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TRINITY COLLEGE

Senior Thesis

CHOOSING A DOOR:
NARRATIVE INTERACTIVITY IN VIDEOGAMES

submitted by

DANIEL HAWKINS, CLASS OF 2019

In Partial Fulfillment of Requirements for
the degree of Bachelor of Arts

2019

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List of Screenshots

All screenshots were taken by me, Daniel Hawkins, of the listed games.

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INTRODUCTION

It is undeniably important to study videogames through a critical lens. They are, by far, the most popular medium of entertainment, comprising a larger market than film, literature, music, and television. Last year, *Grand Theft Auto V*, developed by Rockstar Games and published by Take 2 Interactive, became the best-selling entertainment release of all time, selling more than 90 million copies worldwide, and making over six billion dollars in revenue. On metrics of popularity alone, videogames should be studied. The question then becomes why games should be studied in the humanities instead of the sciences – after all, is it not important that psychologists re-determine every few years that no, videogames do not cause violent behavior? The answer lies in the textual nature of videogames. Whether they are embedded narratives intentionally designed by the developers of the game or are sandbox environments in which players create their own experiences by interacting with a set of prescribed rules, two characteristics of an artform are present: they have intentionality in their design and are interacted with by an audience. While not all games should be considered good art, just as not all movies are good art, and not all literature is good art, this should not exclude the medium from academic criticism.

On paper, videogames seem like they should fall outside the purview of the field of English. However, many critics argue that games, while deserving of their own field of Game Studies, they should still be discussed in other more traditional areas. Espen Aarseth, the Principal Researcher at the Center for Computer Games Research at IT University of Copenhagen, writes that "games should be also be studied within existing fields and departments, such as Media Studies, Sociology, and English, to name a few. But games are too important to be left to these fields… Like architecture, which contains but cannot be reduced to art history, games should contain media studies, aesthetics, sociology etc.," (Aarseth, "Computer Game Studies, Year One"). Aarseth goes

on to say how an "independent academic structure" is needed for game studies, but his argument is still that games should be studied within English.

If we accept this premise, then how would a critic within an English department approach videogames? The first instinct is generally to rely on film theory, since both film and videogames are a typically visual medium, and videogames borrow much of their design and production systems from the film industry. However, the principal quality of videogames that separates them from any previous entertainment medium is their interactivity, which by its nature defies conventional methods of criticism. There are introduced to the film critic puzzling questions such as what parts of the game are textual elements, and what is introduced by the player? In many games, the player has near complete control over the "camera," and can decide which direction to face and what objects in a given scene to look at. This player agency is what defines games, but also what robs the game of its cinematic textual intentionality. Even when film criticism is in some way applicable to videogames, it is not suited to describing the ways the player is related to the experience of the text, a relationship inseparable from any possible analysis.

Literary studies are equally unsuited to dealing with interactivity in videogames, though much of the language used in traditional criticism finds some use in game studies. The solution is therefore to describe a way of reading narrative videogames that emphasizes the interactive player-text relationship and constructs a reading of a given game based on how those elements inform more typically literary ideas of character and theme.

A very brief overview of games is necessary. The history of videogames as texts is a fascinating one, as it starts with them existing as video toys and gradually progresses to digital art. What began as rudimentary text-based adventure games and simple graphical interfaces developed into increasingly complex systems. The goals of videogames changed also, shifting from the

quarter collectors of arcade cabinets to games that were more immersive. By the late 1990s, stories in videogames had evolved from such basics as 'save the princess' into more prescribed narratives such as *Half Life*. Now, in 2019, games have an incredible graphical fidelity and narrative design that allows the medium to supersede film and literature as the most popular entertainment medium. Motion capture performances by Hollywood actors are common in high-budget videogames, and games have been present at critical awards such as the BAFTA for years now. Their textual quality is undeniable.

Even today, however, games occupy a space that is considered both toy and text. The degree to which any given game is either varies, however. There are certainly games that are almost wholly toys meant for play, but there are also games that should be considered texts in the traditional narrative sense. This is a distinction not made by many other critics. Professor at the NYU Game Center, Clara Fernández-Vara, in her book *Introduction to Game Analysis* uses a "broad understanding" of the term "text" in order "approach games as texts, whether they use cardboard, computers, or spoken words." (Fernández-Vara, 6) This universal "games are texts" approach to videogame criticism is undoubtedly useful in understanding games as cultural artifacts, but if we approach texts from the narrativist perspective of literary studies, then the need for an alternate definition becomes apparent.

I believe that it would be practical to view videogames as existing on a spectrum, one end of which is being entirely a "toy," with the other end being "text." The games that inhabit the "toy" end of the spectrum are those that exist solely for entertainment and play. This would include games such as *Super Mario Odyssey* and *Rocket League*, games that are meant to provide nearly immediate gratification from play. In these games, little to no meaningful narrative content exists. However, games that exist on the "toy" side of the spectrum are not always devoid of meaning or

of story, or that games with strong narratives cannot be fun—videogames exist on a gradient. With this spectrum in mind, the onus of the critic is to gauge where a given game is placed along it when beginning an analysis. Games that place at the "toy" end of the spectrum are of little interest to a literary critic, but there also videogames which are so rigidly cinematic in their construction that no new theory is necessary. A videogame that requires little more than pressing a button to continue a scripted sequence requires only the barest ludological framework for study, for example. One might consider the very farthest end of the toy-text spectrum as lacking any form of interactivity. This is where more traditional forms of media such as film and literature begin. As a result, this thesis is highly focused on the area adjacent to the textual endpoint, where videogames are textual but interactive.

The methodology presented in this thesis is predicated on the inability of other critical structures to properly and deeply analyze the games that were made as deliberate, interactive narrative experiences. Those other theories may work for games that are mainly toys, since there has been much study regarding ludology and the role of play in a game. They undoubtedly produce a great amount of quality discussion and analysis on many of the same games described in this thesis. In certain story and character driven videogames, however, they are lacking in the requisite critical framework to provide players with the necessary tools to delve closely into games' narratives. By assigning games to occupy predominantly "toy" or "text" spaces, it allows the critic to lessen any discussion of "fun" and "play" should they wish to focus solely on its narrative. Those concepts are of much more interest to the ludologist than the narrativist, the former being specifically attentive to how we respond to rules of play. Though they have a place of large importance in game studies, they lie outside the scope of this thesis.

Videogames are an incredibly broad medium. Like film and literature, each game may be a part of a specific, familiar genre, or constitutive of multiple overlapping genres. There are games that are gothics, dramas, romances, action-adventures, comedies, and so on. However, games also have a different, exclusive form of genre, which is the technical apparatus through which the game operates. One games scholar, Ian Bogost, is the Ivan Allen Chair Distinguished Chair of Media Studies and professor of Interactive Computing at the Georgia Institute of Technology. In his book *Persuasive Games*, Bogost writes “Just as there are literary and filmic figures, so there are procedural figures. These are distinct from and prior to forms and genres. Procedural figures have much in common with literary figures like metaphor, metonymy, or synecdoche.” (*PG,* 12) These procedural figures that Bogost describes are the computational systems upon which a videogame is built—the code that describes game physics, objects, cameras, and the graphical systems we use to view and interact with the game itself. “Procedural genres emerge from assemblages of procedural forms” claims Bogost. “These are akin to literary, filmic, or artistic genres like the film noir, the lyric poem, or the science fiction novel. In videogames, genres include the platformer, the first-person shooter, the turn-based strategy game, and so forth.” (*PG* 14).

What Bogost does not describe is how games also have those familiar genres as traditional media. “Procedural genres” are not *akin* to literary genres, they are adjacent to them. Describing games with their procedural genre is effective in relaying the computational systems that compose the technical side of the game but are ineffective at describing the actual content of the game. For instance, the game *Deus Ex: Human Revolution* is a stealth action role-playing game, but it is also equally a science-fiction game. In describing game genres, I propose using a dual-axes of genre: on one axis is the procedural genre, while the other axis are the modes with which we are currently familiar. The added dimension of procedural genres determines the rules of a game, which in turn

affect all aspects of it as a text. Two games might have the same traditional genre, such as science fiction, but vastly different procedures due to their secondary genres. A science fiction shooter game is going to have little in common with a science fiction strategy game, for example. Thus, the dual axis method allows critics to accurately describe both the procedural conventions of the game as well as its traditional textual content.

This distinction between axes may appear to be very common-sense. As far as the theoretical frameworks presented in this thesis go, the two-axis genre is a rather basic idea. Bogost's separation between the systemic genres of videogames and the conventional genres of film and literature hints at a larger issue, the tendency for game critics to create strong boundaries between mediums. The procedural figures Bogost discusses are presented as being similar to literary figures, yet at no point does Bogost admit that videogames also contain those same literary figures. For example, as a narrative medium, videogames are full of metaphor, metonymy, and synecdoche. The underlying assumption that Bogost makes in neglecting to discuss these elements is that since critical frameworks used to examine literary figures already exist for film and literature, further theoretical criticism in that field is unnecessary. I posit that this is not the case, that the differences between videogames and other mediums are great enough that a deeper examination is required in how basic textual elements such as character, narrative, and theme function in games. The added complexity of interactive, procedural elements means that traditional modes of criticism are incapable of effectively grasping the whole of a game. A critique of a game that does not address the ways the ludic and interactive forms synthesize with the narrative is a failed criticism.

Only a comparatively little amount of narrative theory has yet found its way into game studies. Bogost is predominantly concerned with rhetorical modes of videogames and his theory

of "persuasive games," that is, games that use their computational rhetoric and operational systems to form persuasive arguments on a set of values embodied by the game systems. Other critics use familiar forms of literary criticism for game analysis. In her foundational book *Introduction to Game Analysis*, Clara Fernández-Vara describes the process of game analysis as having three distinct areas of study: the context of a game, a game overview, and its formal aspects. Interestingly, the term "narrative" does not appear anywhere in this section. Fernández-Vara writes that adapting a structuralist form of criticism is the most effective at reading games in general; Bogost affirms in a more rhetorical mode for game criticism. Both of these forms have their uses in broadly understanding games in general, but within the specific sphere of games as interactive narrative texts, they fail to provide precise methodology required to fully understand fundamental concepts such as character and theme.

The idea of a "character" is one that itself has produced much discussion within the field of game studies, as critics attempt to decipher where the actions of a player end and the elements of a character begin. In videogames, the interactivity inherent in giving the player control over the actions of a character mean that the lines between the two are increasingly blurred in proportion with agency. One of the goals of this thesis is to develop methodology to properly analyze characters that might appear difficult to describe in their totality because of the performative nature of videogames. Games across many genres afford the player the ability to in some way determine aspects of characterization in their controlled protagonist, either through selecting dialogue options, customizing appearances, or in some cases, decide the character's morality. In his paper submitted to the Digital Games Research Association, "Modeling the Semiotic Structure of Game Characters," Daniel Vella accurately describes the predicament of having characters that differ with each individual playthrough of a game: "When speaking of a player-character as a possible

non-actual individual, we are speaking specifically of the character as actualized in one given playthrough: before this actualization, there is no character to speak of, only the framework for one." (Vella, 16)

While Vella believes that a player-character can only become realized as a "non-actual individual" after the game has been completed, and only that instantiation of the character can be analyzed, this thesis will attempt to not only show that is it possible to read characters from games with high player agency, but also provide the methodology necessary to do so. In the subsequent sections of part one of the thesis, I will show how each of the four following techniques of constituent event analysis, choice summation, environmental analysis, and ludonarrative analysis are demonstrated in particular individual example videogames. In part two, I will perform all of the methods in a long reading of the game *Deus Ex – Human Revolution,* displaying how each one illuminates an aspect of the text unreachable by conventional forms of criticism.

CHAPTER 1

Presenting a Methodology: Constituent Events & Commander Shepard

The first problem that must be overcome in narrative game analysis is the extreme variability within a given text. It is a common design element to supply the player with some amount of narrative agency, the ability to make dramatic choices that in some way affect the game's story. The complication arises when the variability is such that different playthroughs of a game's story result in what seem to be distinct narratives, characters, and themes. According to several games scholars, a structuralist approach to analysis rooted in narrative theory gives critics tools to discuss texts through their dynamics. By considering events within a game's narrative as being fundamentally central to its formal construction, structuralist critics are able to examine stories despite any changes the player makes to them.

