate the complicated biological and psychological processes involved in coping with grief by boiling those processes down to a single push of the button on a controller is at best, a misguided attempt by the game designers to provide a moment of interactive agency to the player. Although the game's designers may have intended this brief interactive moment to serve as an emotional moment that provides the motivation for the rest of the game's story, critics and players alike responded to this attempt at interactivity with some disdain.

For example, Charlie Hall describes his experience with this scene as "Hollow.

Voyeuristic. Tawdry”, in part because the artificiality of asking the player to press a button in an attempt to convey the emotion of losing a friend in war reminded Hall that he was playing a game. Hall states that “I didn't belong in this scene. I was sitting in my pajamas, holding a controller in my hands. There was a bowl of my daughter's leftover Halloween candy and a warm beer on the table next to me. I felt like a phony. Like a child”. There was nothing authentic about being asked to press a button in order to make the experience of a military funeral interactive, and for Hall, this moment of interactive agency disrupted the immersive experience of playing the game and took him out of the moment entirely. This feeling was not unique to Hall. For Patrick Klepeck, the scene is “an incredibly clumsy handling of an early emotional beat. *Advanced Warfare's* mistake was calling a spade a spade. ‘Press X to pay respects’ reads like developer lingo. It describes the action in such a literal manner, it's impossible to take seriously, so it falls flat” (“Press X to Experience Feelings”). Chris Priestman follows on Klepeck’s analysis of the scene by explaining why it appears to be so mechanical: “Part of the issue here is the robotic nonchalance of the command. It's presented with the same instructional indifference the game uses to tell you to ‘Press X to Reload,’ and ‘Press A to Jump.’ Mourning isn't a straightforward, action-based verb as with those two examples, but *Advanced Warfare* treats it as if it were”. These critics all share the same concerns about this brief moment of interactivity, that there is an inherent contradiction between the effort required to progress through this scene in terms of the gameplay mechanics and the story beat that this scene is trying to convey.

This moment from *Call of Duty: Advanced Warfare* is a microcosm for the issues that arise out of the fact that video games are an interactive medium. As video games have evolved from the simplicity of two horizontal bars bouncing a square ball across the screen to

multimillion-dollar blockbusters, game designers have been asked to become storytellers as well as technological experts. While games are still evaluated by their performance as pieces of software, where issues of frame rate and resolution are brought up as factors that players must consider when considering which version of a particular game they want to play, the narratives found in these games are under consideration as well. These considerations can be as broad as the representation of women in games, where feminist critics and players have taken to resist the objectification of female characters in games such as *Hotline Miami 2: Wrong Number (2015)*, to something as specific as the aforementioned button prompt in a game like *Call of Duty: Advanced Warfare*.

The direct correlation between a button press from the player and the response from the game is a moment of interactivity, or agency, that is typically taken for granted by game designers who are more focused on the larger moments of gameplay interactivity. That is, it is likely that the designers and programmers at Sledgehammer Games, the developers behind *Advanced Warfare*, placed a greater emphasis on the interactivity that the player would experience for the majority of the game, such as the way that the player can move through the virtual space or how the player fires a weapon. In fact, for a game franchise where many players are interested in the competitive multiplayer modes, the actual mechanics of playing the game will inevitably be more important than how the game presents its story. But where players and critics may have been quick to forgive a moment as crass as “Press X to pay your respects” in video games of the past, the reality is that there is a demand for a more nuanced and considered use of player interactivity in video game storytelling. If game designers want players to experience the psychological pain of losing one’s best friend in a war, let alone the physical trauma of losing an arm to an explosion, then these designers need to consider how to involve the

player in these narrative moments beyond a perfunctory button press.

Before diving into the specifics of interactive storytelling that will be considered in this dissertation, some context is required to help provide the framework for this discussion. Most critics and academics agree that single-player story-driven video games engage their players through moments of interactivity contextualized through some narrative or meta-textual frame. Designers such as Katie Salen and Eric Zimmerman approach game design from the perspective that encourages the creation of interactive experiences that emphasize player immersion, and that the narrative frame of a game helps enhance this immersion. Critics such as Espen Aarseth, Jesper Juul, and Mia Consalvo have considered readings of games from the perspective of their interactivity and the ability for game texts to allow players to be agents of a game's narrative, where player interaction directly contributes to the narrative meaning that a game produces. Designer-critic Ian Bogost has produced both games and scholarly texts that represent the way meaning is created through the act of play itself, suggesting in *Persuasive Games* (2007) that players become invested in the actions they perform in a game as a result of the context provided for those actions. But what makes this type of playing different from other forms of roleplaying or game play? In some ways, playing a video game is very much like a sport, to the point where some video games, such as *Starcraft II: The Wings of Liberty* (2010), *Super Street Fighter IV: Arcade Edition* (2011) or *DOTA2* (2012), have become major sports unto themselves¹. Although sports can have narrative frames imposed on them, such as the media story created around Joannie Rochette winning the bronze medal at the 2010 Vancouver Olympics days after her mother's death (Kelly), the actual sports themselves are not purposely designed to produce narratives. Referees are more concerned about enforcing the rules of a game rather than ensuring

¹ These games, and many others, have official tournaments sanctioned by the developers of the games and provide

that a player scores a winning goal in the final seconds of a match for a highlight reel.

Before considering storytelling through video games, perhaps a more basic question should be asked and answered: What is meant when the term “play” is used to describe player interaction with a video game? Salen and Zimmerman define play as “free movement within a more rigid structure” (304). Their definition is a broad term that incorporates what they see as three categories of play that are involved when interacting with games: “Game Play” or when the player interacts with the various defined rules of a game in a formal manner; “Ludic Activity” or when a player interacts with an external system without requiring the formal rules of a game; and “Being Playful” or when a player injects a sense of playfulness into a context that is outside of a game experience. Both Salen and Zimmerman’s broad definition of play and their specific categories of play ultimately depend on the fact that “play emerges both *because of* and *in opposition to* more rigid structures” (311), implying that play is an interplay between a player and a game. That is, without the authored set of rules that define a game, a player would not have a system to conform to or to rebel against. While the act of playing is one that is performed by the player, it is necessarily contingent on an author to create a framework that gives the act of playing some context. This framework can be as specific as the set of rules that define a game of Chess, or the social conventions that define the ways a person should act in public.

Roger Caillois, an anthropologist who studied the generalized concept of play outside the context of video games, categorizes play into four categories: “agôn” (14) or competitive play, “alea” (17) or chance-based play, “mimicry” (19) or theatrical play, and “ilinx” (23) or embodied, physical play. Caillois’ categorization of play is useful because it can be broadened into two general types of play that can be found in video games. Agôn and alea are types of play commonly associated with the structures and rules of a formally defined game, while mimicry

and *ilinx* are types of play commonly associated with the concept of playing in a performance. It is in *agôn* and *alea* where a video game designer is able to relate a narrative through a video game. Putting Salen and Zimmerman's definition of play together with Caillois, "free movement within a more rigid structure" can create narrative meaning if a game designer structures this free movement using both the rule-based *agôn* and *alea* types of play and the performance-based *mimicry* and *ilinx* types of play. What makes single-player story-driven games different from a sport then, is that players are not only asked to play a game confined by the mechanical rules of the game's systems, but they are also asked to play the game confined by a narrative context that encourages performance.

When a player "plays" a game, they are asked to understand the game's rules and to use those rules to best other players. A chess player must learn how the rules of the game limits the movements of each of their pieces and use their understanding of those limitations to defeat their opponent. Only when a player understands that a king can only move one square in any direction can they learn how to perform a checkmate. This type of play is strictly analytical and strategic, focused on developing a core understanding of a game's set of rules and using that understanding to defeat an opposing player. Video games are no different and demand this type of play on behalf of the player. For example, Namco's *Pac-Man* (1980) requires the player to understand the rules of the game before the player can win. Therefore, the player must learn that as *Pac-Man*, they² must move across the game board and collect all the pellets in order to win and move onto the next board. However, they must avoid contact with the Ghost characters that are chasing them, because if a Ghost catches them, *Pac-Man* will die and the player loses the game. For this type of play, rules are typically not designed with storytelling in mind. When the rules of

² In order to remain gender-neutral, this dissertation will occasionally use the plural "they" as a gender-neutral pronoun for a single-player.

baseball were being written in the early nineteenth century, the designers of those rules could hardly account for Jackie Robinson and the part that baseball would play in ending segregation in the United States. Indeed, the “baseball color line”, which effectively barred African-American players from Major League Baseball came about informally during the rise of segregation laws in the post-Civil War American South as baseball executives and managers decided to effectively ban African-American players from joining their teams (Goldman). The inventors of baseball were focused on fundamental rules of the sport, such as how many innings there are in a game and how many strikes a batter receives before the umpire calls him out. There is nothing inherent in the rules of Baseball that addresses segregation in the United States or the Civil Rights struggle of African-Americans, even if Jackie Robinson is an integral part of both American and baseball history.

However, there are games and game rules that are designed with a story or a narrative in mind. When Satoshi Tajiri created *Pocket Monsters* (1996), or *Pokémon* as it is now known in the West, he wanted to create more than just a game. Much like Baseball, *Pokémon* has a number of strict rules that define the outcome of battles in the game, but it also includes a story featuring the adventures of a boy named Red as he explores the world in the game while collecting Pokémon and increasing his abilities as a Pokémon trainer. For Tajiri, the goal of *Pokémon* was not only to create a game with an interesting rule set, but to also recreate the experience he had as a child when he would go out into the fields and catch bugs (“The Ultimate Game Freak”). While it is important to understand that a fire-type Pokémon is effective against a Grass-type Pokémon in order to succeed at playing the game, *Pokémon* is more than just simply understanding the rules. Indeed, *Pokémon* could simply exist as an abstract set of rules, stats, and numbers on a page and be a perfectly fine game. But what made it a sensation in the 1990s is the

fiction built around those game rules and the feelings it evoked in players who were able to learn and succeed at interpreting those rules. The combination of the mechanical rules of the game and the more traditional aspects of visual storytelling such as art design, character design, and world design helped engender an affective experience in players who felt attached to the digital creatures that players could capture in a *Pokémon* game.

Playing and trying to win a game through an understanding of its rules is certainly part of the experience of “play”, but single-player story-driven video games demand another aspect of play in order for a player to be successful. Single-player story-driven types of video games also demand that players perform a role in the game as well, asking that a player literally “play” a character in the game by acting on the character’s behalf. Broadly speaking, this type of “play”, or roleplaying, exists outside of game rules and can be seen in many different contexts.

Roleplaying can be as informal as children pretending to be soldiers and fighting a fictional war or as formal as an actor reciting lines from a script. We often say that an actor “plays” a role. For instance, when we see Kenneth Branagh in *Henry V*, we understand that he is not actually Henry V but an actor “playing” or “performing” a role written by William Shakespeare. Both the audience and the actors understand that what is happening on screen is not real, but everyone involved suspends their disbelief in order to enjoy the story being told. While this type of “play” or performance has larger implications (for example, we perform our expected gender roles in our everyday lives) we also understand that this type of playing is different from the type of play seen in a sport or in an abstract game such as chess. While roleplaying typically demands that the players follow a certain set of rules - actors are expected to stay in character during the duration of a performance in order for a performance to be considered successful - this type of play is focused on storytelling and not on winning or losing. Actors “play” in order to evoke emotional

responses, not to rack up points on a scoreboard. Players who are successful at this type of roleplaying when playing a video game are able to believe in the game's fiction and become emotionally invested in the game's narrative outcome.

Single-player story-driven video games bring these two different types of "play" together. When a person plays this type of game, they are both playing the game by following a system of rules in order to reach a goal and they are being asked to perform a role designated to them by the game designers. In this respect, the ludic or gameplay aspects of the video game are intrinsically linked to the narrative aspects of the video game. That is, although many single-player story-driven games are not 'scored' in a manner that we might see in other types of video games (or games in general), players of these games can still 'win' by completing goals that unlock story-content. For example, in Role Playing Games or RPGs, a player competes against the game by completing assigned tasks or quests in order to improve their character's abilities and unlock new tasks to complete. There is no formal 'score' as one might find in a sport, but improving a character's ability is the equivalent of scoring a goal. Players can "win" the game by improving their character (or scoring enough goals) to the point where they can successfully complete the game's final quest and finish the game. Similarly, while these games do not ask the player to physically embody a role as an actor would in a play or a film, in many cases they are still being asked by the game designer to perform as someone other than themselves for the duration of the game. *Call of Duty* (2003) asks the player to assume the role of an American, British, and Russian soldier fighting in the Second World War. While the player is not fully embodying the experience of a soldier like Tom Hanks did in his role as Captain Miller in *Saving Private Ryan* (1998), the game still asks the player to put themselves into the shoes of all three characters in the game and assume the role of an allied soldier. While it is up to the player to

decide how far he or she wishes to embody the role of the soldier, the game expects every player to perform the role of the soldier with some level of competency. As a player ‘playing’ a soldier, one is expected not to shoot at friendly soldiers or run off the battlefield in fear. Just as a film director would ask an actor to reshoot a scene if an actor improperly delivers his or her lines, the game asks the player to play the game again from a previous checkpoint if they choose to break the role of a proper soldier. As one can see, single-player story-driven video games bring two divergent types of ‘play’ together, intrinsically linking score-based play found in games as a whole to the performance-based roleplaying found in films or drama. In fact, the interaction between these two types of play is the singularity where a new and unique type of narrative meaning is created in a video game. The very nature of the video game creates the circumstances that allow meaning through play to proliferate and it is this singularity that scholars have tried to describe in their attempts to codify the structure of the video game.

This unique form of meaning-creation is why many early scholars argued that the study of video games and interactive fiction shift away from the tradition of literary studies, positioning themselves as ludologists. Espen Aarseth, one of the pioneers of the field, considered scholars from more traditional academic fields (such as those from literature and film departments) colonists attempting to conquer the “virgin soil” of computer game studies (“Genre Trouble”, 45). Resisting the colonial aspirations of other academics, Aarseth set out to define the building blocks of Ludology, or the study of games, through his seminal work *Cybertext*. Although *Cybertext* focuses primarily on interactive fiction and hypertext, the ideas that Aarseth raises have been used and applied to modern video games by many scholars including Aarseth himself. In *Cybertext*, Aarseth provides a taxonomy of basic ergodic structures that can be used to study interactive fiction or hypertexts: “scriptons”, textons”, and “traversal functions”

(*Cybertext*, 62). These basic units allow him to study the unique nature of hypertexts and how they are employed by authors of ergodic literature³ to provide narrative meaning to the reader. By suggesting that it is possible to codify interaction fiction or hypertext through both the signs in the text written by an author (textons) and the signs in the text found by the reader (scriptons), Aarseth creates a context in which the act of reading itself is entirely indeterminate. That does not just mean that the author is unable to predict the way the reader will read his or her work, but that the reader will have no real understanding of what they are reading until they have completed (or found the solution to) a particular traversal function. If the author is not able to control the reading experience as they would be able to in a traditional form of storytelling, and each reading experience is unique to an individual reader, the implication is that meaning is not found in the words in the text, but in the actual act of reading. Therefore, each individual reader's reading of a hypertext is as definitive or canonical as any other individual's reading of the same text, even if they traverse through the text in completely different paths. The author of the hypertext has no control over the text's meaning, and as a result, the reader is the one who defines a hypertext. The line between author and reader is suddenly blurred.

For Aarseth, it isn't a question of considering how readers read. Instead, he creates a distinction from narratological readings of video games by questioning the notion of creating a distinction between a reader and an author in the first place. If the act of reading is itself an act of authorship, then the meaning in a text is literally co-authored by the text's original author and the text's many readers. Hypertexts create the conditions in which it is possible for two different readers to have completely different reading experiences with the same text. This condition goes beyond just having two readers argue between themselves over an interpretation of a particular

³ Aarseth defines ergodic literature simply as works in which a "nontrivial effort is required to allow the reader to traverse the text" (*Cybertext*, 1), moving beyond the "periodic or arbitrary turning of pages" (*Cybertext*, 2).

passage in a novel: it is possible that these two readers might read two entirely different sets of words altogether. Imagine if two readers were reading *Hamlet* and one reader read a version that omitted the “To be or not to be” soliloquy. Both readers have read *Hamlet*, but each reader’s fundamental understanding of the events of the play is entirely different because each reader has, at that point, read two different versions of the same text.

Although the ideas that Aarseth raises are meant to be applicable not only to interactive fiction, but also to video games as a whole, his dismissal⁴ of the role of the author in games seems to run counter to the intended effect of many single-player story-driven games. In Aarseth’s view, the application of traversal functions to move between textons written by the author and scriptons as read by the reader is a process that removes authorial intent altogether. Interactive fiction, and by association, video games, are texts that privilege the reader experience to the point where it is only their experience that is important. Certainly, there are genres of video games in which this line of thought can be the case (the most obvious would be Massively Multiplayer Online Roleplaying Games or MMORPGs, a genre which privileges individual player experience above all else) but this thinking discounts the myriad of games in which the author wants the player to “read” their game in one particular manner, regardless of the way the player reaches the game’s actual conclusion.

Other scholars have approached the problem of codifying fundamental units of information in video games, but without disregarding the role of the author and authorship in the

⁴ Jan Simmons summarizes his position as such: According to Aarseth (2004), “We might say that, unlike literature, games are not about the Other, they are about the Self. Games focus on self-mastery and exploration of the external world, not exploration of interpersonal relationships (except for multiplayer games).” Aarseth (2004) describes this difference graphically in his account of playing *Lara Croft*: “When I play, I don’t even see her body, but see through it and past it” and adds, “the polygonal significance of Lara Croft’s physique goes beyond the gameplay. But that doesn’t mean it tells us much, if anything, about the gameplay, does it?” (“Genre Trouble”, 48)

process. In *Expressive Processing*, Noah Wardrip-Fruin introduces the concept of “processes”, “expressive processing”, and “operational logics” (4-5). This model considers large procedural systems, such as video games, as a set of processes written by an author that interact with data in order to produce an output for the reader. Operational logics, then, are the fundamental interactions that occur in a system in order to produce a readable/playable text (13). In the case of a video game, operational logics encompass processes that are not immediately understood or seen by the player - such as the quest logics, collision detection/physics logics, AI logics and so forth. For Wardrip-Fruin, the processes in a system and the narrative/fictional framework that contextualizes these processes are interconnected through operational logics and work with each other to provide meaning to the text’s audience via the text’s “surface” (or visible) layer (10). Although the player has a role in interacting with the processes that are working beneath the surface, unlike in Aarseth’s consideration of the fundamental structures of interactive fiction, the player of the game is not the primary focus of Wardrip-Fruin’s work. While this is a more holistic approach to studying the relationship between author, reader, and text, Wardrip-Fruin privileges the role of the procedural system in this context. Ultimately, *Expressive Processing* argues for systems that integrate processes directly with its forward-facing surface so that the reader understands exactly how the actions they take when interacting with a game will affect the game as a whole. In the realm of video games/interactive fiction, *Façade* (2005) is the prime exemplar of a game that successfully integrates the surface layer of the game (what the player sees) and the processes of the game (the operational logics working beneath the surface). In *Façade*, a couple named Trip and Grace invites the player to their home for a party. As the player enters the home, they see that Trip and Grace are in the middle of a heated argument and the player is left to interpret and advance this scenario as they see fit. The surface layer is what

the player is able to see in the game world and the actions that the player is allowed to perform. The player might choose to walk off to a different room while trying to avoid being placed in the awkward position of getting into a personal argument between the two characters. Or the player might choose to side with one of the characters and take a side in the argument. For the player, all they know is that they have been placed into a specific scenario and they are left to act in the scenario as they see fit. Beneath this surface layer is the layer of processes or operational logics. Although there are clearly many processes at play, including the graphics engine that allows the game world to exist in the first place, the most important “process” in the game is the natural language processing engine that interprets player speech. For the player, all they see when they play the game is a text box that allows them to say anything they want to Trip and Grace. The player isn’t interested in how the game processes natural language or how it will present their speech to the artificial intelligence routines that determines how Trip and Grace will behave, even if this process is what allows the game to operate in the first place. Although this is certainly an interesting approach to studying the relationship between the author, reader, and text, this approach does not take into account that there are game designers who are not trying to produce a simulation. In fact, some game designers have purposefully exposed the systemic dichotomy between the rules that a player is forced to abide by and the rules that a player expects in order to produce narrative meaning. For these designers, the purpose is to expose the underlying processes of a game and bring them to the surface. As a result, a more generalized understanding of processes and their role in meaning creation is required.

Ian Bogost provides a broader taxonomy for the fundamental structures that make up games through his work in *Unit Operations* (2006) and *Persuasive Games* (2007). In *Unit Operations*, Bogost outlines unit operations as the “modes of meaning-making that privilege

discrete, disconnected actions over deterministic, progressive systems” that allow for a “network of discrete readings” (3). In this configuration, units are medium agnostic - in film, unit operations include edits, cuts, specific types of shots, and so on - and are meant to describe fundamental, unitary actions that produce meaning through their very operation. Bogost explores the concept of unit operations in the context of video games in *Persuasive Games* by considering how a set of unit operations forms procedure and subsequently how game designers can use unit operations to create a form of rhetoric that he calls *procedural rhetoric* (2-3). When a game designer employs procedural rhetoric, each of the unit operations that make up the processes in their game has rhetorical meaning. An example of a game that deploys procedural rhetoric that Bogost discusses is *G!rlpower Retouch*, a game that teaches players how fashion magazines use *Adobe Photoshop* to touch up their models by having the players procedurally modify a picture to make it acceptable for publication (*Persuasive Games*, 31). In this example, each unit operation in the processing of touching up a model’s picture is imbued with rhetorical meaning. Unit operations in this example would include painting out blemishes on a model’s skin in order to teach the player that fashion magazines expect their models to have perfect skin. Presumably, after thoroughly modifying the model to fit the standards of the magazine, the player learns that the women presented in these magazines represent impossible standards of beauty.

The combination of unit operations and procedural rhetoric allows for an understanding of the relationship between author, reader, and text that privileges the authorial intent of the designer of a video game. Although a game player runs through the unit operations of a game in order to produce a meaning that they can interpret, the game designer carefully designs these unit operations with rhetorical intent so that the player interprets the game in a manner consistent with the game designer’s intentions. For example, in *G!rlpower Retouch*, presumably a designer

would not want the player to leave believing that impossible beauty standards are acceptable and that girls/women should starve themselves to try to meet those standards. In this understanding of games, it is perfectly acceptable for a game to have a standard interpretation, even if it is possible to reach this interpretation through a number of different routes (or by performing unit operations in number of different permutations). Although Bogost's interest in procedural rhetoric lies in games that are meant to persuade, as seen in the games he has designed and in the games he describes in his book *Newsgames*, the principle of considering unit operations as authored moments of gameplay can be applied to any type of game.

This dissertation will show that the atomized units of a video game, scriptons, operational logics, unit operations, or some other unit of measure, are not only units that can be said to be used by a game designer to persuade, but that they are the primary manner in which meaning is relayed in a video game. Adding to Bogost's concept of games that are authored to be persuasive, this dissertation shows that games can be authored to make people *feel* or have an affective experience. This dissertation's approach to understanding meaning-making does not necessarily aim to challenge the generally accepted view that players are the ones to create meaning in a game, but it seeks to reposition the role of the game designer and show that games can be designed to provoke very specific reactions from their players. In this way, one of the larger goals of this project is to reframe discussions of video games so that they also include and name individual game designers, directors, producers, and so on wherever possible. While many academics still write about games as objects that exist in a vacuum, this project seeks to not only emphasize that games are authored objects, but that game designers should be considered *auteurs*. Just as each film director has a specific repertoire of shots that they like to use in order to convey meaning in their films (in fact, some directors have signature shots named after them,

such as the “Hitchcock shot”), game directors have “game grammar” signatures associated with them as well. For example, the “Rule of Threes”, or the idea that the player should be asked to repeat the same action three times in order to introduce and gradually increase the difficulty of a new gameplay mechanic, is commonly attributed to Shigeru Miyamoto and is a mainstay in many of Nintendo’s games even to this day.

Before exploring the interplay between games and the agency in greater detail, an understanding of agency in the context of Ludology or Game Studies should be considered. Janet H. Murray’s *Hamlet in the Holodeck*, in which she defines agency as “the satisfying power to take meaningful action and see the results of our decisions and choices” (Murray, 126), forms the basis for most considerations of player agency and interaction with video games. She is careful to point out that while players are able to experience agency in games via their “meaningful actions”, this fact does not necessarily mean that players become “the author of the story”, stating that “[t]here is a distinction between playing a creative role within an authored environment and having authorship of the environment itself” (Murray, 152). The assertion that a player is in a subservient position to a game’s author is one that provides much conflict in the nascent years of Ludology and Game Studies.

Espen Aarseth, whose work is described earlier, emphatically privileges player agency by suggesting that players are authors of a text by the very fact that players are the ones who create unique traversal functions while reading a hypertext or, by implication, while playing a game. As fellow Ludologist Markku Eskelinen suggests, games are a “configurative practice” that depend on a gaming situation defined as a “combination of ends, means, rules, equipment, and manipulative action” (Eskelinen, 38), where “manipulative action” is the agency a player assumes over the choices offered by a game. Since the act of “reading” a game is configurative

rather than interpretive, the conclusion is that through a player's choices, players are the ones who ultimately author a game.

In the intervening years since the peak of the debate over player agency and game authorship, other scholars have refined the notion of player agency and the role that a player has when playing a game. One resolution of this debate is to clearly delineate the different genres of games between those that are authored and meant to provide a specific narrative experience and those that are more focused on providing ergodic or "play" experiences. In this case, academic scholars have borrowed from the language of game genres that game players and professional critics have developed for specific types of games. In the language of game genres, both Murray and Aarseth's notions of player agency are correct. Murray is describing the effect of agency in single-player games driven by a predefined and authored narrative, while Aarseth is describing the effect of agency on open-world sandbox games where specific player interactions are the primary source of storytelling.

In the context of Murray's form of player agency, the term itself has been refined and reconsidered. Tanenbaum and Tanenbaum have defined agency as "committing to meaning" which shifts "attention to the meaningful mappings between player intention and system response" (16). In their repositioning of Murray's notion of player agency, Tanenbaum and Tanenbaum focuses on how "meaningful results and consequences" (16-17) can inform a player's choices and, as a result, allow the player to feel as if their choices have had a meaningful outcome on a game's narrative. In other words, player agency should be seen as more than simply allowing a player to make choices in a game. Instead, player agency becomes a mapping of authored meaning to potential game actions. In a subsequent article, Bizzochi and Tanenbaum call this commitment to meaning a form of "bounded agency", where player choices are

designed so that “player actions can only deepen each narrative arc in [a] game, without derailing the story” (401). It is from this notion of bounded player agency, or agency in which narrative meaning is directly attached to player actions, that this dissertation will consider the relationship between a player and a game. Narrative agency in a game is more than simply allowing the player to make story choices in a game. Instead, it becomes a method by which game designers can manipulate players into believing that each choice made in the game is a meaningful action that directly affects the outcome of a game’s narrative. In extreme cases that will be explored in the second chapter, the player has no agency at all, but only the affective experience of having agency. That is, the player is compelled to make choices that they feel they are complicit in making, but in reality are only responding to directed choices by the game designer.

Given the concept of play found in video games, it can be easy to emphasize the experience of the person who performs the act of ‘play’ when considering how meaning is created in a video game. But within the context of bounded agency, we understand that play is not necessarily an action that guarantees agency or control over a game’s narrative. Indeed, although games can be seen as empty canvases that allow the player to express themselves through the act of ‘play’, it is equally important to remember that game designers are the ones who created the canvas in the first place. This dissertation seeks to further explore the nature of bounded agency by emphasizing how video game designers author single-player story-driven games in order to create an intentional and specific meaning. Rather than try to consider units of play in a context that tries to fit all video game narratives, this dissertation instead will focus these earlier taxonomies through the idea of units of authored agency. In other words, certain video games can be seen to provide a series of precise meaningful actions or affordances to the player in order for the author of the game to convey a specific narrative meaning. Each of these

deliberately authored moments of bounded agency can be seen as examples of specific units of interactivity described by Aarseth, Wardrip-Fruin, and Bogost, but they also require a more specific interpretation because they are not free moments of interactivity. These units of authored agency can go beyond even Bizzochi and Tanenbaum's concept of bounded agency in that there can be moments of player agency that offer absolutely no choices to the player whatsoever. In these cases the player might be allowed to take an action, but the outcome is completely predetermined.

One question that should be answered is what type of games this dissertation will consider. Although the "video game" is a concept that reaches back to the 1950s, the entire medium continues to remain in flux. Trends in video games that may be considered as the long-term future of the medium are easily dismissed as the people who make games try to capitalize on newer markets. The constant shift in trends can be seen in both the hardware platform holders and the developers who create software for those platforms, with the most infamous example being Atari's meteoric rise to dominance and equally impressive fall to irrelevancy in the early 1980s. In recent years, the biggest example of a trend that was thought to redefine the video game altogether was embodied in motion gaming. As both the Nintendo Wii video game console and the Activision published *Guitar Hero* gained popularity in the North American market, both academics and professional critics saw the future of video games in alternative forms of control. Jesper Juul's *A Casual Revolution: Reinventing Video Games and Their Players* is in part devoted to the future of Nintendo's Wii Remote motion control scheme as a possible future for how players would interface with video games. No longer burdened by the mouse and keyboard or the contemporary game controller with ten buttons and a pair of analog sticks, it was thought that the video game would finally be accessible to people young and old. After all, it is

much easier to teach someone to reproduce a motion that they have seen or experienced themselves, such as swinging a tennis racket or a golf club, than it is to teach them how to time button presses on a controller. Asking people to reproduce those motions with the Wiimote made more sense to people who simply cannot or would not learn how to control video games with a standard controller. Suddenly, video games were not just for “gamers” anymore.

With hindsight, we now know that this new form of interacting with video games was very quickly abandoned by the mass market as players chased after newer game experiences or returned to more traditional experiences. After years of growth, sales of the Nintendo Wii declined and Nintendo’s next console has abandoned motion controls by opting into the next big trend: second screen gaming through the tablet-like WiiU controller. For all the news that *Guitar Hero* (2005) and *Rock Band* (2007) received, culminating with the release of *The Beatles: Rock Band* (2009), the “plastic instrument” genre of music rhythm games is essentially a forgotten footnote, as players have moved on to find other experiences. Even Harmonix Music Systems, who is responsible for these games, has abandoned the *Rock Band* franchise to focus on their *Dance Central* (2010) games. In fact, the final *Rock Band* product to be released, *Rock Band Blitz* (2012), does not support any plastic instruments whatsoever and is played strictly with a traditional controller. Just as players have moved onto new types of game play and interface, both academic and professional critical attention has shifted focus away from embodied experiences and toward social games and mobile games. The key question to engagement with video games was no longer *how* you play a game, but *who* you play a game with. Although this dissertation does not presume to predict the outcome of the current trend in video games, the slowly declining number of players in Zynga’s games and the one-hit wonder nature of mobile

games such as Omgpop/Zynga's *Draw Something* (2012)⁵ suggests in a few more years, something new will come along to redefine video games as we know it.

This short examination of the last seven years of video game history shows that it can be problematic to be specific when studying a medium that is constantly undergoing technological evolution in order to satisfy market trends. Unlike technological evolution found in other media (from the radio to the podcast, from the VCR to the DVRs, from the Vinyl Record to the CD, from the DVD to instant streaming, and from paperbacks to ebooks) technological changes in video games drastically change the way a player interfaces with a game. A student of literature is likely able to move from reading James' *Fifty Shades of Grey* to Austen's *Pride and Prejudice* without any trouble. Although separated by nearly two centuries, as long as the student is literate in the English language, he or she should be able to read both novels. On the other hand, a student of video games is likely to be flustered if asked to play the original *Prince of Persia* (1989) after playing *Prince of Persia: The Forgotten Sands* (2010), games separated only by two decades.

Given the ever-changing nature of the video game, this dissertation explicitly utilizes a technologically agnostic approach in examining video game texts. This prevents the discussion from being too specific, which otherwise would render the work to be prone to obsolescence as gaming trends and technology evolve (such as Jesper Juul's *A Casual Revolution*, a book which contains many ideas that are still relevant to the broader discussion of mobile and free-to-play games that make up the bulk of the market now, but is also hinged on the assumption that motion-controls and other embodied interfaces would be the primary method of input in the near future). Rather than focus too minutely on how a game is physically played, whether it is by a

⁵ The downward trend of Zynga is described in Justin Bachman and Joshua Brustein's "A Short History of Zynga's Rapid Decline".

traditional controller or a motion-based controller, whether on a PC, home console, or handheld device, this dissertation employs a holistic approach to games, examining video games as games and not as technology. The technology behind video games may be constantly evolving, but principles of game design and game writing are fundamental. As such, this dissertation investigates games that span decades, with an awareness that the limitations of technology at a certain time in history produces different results (such as having only kilobytes or megabytes of memory in the 1980s and 1990s as opposed to the gigabytes of memory that designers have access to today), but it will only consider these technological differences between games only if necessary. Although the author readily admits that it is perhaps foolhardy to try to pin down a medium that changes every year, the aim is to study these games in a manner that does not depend on the current trends of today or the past failed trends of yesterday. The hope is that the conclusion reached in this dissertation apply not only to the myriad of games raised here, but also applies to games that will be released twenty years from now on technology that only exists in the imagination.

Another question that should be answered is why this dissertation specifically looks at single-player story-driven video games. Although Bizzocchi and Tanenbaum explain that the concept of bounded agency in the context of “story-based” (393) games function within an internal logic of a “storyworld” (396), I want to focus this discussion further by explaining what this dissertation means by ‘single-player story-driven’ games. An elementary question is simply: what are single-player story-driven games and why focus on them specifically? First, let us consider the notion of single-player. As we know, the very first video games were designed to be competitive and multiplayer. *Pong* (1972), one of the earliest mainstream video games to be released, was designed with two players in mind, with both players competing against each other

to score points. Even the earliest single-player games encouraged competition among the people playing the game by asking them to compete with each other's scores. In fact, to this day players are still competing with each other to achieve the highest score in *Donkey Kong* (1981), as seen in the documentary *The King of Kong: A Fistful of Quarters* (2007) which chronicled the competition between the then unknown underdog Steve Wiebe and the reigning champion Billy Mitchell. Multiplayer games, whether simultaneous or asynchronous, shift the focus of video games over to two different facets of design: game balancing or ensuring that the game is 'fair' for all players and social contexts, and creating a game that encourages social interaction. While the mechanical aspect of game design is important, and implementing rules that allow players of varying experiences and desires to play a single game together is an interesting design challenge, it complicates the exploration of the fundamental aspects of player agency. Indeed, since single-player games and multiplayer games share many aspects of similar design philosophies, examining only single-player games allows this dissertation to focus on the core aspects of designer controlled agency. Similarly, a study of gaming communities found in multiplayer games yields an interesting examination of the cultural and sociological aspects of video games. For example, most of the scholarship based on games such as *Second Life* (2003) or *World of Warcraft* (2004) focus on some aspect of the sociology of the player base, whether it be the economy of a game, guild relationships, the concept of "trolling", and so on. Although the social aspect of video games is important to examine, since games are unique in that they allow for a single text to be read simultaneously by a large number of players, this dissertation intends to examine the designer's role in authoring video games and will defer to the work of social science scholars such as economist Edward Castronova and anthropologist Tom Boellstorff when it comes to multiplayer communities.

As for story-driven games, it should be accepted that some games choose to tell a story and that other games are more interested in mechanics and systems. There are games that exist in between these two extremes and are designed to produce a single political point but not necessarily a full narrative, such as the persuasive games described and designed by Ian Bogost, but most games tend to fall into one group or the other. That is not to say that games that are without a story cannot be studied for their narrative or representational elements, but designers of these types of games are typically more interested in game mechanics rather than on storytelling. Indeed, while Janet Murray may have suggested a reading of *Tetris* (1984) that points to a proletarian struggle that represents the “perfect enactment of the overtasked lives of Americans in the 1990s” (144), Alexey Pajitnov was most likely more interested in making a puzzle game that was well-balanced and playable than on a game that commented on the nature of American Capitalism at the peak of the Cold War. The fact that he has continued to design puzzle games, including Microsoft Game Studios’ *Hexic* (2003), suggests his interests lie in mechanics rather than on story. Instead, this dissertation is interested in examining games in which the designer, writer, producer, or someone else on the development team is invested in relating a story or a narrative experience to the player. This storytelling can be as abstract as the story found in *Papo & Yo* (2012), Vander Caballero’s puzzle-platformer that relates his experience growing up with his abusive, alcoholic father, or the storytelling can be as straightforward as the story found in *Halo* or *Mass Effect*. Given that this dissertation explores the ways game designers manipulate the player through units of agency in order to create narrative meaning, limiting the scope of games studied to those in which the designer intends to tell a story is only natural.

A corollary point raised by this methodology is that the medium of video games has become so complex that it is increasingly difficult to examine games as a whole. Designer intent

will, at the very least, place a game into specific genres and categories that can make games difficult to compare to each other. In the aforementioned book *Expressive Processing*, Wardrip-Fruin's approach of treating games as systems of processes leads to an indirect comparison between a game that is focused on providing a traditional narrative experience, *Star Wars: Knights of the Old Republic* (2003), and a game that is more interested in replicating the rules of the real-world system, *SimCity* (1989). Given that BioWare as a studio produces Role Playing Games (RPGs) and Maxis as a studio produces Simulations, each team clearly has different objectives and goals with the games that they release. While comparing the methods by which these games employ operational logics is useful in understanding the video game medium as a whole, this type of study is also too broad to be of use for understanding either the specifics of RPGs or Simulations. With that said, this dissertation does not claim that only single-player story-driven games are designed with authorial intent in order to provide a specific, authored experience. Some of the concepts raised in this dissertation may apply to other types of games, even if those types of games do not necessarily convey a story or narrative.

To summarize, this dissertation approaches the study of storytelling in video games in a manner that may be considered oppositional to the current ludological-narratological dichotomy that has been used to approach video games for the last decade by early scholars such as Espen Aarseth. When ludologists speak of player agency and player choice, the typical assumption is that the player holds the privileged position in the designer-player relationship, since it is the player that actually controls the game. In fact, it is very natural to assume that it is the player who shapes the game's story to fit his or her own desires. After all, unlike other media, games apparently exist to allow the players the opportunity for self-expression. Why watch *Saving Private Ryan* (1998) when players can relive the Normandy invasion themselves in *Medal of*

Honor (1999)? But what if this unique aspect of video games, player agency, is actually an illusion? What if the one with agency over the text is not the player, but the game designer? If we recontextualize the problem of agency in video games in this manner, video games suddenly become authored texts. The game designer is more than just an anonymous, invisible figure that creates an open-ended sandbox for the player. The game designer has the power to manipulate the sandbox and create a specific world that they want the player to experience in order to impose narrative meaning on anyone who chooses to play their game. If scholars can appreciate that many video games have fully developed characters, plots, and themes, why are the authors of those basic elements of narrative typically ignored in game scholarship?

One way to consider the designer-player relationship is to think of a video game as if it were a jigsaw puzzle. A thousand different players may approach solving the jigsaw puzzle using their own methodology. Some players might begin by sorting the pieces into different categories, while others might jump straight in and begin attaching pieces together without a second thought. But the end result of solving a jigsaw puzzle is always the same: no matter the path taken, ultimately the puzzle-solver will assemble a puzzle that resembles the picture on the front of the box. In this case, the true agency over the puzzle lies with the 'author' of the jigsaw puzzle. Not only is the author the one who chooses the picture to be used for the puzzle, they also choose the number of pieces the puzzle will contain, and perhaps even the shape of the puzzle and its individual puzzle pieces. Yes, players are able to put the puzzle together in any manner that they wish, but they are playing by the rules established by the puzzle's author. Rather than focus on player agency and player choice, the focus should be placed on what the player is choosing, how the player makes their choice, and how the game designer is responsible for these choices in the first place. It is time to atomize the idea of 'choice' and 'agency' in a

video game and understand the way these basic units of interactivity are part of the essential grammar of games. Just as a musician is able to evoke a myriad of emotions through a specific use of time signature, key, tempo, scales, and notes, a game designer is able to create a video game that evokes the same set of emotions through the careful manipulation of units of agency.

Scholars, critics, and players understand that games have a lot to say. Whether through the text itself, or through the people who play video games, scholars and critics have discussed the manners in which games have addressed issues such as gender, sexuality, and race. They have also considered the ways games can evoke emotions such as love, hate, sadness, and joy. Video games are complex texts that are able to intellectually and emotionally stimulate their players as much as a novel or a poem. But when we study the novel *Pride and Prejudice*, we do not forget Jane Austen. When we read the poem *Daddy*, we do not forget Sylvia Plath. Video games should be understood in the same manner, and this dissertation will show the integral nature of the author in single-player story-driven video games, providing a basis for understanding games as authored texts.