Game scholar Espen Aarseth in his paper "A Narrative Theory of Games," posits that videogames can be largely categorized by how dynamic their systems are. Aarseth's approach is to find the formal qualities that exist in both videogames and "stories" and examine how they function textually. In his own words, Aarseth's goal is "to see the ludo-narrative design-space as four independent, ontic dimensions: world, objects, agents, and events."[1] Although Aarseth separates games and stories as distinct entities from one another, his theory is an excellent foundation for the type of videogame narrative analysis envisioned by this thesis. He defines the four "ontic dimensions" as each having certain characteristics: worlds can be linear, multicursal,

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[1] Aarseth, "A Narrative Theory of Games"

or open; objects can be dynamic, user-created, or static; agents can be "rich, deep, and round characters (the narrative pole) or shallow, hollow bots (the ludic pole)"; and finally, events may open, selectable, or plotted, indicating both their sequence and level of interactivity.

With respect to the agents, Aarseth dedicates only a small section in which he quickly defines three categories of character, "bots," "shallow characters," and "deep characters." This is hardly a groundbreaking observation, and it betrays a lack of consideration for games characters, and how the player's agency in portraying characters in narrative videogames is an often-overlooked obstacle. There is little nuance in Aarseth's qualities of games characters. We might describe a game character as flat or round as we might a literary or filmic character to indicate their development throughout a narrative. But how do we discuss a character when one player's portrayal of a character is round, and another player's performance of that same character could be read as flat? Oftentimes in videogames a character's interior movement throughout a narrative is left solely up to the player's interpretation, since the character also serves as the armature through which the player interacts with the game world. The introduction of interactivity creates an aspect of complexity far greater than what is resolved by these subcategories.

The solution to this does not lie within Aarseth's small section on agents and characters, but in how we examine narrative events within the text. The closest Aarseth comes to connecting both agents and events is describing them both as "not so much gameplay as author agency… only the latter two [agents and events] are narrative dimensions per se, while the first two are describing ontological aspects of the game world." However, no indication is made as to how these two qualities interact in any way other than being part of some undefined authorial agency that stems from the prescribed narrative created by the developers Aarseth's source for his narrative theory of events is Seymour Chatman's 1978 book *Story and Discourse*, which itself borrows much from

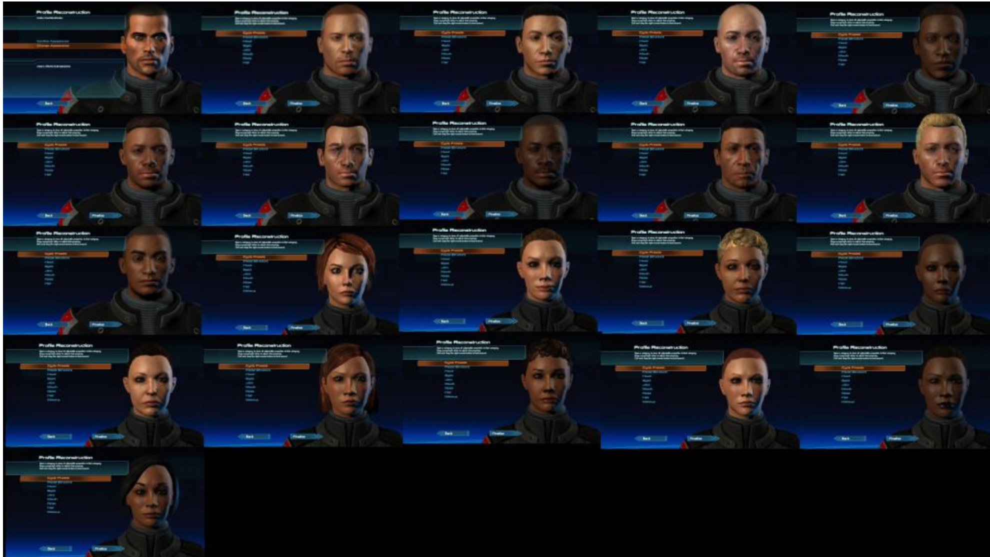
Roland Barthes' structuralist criticism. Chatman describes his theory of narrative kernels and satellites, how "only major events are part of the chain or armature of contingency" (Chatman, 53). This notion of central story nodes that are integral to the text's structure is directly applicable to videogames and their complex web of interactions, choices, quests, and side-quests. "Kernels cannot be deleted without destroying the narrative logic," while "a minor plot point– a satellite– is not crucial in this sense. It can be deleted without disturbing the logic of the plot." (54). Applying kernels and satellites to videogames that have at least partially user-created protagonists allows the critic to situate the character within the text by establishing a narrative baseline on which we can read them. In doing so, the critic can gain an understanding of what immutable characteristics they might possess. In particular, identifying a game's narrative kernels not just for the plot, but for the character, is integral to comprehending both and would fill the gap left by Aarseth and the other structuralist critics.

For example, consider the 2007 game *Mass Effect,* an action role-playing space opera developed by BioWare and published by Microsoft Game Studios and Electronic Arts. Prior to starting the story of the game, the player is prompted to fill in the details of the protagonist, Commander Shepard. While the default character is a soldier named John Shepard, the player has much control over the details. The commander's sex, first name, and facial appearance are all customizable by the player; they are also given a choice of six classes (a playstyle archetype ranging from space marine to space wizard), and a choice of three options between each of Shepard's early life and service record. Even before beginning the actual game and all of its many narrative satellites, the differences between any given player's Shepards might be extreme. Player A might have a white male Commander Shepard named John (the male default), who fights with space magic, was born on Earth, and was a decorated war hero. Player B may have chosen to play

as a female Commander Shepard named Vanessa, who was born on a starship, fights with conventional weapons, and was the sole survivor of an alien monster attack. Meanwhile, Player C could be playing as a Commander Shepard whose first name is ThesisDude, was born on a distant colony, was a ruthless veteran, and fights using a combination of the above.

Screenshot 1: ThesisDude Shepard

As should be immediately apparent, there are plenty of obvious differences between each player's Shepard. While it may suffice some games critics to proclaim that each time a player begins the game, a new character is generated, I believe that since the text itself considers all of the above to be *the* Commander Shepard, so too should the critic. By examining the kernels, or constituent events, of the protagonist and narrative of *Mass Effect*, we can cut to actuality of both the game and the character.



Screenshot 2: Commander Shepard (Pictured Above)

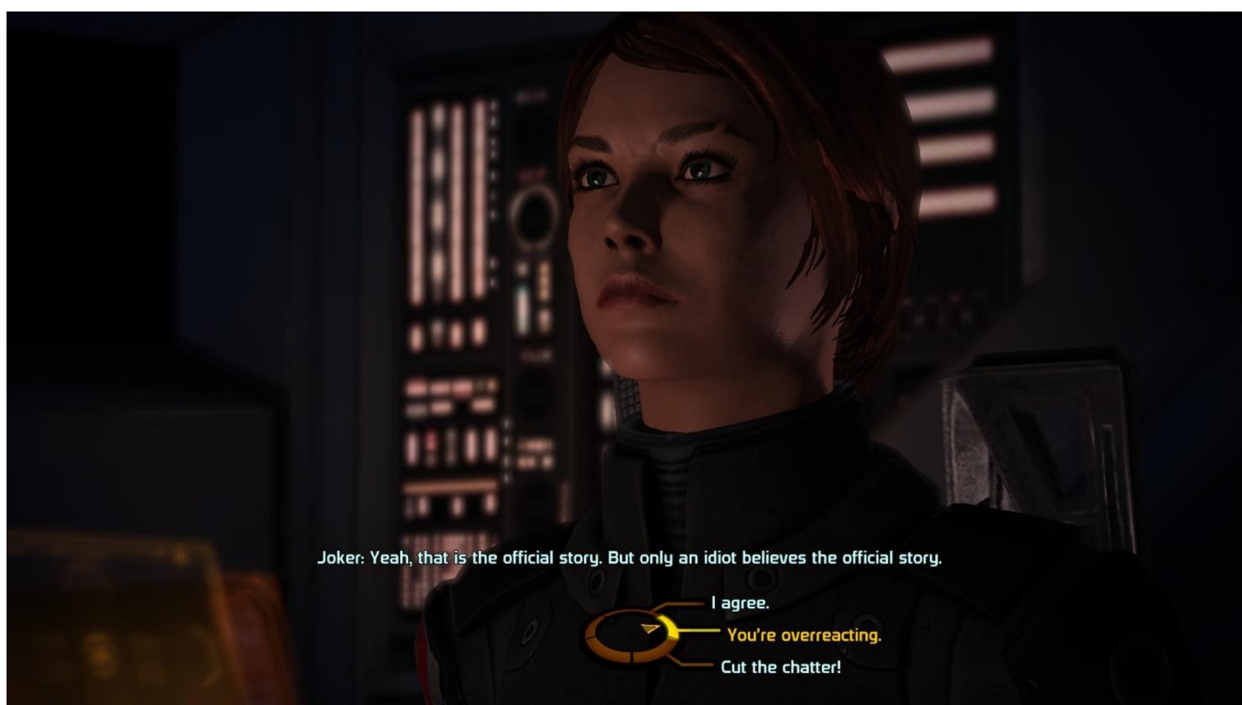
Post character creation, the inter-player variability of *Mass Effect* increases drastically. Players can decide not only Shepard's cosmetic appearance, but also the armor he/she wears, the weapons they use, the lines of dialogue they speak in conversation, their morality, and even the Commander's sexuality. Despite all of this, however, there are plenty of fixed constitutive events from which the critic may draw an equal amount of information about the character. Most obviously, the game allows the player to choose the first name for the Commander, but fixes Shepard as their surname. This is for symbolic reasons apparent in the game – Shepard leads first his band of followers and later entire species of the galaxy to salvation – as well as the practical ability of having non-player characters be able to call them by a name other than their rank without having to record thousands of extra voice lines for every conceivable name. However, even in this character creation process, there are plenty of textual and subtextual *kernels* from which we can infer much about Shepard that applies to every instantiation of the character. The first is Shepard's rank and placement within the human "Alliance Military" – we know that despite whatever the player conceives of while designing their Commander, the result is always someone who is a

capable warrior and exceptional leader. All the early life choices for Shepard's biography, as different as they are, result in Shepard voluntarily enlisting in the military at the age of eighteen. We know that Shepard's service record options, "sole survivor," "war hero," and "ruthless" all denote someone whose dedication to their rank is matched only by their skill. *Mass Effect* at first values the result of Commander Shepard becoming the player-character more than the content of those events themselves. It also includes the idea that a character of any background could have become Shepard. This allows the player to choose the background they imagine most corresponds to the character they will spend dozens of hours playing over the rest of the game. The first constituent event, therefore, is what is implied by the fixed name of Commander Shepard, and not the fluid biography contained within.

The opening of the actual game post-character creation yields similar quantities of both kernels and satellites, both the constituent events that all players encounter and the choices they make surrounding those fixed points. The actual plot of *Mass Effect*'s story, however, is at first fairly linear. The game begins with a voice over dialogue between Shepard's direct superior, Captain Anderson, and Earth's ambassador to an alien council, in which they discuss Shepard's biography and their suitability for the Spectres, a clandestine organization that is *Mass Effect*'s version of the double-O agents from James Bond. This dialogue is used as a tool to reference the choices made during the previous section, with the characters citing Shepard's record as a qualification for the Spectres, but also to reinforce to the player that they are representing a character who is important: not only to their character's own story, but to the future of humanity within an alien civilization, and, eventually, to the fate of life throughout the galaxy. The introductory dialogue, though it changes depending on what biography the player selected for their

Commander Shepard, is, as a whole, a constituent event. The conversation itself serves at the narrative introduction to the kind of story the player will be interacting with.

Players have complete control over Shepard's dialogue throughout *Mass Effect*. Whenever the Commander speaks, the player is afforded a choice between multiple lines, arranged from top to bottom along the game's moral axes: good, or "paragon," or selfish, "renegade". Instead of viewing the player's agency in what Shepard says as being composed entirely of satellites, that every option is its own branch in the story, I find it valuable to think of each choice itself as a constituent event in the narrative. The options themselves compose a kernel in the game, and for the character. The first action the player takes within the game is to choose a conversation option in a dialogue between Shepard and the starship pilot, concerning the latter's suspicions regarding an alien passenger. The player can choose to either share in those suspicions, rebuke the pilot, or invoke their rank and not engage at all.



Screenshot 3: The first dialogue option of the game. Each choice corresponds to an alignment along the game's moral axis.

As Chatman describes kernels, "nodes or hinges in the structure, branching points which force a movement into one of two (or more) possible paths" (Chatman. 53), we can see how these choices themselves are nodes and hinges, that each one tells the player something about the character, in this case that trusted crewmates both value Shepard's judgement and respect their authority.

An exhaustive analysis of every choice, kernel, and satellite in *Mass Effect* is far beyond the scope of this thesis – the game is simply too large. Here, it is enough to show that constituent narrative events, even ones as mundane as "the commander engages in conversation" are important to completing analyses of characters whose variability and interactivity make them otherwise appear to be separate entities instanced apart by player choices. In the following chapter on *Deus Ex – Human Revolution*, I will demonstrate more fully how constituent events and kernels allow a critic to cut to the heart of variably complex characters and facilitate close reading analyses despite and through those complexities.

Choice Summation in *Dishonored*

The counterpart to constituent events is the narrative satellite, the supplemental event that Chatman defines as being "a minor plot event," one that "can be deleted without disturbing the logic of the plot." (Chatman, 54). Whereas his theory of the narrative "kernel" was nearly directly applicable to the type of criticism being performed in this thesis, Chatman's satellite needs some reconstruction in order to fit into a discourse about videogames. As he writes, "Satellites entail no choice, but are solely the workings-out of the choices made at the kernels. They necessarily imply the existence of kernels, but not vice versa." (54). Chatman's use of the term "choice" is distinct from how the games critic might understand it. The narrative choice described in *Story and Discourse* is an authorial one concerned with the deliberate construction of a logical plot. Choice

in videogames is in some ways the opposite: we use "choice" to describe the ludic and narrative interactions made by the player upon the text.

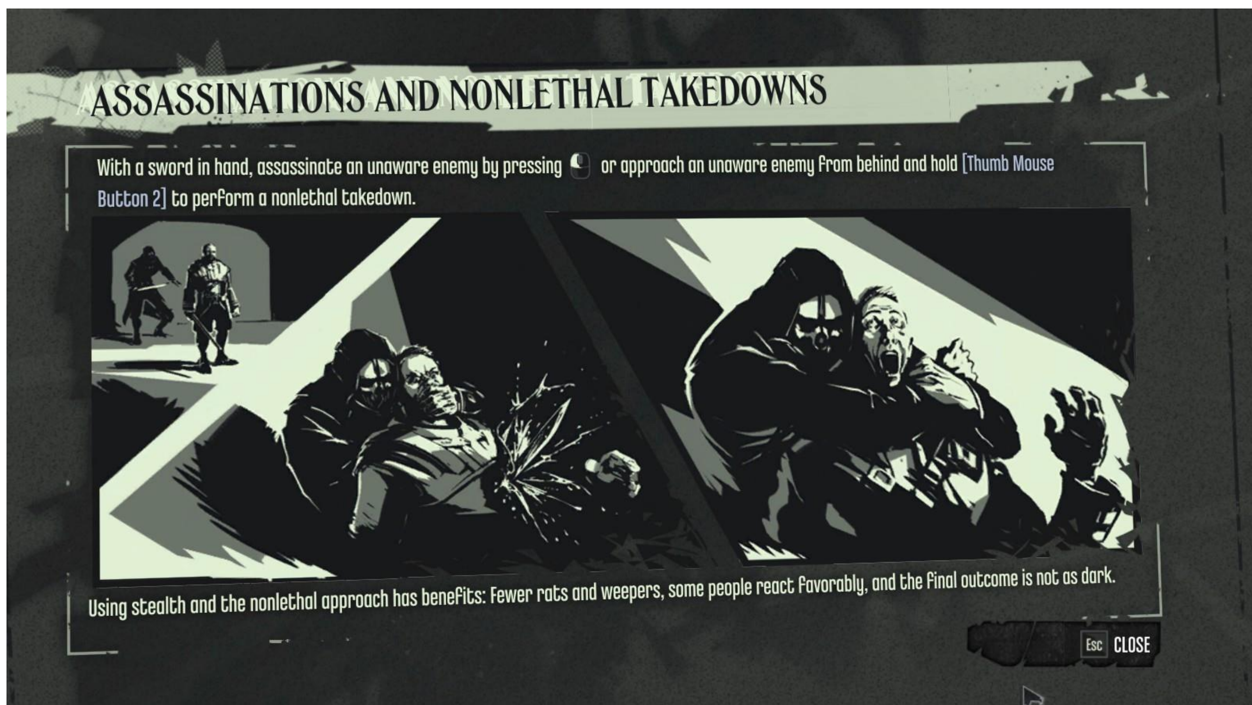
According to Espen Aarseth in "A Narrative Theory of Games," these interactions are what separate his categories of storytelling along a spectrum of "pure story," as exemplified in traditional literary works that have no player-driven elements, and "pure games" that have no embedded narratives such as *Minecraft* or chess. "These two concepts," Aarseth writes, "...allow us to say something about the ways games can contain one or several potential stories." This is not a finely detailed description of this theory's applicability. As independently useless of a phrase as "can contain one or several potential stories" is, through it Aarseth hints at how I believe the narrative *satellite* should behave in game criticism: that is, the critic should examine the choices given to the player as informative of a game's simultaneous characters and narratives. Instead of rigid separations between game instances – i.e. each individual player's experience as a wholly different story – we can use the choices afforded the player to construct a more complete picture of a game's narrative and thematic totality than would be possible without such examinations. As Clara Fernández-Vara writes in *Introduction to Game Analysis*, "Comparing the differences between choices can provide insight on what the game is about. Some games reward certain choices and not others, or there may be a value system attached to the player's actions." (Fernández-Vara, 162). In the same section, she describes the questions critics should ask when analyzing the choice design of a game, including "How often does the player have to make a choice?" "What types of choices are there?" "Are the choices obvious?" and "Does each choice have a value attached to it?" (163). By answering these questions, and by observing how choices relate across separate instances of a game, it is possible to examine the way the presence and

content of those choices gesture towards a coherent reading of the game, one that allows for a comprehensive understanding of its construction of character, narrative and theme.

The 2012 videogame *Dishonored* is an excellent example of how a game's value system is demonstrated through the player's choices. *Dishonored*, developed by the French company Arkane Studios and published by Bethesda Softworks, is a dystopian immersive simulator. The first axis of genre, the dystopia, reflects the game's setting, a bleak corrupted world stylized on a Victorian London whose technology is powered by harvested whale oil. The second axis of the procedural genre, the immersive sim, describes the way the player interacts with the game's systems. The player learns about the game's rules and discovers how to interact with these rules and how they interact with each other. As an example, players can get two powers: one that allows them to momentarily stop time and one that allows them to supernaturally possess another character's body. Smart players can intuit how these two systems interact – if a guard fires a pistol at the player, they can stop time, possess the guard, and walk him in front of his own bullet. *Dishonored*'s story centers around Corvo Attano, the former bodyguard of the murdered Empress, and his quest for vengeance against those who perpetrated her assassination and had him framed as her killer. Within the violent city of Dunwall, the player/Corvo can use stealth, gadgets, and supernatural powers to hunt down the conspirators responsible and dispatch them either lethally or non-lethally. The player can also choose to avoid or confront the guards, gangsters, plague-victims and rat swarms they encounter along the grimy streets.

Early in *Dishonored*, the game makes clear that there are consequences for the player's actions. The more victims the player leaves behind on their missions, the more the rat plague will spread throughout the city, and the darker the ending of the game will become. The moral spectrum of the game measures chaos. At the end of every mission, the player is graded as having either

high or low chaos, a score which the game tracks. A high-chaos player will find that the city of Dunwall is far more precarious in its survival than it is in the game of the low-chaos player. All these results are the sums of smaller choices that each player makes over the course of the game. By examining the choices *Dishonored* allows the player to make and the consequences of those choices, we can fully understand both the character of Corvo Attano, and the moral value system created by the game.



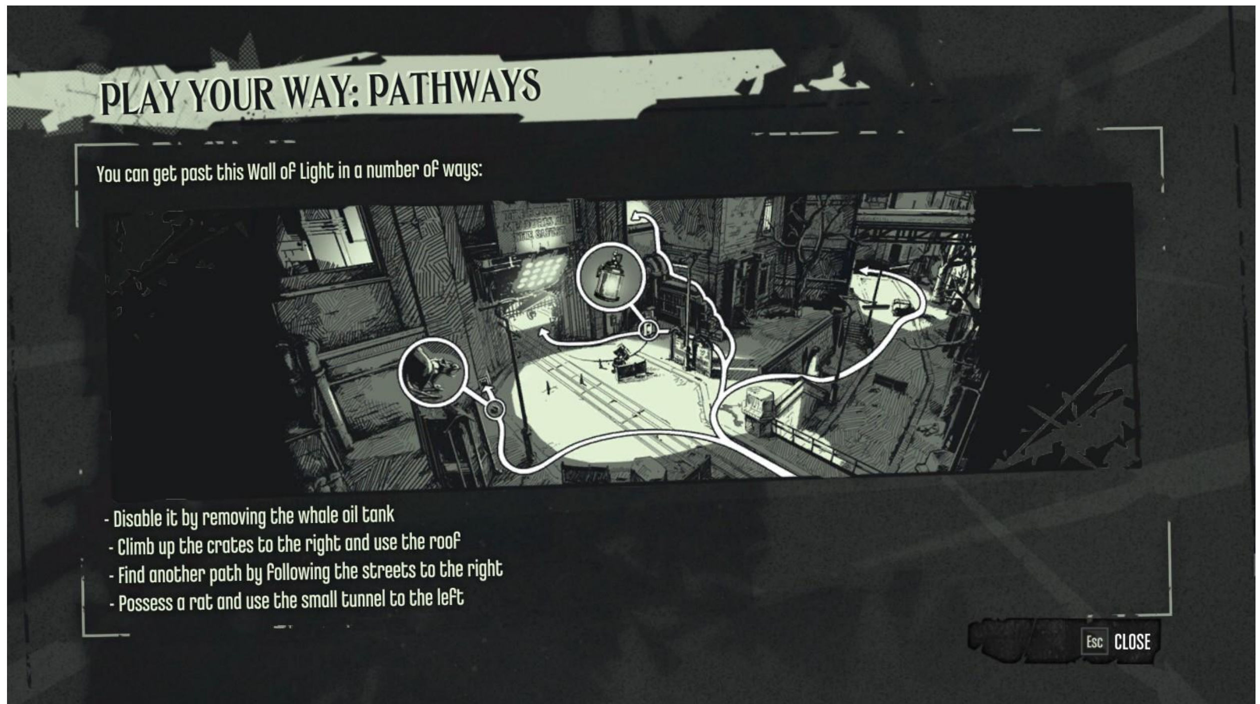
Screenshot 4: A Tutorial Screen from Dishonored *hinting at the moral system*

Throughout the game, the choices the player is presented with rarely come in the form of binary options or menu systems. Corvo only infrequently engages in dialogue with another character, and those occurrences are always limited to single yes / no responses chosen by the player. These are typically asking the player if they would like to move on to the next area of the game or if they would rather continue exploring the current level space. It is instead more helpful to examine how *Dishonored* is constantly presenting the player with a wide array of choices. Due to the nature of

Dishonored as an immersive simulator, every obstacle encountered by the player is also a presentation of multiple choices. Instead of the old game design trope of "opening the blue door with the blue key," the game allows the player to decide on their own how to accomplish any particular task. Every patrolling guard is a choice, as the player knows that they have the means to deal with them in multiple ways. Each time the player comes across a locked door, a watch tower, or any of the other various impediments, they make multiple choices that influence how the story unfolds and how Corvo behaves within their generated narrative.

In the second non-tutorial mission, Corvo sets out from the friendly Loyalist Conspiracy's headquarters to the Golden Cat, a bathhouse for nobles. The player's / Corvo's objectives are to both rescue the young princess Emily who is held captive there, and eliminate the Pendleton twins, two hedonist aristocrats who hold significant power in the city's parliament. The first major choice the player makes in this mission is when they are informed by one of their allies that there is an infestation of plague-victims, known as Weepers, in the sewers beneath the Loyalist headquarters. Corvo is tasked with dealing with the plague victims, but the player can decide how to do so. This becomes the first contact the player has with the Weepers, and conjures up the beginning of *Dishonored,* in which the late Empress describes them as "sick people, not criminals." This is in contrast with the character who instructs the player to deal with them, Havelock, who refers to them as "Nothing more than a shuffling corpse full of sickness and insects." The player can either kill the Weepers or incapacitate them with non-lethal chokeholds or valuable sleep darts. Here, the player's choice in how they deal with the wretched victims corresponds to the moral system posited by the two characters. The two values at play here are the Empress' "sick people" and Havelock's "shuffling corpse," and the player's decision reveals not only their own stance, but that of the character of Corvo as well. Since every diegetic action the player performs is demonstrative of the

character, any choice they make is necessarily informative of the same. No choice can be contradictory. Because the player could just as easily kill the Weepers as he could spare them, so too can Corvo kill or spare them. In *Dishonored,* the game offers us extremely little of Corvo's personality other than what is displayed by the player making decision on his behalf.