With this context in mind, this dissertation will examine the fundamental connection between agency and narrative meaning through three chapters. The next chapter will illustrate the many ways the manipulation of agency can convey meaning to a player through an exhaustive survey of games released in the last three decades. This second chapter shows that agency is a fundamental tool that game designers use not only in contemporary games, but also in games designed and released in the earliest games released to the public. This chapter also illustrates that there are many specific and distinct types of agency that a game designer can use in their games, showing that agency is much more nuanced than simply the fact that the player has control of a game.

The third chapter will examine the problems that can occur when game designers do not properly take player agency into account when designing their games. The concept of Ludonarrative Dissonance, the singularity that is created when interactivity and narrative meet, is explained in greater detail to show that the careful use of agency is necessary if a game designer wishes to convey a narrative to a player. A game designer must be careful to consider the story that they wish to tell and match that with the actions that they allow the player to form in the game. If they fail to do so, the game's narrative will fall apart and the player will feel a dissonance between the story that the game is trying to convey and the story that they have created through their own actions within the game. This chapter will also examine the use of cutscenes, or short film sequences, in video games and how they can be disruptive in a narrative medium that is centered on interactivity.

Finally, the fourth chapter will begin to examine the tension between the player and the game designer when both believe that they are the authors of a game's narrative. In the context of single-player story-driven games, game designers are responsible for crafting authored experiences that offer the illusion of control to the player. Successful designers are able to thoroughly convince players that their game is a text full of unlimited opportunities, when in reality each choice is simply a carefully scripted illusion. This chapter will also examine the metatextual realities of games as software. Unlike other media, games are malleable objects that can be changed at a moment's notice, as both game designers (or the corporate entities that they work for) and players have the opportunity to update, patch, or otherwise modify a game's code well after a game has been released. Since games are in a constant state of flux, questions of agency and authorship become slightly more complicated than the author-reader relationship found in other media.

In the end, this dissertation will make the connection between when meaning is created, through an affective experience, and moments of bounded agency more clear. Designed moments of bounded agency not only create narrative meaning in a video game, but also form a fundamental part of the grammar of the video game language. If a game designer does not properly employ this grammar of bounded agency in games that he or she creates, then the designer risks losing narrative meaning altogether. However, a game designer that can successfully wield this grammar will create an experience that satisfies both the player's desires and the game designer's desires.

Chapter 2. A Grammar and Rhetoric of Interactivity and Bounded Agency

Many would agree that the most memorable storytelling moments in a video game are the ones in which the player is directly responsible for the outcome of the game. When the player has a personal stake in the direction that the narrative takes, they can become emotionally invested in each choice and potential action afforded to the player. Even in games without a story, players are still attached to the score in the game and see winning (whether competitively against another player or against the game itself) as an end goal. By adding elements of chance, and by placing the outcome of a game directly into the hands of a player, video games are able to achieve a level of audience engagement that is not as readily found in other media.

But how is this effect achieved in single-player, story-driven video games? Many scholars raise the term *flow*, first defined by Mihaly Csikszentmihalyi as when a person reaches an “optimal experience” (3). He goes on to describe the state of flow as when people feel that their state of consciousness is “harmoniously ordered, and they want to pursue whatever they are doing for its own sake” (6). Although Csikszentmihalyi will consider flow in many contexts, he begins by considering games because they provide a simple microcosm for how the conditions of flow can be achieved. If the optimal experience is “a sense that one’s skills are adequate to cope with the challenges at hand, in a goal-directed, rule-bound action system that provides clear clues as to how well one is performing” (71), then games, sports, or other acts of play provide the opportunity for a person to have an optimal experience and reach a state of flow. In the context of video games, a state of *flow* is achieved when the player feels that the game they are playing is not too easy or not too difficult. As Csikszentmihalyi explains, players of games tend to want to stay in the “flow channel” (74), a state in between boredom and anxiety. In terms of the act of playing a video game, Salen and Zimmerman point out that games that cannot encourage a flow

state can lead to a “negative experience” (351) for the player. If a game is not challenging enough, a player will be frustrated by the game’s simplicity and seek out greater challenges. On the other hand when a game is too challenging, a player will be frustrated by the fact that they cannot progress through the game. By maintaining the balance between boredom and anxiety, game designers can create experiences that can absorb the player into a state of “optimal experience”, leading to an immersive⁶ experience.

Abstracted beyond the concept of game difficulty, a state of flow is also maintained when the illusion of player agency is maintained by the text. As long as the player feels that they are the one “driving” the game - whether mechanically (through difficulty), physically (through the method of input), or narratively (through some perceived agency in the outcome of the story) - game developers might consider their game successful. And indeed, although flow is a concept that has recently been reinvigorated by video game scholars, Csikszentmihalyi’s definition of the term allows for it to be applied to any medium. When a reader is engrossed in a book, to the point where they only notice that hours have passed after they have set the book down, they are in a state of flow. The conditions for a novelist to achieve the state of flow in a reader might be different than the conditions that a game designer needs to follow – both by creating interesting characters, themes, and plots in order to avoid “boredom” and also by avoiding plot holes, complicated vocabulary, or typographic errors in order to avoid “anxiety” – but the principle is the same.

For single-player story-driven games then, a state of flow is maintained by managing the player’s expectations of narrative control. If a player is not given enough control, they will feel that their flow experience is disrupted by the constant intrusions of the game on their interactions

⁶ Not to be confused with the immersion as described by Murray, in which players are meant to be absorbed into a game world (110), which Salen and Zimmerman react against in what they describe as the immersive fallacy (450).

with the game. If a player is given too much control, they will lose site of the narrative arc of the game entirely and will focus on play experiences that do not involve the game's story at all. In these types of games, flow is maintained by balancing the player's desires for agency with the need to control their experiences in order to provide a structured narrative. In other words, a state of flow is found in carefully crafted moments of bounded agency.

As we'll discuss in depth later on, maintaining an immersive state of flow does not necessarily mean that the player has a direct outcome in a game's story. For some single-player story-driven games, this can be as simple as creating connections between a game's mechanical structures - the set of rules that allow for "gameplay" - and the game's narrative frame. But what happens when a game writer, designer, or developer purposefully disrupts the player's sense of immersion into the game? This post-modern turn is certainly not exclusive to video games. Whether it's Brecht's *The Threepenny Opera*, Cha's *Dictée*, or the recent trend of pseudo-mockumentary television, artists have chosen to disrupt their audience's expectations of immersion for some time in order to provoke a myriad of emotions. Video games are no different and when a game designer chooses to disrupt a player's sense of immersion, to intrude upon their feeling of flow, the designer is choosing to make their presence known by reminding the player that they are not only playing a video game, but playing a video game created by a game designer.

This intrusion is not necessarily always violent or disruptive - quite often, interrupting a reader's sense of flow is used for comedic effect - but it is a tacit reminder that the relationship between the reader and the text exists only at the whim of the text's author. In video games, the expectation that players and game critics/scholars hold to be axiomatic is that the player is the central figure in a video game. Since games are unique because they allow for interactivity, it

follows that the individual actions afforded to the player should be privileged, not the context that allows for these affordances in the first place. Certainly this is a view held by early ludologists such as Espen Aarseth, and players might also expect that their actions as a player should be prioritized when they play a game. Whether single-player or multiplayer, when a player plays a game, they expect to be in control. This control can be as fundamental as being able to properly manipulate the avatar/character on the screen with a game controller, or as high-level as being able to manipulate the technical settings of the game. And for the most part, game designers accommodate this expectation of control or agency because maintaining a sense of flow is important to the success of their game.

But it is precisely because players (and critics) expect agency that game designers are able to subvert these expectations and create narrative meaning. Just as musicians might use Shepard tones to toy with a listener's expectations of a shift in pitch⁷ in order to produce a specific musical meaning in their work, when a game designer impinges on player agency, the designer is trying to elicit a response from the player that goes against that player's expectations of agency. That is to say, while we typically suppose that meaning-creation in a video game occurs at the site where the player acts on the game, meaning-creation can also occur in the moments where player action is *not* afforded. In other words, there are times when the player doesn't create meaning in a video game, and it is in these moments that the game designer imposes meaning on the player.

It should be noted that this assertion does not contradict ethnographic or sociological studies of video games and video game players. In terms of representation, players and critics may point out problematic depictions of female characters, queer characters, and racial

⁷ Described by Hofstadter in *Godel, Escher, Bach* as Bach's "Endlessly rising canon" (712).

minorities that might exist in a game that the game designer may not have accounted for. Similarly, a game designer might not consider the affect that their game might have on younger players as it relates to violence and aggression, but the effects of video game violence (and in media in general) on children is still a hotly contested area of debate for child psychologists. Ultimately, players are still able to derive their own interpretations of a video game that is not only different from the interpretation that a game designer might try to impose on the player, but an interpretation that is different from other players as well. The assertion made here is only meant to suggest that game designers have an equal part in creating meaning in single-player, story-driven video games. If they so desire, game designers are able to provide more than open-ended experiences for the player. Game designers are also able to provide structured experiences that guide players toward a specific response to their game.

With an understanding of the relationship between moments of bounded agency and the expectation of *flow* in a single-player story-driven game, where a game designer must maintain a balance between providing not enough and too many affordances of interactivity, this chapter will explore how game designers exploit this relationship in order to produce meaning in their games. By first showing the many ways agency can be manipulated in a game by the designer, this chapter aims to provide a basic taxonomy of the types of manipulation at a designer's disposal, or in other words, the rhetoric of video games that game designers use to create meaning. This taxonomy would be analogous to describing the many different shots a film director or cinematographer can use in order to evoke specific emotions. This taxonomy of manipulation, or the various different types of agency, is similar to the concept of scriptons, operational logics, and unit operations described in the introductory chapter. However, this taxonomy of agency is meant to describe the specific tools and techniques that game designers

can use to convey meaning in the context of the manipulation of agency rather than serve as a purely abstract method by which to describe individual interactions in a game. To continue the comparison to film, if ‘shots’ and ‘cuts’ are considered the scriptons, operational logics, unit operations, or the essential grammatical structure of film, then the ‘wide shot’ or the ‘long take’ are the specific examples of the rhetoric of film language used to convey meaning to the audience. The following taxonomy of agency deployed in video games illustrates the fact that agency is a fundamental tool that the game designer uses in order to convey meaning to the player. This taxonomy also breaks down the concept of agency in games by illustrating the many ways in which agency can actually be employed by a game designer. Bounded agency is not a nebulous concept, but a broader term that describes many specific and distinct types of controlled interactivity. Finally this taxonomy also serves to provide context for the later chapters and sections of the dissertation, which show the ways in which agency can be used properly or improperly by the game designer.

In order to better understand how agency can be deployed to create meaning in a game, it is perhaps useful to begin discussing agency in its extremes. While single-player, story-based games typically do not venture into the extremes except in fairly confined and special circumstances, by establishing the boundaries of agency in video games, a clearer picture of the middle ground can be seen.

Chapter 2.1. Full Simulation

On one end of the spectrum is full simulation, where players are given direct control over every aspect of the game through the affordances of interactivity provided by the game designer. Racing games such as the *Gran Turismo* and *Forza* series and flight simulators such as the *Microsoft Flight* series or the *Digital Combat Simulator* package provide the full simulations of

the cars and planes depicted in their games. In these types of games, the goal is to provide the most accurate representation of reality possible - in software terms, this means for example, creating a realistic physics model that accurately represents the way a specific Ferrari drives on a track at Nürburgring. In hardware terms, this means supporting racing wheels and including multi-monitor support so that the player can physically recreate the experience of sitting in a car cockpit. For the most demanding players, time itself is simulated perfectly as well, so that a race like Le Mans can take a player 24 hours of real time to complete. In these types of full simulations, game designers are typically not interested in storytelling. Success is measured by how accurately and precisely they have modeled the A-10 Warthog start up sequence, not on accurately representing the life of an Air Force pilot.

That's not to say that simulations cannot be given narrative frames. However, when narrative begins to encroach on the full simulation, compromises are typically made to help support the narrative intent of the designer. In the procedural games described by Ian Bogost, replicating a process in order to make a rhetorical point about that process typically implies that the simulation is truncated in some way. To draw on the example from the introduction, *G!rlpower Retouch*, a game about replicating the process of manipulating photos of models might not be concerned with creating a one-to-one simulation of the *Adobe Photoshop* software platform. The idea isn't that the player is able to understand how to select different layers in an image, but that photographers use this software to manipulate how the female body is presented to an unsuspecting audience.

Indeed, as *G!rlpower Retouch* shows, simulations are a perfect vehicle for games that want to use procedure to impart some meaning to the player. Perhaps the most infamous example is *Penn & Teller's Smoke and Mirrors* (Unreleased), which included a mini-game called *Desert*

Bus. This was a game designed to be an "anti-game", a game that went out of its way to offend player expectations of player agency and the very definition of the "video game" itself.

As Teller would explain in an interview, the game was created in response to American politician Janet Reno's campaign against violent video games:

"Remember Janet Reno? When she was taking away our rights, instead of the people who are now? Janet Reno was really against violent video games, so we decided to do this game, Eddie's original idea, it was called 'Desert Bus.' "'Desert Bus' was a game we thought would really appeal to people who didn't like unrealistic games, and didn't like violence in their games. It was just like real, loving life." ("Penn Jillette Discusses Unreleased Sega CD Game")

As we can see, *Desert Bus* was a game that parodied the very notion of verisimilitude in video games. If the realistic nature of violent video games was the root cause of the increase of violence in children, *Desert Bus* was the antidote. *Desert Bus* simulates a bus ride from Tucson, Arizona to Las Vegas, Nevada in real time. The aim of the game is to safely drive the bus between Tucson to Las Vegas as many times as possible without stopping or taking your hands off of the steering wheel (or more precisely, the controller). In terms of game mechanics, this meant that a player is not allowed to pause the game to take a break - since a real life bus driver isn't allowed to stop their bus in the middle of a route - and because the bus had mechanical problems, the bus would gradually steer toward the side of the road unless the player constantly corrected the steering by maintaining control of the steering wheel. The route itself is eight hours long - the actual time it would take for a bus driver in the real world to drive from Tucson to Las Vegas - so once the player is committed to playing the game and making the trip, the player is

committed for at least eight hours. Successfully completing the trip nets the player one point and offers them the opportunity to make the return trip for another point. The game itself only ends when the player chooses to stop after the successful completion of a route, the player achieves a total of ninety-nine points, or if the player crashes.

For all intent and purpose, the player is asked to experience the average life of a bus driver. There aren't despotic aliens to fight or evil warlocks to defeat, no police officers to run over or streets to shoot up with machineguns. Even the scenery in the game is banal, because as one can imagine in a game titled *Desert Bus*, the desert sprawl between Tucson and Las Vegas is not the most scenic route that one could drive through. The meaning behind the game is clear - it posits the thesis that if video games did represent reality with complete verisimilitude and offered the player full agency, no one would choose to play them because they would not be entertaining. Even if a player were looking for a full simulation experience, they would likely prefer a game that offers an experience that is more involving than driving in a straight line.

Desert Bus provides an experience that satisfies no one through its purposeful use of interactive affordances. For a player wanting a full simulation experience, the game is constrained to the point of triviality. On the *flow* curve of a simulation player, this experience is on the bottom end of the curve and is not satisfying because it is too easy. For a player who wants a directed experience, the game is so difficult that it becomes nearly impossible to play. On the *flow* curve of this player, this experience is on the higher end of the curve because it asks too much of a player not interested in enduring an eight hour road trip. Indeed, a player who wants to experience a cross-country road trip in a video game without having to sit through the days an actual trip would require is better served playing a game like *The Crew* (2014), where a player can experience the drive from Miami to Los Angeles in under an hour.

The average player does not want the complete control over a game that a full simulation provides. These players want the game designer to impose on them in ways that they may not fully appreciate until they are faced with the reality of full agency. Outside of projects like *Desert Bus For Hope*, where a group of players played the game for over six days straight in order to raise money for charity, *Desert Bus* is a video game that is simply not meant to be played.

Just as one expects films to be edited in a manner that allows for a film to represent a greater amount of time than the actual running time of the film itself (outside of experiments such as the film *Timecode* (2000) or the television series *24*), one expects and even desires games to be “edited” in a manner that allows the player to have control over a game in moments that would allow the player to have “fun”. That is, players want experiences that exist in the middle of the *flow* curve.

One example of video game “editing” that can be clearly seen is the change implemented by the designers at *Rockstar North* in *Grand Theft Auto: San Andreas* (2004). *San Andreas* went full bore in the “life simulation” direction of game design, inasmuch as the fact that the player character, CJ, needed to eat in order to satiate his hunger and exercise in order to work off the calories from the food he ate. Without fulfilling these basic life functions, either CJ would starve to death or would gain weight and become unwieldy for the player to control. Although Ian Bogost posits a reading for this particular mechanic in *Persuasive Games* when he suggests that this gameplay mechanic is a comment on how the “problems of obesity and malnutrition in poor communities can partly be attributed to the relative ease and affordability of fast food” (113), most players found this mechanic extremely frustrating to deal with because it distracted from the primary gameplay mechanic of the game - driving through the city and causing mayhem. PC

versions of the game were hacked in order to find ways to circumvent the hunger/weight system entirely so that these mechanics would not interfere with what the player felt was the “true” purpose of the game. Taking their cue from the players, the designers at Rockstar North removed the hunger/weight mechanic entirely in *Grand Theft Auto 4*, choosing to “edit” the game in order to provide a less “realistic” but arguably more enjoyable experience to the player.

Chapter 2.2. Simple Gameplay Mechanics

On the other end of the spectrum are games that remove nearly all aspects of agency from the player entirely, reducing the game to a single, simple gameplay mechanic. While this type of agency can be used legitimately to teach children in educational games (such as repeatedly multiplying numbers in order to drill the multiplication table), for most designers this type of agency is used for parodic or satirical purposes. Ian Bogost’s *Cow Clicker* (2010) is one of the most infamous examples of directed and simplistic agency in video games. Living up to its name, *Cow Clicker* simply asks users to click on a cow every six hours in order to receive a “click” for the cow. No other act is required on behalf of the player, taking away any element of chance or skill out of the equation by asking the player to perform a single, repetitive action over and over again. While one might suggest that the player has ultimate agency over the outcome of the game, in terms of its *affordances*, the player is only afforded two choices - to click on a cow or not to click on a cow.

While Bogost meant for the game to be a satire of the various *Farmville* and *Farmville*-like social games on Facebook and the simplicity of their compulsion loops, *Cow Clicker* quickly outgrew its satirical premise and became a game that its players took seriously. As its title suggests, in *Cow Clicker* the player is given a cow that they can click every 6 hours, and doing so will earn the player “Mooney” which they can use to purchase new cows. Or alternatively,

players could simply pay money to forgo the act of clicking entirely and buy a new cow outright (Alexander, “The Life-Changing \$20 Rightward-Facing Cow”). Although the fact that people were willing to pay to forgo playing the game entirely in order to earn the reward of a new cow reveals a tremendous amount about the psychology of some compulsive players, in the context of player agency, *Cow Clicker* becomes an example of a game that quite literally plays itself. Like many of the social games *Cow Clicker* was trying to parody, players were only seeking the rewards of the so-called Skinner box (Tanz, “The Curse of Cow Clicker: How a Cheeky Satire Became a Videogame Hit”), paying to circumvent the act of playing the game entirely.

What started off as satire soon grew into its own reality, as players continued to chase the high of the constant feedback loop. But can a video game that plays itself still be considered a game? While it is clear that many players enjoy and perhaps yearn for the stress-free nature of games that require very little input or decision-making from the player, completely removing agency or interactivity from the player is certainly not what most people look for in the games that they play. Just as a reader would probably find the original text of *Pride and Prejudice* more fulfilling to read than its corresponding entry on Wikipedia, most people do want some measure of challenge in the games that they play. Would *The New York Times* crossword puzzle be as popular if the solutions to the puzzles were extremely easy to find? Would a Sudoku puzzle where all but one of the numbers on the board are filled in be satisfying to solve? There might be a pleasure to be found in the satisfaction of solving one of these puzzles, even if the solution is trivial. But many others would seek puzzles that are more challenging, because some people want to exert some effort when using their problem solving skills.

Although the satire of *Cow Clicker* was lost on some of its most earnest players, the game

is certainly not a failure of satire on the scale of the Ern Malley hoax⁸. Similarly, even though Alan Sokal's satirical paper lambasting the less than rigorous standards of some post-modernist academic journals was taken at face value by some scholars, this does not mean that the original intent of the satirical work is lost. Yes, some players did become invested in the act of cow clicking, craving the positive feedback that the game offered with very little effort on behalf of the player, but many people understand that this removal of agency is antithetical to standard game design and is meant to manipulate weaker minded individuals for financial gain⁹. Although the psychology of gambling addiction and its connection to player agency is far outside the scope of this project, it should be noted that Ian Bogost eventually shut down *Cow Clicker* precisely because he saw how easily some players could be hooked by the promise of constant, easy to obtain, positive feedback.

A second noteworthy game that had the same authorial intent was Kian Bashiri's *You Have To Burn The Rope* (2008). Like *Cow Clicker*, the game's title tells the player exactly what they will have to do in order to play and finish the game - namely, burn a rope in order to kill the boss. Unlike *Cow Clicker*, the player is afforded a greater (although still limited) moveset. They could try to attack the boss conventionally, using the weapon in the character's hand, but they would soon realize that the only viable option that they have is to burn the rope and drop a chandelier onto the boss' head. If the player chooses to follow the instructions outlined in the game's title, the game can be completed in about a minute - shorter than the running time of the credits that play after the completion of the game. While there are several readings of the game's

⁸ Ern Malley was a fictitious poet invented by James McAuley and Harold Stewart in an attempt to satirize the nature of Modernist Poetry. Unfortunately for them, Malley would become a more popular figure than either of them and the original satirical intent behind the hoax was lost.

⁹ Ryan Rigney describes how some players, which are referred to as "whales", have spent over five thousand dollars in various free to play online games. These players choose to buy their way to victory in these games because it allows them to feel the sensation of winning at a game without the need to invest their time or effort into the game.

simplistic nature, the one consistent reading is that the game is a satire of the trend toward simplicity and extremely guided experiences in modern video games. Since the title of the game tells the player what action they must perform to complete the game, they are left with very little chance to explore or experiment with the game. If the game tells the player to burn the rope, to the point where the command is an imperative, why would they try to do anything else? Although most players do not want complete agency in their games and understand that a game designer has to limit agency in order to provide a more streamlined experience, these players also do not want the designer to take control away from them entirely and hold their hands through the entire experience. Even in the visual novel genre, players are typically afforded some ability to affect the outcome of the story by making key choices in the game.

A more recent and infamous example of the simple mechanic is found in Jonathan Blow's *Braid* (2008), in which the game asks the player to literally sit and wait for two hours in order to complete one of its objectives. Fitting in with the game's themes of time and player agency, *Braid* asks the player to solve a series of time-related puzzles in order to complete the game. Although the game may have a multitude of metaphorical meanings, the surface text sets up a narrative that directly references *Super Mario Bros* (1985). *Braid*'s protagonist, Tim, has to save a princess who has been captured by an unknown monster, running through different areas in order to reach the castle where the princess has been imprisoned. The game's puzzles cleverly play with the player's expectations of time, giving the player the ability to manipulate time in order to extricate themselves from a variety of situations. As the player progresses through the game, they are slowly acclimatized to the fact that they are masters of time. Every mistake they make, even dying, can be fixed by simply reversing time to an earlier point in the game. However, when the player finally reaches the princess, they make a startling discovery that even

the ability to manipulate time cannot fix - the princess was not captured by a monster, but in fact, was running away from a monster. In the final seconds of the game, the player learns that Tim isn't completing an epic quest in order to save the princess - Tim is the monster that has been chasing the princess for the entire game. More importantly, the player discovers that they have been complicit in stalking and ultimately breaking into the home of Tim's victim by using the very powers of time manipulation that the game affords them.

Although this might be the end of the game for the majority of players, those players that are invested in the game's mechanics will discover a second, optional, layer of the game that introduces a new mechanic to the game's puzzle solving gameplay. In addition to controlling time in order to progress through stages, the player is also given the ability to collect eight stars that are scattered throughout the game world. Collecting these stars is strictly optional and not necessary to complete the game and, at least until the community of the game's more ardent fans got together and discovered all the stars, this was a mechanic that was simply ignored by most players. Collecting most of the stars relies on the player using the time mechanics of the game in clever and inventive ways, but two stars in particular play with time in a manner that impacts the player materially.

When the player finishes the game for the first time, the player is allowed to revisit the game and return to any of the previous worlds that they have completed. As a result, the player is technically able to return to the game and collect the stars, if so desired. However, one of the stars is only accessible if the player *has not* completed the game. The only way for the player to reach this star is for the player to reset their progress and start from the very beginning of the game. Reflecting the mechanics of the game itself, *Braid* asks the player to choose to "delete" the time that they have spent playing the game in order to be able to solve this new series of

puzzles. While reversing and manipulating time in the game is a trivial matter, asking the player to “reverse time” by resetting their progress is a much more daunting proposition. The player is able to reverse time to the point before they started playing the game, but the player is unable to gain back the time that they actually spent playing the game itself. Imagine if the final chapter of a book was locked away until the reader chose to read the book twice? How many people would be willing to devote their time to such a proposition?

If the player chooses to reset their progress and begin anew, they are also faced with the infamous puzzle stated above. The star found in World 2-2 is found right where the players start the level but hidden from view. The perceptive player might notice that there is a gap in the wall that signals the start of the level, but there is no apparent means by which the player can access that gap so they might choose to ignore it. By the time the player reaches the end of the level, they might notice a lone cloud sitting in the middle of the sky. The average player might believe that the cloud is simply a bit of art placed in the game world for decoration. The more perceptive player, however, should also notice that all the other moving platforms in this level are also clouds of the exact same shape and design. If the player is able to make the logical leap, they’ll discover that the cloud can be used as a platform in order to reach the gap in the wall and reach the secret star.¹⁰

Assuming the player is able to make those two crucial connections, there is still one final moment of inspiration required on behalf of the player before they can use the cloud to reach the hidden star. While the other cloud platforms in the level move at a perceptible speed, this special platform crawls across the screen at a snail’s pace. The player has to take the time to recognize that the cloud is actually moving across the screen - like the other clouds in the level - by quite

¹⁰ “Braid: Star 2-2 The Cloud Bridge” is a time-lapsed video that illustrates this solution.

literally sitting in front of their screen and staring at the cloud. Unlike other instances in the game where the player can speed up or reverse time in order to solve the puzzle, here the player has to wait in *real time* for the cloud to move across the screen. A player that doesn't have the patience to wait for the cloud will not notice that this particular cloud follows the rules of all of the other clouds visible in the level and be unable to reach the star. The player who does notice that this cloud is like any other cloud in the level will soon realize that this cloud will move into a position that will allow the player to jump the gap in the wall and reach the star.

But this requires a final moment of dedication on behalf of the player and relies on perhaps the most simplistic gameplay action ever implemented in a video game - waiting. In fact, it takes around two hours *in real time* for the cloud to scroll from one end of the level, and the only way for the player to use the platform is to wait those two hours. In a game that is thematically about time and our ability or inability to control time, this mechanic is perhaps the most thought-provoking elucidation of this particular theme. In the context of the game, both the player and Tim, masters of time at every other point of the game, are forced to wait at the behest of game designer Jonathan Blow and play the game on his timeline. Now, like any situation in which the player might be forced to wait for two hours - like say, in the waiting room at a doctor's office - the player is able spend that time waiting as they see fit. They might choose to read a magazine, watch a movie, play another video game on a handheld system, and so forth.

But this raises a question about the nature of games and agency that goes a little beyond the problems raised by *Cow Clicker* or *You Have To Burn The Rope*. Those games do boil down the nature of video games to a single action, but, in this case, playing *Braid* literally requires you to take absolutely no action. Yes, the player needs to be able to make the connection on his or her own through the power of observation in order to solve the puzzle (assuming they did not use

a walkthrough or ask for help). But in terms of the gameplay actions, the player has absolutely no control over the flow of time in the game and is basically forced to do nothing but watch as the cloud slowly scrolls across the screen. It should be noticed that in the case of *Braid*, the removal of player agency by not letting them control time seemingly empowers the player later on in the game. If the player is able to find and collect all eight stars - including the two that require the greatest investment of time on behalf of the player - the player is able to change the entire ending of the game.

When the player reaches the final stage of the game after collecting the eight stars, they'll notice that the sequence of events - the setup of the obstacles and the way time is used to circumvent these obstacles in particular - allows the player to change the entire outcome of the game. While the original ending has the player arrive in front of the princess only to discover that Tim is the monster and that the princess needs to be rescued by a real knight, this new ending actually allows the player to physically reach the princess and claim her as his own. The game reaches an interesting dichotomy. By playing with time on Jonathan Blow's terms, that is, by ceding control of time, the player is able to reach the standard happy ending that players expect from playing video games (especially one that invokes *Super Mario Bros.*). But if one of the costs of the happy ending is literally not playing the game for two hours, wouldn't that be considered a pyrrhic victory? Would the player's time have been better spent using those two hours on something more productive? Although the player is given the choice to not do anything for two hours in order to see the happy ending, the real choice they are making is to give up control of the game, even if this surrender is temporary.

And while players might be happy to sit around and wait for two hours in *Braid*, this is certainly a mechanic that has not been reproduced by any other mainstream game in recent years.

In fact, most game designers would shy away from creating a game in which the player could win by simply doing nothing and players would probably not appreciate this particular gameplay mechanic in any other game. If a game that declares its one single gameplay mechanic in its title is considered satire because it demands little intellectual stimulation from the player, then a game that asks the player to do *nothing* is a game that might not be considered a game at all. Certainly doing nothing cannot be considered gameplay as we know it.

Between the extreme of the full simulation, where a designer aims to replicate a real world experience as closely as possible in a game and give the player as many affordances as possible, and the other extreme of the single, simple gameplay mechanic, where a designer reduces a game to a trivial action that offers the player a single affordance (or even none, in the case of *Braid*), lies a full spectrum of distinct types of authored bounded agency that game designers can use to create meaning in their games. In order to emphasize the prevalence of authored agency in single-player, story-driven video games, this chapter will now catalogue and explore several more examples in order to definitely make the case that video games are authored texts and that bounded agency is the main mode in which the rhetoric of the video game grammar is expressed.

Chapter 2.3. Misdirection

One way that game designers employ agency in order to create meaning is to play on a player's expectations of agency in the first place. While misdirection is hardly a unique method of storytelling, game designers can rely on a player's expected behaviors and allow them to essentially misdirect themselves without them knowing it. Adam Cadre's *9:05* (2000) opens with this text:

The phone rings.

Oh, no - how long have you been asleep? Sure, it was a tough night, but...

This is bad. This is very bad.

The phone rings.

Bedroom (in bed)

This bedroom is extremely spare, with dirty laundry scattered haphazardly all over the floor. Cleaner clothing can be found in the dresser. A bathroom lies to the south, while a door to the east leads to the living room.

On the end table are a telephone, a wallet and some keys.

The phone rings.

With that introduction, the game leaves the player at a text prompt, waiting for their input. As with most interactive fiction games, the player enters a series of pre-determined verbs to perform certain actions. Going in with no expectations, the player might choose to perform the actions that they have been conditioned to perform in real life. Get off the bed, pick up the ringing phone, take a shower, put on some clean clothes, and so on. The game encourages the mundanity of everyday life as possible gameplay actions that the player can take, never discouraging the player from doing what might be expected over the course of a typical morning.

The game becomes more sinister if the player continues on their path of mundanity.

There are clues that warn the player that doing what they expect to be typical behaviour is not the right solution - for example, when the player chooses to drive to work, the game tells the player that the character they are controlling does not know where to go. As the player goes through the process of entering the office complex and walking to their office, the game begins to offer clues to the player that they have taken their character to a place where they do not belong. This begins with the fact that the character doesn't know the layout of the office building, culminating with the revelation that the character doesn't actually work at this company. Although there are several outcomes, perhaps the ending that most players will see in their first playthrough of the game is the one in which the main character discovers that the home he woke up in - and the job that he goes to - is not his. In fact, it is the life of the man he murdered the night before. Upon

discovering this important fact, the player is arrested and the game ends with a news report:

The anchorman chuckles. “And now, on the lighter side of the news - you’ve heard about the burglar who broke into a home and started stealing the family’s valuables, only to get so worn out from the exertion that he fell asleep and was caught when the homeowners returned? Here’s one to top that: a burglar broke into an East Las Mesas home, killed the owner and stashed his body under the bed, put his possessions in the trunk of his car - and then fell asleep, woke up the next morning, went to his victim’s office and tried to do the victim’s job! An insanity defense is likely. And now here with the weather is Jay Doubleday - or is it?”

Armed with this new information however, the player can choose to play the game again and escape the authorities. In fact, if the player chooses to look under the bed right at the beginning of the game, they are told: “Under the bed you see the corpse of the guy who owns this house”, confirming that the main character of the game is in fact a murderer. The game does not give any motive for the murder or explain anything that happens before the character wakes up at 9:05, telling the player only exactly what they can see in the present. Without providing any further context, the player can only do what the designer allows them to do - they can go to work again and get arrested, seeing the same ending as they did before. Or they can choose to drive away, “vanish[ing] without a trace”.

By providing the player with a set of actionable verbs and minimal context, the player is given the opportunity to exercise their affordances in a manner that almost guarantees their failure. It is true that the game encourages the player to perform mundane actions in order to proceed - if the player tries to leave the house without changing their clothes and taking a shower, the game does not allow them to do so - and perhaps the encouragement of this mundanity lulls the player into believing that in order to finish the game, they have to do these mundane tasks in order to succeed. But the game doesn’t prevent the player from looking under the bed and finding the corpse of the man the player character murdered the night before. It is

only because looking under the bed is not a typical or expected behaviour that the player might not choose to perform this action until they are told about the murder after being arrested the first time through. It is very possible that a first time player could, if choosing to explore the full variety of verbs the game affords, find the body on their first playthrough and never be arrested. In this case, it is not the game's limits on player agency that defines the story that the player sees, but the limits on player agency that the player chooses to impose on *themselves* as a result of their own preconceived notions about the typical workday morning. Although a player is given the opportunity to perform many actions in the game, including looking under the bed in order to discover the dead body, most players will choose to perform actions that they believe the game expects of them.

Brenda Brathwaite's *Train* (2009) operates on a similar principle. Although *Train* is a board game (and many board games are not designed with storytelling in mind), it is worth mentioning because it relies on the similar idea of letting players act on their expectations of success before revealing to them the "twist" of the game later on. In *Train*, the aim of the game is to efficiently pack in and transport as many people as they can to the final destination of a train track. When the player does reach the final destination, the player draws a card and the game reveals that these destinations are actually Nazi concentration camps. In effect, players have been competing against each other to see who could transport the most people to places such as Auschwitz and Dachau as possible. Much like *9:05*, there are clues that might suggest to players the true nature of the game - *Train*'s board is placed on top of a broken window frame, and as Brathwaite would relate in a Game Developer's Conference talk, the visual of small people being packed on trains on top of a broken window frame was enough to reveal the true nature of the game to a Rabbi (Burch, par. 15).

By following the rules of the game, the player becomes complicit - however loosely - in one of the greatest human tragedies in the 20th century and the phrase “I was just following orders” becomes more salient than ever. Of course, the point of the game is to make players question the blind faith that they place on the rules of the game. Like *9:05*, the game never disallows actions that would prevent the player from obtaining a different “outcome”. The player could choose to transport as few pieces across their tracks as possible and purposely “lose” the game - after all, it is only the expectations that the player brings to the game that suggests that the only way to win at the game is to transport the most people to a concentration camp and have the highest score. Or a player might choose to simply forfeit and forgo playing the game entirely. Indeed, even though the goal of the game is to be the player who can transport as many people to the destination as possible, the first player that chooses not to follow orders by trying to lose the game on purpose might be the one who actually wins the game.

Although this game will be explored in more depth in another category, *I Wanna Be The Guy: The Movie: The Game* (2007) or *IWBTG* is a game that also exploits the player’s expectations of agency by forcing them to question the very nature of video games and the 30 years of video game language that has become part of standard game design. Since *IWBTG* is a 2d-platformer like *Super Mario Bros*, players will expect the standard rules of 2d-platformers to apply. But very quickly the actions that the player has taken for granted from decades of convention are turned on their head. Players might know that Capcom’s *Mega Man* (1987) has disappearing platforms that periodically blink on and off the screen to reveal their positions, but *IWBTG* has platforms that are simply invisible with no space for the player to discover their positions until after they have stood on them. This means that the only way the player can find these platforms is through pure trial and error, jumping blindly across the screen and hoping that

they land on a platform instead of to their character's death. Traditional platformers might have objects from the sky fall onto the player and have to be avoided, but if the player tries to jump above these objects in *IWBTG*, these objects will fly upwards instead, killing the player instantaneously. *IWBTG* forces the player to throw out any expectations they might have had coming into the game and play it by its own set of unique rules. There is a deliberate intent behind subverting player expectations in this game, but this reason will be explored in a later subsection.

Chapter 2.4. Metatextual Narratives

Continuing on the subject of misdirection, many games have chosen to subvert expectations of agency through their metatextual narratives. In this case, players are expected to invest in the narrative of the game as much as they would in any other story. But whereas most games want the player to take the gameplay for granted, to see it as an extension of the story, there are games that want to show that gameplay *is* story.

Perhaps the biggest example of this phenomenon is the first *BioShock* (2007), directed by Ken Levine and developed by Irrational Games. *BioShock* begins with the player discovering a failed, dystopian society under the ocean aptly called Rapture. The player, as the main character Jack, is guided through Rapture by a man named Atlas, unflinchingly following his instructions that are prepped with the innocuously pleasant phrase "Would you kindly". Since Atlas is the only source of information that every player is exposed to - there is no guarantee that the player will see all of the diegetic pieces of storytelling found in the world itself - at the very least every player is led to believe that Atlas is leading a struggle against an evil man named Andrew Ryan, the man responsible for Rapture's fall. Of course, because the player embodies Jack, they are also following Atlas' orders as well. Yes, the player is allowed to make many decisions - from

small decisions such as choosing which plasmids to equip to the fundamental decision of choosing to harvest or rescue the “Little Sisters” - but ultimately Atlas is the one who gives the orders that decide the flow of the game. Atlas tells Jack, and by extension the player, which level to go to and which characters they need to kill in order to proceed to the next level. And while the player might consider Atlas to be an unreliable narrator, they also have very little reason to believe anything other than the fact that Andrew Ryan is an evil man who must be stopped.

When it is revealed that Atlas has been using a pre-programmed trigger phrase - “Would you kindly” - to force Jack to obey his commands, the player comes to the realization that they too have been pre-programmed to follow orders as well. Perhaps since the inception of video games, players have blindly followed the commands of the game designer. In a modern military shooter, a General might tell the player-character that they need to stop a terrorist. In a fantasy roleplaying game, a King might tell the player-character to slay the dragon in order to stop the evil wizard bent on world domination. For the most part, players never stop to consider these orders, nor are they given an option to disobey these orders and choose another path. It is taken for granted by the game designer and players of the game that each player will simply follow the instructions, just as it is assumed that a reader of most novels will start from the first page and read through the rest of the novel in a linear fashion. How a player might kill a terrorist or slay a dragon can vary from player to player, but the overall outcome of the game is set in stone before the player even loads the game for the very first time. Either the player follows through with their prescribed narrative arc, or the game is never finished.

While most games want to hide the fact that the player is a puppet being controlled by the puppet master that is the game designer, *BioShock* exposes the illusory nature of the bounded agency in video games and the nature of affordances given to the player with its “Would you

kindly” revelation. “Would you kindly pick this up?” “Would you kindly go there?” “Would you kindly go to Andrew Ryan’s office and kill the son of a bitch?” Throughout the first half of the game, each request that Atlas gives to Jack is not a request but a command that he is forced to obey as a result of his conditioning. In the same way, the player has also been programmed by video games to unconditionally follow the instructions laid out by the game designers. If the player is Jack, then Ken Levine is Atlas. In the final moments of Jack’s confrontation with Andrew Ryan, Ryan shouts at Jack - and the player - “A man chooses, a slave obeys.” But just as Jack has no choice but to follow Atlas’ orders and kill Andrew Ryan, the player has no choice but to follow Ken Levine’s orders and play *BioShock* on his terms. When playing a single-player story-driven video game, players are not “men” with the ability to make free choices, but “slaves” that blindly obey the orders given to them by the game designer.