Screenshot 5: Another tutorial screen depicting different avenues of progression

Understanding the choices the player makes are the primary method of uncovering the essences of videogame characters. A close examination is needed of not only what their choices are, but also what their choices are not. If instead of dealing with the Weepers, the player chose to have Corvo shoot Havelock, he would die and the game would end, with a game-over screen saying that "The Loyalist Conspiracy is dissolved due to irreconcilable hostilities," with a prompt to load a previous section of the game before the aggressive action. In a game that allows the player to solve any obstacle in whatever way they wish, it should be noted as significant when they are denied an avenue of progression. As violent or merciful as Corvo is, neither he nor the player can

betray his allies. This is a foundational element of his character despite any other choices the player makes.

Dishonored's narrative themes are the differences between vengeance and justice, the corruption of wealth and power, and the escalating reciprocation of violence. Throughout the game, the more violent actions are typically the easier ones to perform. It is simple to slit the throat of an unaware thug, or fire a crossbow bolt at a target, but the non-lethal sleep darts are in short supply, and a guard left unconscious might later be woken up if his companions find him. The more violent a player's actions are – the more chaos they bring into the city, as the game tracks it – the darker the narrative becomes. Leaving too great a trail of bodies will result in a grim fate for the characters and the rest of the city as Dunwall succumbs to the rat plague, whereas choosing to play with mercy and pacifism in mind will result in a just, hopeful resolution to the game. While the narrative changes are not as drastic as they are in some other videogames in that all players will go on the same missions in the same sequence, the variability between every player's constructed story is wide enough that it is the composite image of the all possible choices made that reveals the true characters and themes. A single playthrough of *Dishonored* could perhaps display only the gratification of violence and a depiction of Corvo as someone entirely dissociated from compassion and consumed by revenge. Another player might perform the character as stealthy, merciful, and clean-handed. Both are internally consistent and functional narratives, but neither are complete. By summing each choice made by the player and by examining the narrative consequences of those choices we can piece together the urtext of the game and understand precisely how its themes, characters, and player agencies interact with one another in a coherent whole.

Hellblade’s Empathic Environment

Armed with both constituent event analysis and choice summation, critics may now be able to adequately investigate variable narratives as event-driven constructs. It is therefore useful to move to a topic for analysis more unique to videogames: examination of the graphical level. Of the listed formal aspects of games described in chapter 5 of *Introduction to Game Analysis*, a handful describe the quality of the “fictional world.” Of the fifteen building blocks of formal elements, only three are obliquely tied to the concept of the fictional world. Fernández-Vara identifies the “rules of the world,” the “relationship between the rules and the fictional world,” and “levels and level design,” (*Introduction to Game Analysis*, 122). All three of these are excellent foundational qualities to approach understanding the medium generally, from games such as Chess to *Stratego* to *Super Mario Bros* to *Call of Duty*. However, these elements lose some of their potency when focusing on “story-driven” games. Of these formal elements, it is “levels and level design” that most closely approaches the type of deep textual analysis that can be applied to the graphical environments present in most narrative videogames.

Fernández-Vara is fairly technical in her discussion of levels in videogames, which she defines as “sections of gameplay marked by separate spaces…Levels divide what we called the rule-based space.” (155). In this mode of game analysis, the space the player inhabits, unlike the set pieces of film and theater, is a box meant to contain the rules of a portion of the game. “[Level design] refers to the specific moment-to-moment challenges, rather than general systems or overall goals. When analyzing the level design of a game, we refer to how the different challenges are distributed in the space and what the different goals of the game are.” (155) This emphasis on challenge, rules, and the technical components of games is useful in examining them as procedural artifacts; but for the sort of narrative-based textual analysis more similar to a traditional close

reading, I believe the critic's focus should also be on the fictional world presented by the game. This world is tied to the game's narrative, which will present certain ideas and assumptions about the level space, as well as the rules of the game, which will determine how the player interacts with their surroundings. However, an equal amount of attention must be paid to the environment itself as an important aspect of the game's fictional creation.

In a medium troubled by the perceived iterative and performative qualities of characters and narratives, I submit that the "hard-coded" graphical environments present in videogames can be used to identify certain aspects of game protagonists, – such that in conjunction with the other previous methods of analysis – a critic may be able to discern immutable characteristics that apply to every instantiation and play-through of a given text. This form of textual analysis should seem familiar to us. It is similar in most respects to the type of criticism made in literary and film reviews, with a few notable distinctions. As is the case for much of games criticism, the interactivity present in games separates it from other forms. Unlike in literature, any given instance of a game may not yield the same description, the same dialogue, or even the same plots. Except in the case of "cutscene" departures from the actual play, games similarly disobey general film conventions, though the two mediums are historically linked. In videogames, the player generally has control of the camera, the viewscreen into the fictional world. Subsequently, all choreography and cinematography are given from the creators of the game to the audience. In doing so, we lose the ability to examine scenes in videogames the same way we would examine them in film. While much of the language of film criticism remains the same, (such as terms like "camera," and "scene"), the application of those ideas in games studies is different enough that this methodology requires its own description and examples. Videogames generally contain graphical representations of physical spaces that can be explored, and the player's interactions with and

observation of these environments are invaluable to understanding the narratives and characters they contain.

Hellblade – Senua's Sacrifice is a 2017 psychological horror and action-adventure game, developed and published by Ninja Theory Games. *Hellblade* follows the titular Senua, a celtic warrior woman on a vision quest to Viking hell, in order to reclaim the soul of her lost lover Dillion, whose head she keeps in a bag on her hip. That, at least, is the superficial premise for the game. Senua suffers from severe psychosis, and the player is witness to the intense audial and visual hallucinations, paranoia, and myriad other mental illnesses that plague the protagonist. As the game progresses, Senua's journey becomes as much about understanding the root of her trauma and overcoming her illness by accepting it. Throughout *Hellblade*, Senua is alone in a hellish landscape, full of shifting half-seen figures and monsters that leave the player – and Senua – unsure of what is the reality of the game's fictional world, and what are the hallucinations conjured up by her psychosis. The triumph of the game is the level of understanding and empathy created between the player and their protagonist, achievable through the world as a framework to explore Senua's conscious and unconscious trauma. *Hellblade* is an excellent example of how the environment, and the ways the player interacts with it, are important to understanding a character's place within the fiction both literally and figuratively: the ways a character moves through a space reveals facets of them that remain through different player experiences of the game.

The environment in *Hellblade*, sometimes beautiful, sometimes horrific, serves a key purpose in the game. In terms of camera perspective, the game is in the third person – we see the world from behind and above Senua: she is always the principal focus of the screen. However, we see the world through Senua's eyes, and is that perception that builds the empathetic connection between the player and the character that gives her journey meaning.

Screenshot 6: The first playable moment of Hellblade. Note the lack of User Interface elements

The environment of *Hellblade* is a complex one. It is dark, macabre, surreal, and nightmarish. Senua's quest is to reclaim Dillion's soul from Hela, the goddess of death, and the world reflects that this is the goddess' domain. There are faceless bodies strung up throughout the game, and the demons that confront Senua appear as a terrible mixture between warrior and animalistic corpse, mirroring the half-dead half-living visage of Hela herself. The player's interactions with the game world are uninterrupted by obvious game elements. There is no omnipresent on-screen user interface. The game lacks common design tropes that one familiar with the conventions of videogames might miss – a health bar, or perhaps a map or compass in any of the corners. Instead, there is nothing separating the player and the rich environment of the game world except for the screen. This closeness between the player and the world increases the immersive verisimilitude of the game and is a major element in maintaining the player's connection with Senua. *Hellblade* is so effective as a text precisely because of the empathy created

for Senua by the player and constant visual reminders of its ludic mechanisms would only dissociate the player from the fiction.

But perhaps the most striking and important aspect of *Hellblade*'s environment is Senua's hallucinations, which are omnipresent. The "Furies," the ensemble of voices that constantly mutter and shout in Senua's head are at first distracting and demand the player's attention, but over the course of the six to ten hours it takes to complete the game, these auditory hallucinations become a part of the background. Through subjecting the player to the constant barrage of psychotic voices that Senua experiences, we begin to become accustomed to them, and these Furies gradually seem as ambient as the wind through the trees, and other diegetic sounds. Here, *Hellblade* indelibly links the game world to the character. One cannot completely understand Senua without experiencing the environment as a player, which is what makes the text one that could only be made in the medium of videogames.

The game world also physically contains much of the actual narrative. Scattered throughout each of the spaces of the game are large lorestones decorated in runes, which, when approached and interacted with, begins the narration of one of the other characters, Druth, a scholar from Senua's past. Each lorestone has Druth recite a portion of a Nordic myth, such as the creation of the world from the giant Ymir, or the tale of the hero Sigmund. Each of these narrations is either expository in nature, so as to give backstory to the mythological figures Senua encounters in her journey, or relates to her current quest in some way, such as Sigmund's acceptance of his own death at the hands of Odin, a mirror to Senua's own eventual acceptance of death before her confrontation with Hela at the game's climax. It is also significant that Senua is an outside to the fictional place of the game. The game begins with her approaching the shores of the mysterious land, and she is learning as much about the myths as the player is. There is a parallel progression

of knowledge between the player and the character they inhabit that reinforces the empathic bond from one to the other.

Screenshot 7: The first runestone in the game.

The qualities of Senua’s psychosis, her paranoia, fear, unease, etc., are shared with the player by our perceptions of and interactions with the environment. Sometimes, faces will appear in the rocks of the landscape, and objects will shift in the corner of our vision. One area of the game has the player guide Senua on an early quest to defeat Valravn, one of Hela’s guardians and the god of illusions. Throughout this area, Valravn appears between the trees of his forest – an eerie, tall, raven-like humanoid. When a tree or other visual obstacle passes between Senua and Valravn, however, we see that there is instead a crude effigy of the god in his place. This creates the sensation of doubt within the player. We are meant to distrust our own senses and perceptions of the world just as much as Senua mistrusts her own.

The instability of the environment, its constant shifting and deceit, does the act of simulating Senua's severe psychosis. In some cases in the game, her mental illness is manifested literally in the game world. Senua names her illness "the darkness," and as she descends into the depths of Helheim, she and the player are challenged by instances of threatening shadow. In one of the game's most notable sections, the player is suspended in a pitch-dark cavern, with only a dim view of their character on the screen. In order to progress, they must rely entirely upon the sounds echoing throughout the space around them: following the call of Dillion's spirit, and avoiding the uneasy lurch of shambling, unseen monsters. While terrifying, this part of the game puts the environment to great effect – just as Senua needs to maneuver through her psychological darkness, the player must progress through an equal, literal darkness. The shift from a graphical representation of 3D space to an audial representation forces the player to reconsider their perception of the environment. The sensory change from visual medium to audial forces the player into an uncomfortable, unfamiliar mode of interacting with the world, one that corresponds to Senua's unfamiliarity of the world due to her psychotic breaks from reality.

The technical term of "level design" that Fernández-Vara uses connotes a ludic system of obstacles and challenges, walls and pathways – procedural figures that exist within the game environment but do not add up to it. It is through an examination of the virtual space that Senua inhabits within *Hellblade* that we truly begin to understand her. Seeing the world as she sees it is the only way to make that empathetic connection from the player to the character. The simulation that *Hellblade* creates of Senua's psychosis is something that can only be done through videogames. The long subjection of the player to her hallucinations, and the inevitable acceptance of them would not be possible in the mediums of film or literature, just as the altering sensory perceptions of the world would fail in any format other than a game. Such is the power of the game

world, that interacting with and observing it can entirely create a strong emotional connection between the player and the character they control, as well as an almost profound insight into a mental illness that most players would have no other method of understanding.

Ludonarratives in *The Line*

When performing game analysis, it can be tempting to rely solely on the textual elements familiar to traditional media criticism. Literary figures such as metaphor and symbolism are very much present in videogames, and there is much to discuss about the rich characters that can inhabit games. However, any analysis of a game that ignores its ludic qualities – the actual computations and design that comprise the systems with which the player interacts, loses sight of what fundamentally makes games into their own unique artistic medium. By examining the ways in which the rules of the game and its narrative intersect and interact, this section will attempt to bridge the divide between the ludological and narratological elements of analysis.

When performing analysis of any narrative game, computer or otherwise, it is important to answer some essential questions regarding the synergetic parts of rules and text. How do the rules of the game help inform the narrative, and vice versa? Do the narrative themes align with the themes created by its rules? How do the game's systems determine what is diegetic and what is extradiegetic? The answers to these questions are integral to understanding a game not only as a narrative, but also as a composition of rules, mechanics, and procedures.

In many ways, the rules of the game determine its primary genre. The common design elements of games are bound by familiar traditions and tropes. When someone describes a game as a "first-person shooter," or a "role-playing game" they instantly identify the conventions of rules and systems associated with that genre. The former describes an action game principally built around the player using guns or similar weaponry to fight their way through the world or levels.

Genres also bring with them their own assumptions of textual functionality. If the first-person shooter (FPS) is played on a computer, and not a console such as an Xbox or Playstation, we would assume that camera orientation is determined by the movement of the mouse, and player movement is dictated by the W, A, S, and D keys on the keyboard, corresponding to forward, left, right, and back respectively. A role-playing game, or RPG, typically has options for different lines of dialogue that the player may choose from, as a way of customizing the personality of their character.

A game's rules inform the player of its themes in much of the same ways that narratives do. As opposed to fiction, however, games have ludic themes and narrative themes, which may or may not be consonant with one another. In 2007, game designer / critic Clint Hocking coined in his blog the term "ludonarrative dissonance," which he used in relation to the game *Bioshock*, developed by Irrational Games and published by 2K Games in that same year. Hocking's use of the term in his criticism of *Bioshock* stems from the incongruities between the way the game's ludic themes are in opposition to its narrative themes. As Hocking says, ludonarrative dissonance is a powerful presence in a player's experience with a game.

> The leveraging of the game's narrative structure against its ludic structure all but destroys the player's ability to connect with 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. (Hocking, "Ludonarrative Dissonance in *Bioshock*").

In *Bioshock*, these two competing structures relate to: the game's story, which constructs themes in ways that traditional-media critics should be familiar with, such as character and plot; the other structure is the game's rules and mechanics, which enforce a theme by directing the player to

interact with the game and its fictional world in a particular way. In *Bioshock*, this reveals itself in the form of a narrative that rejects and opposes Randian Objectivism, which runs counter to the game's ludic structure, a system that empowers the player the more they act in self-interest. The conflict between the two themes result in a text that is unsuccessful in its deployment of either, but this example is relevant in its demonstration of how important analyzing a game's ludonarrative is to the criticism of it as a text. While an internally consistent ludonarrative is not necessary for a game to be worthwhile, a dissonant ludonarrative indicates a game's themes are oppositional to one another, creating a contradictory player experience.

A counterexample to *Bioshock*'s failure in this regard is *Spec Ops – The Line*, a 2012 third-person shooter from Yager Development, also published by 2K Games. *The Line* is the story of delta commando Martin Walker of the US military on a reconnaissance mission to a sandstorm-ravaged Dubai, and Walker's descent into madness due to the incredible levels of violence he inflicts upon the surviving citizens of the city and the rogue Army company that stands in his way. *The Line*'s primary narrative themes are about the nature and illusion of choice in a videogame, and the player's own responsibility for their violent actions. The design and mechanics of *The Line* are effective because they complement the game's story and understanding how they interact here allows us to understand how these two structures function more broadly in videogames.

The Line is a work severely concerned with its own place among a canon of videogames, which makes its inclusion in this introductory thesis somewhat problematic. While a full analysis of the game cannot be made without delving into the other titles it is in conversation with, its incredibly effective blend of ludic and narrative structures make it an excellent example text. Part of the reason why *Spec Ops – The Line* was chosen as the subject for this section is the wide array of criticism already written about it. It was reviewed exhaustively upon its release in publications

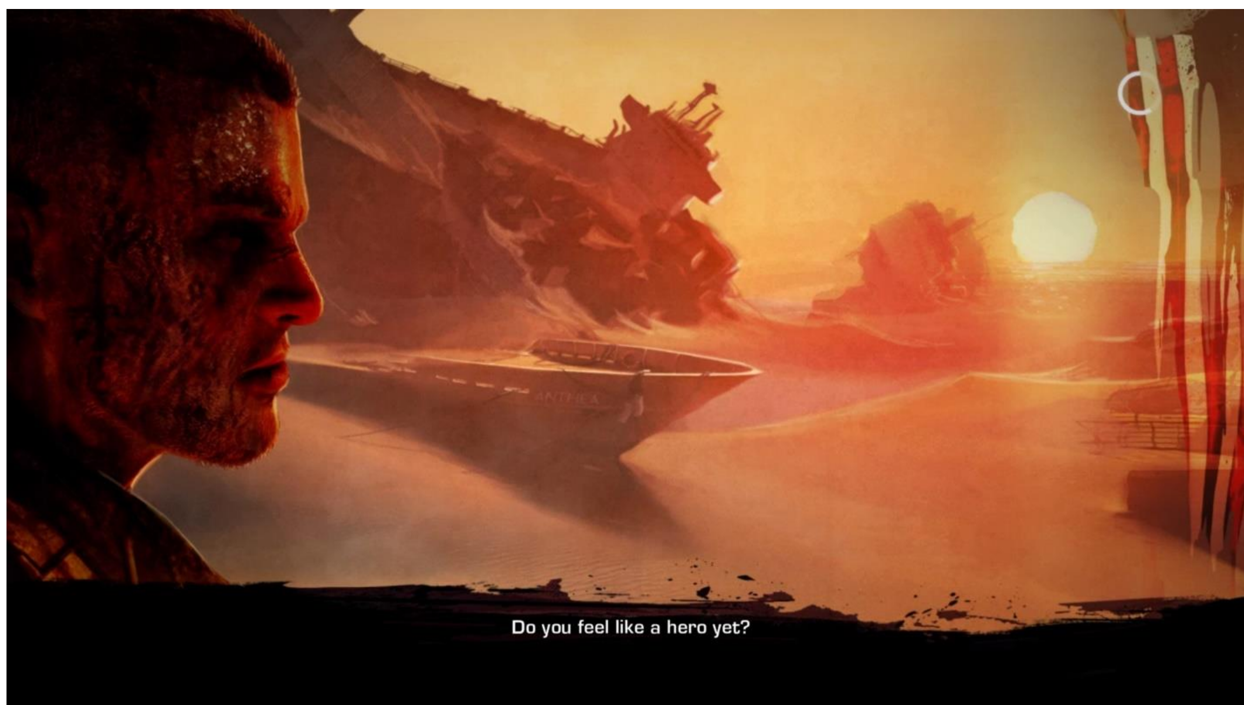
beyond the standard videogame press, such as its review in *The New York Times*, and works of more academic criticism are still being written about it. In 2014, game scholar Brendan Keogh published his long form close reading of the game, *Killing is Harmless*, a work of criticism deeply invested in the ludonarrative value of *The Line*. The game's textuality is rooted in its genre as a military shooter, in which players typically take the role of a white American soldier, who kills thousands of faceless others over the course of the game. *The Line* is a critique of these conventions, twisting the player's expectations through both its ludic structures and its narrative, by confronting the player with their own violent actions with its mechanics. As Keogh points out in *Killing is Harmless*:

> "*The Line* does this strange slow-motion thing with headshots where if you shoot someone in the head, time briefly slows down for about one second. The audio slurs, time drags, and blood blooms as the bullet connects with the target's head and they start to collapse… Lots of games reward headshots or otherwise 'good' kills… It's weird and self-congratulatory. Like a hardy pat on the back for killing a human being with the least amount of bullets possible… In *The Line*, the brief slow-down does the same thing, but as the game goes on a time slows with *every single* headshot… what first feels like romanticised 'good' shots become unsettling… I don't want to see the slow-motion anymore, but I am forced to." (*Killing is Harmless*, chapter 2)

Here, the gameplay mechanic of slowing time is unrelated to the narrative – Walker is not literally slowing down time when he/ the player shoots someone in the head – but it serves to further the same themes that the story does. *The Line* disallows players to avoid confronting their complicity in the computerized violence they perpetrate in the name of entertainment. Hundreds of times over the course of many hours, the game repeatedly pulls the player's attention to the narrative elements

generic to the genre that would normally be overlooked, such as shooting enemies, and forces the player to ask themselves what degree of violence they are comfortable with, and what they are willing to do in order to continue playing the game.

Other non-narrative parts of the game echo this theme of accusatory metatextual questioning. One of the conventional designs for shooter games is to have tips and hints on the loading screens that remind the player of certain gameplay functions, such as how to take cover, what certain buttons do, etc. In *The Line*, however, the loading screen addresses the player directly, with messages such as "Do you feel like a hero yet?" "If you were a better person, you wouldn't be here." and "To kill for yourself is murder. To kill for your government is heroic. To kill for entertainment is harmless." These statements could be directed at either the player or the character of Captain Walker. Are these Walker's thoughts as he moves through the narrative of the game, or



Screenshot 8: A loading screen from Spec Ops -- The Line

are these messages from the text itself, an accusation condemning the player and their motivations

for enjoying their violent pastimes? In effect, they are both, and it is this synthesis, the narrative and ludic modes coming together, that makes the themes of *The Line* so coherent.

The other ludonarrative textual element that must be considered when performing a game analysis, which is the examination of the diegetic and extradiegetic aspects of the videogame. The loading screen messages appear to be both part of the fiction, Walker's subconscious doubts relayed to himself, and a metatextual address to the player outside of the narrative. Exploring which rules and systems are diegetic and what are not is essential to understanding the text as both a game and a narrative. In *The Line*, there are obvious extradiegetic systems that immediately present themselves to the player. The main menu from which the player can choose to start a new game, the difficulty options presented to the player, all exist only as rules for the player instead of fiction for the game world. When the player dies and restarts a level at a previous checkpoint, Captain Walker is not being resurrected by some form of immortality or brought back through some temporal loop as in games like *Dark Souls* or *Assassin's Creed*. The player is engaging with the rules of the game on a separate level of interaction than they are with the fiction. The analysis of these qualities reveals how the game intends for the player to respond and interact with its systems, both ludic and narrative. The diegesis of the loading screen tips cause the player to associate themselves more closely with their game protagonist than they otherwise might. The traditionally extradiegetic conventions of the shooter genre, the checkpoint system for loading into games and the choice of different difficulty levels are meant to evoke familiarity with the player in order to later deconstruct that familiarity with the narrative.

One particularly interesting diegetic element of *The Line* is the game's use of music, which generally is played through speakers within the game world. The main menu of the game features an upside-down American flag while Jimi Hendrix's rendition of "Star Spangled Banner" plays

through a scratchy record player, and there are many later sections of the game that features similarly diegetic music. As Keogh writes in Chapter 2 of *Killing is Harmless*:

> At this point, I start to hear what sounds like the first proper music since the game commenced… here there is an actual, diegetic song playing from somewhere within the building… Here I am, lobbing grenade after grenade at these men while what I soon figure out is 'Hush' by Deep Purple plays over the top… The idea of the song's narrator being lured by a woman they know they should stay away from seems particularly telling as Walker bucks his proper orders, delves deeper into the city, and starts lobbing grenades at refugees. On some inner, subconscious level, it's meant to make us feel uneasy about our actions. (*Killing is Harmless,* chapter 2)

This part of the game would not have had the same effect were the music extradiegetic as soundtracks typically are in videogames and film. If the song was part of the background, emanating from some indistinct point beyond the fiction of the game, the player would tune it out as they engage primarily with the action, or at the very least would pay far less attention to the music than if it came from some realized space within the 3D graphical world on the same layer as their actual play.

Identification of which aspects of a game's design are diegetic and which are extradiegetic is key to understanding the fictional world of the game, the game's thematic intentions, and its methods of communicating with the player. In the following section, I will show how examination of the ludonarrative and diegesis in *Deus Ex – Human Revolution* is invaluable to any analysis of it as a narrative, videogame, and text.

Chapter 2
Analyzing *Human Revolution*:
Introduction

The purpose of this thesis is to theorize a critical framework that can be applied to any narrative videogame. To that end, any of the games previously discussed could certainly benefit from a thorough examination. Indeed, there is a version of this thesis that would have exclusively concerned itself with *Spec Ops – The Line*. However, in order to demonstrate the broad applicability of the frameworks, it is necessary to investigate how these methods interact and build upon one another in a coherent reading of a game. I have chosen the 2011 title *Deus Ex – Human Revolution* for that purpose because of the textual value I believe the game possesses, as well as my preexisting familiarity with the game, which is greater than most of the other aforementioned titles. Developed by Eidos Montreal and published by Square Enix, it was critically acclaimed upon its release, and is still regarded as one of the best roleplaying games of its kind. *Human Revolution*'s dual genres are like some of the other games we have discussed. Its procedural genre is like that of *Mass Effect*, the role-playing game. Additionally, the game is considered a stealth action game, of the same pedigree as *Dishonored.* Its conventional genre is a cyberpunk neo-noir, with a clear textual lineage descending from *Neuromancer* and *Blade Runner*. While *Human Revolution* is a textual work, it is also a piece of entertainment. Its quality in that regard is rooted in the subjective, however. To consider it merely on the level of fun is to move away from the textual analysis that makes this thesis worthwhile. After all, that type of analysis is already available in the form of the commercial review that can be found on any game-related website.

The following sections will examine particular area, mechanical, and narrative elements of the game using the four analytical subjects of constituent events, choice summation, environments, and ludonarratives to reach a comprehensive understanding of the game's player character, Adam Jensen, and the game's other mechanical and narrative themes.