In single player, story-driven games, agency is simply a lie that players believe in because it allows them to believe that they are in control of a game’s narrative outcome. But just like those who read a novel or watch a film, players are little more than passive observers simply along for the ride. Ken Levine is simply the magician that chose to expose his magic trick to the world, asking players to question the very nature of the video game as a textual object, and forcing players to reconsider their relationship with video games as a whole. As Rowan Tulloch suggests, “It is important that we leave behind the notion of players (or subjects of society more broadly) as able to operate outside and removed from the norms of knowledge, pleasure, and discourse. *Bioshock* carefully deconstructs its own operation and in doing so forces us to deconstruct ourselves. It demonstrates that we are all products of the forces that operate on us” (36). By putting the artificiality of the video game fiction in focus, the player is forced to question their actions not only in the context of *BioShock*, but in the context of all games.

Agency, choice, and control are all concepts that only avail themselves through the game designer's intent. If a player appears to have agency while playing a game, it is only because the game designer has created an elaborate, illusory world where the player doesn't know that a designer hiding behind the scenes is actually pulling their strings.

With all that said, *BioShock* does end by suggesting that the player is able to wrestle agency away from the developer and make their own choices. In the end, Jack is able to kill Atlas and free himself of his conditioning and the game's story ends with a "happy" ending or a "bad" ending depending whether or not the player has saved every Little Sister in the game. While *BioShock* exposes the inequity in the relationship between game designer and player, it appears to repair that damage by giving the player the final say in how the game ends. Of course, these endings also subtly remind the player that their choice of which ending they will receive depends entirely on the rules laid out in the game rules. *BioShock Infinite* (2013) would return to this theme by suggesting that every player's experience with *BioShock Infinite* and *BioShock* would boil down to fact that in these games "there's always a lighthouse, there's always a man, there's always a city". Despite the fact that any player might assume that they are developing their own personal experience with the game different from another player's experience with the game, ultimately all players will share the same directed experience. *BioShock Infinite* ends by suggesting that the only way for the player to break out of the repetition imposed on them by both the *BioShock* franchise and by other video games is to stop playing games altogether. As such, *BioShock Infinite* ends with the player character choosing to commit suicide, removing the player from the act of playing a video game altogether. Other games have used metatextuality to push the troubled relationship between game designer and player even further than *BioShock* or *BioShock Infinite*.

Davey Wreden's *The Stanley Parable* (2011) is a short game that challenges the reasons that a player might play a video game by putting the arbitrary nature of player agency on trial. The game begins with a male narrator telling the player about the character that they will control - an average man named Stanley, one of hundreds of employees inside a nondescript office complex slaving away at a menial job. As the narrator tells player, Stanley is man that sits in his office and pushes buttons on a keyboard, following the orders given to him by the monitor in the room. Far from being put off by the menial task of pushing buttons, the narrator tells the player that "although others might have considered it soul-rending, Stanley relished every moment that the orders came in. As if it he had been made exactly for this job". The game begins when Stanley realizes that he hasn't received an order through the monitor in "over an hour" and begins to worry because he hasn't been given any instruction on how to proceed with his job. As a character, Stanley is paralyzed by the lack of guidance, and as the player will soon find out, they themselves aren't that dissimilar from Stanley's slavish devotion to an unseen boss telling them exactly what buttons to push on the keyboard.

When Stanley decides to investigate the lack of orders coming through his monitor, the player is given control of the character and is told what to do. Even though the player is in control, the narrator continues to guide the story by telling the player what to do. The narrator's first direction tells the player that Stanley "got up from his desk and walked into the hallway" and when the player moves into the hallway, the narrator tells them "Stanley decided to go to the staff lounge to check on his co-workers. He never functioned well by himself and constantly needed guidance and support from others, so the thought of total solitude was terrifying to him". As the player guides Stanley through this office complex, new possibilities begin to emerge that differ from the prescribed route that the narrator believes Stanley should follow. The first of

these choices is simple: “When Stanley came to a set of two open doors, he entered the door on his left”. Here the player is seemingly allowed to exhibit some form of agency over the story and wrest control away from a narrator that has been telling them - and Stanley - exactly what they should do. If the player chooses to walk through the door on the left, the story continues unabated. However, if the player chooses to walk through the door on the right, the narrator becomes frustrated and chastises the player for not following his directions.

Throughout the game, the player is given many opportunities to comply with or defy the orders of the narrator. If the player chooses to comply with the narrator’s directions and follow the prescribed path, the player is treated to an ending that condemns them for their inability to act as a free agent in a game. One might assume that if the player chooses to act of his or her own accord, to take the door on the right instead of the door on the left, the game might reward the player with a more positive message. In one ending, Stanley discovers that he has been controlled by a “machine” and upon turning it off, the narrator tells the player that they are no longer bound by “instructions on a screen” and that “Stanley decides for himself now”. But we know that this simply isn’t true. Even by defying the narrator, the player is still following a prescribed path specifically designed for players who choose to defy the narrator. At no point do players ever decide anything freely, nor does Stanley impose a decision on them. The other four endings, which occur if the player chooses to branch off from the narrator’s designated path at various points in the game, are perhaps even more nihilistic in critiquing the player’s role in the modern video game story. Three of these paths further meditate on the function the player has in the way a game tells its story, as each attempt to exhibit agency over the story ultimately results in the narrator forcing the player down a path that has been pre-designed.

Even the “emergent” ending that comes as a result of the player choosing to defy all of

the narrator's orders, in which the narrator angrily stops the game and throws the player into the opening sequence of *Half Life 2*, ends with the narrator reminding the player that even though they chose to be the "leading man" by trying to create their own story in this pre-built game space, the narrator will always be around to "step in and wrap things up with a nice piece of dialog and a reflection on life that makes sense of whatever path you have chosen to walk". Playing on the fallacy of emergent gameplay as a true escape from the author-centric nature of video games, the narrator concludes that he is "happy to be the destination, instead of the journey". However, that concession is only temporary, as the narrator's final sinister words to the player are: "But only for now".

In fact, the final ending reveals the true nature of the relationship between a player and a video game. In one branch of the story, the player defies the narrator twice and in frustration, the narrator closes down all options and forces the player down a linear path. Given that scripted games are colloquially known as "rollercoaster rides" due to the fact that they are purely linear and are designed to provide peaks and valleys in order to evoke positive emotions from players, the narrator himself forces the player to sit on a platform that serves as a roller coaster car. Unable to move in any direction, the narrator slowly drives the player down a conveyor belt leading to a pair of metal plates designed to crush anything that found itself on this deadly rollercoaster ride. At this point the narrator, not happy with simply taking control of Stanley's body, also narrates Stanley's thoughts as well: "he thought to himself, 'This is simply the price to pay for ruining a perfectly good story. So he resigned and willingly accepted his fate". The narrator's desire for control over every aspect of the player, violently forcing the player to bend to his will to the point of telling the player what they should be thinking, is the curtain being lifted on the magic trick that is interactive storytelling. Ultimately every game designer wants

their players to behave in a certain way and experience specific emotions. Interactivity, namely player agency, can only exist within the context of bounded agency in games where the story is the main focus.

With that said, the game does not end with players resigning themselves to their fate by sitting passively while being crushed by the metal plates. The game chooses to exhibit its power over the player one more time by stopping the metal plates before the player is killed. The roller coaster ride stops and a *second* narrator, this time a female voice, narrates the thoughts of the original male narrator: “‘Farewell Stanley’, cried the narrator as he sent his subject down the conveyor belt and into the enormous metal jaws”. The very premise of the world that the player finds themselves in changes entirely, as the implicit contract between the game’s narrator and the player is exposed by pointing out that the narrator himself is a game object written by the game’s designer, Davey Wreden. The first narrator is not omniscient or all-powerful - he was simply a tool for this second narrator, who herself might be a tool for yet another narrator. The new female narrator momentarily frees the player, allowing them to peek behind the curtain by seeing the sets and props used by the designers to create the factory “set” that the narrator and Stanley find themselves in. After the truth is exposed, the player is taken back to the conveyor belt that they found themselves in before the second narrator took over from the first narrator. As the player is slowly driven toward the crushing metal plates, the second narrator tells the player the truth of *The Stanley Parable*: “there’s no salvation for these two, I’m afraid. The narrator had as little power over Stanley as Stanley did over the paths the he walked”. The reality is that the narrator had as little power over the game as the player. While the narrator seemingly chose the paths that the player could take throughout the game and praise or chastise the player for the choices that they made, the fact remains that the narrator is simply another object in the game

bound by the same rules as the player - rules put in place by the designers. The second narrator offers the only true way that a player can exhibit agency over a video game's story and take full control: "Push escape and press quit. There's no other way to beat this game". And she's right. The only real choice that a player has in a video game story is to stop playing the game altogether. Every other choice the player makes is not a choice at all, but a series of carefully designed options created by game designers to create the illusion of choice.

Chapter 2.5. The Anti-Game

The idea of making the player aware about the fallacy of choice, of aggressively reminding the player that they are not the ones leading a video game story, is a concept found in early video games as well. Taito Corporation and actor-director Takeshi Kitano's *Takeshi no Chōsenjō (1986)* is a game that is purposefully designed to be nearly impossible to play without external guidance. That game itself never tells you what you need to do in order to progress through the game and the player is forced to rely on aimless experimentation, or more likely, a guidebook published by an external party, in order to understand the game's goals. Without a guide, the game's punitive structure – where the player is allowed to make choices that render the game impossible to complete – discourages any real experimentation unless the player is willing to be obsessively systematic about recording the hundreds of possible permutations of gameplay decisions that are allowed in the game.

Like many games of its time, the premise of the game itself is extremely simple: the player needs to leave their boring salary man life behind and find the secret treasure. To get to that treasure, however, requires an exacting path. For example, the player has to quit their job in order to be able to be free to go searching for the treasure in the first place. But if the player quits their job before divorcing their wife, their wife will take the player's severance money and the

player is unable to buy the necessary items and lessons in order to proceed with the rest of the game. Another example of sequence breaking that can cause the game to be unwinnable occurs when the player neglects to choose to learn a foreign language before leaving Japan and flying to the island where the treasure is hidden. If the player forgets to take foreign language lessons, they will find that they are unable to speak to any of the natives on that island and are thus unable to proceed further in the game. The only solution to either of these dead ends in the game is to restart the game and avoid making these mistakes in a subsequent playthrough.

Although those challenges in the game can be solved with trial and error, other obstacles are simply impossible to solve without being told the solution. At one point in the game, the player has to play pachinko and win a *shamisen* or three-stringed guitar as a prize. The twist is that it is impossible to win the pachinko game legitimately. Instead, as the player nears the end of their pachinko game, they must grab the second control with the built in microphone (featured on the original models of the Nintendo Famicom system) and start loudly complaining about the game. If the player performs the song correctly, yakuza will appear and try to kick the player out of the pachinko parlor for causing a disturbance. If the player is able to defeat the yakuza, they will offer the player 5,000 pachinko balls in order to leave the parlor without any further disturbance. The player can then trade in the pachinko balls for the *shamisen*. Not only is the solution to the puzzle of “obtain a *shamisen*” obtuse in its own right, at no point does the game tell the player that they can yell into the microphone of the second controller in order to complain about the unfairness of the pachinko game and cause a disturbance. This is an action that the player must randomly stumble upon or be told to perform by an external source outside of the game.

Another similar puzzle that the player must solve is obtaining a treasure map in order to

find the treasure in the first place. The route to obtaining the map is as convoluted as any other puzzle in the game, but perhaps the most obtuse step in the solution requires the player to again perform random actions or be told the solution. Near the end of this particular puzzle, the player is given a blank parchment that is said to contain the location of the treasure. If the player examines the parchment, they are given various options as to what they can do with the parchment. Only two of these options can lead to the map revealing itself on the blank parchment - dunking the parchment into water or leaving the parchment out in the sun. The part that is impossible to figure out without external help is that the only way the map reveals itself on the parchment is if the player leaves it in water for exactly five minutes or leaves it out in the sun for exactly one hour. This literally means selecting the correct option and then leaving the controller untouched for that exact amount of time. There is no timer or progress bar in the game - the player has to use one of their clocks in the “real world” to keep track of how much time has progressed since selecting either option. If the player returns to the game too early or too late, the parchment is destroyed and they need to restart that part of the game over again. The game never reveals how long you have to leave the parchment in the water or in the sun. And while it is possible to experimentally work out the correct solution by simply replaying this section of the game over and over again (leave the map in sun for one minute, two minutes, three minutes, etc), the game leaves it completely up to players to make this leap of logic on their own.

Similar to *Penn & Teller's Smoke and Mirrors*, *Takeshi no Chōsenjō* is an **anti-game**. The difference here is that while *Smoke and Mirrors' Desert Bus* follows the rules of the real world, *Takeshi no Chōsenjō* has absolutely no coherent rules at all. It has been suggested, perhaps apocryphally, that Takeshi wanted his game to be purposefully obtuse and nonsensical in order to assault the player's expectations of choice, agency, or even coherence in a game. Indeed,

if the player manages to finish the game and chooses to wait 5 minutes after the game displays its “The End” title card, the player is greeted with a picture of a smiling Takeshi and the caption: “*onna gēmu ni maji ni nacchatte dōsuruno?*” (“Why are you taking this game so seriously?”), questioning the player’s dedication to completing an arbitrary set of tasks in a game with no obvious structure. Perhaps to add insult to injury, the game also allows the player to watch this ending right from the beginning of the game - the player simply needs to stand in place and press the punch button 30,720 times. This is a task that is as absurd as the tasks required to complete the game legitimately, and both paths to the game’s ending questions the robot-like manner in which video game players are programmed to perform tasks in order to reach an arbitrary and ultimately unrewarding conclusion. As with *The Stanley Parable*, the only real solution to “beating” the game would be to not play it again and excise oneself from the player-designer relationship entirely. The alternative would be for the player to legitimately go through all the convoluted steps required to finish the game, only to achieve an ending that admonishes the player for blindly following directions.

Case Study: *Call of Duty: Modern Warfare*

Not all games are as nihilistic as *The Stanley Parable* or *Takeshi no Chōsenjō* in terms of their positions as anti-games. Some games will contextualize the lack of agency in games and the ultimate futility of games within their fiction, using the futility of choice to not only make a point about the nature of video games, but to also address larger themes and ideas. As one of the most important games of the previous decade in terms of both its reach to video game players and its enduring influence on first person shooter design, Infinity Ward’s *Call of Duty 4: Modern Warfare* (2007) is a game worth singling out for an examination of how it approaches this concept of the anti-game. *Modern Warfare*, on the surface, is much like their previous efforts: big,

bombastic, perhaps even propagandistic representations of war and military conflict. Indeed, the game opens much like the previous games in the franchise. After a brief training mission to allow the players to learn how to control the game, the player assumes control of SAS Sergeant “Soap” MacTavish and is tasked to land on a transport ship on the Bering Strait and track down nuclear material that is bound to a terrorist organization in Russia. It’s a standard boilerplate plot that might as well have been cribbed from the pages of a Tom Clancy novel. Perhaps to highlight the ridiculously bombastic nature of the opening chapter, the mission ends with the transport ship being rocked by explosions, forcing it to capsize and slowly sink into the sea. As the ship lists, the player is forced to evacuate the ship, struggling to stay upright and above the rising water flooding the ship’s cargo hold. In a daring escape that Michael Bay would be proud of, the chapter ends with the player jumping onto a waiting helicopter just as the ship sinks into the sea. Players who might have been hesitant about playing *Modern Warfare* because of its shift away from the Second World War setting of the previous games discovered that they had nothing to fear, because the change in setting did nothing to diminish the blaring action beats associated with the *Call of Duty* franchise.

However, just as the player begins to feel comfortable with what has now become standard summer blockbuster action movie fair, the game cuts to an opening credits sequence that sucks the excitement out of the air and brings the player back to some semblance of reality. In a sequence evocative of the City 17 opening sequence from *Half-Life 2* (2004), the player is thrust into the body of Al-Fulani, President of an unnamed Middle Eastern country (although the game clearly identifies part of the game as being set in Saudi Arabia), as two armed guards drag him into a waiting car. Both the player and the President are helpless, unable to perform any action other than turn their head to look outside the car’s windows. As the car drives through the

streets, the player witnesses armed soldiers killing civilians and people running for their lives. Despite being the leader of this country, the player is powerless to stop the murder of these civilians, and can only look on as their lifeless bodies disappear into the distance as the car continues driving. As the car continues to drive, the player is left to wonder what is in store for them. Unlike the exciting opening where the player fought through a ship as a member of the SAS, the player is left bewildered as they are simply driven through the chaotic streets of this unnamed Middle Eastern capital city and forced to become an observer of the game and not a participant. When the car finally comes to a stop, a soldier drags the player out of the car and stomps a boot on the player's face, knocking the player out. As the player regains consciousness, they see that they are being tied to a stake. The limited amount of agency that the player had moments before - the ability to move their head and look around - is completely lost, as the player is forced to confront the final moments of Al-Fulani's life. A soldier, presumably the leader of the military coup that has deposed the President, grabs a gun and points it at the player's face. The player can do nothing but watch as the soldier cocks the weapon and pulls the trigger, resulting in the President's - and the player's - death.

Where previous *Call of Duty* games begin with the player surviving D-Day invasions, the siege at Bastogne, the retaking of Stalingrad, and just moments before, the sinking of a ship in the Bering Strait, *Modern Warfare's* opening credits sequence eschews the power fantasy of playing a soldier by forcing the player to become a victim. War simply isn't about being a proud soldier who fights for king and country against an undeniable evil. Without the simplistic good versus evil historical narrative of World War 2, war suddenly becomes uncertain, mocking the vainglorious nature of video game representations of military conflict.

The game itself provides very little context for the military coup and the execution of the

President. Perhaps Al-Fulani was a terrible dictator who mistreated his people. The only thing that the player can infer is that Al-Fulani was working with the American government, because the President's execution triggers a full-scale military invasion of this Middle Eastern country. It should be noted that no game has seriously attempted to tackle the invasion of Afghanistan or Iraq in the earlier parts of the 2000s, and while *Modern Warfare* itself is fairly apolitical and purposefully non-specific, one can only infer that the game wants the player to have the American invasion of Iraq in mind while playing this game. Unlike the Allies fending off the fascist Axis powers, there are no forces of "good" or "evil" here. All that the player is able to parse is a story about soldiers caught up in a geopolitical conflict beyond the scope of their understandings.

And so the game's perspective shifts to United States Marine Sergeant Paul Jackson, a faceless soldier in a sea of faceless soldiers ordered to invade this unnamed Middle Eastern country in order to capture Al-Fulani's executioner and the leader of the coup d'etat, Al-Asad. Like the real American soldiers that rolled into Iraq and ultimately into Baghdad, it isn't Jackson's place to question the motives of his orders. As a soldier, Jackson must simply do as he is told and the player herself is placed in the exact same situation. Going from being a President to a Sergeant, the player doesn't really gain any more power over the game or any new perspective over the game's narrative context. Just as both characters are simply pieces in a larger war, the player is a piece of the larger narrative concerns of the game designer.

For a moment, the traditional *Call of Duty* format the players have come to expect, returns. The spectacle of dozens of Blackhawk helicopters rolling into this unnamed Middle Eastern city is instantly evocative of the many similar moments found in the previous *Call of Duty* games. Just as the player fought through the streets of Sainte-Mère-Église in the first *Call*

of Duty as part of the D-Day operations to liberate France from the Germans, the player dropped into the middle of this city to help “liberate” it from the masterminds of the military coup. But while the invasion of France, by virtue of being a historical event, is a known quantity, this modern military campaign is shrouded in doubt and mystery. The player assumes that Jackson and the Americans will prevail because those are the expectations set by the previous *Call of Duty* games. In fact, the player might even expect to be able to avenge the execution of Al-Fulani themselves.

However, the player doesn't get that opportunity. While the previous games placed the player into pivotal moments of the Second World War, *Modern Warfare* purposefully leads the player away from the chase for Al-Asad. In the player's first attempt to capture Al-Asad, they are led to a television station where Al-Asad is supposedly broadcasting a message to the people of this country. After the player fights through the television station, all they are greeted with is an empty control room. Al-Asad's broadcast is nothing more than a recording, a revelation that leads a fellow soldier in Jackson's platoon to sarcastically quip: “Yeah... score one for military intelligence!”. The next time the player is ordered to capture Al-Asad, his platoon is diverted to a secondary location to help rescue another platoon that has become pinned down. As Jackson, the player is left impotent and unable to complete the objective that was tasked to them by the game.

That simple failure might be enough to trouble the expectation of agency that a player might have coming to a *Call of Duty* game. But *Modern Warfare*'s manipulation of agency does not simply end with the player's inability to complete the game's objective. If Al-Fulani's execution raises the fact that the player has no agency in *Modern Warfare*, because it might have been excused as an artistic choice in the opening credits sequence that had no bearing on the actual game, then Jackson's fate hammers home the point that this is not *Call of Duty* as the

player had previously known it. While the previous *Call of Duty* games are just as tightly scripted and controlled as *Modern Warfare*, those games allowed the player to fully experience the power fantasy of being an American, British, or Russian soldier during World War 2. Indeed, many critics have called the *Call of Duty* games rollercoaster rides, inasmuch as the games are so heavily scripted that they play out exactly the same every time and everyone generally has the same experience with the game. While the player may not have full gameplay agency over the route the player should take, the player is allowed to feel as if they have full narrative agency over the game by allowing them to feel empowered as they blast through Europe and North Africa shooting at German soldiers. While *other* soldiers are certainly killed in *Call of Duty* games, at no point is the player and the player character ever in danger. In fact, failure is literally not an option, as player death results in an immediate game over and a reloading of a previous checkpoint. Unless the player chooses not to finish the game, the only canonical ending for the game is some measure of victory for the soldier and the Allied forces that they are fighting with.

Modern Warfare throws those expectations of agency and empowerment out the window with Jackson. Not only is he unable to find or even go after Al-Asad, his one moment of glory in the war is rendered moot by the fact that he is killed in a situation that leaves the player even more impotent than in the Al-Fulani death sequence. As Act 1 draws to a close and Jackson is diverted away from the search for Al-Asad to rescue the pinned down squad, a commander tells Jackson and his platoon that they have discovered a nuclear device and orders everyone to evacuate the city. As they fly away on their Chinook, a Cobra helicopter that is escorting them is shot down. Jackson's platoon decides to mount a rescue operation and divert to the crash site, ignoring the potential danger of the seemingly impending nuclear explosion. When the Chinook lands near the crash site, the player regains control of Jackson and is told to rush toward the

downed Cobra. Jackson's Lieutenant shouts the classic war film line: "No one gets left behind!" and the player is allowed to finally take centre stage. In a moment of simulated heroism, reminiscent of single-handedly destroying German artillery batteries targeting the beaches of Normandy, the player runs toward incoming enemy fire in order to rescue the helicopter pilot. When the player reaches the downed Cobra, they press a button on the controller ("square" on a PS3 controller) and watch as Jackson gently picks the pilot out of the cockpit in order to carry her to safety. That the pilot is an injured woman might even allow the player to read this particularly situation as a valiant knight rescuing an injured princess. When the player reaches the Chinook and sets the injured pilot down, the rest of Jackson's platoon rush up the platform of the Chinook and escape the enemy soldiers bearing down on them.

Much like the last-second helicopter-boarding scene from the very first mission of the game, the player is allowed to breathe as they are directed to look back at the crash site disappearing into the distance. The player is lead to believe that, after their act of heroism, the mission is over and that they are safe. Rather than fade to black and cut to the next scene however, the player is greeted with a bright flash of light and the unmistakable form of a mushroom cloud in the distance. As with Al-Fulani's execution, the player can only watch as the shockwave from the nuclear explosion hits their Chinook and sends it out of control, flinging a helpless crewmember out the back. After the Chinook crashes, the screen cuts to a satellite image of the region showing the damage caused by the nuclear bomb. Text windows appear, showing dozens and dozens of names on a casualty list, before singling out Jackson's name. When the game gives control back to the player, they find themselves back in control of Jackson, groggily waking up after the violent crash of the Chinook. At this moment, the player is given no direct objectives or orders, because the standard contract between player and game designer has been

violated. The player is given a chance to feel empowered one last time when they are allowed to direct Jackson out of the wreckage of the Chinook. But each step forward is painfully slow and deliberate, as it seemingly takes Jackson every ounce of his strength to drag his body forward. Using the haptic feedback on the controller, the player can feel Jackson's pain as the controller violently rumbles every time the player guides Jackson forward. When the player is able to get Jackson out of the Chinook, they are greeted with a red and barren wasteland, overshadowed by the giant mushroom cloud that looms in the distance. The player continues to guide Jackson through the rubble, unsure of where they should go. A voice from Jackson's radio breaks through the static, asking all personnel to seek medical attention, but as anyone aware of history must know, the radiation from a nuclear explosion is typically fatal. Nevertheless, the player is able to continue to crawl forward, feeling the ever increasing pain that Jackson is suffering in their hands as their controller begins to rumble even more violently than before. The vibration of the controller climbs to a peak as Jackson suddenly stops responding to the player's commands and falls forward. The screen fades to white and moments later, the player sees the following text on the screen: "Sgt. Paul Jackson, 1st Force Recon, Status: K.I.A."

For the first time in a *Call of Duty* game, a soldier that the player directly controls is killed and no amount of physical skill or sheer will on behalf of the player allows them to change that outcome. Indeed, the brief moment of heroism afforded to the player during the rescue of the downed Cobra pilot is the very definition of a Pyrrhic victory. Whatever notions of power and agency afforded to the player only moments before are snatched away from them in the most violent manner possible. Single-handedly pulling the downed pilot out of the Cobra and carrying her to safety is an action that isn't rewarded with fanfare and medals. It is rewarded with death and the empty feeling of futility. The feeling of agency the player may have felt by playing a

heroic soldier is deliberately cut short by the intentional and deliberate design of the Infinity Ward crew. Where previous *Call of Duty* games allowed the player to survive through dozens of key battles from World War 2, *Modern Warfare* forces the player to confront the truth about playing war. Answering the so-called “call of duty” does not always lead to the glory and medals that you see in many fictional representations of war. *Modern Warfare* may be a video game, and you can “win” the game by reaching the ending, but in this case “winning” does not necessarily mean victory.

Indeed, when the game resumes and players return to MacTavish, the character they controlled when the game first began, they are able to find and capture Al-Asad. Given that Al-Asad is responsible for killing the player twice - once as Al-Fulani, and once as Paul Jackson - his capture might be considered a moment of catharsis. Perhaps to put it into classic video game terms, Al-Asad is the final “boss” that the player has to kill in order to win the game. He is, in essence, the “Donkey Kong” of *Modern Warfare*. But any satisfaction that the player might receive from Al-Asad’s capture is short-lived, as the player soon finds out that Al-Asad is nothing more than a small pawn being directed by a greater threat: Imran Zakhaev. When MacTavish’s commanding officer executes Al-Asad by shooting him in the head, much like when Al-Asad shot the player in the head earlier in the game, the victory itself is completely hollow. Not only does the player not have the agency to shoot Al-Asad himself or herself, but also Al-Asad wasn’t even the one who orchestrated the deaths of thousands of American soldiers in the first place.

As the game progresses, the player confronts Zakhaev and prevents him from launching nuclear missiles at the United States. But when the game finally ends and the player, as MacTavish, is able to finally kill Zakhaev, the final confrontation is anything but heroic. The

player is left lying on the ground, half dead as Zakhaev walks over to deliver the final blow. Like before, the player can only watch helplessly as Zakhaev shoots your fellow soldiers on his way to the MacTavish's near lifeless body. Using the last of MacTavish's strength, the player shoots Zakhaev as he is momentarily distracted. When Zakhaev dies, "Objective Completed" appears on the top of the screen and the game is essentially over. But this victory isn't quite the same as storming the Reichstag and planting the Russian flag on the roof. The calvary appears and a soldier tells MacTavish that he will "be alright". But as the player sees the lifeless bodies of his comrades, they can only wonder if that can be true after everything they have been put through by the game designers. To put a final mark of futility on the player's actions, a non-diegetic newscast can be heard as the game begins to fade to white for the final time. Everything the player has gone through to capture Al-Asad and to stop Zahkaev from destroying the Eastern Seaboard is covered up by the American government. Unlike the heroic and mythic actions of the soldiers in the Second World War, and by implication the player's actions in the previous *Call of Duty* games, the events of *Modern Warfare* will never be mythologized in an HBO miniseries or through hours of History Channel documentaries. By answering the call of duty, the player may have saved the world, but no one will ever know about it. The game designers are not even willing to concede that much to the player.

Modern Warfare, as in *Takeshi no Chōsenjō*, refuses to acknowledge the accomplishment of finishing the game. While *Modern Warfare* doesn't chide the player for taking the game too seriously, it also doesn't allow the player to feel as if finishing the game itself is much of an accomplishment. Yes, the player was able to complete the game's objectives. And perhaps the player was even able to do so on Veteran, the highest difficulty of the game. But to what end? The game's narrative conclusion is the most nihilistic ending the player has probably seen in a

big budget video game - let alone a *Call of Duty* game - and the player is constantly reminded by the designers that agency in a video game should not be taken for granted. By forcing the player to witness and experience death in a game franchise that typically romanticizes war, player agency and empowerment is purposefully diminished through narrative design. If anything, the game is a stark reminder that video games are not necessarily “fun”, nor do they have to satisfy the expectations of agency or the power fantasies of their players.

One question that arises is why the *Modern Warfare* might be so popular despite its intentions to disturb the player experience. One important factor is the fact that the game was released the same year as both *Portal*, and *BioShock*. Given that *Modern Warfare* was released at the end of 2007, players and critics alike were acclimated to games that used bounded agency to challenge player expectations. In speaking of the story campaign, Jeff Gerstmann wrote “[i]n a world filled with war games in which the good guys come out unscathed and the world is left at total peace, Call of Duty 4 will wake you up like a face full of ice water” (“Call of Duty 4: Modern Warfare Review”), a sentiment reflected by many of the other critics who reviewed the game at the time. Infinity Ward would also set a new standard for multiplayer First Person Shooter design by introducing Role Playing Game mechanics into the player progression, making the multiplayer component of *Modern Warfare* highly addictive. The combination of an exciting and intellectually challenging single-player campaign with a highly addictive multiplayer campaign is a design philosophy that would become the cornerstone of the *Call of Duty* franchise, and Infinity Ward would iterate on this design in *Call of Duty: Modern Warfare 2*.

Chapter 2.6. Forced Player Agency

Related to this notion of narrative nihilism and player agency, there are times when game

designers thrust agency onto the player when they least want it. In this case, the player assumes the affected experience of having agency, but their choices are actually being completely controlled by the game designer. Certainly, this type of forced player agency is not necessarily a new phenomenon. Many games have forced players to perform actions by imposing a strict time limit or by automatically scrolling the screen. But in recent years, the idea of forcing agency on a player as a narrative conceit is one that exemplifies the power that a game designer is able to wield in order to impose a story onto the player against the player's will. By giving the agency when the player wants it least, the player is made complicit with the actions of the player character - actions that the player might violently disagree with. In readings of video games, the assumption is that the player wants to have at least some control over the game experience. This critical response can be as extreme as Aarseth's assertions that the player becomes the author of a hypertext/game, as introduced in the first chapter of this dissertation, or it could be as be found more moderate responses such as Bizzochi and Tanenbaum's paper describing the notion of bounded agency when they make the case for player freedom in the game *Mass Effect 2*:

Mass Effect 2 is like a river—as you make progress you inevitably get carried downstream, but you have some choices on how you get there. You also have choices on how widely you decide to experience the potential arcs of the game. You can change how wide or deep the river is as you navigate, but in the end, you go where it takes you. This is a form of “bounded agency” where the player's actions can only deepen each narrative arc in the game, without derailing the direction of the story (401).

In their reading of *Mass Effect 2*, player actions are additive and their notion of bounded agency implies a collaborative relationship between the player and the designer. The designer sets the “direction of the story”, while the player contributes to add nuance to the narrative arc that makes the game an experience that is unique to the player. But when designers manipulate the player into taking control against his or her own will, the player suddenly realizes that they

only want control of a game when the circumstances are favourable to him or her.

Continuing along with the *Call of Duty* franchise, *Call of Duty: Modern Warfare 2* (2009) is perhaps most infamous for its “No Russian” level. In fact, it might be considered one of the prime examples of how agency can be authored. In “No Russian”, the player is an undercover CIA agent codenamed “Alexei Borodin” embedded in a Russian terrorist group. The level opens in an elevator compartment with Makarov, the leader of this terrorist group telling the player: “Remember, no Russian”. When the elevator door opens and the player walks through the threshold, they see that they have walked into the middle of a Russian airport, teeming with civilians waiting to catch their flights. Alexei lowers his weapon and watches as the other men in his group systematically mow down the civilians in front of them. When the game gives control of Alexei back to the player, the player has a limited number of affordances - all of which make them complicit in this act of terrorism. The player can choose to play the part of the Russian terrorist, shooting at the civilians in front of him in order to maintain Alexei’s cover. A craftier player might choose to purposefully miss their shots, trying to shoot around the civilians in an attempt to minimize their role in this act of terrorism, but even in that case, they will still see the other terrorists in the group murder countless civilians.

When the next phase of the level begins, any attempt at pacifism is rendered moot as Russian authorities descend on the airport and begin shooting at the player and the other terrorists. At this point, the player must participate in the act of terror whether they want to or not, because the only alternative to successfully shooting the Russian police officers is death and a Game Over screen. The level ends when the player shoots through the police officers and reaches an escape vehicle, only to be shot by Makarov, who reveals that he knew the player was a CIA agent all along. “No Russian” pushes the player through three phases of forced agency,

first by forcing the player to watch civilians being killed, then by forcing the player to shoot police officers, and finally by forcing the player to walk into a trap that not only renders the player's previous actions pointless, but also serves as the event that the rest of the game hinges upon. By killing the player at the end of "No Russian", Makarov uses the player's body to trick Russian authorities into believing that the American government is behind this act of terror, which in turn leads to the Russian invasion of the United States. The improbability of the scenario aside, the player is not only made culpable in the murder of countless Russian civilians, but they are also in effect responsible for thousands if not millions of American casualties suffered through the Russian attack of America.

Of course, throughout this level, the player has full agency over their actions as with a standard game sequence. They can move anywhere they want, choose which weapons to use, use whatever strategies that come to mind when dealing with the civilian and police force NPCs, and otherwise have all the options that are afforded to them in any other level of the game. For most players, it serves as a stark reminder of the nature of video game warfare. Players take for granted that their actions are morally justifiable. In previous *Call of Duty* games, moral questions are avoided due to the fact that players are shooting Germans. Even without editorializing, the game's designers can rely on the player's extra-textual knowledge of the Second World War to essentially turn the German soldiers into villains without any further input. There's no reason to mention the Holocaust in the game because players from North America or Europe of a certain age would have certainly been taught about the Holocaust at some point during their education. Even for games with more fantastical elements, it's fairly easy to create sympathetic heroes and antagonistic villains. *Halo* makes it clear that you should sympathize with Master Chief and the other human forces because the Covenant are hellbent on wiping out the entire human race. But

Modern Warfare 2 casts the player into a morally ambiguous role, forcing the player to perform morally questionable actions. The player is forced to confront the previously naturalized game mechanic of pointing a weapon at a fictional character and killing them, simply because the player was never really made to question who they were shooting in the games they might have played previously (including the first *Modern Warfare*). For players who may have come to the game to enjoy a simple rollercoaster ride or to live out an action hero fantasy, it is certainly a reality that they would otherwise not have to acknowledge.

Although the game essentially tricks the player into taking agency when they would otherwise not want it, it should be noted that Infinity Ward - or perhaps their publisher, Activision - ultimately decided to include an option in the game that allowed players to skip this level entirely by having the following message precede the mission: "The following mission may be disturbing or offensive to some players. You may skip this mission at any time in the pause menu". It's possible that this option was included as a concession to the fact that most players don't actually want to be forced to confront the extreme violence in the games that they play. But taking the action to skip the mission is itself an acknowledgement that the player is complicit in this act of violence. Even if the player chooses not to play "No Russian", the player is forced to acknowledge that they have some moral limits - even when it comes to video game violence - and are complicit in the violence that follows "No Russian" in the rest of the campaign. There is no easy out for the player, no way for them to pretend that they are simply playing a video game.

Other games use forced agency to compel the player to feel sympathy with or for the player character. For example, Valve Corporation's *Portal* (2007) included a simple moment of forced agency that spawned a myriad of memes that lingers on in the video game community to this day. Playing as Chell, a woman trapped in a testing laboratory controlled by the rogue AI

GLaDOS, the player is forced to perform a series of tests in order to progress through the game, much like a lab rat trapped in a maze. At a certain point early in the game, the player is asked to pick up a “Companion Cube” and carry it along with them through one of the test chambers. This Companion Cube is distinguished from the many other cubes in the game by the fact that it has a heart painted in the centre of each of its sides. Yet this simple distinguishing feature was enough to enamour players with the Companion Cube, causing many players to despair when GLaDOS orders them to throw their Companion Cube into an incinerator. Perhaps by accident, the designers created an object that offered the player some form of companionship in an otherwise lonely and isolating game and by forcing the player to destroy the only friendly “face” in the game, the game reinforces GLaDOS’s characterization as the game’s villain.

In Konami and Kojima Productions’ *Metal Gear Solid 3: Snake Eater*, the player - as Naked Snake - is tasked to find and kill The Boss, Snake’s old mentor, after she supposedly betrays the United States and delivers a nuclear weapon to a rogue Russian Colonel named Volgin. The player fights their way through many of the Volgin’s and The Boss’ forces before reaching a final confrontation between Snake and The Boss. As the game’s climactic gameplay sequence, it serves as one of the game’s most memorable and difficult battles. The player is forced to fight The Boss in a one-on-one battle, using all the stealth and combat techniques that they have learned throughout the game. When the player wins the grueling battle, the game cuts to a cutscene where Snake and The Boss share a final moment together. It is here that both the player and Snake begin to realize that what they thought they knew about The Boss might be called into question. Rather than confront Snake as a maniacal villain, The Boss gives Snake a Patriot, the key to Volgin’s secret plans and tells him that it is the key to saving the world. She then reaches out to him and tells him that he is a “wonderful man” before begging him to kill her.

Despite the events of the game, despite the difficult final battle, The Boss - whose name suddenly becomes ironic - does not act like a woman who betrayed Snake and the United States. In her final moments, she is suddenly sympathetic, reminding the player that previous to the events of the game, Snake and The Boss had a close relationship as teacher and student. It is at this moment that control of the game is returned to the player. The camera pans up to an overhead shot of Snake standing over The Boss and then prompts the player that they are back in control of the game. But Snake, and the player controlling Snake, has no real options. Even though the game gives the player full agency over whether or not to shoot The Boss, the game offers the player no other options. They cannot walk away, nor can they can try to talk to or save The Boss. The game locks the camera and freezes the scene, so that the player can't even choose to wait for The Boss to die of the wounds already inflicted on her during the previous battle. The only input the game accepts during this segment is the "shoot" command and the game demands that the player be the one to force Snake to pull the trigger on his gun. When the game reveals that The Boss was never a traitor but instead a double agent who was essentially ordered to put herself in a position where Snake would be the one to kill her, the player realizes that - like The Boss - they have been tricked into killing someone who was only following orders. As the game ends with Snake planting flowers at The Boss' grave, the player realizes that they were the ones who forced Snake to murder someone he cared about. By forcing the player to follow orders, the game openly questions the unflinching obedience that players - and soldiers - have to authority. Only when the consequences are laid bare can the player truly understand that the agency that the game gave them in that moment was never agency at all. They may have been the one to pull the trigger, but that is because it is the only option that the game affords them.

BioWare's *Mass Effect* (2007) is another example of a game that forces agency onto the

player, challenging them to make a choice between two difficult, and ultimately, losing options. Building up to the final act of the game, the player as Commander Shepard and his or her crew of soldiers and specialists head to the planet Virmire in an attempt to find Saren, the main antagonist of the game, and destroy his base. During the mission, Shepard orders his or her crew to divide into two groups, one lead by Kaidan Alenko and the other lead by Ashley Williams, and each group proceeds through the base in order to prepare the nuclear devices that will be used to incinerate the facility. Near the end of the mission, both teams radio Shepard for help, as it has become clear that Saren was lying in ambush. At this point, the game stops and players are forced to make a critical decision. Shepard only has time to respond to one mayday, and the game makes it abundantly clear that Shepard is only able to save one or the other. Therefore, if they choose to respond to Ashley's call for help, Kaidan is guaranteed to die in battle, and vice versa. Like all dialog choices in *Mass Effect*, the game presents this choice in its dialog wheel system and then simply waits for player input. The player is forced to put themselves into the mind of a leader being asked to sacrifice the life of one soldier in order to save the other, and the game does not offer the player an easy escape by making the decision for them. It is emphatically clear that the game designers wanted this choice to be the one that the player makes and that they will be forced to live with for not only the rest of the game, but for the two subsequent sequels. Unlike games that try to satisfy the player's desire for control and agency by creating the conditions that will allow them to succeed, *Mass Effect* essentially forces the player to choose between one losing choice or the other. If the "high score" outcome would be saving both Ashley and Kaidan, then the game makes it impossible to ever reach this high score. Here, it isn't that the player is only allowed one input like they are in the confrontation with The Boss in *Metal Gear Solid 3*. It's that the player is offered a choice between two inputs that they would

otherwise not want to choose from, perhaps suggesting that being in a position of power, where one's choices can have life and death consequences, is not necessarily as exciting a position as games have previously made it out to be.

The idea of forced choices would later play an important part in Telltale Games' *The Walking Dead* (2012), which is an adventure game built around the player making choices. As Lee Everett, the player must cope with finding himself or herself in a post-apocalyptic world plagued with zombies. The player must lead a group of survivors through Georgia, hoping to find some form of sanctuary somewhere out in the world. Half of the game's interactivity comes from moving Lee around various screens and investigating objects in the game world, but the more dramatic choices come from the many, many times that the character is forced to interact and converse with the other characters in the game. Each interaction that Lee has with the other characters in the game play out via a dialog tree, where the game offers on average three dialog choices that Lee can make. Unlike many other games, like the aforementioned *Mass Effect*, the game added the extra element of time pressure to their dialog tree system. Rather than be able to sit and contemplate between the three various dialog options, the player is forced by the game to make a choice or have a choice be made for them. When time is a factor in the player's decision-making process, a white bar on the screen slowly dwindles as time counts down, pressuring the player to make a decision before the bar decreases to zero. This visual cue only serves to add additional pressure to the player, as it indicates to them that they must make a decision and make it soon. That the developers play-tested the game and adjusted the timers to decrease faster than what play-testers felt comfortable with shows that there was a purposeful intent in trying to make players feel intense pressure and unease at being forced to make a split-second decision and face the consequences of their actions ("Episode 21 – Narrative in Games").

Indeed, many of these decisions are choices that in the “real world” would have to be made as quickly as possible. For example, a zombie bites Larry, one of the fellow survivors, and Kenny demands that the player kill Larry for the safety of the group. If the player makes the decision to do so before time runs out, Lee kills Larry and shocks the rest of the group. If the player takes too long to make a choice, Lee simply stands stunned as Kenny takes matters into his own hands and drops a brick onto Larry’s head. While the end result of the choice is the same, the consequences of making either decision has a long term affect on Lee and the other characters in the game. The fact that the player doesn’t have time to consider the consequences of killing a member of the group forces the player to essentially go with their gut instincts and make a choice based firmly on their personal emotional or moral being. Not only are some of the choices themselves difficult to make, but the added pressure of time only makes these choices even more difficult for the player. Again, the player is forced to make choices under undesirable circumstances, forcing them to accept agency under terms that they might not otherwise want.

Yager Development’s *Spec Ops: The Line* (2012) and Cavia’s *Nier* (2010) remind the player of the undesirability of agency through the two most nihilistic endings in this current generation of video games. *Spec Ops* is, on its face, a simplistic third-person shooter about three Delta Force soldiers who are sent to a post-disaster-ridden Dubai in order to find a battalion of missing American soldiers. Inspired very much by Coppola’s *Apocalypse Now* (1979), the game features the descent into madness that the three Delta Force soldiers experience as they penetrate deeper and deeper into the foreboding and nearly impenetrable desert environment. By the time the game ends, Captain Walker, the player protagonist, is finally able to meet Konrad, the Kurtz-like character who has been ruling Dubai after the city fell. Much like the Willard-Kurtz relationship, Walker and Konrad’s meeting allows the game to ruminate over the nature of war

and the descent into madness that the player experiences through Walker as they progress through the game. While there are many interesting aspects of this game, what is noteworthy here is how the game supposedly gives the player a choice in how they want the game to end. The player might choose to have Walker commit suicide, freeing the character of the psychological reality of a soldier suffering from Post Traumatic Stress Disorder (PTSD). The player might choose to shoot Konrad, which allows Walker to realize that Konrad has always been a hallucinatory manifestation of Walker's PTSD. If the player chooses this ending path, the player then is allowed to choose whether or not Walker returns to society, or if he chooses to descend further into madness, losing his humanity and becoming the new Kurtz-like figure to rule Dubai.

One could argue that these three endings are nihilistic about player choice in the context of war because every ending ends with some form of mental anguish that comes from being a soldier. Certainly it is true that there is no happy ending that the player can choose that allows Walker to return home an American hero. However, the game offers an even more nihilistic view of war and player agency when its presentation, and its designers, imply that the *entire final act* is a dream-like hallucination triggered by the experiences Walker has lived through in the first half of the game. The game opens with the player riding on a helicopter in an on-rails (or completely guided by the developer) gameplay sequence. This introduction serves to explain the basic controls of the game to the player, but narratively, it also serves as a framing device for the rest of the story. Eventually, the helicopter crashes as the player completes the introductory level and suddenly the game flashes back several days and the player is able to see how Walker ended up on the helicopter in the first place. Slowly, the player progresses through the game until they return to the same helicopter sequence that they played at the beginning of the game. However,

this second time around, Walker muses to himself: “I’ve seen this before...”, showing an awareness of himself either as a subject of a video game who is repeating levels, or perhaps an awareness of the fact that he has been hallucinating the entire game since the original helicopter crash that opens the game. If the player is confronted with this interpretation of the game, then the player will come to the shocking revelation that every single morally questionable choice the game has forced them to make while playing Captain Walker has been nothing more than the fantasies of a man trying to rewrite history in his mind. That is, not only is the player forced to make choices that they may not have wanted to make, all of the consequences of those choices are rendered meaningless because the choices never existed in the first place.

Nier pushes this nihilism even further by forcing the player to complete the game four times in order to see its ending. The game features a question about a man named Nier who must go on a quest to try to save his daughter from the evil creatures that have kidnapped her. As the player completes the game the first time, Nier is reunited with his daughter. When the player starts the game a second time, they begin to notice many subtle changes to the story and the world that complicates the nature of Nier’s journey. The player is able to see the world from the perspective of Kaine, one of Nier’s travelling companions, and slowly begins to understand that the evil creatures that they have fought and slain in the first playthrough of the game have their own motivations for wanting to fight Nier. In fact, the creatures were only trying to defend themselves and their friends from Nier as the player was indiscriminately killing them without remorse. Through Kaine’s eyes, the player begins to realize that Nier’s heroic journey isn’t as virtuous as it first seemed. When the player plays the game a third time, they now fully understand the context of their actions. With an understanding of the true nature of these supposedly evil creatures, the player is placed in a final dilemma. When the player plays the

game a third time, they are told that Kaine is slowly turning into one of the monsters that they have been slaying throughout the game and are given the opportunity to choose her fate. Nier can either kill Kaine, putting her out of her misery and preventing her transformation, or he can sacrifice himself by removing every trace of his existence from the world, thus preventing the events of the game from happening in the first place.

At this point, the player is asked to choose whether or not to negate their entire play experience, suggesting that the time they spent playing the game three (or more) times will be seen as a waste. The player is forced to confront the revelation that their actions in the game as Nier were selfish and did not serve the greater good of the game's universe. If the player chooses to simply kill Kaine, the game ends and the player is offered the chance to replay the game a fourth time, upon which they are confronted with the exact same decision to be made at the end. Ultimately, the only choice the game leaves the player, if they want to see the entire game through and see the final ending, is to choose to sacrifice Nier's life and remove any trace of Nier from the universe. In the game's narrative, the player sees this play out in a cutscene where Kaine is the one to save Nier's daughter and neither remember or are even aware of Nier's existence. For the player, however, the game goes the extra step of showing how the game will erase the player's "existence" and complicity in Nier's actions through metatextual means. When the player chooses to sacrifice Nier's life, the game takes over and begins to go through all of the game's menus. The game pulls up a list of quests that the player has completed and erases all of them. The game then pulls up a list of abilities that the player has gained through their four playthroughs and erases all of them. The game erases the player's inventory, statistics, and anything related to the player's actual experience with the game before finally making the most impactful erasure of them all: it deletes the save game file itself from the game console, making

the player's choice to sacrifice Nier and the time the player invested in the game complete and utterly final. The player, of course, will still have their own memories of the game and of playing as Nier, but there will be no record of their effort, no reminder of the fact that they played through the game several times in order to make the ultimate sacrifice. The game gives the player agency to essentially erase all of their previous moments of agency. The final choice reminds the player that they had no choice at all, making it one of the most difficult realization that a player is forced to arrive at. But, it is a realization that only the player can choose to make himself or herself.

Chapter 2.7. Embodied Agency

As video games are also physical objects that require skill and physical ability to manipulate and control, there is also a sense of embodied agency that designers can put into their games. Perhaps the most simplistic, and probably the most financially successful, example of embodied agency can be found in Nintendo's *Wii Sports*. Using the Wii Remote, players of *Wii Sports* are able to simulate the act of playing tennis, baseball, bowling, and golf. In fact, shortly after the Wii and *Wii Sports* launched, the news media reported several cases of people experiencing tennis elbow from playing the game for too long. This trend of embodied agency in casual games (that is, games designed to be accessible in order to reach an audience beyond the traditional "gamer" demographic) is also seen in the music rhythm game genre, with games like *Guitar Freaks*, *Drum Mania* and *Dance Dance Revolution* paving the way for the North American success of the *Guitar Hero* and *Rock Band* franchises. By giving players the chance to simulate the act of playing their music on an instrument, players are able to feel like they are active participants in their favourite songs. The popularity of this type of embodied agency peaked with the release of *The Beatles: Rock Band*, which allowed players to assume the roles of

the Fab Four in their living rooms.

Of course, this type of agency is not strictly limited to casual game experiences. Several game designers have exploited the fact that the act of playing a game is a physical experience in order to make the player feel like an active participant in the game's story. In *Heavy Rain* (2010), there are many noteworthy story sequences that demand physical agility on behalf of the player in order for the player to progress in the story. In one particularly harrowing experience, the player is put in a situation where they must help their in-game avatar amputate one of their fingers. In some games, such a sequence might be played out in a non-interactive cutscene. In other games, such as *Battlefield 4* (2013), this might be a simple button prompt that the player presses in order to have the player amputate another soldier's leg. *Heavy Rain*, however, demands much more of the player. Not only does it give the player the option to choose whether or not to amputate their character's finger, but also if he or she does choose to go through with the amputation, the task of doing so becomes a form of torture for the player herself. Not only is the player asked to find the instruments of their amputations themselves - a hot fire poker to cauterize the wound, a bottle of antiseptic in order to clean the wound, and of course a saw to cut off the finger - the player is made to press and hold the controller in an awkward manner by forcing them to press certain buttons in order to actually amputate the character's finger. Choosing to amputate the character's finger becomes more than just a passive decision with no consequences for the player - if the player wants to make her character go through with the amputation, then they have to be prepared to suffer at least some measure of the character's discomfort herself.

Metal Gear Solid 4: Guns of the Patriots (2008) uses a similar device to allow the player to approximate the level of physical pain that the game's protagonist suffers in the so-called

“Microwave corridor” sequence. During this sequence, Solid Snake is forced to crawl through a corridor lined with microwave dishes that are literally cooking him as he tries to reach the end of the corridor. In order to help Solid Snake reach the end of the corridor, the player is asked to mash the “square” button on the controller as fast as they can. While the discomfort of being asked to mash a button is miniscule compared to the pain of being cooked alive by microwaves, the player is able to – in even the smallest of measures – sympathize with Solid Snake’s pain. The player wants Snake to reach the end of the corridor not only because it would end Snake’s suffering, but also because they would also be able to stop their own pain of being forced to mash a button for an extended period of time.

By leveraging the physicality of playing a video game, a designer can make agency more than just an abstract, intellectual choice that the player makes in their game. The act of playing the game itself becomes a part of the grammar that a designer can use in order to make the pretense of agency a much more personal experience. Of course, the player is still being asked to press a series of buttons being displayed on the screen and has no actual control over how the scene plays. Either the player follows the instructions, or the player fails and the game ends. But allowing the player to feel as if they are a part of the scene by exerting physical effort gives the player the illusion that they are the actors in the scene. If the player can’t hold the controller in a certain way, then the character will not amputate his finger. If the player can’t mash the square button fast enough, then Solid Snake dies. In a moment where the player has the least amount of agency, they are allowed to feel as if they have the most control over the game’s outcome, despite the fact that all they had to do was mash a single button.

Chapter 2.8. Scope

Games can also manipulate a player’s sense of agency through scope, effectively

disrupting the flow of a player's game experience by contracting or expanding the scale of the game. Although many games employ this method to develop set pieces – for example, *Call of Duty: Modern Warfare* has a sniper sequence where you are only meant to shoot one person – there are games that are made explicitly around disrupting player expectations of scope.

Team Ico's *Shadow of the Colossus* (2005) contracts its expected scope by removing nearly all enemy encounters from the game. Other action adventure games, such as Nintendo's *Zelda* franchise, will commonly have enemies on the field that the player can enter combat with as minor obstacles before they reach the final "boss" encounter of a particular area. This allows the sense of flow to slowly ramp up, as the player defeats increasingly more difficult enemies before being faced with a unique, and much more difficult, combat challenge. *Shadow of the Colossus* eschews this difficulty ramp by only having boss enemy encounters in the game. Each combat encounter becomes special, because the combat in the game is much more specific and refined. A player might get comfortable when playing a *Zelda* game because they know exactly what to expect when facing one of the throwaway enemies, and therefore is allowed to feel in control of her experience with the game. They are not able to become comfortable in *Shadow of the Colossus* because every single encounter will inevitably be a difficult battle. Not only does this make every enemy encounter special, but also equally significant is the fact that the act of killing an enemy becomes a deliberate and meaningful action. When the player is treated each time with a cinematic or cutscene depicting the death of one of the colossuses in the game, they are almost reminded of a large animal in its final death throes after a hunt. As the player progresses through the game, killing each and every single unique enemy, the player is able to stop and wonder why they are killing these creatures in the first place. By the end of the game, the player realizes that by murdering these creatures, they are perhaps the true villain of the

game.

Similarly, Team Ninja's *Ninja Gaiden* series are character action games that greatly expand on their scope by making every single enemy encounter equally difficult. Games in the genre will typically have "trash" enemies that the player is easily able to defeat, usually because they exist to provide refills for the player's health or special ability gauge. *Ninja Gaiden* (2004) makes each enemy encounter matter and the player is forced to slow down and be deliberate in their actions. Rather than thoughtlessly mash their buttons as they proceed through countless enemy mobs, the player must think about how they will engage each enemy or they will suffer the consequences of their carelessness through their character's death. By designing each enemy encounter to be equally difficult, the player is forced to become a master of the game and its rules, bringing the player at least marginally closer to understanding the concentration required to learn and master a martial art. Games of this nature encourage the player be more mindful in their actions, to actually think about each and every single button press, less they make a careless mistake and end up losing the game.

A related manner in which games can disrupt flow is by completely skewering the traditional learning curve of a game by making it extremely **difficult** right from the beginning. Unlike the *Ninja Gaiden* example above, which while difficult, still offers the player the same linear learning curve by starting her off with one-on-one battles, games that rely on the disruption of flow through difficulty have absolutely no learning curve at all. The fan community has coined the term "masocore", a portmanteau of masochist and hardcore, to describe these games because they will punish the player in a typically unfair manner. Although the player expects the game to subvert their expectations, these moments of subversion are so unpredictable that the player will fall victim to them at least once. A standard game will give the player a

chance to succeed by teaching the player its rules and testing the player's knowledge of those rules in a manner that offers a strong chance of success. The masocore game has no predictable rules whatsoever, making it impossible for a player to learn how to succeed at the game without some amount of trial and error. The only way to succeed at a masocore game is to memorize the points at which the game tries to punish the player with an unexpected gameplay mechanic. It is a masochistic experience because the player consents to being treated unfairly by the game and its designers, knowing in advance that it is impossible to finish the game with standard video game logic.

Perhaps the most infamous example of the masocore genre is the fan-made independent platformer *I Wanna Be The Guy: The Movie: The Game*, which takes agency away from the player completely by exploiting their knowledge of previous games that they may have played. The game encourages feelings of nostalgia by using sprites, characters, and music from 8 and 16-bit video game classics – the title screen music is lifted straight out of *Mega Man*, immediately evoking memories of a hard, but fair, classic platformer of a bygone era. However, the game is made much harder the more experience the player has with other video games because it punishes the player who makes assumptions about the game based on previous games that they have played. Any baggage the player brings from their experiences playing *Super Mario Bros.* or *Mega Man* or any number of platformers since the NES era only works to their detriment.

For example, the very first thing the player sees when they start the game is a room with a series of spike walls that is extremely difficult to traverse. The natural inclination is to go through the room because that is simply what most platforming games have taught the player to expect, much in the same way that *9:05* plays on the player's expectations of what a character might do when they wake up in the morning. Progressing through this room is extremely difficult

and requires trial and error and memorization – there is simply no way to get through this room the first time through, unless the player is extremely lucky. If the player manages to descend through this room and make it to the next room, they are greeted with a floor full of spikes that they will inevitably land on because they have very little time to react when the game transitions to the next room. This is a seemingly impossible situation until the player realizes that, from their starting position, they can jump up through the top of the screen and find a completely different level that is much more manageable. An experienced player might try to brute force their way through the more difficult screens, only to find that they are unable to make any progress when they reach the room with the spiked floor, wasting hours of their own time trying to accomplish an impossible task simply because they are trying to play the game based on what they expect the game to be like. It's only when they realize that they have to play the game by an entirely new set of rules – by jumping up and out of the first screen instead of trying to head down the screen – that they understand that there is no way for them to control or predict the outcome of their actions in the game.¹¹ The expectation of control is something that the player may feel entitled to, either through experience with other games, or simply through the expectation that a game is designed to have fair and predictable rules that encourage a *flow* state. However, these games exist on the top end of the *flow* curve and are deliberately designed to frustrate any and all of the player's expectations.

Much like post-modern fiction in other genres, these games are hard to “read” precisely because they are unfair by the standards of the typical video game. This is extremely true in a game like *Shobon Action* (2007), which is made to look exactly like Super Mario Bros., but

¹¹ A typical example of a player being angry at their expectations being defied by the game is seen in “Rage Quit - I Wanna Be The Guy”.

punishes the player if he or she tries to play it as if it were a typical *Mario* platformer. While the majority of players will not choose to play games that are by design completely unfair and strip away player agency, there are a small minority of players who are happy to cede control to the designer in order to experience a game without any rules whatsoever. In fact, even Nintendo itself dabbled in the masocore genre in the very early days of the Nintendo Entertainment System. While American players got a re-skinned version of *Doki Doki Panic* as their version of *Super Mario Bros. 2*, Japanese players were treated to an extremely difficult update to the original *Super Mario Bros.* as their official sequel. Much like other masocore games, the Japanese version *Super Mario Bros. 2* (1986), now known as *Super Mario Bros.: The Lost Levels*, is infamous for exploiting player expectations by having a purple mushroom that instantly kills the player upon collecting it. Mushrooms, which the player considered safe in the first game, were now objects to be feared. And while Nintendo had long assumed American players would like to feel in control when playing their games, recent games such as *Super Mario 3D World* have included levels that are extremely difficult to play, showing that even the creators of the platforming genre see the appeal in subverting player agency through increased difficulty.

Chapter 2.9. Gameplay Limitation or Constraint

Another manner in which games can manipulate the player through gameplay is by directly limiting or constraining their agency in order to make them feel vulnerable and to create extra tension. Although this is a feature found in many games, typically through difficulty settings, limiting agency through game design is seen specifically in survival horror games such as the *Resident Evil* or *Silent Hill* series. Survival horror games and their use of constrained agency are described in greater depth in Bernard Perron's *Horror Video Games: Essays on the*

Fusion of Fear and Play, but, in brief, survival horror games are designed around the fact that the player will always feel like they are in peril at all times. These games are essentially the antithesis of the power fantasies that are found in many other video games, where the player is typically empowered by the designers and made to feel as if they are more powerful than the game's enemies.

Indeed, the *Resident Evil* franchise, including *Resident Evil 4* (2005), has used many techniques – both intentionally through design and unintentionally through the limitations of technology – to limit player agency in order to elicit feelings of fear. These techniques include forcing the player to manage their inventories by only allowing them to carry a certain number of items, allowing the player to only save their game a certain number of times, giving the player a limited amount of health, not letting the player both move and shoot simultaneously, or forcing the player to use controls that are not immediately intuitive. Combining all of these limitations together makes the player feel as if they in a constant state of paranoia as they play the game. Rather than rush head first into a room, blasting away at any enemies that they might encounter, the player learns to be constantly afraid of what the game might throw at them. In fact, the ability to instill fear into a player is not limited strictly to survival horror games. In Action Role Playing Games (ARPG) such as the *Diablo* series, including *Diablo III* (2012), the player is able to choose to play the game on “hardcore” mode. By opting to play in this mode, the player is consenting to the fact that once their character dies in the game, all of their progress is immediately erased and lost forever. While this mode wasn't necessarily designed specifically to create fear by limiting agency, the mode does dramatically raise the stakes of a player's involvement with the game. Someone playing the game in hardcore mode will be much more careful and considered in their actions by virtue of not wanting to lose everything that they've

earned by playing the game. At the very least the person playing in hardcore mode will play the game very differently from someone who is not playing in hardcore mode.

Some games go as far as to not give the player any weapons at all. More recent entries in the *Silent Hill* franchise, and games such as *Amnesia: The Dark Descent*, ask the player to simply run away from enemies rather than fight them. In fact, the player is given so little agency that their only option is to run away, because fighting will result immediately in their character's death. Unlike many games that attempt to allow players to live out some fantasy, these games are designed to allow players to live out their greatest fears. In fact, many players have simply opted out of playing these games because the limitations on their agency are simply too much for them to handle. Instead, some players will opt to watch other players play the game for them on livestreams, choosing to live vicariously through another person's fear (Klepeck, par. 4).

In extreme cases, games not only remove agency through limitations on gameplay mechanics, but also by removing perhaps one the element of games that is always taken for granted - sight. Kenji Eno's *Real Sound: Kaze no Regret* (1997) and *Enemy Zero* (1997) are survival horror games where the player must rely entirely on sound to not only get their bearings, but to also find their enemies. Blindness forces the player to learn how to play the game on its own terms, removing a sense that they have probably depended on for most of their lives. Suddenly silence becomes as oppressive as darkness, as the player is forced to patiently wait for the slightest noise in order to react to the environment around them.

Other games, like *Lifeline* (2003), remove direct control of the game from the player and ask them to control the game with only their voice by giving orders to the character through a microphone. While the technology in *Lifeline* was not able to live up to the expectations of most players – in many cases the character did not respond to the player's orders because the game

could not understand the player's speech – the idea of leaving control out of the player's hands and forcing them to rely entirely on their on-screen character's ability to perform instructions creates a level of uncertainty that at least provides an aspect of tension that a player simply would not be able to experience otherwise.

Chapter 2.10. Empowerment

Finally, games can empower the player by carefully timing when agency will be given to the player. In *Flower* (2009), the player takes on the roll of a flower petal being guided through several distinct worlds by gusts of wind. As the game progresses, the petal's freedom is slowly encroached upon by urbanization. At first, the petal is free to fly across an open grassy field, joined by dozens of other flower petals. But as the game progresses, the petal's movement is severely limited by the amount of free space available. Buildings and power lines disrupt the petal's ability to travel across the space - and accordingly, the player's agency is also severely limited. However, when the player reaches the end of the game, they are suddenly given a burst of exhilarating agency when they least expect it. Trapped by grey buildings and steel girders, the petal is unexpectedly given the ability to restore life to the environment by being able to smash through the girders. Whereas the player had to carefully navigate the obstacles of urbanization in the previous levels, now they are free to fly straight through them without worry. The player is slowly directed by the game to smash a few girders, building toward a crescendo in which the player excitedly destroys an exponentially increasing amount of girders before freeing the petal from the urban environment entirely. By carefully restricting and tempering the amount of agency the player is afforded, the game designers are able to emotionally manipulate the player into a sense of euphoria when the feeling of agency is given back to them. Suddenly, the player feels powerful and able to do anything in the game - and while it is all at the whim of the game

designer, the player feels like they have taken control of the game's climax and can personally experience the positive feelings associated with that control.

While *Flower* subtly manipulates player agency, other games will clearly telegraph the moments in which the player is losing control. Much like a sports film in which the home team suffers a series of setbacks before triumphantly winning the final game, some video games will force the player to seemingly lose before allowing them to win. Perhaps the most famous example of this type of telegraphed ending is seen in *Super Metroid* (1994). As Samus, the player works through the game to in order to confront Mother Brain. In this final battle, the player has absolutely no control over the outcome. They can try to dodge Mother Brain's attacks, but eventually they will be overwhelmed by the sheer amount of damage Mother Brain can deliver to them. While this is not strictly a scripted sequence - the player still has the feeling of being completely in control over the outcome of the fight - it is impossible to defeat Mother Brain at this point in the battle. Just as Mother Brain prepares to deliver the seemingly inevitable final blow, an unexpected friend appears from off screen to save the Samus' life. Given a last-second reprieve, Samus gains a second wind and the player is suddenly able to destroy Mother Brain with ease. In a matter of seconds, the player shifts from feeling *powerless* to feeling *powerful*. This feeling of power comes at a cost - the friend who saves Samus' life dies in order to give the player their newfound sense of power. As overjoyed as the player might be to snatch victory from the jaws of defeat, they soon realize that their victory is somewhat hollow. Even in a battle sequence that lasts little more than a few minutes, taking away control from the player for a short amount of time creates the conditions that allow the player to experience a range of emotions. In this case, momentary powerlessness lets the player feel both joy at their victory and sorrow at the friend's sacrifice.

Chapter 2.11. The Grammar and Rhetoric of Video Games

These basic grammatical structures – full simulation, simple gameplay mechanics, misdirection, metatextual narratives, the anti-game, forced player agency, embodied agency, scope, gameplay limitation or constraint, and empowerment - provide a glimpse of the many tools that game designers can use in order to convey meaning through player interactivity. Each of these types of video game grammar and rhetoric allow the game designer to craft an interactive experience that encourages the player to feel as if they are in control of the game, but also allow the designer to provide a crafted affective experience. In other words, while the designer is ultimately only able to make assumptions about how a player might interact with their game, they are able to carefully construct a set of rules for interactivity that encourages a directed experience that suits the needs of the game's narrative. Much like film, drama, music, and other forms of artistic expression have means by which they can make an audience laugh, cry, or simply think, video games also have their own language of interactivity and bounded agency that can elicit these same emotions out of the player. It is true that video game designers and writers borrow much from the language of other media. Many game stories follow a five-act structure, and many of the cinematic cutscenes found in games are produced as if they are films. But what makes a game different from a film or any other medium is the fact that games demand physical action on behalf of the player. Through four decades of evolution and refinement, game designers have combined the rule-centered language of playing a game with the visual language of film to create a new language of interactivity and bounded agency. This new language has its own grammar and rhetoric, expressed through the limitations of and affordances on player action defined by a video game's rules. In other types of games, whether board games, sports, or even video games that do not aim to tell a story, rules are simply an effort to regulate how the game is

played. In video games that are designed to convey a narrative, rules are more than a simple regulation of player actions. Rules are the means by which the narrative is delivered to the player. The careful design of these rules directs players to specific, predictable outcomes that allows the player to feel as if their progression in the game are directly a result of their successful navigation of the game's rules, while also allowing the game designer to tell a specific story. This chapter illustrates the means by which this language of video games can be used to convey meaning to the player, with the specific examples described serving as the grammatical structure of this language. Again, just as film uses "shots" and "cuts" to manipulate a series of visual images in order to convey meaning to and film audience, video games use limitations of and affordances on player agency to convey meaning to a video game player. With an understanding of this grammar and rhetoric in mind, this dissertation will now turn to specific circumstances in which the interplay between agency and meaning can influence how a video game designer can tell a story to a video game player, showing that designers must take agency into account when considering how stories are told in the games.

Chapter 3. The Dissonance of Play

With this understanding of a language of video games that can be used by a game designer to convey meaning to a game player, this chapter explores two special cases that illustrate how game designers can potentially fail to take into account the integral nature of the manipulation of interactivity in video game storytelling. Both the concept of ludonarrative dissonance and the extensive use of cutscenes in contemporary video games are problems that are unique to the medium because of new considerations of storytelling that many designers have not had to consider until now. As designers, critics, and players alike come to understand how to both read and write in this new language of manipulated interactivity, these two special cases represent the key focal point in understanding why video game stories are different from other types of stories. Just as the earliest filmmakers had to learn to exploit the storytelling potential offered by a medium that allowed for the recording and editing of a visual narrative, these special cases show how game designers have to learn to exploit the unique opportunities offered by the ability to manipulate player interactivity.

Chapter 3.1. Ludonarrative Dissonance

As the previous chapter has shown, video game designers are able to tell stories in games with a language that is unique to video games. Interactivity becomes more than just allowing players freedom of choice, but instead it becomes the vector by which a player may be manipulated into being invested in a game's story. But as the medium continues to evolve, so do the tools that game designers choose to use. Just as the very first filmmakers borrowed from theatre to help tell their stories (whether by framing shots as if they were being filmed on a proscenium stage or by having a theatre organ provide the score and sound effects), video game designers have also borrowed heavily from the languages of other media. Set design, art design,

sound design, cinematography, editing, acting, and direction are all aspects of film that have been, and continue to be used in video games to this day. Indeed, as technology continues to improve, the line between Silicon Valley and Hollywood has continually blurred. The shift toward three-dimensional spaces allowed game developers to treat their virtual spaces in the same manner as a film crew, as concepts such as blocking, lighting, and environmental/diegetic sound were brought to the forefront. As both sound compression technology and storage technology improved, game developers hired Hollywood actors to star in their games. It is a practice that continues to this day, as seen in the game *Beyond: Two Souls* (2013), featuring not only Ellen Page's voice, but her likeness as well.

But as games have cribbed more and more from the filmmaker's playbook, many games that try to tell a story have become designed with almost two discrete components in mind. On the one hand, there is the 'ludic' or gameplay component of a video game. This component is the part of the game that involves direct player input and interaction. When someone says that they are 'playing' a game, this is the part of the game that they are manipulating directly with a controller of some sort. On the other hand, there is the 'narrative' or storytelling component of a video game. This component is the part of the game where the player is simply encouraged to watch a non-interactive movie scene play out in front of them as the game tries to expound on the traditional elements of narrative found in other forms of storytelling. These are the parts of the game that will explain the setting, delve deeper into the backstory of the fictional universe, or characterize the player character and other non-player characters. Perhaps unintentionally, contemporary game designers have almost built their games around these two disparate and completely delineated components of video game storytelling. Ron Gilbert, the designer who coined the term "cutscene" during the development of *Maniac Mansion* (1987) to describe the

non-interactive movie segments between gameplay, would argue twenty years later that “games are art that is meant to be lived, not viewed” and that “the worst way to tell a story in games is by a series of cutscenes interspersed between action” (Breckon). In *Maniac Mansion*, Gilbert and his team at LucasArts (then Lucasfilm Games) used cutscenes to connect the interactive elements of the game, the puzzle solving, together. Solving a puzzle would lead to a piece of the story that would be relayed to the player through a non-interactive animated scene, which in turn would lead to a new puzzle for the player to solve. In the adventure game genre, this method of storytelling would become a staple of games produced by the two largest adventure game companies at the time: LucasArts and Sierra. Early games in other genres simply typically conveyed their story through diegetic means. *Wolfenstein 3D* (1992) and *Doom* (1993), id Software’s seminal games that would define what is now called the First Person Shooter (FPS) genre, did not use cutscenes to convey narrative in the game, relying strictly on diegetic storytelling to provide the necessary contextualization for the audience’s actions. It is only much later that FPS games, including sequels to both *Wolfenstein 3D* and *Doom*, would come to rely on the cutscene for the purposes of storytelling. What Gilbert used as a storytelling shortcut in *Maniac Mansion* suddenly became the standard that many game designers simply followed, much to his chagrin. In fact, this type of narrative structure has become so common that the concept of an ‘opening cinematic’, that is, a short non-interactive scene that plays at the beginning of a game, is considered the status quo. For a medium defined by interactivity, the first action that most games demand from their players is passivity, as game designers insist that players watch a movie that explains the narrative context of the game to them before they are even allowed to play the game. The endemic nature of cutscenes is made more problematic by the fact many game designers allow players to skip in-game cutscenes entirely. The ability to

skip cutscenes implicitly acknowledges the fact that some players will not want to sit through a non-interactive movie when playing a game, and it is also an admission that game designers have not found a better solution to convey story in an interactive medium.

Indeed, the reliance on techniques borrowed from other media has allowed game designers to, at the very least subconsciously, separate the storytelling moments of a game from the interactive moments of a game. Rather than try to develop avenues of storytelling that leverage the advantages of the interactive medium, game designers are able to rely on prose and short films to help them tell their stories. At best, this method of building story into games creates a clear divide between the interactive and non-interactive parts of a game. The player is conditioned to simply accept that they will not learn anything important about the world they are being asked to inhabit when they are in control of the character on the screen. At worst, the interactive and non-interactive parts of a game will seemingly contradict each other, leaving the player feeling confused and disorientated. In this case, the player's actions in the game oppose the story imposed on them by the designer.

The feeling of confusion that games created through the disharmony of these two components became so prevalent that it led to game designer Clint Hocking coining the term *Ludonarrative Dissonance* in order to name the feeling of dissatisfaction that he experienced when he was playing through the first *BioShock*. Although he does not explicitly define the term in his blog post, he effectively defines the term when he describes his problem with *BioShock*:

By throwing the narrative and ludic elements of the work into opposition, the game seems to openly mock the player for having believed in the fiction of the game at all. The leveraging of the game's narrative structure against its ludic structure all but destroys the player's ability to feel

connected to either, forcing the player to either abandon the game in protest (which I almost did) or simply accept that the game cannot be enjoyed as both a game and a story, and to then finish it for the mere sake of finishing it. (par. 4)

The problem that ludonarrative dissonance describes is one where the actions the players are asked to perform – the moments of player agency or player affordances – seem to directly contradict the narrative that the game designer imposes on the player. As Clint Hocking puts it, game designers ask the player to agree to two separate “contracts”, one involving the game’s mechanics, and one involving the game’s narrative. In his view, *BioShock*’s anti-Objectivist message runs up against the fact that the game never allows the player to be in control of their decisions. The game violates the narrative contract with the player through its mechanics.

With older games the balance between the ludic and narrative elements of a game is maintained by the sheer simplicity of their stories. When the player reaches the end of World 1 in *Super Mario Bros.* and is greeted by a Mushroom Retainer character that tells the player, “Thank you Mario! But our Princess is in another castle!”, the player is not asked to question the motives of Mario or any of the other characters in the game. Why was Mario sent to the wrong castle? Did Bowser deceive Mario and trick him into going to the wrong castle? Did Mario have faulty intelligence and was inadvertently sent to the wrong castle? None of these questions are important, even though Mario seemingly makes this same mistake six more times and is constantly being directed to “another castle” in order to find the kidnapped Princess. The player simply accepts that they are being given an excuse that allows them to progress to the next stage of the game.

Of course, there are many smaller examples of dissonance that the player is typically willing to forgive due to the suspension of disbelief. For example, many roleplaying games feature storylines where the player is a hero tasked with saving the world from some evil force. Even with this mandate in hand, however, the player is still asked to pay for any items and equipment that they might need in order to complete this quest. It may seem extremely petty of the shopkeepers, whose lives depend entirely on the player's success in defeating this evil force, to still charge players for a sword that they might need. But, perhaps by convention, most players accept that these games need to gate progression by requiring an obstacle for the player to overcome. By forcing the player to earn enough gold to buy health potions, armor, weapons, and other items, the game makes the acquisition of better gear a challenge onto itself.

But as game designers began to use games as a means to convey a narrative along with game mechanics, the need to strike a balance between the ludic and the narrative aspects has become an issue that designers could no longer ignore. If the right balance is not met, or to use Clint Hocking's terms, if both contracts are not fulfilled, the player is violently ripped from their immersive gameplay experience and their sense of flow is completely disrupted. This sense of disruption is one that can be found in any medium. If a boom microphone appears on screen during a dramatic scene in a film, the audience will immediately be reminded that they are simply watching a movie. If a stage actor forgets a line or a singer is flat when trying to reach a high note, most of the audience will recognize that they are watching a flawed performance. Certainly, as evidenced by Hocking's response to the dissonance in *BioShock*, designers that ignore the problem of ludonarrative dissonance do so at their own peril.

In recent years, instances of ludonarrative dissonance have largely been found in games that rely on some form of violence as their primary mechanic. That is, a game where the primary

action or verb is simply “to kill”. Of course, games where “killing” is the primary action is nothing novel. *Wolfenstein 3D* (1992), considered the progenitor of the First Person Shooter (FPS), is a game where the player is simply asked to find guns and shoot various Nazi enemies, culminating with Hitler himself. So why has ludonarrative dissonance not become an issue until now? For one, early games like *Wolfenstein 3D*, *Doom*, *Hexen*, and the other games of the 1990s era of PC FPSes did not have an ambition to tell a story. Yes, these games have a thin plot in order to provide some context for the player’s actions, but much like *Super Mario Bros.*, these games simply provide enough fiction to allow the player to continue playing the game. However, as game designers began to become much more ambitious in their storytelling, they increased the complexity of their stories without considering the consequences of doing so.

Case Study: *Grand Theft Auto IV*

Perhaps the most egregious example of ludonarrative dissonance in a contemporary game can be found in Rockstar North and the Houser brothers’ *Grand Theft Auto IV* or *GTA IV* (2008). Unlike the *Grand Theft Auto III* trilogy, which was much more cartoony and exaggerated with its satire, *GTA IV* was a comparatively grounded and realistic look at life in mid-2000s America. Whereas *GTA: San Andreas* culminates with a mission that asked its main character to hijack an Army train with a jetpack, *GTA IV* tries to tell the story of a Yugoslavian War Veteran trying to find a new life for himself in the United States. Whereas *GTA: Vice City* features a mission where the player saves Phil Collins by allowing him to perform “In The Air Tonight”, *GTA IV*’s cultural references are much more muted and subtle, requiring the player to seek out the Ricky Gervais cameo explicitly in order to experience it. Whereas the previous games celebrates chaos, culminating with a recreation of the L.A. riots in *San Andreas*, *GTA IV*’s grounded recreation of the Five Boroughs of New York City, called Liberty City, is anchored by a sectioned-off area in

downtown Manhattan where the Twin Towers once stood. If the Xbox/PlayStation 2 *GTAI* games were meant to be big, bombastic, wacky, and “fun” open-world sandbox games, the shift to the Xbox 360/PlayStation 3 generation of consoles gave the Houser brothers to explore more mature ideas and try to produce a game that was much more nuanced than it was crass. The increase in power allowed for not only an increase in graphical fidelity, but also gave them the opportunity to reconceptualize the core ideas of what constituted a *Grand Theft Auto* game.

Since the game is set in 2008, *GTA IV* is in the very unique position of taking place in both a time of optimism and cynicism. Yes, the second Iraq War engendered distrust of the American government, but the housing bubble was reaching its peak and people assumed that they would be able to live prosperous lives. At a time before the global recession in 2009 when the American Dream was more reality than dream, the period was ripe for a story about an Eastern European immigrant leaving his old life behind in order to try to start over. A veteran of the Yugoslav War, Niko Bellic is a man who had witnessed many atrocities and suffered many personal losses. Haunted by the demons of his soldiering past and unable to find a normal life after the war, he eventually finds himself working for a Yugoslavian crime syndicate. Before the game begins, Niko is accused of stealing from the crime syndicate, and looking for a second chance to start over, decides to move to America. While the protagonists of the previous *Grand Theft Auto* games were simply petty criminals, Niko Bellic is a complicated character and a man of conscience. He falls into violence by necessity, rather than by choice.