To give a brief synopsis, *Human Revolution* takes place in 2027 Detroit, a near-future cyberpunk dystopia in which private medical corporations supply the world with high-functioning prosthetic augmentations. Some people choose to be augmented as a display of wealth or to be better functioning than their non-augmented peers, while others are augmented due to injury or other medical reasons. Both rich and poor alike, however, are forced to use Neuropozyne, a costly and addictive drug that helps the body accept their cybernetic implants. Players take the role of Adam Jensen, an ex-SWAT commander turned head of security for Sarif Industries, a rising global corporation whose founder, David Sarif, is intent on leading the way into the future with the groundbreaking research of Adam's ex-girlfriend, Megan Reed, who has supposedly unlocked the secrets of the genome to allow human controlled evolution. On the eve of her presentation to a skeptical Congress, Sarif Industries is attacked by heavily augmented terrorists, and Megan is presumed dead while Adam is mortally wounded. He is rebuilt via Sarif Industries' technology to be an extremely augmented and lethal operative, forced back into work early as another attack leads Adam down a long rabbit-hole of conspiracies. *Human Revolution* is a game about the growing power of corporations, the diminishing power of the lower class, transhumanism, and how the choices we make define our own humanity.

Affordances

Before even discussing the content of *Human Revolution*, it is useful to describe the affordances that the game offers to the player, that is, the actual interactions that define exactly

how the game may be played. Affordances are not considered one of the previously mentioned formal aspects for game analysis because of their ubiquity. Every game has affordances for the player. It would be repetitive and unhelpful to define them in every above example, but an analysis of them is needed in a longer, closer reading of a game. Affordances exist outside of a narrative context, though some of the following methodologies are similar in that they discuss the way the player interacts with the game's story. Examining the tools and rules for interaction is an important first step in beginning analysis of a videogame, because it is through these restrictions and allowances that the player will interact with the narrative and the world.

The first, most basic affordance that the player is likely to discover is movement. The player, as Adam Jensen, can walk, run, and sprint around in any direction. "Crouching" is a standard videogame trope for moving stealthily and is another form of movement in *Human Revolution*. Adam can also jump, possibly to heights of three meters if the player decides to augment his cybernetic legs once he has been rebuilt after the prologue. Although this list seems rudimentary, it is important to list the ways in which the player can interact with the game, because these interactions will train the player to think about the world of the game in certain, deliberate ways. Adam's ability to move over obstacles or quietly behind enemies allows the player to see the environment as not just a backdrop, but as a tangible and explorable extension of the setting. The more the player think in immersive ways, the closer they become to sharing the same consciousness as the character. These interactions center the player distinctly within the character.

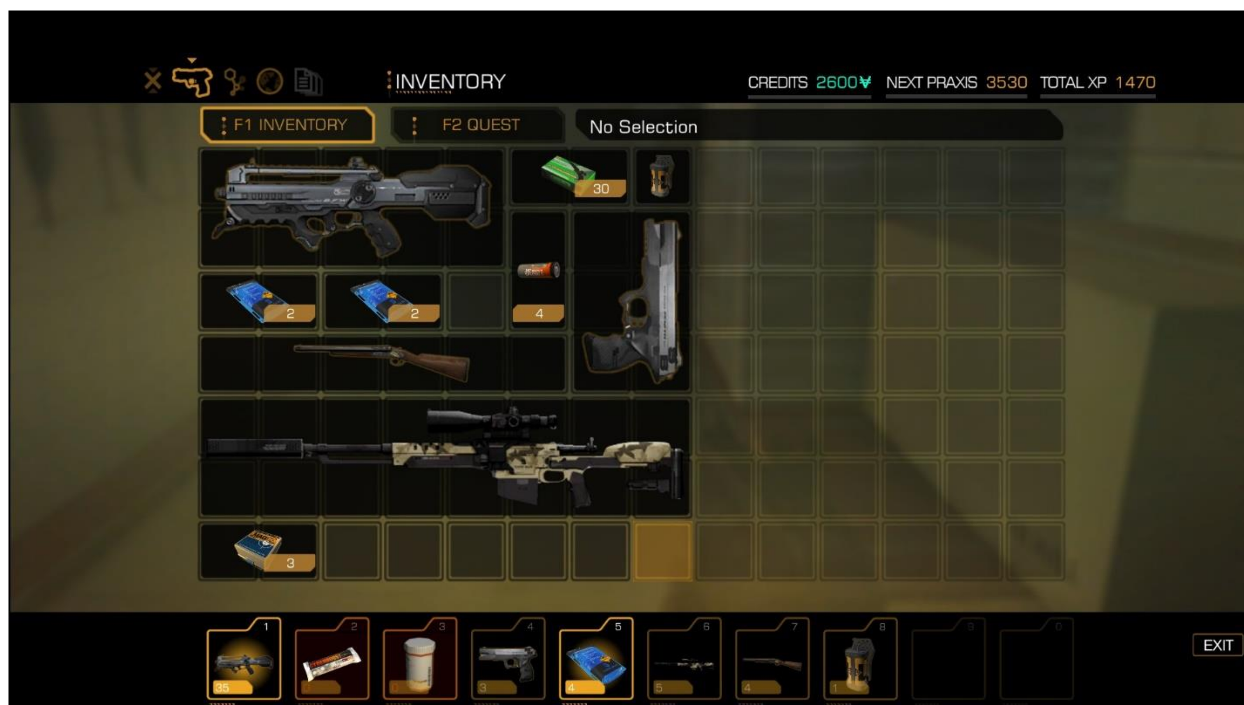
The setting of *Human Revolution*, of course, is populated. It is filled completely with objects and people, though the players interactions with either of these two categories is necessarily limited. Most of the non-player characters present in the game are either hostile enemies or background "extras" with whom Adam is unable to hold an actual conversation. The player is

unable to talk their way out of active conflict situations or engage in meaningful conversations with bystanders. Using the “interact” button on a bystander character will result in the character reciting one of a handful of single lines of dialogue, meant more to evoke the sensation of existing in the world of *Human Revolution* more than offering an actual dialogue. Characters that are named by the game, such as Pritchard, David Sarif, Megan Reed, give the player the sensation that they are among the important cast of the narrative of the game. Outside of these specific characters, the extras have the tag of “Civilian” appear next to them when approached by the player, an easy method of distinguishing between the narratively important characters and the general population of the setting. In most of the conversations with non-player characters, (NPCs), the player merely selects the topic they want Adam to speak about and allows the prewritten dialogue to play out. In others, the “social boss battles” to be described later, the player chooses the rhetorical method of persuasion Adam can pursue in the dialogue, but not the actual arguments themselves. In these instances, the conversational event is the constituent kernel and oftentimes whatever option the player chooses becomes a more secondary satellite. The conversation system is intended to be more cinematic than simulated, the distinction being that the player is merely choosing from a list of dialogue options, not completely constructing the conversation.

It should also be noted which objects are interactable and which are cosmetic, static parts of the environment. The player can interact with many varieties of electronics, such as personal computers, PDAs, security keypads, e-books, and so forth. Conspicuously absent from player’s interactions then are the mundane, non-electronics that occupy a great deal of *Human Revolution*’s world. The paper books, chairs, desk ornaments, picture frames and notepads are all visual artifacts and not dynamic actors within the game’s logics. This emphasis on the technological forces the player to see the visually distinct elements of the cyberpunk world – all that matters is the

electronic. The game expects the player to be able to enter a room and see the keypads that control access to a safe, for example, or the pocket secretary PDA among the papers on the coffee table, and the computer at the desk and know exactly how they can interact with those systems. As Adam Jensen becomes a technological being through his cybernetic implants, the player increasingly becomes technological through the types of interactions facilitated by the game.

The other types of affordances are generally standard to the genres that *Human Revolution* conforms to. As an action role-playing game, players can decide how they wish to customize their character and choose how they approach various challenges. Here, this takes the form of Adam's cybernetic augments, which can be adopted and upgraded throughout the game. Players can increase Adam's durability by upgrading the robotic components of his torso, for example. Each upgrade allows the player to interact with the world in different, meaningful ways. Unlocking the upgrade for Adam's arms allows the player to punch through weak walls, visually denoted by cracks in the concrete. This allows the player to adventure down paths previously unexplorable. The game incentivizes thinking as its characters do, that the technological upgrades to the body are only beneficial. Since there is no gamified penalty to pursuing these augments, the player is coaxed into the same positions as the average character in *Human Revolution*. Augments are a normal part of that game's reality, so then through the game's systems they become a normal part of the player's experience.



Screenshot 9: Some items from Adam's inventory early in the game. From top to bottom: A combat rifle, its ammunition, a stun grenade, revolver ammunition, a 10mm pistol, 4 remote explosives, a double-barrel shotgun, a sniper rifle, and shotgun ammo. An energy bar and painkillers can be seen at the hotbar at the bottom of the screen.

The player may also pick up, carry, and use certain items and objects they can find or purchase across the game world. Most of these are combat related. Adam can carry multiple guns, the ammunition required to use them, different types of grenades and other explosives, etc. Adam is the protagonist of an action cyberpunk game, and between his trench-coat attire and personal armory, we should be reminded of Neo's lobby fight scene in *The Matrix*. The other sort of object that the player can have Adam carry are the "consumables," or single use items that provide some positive effect on Adam. There are "energy-bars," the only food the player can have Adam eat in the game, which restores the stamina drained by knocking out enemies and lifting heavy objects. If the player is wounded in combat, or by other hazard, they can consume painkillers to reduce damage to Adam's health statistic. Likewise, if players choose, Adam can equip and consume whatever alcohol they find in the game world, causing a small replenishment of Adam's health at

the cost of a momentary stupor-like distortion overtaking the computer screen. It should be noted as significant that only interactions Adam can have with his body are in the form of vices – unprescribed pills and alcohol are the only potential diet for our cyber-noir protagonist. It firstly tells the player something about the world, that Adam inhabits a gritty dystopia in which, between the commonplace violence and the abundance of drugs, life and health have little value. However, in the instance of the alcohol Adam can imbibe, the brevity of its effect also shows that due to his cybernetic metabolism, he can find no escape from his dark reality of unending violence and unwanted augmentations. The game affords the ability to only consume drugs and alcohol because it needs the player to understand that that is the life Adam is condemned to, a life of merely ephemeral pleasures and constant violence, devoid of substance and vitality. In this way, even without any discussion of a game's plot, we see how the ludic elements that comprise the player-text interface reveal its central fixations and tensions. The exploration of a game's affordances should be the critic's first foray into any game's analysis.

Constituent Events

The first non-prologue mission of *Human Revolution* introduces many of the main narrative, thematic, and mechanical elements that are to be built upon for the rest of the game. We learn how we can move and interact with the rest of the game world – creeping through air vents to circumvent enemy patrols, hacking into computers and security systems, incapacitating villains in hand-to-hand combat, or attacking in a blazing firefight. Here, too do we learn much about the world itself, the activities of violent "pro-human purists" who attack cybernetic augmentation centers, the power corporations hold over the police and the state, and the intent required to be human, one of the primary themes of the game. With all the different paths one can take during this mission, no two players will experience it the same way. Using the constituent events of this

game chapter, those narrative and character moments that all players will encounter, will allow us to untangle the web of interactivity and reveal the basic framework upon which criticism can be built. In this way, we can examine those foundational narrative threads that would otherwise remain unrealized by a typical close reading, one that either views different instantiations of the game as incomparably separate or else makes no acknowledgement of how some events of one instance overlap with another. It is the focus on these overlapping moments that makes this form of investigation so useful.

The mission, which begins with Chapter 2, "Back in the Saddle" follows Adam Jensen as he is recalled from his recovery early to resume his position as Chief of Security for Sarif Industries, a very hands-on role. A group of armed terrorists have taken hostages at the manufacturing plant in which a prototype weapon has just begun to be produced. David Sarif, the transhumanist inventor behind Sarif Industries, personally escorts and briefs Adam on his infiltration into the plant, where his first priority is to recover the prototype before the Detroit Police Department enter.

We must look beyond the major plot elements of the story – that the hostage situation occurs, that Adam returns to active duty at Sarif Industries, and the mission is in some way completed. These big, prescribed moments are generally mere set-pieces and contrivances to push the characters around into different scenes. To theorize about why the developers chose to make the narrative of *Human Revolution* the way it is, or why they decided to place one scene or mission after another, is beyond the scope of this thesis. A useful way of thinking about these constituent events is to imagine a row of outwardly identical houses, each with the same floorplan. While the order of the rooms within each house is the same, the furnishings of each may differ. The contents that remain the same in every room in each house, therefore, collectively tell us something about

all the occupants. Thus, the constituent events I am interested in the are the smaller details that operate within those grander plot points. While there is obvious value in considering major plot points, it is not the same sort of revealing information that can be gathered from the smaller details of the mission. Wondering why the architect designed each house so tells us little about what we want to know, which are the fine characteristic inhabiting each space.

Beginning with Adam leaving Sarif Industries in a VTOL jet, the first constituent event is a brief conversation with Sarif's Chief Pilot Faridah Malik, who asks if Adam feels he is ready to go back into the field. The choices presented to the player are either "Challenge" or "Reassure" Malik, but the answers are less important than the question itself, which introduces an element of uncertainty to both Adam and the player. By this point in the game, we had only experienced incredible failure within the prologue, the gruesome scripted sequence that has Adam gutted, shot, and left for dead. While Malik asks Adam if he is ready for action, the game is also asking the player if we are ready to fully interact with its systems, as opposed to the limited interaction available in the prologue.

After the dialogue with Malik, Adam enters the VTOL and comes face to face with David Sarif for the first time since the attack. Sarif and Adam have a short conversation while en route to the manufacturing plant. Here, there is only a single line of dialogue that the player is unable to skip: after Adam demands to know who the leader of the terrorists is, Sarif replies "Goes by the name of Sanders. That's him, there," as the camera shifts to a display showing an image and profile of the pro human terrorist. "He isn't augmented, Adam, so he can't be one of the mercs who attacked us, but he did know exactly how to get inside our plant." That this line is "unskippable" is interesting. It is the barest amount of information the player needs to maintain familiarity with the story of the game: the upcoming villains are distinct from the previous antagonists.

Immediately after this bit of dialogue, Sarif informs Adam that as head of security for Sarif Industries, Adam determines his own “rules of engagement,” offering the player first the choice between receiving a lethal or nonlethal weapon, and then the choice between a short or long range weapon, resulting in the player obtaining either a revolver, a combat rifle, a stun gun, or a tranquilizer dart rifle for the mission. From within the context of the videogame genre conventions, this is an entirely mundane interaction. *Deus Ex* shows us in this early chapter that it is going to obey the form of the action role-playing game: the player is allowed to choose our means of interacting with the game’s systems, as long as we promise to do so. The contract between the player and the game is the latter gives us the sensation of agency, which is in some way its own reward in a videogame, the former will employ that agency to engage with the game’s systems.

On a textual level, however, this choice should strike us as strange from our own reality. What kind of world is it in which the CEO of a Fortune 500 company personally escorts his head of security to commit multiple extrajudicial murders and assaults in an ongoing hostage situation, just as he orders the delaying of the police SWAT team’s rescue attempt? The violent, corporate world of *Deus Ex*, the game tells us. By forcing the player to pay attention to the plot, and by lingering on the choice of weapons offered by a billionaire CEO, *Deus Ex* constructs a clear image of its own world and the characters who inhabit it. Here we have a dystopian vision of an America plagued by multiple armed domestic terrorist groups, one in which the wealthy elite control the police, and by extension the law itself–David Sarif arms his own private security to kill on his own behalf. *Human Revolution* never ceases to remind the player of its dystopic setting. Just as we are introduced to the game’s combat systems – the different types of weapons to use – we are reminded of its moral systems. In both *Human Revolution*’s ludic systems and in its fiction, life has little value beyond what the player gives it.

Of course, the player can choose for Adam not to kill. At no point during the subsequent mission does Adam need to confront any of the armed Purity First hostage takers. In fact, depending on the player, they could never even be aware of his presence in the manufacturing plant. During the actual chapter, there are only two objectives that the player is mandated to complete by the game: recovering the prototype weapon and confronting Zeke Sanders, the leader of Purity First. Even rescuing the dozen or so hostages kept in the manufacturing plant is only a secondary, optional objective. In this instance, what is *not* a constituent event is just as informative as what is. The negative space around the minimum requirements to complete the mission creates its own picture. It is vital to *Human Revolution* that the only motivation the players have to rescue the hostages is a moral one. The player must choose to treat the game as an extension of reality, that the humanoid models rendered in the game are actual people that are worth saving. The humane and moral decisions are almost always optional, and necessarily so. If saving the hostages' lives was a constituent event, for example, the imperative morality would make Adam just another defiant hero in a hostile world. The lack of agency in making the righteous choices means that the game would lose connection with its own theme of "where do we find our own humanity?" The game repeatedly asks us what it means to be human, and through making these ethical decisions, we are meant to realize that humanity is not related to the body, but to the deliberate choices we make. In *Deus Ex*, we *choose* to be human.

Choice Summation

Unlike the previous section on constituent events, in which we looked at the parts of a mission that all players encounter, here we will employ my technique of *choice summation*, that is, looking at every available option the player has as being in some way revealing of Adam's character. Even though the choices we make in any given playthrough of *Human Revolution* reveal

a certain aspect of our protagonist, that aspect alone is not necessarily representative of the whole Adam. Five different instances of the game would generate $Adam_1$, $Adam_2$, $Adam_3$, $Adam_4$ and $Adam_5$, each superficially their own character. The Adam one player performs might be different than the Adam another player performs with regards to their tactics, equipment, and dialogue, but taken together inform more of Adam's character than they do apart. With the technique of choice summation, we can isolate and examine all variances between character subsets and compile them together to see Adam Prime, the totality of all character performances and instantiations. Any comprehensive analysis of *Human Revolution* must look outside any single iteration of the game and consider every possible performance of the character as simultaneously indicative of Adam Jensen

In the missions following "Sarif Under Siege," the player is placed in a larger, open-world environment not dictated by the narrower constraints of the earlier levels. One of their first objectives is to investigate the dead hacker from the mission in the manufacturing plant, whose body is located in the morgue of the local Detroit police precincts. The player can choose to approach this mission in a wide variety of ways. They can sneak in to the police station from any of the rear entrances once they have been unlocked, or they could enter from the sewer entrance after navigating through hostile gangs. Or, the player could simply walk in to the front door and attempt to talk their way down into the morgue. Once the player is in the police department, they can remain unnoticed, crawling through vents and slipping past guards and security cameras, or they could even fight past the entire precinct, incapacitating or killing the police officers they encounter. No two players must enter the morgue in exactly the same way. Rather than the described binary morality system of games like *Mass Effect*, which report to the player their current grade along a good / evil axis, *Human Revolution* allows players to make their choices with no

mechanical rule-based repercussion, only the diegetic in-fiction response from the world and characters.

The choice of the mission I would like to examine is the first "Social boss battle" of the game. There are a few moments throughout *Human Revolution* in which the player must navigate a dialogue with an opposing character, trying to "win" the encounter by making a persuasive or intimidating argument. In this instance in the police precinct, the opposing character is Wayne Haas, the self-pitying desk sergeant in the lobby of the precinct. The player attempts to convince Haas to allow Adam into the morgue despite his lack of authorization, but the conversation quickly develops into being about the two characters' previous relationship as SWAT team commanders. Through this conversation, the specifics are revealed of the "Mexicantown" disaster that was previously only passingly referenced. As the leader of a Detroit SWAT team, Adam was ordered to shoot a fifteen-year-old boy who had potentially dangerous cybernetic augmentations. Adam refused, and the order fell on to his subordinate, Wayne Haas, who complied. Haas' despair over both his guilt and his crumbling career almost immediately becomes the focus of their dialogue, and players can either choose to assuage that guilt, force Haas to reconcile himself with his actions, or plead for him to allow Adam though regardless of their history. The three dialogue options that player is given throughout the conversation are to "Absolve," "Plead," or "Crush". In order to win this social encounter, the player must successfully listen to what Haas says, sympathize with him, and choose the option that effectively uses that sympathy. In playing through this conversation multiple times, the canny player realizes the pattern. Haas reacts to each choice with a random response from a dialogue set, meaning that the player cannot memorize a "correct" dialogue choice for a given line. Since this is the first social boss battle of the game, some mechanical simplicity is to be expected. The following social confrontations across the game are increasingly complex,

but Haas' conversation serves as an effective tutorial of not only the rules for these dialogues, but also serves as an introduction to more of the setting itself. The conversation demonstrates that here is a world in which there is no easy reprieve from guilt. We see Haas unable to reconcile his own participation in a wrongful murder. The only way for him to accept his guilt is to be "crushed" by the player, a violent resolution to a violent act. As is apparent from this dialogue alone, *Human Revolution* is a world of often self-perpetuating violence.

Screenshot 10: The player selecting the "plead" dialogue choice for the conversation with Haas

The first step in summing choices as part of analysis is to determine if any options are contradictory with one another. In this instance, the conversation is far more based upon what Adam believes will be most persuasive to Haas, not what is necessarily the truest for Adam. The three different choices are based on Haas' personality and the rhetorical strategy that Adam thinks is most effective against it. We don't know if Adam believes that the Mexicantown massacre is really in

the past, that it's time for Haas to move on, or that the shooting wasn't anyone's fault. The closest option to Adam's own beliefs as evidenced by his actions outside of the player's control is the "Crush" option, which has Adam exclaim "He was 15, Haas! In what world can you justify putting a bullet in between the eyes of a 15-year-old boy?" and the following "Crush" option in which Adam tells Haas "I've heard enough of this. You're lying to yourself. You pulled that trigger. No one else. You can't escape that, for the rest of your life. Accept it, make it a part of your history, and put it in your past. Because denial is only making it worse." This is at least congruent with the backstory provided regarding the incident, that Adam refused an order he believed to be immoral. What these choices add up to is a picture of Adam as a character who would say whatever he finds to be most persuasive to his verbal opponent, regardless of if those arguments align with his own personal beliefs. This is part of how Adam is incredibly complex as a videogame protagonist. The player's relationship to him is equal parts performer and observer. It is entirely an interior perspective, but the player's interactive agency is entirely externalized. We can make choices for him, but those choices do not define his character; they merely reveal it.

However, the other options afforded to the player also indicate someone who does not rely on a single tactic. Players can fail the conversation with Haas, resulting in the desk sergeant no longer speaking to Adam, and does not give necessary access to the morgue. In this instance, or in the event of the player ignoring Haas completely, they must find alternative and illegal means to gain access to their primary objective. Adam, while willing to negotiate with Haas, is simultaneously willing to break into the police station in order to achieve his goal. In extreme circumstances, Adam is also willing to kill policemen in order to get into the morgue. This tells me that Adam is always at the risk of completely shutting himself off from his humanity. The power he has as a character, the power afforded to the player though the game's rules and

mechanics, is the temptation to use the quick and easy path, the selfish and the violent. When the player decides to have Adam commit terrible violence, they are giving in to the side of him that has always been there, the side opposed by the moral decisions that the game also allows us to make. This side of Adam needs to be present. The composite image of his character needs to one of internal conflict between the moral and amoral, so that if and when the player makes the human choice, both them and Adam are in emotional harmony. The game's offer of violence is omnipresent, so when it is refused, both the player and Adam are sympathetically giving into their respective humanities.

Environmental Storytelling

There is a common thought in game criticism that certain characters are so varied in their iterations that they must be described as being completely separate characters entirely. Because of the breadth of narrative choice that we are often afforded in videogames, the characters we portray can take such wildly different forms and identities that it is normal to hear people say that "their" character behaved like *this*, while another player's character behaved like *that*. When discussing Adam Jensen, the playable character of *Deus Ex – Human Revolution*, "my" Adam is empathic, eager to help others, and does his best to avoid conflicts when he can, while "your" Adam could be a selfish murderer, bitter at the world and lashes out with violence whenever he can. Both readings of the character are supported by the choices the game allows us to make. With this in mind, how then can critics talk about the character in a broadly applicable way that can facilitate nuanced discussion without having to perform separate readings for each instantiation of a character? One solution is to use the static, non-interactive elements of a game environment to inform character and narrative. The best example of this from *Human Revolution* is Adam's

apartment, in which we can learn certain and reliable facts about him as a character that can apply to every possible portrayal of him.

Chapter 4 of *Human Revolution* is the first time the game releases the hand of the player and lets them explore futuristic Detroit. In addition to the two mandatory main missions of visiting the cybernetic LIMB clinic near Sarif Industries and somehow accessing the morgue of the local police precinct, there is also a host of side missions that can occupy the player's time in the city: confronting the thief who stole valuable Neuropozyne from the Sarif labs, investigating the missing evidence collected by the police on the terrorist attack, helping an old colleague of Adam's from his SWAT days take down a corrupt detective, and so on. Between all the nooks and crannies to explore, cybergangs to circumvent, and plotlines to progress, players are forced to spend comparatively little time in Adam's apartment, open for the first time after they recover the data chip from the hacker's skull in the morgue.