The American Dream is not quite all that Niko is led to believe. Rather than coming to a land of opportunity, he is forced to live in his cousin’s rundown apartment in this world’s fictionalized version of Brighton Beach. Perhaps it is possible that rags to riches stories happen

often in America, but it is certainly not a reality that is readily accessible to Niko. It is rather fitting that the opening hours of the game betray the player's expectations of this version of America as much as it betrays Niko's expectations. Whether players have previous experience with the *Grand Theft Auto* franchise or not, the name of the game itself – *Grand Theft Auto* – implies a game based on crime and, at the very least, stealing cars. Where Niko expected to find wealth and prosperity, and where the player expected to find crime and excitement, the opening hours of the game feature a comparatively banal and dreary experience that most unskilled immigrants might find when first arriving on America's shores. While it is true that the opening hours of the game do involve driving cars, the player and Niko are not stealing cars and having fun in Liberty City. Instead, Niko is compelled to work for his cousin's taxicab company in order to earn a living and the player, experiencing the game through Niko, is equally compelled to push their expectations of excitement from their mind and help Niko drive around the city looking for fares. The introduction to the game is one of the times when the game design and the story design line up perfectly with each other. As a game that is centered on driving, introducing the player to the driving mechanics and to the geography of Liberty City is something that the game designers would want to do early in the game. Contextualizing this learning experience through the eyes of a new immigrant's first few days in a foreign city allows the player to feel the same sense of uncertainty, discovery, and disappointment that the character himself might be experiencing. America isn't quite the land of opportunity that Niko Bellic expected that it would be, just as this version of *GTA* isn't quite the fun sandbox that the player expected that it would be.

However, as the game progresses and more mechanics are introduced, the simple life of being a struggling cab driver in Liberty City is soon tossed away in favour of the typical action

and emergent gameplay found in the previous entrants in the franchise. In the game's story, Niko is dragged back to a life of crime against his will, forced to fall back on a set of skills that he would rather leave behind in Yugoslavia. Although Niko regrets his life as a soldier, given that the game is structured around the ludic action of shooting a weapon, many of the game's missions force Niko into picking up a gun and shooting his way through countless bodies. Perhaps the most notable mission in the game is a complex bank robbery reminiscent of the film *Heat* (1995) in which Niko kills countless guards and police officers on his way to make some quick cash. As much as the Housers may have wanted to create a story with a more mature outlook on violence, as a game where shooting is one of the primary actions afforded to the player, it becomes impossible for them to avoid placing Niko in situations that run counter to his character. Indeed, the player is never given the option of simply walking away from the life of crime in order to find a fresh start somewhere else. If the player wants to reach the game's conclusion, either they accept the missions imposed on them, continuing to work with both the Federal government and the criminal underclass by committing various acts of violence, or they must ignore the narrative altogether. Or as Hocking suggested through his reaction to *BioShock*, the only other alternative would be for the player to simply stop playing the game.

One other facet that is noteworthy is that the *GTA* franchise of games has always encouraged players to create their own experiences by exploiting the systems in place for their own gain. The aforementioned emergent gameplay refers to this specific type of experience that is engendered by sandbox games where the player is simply given a setting, a set of tools, and a set of rules. Before games such as *Minecraft* (2011) or *DayZ* (2013), the *GTA* franchise embodied the idea of allowing players to create their own personalized experiences. At its most innocuous, this could be driving a car off the top of a mountain and trying to see how long the

car might remain in the air before crashing to the ground. But perhaps the most often reported example of an emergent gameplay action in a *GTA* game is sleeping with a prostitute and then murdering her in order to take back the money that the player paid for her services. Emergent gameplay, by definition, engenders player agency because it emphasizes player affordances. The player is guided by a set of rules, but is not trapped by these rules. Instead, these rules exist only to encourage player creativity. For instance in *GTA IV*, the game is defined by the rules of physics as defined by their proprietary Euphoria engine and the set of allowable character actions that the designers have programmed into the game (walking, running, swimming, etc.), but the player is free to perform any actions they want under the confines of those rules – even if it means murdering prostitutes to steal their cash.

For *GTA IV* specifically, the emergent design creates a larger problem than simply having a game where the main character's motivations contradicts the tasks that they are given by the various other characters in the game. In many cases, the emergent design runs counter to the entire story altogether, quickly undercutting any attempts at serious characterization and storytelling that the designers might have tried to impose on the player. As emergent gameplay experiences are uniquely tied to an individual player, the following example is one that is specific to my own experience with the game. But this experience is emblematic of how the emergent design dramatically emphasizes the feeling of ludonarrative dissonance that the game designers surely did not want the player to experience. One of the through lines for Niko's character is that during the war, his army unit was betrayed by a man named Darko Brevic and he had to watch helplessly as all his friends were killed in an ambush. This event that haunts Niko throughout the game, and one of the reasons Niko chooses to commit crimes on behalf of the government, in the form of a CIA handler, is because he believes that the CIA will be able to

find the man who betrayed him and his friends. By the third act of the game, Niko is finally able to confront Darko and learns the sad truth behind the ambush in one of the game's more emotional cutscenes. Darko was, and still is, addicted to drugs and sold out his unit for a thousand dollars in order to feed his addiction. After this revelation, the cutscene ends and the game returns control of Niko to the player. The player must now choose between two options: they can either shoot Darko, fulfilling Niko's desire for revenge, or they can choose to let Darko go, allowing Niko to realize that killing Darko would not make up for the deaths of his army friends.

In the example discussed here, I chose to let Darko live and directed Niko to walk away and move on with his life. It's clear that the game designers wanted to show that Niko could grow as a character if he gave Darko some mercy. Indeed, after Niko walks away from Darko, he is told that he "did the right thing" by his cousin Roman. Similarly, Niko understands that "nothing would change if I killed him". Unfortunately for me, as Niko and Roman were having a heartfelt conversation about the events that had just transpired, the car I was driving, with Niko as my avatar, ran over a group of pedestrians and killed them. Since the game is designed around the principle of emergent gameplay, the game designers could not control how I drove the car during this particular conversation. The designers could only assume that the player would follow the rules of the road at that given moment and listen to the conversation, hoping that the player would not ruin the moment of character growth by driving wildly. While I did not set up to purposely break the moment of the scene by having Niko drive into a group of pedestrians, the fact that the game allowed me to do so shows the fragile balance between gameplay and narrative. By allowing me to kill pedestrians only seconds after sparing Darko's life, any suspension of disbelief, sense of immersion, or sense of flow that I had while playing

the game was lost and I was suddenly reminded of the incongruity between the story that the designers were trying to tell and the personal experience that I was having while playing the game. This experience is a clear example of ludonarrative dissonance, and certainly an encounter that the designers would rather the player not experience. Indeed, while the game may have its satirical and comic moments, its narrative is anchored around many serious moments of character development that require player choice. The game asks the player to take the game seriously as Niko is forced to decide Darko's fate, in the same way that it asks the player to take the game seriously as Niko is forced to save the life of his cousin or his lover at the very end of the game.

There are other, more universal, examples of ludonarrative dissonance in the game that occur because the story imposes directly on the gameplay. While the previous example illustrated how emergent design can ruin a narrative moment, the following examples illustrate how a story can encounter problems with the expectations of emergent gameplay. One example is an early mission where the player, as Niko, is asked to locate a man at a club and kill him. When the player reaches the club, the man in question runs out the back door and escapes in a vehicle. In previous *GTA* games, a player could outsmart the mission design by simply parking dozens of cars behind the back of the club so that when the mission is triggered by the player and the man tried to run out the back door, the man would find himself stuck behind dozens of cars and unable to escape. In *GTA IV*, if the player tries to do the same thing in order to avoid a lengthy car chase, they are greeted with a nasty surprise. Because the game requires the man to escape and the car chase to happen, if the player tries to "break" the mission by blocking off the rear exit, the player will soon discover that the game despawns (removed from the game world) all objects behind the club in order to allow the man to escape. Here, ludonarrative dissonance

occurs because expectations of gameplay are not met. In many of the other missions in the game, and in the previous games, the player is given the opportunity to exercise their creativity and solve the missions in any manner that they want, exercising their creativity. In this game, the designers want the player to experience the game the way that they have intended it to be experienced by the player. For a game franchise known for featuring emergent gameplay, suddenly the player finds herself in a game that is extremely scripted. Indeed, the game features many missions where expectations of player affordances are thwarted by invisible game scripting. In many car chases where the player is expected to stop and blow up a car in front of them, the game will not allow the player to damage the car until certain scripted conditions are met. This leaves the player in a state of confusion, as they unload magazine after magazine of ammunition into the car in front of them only to have the car suffer no damage.

In *Grand Theft Auto V* or *GTA V* (2013), Rockstar North would attempt to address some of these concerns by trying to better balance the need for emergent gameplay that is intrinsic to the *GTA* franchise and the desire of the writers to tell a story that is tied to the notions of contemporary masculinity in America. Even the manner in which *GTA V* opens stands as a direct contrast to the opening of *GTA IV*. While *GTA IV* opens with a short cutscene showing Niko stepping off of the ship that brought him to America before edging the player toward a slow-paced driving tutorial, *GTA V* opens by throwing the player immediately into the middle of a bank heist. The only context that the player is given is a short title card that simply states: “Ludendorff, North Yankton, nine years ago”. There is no indication of what character the player might be playing as, since the character is in a mask, or why they might be robbing a bank in the first place. With no time to gain their footing, a player is forced to rely entirely on the game for direction. Rather than teach the player how to drive a car, the very first thing the game teaches

the player is how to control a hostage by aiming their rifle at them. As the mission progresses, the player is taught how to take cover and how to actually use their weapon in order to kill the police officers trying to stop them. There is no question that this game is not *Grand Theft Auto IV*, with a seemingly milquetoast protagonist looking for a new life beyond committing acts of violence. This is a game that wants the player to expect action and violence first and foremost.

The game itself features three protagonists who are unapologetic about using violence to achieve their goals. Each of the three characters that the player inhabits, Franklin, Michael, and Trevor, are introduced to the player through acts of unapologetic violence. Franklin kills a man in order to repossess a motorcycle. Michael destroys a man's house because the man is having an affair with Michael's wife. Trevor decides to kill an entire biker gang in order to take over the drug trade in his neighbourhood. These are not characters that are meant to be as immediately sympathetic as Niko Bellic, but characters who are purposefully written in order to allow the player to commit acts of violence without experiencing ludonarrative dissonance. Trevor, in particular, is very much a sociopath who has no qualms about murdering anyone that stands in his way, so seeing him shoot dozens of police officers in a killing spree is almost perfectly natural. Rather than try to recreate the immigrant experience, the game is written to celebrate masculinity in contemporary America. As such, featuring characters who have no qualms about doing what is necessary in order to get ahead in life is a design choice that fits in comfortably in a game where the primary action is shooting a gun.

Certainly the game has as many varied activities as *Grand Theft Auto IV*. Michael, for example, can choose to play a game of tennis with his wife at most points during the game. But the majority of the primary missions – the missions that drive the game's narrative forward – all require acts of violence that might cause the player some doubt, but that the characters

themselves are willing to perform without hesitation. The player might not agree with the actions that the characters perform or the decisions they make, and certainly many would probably find Trevor and his psychopathy extremely troubling. Yet at no point do the affordances that the game allows the player contradict the characterization of the player characters. Every act of murder the player commits as one of the three characters is perfectly justified by the game, regardless of the fact that the victims are mobsters, police officers, or soldiers. One might question whether it is troubling that masculinity is so inherently tied with violence in this game's vision of American gender politics. Leaving the broader conversation about the recent rise of the male anti-hero in popular culture aside, *GTAV*'s focus on this aspect of masculinity helps close the gap between the potential dissonance found in the game's gameplay and the game's story.

On the other end of the equation, in which the emergent gameplay is infringed upon by heavy-handed scripting, *GTAV* addresses this problem by revamping the entire mission structure. There are certainly missions where the player is expected to chase down another vehicle, but the player is not locked to the game designer's scripted mission design. The game does not insist that the player follow a car and trigger special events before being allowed to shoot the car. Instead, the player is able to approach missions in whatever manner they see fit, even if it is detrimental to their progress through the game. For example, one mission asks the player to steal a fighter jet from a military base. Although the game provides that objective as a goal for the player, unlike in the previous game, there are no explicit directions on how to achieve that objective. A player might simply drive through the base's front gate and make a break for one of the jets while being chased by dozens of soldiers, or they might try to find a more stealthy approach and sneak to a jet without alerting any guards. The game does not penalize the player for trying to find alternate solutions to the problem – as long as the player is able to get a fighter jet, the game considers the

objective complete and the story will move on. Even the game's more scripted moments – the game's narrative is tied directly to a series of “heists” that the characters are asked to perform – allow the player to choose how to perform those heists. For example, the final heist of the game, “The Big Score”, allows the player to choose between an “Obvious” approach (which involves more violence) and a “Subtle” approach (which involves a more stealthy solution). Both are ultimately valid options and allow the player to complete the heist, but the choice allows the player to feel as if they have some control over these scripted sequences. Unlike *GTA IV*, *GTA V* allows the player to be creative and leverage the emergent design of the game even in moments that are heavily scripted.

Case Study: *Uncharted 2: Among Thieves*

Of course, there are many other examples of ludonarrative dissonance that can be found in games where the game designers want to tell a story to the player. The *Uncharted* games produced by Naughty Dog are equally troubled by a dichotomy between the narrative elements of the games and the actual gameplay, especially since there is a clear division between these two elements. Indeed, for its narrative scenes, the *Uncharted* games rely extensively on motion-captured performances featuring the lead actors of the games. Whereas many game designers might animate the characters and then ask actors to perform their lines in a recording studio after the fact, much like a Disney or a Pixar film, Naughty Dog asks their actors to perform the actions that they expect their characters to perform in the game. This novel approach to cutscene design allowed Naughty Dog to create cutscenes that were not only realistic in terms of allowing their characters to move like human beings in real life, but also allowed the actors to work together in the same room and space, a privilege that most voice actors are typically not afforded in video game or animation voice acting roles. Given the performances that the designers can replicate

with this technology, it is natural that they would privilege these cutscenes and use them to convey most of their storytelling. In essence, the *Uncharted* games are really a series of short films strung together by interactive action sequences.

But with such a clear separation between the gameplay moments and the story moments, all the games in the franchise run into the problem of creating two different sets of expectations for the player. In *Uncharted 2: Among Thieves* (2009), the game opens with a scene where Nathan Drake, the player character, is asked to rob an artifact from a museum. Through the cutscenes, the player is told that Drake is a man who is unwilling to harm the guards in the museum, opting to forgo using a lethal weapon. At this point, the game certainly supports its characterization of Drake as a pacifist, since the game forces the player to engage in a gameplay sequence that requires complete stealth. Functionally this is a perfect example of when the story and the gameplay design are not dissonant, as this sequence also serves to teach the player about the game's stealth and platforming mechanics, as the player learns how to sneak around the museum without attracting the attention of the guards. The player's actions as an external force playing the game align with the motivation of the game's protagonist and playable character.

Yet, after this chapter is completed, any ethical and moral restrictions Drake places on the player through his characterization are removed and the game allows Drake to use any and all weapons against the game's antagonists. The man who is hesitant to harm any of the museum guards is replaced with a ruthless killer who can snap necks, throw grenades, and shoot AK-47s. In fact, all of the games in the franchise offer meta-game rewards, otherwise known as PlayStation Trophies, for achieving a certain number of kills with every single weapon in the game. While having a game that is completely full of action is not necessarily a problem, the game's story – as told through its cutscenes – insists on portraying Drake as a man who is

anything but the mindless action hero.

As the game continues, the player and Drake realize that the artifact that they were trying to steal from the museum in the opening chapter of the game is a map to the mythical city of Shambhala. Much like the *Indiana Jones* films that clearly served as an inspiration for the games, *Among Thieves*' narrative reveals that a man named Zoran Lazarevic is trying to reach Shambhala in order to find the secret of immortality. Given that Lazarevic is a ruthless villain who would certainly use the power of immortality for the sake of his own evil plans, Drake feels an obligation to find Shambhala himself in order to stop Lazarevic's plans. Certainly Drake could simply walk away and leave Lazarevic to find Shambhala, but the game's cutscenes make it clear that if Lazarevic is a force of evil, then Drake is a force of good. Just as the Indiana Jones is motivated, in part, by trying to stop Walter Donovan and the Nazis from finding the Holy Grail in *Indiana Jones and The Last Crusade* (1989), Nathan Drake wants to stop Lazarevic from reaching Shambhala. It's clear that Naughty Dog, and creative director/writer Amy Hennig, wanted to replicate the *Indiana Jones* films in their own video game series. This story setup drives both Drake as a character and the player forward, providing the context for the choices that Drake will make throughout the game and the gameplay actions that the player will be asked to perform as a result of Drake's decisions.

In the middle of the game, Drake and his companion Chloe head to Nepal in order to find the next clue that would lead them to Shambhala. When searching the ruins of a temple, they run into Elena and Jeff, investigative journalists who are also trying to find Lazarevic and expose his plans. While Elena was Drake's love interest in the first *Uncharted* game, they have become estranged by the time that *Among Thieves* begins. Although Elena does not want to work with Drake, she is forced to do so when Lazarevic arrives at the temple with armed guards. While

Drake is able to find the clue that leads them to Shambhala, Lazarevic catches up to them and Jeff is shot in the stomach. In a short but effective scripted gameplay sequence, Drake puts Jeff's arm around his shoulder and starts to drag him through the temple in an attempt to escape from Lazarevic and his men. In every other gameplay sequence in the game, Drake has complete mobility. Not only does the player guide Drake through various temples and ancient ruins, the player is also asked to help Drake jump from moving truck to moving truck and climb up a train that is literally hanging off the edge of a cliff. However, in this sequence with Jeff, the player can only move slowly as they are forced to carry Jeff's weight through the level. Through gameplay, the game tells the player that Drake is a man who is willing to sacrifice his mobility (the one advantage that the player has relied on and will rely on in the game) in order to save Jeff. Unfortunately, Lazarevic will inevitably catch them regardless of the player's actions. In a dramatic cutscene, the player and Drake can only watch helplessly as Lazarevic ruthlessly executes Jeff in front of them before leaving them to die. This is a cutscene that is meant to evoke emotions that an audience member might feel in a typical action film. Whether it's sadness at the loss of a human life, remorse because Drake and the player were unable to save Jeff, or anger because of the savage nature of Lazarevic's actions, this moment is meant to draw the player into the mind of Nathan Drake through the grammar and rhetoric of a conventional cinematic narrative experience. Indeed, most action films would use a similar dramatic moment to justify any acts of violence that the main character commits in the remainder of the film.

In *Among Thieves*, the dramatic moment of Jeff's death is as quickly forgotten as Drake's insistence on pacifism in the opening chapter of the game, as the player is thrust into constant combat sequences throughout the rest of the game. Not only is the player asked to kill countless soldiers in the aforementioned truck and train sequences, but when they reach Shambhala, the

player is confronted with mystical guardians that they have to kill as well. As a video game, *Among Thieves* and the other *Uncharted* games must constantly increase its action in order to keep the player in a state of flow. Certainly there are moments where the shooting sequences are broken up by slower paced environmental puzzles. Nevertheless the core of the game is its many shooting set pieces that challenge the player with new enemies and new locations to fight these enemies in. What this does to the game's story is that while Drake is presented as a reasonable, sympathetic action hero in the cutscenes, the gameplay sequences encourage the player to see him as a coldhearted psychopath who does not have a second thought about his actions. In fact, the game rewards the player by giving them extra ammo if they can find creative and stealthy ways to kill the enemy soldiers, only further emphasizing Drake's prowess as a killer. Given that the game is constantly recording player statistics, every player knows the number of people they have killed in the game, and for most players that number is in the hundreds if not thousands. This is an astonishing body count that would make even the protagonist of a Michael Bay film blush. Indeed, one of the sequences in the game involves an attack by Lazarevic and his men on a small Tibetan village that has rescued Drake. While this sequence is again meant to show the player what Lazarevic would do if he obtained the power of immortality, the player must realize that they have helped Drake murder his way through a small village in order to stop Lazarevic at the end of the game. Certainly the irony that is created by the dichotomy between Drake as hero and Drake as a murderer is one that many players, including those at Penny Arcade, a popular gaming website, who made a comic strip mocking the number of soldiers Drake murders throughout the game (Krahaulik and Holkins), had a problem resolving.

The gameplay itself creates its own internal inconsistencies that, if nothing else, shows the unintended consequences of gameplay design that is focused primarily on combat sequences.

There are several times throughout the three *Uncharted* games where the player is forced to fight enemy soldiers in a level that is undergoing some state of destruction. Drake finds himself in a burning building that is on the verge of collapse or on a cargo ship that is listing on its side and about to sink, and the player must balance the fact that they are fighting enemy soldiers with the fact that the environment around them is in a state of flux. However, moments of dissonance are created when the enemy soldiers are programmed to single-mindedly attack the player with selfless disregard. This means that when the burning building begins to collapse, the enemy soldiers continue to attack Drake even if it means that they will die either in the fire or when the building finally falls. Similarly, enemy soldiers on the cargo ship will continue to fire on Drake even once they can clearly see the water rise through the cargo hold. With no regard for self-preservation, these shooting sequences make both the enemies and Nathan Drake seem insane in their bloodlust as both the player and the non-player enemies are willing to die trying to kill each other rather than try to escape from a fiery or watery death. The player is simply asked to ignore the simpleminded nature of both Drake and the enemies in these sequences for the sake of an exciting gameplay sequence.

Naughty Dog, with creative director/writer Neil Druckman, attempted to solve their problem with ludonarrative dissonance in their latest game, *The Last of Us* (2013). While the game features many of the same narrative techniques as the *Uncharted* games (it still uses a combination of motion captured cutscenes and combat sequences), *The Last of Us* is framed in a manner that lessens that dissonance that a player might feel. For one, the player character of *The Last of Us* is not the charming action hero that Nathan Drake tries to be. Instead, Joel is a desperate and angry man who was forced to watch as his daughter was shot right in front of him. Whereas the *Uncharted* games ask the player to stop villains from stealing mystical artifacts in

order to save the world, *The Last of Us* is set in a post-apocalyptic future full of zombies, and all Joel is asked to do is simply survive in a world without hope. For Joel, there are certainly no qualms about killing another man. Indeed, Joel's partner Ellie is a girl who has known nothing but a world infested with zombies and death. For her, violence is – by necessity – second nature.

With a tone, setting, and characters that are unrelentingly dark, the game's narrative is much more conducive to a game where Joel and Ellie spend most of the time killing zombies or other people who might be trying to harm them. The violent nature of the gameplay (Joel is able to kill his enemies in a variety of ways) is complemented by his characterization in the cutscenes. Indeed, at one point in the game, a group of men kidnap Ellie, and in a cutscene Joel captures two of these men and proceeds to brutally torture them for information. Joel is not the charismatic action hero that Nathan Drake is, nor is he trying to be. Even when the player is given control of Ellie for part of the game, the game does not restrain its use of violence even though the player is now seeing the game world through the eyes of a teenaged girl. Any dissonance that might be felt by the player when they make Ellie jump on the back of an armed man and stab him in the neck is quickly forgotten when the player realizes that Ellie is anything but a typical American teenager. Both in the context of the cutscenes and the gameplay, players simply accept that Ellie would know how to handle a knife or a rifle. Of course, there are still the minor moments of dissonance that exist that remind the player that they are playing a game first and foremost. For example, in order to upgrade Joel's abilities, the player must find pills strewn about the environment, even if it's not clear why pills would suddenly make Joel have better aim with a gun or better sensory perception. These pills exist only to offer the player a sense of character progression as they improve Joel's combat abilities over the course of the game. But even with these small moments of dissonance, the narrative as presented in the cutscenes does

not in anyway contradict the actions that the player is asked to perform in the game. While some players and critics have stated that they do not enjoy the unrelenting dark tone of the game, especially in comparison to the more lighthearted *Uncharted* series, at the very least the game is being criticized for its narrative intent and not on its failure to merge the ludic and narrative elements together. When Phil Kollar opens his review of *The Last of Us* with: “It paints a vision of a near-future that is cold, heartless and, in many cases, downright evil. It's not a fun place to be, and likewise, the game isn't really a fun thing to play” (Kollar par. 1), he is reacting against the storytelling choices made by the designers and not the fact that the gameplay and the story create moments of dissonance. The gameplay works in tandem with a story that features many moments that are “downright evil”, and as a result critics are able to judge the game as a whole. There isn't a need to excuse the story or the gameplay for being discrete elements of a game text, because in *The Last of Us* they are intrinsically linked.

As we can see, ludonarrative dissonance can disturb the flow of the player experience by providing gameplay agency in an improper narrative context. If a state of flow is maintained by balancing the difficulty of a game so that the player is constantly engaged with the gameplay mechanics, a similar state of flow is also being maintained by balancing the ludic and narrative components of a game. If a player is asked to perform actions that directly contradict the story, then the player is left in a state of confusion or frustration. In this case, either the player stops believing in the integrity of the story and learns to ignore the narrative content of the game in lieu of the gameplay, or the player sees the gameplay as a distraction from the game's story and simply sees gameplay sections as a necessary evil in order to reach the next plot element in the story.

Potential Solutions Found in Other Games

But how can designers prevent a conflict between a game's non-interactive story elements and its gameplay elements? An obvious answer would be for designers to expand the set of verbs that a player can perform in their games. In both *Grand Theft Auto* and *Uncharted*, the primary verb of the games is 'to kill'. When the player's only real interaction with the game is violent, then the story has to accommodate those actions in order to prevent the disconnect that a player feels. Otherwise, as shown above in the examination of both *GTA IV* and *Among Thieves*, the player feels as if the game is chastising them for simply playing the game. Whether game designers can truly expand the ways in which a player can interact with games is perhaps a discussion that is too big for the context of this thesis, but nevertheless there have been attempts to make games that are more than just pointing guns and shooting enemies. As designers begin to discover and rediscover methods of allowing players to interact with virtual worlds, a broader range of human emotions can be expressed through gameplay. A game like *Gone Home* (2013) or *The Stanley Parable* (2011), where the primary verb is "to explore", allows the player to simply experience the game world on their own terms without the constant anxiety of having angry men trying to kill them. In fact, there are no enemies whatsoever. A game like *Catherine* (2011), where the primary gameplay action is puzzle solving, allows the player to consider the complexities of human relationships (specifically the fear of commitment) in a manner that is simply not possible in the bigger budget games that are being released today. Even games such as *Portal* (2007) and *Quantum Conundrum* (2012), which repurpose the first-person shooting mechanics found in other games, allow for comedic experiences because the shooting is replaced with spatial reasoning puzzles. Rather than shoot through hordes of enemy soldiers on a battlefield, *Portal* and its sequel *Portal 2* (2011) makes the player face the biting and sarcastic

remarks of GLaDOS and Wheatley as they solve puzzles with their Portal gun. The game designer is still able to constrain player actions by offering a specific set of allowable actions that the player can perform in a game, but by moving beyond acts of violence, game designers are able to tell stories that involve more than shooting a gun or swinging a sword without creating the feeling of ludonarrative dissonance in the player.

But even in the space of games where violence is the primary action afforded to the player, there are still ways in which a game designer can prevent dissonance. One solution is to simply disallow certain actions altogether, even if they would be perfectly reasonable actions as defined by the set of verbs in the game. In other words, a game can create an additional set of rules that the player must follow if they do not want to fail at the game. For example, the *Assassin's Creed* series, as its name would suggest, asks the player to embody the role of an assassin and kill several targets. As Altair, Ezio, Connor, Aveline, and Edward, the player amasses an impressive body count as they progress through the games in the series. But while the player is allowed to find inventive ways to kill guards and the targets of their assassination contracts, the player is prohibited from harming any civilians whatsoever. If the player tries to kill a civilian, they receive a warning from the game, emphatically stating that these assassins do not harm the innocent. If the player ignores this warning and continues to kill more civilians, the game will “de-synchronize” and the player will immediately fail any mission that they are playing and is forced to restart from the last checkpoint (in the in-game fiction, each *Assassin's Creed* game takes place in a form of virtual reality, and the virtual world will de-synchronize and restart whenever the play fails a mission or violates the game's rules). Whereas there are essentially no consequences for killing civilians in the *Grand Theft Auto* games, the *Assassin's Creed* games teaches the player to avoid harming civilians at all costs, lest they be forced to

replay a section of the game again. In this case, the player understands that while their player character is, by definition, an assassin, they are also taught by the game's rules that in the context of this fictional universe, assassins are bound by a code that prevents them from harming innocents. The protagonists of the *Assassin's Creed* games rack up body counts that number in the thousands, but the game considers these deaths to be wholly justified. The *Call of Duty* franchise similarly limits the player through its rules, such that when a player shoots a friendly soldier, the game enters a game over state and tells the player "Friendly fire will not be tolerated!" ("Mission Failed/Death Messages").

There are also solutions that can be found on the narrative side of the equation. A designer might choose to tell a simpler story, one without the moral complexities or quandaries found in most other games. The *Call of Duty* games and their direct predecessors, the *Medal of Honor* games, feature simplistic war stories that make Tom Clancy novels seem like deep treatises about the nature of war and its effect on the human condition. The games in both franchises that are set in World War II never touch on the more complex histories surrounding the war. As such, while the player is thrown from the beaches of Normandy to the forests of Bastogne, the game never asks the player to visit Dachau or Auschwitz. Even when one of these games touches on the more complex nature of the war, such as the battle for Stalingrad where the player witnesses the infamous Order Number 227 in which machine gunners shoot down any soldier that tries to retreat from battle, this recreation of history is presented more as a piece of factual information rather than any comment on the cruelty of war. The games in both franchises that take place in a contemporary setting similarly absolve themselves of any moral complexities, as they tread into the realm of speculative fiction. When Russians destroy the major capitals of the Western world in the *Call of Duty: Modern Warfare* series, there is no consideration for the

loss of life or the impact that such destruction would have on any survivors. Instead, it is seen as a novelty to have a shootout down the ruined streets of downtown Manhattan. Many critics have compared the *Call of Duty* games to Michael Bay films, and the stories that the games try to tell certainly affirm that particular criticism. The wars featured in *Modern Warfare* and *Black Ops* are little more than excuses to have high-octane set pieces for the player to shoot through, and as such, the player is not expected to think about the consequences of the war or the actions that they make as soldiers in these conflicts. These games are much like the *Transformers* series of films, in which the story exists only to provide context for the spectacle.

Some designers might choose to simply have a player character that is a blank slate and exists simply as a player surrogate. *Call of Duty* uses this type of player character extensively, but most famously, the *Half-Life* series features a protagonist who is on the one hand an iconic video game character, but on the other hand lacks any personality whatsoever. Certainly some information about the main character, Gordon Freeman, is offered to the player: he is a MIT graduate with a Doctorate in Theoretical Physics. However, the player never knows how Freeman reacts to the situations around him. The player sees the world through Freeman's eyes, but Freeman never speaks to other characters or has any representations of his internal thoughts. Given his complete and utter silence, the player can only infer how Freeman might react to an alien occupation of Earth. While there are certainly problems associated with the fact that the main character of a game never speaks or displays any self-expression, the fact that Freeman is such an empty shell allows the player to project themselves onto him and imagine their own motivations for Freeman's actions. Therefore while Nathan Drake's depiction in the story of the *Uncharted* games contradicts the actions that he performs in the game, Gordon Freeman's motivations are never questioned because he simply does not have any.

Another solution that game designers can use to address the problem of dissonance is self-reflexivity, or specifically breaking the fourth wall by pointing out the inherent peculiarities found exclusively in video games. Typically this method is used for comedic or satiric effect and allows the designer to directly address the more artificial elements of their game's fiction. This could be as simple as games that offer a reward for tasks that are extremely trivial – *The Simpsons Game* famously gives the player an Xbox Live Achievement for pressing the Start button in order to start the game. Alternatively, a game might constantly remind the player that they are playing a video game. *Eat Lead: The Return of Matt Hazard* (2009) features a protagonist who constantly complains about the various video game tropes that he finds himself stuck in, such as the fact that he (and by association the player) has to play through a tutorial level in order to start the game proper. *The Stanley Parable*, described in the second chapter, features a narrator who constantly comments on the player's actions, mocking them if they make wrong choices while also pointing out the absurdity of following the directions of a faceless, nameless narrator. As long as the game's narrative does not require the player's suspension of disbelief, then reminding the player that they are simply playing a game allows the designer to repurpose the game's dissonant moments and turn them into an integral part of the game's story.

Certainly the most ideal solution to the problem of dissonance would be one where a game designer integrates the game play and the narrative. *Cart Life* (2011) and *Papers, Please* (2013) are games that feature stories that are directly related to the actions that the player is allowed to perform within the game. For instance, *Cart Life* allows the player to choose to play out one of several stories featuring a character who is trying to start a business selling from a cart. Part time-management game, part business simulator, part life simulator, *Cart Life* asks the player controlling their character to find a balance between their lives and running a successful

business. As Melanie, a recent divorcée, the player must balance the struggles of running a coffee cart and being a responsible mother so that the character might be in a position to win custody of her daughter. In gameplay terms, the player must make choices throughout the day that range from extremely simple, such as how much should Melanie charge for coffee in order to make a profit but not drive her customers away, to the much more emotionally complex, such as whether or not Melanie should spend her day's profits on a cab in order to pick up her daughter from school on time. The player must navigate the game world through interactions that range from performing simple math in order to provide correct change to their customers, to keeping an eye on their stress and hunger indicators to make sure that Melanie retains her sanity and health. In essence, the player is left to manage the mundane aspects of another person's daily life. The player is able to relate to the stress that Melanie feels because they are forced to experience the same stress that she does through the gameplay and as a result, the game is able to make a direct connection between the player's success in playing the game and the character's success in the game's narrative.

In *Papers, Please*, the player is a nameless border agent in the fictional Cold War Era Eastern European country of Arstotzka. As a story about political intrigue and personal struggle, the gameplay itself is deceptively simple. Given that the player is a border agent, they have the power to let people into Arstotzka whether or not they have the right paperwork. In the beginning of the game, the government of Arstotzka favours speed and efficiency. The player learns to memorize the various countries in the game and their specific passports and visas. The player also learns to be ruthless. For instance, if a passport photo is out of date or expired, the player must send the person away or face being penalized by their superiors. Efficiency becomes the main motivator, as processing more people directly leads to a higher paycheck which the

player can use to keep their poor family alive. As the game progresses however, the player begins to learn of a plot to overthrow the authoritarian Arstotzka government. The player can choose to be faithful to the government of Arstotzka, by being a good citizen and denying entry to these insurgents or even arresting them, and assume that they will be rewarded for their loyalty. Or the player might believe that these insurgents will help them escape Arstotzka in hope of a better life for themselves and their family by allowing insurgents through the border and directly supporting the insurgency. As with *Cart Life*, the player's actions through the affordances in the gameplay allow the player to directly affect the outcome of the story.

In both games, the player is never allowed to feel as if their gameplay decisions are separate from the story that the game is trying to tell because there is a direct connection between the narrative and the gameplay. Other games might have a simple fail state. For example, in the *Uncharted* games the player is either able to successfully defeat his enemies and continue the story or Drake is killed and the player is asked to try again. But games such as *Cart Life* and *Papers Please* offer many possible states of success and failure for the player. The player might fail to make enough money in either game and reach a fail state, but there are also many other possibilities that the story can lead to based on the gameplay choices that they make.

In fact, interactive fiction and visual novels are genres of games that push the notion of player-controlled stories by giving them direct control over the outcome of a game's narrative entirely. Whether it is the hundreds of Japanese visual novels such as *Virtue's Last Reward* (2012) or the *Hakuōki* series, the independent visual novels such as Christine Love's games, the licensed adventure games produced by Telltale Games such as *The Walking Dead*, or the big budget Quantum Theory games such as *Beyond: Two Souls*, these games are predicated on offering branching narratives whose outcome are driven entirely by player choice. While these

games might have some aspects of gameplay, such as puzzle solving, the primary method of interaction with these games is based on making choices when the game's narrative can potentially branch into many different directions. While the actual gameplay interactions during these choices are typically very simple, where the player is given a series of narrative options that the player must choose from, the effect that their choice has on the outcome of the narrative is profound. In the previous games discussed, the narrative outcome of a game is dependent on the player being able to successfully navigate through the gameplay sequences. In these types of games, the narrative outcome is primarily dependent on where each player chooses to take the story. Each of these games are designed with multiple endings in mind, funneling the player through different narrative arcs authored by a game designer, but how each player reaches one of the prescribed endings is up to the how the player chooses to progress through the game's story. By giving the player the power to directly influence the game's story, the player becomes directly invested in the story's outcome and ideally, never experiences any dissonance whatsoever.

Ludonarrative Dissonance is a unique problem that game designers are only coming to grips with now because they want to tell more complex and involving stories, as evidenced by the some of the talks given at the GDC 2013 Game Narrative Summit (Robertson). Whether it is the story of a Yugoslavian War veteran trying to find a new life in America or a woman trying to keep custody of her daughter after her divorce, game narratives have come a long way from the very simple stories that are found in Atari and the very first Nintendo games. But as the storytelling ambitions of designers increase, players are being asked to stretch their ability to suspend disbelief to the breaking point. Certainly every medium has its own share of problems when negotiating the relationship between the audience and the text. For example, in many cases

a theater audience must be ready to accept that the theater stage represents a space outside of the theater, that they are peering into a world beyond the building that houses the stage. In these cases, the audience might be asked to believe that they are watching two men talking to each other on a bench in Central Park, or a king delivering a speech on a bloody battlefield in France. A film audience must accept that they are voyeurs watching characters who are seemingly unaware of the fact that they are being recorded by large cameras. But whereas the tradition of these other forms of storytelling date back hundreds or even thousands of years, game designers have only had three decades to try to address the storytelling problems unique to video games. Ideally, video game players will be able to play games without being distracted by the eccentricities of the medium, particularly the separation between a game's ludic elements and a game's narrative elements, just as television audiences enraptured by Walter White in *Breaking Bad* never once stop to consider why a camera crew would be allowed to follow White as he commits his many crimes.

Chapter 3.2. Negotiating the Cutscene

Although Ludonarrative Dissonance can take many forms, as the previous section has shown, cutscenes are the primary point of failure in games that try to tell a story to the player. But it is also clear that, at least in the near future, game designers are not willing to give up on such a familiar method of storytelling. Beyond the simple marketing potential of having Hollywood actors perform in starring roles in a video game, using short movies as narrative shorthand allows designers to easily convey a story to the player and provides them with more time and resources to focus on the player's primary point of interaction with a game: the gameplay. In the end, among both critics and the player base at large, video games are judged on how well they play rather than on how well they convey their stories.

Certainly there are designers who eschew the cutscene altogether, subscribing to the notion that using them disrupts the flow of a player's experience. If the player is constantly ripped out of gameplay by a non-interactive movie, they are constantly being reminded that any agency they have in the game exists only at the mercy of the game designer and the story being told by the game designer. Valve's games avoid cutscenes altogether, choosing to tell the story through strictly diegetic means. For example, *Left 4 Dead* (2008) places the player into a zombie apocalypse, asking the player to travel through ruined landscapes in order to find safety. The game never tells the player why zombies have appeared, who they are playing as, or even where they are going. Instead, everything about the game world is inferred through signs, posters, graffiti, and other environmental objects placed in the game world. It is up to the player to fill in the gaps of the story themselves, as this allows the player to experience as little or as much of the game's story they want. In addition to the designers at Valve, there are a small number of designers who often see the cutscene as an intrusion on the player. For example, Ken Levine said of cutscenes: "Generally I'm not a huge fan of story video games as that's the problem I have with them - I want to play. I don't want to sit down and be told the story. I want to interact with the story" (Dutton, par. 7). This is certainly a design philosophy that can be seen in *BioShock* and *BioShock: Infinite* (2013), where every piece of storytelling is completely diegetic and found in the game worlds of Rapture and Columbia.

However, these designers are certainly in the minority and the majority of big budget games released today feature cutscenes of some sort. In fact throughout the 1990s, as the development of multimedia technologies improved over time, game designers would come to rely on cutscenes almost entirely because they were not confident enough in their abilities to tell a story without relying on the grammar of film. In America, this peaked with the inclusion of live

action sequences that often trumped the gameplay. Famously, one of Clive Owen's earliest screen roles was for a game called *Privateer 2: The Darkening* (1996), featuring so many cutscenes that, put together, they would rival the running time of any conventional film. Before the development of DVD as a storage medium, games often came spread across several CD-ROMs, as developers continued to fill their games with more and more video and audio data. In Japan, many games would feature more involved CG or computer generated cutscenes, essentially building entire animated films within their games. Game designers were so enamored with the simplicity of using films to tell their stories that some games made the player sit passively and watch a cutscene as much if not more than actually interacting with the game in some more meaningful manner.

It should be noted that Japanese designers have had a long history of cutscenes and otherwise non-interactive storytelling sequences. Early games from the 1980s may have provided a very loose narrative frame for the gameplay (such as Mario needing to save the princess from Donkey Kong and Bowser) but games at that point simply did not place an emphasis on storytelling. Only with Tecmo's *Ninja Gaiden* (1988) did players first experience the ability of games to provide more in-depth storytelling components. Although Tecmo trademarked the term "cinematic screens", *Ninja Gaiden* featured what would become considered cutscenes - roughly animated, non-interactive movie scenes whose sole purpose was narrative exposition. This feature was not only revolutionary on a technological front, as Tecmo was able to include over 20 minutes of animated cutscenes on the now tiny Famicom/NES cartridge along with the full game, but also in terms of aesthetic presentation. Although in hindsight this might be considered regressive, for many players this was the first time that a game showed that it could tell stories in the same way that they were told in film.

A method of storytelling that was once a novelty slowly became standard practice, as Japanese designers began to include more and more cutscenes into their games. Limited by technology, the Famicom and Super Famicom *Final Fantasy* games released by Square used cutscenes sparingly, closely integrating any scripted sequences within the context of the actual gameplay. Starting with *Final Fantasy VII* (1997), released on the first PlayStation, the designers of the franchise began to rely on pre-rendered cutscenes for most of its climatic narrative beats. Games that used to fit on the limited space of a Famicom and Super Famicom cartridge now spanned three or four CDs, indicating just how much data was demanded via the jump from one console generation to the next. And while *Final Fantasy VII* had many iconic moments, to the point where players of a certain age revere it as one of the best RPGs ever produced, there is a certain irony that one of the most important moments in the game comes from a cutscene and not any gameplay. Past the midpoint of *Final Fantasy VII*, the game's antagonist, Sephiroth, confronts one of the player's main characters, Aerith. Rather than engage in combat, as the player might expect through the process of playing the game, the game shows Sephiroth unceremoniously killing Aerith in a pre-rendered cutscene. While this was not the first time that a *Final Fantasy* game killed a main character, *Final Fantasy VII* was the first to choose to depict such a death entirely in a non-interactive manner. Of course, this allowed the game designers, and specifically the director of the cutscenes, to portray Aerith's death in a cinematic manner. The scene is allowed to cut from a shot of Aerith being stabbed to a close up of her face, effectively conveying the shock at her sudden demise. But the player also has absolutely no agency in this pivotal story moment. They can only react to the cutscene as it happens and then deal with the consequences later on. For game designers who dislike the use of cutscenes, this dramatic moment is the equivalent of a Stephen King film adaptation cutting away from the

action in order to have an actor read a chapter from one of his books. While it might be an extremely effective and memorable moment in the game – as evidenced by the number of people who still remember it nearly two decades later – it is also a moment that essentially has nothing to do with gameplay or game design.

Square would take their ambitious and generous use of cutscenes to the most logical conclusion: making a *Final Fantasy* computer animated film featuring many Hollywood actors called *Final Fantasy: The Spirits Within* (2001). However, the film was a financial failure at the box office, contributing to the eventual resignation of *Final Fantasy* creator and Executive Vice President Hironobu Sakaguchi. As it turned out, fans of *Final Fantasy* games are more interested in playing *Final Fantasy* than simply passively watching it. While Square, now Square Enix, would continue to produce *Final Fantasy* games after the dramatic failure of *The Spirits Within*, the designers have clearly not become shy about using cutscenes in their games. Their latest entry into the franchise, the *Final Fantasy XIII* trilogy, features hours and hours of pre-rendered CG cutscenes to fill in the story. Given the disappointing sales of the games in the trilogy and the poor reviews from critics, it is clear that players that expect to be able to *play* their games are not as impressed as they were in 1997 with cutscenes that force the player to *watch* their games.

Hideo Kojima, the director of the *Metal Gear* franchise, has managed to abuse the cutscene far more than any of the directors at Square Enix. Certainly, as a fan of Hollywood action films, Kojima has been trying to chase his Hollywood heroes for many years. In fact, Snake Plissken from *Escape From New York* directly inspires *Metal Gear*'s main character Solid Snake, right down to the resemblance to Kurt Russell. The franchise gets closer to Hollywood when Kiefer Sutherland was cast in the role of Snake for *Metal Gear Solid V* (2015). But while Kojima's love of Hollywood films led him to create arguably the most popular stealth action

video game, his love of the medium also causes him to continually push the limits of the use of cutscenes in video games. As shown in the previous chapter, the *Metal Gear* games are not shy in terms of using gameplay sequences in an innovative manner. However, with each successive game, Kojima chose to include increasingly lengthier cutscenes. By the time *Metal Gear Solid 4: Guns of the Patriots* was released, Kojima was able to leverage the massive storage space of Blu-ray Discs to include at least five hours of cutscenes. This means that, depending on the skill of the player and the difficulty level chosen, the player might actually spend more time watching the game than actually playing the game.¹² In fact, the reward for completing the game is a final cutscene that lasts over an hour. While the most dedicated fans of the franchise would want a final scene that explains the final fate of Solid Snake, leaving players with a movie-length cutscene as the final impression of a video game is a dubious prospect at best.

Clearly, both of these examples depict the way cutscenes can render a player impotent in their own gameplay experience. While it is true that video games are author-centric texts and that game designers have the final say in how their story progresses, there is a danger that game designers may forget that they are working in an interactive medium. Not only do cutscenes strip interactivity away from an interactive medium, but in some cases they can override or trivialize the gameplay that a player experiences in the interactive segments of the game. Indeed, both *Final Fantasy XIII* and *Metal Gear Solid 4* include cutscenes that feature the main characters performing actions that are simply impossible for the player to perform in the game itself. In this case, these cutscenes serve not only as a reminder of how little power the player has over the outcome of the story, but also remind them that any power they do have over the game can never match the imagination of the cutscene director. The use of cutscenes in this manner begs

¹² As seen in the video series “MGS4: Big Boss Emblem Walkthrough (with commentary)” created by user PhantoM, who was able to finish the game in under 2 hours when skipping the cutscenes.

the question: how can a player be expected to feel any agency in a game, in terms of the narrative and the gameplay mechanics, if the story is found in the non-interactive parts of a game over which they have no control?

Case Study: *Ryū ga Gotoku* or *Yakuza*

That's not to say that it is impossible to use extensive cutscenes and still offer the player the feeling of narrative agency. However, it is up to the designers to use the cutscene as a tool that enhances the story of a video game rather than replacing it. Certainly, filmgoers do not expect to listen to an orchestral performance when they watch a film, but they are usually willing to listen to a symphony-length orchestral performance as long as the music accompanies the film. In this case, a musical score is used as a complementary tool that accompanies the other tools that a filmmaker can use to tell a story. The games in *Ryū ga Gotoku* franchise (or *Yakuza* as it is known in the West) feature a large number of cutscenes that are both pre-rendered and in-engine. Given that these games star well-known Japanese actors portraying fictional members of the Japanese criminal underworld, the games' cutscenes are presented much like classic *Yakuza* films or television dramas. In fact, the first two games in the franchise are written by *Yakuza* crime novelist Hase Seishu, raising the typical themes that one would find in Japanese and Asian crime fiction: family, community, masculinity, and so on.

With a crime fiction author penning the script and with cutscenes that can run dozens of minutes at a time, the *Ryū ga Gotoku* games could almost certainly be seen in the same light as *Final Fantasy* or *Metal Gear Solid*. However, *Ryū ga Gotoku* sets itself apart by closely integrating its story cutscenes with the rest of the gameplay. Rather than treat the non-interactive cutscenes and the interactive gameplay sequences as disparate components of a single game, in most cases cutscenes lead into gameplay and vice versa. *Ryū ga Gotoku 3* (2009), also known as

Yakuza 3 in the West, is the culmination of the franchise's Kiryu Kazuma character arc. Having seen the pain and chaos that being a part of the Yakuza life has brought to his own life and the lives of his loved ones, Kazuma decides to cede his claim to the leadership of his Yakuza clan and retire to Okinawa in order to run an orphanage. During the course of setting the scene for Kazuma's life in Okinawa through cutscenes that show his new life at Sunshine Orphanage, as any film might in its opening scenes, the game simultaneously introduces some of the gameplay mechanics as well.

After being introduced to Kazuma, Haruka, and the rest of the orphans, the player is given control of Kazuma and asked to simply talk to the orphans to find out about their day at school. While the game will eventually lead Kazuma back into the violent world of the yakuza, as he is pulled into a conflict involving a potential expansion of the American military presence on Okinawa that would be built on the land where the orphanage stands, the game creates an opening that encourages the player to see a different side of the character. Through the cutscenes and knowledge of the previous games, the player comes to understand that as an orphan himself, Kazuma recognizes the alienation that his charges experience as they try to fit in with their friends at school. In one example, the son of a teacher bullies an orphan named Shirou at school, and the teacher threatens to have the orphanage shut down. Forced to deal with the threats of his orphanage's closure, Kazuma tracks down a local politician, Akasaka, in order to convince him of the merits of the orphanage. While most of this story takes place in the form of cutscenes, when the player finds Akasaka, they are asked by the game to play three holes of golf with him by initiating the game's golfing mini-game. Where most games would put something as mundane as a golf meeting in a cutscene in an attempt to move the player to the 'real' gameplay, this game chooses to make the golfing a game mechanic that requires direct player interaction.

Kazuma and Akasaka still have their meeting in between the three holes of golf, but the player now has the ability to control the outcome of the game through their performance. In fact, a player might choose to role-play this gameplay moment by purposely losing the golf game in order to ingratiate Kazuma with Akasaka. While the cutscenes do set up the context for the introduction of the golfing mini-game, the mini-game itself is also pivotal to the outcome of this particular story arc. As such, after meeting and becoming friends with Akasaka, Kazuma is able to ensure that the teacher will not shut down the orphanage. More importantly, the player is allowed to experience agency in this important moment of the story.

There are several other sample quest lines in the game which feature a combination of cutscenes and gameplay mechanics that allow the player to both learn more about the characters in the game and also feel as if they are a direct participant in the story rather than simply a passive observer. When another one of the orphans, Izumi, finds a stray dog, she insists on keeping it because she feels that the dog deserves a safe home as much as she does. While the player is introduced to this particular storyline through a cutscene, they are then asked to go into town in order to buy the necessary supplies to be able to take care of the dog. While this may simply be a fetch-quest, it serves a dual purpose. In terms of the game mechanics, it teaches the player the location of a convenience store and also the fact that they can buy specific food items from the store. In story terms, the player is able to bond with Izumi and the other orphans by allowing them to keep the dog at the orphanage. By asking the player to fetch food and toys for the dog, the game allows the player to feel responsible for making Izumi happy.

By allowing the player to identify with Kazuma's paternal instincts through their own direct actions, the player not only develops a relationship with the children at the orphanage, but also feels a direct connection to the success of the orphanage itself. Because these story moments

are told through a combination of cutscenes and gameplay, the player is allowed to feel agency throughout the game even though it is heavily scripted. Of course, since this game is about the yakuza, one is not surprised that at the climax of the game the primary antagonist, Mine, vindictively destroys the orphanage. Kazuma, who is in Tokyo when the orphanage is destroyed, has no power whatsoever, as he is literally hundreds of miles away from home. Similarly, the game strips away the player's agency as well, as the player can only watch in horror as the orphanage is destroyed and the orphans are made homeless. This event is an example of a cutscene that is effective not only because it sets up the next gameplay sequence in which Kazuma gets revenge on Mine and the men that destroyed his orphanage, but also because it directly places the player in the same state as Kazuma. If the previous examples allow the player to feel empowered by the fact that they are directly responsible for improving the relationship between Kazuma and the children under his care, then this cutscene reminds the player that there are times when they have no agency whatsoever. The cutscene is made even more effective by the fact that the player has been allowed to feel directly responsible for the orphanage's success. Since the player is allowed to invest himself or herself into the orphanage by helping out the various orphans, seeing their work taken away at the whim of the game designer is, if nothing else, a heartbreakingly deflating experience.

Certainly watching a cutscene of what is essentially an evil, mustache-twirling villain laugh as he destroys an orphanage is probably enough to engender feelings of anger in any audience. But the cutscene is simply more impactful than a similar scene in a non-interactive medium by virtue of the personal connection that the player has developed with the orphanage and the children involved. By so violently stripping away agency from the player in this cutscene, the game offers an extreme feeling of catharsis when the player is finally allowed to

take control of the game again and seek revenge for what Mine has done. Certainly this is a story beat that is no stranger to an action film screenwriter, but the game is able to make this moment much more personal to the player's own experience by directly tying their sense of agency to the moment's outcome. While the film *Taken* (2008) asks the audience to try to put themselves into the mind of a father whose daughter has been kidnapped, *Ryū ga Gotoku 3* all but puts the player into the mind of a guardian whose family was violently made homeless by making the player form an emotional attachment to the orphans through gameplay.

This strategic blending of cutscenes and gameplay is an example of how cutscenes can be used to enhance a game's story but not necessarily replace it. Each cutscene serves to provide context for the player's actions in the interactive segments of the game, giving the player an emotional connection to the gameplay actions that they are asked to perform. In turn, the gameplay segments serve to make the cutscenes more meaningful to the player because they are more likely to become invested in the actions of the protagonist even if they are not directly in control of the protagonist's actions during these non-interactive storytelling segments. By closely integrating the interactive and the non-interactive moments of a game, the designer can allow the player to feel as if they are contributors to a game's narrative rather than simply passive observers. In other words, if a designer is able to successfully tie these two elements together, then they create the conditions that allow for Bizzocchi and Tanenbaum's notion of "bounded agency" (394) as described in the introductory chapter. Otherwise, the player is left feeling as if the cutscenes are a distraction from the gameplay, in which case they might skip them entirely, or in the worst case scenario, might forgo playing the game altogether and simply watch the cutscenes on a video service like Twitch or Youtube.

Some designers have addressed the cutscene problem by making them interactive,

allowing the player to directly impact the cutscene in a meaningful way. Telltale Games' *The Walking Dead* and *The Wolf Among Us* (2014) are games primarily structured around story sequences where the player must make key plot decisions as the main character of the game. Therefore when Lee, the main character of *The Walking Dead*, is forced to choose between saving one person or another person during an action sequence, the player is forced to make a split second decision and watch the consequences of their actions unfold in a non-interactive cutscene. This compromise allows the game designer to continue to rely on cutscenes to tell their story, but also create the illusion of agency through the limited interactivity afforded through dialog and plot choices.

Perhaps the most popular design attempt to make cutscenes interactive is the use of Quick Time Events (QTEs), or on-screen prompts that ask the player to push a correct sequence of buttons in order to progress through a game sequence. Game developers have had a long history of using QTEs, with perhaps the most famous example of QTE-based gameplay being Cinematronics' *Dragon's Lair* (1993). Like the adventure games of the 1990s, *Dragon's Lair* leveraged laserdisc technology to provide extremely high-quality animation (provided by animator Don Bluth) in an arcade video game. Of course, for all its presentation, the gameplay itself was fairly shallow. At seemingly random points in the game, the player is asked to press the joystick in a particular direction. If the player succeeds, they move on to the next animated sequence. If the player fails, Dirk the Daring perishes and the player is forced to insert quarters in order to continue. While this particular type of interactivity is obviously limited by the fact that a player can simply memorize the action sequences and finish the game without a death, this design is still being used to this day in an attempt to make expensive and elaborate cinematic cutscenes feel interactive.

The obvious criticism of QTEs is that they only provide the player with a false or at the very least, unearned sense of agency. While the player is arguably in control of the player character during the cutscene, the actions the player performs has almost very little to do with what is happening in the cutscene itself. In contemporary games, QTEs are typically random button prompts that flash on the screen during a cutscene, where the player is tasked to press the correct button or fail the game. Presently, games that use QTEs do not use them exclusively as the only form of interaction that the player has with the game, but instead they are used to compliment the main gameplay actions of the game. The *God of War* franchise features these moments extensively. While the main gameplay is action-focused, having the player control Kratos as he performs various killing moves with his weapons, at certain times the game will enter a cutscene and the player is asked to press a series of buttons in order to successfully navigate the cutscene and continue with the game. However, the merits of this interactivity are debatable, and action game designers such as Tomonobu Itagaki¹³ have spoken out against this type of gameplay, arguing that it adds nothing to the game itself because the actions that the player performs during these cutscenes have very little to do with the actions that the player performs in the game proper.

However, there is a way to inject true player agency into cutscenes through QTEs. If a designer chooses to make them integral to the game in a non-trivial manner, suddenly QTEs become the primary gameplay mechanic rather than an afterthought. Quantic Dream's *Heavy Rain* definitely fits this bill by blurring the line between cutscene and gameplay by heavily integrating the two. While in many ways *Heavy Rain* (2008) is like a classic adventure game, the main gameplay action isn't through puzzle solving but through QTEs found in cutscenes. Unlike

¹³ "I've never played a good game where the developers put a big icon of the button you're supposed to press onscreen" (Purchase, par. 3).

the extremely rudimentary gameplay of *Dragon's Lair* however, *Heavy Rain* features much more complicated actions involving button presses, gyroscopic controls, and analog stick movement on the standard DualShock 3 controller. The game also supports motion-based controls through PlayStation Move controller, a user input device that allows the player to perform actions in a game by performing the equivalent action in the physical world. All of the gameplay actions are made to feel close to their real-life equivalents, so that opening a door involves twisting the analog stick in a "door-opening" motion and so forth. This leads to QTEs that feel much more involved than the simple button presses found in the QTEs of other games. One of the most inventive uses of the QTEs is when the player is forced to amputate one of the main character's fingers, as discussed in the previous chapter.

Quantic Dream went on to iterate on their QTE design in *Beyond: Two Souls* (2013), by featuring more action sequences that require even greater agility with the controller. But the game also features a greater number of character-building sequences that use QTEs to help the player identify with Jodie, the main character, and her experiences. For example, as a teenage girl, Jodie is brought to a birthday party where she is encouraged to mingle with other kids. The player can choose to interact with various characters and objects in the game, but each choice funnels Jodie towards the same inevitable feeling of isolation. The other kids at the party ask Jodie to turn on some music, and the player can guide Jodie to the stereo where they are allowed to choose between several genres of music by pressing one of the face buttons on the controller. No matter what the player chooses though, the kids will chastise her for being completely out of style and pick a different album to listen to on their own. Later on, a boy at the party approaches Jodie and the player is allowed to choose how they respond to the boy's affections by selecting various responses with the controller buttons. Again, the end result is the same, as Jodie is

ostracized from the group regardless of her decisions, but the player can respond by flirting with the boy or shutting down and choosing not to respond at all. In the case of the former, the boy calls Jodie a slut and the other girls at the party turn on her. In the case of the latter, the boy says Jodie is a freak and the same result occurs. Through these very basic input prompts, the game allows the player to feel invested in Jodie's choices and the outcome of these choices. What makes *Beyond: Two Souls* more complicated than *Heavy Rain*, however, is the fact that the player is also able to control a character named Aiden during the game as well.

Although Aiden's true identity is not revealed until the end of the game, the player sees Aiden as a mysterious entity that they can use to dramatically affect the environment around Jodie. In the context of the game, Aiden is seen as some special spectral entity, perhaps a form of ghost, that only Jodie can see but who is able to manipulate physical objects in the game world. In gameplay terms, Aiden is a manifestation of the player, an external force that can influence the outcome of the game – and can come to represent the player's id if they so choose. In the party sequence described above, regardless of the player's responses, the other kids at the party lock Jodie into a staircase closet. At this point, Jodie asks Aiden to help free her and the player is able to switch to Aiden and unlock the closet door. The sequence can simply end with Jodie running out of the house and escaping the party. This event effectively ends the chapter and the game continues on. However, the player could choose to run rampant and destroy the party as well, to the loud protestations of Jodie. If the limited QTE responses that the player can make for Jodie make them complicit in being ostracized by the other kids, then the player can potentially take back their power by torturing the kids as a form of revenge. By using the controller or a tablet/smartphone, the player is given the ability to move through the house and throw various objects at the kids. By flicking the analog sticks in the correct manner, or making the precise

finger-dragging movements on a tablet, the player is able to make Aiden throw chairs and tables at the kids, or short circuit electronics so that the curtains are set on fire, etcetera. Just as the player is responsible for Jodie's bullying by placing her in socially awkward situations, they can also be responsible for taking revenge on her bullies by attacking them with the environment.

What's important to emphasize is that in the case of both *Heavy Rain* and *Beyond: Two Souls*, there are no wrong decisions or failures if the player is unable to perform certain QTE actions. As mentioned above, in *Dragon's Lair*, failure to input the correct QTE command at the correct time results in an instant death. The same is true for many games that have used them, including the *God of War* games. In the Quantic Dreams games however, failure to perform an action simply results in a different scene that the player can see. If the player is unable to cut off Ethan's finger because they choose not to or are unable to perform the correct QTE sequence in time, then *Heavy Rain* will continue on and the player must live with the consequences. Similarly, if the player chooses to threaten Jodie's bullies as Aiden or simply walk away from the house as Jodie, the game will remember those consequences and continues the story. This distinction is important because it not only means that players are allowed to feel agency in the outcome of a cutscene, but also that the player's sense of flow is not disrupted if the player is unable to properly complete a QTE sequence. Rather than simply throw a "Game Over" screen to the player on failure and ask the player to try again, the player is asked to live with the consequences of their failure and continue playing the game.

While the cutscene is a problematic narrative device in games, if utilized properly, it can enhance the storytelling potential of games. *Dead Poets Society* (1989) famously ends with the students in the class shouting "O Captain! My Captain!" at John Keating as he leaves the classroom, showing the power that a poem can have in a cinematic context. If game designers

remember that players demand, at the very least, the illusion of agency, then cutscenes can be used to direct the player to specific narrative moments without appearing as if they are imposing a story onto the player. Just as a good film score and soundtrack can be used to support the visuals of a stage or film experience, non-interactive cutscenes can also be used to support interactive gameplay sequences. The consequences of improperly using cutscenes in a game is ludonarrative dissonance, but a designer who can use them properly is able to leverage the century-old language of cinema in their storytelling as well as the unique type of interactivity specific to video games.

Chapter 4. The Fight for Control and Agency Run Amok

The previous chapter showed what could happen when game designers are too hands-off with how they choose to control agency in games. If they choose not to express narrative control over gameplay sequences, then they run into the danger of creating ludonarrative dissonance. But it is also possible for a game designer to overplay their hand, to essentially suffocate the player by imposing too much control over the experience that they wish the player to have. While there are times when the subversion of player expectations can be successfully used to evoke specific emotions in the player, there are also times when the subversion of these expectations can completely ruin the player's experience with the game by disrupting their feeling of *flow*. This chapter will show that although games are necessarily authored texts, the game designer must balance their desire to convey their narrative with the player's expectations of agency. Just as a filmgoer will implicitly accept that a film director is controlling a film's point of view through the framing of specific shots, players will implicitly accept that a game designer creates opportunities for agency through careful design. However, in the same way that filmgoers can react negatively to films that exert too much control over what they can see – such as the criticism pointed at Paul Greengrass for his use of the cinéma vérité-inspired “shaky camera” technique of filmmaking, video game players can also react negatively to specific types of authored agency. Beginning by illustrating some examples of game designers imposing too much control over a game's narrative, this chapter will try to show how game designers can strike a balance between telling their own story while also offering the player the illusion of player choice.

The Undefined Boundary of Bounded Agency

Perhaps the most well known example of a designer imposing game mechanics onto a

player is through the so-called “ability tease”. Games in the *Castlevania* series, *Assassin’s Creed* series, and many others feature an opening prologue level that offers a glimpse of all the abilities that the player will unlock by the time they finish the game. In essence, the “ability tease” is a preview of all the gameplay actions that the player will be afforded and serves as a means to whet the appetite of the player’s desires for more complicated gameplay. In theoretical terms, it is a purposeful disruption of the standard progression of flow – the game gives the player an opportunity to see where the flow curve will be at the end of the game right at the very beginning. In literary terms, this is similar to a novel/film with a non-linear or disjointed narrative, where the ending of a story might be placed at the beginning in order to disrupt any expectations of traditional narrative structure. Here, the gameplay arc is disrupted in order to give the player an expectation of the game mechanics that they will have access to by the time they complete the game. The player will need to progress through the game normally in order to earn the chance to engage with these mechanics, but the “ability tease” gives players a goal for them to reach.

Most designers will find a narrative contrivance to justify why abilities are offered to the player at the beginning of the game only to be taken away soon after. In the first *Assassin’s Creed*, for example, Altair is punished by the Assassin’s Order and told that he is not allowed to use the tools of the assassin until he redeems himself – and in most cases, the player will accept this limitation of their agency with the understanding that they will eventually unlock the full complement of gameplay affordances by the end of the game. Players have come to accept this convention in gameplay design and typically accept the narrative excuse that the designer has written to allow for the player to lose their short-lived agency. However, problems can arise for the designer when the players feel that they cannot accept the game’s narrative explanation for

their sudden loss of power.

Case Study: *Metroid: Other M*

Perhaps the most striking example of fiction being unable to justify the lack of agency is found in the Nintendo game *Metroid: Other M* (2010). Given that the franchise is as old as *Super Mario* and *The Legend of Zelda*, any game using the *Metroid* name carries a large set of expectations that the player brings into the game. For the *Metroid* franchise in particular, the player has come to expect the notion of the “ability tease”, as most of the games either strip the player of their abilities soon after the game begins or gives the players no extra abilities whatsoever. Either way, part of the process of playing through a *Metroid* game requires the player to explore an open world and find upgrades that unlock the abilities that they have lost.

Samus Aran, the protagonist and player character of the *Metroid* franchise, is a powerful bounty hunter working for the Federation. In each game, Samus lands on an unknown planet or ship and the player is asked to guide her through this space in search of the final boss. Rather than present a linear world to the player, the game designers create a large open world that encourages exploration and backtracking. When the player traverses through one of these worlds for the first time, they will see doors or passages that they are unable to access. When the player hits one of these barriers, the game encourages the player to simply continue on through the passages that are accessible to them. Eventually, the player will find items and power-ups that give them new abilities, allowing them to travel through the previously inaccessible routes. For example, one of the most iconic powers that the player unlocks in the games is the Morph Ball ability, allowing the player to transform Samus into a ball that can roll through small tunnels. The player can also find missiles that allow Samus to smash through passages blocked by shielded barriers. In essence, gaining or regaining abilities forms the main gameplay loop of any

Metroid game. Initially powerless, the player must find ways to give Samus the ability to access new passages, which in turn unlocks new areas where they can find new abilities. This loop repeats itself until the player has unlocked access to the entire game world and can challenge every single enemy in the game on even terms.

Metroid: Other M certainly does not deviate from this particular formula established by its predecessors. The 2010 entry into the *Metroid* franchise also heavily features the “ability tease”, where Samus’ powers are locked away and only accessible at certain points of the game. While mechanically the effect of slowly doling out agency to the player over time is the same, *Other M* couches the player’s lack of agency at the beginning of the game in a manner that essentially antagonized many of the franchise’s most loyal fans. As a franchise that dates back to the creation of Mario and Link, it is worth noting that Samus is not only one of Nintendo’s oldest characters, but that she is one of the first video game heroines in the history of the medium. While the majority of video games featured Rambo-like soldiers fighting aliens or knights saving princesses, the original *Metroid* featured a heroine who was just as capable as her male peers. In a medium where strong, positive, female role models are far and few between, Samus is held in extremely high regard by many female fans of video games.

With such a powerful legacy to uphold, *Metroid: Other M* had to carefully navigate how to both strip away Samus’ powers in order to maintain the “ability tease” gameplay loop, but also do so in a way that allowed the player to believe that Samus was still a strong heroine. Given the previous discussion of *Super Metroid*, players also certainly expect that the designers of *Other M* would be able to combine agency and narrative in a similarly effective manner. Unfortunately, *Other M* was unable to live up to the legacy of the franchise and ended up alienating many of the franchise’s long-term fans. In her review of *Other M*, critic Abbie Heppie argues that while the

game tries “to flesh out one of the most iconic (and nonsexualized) female characters in gaming history... the outcome is insulting to both Samus and her fans” (Heppe). By incorrectly trying to incorporate gameplay and narrative, the designers created a game that ended up upsetting player expectations. Rather than solve the problem of ludonarrative dissonance by trying to make player actions in the game correspond to the Samus’ actions in the game’s story, the designers inadvertently increased the amount of dissonance that many players felt as they played through *Other M*.

But how did *Other M* fail so spectacularly, to the point where many players and critics felt that the game tarnished the legacy of one of the medium’s greatest characters? While *Other M* was not the first game in the *Metroid* series to include an extensive story, it was the first game that tried to define a character nearly 25 years after her first appearance. Filling in not only the gaps between the various games in the franchise, *Other M* is also an origin story of sorts, attempting to explore Samus’ origins as a Galactic Federation soldier and her involvement with the franchise’s primary antagonist Mother Brain. The game opens with Samus boarding a derelict ship and meeting a group of Galactic Federation soldiers led by her former commander, Adam Malkovich. Because of their shared history together, Malkovich regards Samus with suspicion and only allows her to be a part of his mission if she agrees to follow his commands. This narrative conceit is how *Other M* chooses to restrict Samus’ abilities and dole them out slowly to the player. The player understands that Samus has access to her full complement of weapons and abilities, but that Samus chooses not to use them until Malkovich allows her to do so.

While some players and critics might find this premise troubling, that a woman who happens to be one of the galaxy’s greatest bounty hunters would want to so desperately please a

man only alluded to previously in *Metroid Fusion*, there is a specific moment in the game which some players considered tantamount to torture. As the game progresses, Samus enters a lava-themed level featuring many fire-based enemies. While she is equipped with an Ice Beam weapon that is extremely effective against these fire-based enemies, her desire to follow Malkovich's orders leads her to hold her weapon in reserve until much later in the level. One might be able to rationalize why Samus would choose to depower herself in such a manner – perhaps she wants to conserve ammo or energy – but there is at least a conceivable or believable reason why she would choose to acquiesce to Malkovich's orders.

While holding the Ice Beam in reserve might be justifiable in the context of the game's narrative, many critics and fans would find the final limitation placed on Samus in the lava level to be completely unjustifiable – the use of the Varia suit. As the player progresses through the lava-themed level, there will be times where the player will fall into pits of lava if they are hit by enemies or are unable to properly jump on the various platforms. The penalty for falling into these pits of lava is as one might expect: Samus takes damage and her health will deplete until the player is able to extricate her from the lava and return her to a stable platform. It is not until the player reaches the boss for this level, long after they have guided Samus past many lava pits, that Malkovich finally orders her to “activate the Varia feature on your suit to protect yourself from heat damage.”¹⁴ It is after this order that the player realizes that Samus had the ability to protect herself from the lava that she had fallen into previously, but purposefully chose not to do so because her former commander did not allow her to do so until much later in the level. Not surprisingly, many players interpreted this as form of self-flagellation that is simply out of

¹⁴ As shown and commentated on by TheSinisterUndead in their playthrough of the sequence found in “Metroid Other M Part 11: The Varia Suit *FACEPALM*” and described in MenTalguY's blog post “Metroid: Other M - The Elephant in the Room”.

character for a woman who is known as one of the strongest bounty hunters in the known universe. At best, one might believe that she is showing her loyalty to a man who feels betrayed by the fact that she chose to leave the Galactic Federation and serve the galaxy on her own terms, and that by purposefully allowing herself to feel more pain than she has to, she is showing Malkovich just how far she is willing to go to regain his trust. At worst, Malkovich can be seen as a cruel man who is torturing a woman that scorned him, and despite being a strong woman, Samus is unable or unwilling to act against Malkovich's sadistic commands.

Regardless of how a player might interpret this scene, the end result is the same: Samus is rendered powerless in the face of a man whose orders she blindly follows. While this example is the most extreme example from the game, *Metroid: Other M* as a whole feels like a betrayal of a character that many fans considered one of the best female protagonists in the history of the medium. Because the designers at Nintendo and Team Ninja did not consider the various ways a player would interpret the limitations on their agency in the context of the game's story, the result is a game that alienates the player through its game design. Controlling how and when the player is allowed to experience agency in a game can be a powerful tool that game designers can use to convey moments of helplessness or power. But if the designer manipulates the expectation of agency in a manner that is completely unexpected, the player will be removed from the flow state of playing the game and violently react against the designers choices. In the context of *Metroid: Other M*, players have grown accustomed to the gameplay arc of a *Metroid* game. In nearly every game in the franchise, Samus starts off with a limited number of abilities and the player must find upgrades in order to gain access to more of her advanced abilities. However, each game provides a narrative context for the fact that the game has taken away Samus' powers from the previous game, and typically Samus improving her abilities is placed in the context of

her growth as a character and the player's growth as an expert in the game. *Metroid: Other M* betrays the expectations of agency, particularly in the context of bounded agency, by stripping away Samus' abilities in a manner that undercuts two decades of in game characterization and player experiences. Rather than show Samus gain her powers through exploration, this game suggests that Samus is a woman who would purposefully limit access to her own abilities, to the point of self-harm, simply because she has been ordered to by a former commander. As one of the earliest heroines in the history of video games, Samus is an important figure for many players, and particularly women, who want video games to be more inclusive. Where *Mario* and *Zelda* typically feature plots where the player must rescue the princess from a villain, *Metroid* puts its female character front and center, allowing Samus to be the one who acts, rather than be one who is acted upon. Given this history, it is understandable why critics like Abbie Heppe would react so negatively to *Metroid: Other M*'s use of bounded agency. The problem isn't necessarily limiting agency, as players have come to expect the growth of Samus' abilities over time. The problem is when this limitation on agency is placed in a narrative context that many players feel is simply unacceptable.

Case Study: *Mass Effect 3*

Underestimating the player's emotional investment in the agency that a game offers also dramatically backfired on BioWare in *Mass Effect 3* (2012). Ambitious in scope and scale, the *Mass Effect* trilogy built on BioWare's decades-long work on licensed RPGs. From a storied tradition that includes the critically acclaimed *Baldur's Gate* and *Neverwinter Nights* games, BioWare parlayed that experience into developing a game that featured their own RPG rule set and also feature a wholly original world. Perhaps the most ambitious aspect of the trilogy was the fact that the narrative choices a player made in one game would have direct consequences on

the following game. In essence, the idea was that every player who completes the entire *Mass Effect* trilogy would have a wholly unique narrative experience, defined by each player's specific narrative choices. The trilogy's narrative was still written by a core group of writers at BioWare, but this narrative was designed to allow many different forking paths that the player could traverse through. In the very broad sense, the player would be able to craft their own story within the context of the set of story tools offered by the games. Indeed, Bizzochi and Tanenbaum's notion of "bounded agency", in which player choice enhances and complements the narrative of a game, is derived from a reading of the second game in the trilogy, *Mass Effect 2* (401).

The specifics of how the story is told in terms of the relationship between representation and agency is covered in greater detail in the next section, but broadly speaking, most narrative choices in BioWare games are based around moral choices. The player is presented with a narrative scene that can be resolved in one of two ways: the player can choose to either roleplay as a "good" character or an "evil" character, resolving the scene in a manner consistent with their moral choice. A player will make dozens of these moral choices over the course of one of BioWare's games, and taken as whole, these moments of player choice are what allows the player to feel as if they are the authors of their own story within the context of the game's fiction. This is a very powerful form of authored agency, and is used to great effect not only in BioWare's games, but also in many story-focused games. The game designer is able to create a game with a single overall narrative arc, but also provides the illusion of choice to the player through the concept of bounded agency. As long as the game is able to keep the player's suspension of disbelief, the player will feel as if the game is catered to respond directly to his or her own narrative choices. This use of narrative interactivity allows the player to feel as if they are the creators of their own version of the *Mass Effect* story, encouraging an ownership of the

game's story based on the decisions the player has made. It doesn't matter that most of the narrative choices in the game boil down to binary "good" or "evil" choices, all the player really notices is whether or not the game takes their specific choices into account in the next chapter of the story.

Mass Effect itself is a sprawling science fiction trilogy reminiscent of both the *Star Wars* films and the various incarnations of *Star Trek*. As Commander Shepard, the player must explore the galaxy in search of clues to prove the existence of aliens, known as the Reapers, who are intent on destroying all organic life in the Milky Way. In *Mass Effect 3*, the Reapers begin their attack on the galaxy, occupying many planets including Earth, and Shepard must unite the galaxy in order to mount a final stand. An engrossing space opera epic, which casts the player as a combination of both Luke Skywalker and Captain Kirk, is a recipe for success. Rather than a passive observer watching *Star Wars*, the player is able to place themselves into *Star Wars*. The function of choice in the game's narrative is based on the assumption that the player, as Shepard, will save the galaxy. Everyone who plays the game will reach that ultimate goal. But the question becomes: how will the player achieve that goal through their moral choices? Are they willing to compromise their humanity, using eugenics and enslaving sentient machines to reach their goal? Or will they choose to take the moral high ground, refusing to become the enemy in order to defeat the enemy? By answering these questions throughout the trilogy, the player is able to construct their own narrative within the context of the general narrative arc written by the game's designers. As a result, players feel invested in their individual choices and come to believe that their version of Shepard's story is uniquely theirs. It is not uncommon to see fans refer to Shepard as "my Shepard", as they become emotionally invested in the story choices that they have made. In fact, this sense of ownership was encouraged by EA itself, which uses

phrases such as “What do I need to import my Shepard into Mass Effect 3?” (“Questions about importing your Mass Effect 2 save file to Mass Effect 3”) in their support documentation.

With the context of the empowered player in mind, the violent reaction to the end of the *Mass Effect* trilogy by the fan base was certainly something that BioWare should have seen coming. Much like the anger toward the character assassination of Samus Aran in *Metroid Other M*, players at large felt betrayed by the ending of *Mass Effect 3*, which took agency away from the player and funneled them toward the ending the game’s writers desired. Indeed, while the game technically offered the player the choice between three specific endings, all of those endings were the same – the player sacrifices their character in order to save the galaxy. The only variation comes in how the player will sacrifice himself or herself, but since this is the final scene of the game, the designers explicitly decided not to show the player why these choices are meaningfully different in any way other than the fact that the endings are presented in either a red, green, or blue colour filter over the final cutscene.¹⁵ Players who have watched all three endings feel cheated because they know that the game is not interested in giving them agency in how the game’s narrative concludes and shoehorns them into an ending that essentially disregards all of their choices. Although the *Mass Effect* trilogy is entirely contingent on the player claiming ownership of the choices that they made over the course of the three games, control is wrestled away from the player at the trilogy’s climatic moment and the player can only watch as the game’s ending is fed to them by the game’s writers.

Players felt so betrayed by the lack of agency in the final moments of the trilogy that they protested in many forms, from writing blogs and posting Youtube videos explaining their

¹⁵ A fan created a video showing all the ending cutscenes running simultaneously in order to illustrate their similarities: “Mass Effect 3 - Ending Movie Comparison - All the Colors”.

frustration¹⁶, to creating petitions and sending cupcakes¹⁷ to the BioWare offices. The only way that players are able to take ownership of *Mass Effect 3*'s ending back from the developers was to exhibit their agency outside of the game. Some players were so desperate to regain ownership of their version of Shepard that they modified the game's files and created what they called the "Mass Effect Happy Ending Mod"¹⁸, rejecting BioWare's ending outright and replacing it with their own.

In the same way that the developers of *Metroid: Other M* may not have considered how the manipulation of player agency could drastically alter the player's interpretation of a game's story, BioWare did not take into account player's expectations of narrative agency after engendering those expectations in *Mass Effect* and *Mass Effect 2*. BioWare was so taken aback by the negative response to the ending of *Mass Effect 3* that they proceeded with the unprecedented step of releasing an extended cut of the game free of charge, with BioWare co-founder Ray Muzyka stating that "we have had time to listen to the feedback from our most passionate fans and we are responding" ("BioWare Announces Mass Effect 3: Extended Cut"), acknowledging that players felt cheated by the ending of the game. It is telling that the new extended cut of the game features a new ending that allows the player to reject the three endings of the original game entirely. If nothing else, it is an admission to the player that the original three choices were not enough to satisfy player demand for an opportunity to guide the story to a conclusion of their own.

There have certainly been controversial endings in the history of serialized narrative

¹⁶ Jeremy Jahns' "Mass Effect 3 Ending and Why We Hate It!" is one of many examples of videos created soon after the release of the game.

¹⁷ As reported by Mike Kayatta in "Gamers Ship 400 Cupcakes to BioWare in Protest of Mass Effect 3".

¹⁸ As seen in the forum thread titled "MEHEM - the Mass Effect (3) Happy Ending Mod - No more star kid, no more deaths and a reunion".

fiction (from anger at the death of Nell in *The Old Curiosity Shop* to the anxiety over the lack of a definitive ending to *The Sopranos*), this is perhaps one of the first times that an ‘author’ of a text made the conscious choice to change or significantly alter their work after the fact in order to satisfy their audience. While a single person with a single vision definitively authors non-interactive media (drawing on the previous examples, Charles Dickens and David Chase respectively), video games are the first medium that allows the reader to feel as if they are co-authors of the text. While it is true that the game designers do most of the work, from writing the actual story, to creating the art and music, to directing voice actors, and of course designing how player agency functions in the game in the first place, players are essentially asked to be collaborators and co-authors. The very act of playing through the game is asking the player to write their own version of the game’s story that is specific to them and them alone. If game designers want to offer narrative control of a game to the player as a form of designed agency, then they must be prepared to relinquish control of the story to the player and place themselves in the supporting role. It is a lesson that the designers at BioWare had to learn in a very public and embarrassing manner.

Case Study: *Spec Ops: The Line*

But does a game designer always have to give control of a game’s narrative to the player? Can a game designer still tell a story that exhibits their own authorial vision, but also allows the player to feel as if they were in control of the story all along? The previously mentioned *Spec Ops: The Line* is a game designed to toy with expectations of agency, constantly pushing the player toward a belief that they are in complete control of the game even when in reality they are being fully controlled by the game designers. When considering how the game ends, one can see how the game is positioned to empower player choice: it offers the player the choice between

four endings and allows them to conclude Captain Walker's story apparently on their own terms. But players who choose to think deeper about their play experience and notice the forced repetition of the helicopter sequence will soon realize that the game is played completely on the designer's terms.

Spec Ops: The Line takes place in a Dubai after massive sandstorms bury the city in sand and traps its inhabitants. The American government sends an Infantry Battalion led by Colonel John Konrad to help with the relief efforts, but they are soon ordered to abandon the city as the sandstorms increase in intensity. Konrad chooses to disobey orders and remains in Dubai in order to protect the civilians as best as he can and the final sandstorms completely cut off the city from the outside world. The American government is forced to declare Konrad and his men traitors and sends Captain Walker, the player character, into Dubai to investigate Konrad's disappearance. As mentioned in the second chapter, the story borrows heavily from Francis Ford Coppola's *Apocalypse Now* (1979) and Joseph Conrad's *The Heart of Darkness*, and the player's journey deep into the ruined cityscape of Dubai serves as a metaphorical journey deep into the mind of a troubled soldier. Throughout Walker's journey, the player has to contend not only with desperate locals who have survived the storm, but seemingly crazed American soldiers who attack the player without provocation. As a military-themed shooter that directs players to shoot and kill Americans, *Spec Ops: The Line* is a game that is anything but the typical power fantasy found in *Call of Duty* or *Battlefield*. It is a game that questions the nature of war and the player's complicity in glorifying war in video games.

Spec Ops: The Line conveys the theme of the power fantasy in games through moments of false agency afforded to the player. Walt Williams, one of the writers of the game, has stated that the goal of the game was to make the player question the nature of the agency of their game:

I think it's a little funny that the Illusion of Choice has become a topic of intellectual debate between gamers and creators. [Because] the way I see it, gamers have never had a choice. This goes back to what I said about to be a gamer is to be your own unreliable narrator. We convince ourselves that games give us a choice... That we have agency. We don't. We can do only what a designer has pre-determined. There is no such thing as Player Agency. There is only Designer Intent. (Williams)

The designers have effectively tricked the player into believing that they are the ones in control of Captain Walker's story. Not only does the player choose the ending that they want to see, but also throughout the game the player is asked to make various moral and ethical choices that all ultimately have the same result. For example, at one point in the game the player is offered the choice of using a chemical weapon, white phosphorous, against their enemy. The player might consider avoiding using these weapons, because of they are considered inhumane, and try to use conventional weapons to fight their way through this sequence. However, the game only offers this option as an illusion of choice. No matter how well the player performs in this sequence with conventional weapons, the game ultimately forces the player into using the chemical weapons as a last resort. There is simply no way to complete this sequence without using the chemical weapons that are offered to the player – either they will run out of ammunition for their guns, or they will be overwhelmed by the enemy and be killed.

When the player ultimately chooses to use the chemical weapons against their enemies, their squad members begin to protest the player's decision. Not only is the player using an inhumane weapon of war, they are also using it against American soldiers that have occupied Dubai. Up until this point, the player has been shooting and killing Americans, but only when

fired upon first. The game forces the player to take the offensive and massacre these American soldiers in order to proceed. As Walker takes control of the computer that will fire white phosphorous from a mortar, the game's camera zooms in on the computer's screen and the player is given a black and white thermal view of the battlefield. American soldiers are reduced to white dots on a computer screen (much like the monitor that the player would be using to play the actual game) and are coldly told by the onscreen instructions to fire mortars unto these dots in order to eliminate them. The player might be able to rationalize this as choice that they made willingly, that because at that point the player can only assume that these American soldiers have gone 'rogue' or have become otherwise psychologically affected by their isolation in Dubai. Although the game funnels the player into choosing to use the mortar, the player still believes that they are in control of making that choice.

The computer screen mortar sequence continues for several minutes as the player guides a reticule over white dots and drops white phosphorous onto them. Over the course of the sequence, this act becomes so routine for the player that they do not hesitate to fire on a large group of white dots at the end of the level, expecting that those dots are simply another group of soldiers that they have to kill in order to proceed with the game. The sequence ends when the player kills all the white dots on the screen, and the game then cuts to a cutscene showing Walker and his men as they walk through the carnage that they have wrought with the white phosphorous. The characters do not hesitate as they walk through a street lined with the corpses of American soldiers, but as they reach the end of the street, and the location of the final group of dots on the computer screen, they realize in horror what they have done. The final group of targets that Walker and the player killed were not soldiers, but were a group of innocent civilians being protected by the American soldiers. The camera slowly pans to the charred remains of a

mother holding her child, as both Walker and the player come to understand that they have committed a war crime. One of Walker's soldiers declares that "he turned us into killers", effectively blaming the player for the atrocity. While the player must process what they have just done and seen, Walker ends the cutscene by saying "*I'm* going to make these bastards pay for what *they've* done". Walker does not accept responsibility for what just happened, choosing to blame the American soldiers for forcing him to use the white phosphorous in the first place.

The player does not have much time to dwell on this situation as the game returns control to the player and asks them to continue on with the game. While the game offered the player the 'choice' to use the mortar to kill the soldiers in their way, the game hid the consequences of that choice until after they have made the decision. One might reasonably assume that most players would, if given the choice in a clear manner, choose not to kill civilians. Indeed, the other soldiers in the game blame Captain Walker, and by association the player, for turning them all into murderers after the player 'chooses' to mortar the final group of civilians in the scene. But the game effectively tricks the player into making that choice seemingly of his or her own volition. The only way that the player can cope with the consequences of that false choice is to blame the game for forcing them into that situation, much like how Walker blames the American soldiers for forcing him to use the white phosphorous mortars instead of accepting the responsibility for making the decision himself.

Choices similar to this one happen at several points throughout the game, as the player is given the choice to take an action whose consequences all lead to Walker, and the player, losing a piece of their humanity. For example, in one later scene, Walker encounters a dying soldier trapped by a truck that has fallen onto him. The soldier asks Walker to kill him and put him out of his misery, and the player is left to choose whether or not to honor his request. Whether the

player chooses to kill this soldier or walk away, the thought process of Walker is left ambiguous. If the player chooses to shoot the soldier, it is not clear if Walker shoots him out of mercy or out of malice. In the same way, if the player chooses to walk away, it is not clear if Walker leaves the soldier because he is tired of killing or he is being sadistic and wants this soldier to die a slow and painful death. While the player is given a choice in this situation, the act of choosing loses any sense of agency that the player might have felt because the implications of their choice are ambiguous and the soldier will die regardless of how the player chooses to end this scene.

Through this scene, the game is able to effectively illustrate to the player that there are no easy choices in a war, but without having to impose on the player's expectations of agency in that scene. Even though the conclusion to the scene is the same regardless of the player's choice, the player is allowed to feel as if they reached that conclusion based on their own action or inaction. The fact that every opportunity for the player to exhibit agency in the game leaves him or her feeling empty and powerless is deliberate. In a medium that is contingent on privileging the player's choices, where fans can react negatively if the developer imposes on their interpretation of a character or story, *Spec Ops: The Line* reveals that there may be times when the player may not want to be in a position to choose. Watching soldiers commit acts of violence in war films can be easier for a filmgoer to accept because they are passive voyeurs in the experience and not necessarily complicit in the actions of the characters in a film. A filmgoer might be intellectually or morally challenged when they are forced to watch soldiers commit acts of rape and murder in films such as *Casualties of War* (1989) or *Redacted* (2007), but at no point do these films ask the audience to participate in those crimes. Players of video games do not have that luxury, and must accept responsibility for the consequences of the choices they must make in order to advance the game's narrative.

Walt Williams reveals that this is one of the core design philosophies of how player agency is deployed in the game:

We continually have the characters discuss the fact that they should NOT be in this situation and that they should leave. However, we do not give the characters this option. The option is only available to the Player—If you don't want to be here, then stop playing the game. (Williams)

All of the choices in *Spec Ops: The Line* are bad choices, ones that the player would rather not have the responsibility of making. But this leads to the main conceit of the game. It is not only that game designers are the primary authors of a video game's story, but also that player agency is a myth and only exists to serve the storytelling purposes of the game designer. As Williams suggests, the only real choice the player has in *Spec Ops: The Line* is to "stop playing the game" and turn it off. Every other choice, even how the game ends as discussed in the second chapter, is not a choice at all, but a deconstruction of the myth of player agency. What makes *Spec Ops: The Line* successful, inasmuch as it did not elicit a negative response from players like *Mass Effect 3*, is that players were still allowed to feel as if they were the ones driving the narrative forward with their choices. Even though the ultimate message of the game is that the player's choices do not matter, because the only actionable choice offered by the game is to not play it at all, the player believes that the choices they make throughout the game – including which of the several endings they will see – are theirs and theirs alone. Players who choose not to read too deeply into the narrative conceit of the game are left to consider the cumulative result of all the choices that they made throughout the game, believing that the game ended on their terms. Players who choose to read deeper into the ideas raised by the game, including Brendan Keogh who wrote a monograph called *Killing is Harmless: A Critical Reading of Spec Ops: The Line*, will embrace

the fact that an ending was imposed on them by the designer because of what the game is trying to say about the nature of the relationship between player and designer. As a result of how choice is designed in *Spec Ops: The Line*, players can either enjoy it as a piece of anti-war fiction or more specifically as a piece of anti-player fiction. But regardless of how the game is received by a player, at no point does the player feel as if the game designer is dismissing the choices that they may have made throughout the course of the game. Even in the anti-player reading of the game, players become complicit in the designer's actions and come to understand that the choices that they have made were not really choices at all.

As this section has shown, game designers have to be very careful when integrating player agency with game narratives. If a game imposes on the player's expectations of agency in order to force the player to experience a specific story moment, the game designer needs to find a way to convince the player that they are still driving the game's story forward, even if this is not the case. If the designer is unable to do so, the typical player will react negatively, feeling as if their personal involvement in the story has been overridden by the whims of the designer. The manipulation of agency can be a very powerful weapon in the designer's arsenal when trying to use game mechanics to tell a story, and bounded agency is one of the means by which game designers can become storytellers. But this weapon can also backfire if not handled with care.

Representational Agency

The previous section examined the relationship between the game designer and the player through the interactive nature of the bounded agency found in games. But one aspect that can be taken for granted by designers is how the player is represented in the game itself. In most cases, either the player is given a single character to inhabit as they explore this game world (for example, Samus Aran, Commander Shepard, and Captain Walker as described in the previous

section) or the player is allowed to choose from a stock of characters that are superficially different, whether by gender, race, or other physical attributes, but these choices have no effect on the game's narrative whatsoever. In the extreme case, the *Saints Row* franchise allows the player to change their character's gender, race, voice, and physical appearance at any point in the game without affecting the game's story whatsoever.

While there have been many critics that have looked at various aspects of representation in video games – Astrid Deuber-Mankowsky's feminist reading of Lara Croft, Soraya Murray's reading of the use of ethnic bodies in games like *Grand Theft Auto: San Andreas*, Jeffery A. Ow's reading of race in the first *Shadow Warrior* (1997), Patrick Klepeck's examination of slavery in *Assassin's Creed: Freedom Cry* (2014), and so on – many of these analyses focus strictly on elements of representation that are out of the player's control. These issues of representation are important, and the sexualized depiction of Lara Croft has been one example of representation in games that has been discussed constantly both in academic scholarship and professional criticism, but these issues of representation are very similar to the ones that can be found in other media. Indeed, given that video games replicate the visual language of film through not only the use of cutscenes but also through the camera control afforded to the player, one can find many examples of the male gaze functioning in games. Rather than focus on the visual aspects of representation, this section will consider aspects of representation that the player has a hand in directing. Specifically, this section will look at how designers provide avenues of representation to the player and how this aspect of player agency can affect how games are read - both as objects of representation and also as mechanical objects with internal systems at play.

The Dating Simulation or Dating Sim is a genre of game that is meant to be highly

customizable, as the typical dating sim places the player in a situation where they can choose from a group of boys or girls to date. The most well known and longest running Dating Sim franchise, Konami's *Tokimeki Memorial*, places the player into the shoes of a new student at a high school and asks them to try to develop relationships with the other students at the school. In games from this genre, agency of representation is found in the various characters with whom the player is allowed to interact. In this way, each player is able to date a character that they are attracted to, creating what is essentially a romance novel catered specifically to their liking. While the Dating Sim is primarily a genre found only in Japan, with games such as *LovePlus* (2009) and *Photo Kano* (2012), Western game designers have incorporated some elements of the Dating Sim into their games. In such games, players typically not only have a stake in the outcome of the game's plot, but they also want to choose how they are represented in the game's world. The tension then exists between the designer's choice in the way characters are presented in the game and the player's desire to have the characters appeal to their own personal desire to be accurately represented in the game. Indeed, as seen in the cultural reception of texts such as Rowling's *Harry Potter* series or Meyer's *Twilight* series, fans will often project their own desires onto the characters of these works. In fact, the debate about whether Harry should marry Hermione at the end of the *Harry Potter* series became so heated that Rowling herself felt the need to explain the ending of *Harry Potter and the Deathly Hollows* in an interview: "What I will say is that I wrote the Hermione/Ron relationship as a form of wish fulfillment. That's how it was conceived, really. For reasons that have very little to do with literature and far more to do with me clinging to the plot as I first imagined it, Hermione with Ron" (Sims). Rowling herself was as invested in the outcome of the relationships in her creation, but as the author of the text, she was able to make the decision that she wanted to make, even if it meant potentially "breaking

people's hearts" (Sims). What makes games different is their interactive and open nature, which allows for the creation of narratives that offer many different permutations of the story to exist within the same work of fiction. Rather than have an author declare one relationship to be the definitive one, a reader can choose whom the main character ends up with on his or her own, creating a personalized version of the story to match their own desires.

But when considering the various possibilities of romantic relationships, games have suddenly become political. While many designers have assumed that the average player is heterosexual, and therefore these players will choose to have heterosexual relationships in their games, a growing voice of queer players have begun to demand that games offer the possibility of homosexual relationships as well. As Nintendo of America found out with the #MiiQuality campaign that was started soon after the release of *Tomodachi Life* (2014), by not including the option of same-sex relationships in their game, many queer players felt alienated and demanded equal representation. Ultimately, the company released a press release stating that: "We apologize for disappointing many people by failing to include same-sex relationships in *Tomodachi Life*" and "We pledge that if we create a next installment in the *Tomodachi* series, we will strive to design a game-play experience from the ground up that is more inclusive, and better represents all players" ("We are committed to fun and entertainment for everyone"). While *Tomodachi Life* might be excused because it is a game designed and written in Japan for a Japanese audience, where the acceptance of queer rights is behind that of the West, the same cannot be said of BioWare and the *Mass Effect* trilogy.

As previously mentioned, the *Mass Effect* trilogy is a series of games that offers the player a lot of agency in the game's narrative. The player can choose to have a Captain Shepard be a saint that tries to save as many lives as possible in order to gain trust, or a sinner who uses

torture as a means to extract intelligence from an enemy. But the player is also able to fully customize Shepard's character as well. Not only are players able to choose a backstory for their specific Shepard, but also Shepard's gender, race, and physical appearance. The Commander Shepard featured in the marketing materials and the game's cover might be male, but the player is able to make their Shepard an Asian female if they so desire. However, in *Mass Effect* and *Mass Effect 2*, the one aspect of customization that the player has no control over is Commander Shepard's sexuality. He, or she, is straight and players simply had to live with that authored decision. As Ray Muzyka, then head of BioWare stated in an interview: "Sometimes, in some of our games, we are going to have a defined character with a more defined view" (John, par. 9), insisting that Shepard's sexuality was something that they wanted to control as the authors of the game.

While social media campaigns were not as prevalent then as they are now, players were quick to condemn BioWare's decision to impose this aspect of representation onto them and found ways to regain agency over the way they wish to be represented in the game. The most significant reclamation of agency came from players who went into the game files and modified them so that gay and lesbian romances were now possible. Although this simply entailed tricking the game into thinking that a male Shepard was female or that a female Shepard was male, it allowed players to pursue same-sex relationships in the first two *Mass Effect* games and feel as if their sexual identity was as legitimate as the ones that BioWare chose to include in the game themselves. Perhaps seeing the demand for same-sex relationships in their game, the designers of BioWare went back on their insistence of having a "defined character" and designed *Mass Effect 3* with various same-sex options in mind. In fact, a character named Kaiden, who was straight in the first *Mass Effect*, was changed to be bisexual in *Mass Effect 3* and became available for

Shepards of either gender to date. Much like how the ending of *Mass Effect 3* made some players feel as if their expectations of narrative agency were betrayed, the first two *Mass Effect* games alienated some players because expectations of representational agency were betrayed.

While players were able to shape their version of Shepard into whatever they desired, the fact that the game locked them out of choosing Shepard's sexuality made them feel as their identities were being overridden by the game and its designers. In games such as the *Uncharted* series, players are willing to accept that Nathan Drake is straight and will eventually marry Elena, the female protagonist in the series, because there is no expectation of representational agency on the player's behalf. The player accepts that Nathan Drake is a straight, white, American male in his 30s, as defined by the writers at Naughty Dog. At no point are players given the opportunity to change Drake's race or gender, nor are the *Uncharted* games designed to be interactive narratives in which the player can choose a specific narrative path. Players who choose to play *Uncharted* understand that interactive choices come via the combat mechanics and that creative director Amy Hennig sets the story itself in stone. However, when a designer does offer some aspect of choice to the player in terms of how the protagonist will be depicted in the game, then the player will come to expect to be able to define every aspect of their in-game avatar.

It is worth noting that the first game of BioWare's other major franchise, *Dragon Age: Origins* (2009), features same-sex romance right from the beginning. However, the second game in the series, *Dragon Age II* (2011), perhaps went too far in not clearly defining or setting limits in their game world as it inadvertently made nearly every single party member in the game bisexual. Functionally, the various party members reacted to the romantic advances of the player the same way, regardless of the player character's gender. Rather than have a sexual identity,

these party members had no sexual identity whatsoever and became whatever sexual orientation that player wanted them to become. While this solution certainly gives players affordances that were missing from the first *Dragon Age*, where certain characters were definitively heterosexual and thus not possible romantic partners for the player, it also creates a fictional context where sexuality as an aspect of a person's unique identity is completely lost. One might suggest that in *Dragon Age II* sexuality is simply a choice, and that gay men might be attracted to women if the right person came along. Given that David Gaider defended the inclusion of same-sex romance in the series by suggesting that detractors came from a position of "privilege" (Fahey, par. 13), one would expect that this is not the interpretation of sexuality that the writers of *Dragon Age II* had in mind when designing the game.

In fact, completely catering to a player's desire for representational agency may dramatically affect a game's interpretation and compromise a designer's vision. Atlus' *Shin Megami Tensei: Persona 3* (2006) is a game that is about the power of personal relationships, that reaching out to one's friends and strengthening friendships gives one power that can not be found in a conventional weapon. As a game, *Persona 3* is a RPG with conventional RPG mechanics. The player has various stats that can be improved by gaining experience or by equipping certain pieces of equipment. But the game also had a unique feature called the "Social Link" or "S-Link". While the player might be able to kill dozens of monsters in order to gain experience and increase their health, S-Links can only be improved by talking to certain characters in the game and becoming friends with them. Improving one's S-Links unlocks the ability to create more powerful Persona, summoned creatures that help the player in combat, and as such is an integral part of the game. Clearly, the developers wanted players to understand that *Persona 3* is a game that suggests that the bonds of friendship are as important as one's physical

abilities when stepping into a dungeon in order to save the world. The ability to relate to other people is just as powerful as being able to swing a sword.

While the player could improve S-Links by becoming friends with characters in the game, the player could also improve S-Links by choosing to date certain characters as well. In the context of the game's design, friendship and romance are synonymous and both may lead to a better relationship between player and the other characters. To better simulate reality, in its initial release *Persona 3* penalizes players who were polygamous and tried to date several characters at the same time. Much like being caught cheating in the real world would have consequences on one's relationship, if a player tried to date two characters at the same time, one or both of the characters would inevitably find out and end their relationship with the character. Mechanically speaking, this means that the friendship is broken and the S-Link progress with that character is set back to zero. Given that the game is designed upon strengthening relationships, such a consequence can be devastating to a player's progression. In any other RPG, this loss of character progression could be considered the equivalent of suddenly dropping several levels or losing rare gear. The consequences of infidelity are designed to mirror the real world, as divorces in the real world cause a similar amount of economical strife.

However, perhaps because some players wanted to be able to date multiple characters at once, the subsequent re-release of the game, *Shin Megami Tensei: Persona 3 FES* (2007), completely removed the consequences of being caught cheating with another character. The player could date anyone and everyone in the game without fear of retribution from the characters or losing their S-Link progress. While this decision makes the game easier for players who wanted to be polyamorous, it also compromises the original intent of the game, as players could lie to the other characters in the game about their relationship status and still maintain their

relationship. In fact, one might read the game as suggesting that lying to other people in the game and cheating on them is the best way to maintain relationships and improve one's social standing. One can only assume that this is not how the designers would want their game to be interpreted.

Indeed, the designers would address this particular problem in the sequel, *Shin Megami Tensei: Persona 4* (2008). While *Persona 4* would also allow the player to date multiple characters without any consequence, the remake of the game, *Shin Megami Tensei: Persona 4: Golden* (2012), would re-introduce a penalty for players who chose to be polyamorous. Although the penalty would not be as harsh as the one in *Persona 3*, in that the player would not be penalized via the game's mechanics and lose any S-Link progression, the player is forced to watch a story cutscene in which each of the characters that the player cheated on confronts them on Valentine's Day. The characters continue to fight with the player in the game, but in the story, the player is forced to deal with the fact that they have toyed with the emotions of these characters that placed their trust in them. While the player still has the same statistics in the game, presumably the designers hoped that these cutscenes would at least make the player think about how it would feel to be lied to by a person that they loved. In this way, the designers found a way to allow the player to choose to date multiple characters at the same time, but also penalize them for doing so. Although this solution may not return the game to its original incarnation in *Persona 3*, the authorial intent of the designers is clear: infidelity has its consequences.

Affordances in representation must properly balance between the player's desire to choose how their character is represented in the game and the game designer's desire to tell a specific story with a specific theme. For example, Obsidian Entertainment's *Fallout: New Vegas* (2010) incorporates sexuality into its character creation, allowing players to essentially choose

their character's sexual identity in the game right from the beginning. However, *Fallout: New Vegas* does not simply make sexuality a toggle like it (and most other RPGs) does with gender. Instead, the game incorporates sexuality within its game mechanics, making a character's sexuality a part of the game's rule set. A key part of *Fallout: New Vegas*'s roleplaying system involves the player choosing special perks as they gain levels. These perks allow the player to further customize their character to be proficient at certain aspects of the game. Some perks might increase a player's aptitude with laser weapons, while another might make the character more charismatic and able to talk their way out of combat entirely.

The two perks in the game that affect the character's sexuality are "Confirmed Bachelor" and "Cherchez La Femme". The first perk is only available for players who choose to play as a male character, and the second perk is only available for female characters. The in-game explanation for both is as follows: "In combat, you do +10% damage against [male/female] opponents. Outside of combat, you'll sometimes have access to unique dialogue options when dealing with the same sex". The first part of the description is self-explanatory – picking Confirmed Bachelor will allow the player to deal extra damage against male opponents, while picking Cherchez La Femme will allow them to deal extra damage against female opponents. The second part of the description, the fact that there are "unique dialogue options", is where the character's sexuality factors into the game's narrative. If a player chooses Confirmed Bachelor, they will be able to flirt with certain men in the game, which may give them access to areas or information that a player without the perk will not be able to obtain. In essence, the player is choosing to tell the game that they wish to play as a gay character, and the world reacts to the player's choice accordingly. Unlike *Dragon Age 2*, this does not mean that all men in the world are bisexual – there will be straight characters that will simply not respond to the player's

flirting, if the option to flirt even presents itself.

What makes this system interesting is that there are also corresponding perks for players who choose to play as straight characters – “Lady Killer” and “Black Widow” – and their descriptions serve as the opposite of the two perks mentioned previously: “In combat, you do +10% damage against [female/male] opponents. Outside of combat, you'll sometimes have access to unique dialogue options when dealing with the opposite sex”. Again, only male characters can choose to be Lady Killers, and only female characters can be Black Widows, and the same bonuses apply. However, if a player so chooses, they can pick both perks and receive both of their benefits. In this case, a female character with *Cherchez La Femme* and *Black Widow* would be able to flirt with women and men, effectively becoming bisexual. Of course, a player could choose to have neither perk and be a character that is unable to flirt with either gender. For a player who might be choosing to play as a character that lacks the ability to read social cues, but instead is more proficient in some other area, this is a perfectly valid option as well. *Fallout: New Vegas*, then, is a game that effectively leverages the desire for player choice in a manner that is consistent with the game world. The player understands that there are both straight and queer characters in this universe, and depending on the player’s choice of sexual orientation, these characters will respond to the player’s character accordingly. Players are able to choose the specific representation that they desire, while Obsidian Entertainment is able to create a consistent and believable world that facilitates that representation.

In a similar manner, Atlus’s *Catherine* (2011) incorporates representation in a manner that integrates it closely with the story that they want to tell. Where the *Persona* series had problems trying to reign in a player’s ability to commit infidelity in a story about earning the trust of the other characters in the game, *Catherine* is a game focused entirely on a single

relationship and the anxieties that a man in a long-term relationship may have. The player-character in *Catherine* is a man named Vincent who is in a committed relationship with a woman named Katherine. Like most men who are afraid of commitment, Vincent is suddenly struck with anxiety when Katherine suggests that they should get married. Rather than have a serious conversation with her about their future together, Vincent chooses to avoid talking to her and decides to hide at the Stray Sheep Bar instead. There he meets Catherine, a woman who represents everything that Katherine is not – young, fun, and most importantly, not interested in commitment whatsoever. Vincent spends the night with Catherine, and in doing so, is drawn into a larger plot involving the mysterious murders of men whose only connection to each other is the fact that they cheated on their partners. The game itself is split into two parts: the core gameplay is centered on block climbing puzzles which are contextualized as nightmares that Vincent experiences as he decides between Katherine or Catherine, and the player must complete these puzzles in order to progress through the story. The other part of the game involves talking to people and answering what are essentially personality quizzes.

Rather than simply have the player choose to commit to Katherine by marrying her or run away with Catherine, the game uses these personality quizzes to test where the player stands on a variety of issues. These questions range from those that question the player's stance on relationships: "Have you ever cheated before?", and "Can money buy you love?", to those that are more irreverent: "Do you carefully choose your underwear each day?" and "If you were suddenly naked in public, where would you hide?". Each of these questions has two possible answers, and these answers fall into two categories: "Order" or "Chaos". If a player answers to these questions fall more on the "Order" side of the spectrum, then the game will conclude that the player wants Vincent to commit to Katherine and marry her. If the player's answers fall more

toward the “Chaos” end of the spectrum, then the game concludes that the player wants Vincent to run away with Catherine. If the player’s answers fall somewhere in between these two extremes, then the game assumes that Vincent will choose neither woman and wants to be alone instead. In this way, the game is able to use how the player chooses to represent himself or herself in the game to make a point about their feelings toward commitment and infidelity. While the game gives players affordances to choose their own fate, the game designers are still able to comment on the nature of committed relationships in general. By closely integrating how the player chooses to represent themselves, through Vincent and the personality quizzes, with the game’s story, the game can still express authorial intent on behalf of the game designers but also offer players the freedom to choose their own story.

One final example involves the recent trend of RPGs that use morality systems as part of their storytelling. *Baldur’s Gate*, *Mass Effect*, *Dragon Age*, *Fallout 3*, *Fable 2*, and many other games allow the player to roleplay in the game by having them choose between acting good or acting evil. To use a generic example, a game might have the player find a wallet on the ground and then present the player with two options: they can try to find the owner’s wallet and return it to them, or they can simply keep the money in the wallet and throw the wallet away. By making a series of these choices throughout the game, the player is able to craft a character that the game considers either good or evil and presents a story based on their moral alignment. While morality makes for an interesting method of creating branches in a story, as these games continued to iterate on this method of interactive representation, they slowly created systems where ultimately the player had no choice in the matter whatever, if they wanted to play a mechanically and narratively consistent game.

A game designer might offer dozens of these binary moral choices throughout their game,

and the player is allowed to choose in each instance whether to be good or evil. However, in doing so, the designer creates the possibility of ludonarrative dissonance. If a player chooses a representation that constantly shifts between being a saint and being a sinner, they essentially create a character that is psychotic. Most of these games are designed based on the assumption that the player will consistently pick choices that fall under one alignment or the other. If a player has been consistently good for half the game and suddenly chooses to steal and murder, the game is not designed to properly react to the player's sudden change in representation and the characters in the game world will continue to act as if the player's character is a hero. The game designers trust that the player will not act in a manner that breaks the game's fiction, but it does nothing to prevent the player from doing so. While the player is at fault for choosing a representation that may break their suspension of disbelief, it is also the designer's fault for not accounting for this outcome as a possibility.

In a similar manner, the mechanics in these games always push the player toward choosing one alignment or the other in order to receive the in-game bonuses that one alignment confers onto the player. Being consistently good or consistently evil will typically reward the player with statistical bonuses that improve their abilities in combat or allow them to influence other characters through conversation. For example, if a player chooses to play a genocidal murderer, then any characters that they confront will cower in fear and give the player what they want. While this may help curb the player's attempt to break the game's narrative by switching moral alignment throughout the game, it also penalizes players that want to play characters that are ethically nuanced. In order to "win" the game, the player has no choice but to be perfectly good or consistently evil, with no room for anything in between. Instead of offering the player the ability to choose how they would like to represent their character in the game, the designers

force the player to play strictly one way or the other.

Designers have since learned that a binary system that allows the player to be good or evil is too simplistic and does not handle all the possible representations of morality that the player might choose to perform in their game. As such, Obsidian Entertainment's *Alpha Protocol* (2010), whose main character is a government agent named Michael Thorton tasked to stop a terrorist plot against America, assumes that the player is naturally good. Instead of giving the player the choice between good and evil, the designers chose to let the player act in three predetermined attitudes that the one designer described as a choice between acting like "Jack Bauer, James Bond, Jason Bourne" (Tito, par. 2). This allows the player to choose which archetype to perform as depending on how they wanted to respond to a situation, rather than be forced to privilege one particular representation over the other. CD Projekt RED's *The Witcher 2: Assassins of Kings* (2011) eschews morality altogether, allowing the player to make moral decisions based on their interpretation of the choices that the game offers. Rather than tell the player one is a good choice and the other is an evil choice, the player is left to apply these labels to the choices however they see fit. One player might consider a choice to be good, while another player might believe that the same choice is evil, and as a result the game does not shoehorn the player into performing one role or the other. The game assumes that the player is always making the correct choice, and it is up to the player to interpret the moral consequences of their actions on their own. BioWare themselves removed the consequences of moral choices from the *Mass Effect* franchise in the third game, where making a choice raises a single "Reputation" score, regardless of whether the choice was good or evil. By making the representation of morality less mechanical and moving beyond a simple good and evil binary, game designers are able to put forward fictional worlds and game systems that allow the players to explore morality in a more

nuanced and believable manner. By acknowledging that morality isn't as simply black and white and designing systems around that fact, game designers are able to let the player perform their character's morality as they see fit while also maintaining authorship over the game's narrative.

As we can see, the agency of representation is as important as the representation itself. In a medium where players demand choice, even in how their character is represented on the screen, game designers must carefully consider how to offer those choices to the player. If a designer imposes a specific representation on the player, such as allowing them to only play as a heterosexual character, then the player may feel restrained and even offended by the game's lack of affordances. Similarly, if a game gives the player too much leeway in how they want their character to be represented in the game, then the player's choices may override the authorial intent of the game designer, creating a narrative that goes against the designer's original intentions. In order to balance the player's desire to choose how they are represented in a game and a designer's desire to write a game with a specific narrative and theme, it is up to the designer to carefully integrate representational choices into both the game's mechanics and also the game's narrative. By considering all the possible representations that a player might choose and integrating those possibilities into the very design of the game, the game designer is able to create a game where the player feels as if they have full control over their character's representation even if this is not necessarily the case.

External and Embodied Agency

One final aspect of agency that should be addressed is when agency is found beyond the text itself. As alluded to earlier in the discussion of representation in *Mass Effect*, players have the ability to drastically modify a game text in order to create a text that lives up to their own expectations. In *Mass Effect*, this included modifications that allowed a player to play a gay

character, but also modifications that offered greater character customization options, such as different skin tones or hair colours, and also significant story modifications. Some players might choose to modify the rules of the game completely, perhaps tweaking the game to be more difficult because they prefer a greater challenge. Modifying game files, or “modding”, allows players to express themselves in the context of a game world and game engine and become game designers themselves. While BioWare never officially supported modding in *Mass Effect* or *Dragon Age* because they were games targeted at closed console platforms, their previous PC-exclusive games such as *Neverwinter Nights* (2002) (via the Aurora toolset) offered players the opportunity to create stories and game modules within the *Dungeons & Dragons* franchise. Perhaps the most dramatic example of player modding can be found in Obsidian Entertainment’s *Star Wars: Knights of the Old Republic II: The Sith Lords* (2004), which was released with significant narrative content missing from the game. Dedicated fans looked into the game’s files and discovered this narrative content was in fact still in the game but was made inaccessible to the player. Upon discovering these hidden files, which might be compared to an author’s early drafts of a novel, these players took it upon themselves to use these files and complete the game themselves. Seven years after the game’s release, these modders released *The Sith Lords Restored Content Mod*, restoring this cut content back into the game and offering fans the chance to play the game as the designers had originally intended.

Valve Corporation’s *Steam* platform now includes a series of tools known as *Steam Workshop*, which allows game designers to open up their games to the player community for the purposes of creating modifications or “mods”. Valve’s own games, *Team Fortress 2* (2007), *Counter-Strike: Global Offensive* (2012), and *Dota 2* (2013), not only allow players to create custom content for those games, but also allows them to sell their custom content to other players

for profit. As Craig Pearson reports, “Team Fortress 2 and Dota 2 enable contributors to earn money from their creations, leading to some modders earning a six-figure income” (par. 1). The ability to openly modify a game and sell those modifications allows a player to take the next step in claiming agency over a game by becoming a game designer himself or herself. While these are more mechanical and cosmetic modifications, games such as Bethesda Softworks’ *The Elder Scrolls V: Skyrim* (2011) and Harebrained Schemes’ *Shadowrun Returns* (2013) also feature *Steam Workshop* integration, allowing players to create and share their own custom story content within those two game worlds. Until Amazon’s recently launched *Kindle Worlds* initiative, which allows fans to author stories in well-known franchises and sell them to other fans, games have been the only medium to allow fans to contribute to a game’s production and design in a meaningful, and profitable, manner.

Another interesting aspect of external agency is found in the fact that video games are also pieces of software. Just as iPhone users have become accustomed to updating their phone’s version of iOS, video game players understand that games are also constantly evolving texts that can be changed at any time. Most changes to a game, deployed through patches, are typically technical or mechanical in nature. For example, a game may not work properly with a specific model of GPU when initially released, and so the designer must fix the issue by modifying the game files and sending those modifications to the player base. Such a patch is similar to Disney being forced to recall copies of *The Little Mermaid* on Blu-ray in 2013 because of a production error.¹⁹ The other common type of patch involves changes to a game’s rules that can affect how the game is played. Players typically have some input into these types of patches inasmuch as they will offer feedback to the game designer and ask them to make rule changes to a game. For

¹⁹ Although no official press release was issued, the news was widely reported in articles such as “The Little Mermaid Blu-ray Disc Exchange Program”.

example, some sequences in *Assassin's Creed III* (2012) were too difficult for some players to the point where these players were unable to complete the game. The designers patched the game so that these sequences were easier, allowing those players to finish the game properly.²⁰

There have also been extraordinary cases in which players demanded significant changes to a game that necessitated changing a game's entire story. The aforementioned changes to *Mass Effect 3*'s ending are perhaps the most infamous example of external pressure on behalf of players leading to designers patching in a new story into the game. The violently negative reception to the game's ending would be as if playgoers rioted during the first performance of *Romeo and Juliet* and demanded that Shakespeare write a happy ending for the play. But since games are not fixed objects, but pieces of software that can be updated, players can issue these demands and designers can choose to respond to them. Bethesda Softworks' *Fallout 3* (2008) featured a paid piece of downloadable content, or DLC, to the game that dramatically changed the game's original ending. When *Fallout 3* was released, the game was written with several definitive endings in mind, including many which left the player's character for dead. In response to this particular ending, some players pointed out a significant plot hole in the ending that they felt ruined the game's final moments and complained to the designers. Several months later, the designers released a DLC package called *Broken Steel* (2009), which players could purchase and patch into their game. In addition to adding a whole new story campaign, this add-on package changed the original ending of the game so that the player's character would live regardless of how the game was played when it was originally released. Effectively, through external pressure, players were able to take some ownership over the game's story and convince the designers to change the game.

²⁰ As indicated in the patch notes for the game found at "Assassin's Creed III Thanksgiving Patch [Spoilers]".

Although the player may have a significant impact on a game externally through modifications and patches, the designer can also use the fact that video games are a physical medium. That is, games are texts that require the player to perform physical acts in order for them to be consumed and read. In a very basic sense, players must be able to press the correct buttons on their controller in order to proceed through the game. On the extreme end, with Electronic Sports or “Esports”, players are expected to be able to have quick reflexes and be able to press buttons at an impossibly quick rate. The average *Starcraft II* (2010) player may be able to perform 50-100 actions per minute, but a professional player is expected to be able to perform over 400 actions per minute in order to be competitive. Much like playing a typical sport that one might find at a gym, to play a video game at a high level requires constant practice in order for one to succeed, and players who do not have quick reflexes or are unable to perform hundreds of actions per minute are simply not competitive.

While the average story-based game does not demand the player to be of such a high caliber, game designers can still use the fact that playing a game is a physical experience in order to demand agency of the player’s physical body. The aforementioned examples from *Metal Gear Solid 4* and *Heavy Rain* depict the various ways designers choose to challenge the physical limits of the player. If the player wants to succeed in the game and have agency over it, then the player must demonstrate that they are physically able to do so. As such, the designer can test the limits of the player’s body as a way of demanding agency from them. However, not all games need to overtly physically challenge the player in such an overt manner. For example, Capcom’s *Resident Evil 4*’s controls are notorious among players as being constrained and old-fashioned simply because the game does not allow the player to aim their character’s weapon and walk at the same time. Without the safety of being able to walk away from an enemy while shooting at

them, or even employing a basic strategy such as circle-strafting (which involves circling around an enemy while firing one's weapon at the enemy), the player is suddenly constrained by their own physical ability with the controller. As a horror game, *Resident Evil 4* is very much about limiting player agency in order to create tension. Indeed, where as other games such as those in the *Call of Duty* franchise want the player to feel as if they are a powerful soldier, *Resident Evil 4* tries to make the player feel vulnerable and weak. Since the only way the player is able to shoot their gun at an enemy is to stand still and slowly aim at the Ganados (or zombies) rushing toward them, the player feels imperiled because of the physical limitations imposed on them. If a player is unable to move their controller fast enough to aim at the Ganados, they will either be forced to lower their weapon and run away or be overwhelmed by the enemy swarm. Of course an expert player, one who has physical mastery over the controller, would be able to aim at these enemies as quickly as possible and not feel any tension at all. But the average player will physically struggle with their controllers and be constantly pressured by the game's enemies. This particular restriction of agency relies on the fact that games are an embodied and physical experience, and that players must be able to physically perform actions in order to play a game. In some cases, this reliance on the physical ability of the player can prevent some players from completing the game at all if the player does not have the quick reflexes (or twitch reflexes) necessary to respond to the game's demands. Typically, a game designer will include the ability to select the difficulty of the game so that players can choose a game experience that allows for them to maintain a flow experience suited to their physical ability.

Game designers might also use time to limit a player's agency and create tension. Capcom's *Dead Rising* (2006) series is hinged upon the fact that they are as much time management games as they are third person action games. Unlike most games where time is an

uncertainty, in *Dead Rising*, the game runs in real time and requires the player to complete tasks according to a strict schedule. A character might need help at 4:00 p.m. and if the player is unable to reach that character at that time, the player will fail that mission and that character might die. By keeping the player on a strict timeline, the game demands that the player be constantly moving and not waste any time traversing through the game's world. Again, the player is expected to be able to memorize the best routes through the game world and also be able to physically move their character through that world as efficiently as possible, while also keeping an eye on the time of day in the game. The player is not allowed to take any moment of the game for granted, because a wasted minute early in the game may mean failure hours later. Other games might allow the player to stand still in the game's environment, perhaps to admire the technical details of the game world, or perhaps to simply take a bathroom break. *Dead Rising* is a game that puts the player under constant pressure, taking away the player's expectations of agency over the progression of time in a game. Indeed, games such as *Dark Souls* (2011) take this idea of limiting agency through time further by not allowing the player to pause the game. Much like a live concert or sporting event, which will continue on even if one chooses to leave their seat to go to the concession stand, the game world of *Dark Souls* continues to run in the background even if the player is looking through their inventory or through the game's menu settings. The game demands the player's complete attention, and the player may be penalized if they choose to do something else while playing the game.

Of course there are other more novel ways that a game can manipulate agency through the player's physical body. Games such as Nintendo's *Wii Sports* (2006) and Harmonix Music Systems' *Dance Central* (2010) require the player to be able to physically perform the actions depicted on the screen in order to succeed at the game. Similarly, Harmonix Music Systems'

Rock Band 3 (2010) requires players to be able to either sing, play a guitar, bass, keyboard, or a set of drums in order to successfully perform a song. Konami's *Boktai: The Sun is in Your Hand* (2003) featured a photometric light sensor on the game cartridge that measured the amount of sunlight that the player was exposed to. The basic idea being that Django, the main character in the game, has a weapon that is powered by solar energy. As such, if the game player did not physically go outdoors with their game and expose the cartridge to the sun, then Django's weapon would be underpowered and the player will find that the game is more difficult to complete.

All of these examples rely on the fact that the player has a physical body that can be acted upon by the game designer. If players can gain agency over a game by making demands of designers or simply modifying the game themselves, then designers are able to impose a particular narrative onto the player by limiting the agency of the player's actual body. In the same way that a dramaturge will study the performance history of a play in addition to the text of the play itself, game critics and scholars should also remember that games are objects that are acted upon by both the game designer and the player. As texts, they are not fixed objects once they are published and released into the world. As reading experiences, they demand the physicality of a player's mind and body. A game text is as much the lines of code that make up a game as much as it is the designer's authorial intent and the player's physical manipulation of the game's controls.

Conclusion

This dissertation serves several purposes. One purpose is to continue and expand on the work of scholars who have attempted to codify how games convey narrative meaning to the player through interactivity. By drawing on the taxonomy described in Chapter 1, along with the notion of bounded agency, the notion of moments of agency being fundamental units of meaning-making is illustrated through an extensive, although not exhaustive, examination of how designers can use moments of agency and interactivity to create meaning. This attempt to develop a grammar of interactivity adds to the earlier attempts to describe individual units of agency by greatly expanding the scope of this language. That is, borrowing terms used by Bogost described in Chapter 1, games may use “unit operations” in order to produce a “procedural rhetoric”, but this formalization of the language of interactivity only describes the very basic structure of this ever evolving language. This dissertation, in Chapter 2, aims to expand on the theorization of these basic units of interactivity by describing many of the possible types of manipulated agency; each with its own specific rhetorical intent meant to invoke a particular meaning or affective experience. If the shot is the basic unit of the film language, then the close-up or the wide-shot are examples of the different types of shots that produce a specific and distinct meaning in a film.

The second purpose is to emphasize the importance of the role of the game designer in creating meaning in a video game. As a result of the early ludology/narratology debates during the nascent period of video game scholarship, a great emphasis has been placed on the notion that the player is the author of his or her own video game experience. Chapters 3 and 4 of this dissertation serve to illustrate how video game narratives are carefully crafted experiences, and as a result, the game designer has as much an important role in the narrative direction of a video

game story as any other author in any other medium. As much as players find themselves directing a game experience through their manipulation of a character or objects in a game world, what can't be forgotten is that the game designer directs the player through various limits placed on player interactivity through the grammar and rhetoric described in Chapter 2. As long as the game designer provides enough interactivity to maintain the experience of flow, the player will believe in the illusion that they are the ones controlling the game's narrative and not notice that the agency that they are experiencing is bounded.

More specifically, this dissertation makes the case for a reading of games that approaches the limiting of player affordances as a tool that can also be used improperly by designers. When successful, bounded agency allows for a designer to craft an experience that both satisfies a player's desire for control over the narrative and a designer's wish to tell a specific story with specific characters, plots, and themes. But when a designer fails to use bounded agency properly, the gameplay elements and the narrative elements of a game often come into conflict, creating a breakdown in the player's suspension of disbelief that is unique to video games. Examining both the successful and unsuccessful uses of bounded agency helps illustrate the mechanics of storytelling in games, simultaneously serving to reinforce this dissertation's assertion that units of agency or interactivity are one of the primary sources of creating narrative meaning or an affective experience in a game. This discussion of the specific edge cases of bounded agency not only allows for an understanding of the limits of the grammar of interactivity, but also illustrates the important and central role that the designer has in properly deploying this grammar for the purposes of telling a successful interactive story. This particular discussion also serves to provide examples that game designers might consider when they are integrating interactive narratives into their games, and also serves as a guide for players to better understand why they might find

a particular game's use of interactivity enjoyable or frustrating.

A third purpose that follows directly from this point about the authored experience of games is to begin to single out game studios and individual game designers as auteurs. As the medium matures and individuals begin to both develop a track record and also speak about their own design philosophies at public conferences, understanding who the designers are can inform how player interaction and agency will operate in a game before it is even made. Although this dissertation doesn't explicitly position itself as a study of individual designers, the naming of designers and studios will help contribute to the recognition of games as a medium for auteurs. There is an understanding that the lead designers of some of the games discussed in this dissertation - Toshiro Nagoshi (Sega), Hideo Kojima (Kojima Productions), Shigeru Miyamoto (Nintendo), Ken Levine (Irrational Games), Jason Jones (Bungie), Vince Zampella (Infinity Ward), Amy Hennig (Naughty Dog), David Cage (Quantic Dreams) - all have distinct and unique approaches to how story should be conveyed to the player. Furthermore, it is possible to trace influences in design from one designer to the next. Of course countless designers owe their careers to Miyamoto, but more specifically, one can see the direct influence that *BioShock* (2007) had on *Gone Home* (2013), particularly because members of The Fullbright Company worked on the sequel to *BioShock* before forming their own studio. It is important to recognize that the voices of game designers are distinct and influenced by their particular cultural context, as are artists in every medium, and hopefully this dissertation has at least begun to contribute to this particular understanding of games and their creators.

It should be noticed that this dissertation has only covered a small sample of the thousands of games and game experiences that are available in the world at large. For example, player agency becomes complicated when games that are multiplayer are considered, because

suddenly the player is not only wrestling for control of the game with the game's designer, but with other players as well. Designers of Massively Multiplayer Online games or MMOs approach game design and storytelling in a completely different manner than designers working with single player games, as they must account for sociological factors in addition to the issues of interactivity discussed in this dissertation. In the same manner, there are single player games where story is simply not an important part of the gameplay experience. For example, in games such as Alexey Pajitnov's *Tetris*, the emphasis is placed on learning the affordances created by the ruleset. Player agency and bounded agency have an important role in these types of games as well, but much like in MMOs, they serve a different function focusing specifically on the actual rules of the game instead of on the meaning the rules might create.

Similarly, given that the video game as a medium is still relatively young, the conventions of game design are constantly evolving. As technology improves, game designers have access to more tools to create new types of games that were unfathomable a decade ago. While smartphones with constant online access are ubiquitous in 2015 and mobile game designers can take advantage of that fact by designing short game experiences that players can enjoy while waiting in a line or commuting on a bus, games like *Candy Crush* (2014) and other games based on managing timers simply could not have existed in 2005. With the impending rush to release virtual reality experiences in 2016 and beyond by Facebook with Oculus Rift, Sony with Playstation VR, and Valve with Vive, the gaming industry is on the cusp of another technological shift that will dramatically change the way that game designers create games and players interact with games. But it's important to note that although the experience of playing a game will change, the role of interactivity in creating meaning and providing an affective experience to the player will always remain the same. Whether one is playing a game on

television screen, a phone or tablet screen, or with a virtual reality headset over their eyes, the basic principles of the grammar of interactivity remains the same. Yes, designers have to build games around the limitations of the user interfaces of the platforms they are working on, but the discrete moments where the player's expectation of interactivity can be manipulated for the purposes of meaning creation remain the same. For example, let's briefly consider the game *Lifeline...* (2015), an iOS game designed for the Apple Watch. *Lifeline...* is a text-based interactive fiction game in which the player receives a distress signal from an astronaut named Taylor who has crashed on an alien planet. As Taylor's only lifeline to the outside world, the player is asked to find a way to help rescue Taylor from this planet by giving her advice on what she should do at several points in the story. Taylor might ask the player whether she should sleep in the wreck of her crashed ship but risk radiation poisoning from the ship's damaged engine core or outside of the ship but risk freezing to death. The choices offered to the player throughout the game are simple binary choices that lead toward different paths in the game's branching narrative, which is typical of a standard interactive fiction game. What makes *Lifeline...* unique is that the consequences of the player's advice to Taylor are revealed to the player in real time. So after the player tells Taylor where should spend the night, they must wait hours before Taylor contacts them again and reveals the next event in the story. In effect, the game utilizes elements such as simulation in that the considerations of real time play a factor in the outcome of the story. This use of simulation also constrains the player's expectation of agency because in a typical game or interactive experience, the outcome of their decision is relayed to them shortly after they make a choice. Instead, the player is asked to wait a certain amount of time after each choice they make in order to see where the narrative goes next, building tension and anxiety in the player as the only thing they can do after they make a choice is wait for the next push

notification on their Apple Watch to tell them the outcome of their decision. This particular constraint works because the designers can expect that the player who owns a smartwatch will typically wear it for most of the day, meaning that the designer can count on the player being able to receive push notifications at any time and be available to continue the game's story throughout the entire day. If the player tells Taylor to climb a mountain in order to gain a higher vantage point and survey the land, then they must wait the several hours it takes for Taylor to actually climb the mountain in the game. But this isn't a problem because the designer can expect that the player will still have their watch on throughout this entire process and is able to respond when Taylor reaches the summit of the mountain. *Lifeline...* leverages the unique capabilities of the smartwatch by providing an experience that is simply not optimal on another platform, but it still uses the language of interactivity that is found in more traditional home console based games.

One can expect that games designed for the various upcoming virtual reality platforms will also draw on the same language of interactivity. Even though the physical experience of interacting with the game will be completely different, as players will be fully immersed in a virtual world through a VR headset, the grammar of this language of interactivity will remain the same. Designers will still use elements of bounded agency to create crafted narrative experiences that manipulate player expectations in order to create meaning. It is a given that a potential *Call of Duty* game designed specifically for the Oculus Rift will provide a completely different immersive and play experience than *Call of Duty: Modern Warfare* on the Xbox 360. But despite the gap in how the player will interact with a VR version and a home console version of *Call of Duty*, the way that the designer of the VR *Call of Duty* game uses bounded agency to create an affective experience or narrative meaning in their game will not be all that different from how

the designers at Infinity Ward used bounded agency in *Call of Duty: Modern Warfare*. In the 30 years since the release of the Atari 2600 and the Nintendo Entertainment System, we've seen huge leaps in technology so much so that games released today bare very little resemblance to the now rudimentary games that defined the early history of the contemporary video game. But we can see how game designers have continued to develop and rely on using interactivity to provide a bounded experience that offers the player the illusion of choice while still allowing the designer to convey a specific narrative experience. Even though today we can recognize that a game like *Metroid* is not necessarily the most immersive experience because it uses sprite-based graphics with chip tune music and sound effects, we can still understand how the game uses bounded agency in order to create meaning for the player. Looking into the future, as video games develop into virtual reality experiences, augmented reality experiences, and perhaps even holographic experiences, it's clear that the game designers of the future will still rely on a language of interactivity that game designers are using today. The technology and how players interface with that technology will be different, but the basic principles of how meaning is communicated to the player through interactive experiences will still exist.

Regardless of the underlying technology, for the game designer who wants to tell a story in their video game, limitations on interactivity or bounded agency is the language that they can use to shape a game's narrative experience. The history of film has shown that despite the technological advancements over the last century, the language of film remains mostly the same. Although games are constantly evolving, game designers past and present are laying the very foundations of game grammar and rhetoric. Manipulating expectations of agency, or controlling the affordances that the player receives, will always be an integral part of how game designers can convey meaning to the player or create an affective experience. This dissertation does not

aim to be the final word on bounded agency and game narratives, but serves as the basis of the beginning of a continual and ever-evolving discussion of how stories can be told through video games and why it is important that these ideas not be taken for granted.

Works Cited

9:05. Adam Cadre, 2000. Vers 1.11. 24 July 2012.

Aarseth, Espen. *Cybertext: Perspectives on Ergodic Literature*. Baltimore and London: The Johns Hopkins University Press, 1997. Print.

--. "Genre trouble: narrativism and the art of simulation." *First Person: New Media as Story, Performance, and Game*. Ed. Noah Wardrip-Fruin & Pat Harrigan. Cambridge: The MIT Press, 2004. 45-55. Print.

Alexander, Leigh. "The Life-Changing \$20 Rightward-Facing Cow." *Kotaku*. Gawker, 10 March 2011. Web. 04 April 2015. <<http://kotaku.com/5846080/the-life-changing-20-rightward-facing-cow>>.

Alpha Protocol. Irvine, California: Obsidian Entertainment, 2010.

Assassin's Creed. Montreal, Quebec: Ubisoft Montreal, 2007.

"Assassin's Creed III Thanksgiving Patch [Spoilers]". *Ubisoft Forums*. Ubisoft, 15 Nov. 2012. Web. 29 Sep. 2015. <<http://forums.ubi.com/showthread.php/726389-Assassin-s-Creed-III-Thanksgiving-Patch-Spoilers-Forums?s=bcfd6bea25f7875f0393107fb14f42b8>>.

Assassin's Creed III. Montreal, Quebec: Ubisoft Montreal, 2012.

Amnesia: The Dark Descent. Helsingborg, Sweden: Frictional Games, 2010.

Bachman, Justin and Joshua Brustein. "A Short History of Zynga's Rapid Decline." *Bloomberg Businessweek*. Bloomberg L.P., 4 June 2013. Web. 1 Sep. 2014. <<http://www.businessweek.com/articles/2013-06-04/a-short-history-of-zyngas-rapid-decline>>.

Battlefield 4. Stockholm, Sweden: EA Digital Illusions CE, 2013.

Beyond: Two Souls. Paris, France: Quantic Dream, 2013.

BioShock. Boston: Irrational Games, 2007.

BioShock: Infinite. Boston: Irrational Games, 2013.

“BioWare Announces Mass Effect 3: Extended Cut.” *EA’s BioWare Label*. Electronic Arts, 5 April 2012. Web. 13 Dec. 2013.

<<http://investor.ea.com/releasedetail.cfm?ReleaseID=662095>>.

Bizzocchi, Jim and Joshua Tanenbaum. “*Mass Effect 2: A Case Study in the Design of Game Narrative*”. *Bulletin of Science, Technology & Society*. 32:5 (2012). 393-404. Print.

Bogost, Ian. *Newsgames: Journalism at Play*. Cambridge, Mass.: MIT Press, 2010. Print.

---. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, Mass.: MIT Press, 2007. Print.

---. *Unit Operations: An Approach to Videogame Criticism*. Cambridge, Mass.: MIT Press, 2006. Print.

Boktai: The Sun is in Your Hand. Tokyo, Japan: Konami, 2003.

Braid. Jonathan Blow, 2008.

Breckon, Nick. “Monkey Island Creator Ron Gilbert on Today's Games Industry, Art and the 'Freedom to Fail'.” *Shacknews*. Shacknews LTD, 04 September 2009. Web. 20 September 2014. <<http://www.shacknews.com/article/60339/monkey-island-creator-ron-gilbert>>.

Buggyiscool. “Braid: Star 2-2 The Cloud Bridge”. Online Video Clip. *YouTube*. YouTube, 13 Aug. 2009. Web. 29 Sep. 2015. <<https://www.youtube.com/watch?v=kSCDD3ygYrQ>>.

Burch, Anthony. “GDC 10: the Holocaust board game.” *Destructoid*. ModernMethod, 03 Mar. 2010. Web. 20 Dec. 2012. <<http://www.destructoid.com/gdc-10-the-holocaust-board-game-166862.phtml>>.

Caillois, Roger. *Man, Play, and Games*. New York: Free Press, 1961. Print.

- Catherine*. Setagaya, Tokyo, Japan: Atlus, 2011.
- Call of Duty*. Los Angeles, California: Infinity Ward, 2003.
- Call of Duty: Advanced Warfare*. Foster City, California: Sledgehammer Games, 2014.
- Call of Duty 4: Modern Warfare*. Los Angeles, California: Infinity Ward, 2007.
- Call of Duty: Modern Warfare 2*. Los Angeles, California: Infinity Ward, 2009.
- Castlevania*. Tokyo, Japan: Konami, 1986.
- Cart Life*. Richard Hofmeier, 2011.
- Counter-Strike: Global Offensive*. Kirkland, Washington: Valve Corporation, 2004.
- Cow Clicker*. Ian Bogost, 2010.
- Crosscade. "Mass Effect 3 - Ending Movie Comparison - All the Colors". YouTube. 14 Mar. 2012. Online Video Clip. 29 Sep. 2015.
<<https://www.youtube.com/watch?v=rPelM2hwhJA>>.
- Csikszentmihalyi, Mihaly. *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial, 1990. Print.
- Dance Central*. Cambridge, Massachusetts: Harmonix Music Systems, 2010.
- Dark Souls*. Tokyo, Japan: From Software, 2011.
- Dead Rising*. Osaka, Japan: Capcom, 2006.
- Deuber-Mankowsky, Astrid. *Lara Croft: Cyber Heroine*. Minneapolis: University of Minnesota Press, 2005. Print.
- Dance Central*. Cambridge, Massachusetts: Harmonix Music Systems, 2010.
- DayZ*. Prague, Czech Republic: Bohemia Interactive, 2013.
- Diablo III*. Irvine, California: Blizzard Entertainment, 2012.
- Donkey Kong*. Kyoto, Japan: Nintendo, 1981.

Doom. Mesquite, Texas: id Software, 1993.

Dota 2. Kirkland, Washington: Valve Corporation, 2013.

Dragon's Lair. El Cajon, California: Cinematronics Incorporated, 1993.

Dragon Age: Origins. Edmonton, Alberta: BioWare, 2009.

Dragon Age II. Edmonton, Alberta: BioWare, 2011.

Draw Something. New York City, New York: OMGPop, 2012.

Dutton, Fred. "Del Toro, Levine speak out against cutscenes." *Eurogamer*. Gamer Network, 17 Nov. 2011. Web. 20 Mar. 2014. <<http://www.eurogamer.net/articles/2011-11-17-del-toro-levine-speak-out-against-cutscenes>>.

Eat Lead: The Return of Matt Hazard. Morrisville, North Carolina: Vicious Cycle Software, 2009.

"Episode 21 - Narrative in Games." *Games, Dammit!* 03 Aug 2012. *Iup.com*. Web. 10 Sep. 2014 <<http://www.podtrac.com/pts/redirect.mp3?http://podcast.the1upnetwork.com/flat/GamesDammit/GD080312.mp3>>.

Eskelinin, Markku. "Towards Computer Game Studies". *First Person: New Media as Story, Performance, and Game*. Ed. Noah Wardrip-Fruin & Pat Harrigan. Cambridge: The MIT Press, 2004. 36-44. Print.

Enemy Zero. Tokyo, Japan: WARP, 1997.

Fahey, Mike. "Dragon Age II Writer Eloquently Defends The Game's Sexuality Balance." *Kotaku*. Gawker, 24 March 2011. Web. 04 April 2014. <<http://kotaku.com/5785306/dragon-age-ii-writer-eloquently-defends-the-games-sexuality-balance>>.

Façade. Michael Mateas and Andrew Stern, 2005.

- Fallout 3*. Rockville, Maryland: Bethesda Game Studios, 2008.
- Fallout 3: Broken Steel*. Rockville, Maryland: Bethesda Game Studios, 2009.
- Fallout: New Vegas*. Irvine, California: Obsidian Entertainment, 2010.
- Final Fantasy: The Spirits Within*. Dir. Hironobu Sakaguchi and Moto Sakakibara. Columbia Pictures, 2001. Film.
- Final Fantasy VII*. Shinjuku, Tokyo, Japan: Square Product Development Division 1, 1997.
- Flower*. Los Angeles, California: Thatgamecompany, 2009.
- Gerstmann, Jeff. "Call of Duty 4: Modern Warfare Review." *Gamespot*. CBS Interactive Inc. 06 Nov. 2007. Web. 10 Sep. 2014. <<http://www.gamespot.com/reviews/call-of-duty-4-modern-warfare-review/1900-6182425/>>.
- God of War*. Santa Monica, California: Sony Santa Monica, 2005.
- Gone Home*. Portland, Oregon: The Fullbright Company, 2013.
- Goldman, Steven. "Segregated baseball: A Kaleidoscopic review." *MLB.com*. MLB Advanced Media. Web. 1. Sep. 2014. <http://mlb.mlb.com/mlb/history/mlb_negro_leagues_story.jsp?story=kaleidoscopic>.
- Grant Theft Auto IV*. Edinburgh, Scotland: Rockstar North, 2008.
- Grand Theft Auto: San Andreas*. Edinburgh, Scotland: Rockstar North, 2004.
- Grant Theft Auto V*. Edinburgh, Scotland: Rockstar North, 2013.
- Guitar Hero*. Cambridge, Massachusetts: Harmonix Music Systems, 2005.
- Half-Life 2*. Kirkland, Washington: Valve Corporation, 2004.
- Hakuōki: Demon of the Fleeting Blossom*. Shibuya-ku, Tokyo, Japan: Idea Factory, 2012.
- Hall, Charlie. "Call of Duty: Press X to feel something." *Polygon*. Vox Media, 04 Nov 2014. Web. 15 Mar. 2015 <<http://www.polygon.com/2014/11/4/7151865/call-of-duty-press-x->

to-mourn>

Heavy Rain. Paris, France: Quantic Dream, 2010.

Heppe, Abbie. "Metroid: Other M Review for Wii." *G4tv*. G4 Media, LLC., 27 Aug 2010. Web. 20 Dec. 2013. <<http://www.g4tv.com/games/wii/61992/Metroid-Other-M/review/>>.

Hexic. Redmond Washington: Carbonated Games, 2003.

Hocking, Clint. "Ludonarrative Dissonance in Bioshock." *Click Nothing*. 07 Oct. 2007. Web. 20 Nov. 2013. <http://clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html>.

Hofstadter, Douglas R. *Gödel, Escher, Bach: An Eternal Golden Braid*. New York City, New York: Basic Books, 1999. Print.

Hotline Miami 2: Wrong Number. Dennaton Games, 2015.

I Wanna Be The Guy: The Movie: The Game. Michael O'Reilly, 2007.

Jahns, Jeremy. "Mass Effect 3 Ending and Why We Hate It!" YouTube. 13 Mar. 2012. Online Video Clip. 29 Sep. 2015. <https://www.youtube.com/watch?v=4H_A7SeawU4>.

Jesper, Juul. *A Casual Revolution: Reinventing Video Games and Their Players*. Cambridge, MA: MIT Press, 2010. Print.

John, Tracey. "BioWare Explains Why There's No Homosexuality in Mass Effect 2." *Kotaku*. Gawker, 05 April 2010. Web. 10 May 2014. <<http://kotaku.com/5509870/bioware-explains-why-theres-no-homosexuality-in-mass-effect-2/all>>.

Kayatta, Mike. "Gamers Ship 400 Cupcakes to BioWare in Protest of Mass Effect 3." *The Escapist*. Defy Media, LLC., 27 Mar 2012. Web. 29 Sep. 2015. <<http://www.escapistmagazine.com/news/view/116530-Gamers-Ship-400-Cupcakes-to-BioWare-in-Protest-of-Mass-Effect-3>>.

Kelly, Malcolm. "An inside look at Joannie Rochette's brave Olympic odyssey." *CBC Sports*.

CBC/Radio-Canada, 22 Mar 2010. Web. 15 Sept 2015. <

<http://www.cbc.ca/sports/figureskating/an-inside-look-at-joannie-rochette-s-brave-olympic-odyssey-1.887577>>.

Klepeck, Patrick. "Assassin's Creed: Freedom Cry." *Giant Bomb*. CBSi Interactive Inc, 20 Feb.

2014. Web. 20 May 2014. <<http://www.giantbomb.com/reviews/assassin-s-creed-iv-freedom-cry-review/1900-626/>>.

--. "Not Everyone Wants to Be a Pilot." *Giant Bomb*. CBSi Interactive Inc, 22 Oct. 2013. Web.

20 Nov. 2013. <<http://www.giantbomb.com/articles/not-everyone-wants-to-be-a-pilot/1100-4770/>>.

--. "Press X to Experience Feelings." *Giant Bomb*. CBSi Interactive Inc, 5 Nov. 2014. Web. 15

Mar. 2015. <<http://www.giantbomb.com/articles/press-x-to-experience-feelings/1100-5075/>>.

Kollar, Phil. "The Last of Us Review: Dead Inside." *Polygon*. Vox Media, 05 June 2013. Web.

16 September 2014. <<http://www.polygon.com/2013/6/5/4396286/the-last-of-us-review>>

Krahaulik, Mike and Jerry Holkins. "Ambiguitas." Comic strip. *Penny Arcade*. 19 October 2009.

Web. 16 September 2014. <<http://www.penny-arcade.com/comic/2009/10/19>>

Left 4 Dead. Kirkland, Washington: Valve Corporation, 2008.

Lifeline. Tokyo, Japan: Sony Computer Entertainment, Inc., 2003.

Lifeline... 3 Minute Games, LLC, 2015.

LovePlus. Tokyo, Japan: Konami, 2009.

Maniac Mansion. San Francisco, California: Lucasfilm Games, 1987.

Mass Effect. Edmonton, Alberta, Canada: BioWare, 2007.

Mass Effect 3. Edmonton, Alberta, Canada: BioWare, 2012.

Medal of Honor. Los Angeles, California: Dreamworks Interactive, 1999.

Mega Man. Osaka, Japan: Capcom, 1987.

“MEHEM - the Mass Effect (3) Happy Ending Mod - No more star kid, no more deaths and a reunion.” BioWare. EA International (Studio and Publishing) Ltd., 03 Nov. 2012. Web. 29 Sep. 2015. <<http://forum.bioware.com/topic/419665-mehem-the-mass-effect-3-happy-ending-mod-no-more-star-kid-no-more-deaths-and-a-reunion/>>.

MenTaLguY. “Metroid: Other M - The Elephant in the Room.” MenTaLguY. 23 Oct. 2010. Web. 29 Sep. 2015. <<http://moonbase.rydia.net/mental/blog/gaming/metroid-other-m-the-elephant/article.html>>.

Metal Gear Solid 3: Snake Eater. Roppongi Hills, Tokyo, Japan: Kojima Productions, 2004.

Metal Gear Solid 4: Guns of the Patriots. Roppongi Hills, Tokyo, Japan: Kojima Productions, 2008.

Metroid: Other M. Tokyo, Japan: Team Ninja, 2010.

Murray, Janet Horowitz. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Cambridge, Mass.: MIT Press, 1998. Print.

Murray, Soraya. "High Art/Low Life: The Art of Playing Grand Theft Auto." *PAJ: A Journal of Performance and Art* 27.2 (2005): 91-98. Print.

Minecraft. Stockholm, Sweden: Mojang, 2011.

“Mission Failed/Death Messages.” *Call of Duty Wiki*. Wikia, Inc. Web. 20 September 2014. <http://callofduty.wikia.com/wiki/Mission_Failed/Death_Messages>

Neverwinter Nights. Edmonton, Canada: BioWare, 2002.

Nier. Tokyo, Japan: Cavia, 2010.

Ninja Gaiden. Tokyo, Japan: Tecmo, 1988.

Ninja Gaiden. Tokyo, Japan: Team Ninja, 2004.

Ow, Jeffery A. "The Revenge of the Yellowfaced Cyborg Terminator." *Race in Cyberspace*.

Eds. Beth Kolko, Lisa Nakamura, and Gilbert Rodman. New York & London: Routledge, 2000. 51-68. Print.

Pac-Man. Ōta, Tokyo, Japan: Namco, 1980.

Papers, Please. Lucas Pope, 2013.

Pearson, Craig. "Tales from the Steam Workshop: we talk to modelers making six figure sums."

PC Gamer. Future Publishing, 09 Jan. 2013. Web. 14 May 2014. <

<http://www.pcgamer.com/2013/01/09/tales-from-the-steam-workshop-we-talk-to-modelers-making-six-figure-sums/>>.

Penn & Teller's Smoke and Mirrors. Upper Saddle River, New Jersey: Absolute Entertainment.

"Penn Jillette Discusses Unreleased Sega CD Game." *Game Set Watch*. UBM Tech Web, 3 Mar.

2006. Web. 19 Dec. 2012.

<http://www.gamesetwatch.com/2006/03/penn_jillette_discusses_unrele.php>.

Perron, Bernard, ed. *Horror Video Games: Essays on the Fusion of Fear and Play*. Jefferson, N.C.: McFarland & Co., 2009.

Phantom. "MGS4: Big Boss Emblem Walkthrough (with commentary)." Online Video Series.

YouTube. YouTube, 29 June 2014. Web. 29 Sep. 2015. <

https://www.youtube.com/playlist?list=PL927C4752318CE1AD&feature=mh_lolz>

Photo Kano. Shibuya, Tokyo, Japan: Dingo Inc., 2012.

Pocket Monsters. Tokyo, Japan: Game Freak, 1996.

Pong. Sunnyvale, California: Atari Inc., 1972.

Papo & Yo. Montreal, Quebec: Minority, 2012.

Portal. Kirkland, Washington: Valve Corporation, 2007.

Priestman, Chris. "Call of Duty Doesn't Understand Grief, But Then, Who Does?" *Kill Screen*.

Kill Screen Media, Inc. 6 Nov. 14. Web. 15 Mar. 2015. <

<http://killscreendaily.com/articles/call-duty-doesnt-understand-grief-then-who-does/>>.

Prince of Persia. San Rafael, California: Brøderbund, 1989.

Prince of Persia: The Forgotten Sands. Montreal, Quebec: Ubisoft Montreal, 2010.

Privateer 2: The Darkening. Austin, Texas: Origin Systems, Inc., 1996.

Purchase, Robert. "Heavenly Sword is "half-assed"." *Eurogamer*. Gamer Network, 6 Aug. 2007.

Web. 15 Feb. 2014. <<http://www.eurogamer.net/articles/heavenly-sword-is-half-assed>>.

Quantum Conundrum. Redmond, Washington: Airtight Games, 2012.

"Questions about importing your Mass Effect 2 save file to Mass Effect 3." Electronic Arts Inc,

23 October 2013. Web. 20 October 2014. < [http://help.ea.com/ca/article/will-i-be-able-to-](http://help.ea.com/ca/article/will-i-be-able-to-import-a-save-file-from-steam-into-mass-effect-3/)

[import-a-save-file-from-steam-into-mass-effect-3/](http://help.ea.com/ca/article/will-i-be-able-to-import-a-save-file-from-steam-into-mass-effect-3/)>.

Real Sound: Kaze no Regret. Tokyo, Japan: WARP, 1997.

Resident Evil 4. Osaka, Japan: Capcom, 2005.

Rigney, Ryan. "These Guys' \$5K Spending Sprees Keep Your Games Free to Play." *Wired.com*.

Condé Nast, 11 Jan. 2012. Web. 20 Dec. 2012. <[http://www.wired.com/2012/11/meet-](http://www.wired.com/2012/11/meet-the-whales/)

[the-whales/](http://www.wired.com/2012/11/meet-the-whales/)>.

Robertson, Adi. "Death is Dead: How Modern Video Game Designers Killed Danger." *The*

Verge. Vox Media, Inc, 28 March 2013. Web. 20 Sep. 2014.

<<http://www.theverge.com/2013/3/28/4157502/death-is-dead-how-modern-video-game-designers-killed-danger>>

- Rock Band*. Cambridge, Massachusetts: Harmonix Music Systems, 2007.
- Rock Band 3*. Cambridge, Massachusetts: Harmonix Music Systems, 2010.
- Rock Band Blitz*. Cambridge, Massachusetts: Harmonix Music Systems, 2012.
- Rooster Teeth. "Rage Quit - I Wanna Be The Guy". Online Video Clip. *YouTube*. YouTube, 1 Sep. 2011. Web. 29 Sep. 2015. <<https://www.youtube.com/watch?v=JRO-UVW0uVE&feature=youtu.be>>.
- Ryū ga Gotoku 3*. Ōta, Tokyo, Japan: Sega, 2009.
- Salen, Katie and Eric Zimmerman. *Rules of Play: Game Design Fundamentals*. Cambridge, Mass.: MIT Press, 2004. Print.
- Second Life*. San Francisco, California: Linden Lab, 2003.
- Shadow of the Colossus*. Tokyo, Japan: Team Ico, 2005.
- Shadow Warrior*. Garland, Texas: 3D Realms, 1997.
- Shadowrun Returns*. Seattle, Washington: Harebrained Schemes, 2013.
- Shin Megami Tensei: Persona 3*. Tokyo, Japan: Atlus, 2006.
- Shin Megami Tensei: Persona 3 FES*. Tokyo, Japan: Atlus, 2007.
- Shin Megami Tensei: Persona 4*. Tokyo, Japan: Atlus, 2008.
- Shin Megami Tensei: Persona 4: Golden*. Tokyo, Japan: Atlus, 2012.
- Shobon Action*. Chiku, 2007.
- SimCity*. Emeryville, California: Maxis, 1989.
- Sims, Andrew. "J.K. Rowling and Emma Watson discuss Ron, Hermione, and Harry: The full interview." *Hypable*. 7 Feb. 2014. Web. 1 June 2014.
<<http://www.hypable.com/2014/02/07/jk-rowling-ron-hermione-interview/>>
- Simmons, Jan. "Narrative, Games, and Theory." *Game Studies*. 7.1 (2007): n. pag. Web. 13 Dec.

- 2011.
- Spec Ops: The Line*. Berlin, Germany: Yager Development, 2012.
- Star Wars: Knights of the Old Republic*. Edmonton, Alberta: BioWare, 2003.
- Star Wars: Knights of the Old Republic II: The Sith Lords*. Irvine, California: Obsidian Entertainment, 2004.
- Starcraft II*. Irvine, California: Blizzard Entertainment, 2010.
- Steam Workshop*. Kirkland, Washington: Valve Corporation, 2012.
- Super Mario Bros.* Kyoto, Japan: Nintendo, 1985.
- Super Mario Bros. 2*. Kyoto, Japan: Nintendo, 1986.
- Super Metroid*. Kyoto, Japan: Nintendo, 1994.
- Super Street Fighter IV: Arcade Edition*. Osaka, Japan: Capcom, 2011.
- Tanenbaum, Karen and Joshua Tanenbaum. "Agency as Commitment to Meaning: Communicative Competence in Games." *Digital Creativity*. 21.1 (2010): 11-17. Print.
- Tanz, Jason. "The Curse of Cow Clicker: How a Cheeky Satire Became a Videogame Hit." *Wired.com*. Condé Nast, 20 Dec. 2011. Web. 20 Apr. 2015. <
http://archive.wired.com/magazine/2011/12/ff_cowclicker/all/>.
- Takeshi no Chōsenjō*. Shibuya, Tokyo, Japan: Taito Corporation, 1986.
- Team Fortress 2*. Kirkland, Washington: Valve Corporation, 2007.
- Tetris*. Moscow, Russia: Alexey Pajitnov, 1984.
- The Beatles: Rock Band*. Cambridge, Massachusetts: Harmonix Music Systems, 2009.
- The Crew*. Lyon, France: Ivory Tower, 2014.
- The King of Kong: Fistful of Quarters*. Dir Seth Gordon. Picturehouse, 2007. Film.
- "The Little Mermaid Blu-ray Disc Exchange Program". *Blu-Ray.com*. Blu-Ray.com, 22 Oct.

2013. Web. 29 Sep. 2015. <<http://www.blu-ray.com/news/?id=12422>>.
- The Elder Scrolls V: Skyrim*. Rockville, Maryland: Bethesda Game Studios, 2011.
- The Last of Us*. Santa Monica, California: Naughty Dog, 2013.
- TheSinisterUndead. "Metroid Other M Part 11: The Varia Suit *FACEPALM*." Online Video Clip. *YouTube*. YouTube, 31 Dec. 2013. Web. 29 Sep. 2015. <<https://www.youtube.com/watch?v=7ncuaGUgUsY&feature=youtu.be&t=10m40s>>.
- The Simpsons Game*. Redwood City, California: Electronic Arts, 2007.
- The Stanley Parable*. Davey Wreden, 2011.
- "The Ultimate Game Freak." *TIME*. Time Inc. 22 Nov. 1999. Web. 1 Sep. 2014. <<http://content.time.com/time/magazine/article/0,9171,2040095,00.html>>.
- The Walking Dead*. San Rafael, California: Telltale Games, 2012.
- The Witcher 2: Assassins of Kings*. Warsaw, Poland: CD Projekt RED, 2011.
- The Wolf Among Us*. San Rafael, California: Telltale Games, 2014.
- Tito, Greg. "The Three J.B.s: Jason Bourne, Jack Bauer and James Bond." *The Escapist*. Alloy Digital, LLC. 19 Feb. 2010. Web. 10 April. 2014. <<http://www.escapistmagazine.com/news/view/98456-The-Three-J-B-s-Jason-Bourne-Jack-Bauer-and-James-Bond>>.
- Train*. Brenda Brathwaite, 2009.
- Tokimeki Memorial*. Tokyo, Japan: Konami, 1994.
- Tomodachi Life*. Kyoto, Japan: Nintendo SPD Group 1, 2014.
- Tulloch, Rowan. "'A Man Chooses, A Slave Obeys': Agency, Interactivity and Freedom in Video Gaming." *Journal of Gaming and Virtual Worlds* 2.1 (2010): 27-38. Print.
- Uncharted 2: Among Thieves*. Santa Monica, California: Naughty Dog, 2009.

Virtue's Last Reward. Shinjuku, Tokyo, Japan: Spike Chunsoft, 2012.

Wardrip-Fruin, Noah. *Expressive Processing: Digital Fictions, Computer Games, and Software Studies*. Cambridge, Mass.: MIT Press, 2009.

“We are committed to fun and entertainment for everyone.” *Nintendo*. Nintendo of America Inc., 09 May 2014. Web. 22 May 2014. <<http://www.nintendo.com/whatsnew/detail/c4FWbi-Uave2T9R1h7SFzX0aoa-d4pgx>>.

Wii Sports. Kyoto, Japan: Nintendo EAD Group No. 2, 2006.

Williams, Walt. Email Interview. 24 Sep. 2012.

World of Warcraft. Irvine, California: Blizzard Entertainment, 2004.

Wolfenstein 3D. Mesquite, Texas: id Software, 1992.

You Have To Burn The Rope. Kian Bashiri, 2008.