Over the course of *Human Revolution*, players must go into Adam's apartment only twice. Once here in Chapter 4, and again upon their return to Detroit. Easily missed, the hidden details of Adam's home are some of the most revealing insights into his character. Whereas in the prologue we see Adam as a character from an exterior perspective, without our control, and in the first mission to the manufacturing plant where we were able to make substantial choices that show what our protagonist is like, here the environment does the characterization, not our choices as the player. The subtle power of environmental storytelling provides us with a view into Adam's own reality, a life defined without player interaction.

Screenshot 11: Adam's apartment

Most players will enter Adam's building only when instructed to—it is located out of the way of the other objectives and offers little exploration beyond the apartment itself. Adam lives in the Chiron Building, an area visibly separated from the general detritus and plight of the rest of struggling Detroit. The interior is furnished with nice wood and hanging lights, modern and wealthier than one would expect of our grizzled protagonist. The occupants who loiter around the lobby are not the same sort as we would encounter out on the streets of Brooklyn Court or Derelict Row. The name of the building should strike us as being important. Chiron, the Greek mythological Centaur, was known as being exceedingly wise and just. It is only fitting, then, that Adam will make his home here. In a way, he is also half man, half beast. The extensive surgeries he was forced into have left him just as much machine as man, though the game asks us if these augmentations have made him "more human than human," as Sarif believes, if they have

diminished his humanity. As for Chiron's renowned wisdom, the events of the game show us that Adam is instrumental to the shaping the rest of the world. He is placed into multiple positions in which he determines events on a global scale, a power one would hope afforded to only the wisest. The relationship between the name of the building and Adam's character is precisely the sort of revealing detail that makes environmental storytelling so potent a method of investigation.

After taking the elevator up, we go down a hall to room 3434, Adam's apartment. When we open the door and enter, we are greeted by a soothing, robotic voice that welcomes Adam home, and the blinds on the large windows automatically ascend, revealing the dusky yellow Detroit skyline. The intersecting lines of the shadows, the upholstery and the blinds along the large windows compose a neo-noir scene remeniscient of Rick Deckard's apartment in *Blade Runner*, a film from which *Human Revolution* borrows much of its imagery.

Compared to other sections of the game, almost everything in the apartment is static, or has no function outside of being a rendered visual object, as opposed to having any sort of meaningful mechanical interaction. The player can read only a single e-newspaper that reports the outcome of the mission at the manufacturing plant, which changes depending on their earlier choices, and similar copies can be found across the game world outside of the apartment. There are very few in-game texts present in the apartment. We can read the newspaper, the two e-books, and Adam's emails, or watch the TV which shows, as always, Picus news, the only news station available in the world of *Human Revolution*. From these things we can learn valuable information about our protagonist. On the table next to the window we see a desk cluttered with clock parts and gears, indicating that he has taken up clock-building to improve the manual dexterity of his new mechanical hands. However, the e-book on the table in the middle of the room is an excerpt from "Advanced Clock Building," which describes early 13th century clockwork by inventor Al-

Jazari, who was the "first to utilize the aesthetic device of the clockwork automata." Perhaps then, by reading a history of mechanical invention, Adam is trying to understand his place within it? Is he wondering if he is simply an aesthetic automaton? Adam never shares his thoughts, but the presence of the book suggests that we should be cognizant of such questions as they reveal Adam's own fears.

In order to progress the story, players must log on to Adam's personal computer and enjoy a brief dialogue with Adam's tech counterpart and rival Pritchard. After this, they are free to leave the apartment, but attentive players will make note of the rest of the contents of Adam's computer. There are only three messages left on his email: one is from David Sarif's assistant Athene describing how Sarif Industries has paid for a year's worth of lease on the apartment; a message from Adam's landlord inquiring as to how exactly yet another one of Adam's bathroom mirrors became broken, evidence of which we can see in the bathroom; the last message is a tragically short email with the subject "RE: your dog" that tells Adam about how she had to put down his dog Kubrick while Adam was in surgery after being nearly murdered in a terrorist attack.

What interests me most about Adam's apartment more than say, his office at Sarif Industries, is how the supplemental information – the objects with which we cannot interact, and thus have no incentive to examine – provides insight into Adam's character. The mirror on its own without the email from the landlord tells us something immutable about Adam's character, shared by every player, no matter what choices they have made so far in the game. With the mirror, we see how Adam has been unable to fully accept his new life as a cyborg, and the sight of his reflection provokes him into anger and violence. When we see that Adam has received only seven "get well soon" cards with comically understated messages such as "Dark clouds never stay…" and "May you heal quickly," we see a common link between any and every play-through of *Deus*

Ex, a constituent element of Adam's character that tells us something about his life, in this instance, that he has few people who genuinely care about him and his recovery. The presence of these cards builds the empathetic relationship between Adam and the player. The player understands just how traumatic Adam's experiences were, because we were there when they happened. The cold distance between Adam and the well-wishers brings the player and the character together, away from the rest of the world.

Screenshot 12: The array of "get well" cards

Nowhere else are these constituent elements better displayed than the books Adam keeps in his apartment. We see them in stacks next to boxes of belongings he has never unpacked, placed in piles in corners and under tables. These are not the in-game readable e-book texts, however. They appear as little more than square textures, blurry and barely legible. Many of the titles are repeated throughout the apartment. What is most fascinating about these books is that many of them betray some aspect of Adam's knowledge as represented by the game's mechanics. Each

path a player can choose to take during the game fits the with the title of a book on one of these shelves: *Under Heavy Fire* and *Guns Blazing* fall in line the player's ability to solve many problems in the game with violence. *Using Force for Peace* and *The Art of Gratuitous Violence* are others. Conversely, a book that appears several times is *Resolving Conflicts*, which reflects the player's option to avoid combat altogether in many areas of the game.

These books reveal that despite any given choice the player makes regarding the obstacles presented to them over the course of the game, Adam is well versed in all of them. A player can choose to avoid every single enemy in the entire game, yet Adam Jensen is still familiar with *The Art of Gratuitous Violence* and *Guns Blazing*. We may choose to represent him as being completely selfless or totally immoral, but based on the books he keeps in his apartment, Adam is familiar with *Self-Gratification*, *Police Force and Ethics*, and *Life and Regrets*. Adam, to us, the collective players of *Human Revolution*, is not an iterative character whose personality is reconstructed anew with every instantiation. Rather, he is always a composite character, the sum of every available option given to the player. Because we are adding together every possible choice and affordance to examine our protagonists, what the player chose over the course of any particular play-through of the game is not as revealing as the choices themselves. Adam *can* resolve conflicts through persuasion as much as he *can* do the same through violence or stealth. Whether or not he does so is the performative aspect of the game, but it is ultimately less important in understanding his character.

Game environments need not be so tailored to a character in order to reveal something about them. Throughout all of *Human Revolution*, we learn about Adam Jensen by exploring and investigating the world. It is only through our own curiosity do we (and Adam) learn that he was experimented upon as a child in a secret facility, and that it was upon his DNA that Megan Reed

based her research. We learn about Detroit by walking among its streets in Adam's shoes, seeing it through his eyes. When we see something about his environment, we learn about him and his place in it.

Many games are not as explicitly informative about their characters as *Deus Ex* is with his apartment, but the game world is one of the best windows into understanding and analyzing characters. Whether it's the visual hallucinations of *Hellblade*, the sandstorm-struck city of *Spec Ops – The Line*, the grimy city of Dunwall in *Dishonored*, or the alien worlds of *Mass Effect*, exploring an environment through the perspective of a character is one of the primary methods of understanding both them and the world.

Ludonarratives in *Human Revolution*

While other sections of this *Deus Ex – Human Revolution* analysis are primarily concerned with how the player interacts with the game's narrative, here I will be examining how the ludic elements of the text are just as integral to the construction of the game's themes as its story. In *Human Revolution*, the rules are meant to evoke the same sensations that protagonist Adam Jensen experiences: the unfamiliarity of having cybernetic augmentations, the temptation of selfish violence, humanity's control over its own destiny. There are several significant systems that greatly contribute to these themes throughout the entirety of the player's experience in the game. Some of these mechanisms are related to how *Human Revolution* deploys conventions of its genre, some from how the game responds to the player's narrative choices, and others come from the diegetic elements that serve a rule-based, mechanical purpose within the story itself.

It is not enough for the immediate stimuli of the game to be tonally consistent: the rules themselves must also align with the narrative themes to make a coherent, effective text. The graphical landscape of the game creates a gritty cyberpunk atmosphere, the characters talk in slang

about "augs" and megacorporations that control the world, the music, both diegetic and extradiegetic, is futuristic synth; all of this, however, means little if the systems that define the game are incongruent. The ludic must fit the narrative.

The first significant system of *Human Revolution*'s design that contributes to its ludonarrative consistency is the way the game awards the player with "experience points," or XP, based on the successful actions they perform. XP are ubiquitous element of role-playing games, used by the genre to advance the player's mechanical abilities, escalating them alongside a rising narrative. Traditionally, there are player "levels" that, when attained, unlock new powers the player can use during the game. In *Human Revolution*, these XP are used to purchase and unlock new cybernetic augmentations for Adam, which in turn augment how the player interacts with the game world. If the player chooses the augmentations that make Adam more resistant to bullets and increase his accuracy when firing weapons, they are more likely to choose more aggressive tactics as the game continues. Adam's augmentations determine both the playstyle for the game, but also his narrative interactions, which can become increasingly violent, social, stealthy, or technological depending on what the player unlocks. For example, unlocking a particular pair of "social enhancer" augmentations allow Adam to read the personality types of the people he talks to, giving the player information on how best to persuade them in their interactions, as well as the ability to release a pheromone that convinces certain characters to react favorable to Adam, effectively bypassing the persuasion system altogether. These mechanics allow the player to create an interior view of Adam, filling in parts of his personality drawn not from his actions, but by what he is capable of. The player might never use the pheromone augmentation, but Adam's possession of it creates the image of someone who manipulates others as befits the dystopian setting.

The method by which the player receives XP is just as significant as how they later spend them. *Human Revolution* has several "gameplay pillars," or archetypal styles of playing the game. The two main pillars are combat and stealth. Players can either fight their way through obstacles or find alternate routes and hidden paths to sneak by without notice. There are also minor pillars such as social interactions and hacking into devices, both of which may intertwine with the major pillars – hacking can be used to unlock doors and shut off security cameras, which aids in stealth playthroughs, for example. In *Human Revolution*, the player receives XP based upon the quality of their performance, no matter what pillar of gameplay they choose to pursue. However, the game does slightly incentivize different styles of playing based on their respectively difficulties.

Screenshot 13: The player receives 100 XP for exploring a narrow vent, which is added to their total count of 1700

For instance, completing the first non-tutorial mission by killing every enemy nets the player around 5,000 XP; nonlethally incapacitating them, a more challenging method, grants the player around 5,600 XP; If a player were to successfully navigate through the mission without alerting or incapacitating any enemies, they would achieve around 7,000 XP. The effect of this

awards system is that the player is given the freedom to play *Human Revolution* however they wish but are better rewarded the more they challenge themselves. As a result the experience point progression system trains the player to think about the fictional world of *Deus Ex* in the same way that Adam Jensen does: they begin to look for computer terminals to hack, they watch and learn the patrol patterns of nearby guards, they find hidden paths to traverse. The ludic mechanisms of the game lower the divide between the player and the character. Adam as a character is a master at all these ways of interacting with the world, and the game trains the player to emulate that level of skill. In short, the XP system for *Deus Ex* makes players perform Adam's expertise. Again, the interior perspective on his character is what builds an emotive connection from the player to the character, which subsequently extends to the world Adam inhabits.

The ludonarrative is also maintained by the verisimilar fictional world as it relates to the system of missions and player exploration. In between the prologue and the first mission, Adam is recalled back to Sarif headquarters to be briefed on the hostage crisis that constitutes the following mission. During this time, the player can explore the offices of Sarif Industries, check in on some other characters that inhabit those spaces, and see what will serve as a hub for many parts of the game. Players can enter Adam's office as the head of security, and go through his emails, one of which details the repeated thefts of neuropozyne shipments, the pharmaceutical that allows one's body to accept cybernetic augmentations. The player can attempt to unravel this mystery before departing the area – this small side-mission is a fun investigation that has Adam deduce computer passwords, follow trails of notes, and hack into his coworkers' emails.

Throughout this entire section, however, the game keeps a hidden clock that counts down while the player explores the building. If the player takes too long to leave the area and begin the rescue, David Sarif calls Adam and informs the player that due to their delays, the hostages were

all killed, and the subsequent mission is effectively a failure before it even begins. While this is certainly a narrative moment – the penalty for failure is a narrative one and not a mechanical punishment – it is also the game's systems directly informing the player of how the game will treat their decisions. Feel free to explore, the game says, but know that the world of *Human Revolution* does not exist at your convenience. In this way, the game uses both its ludic and narrative systems to inform the player of the way they need to interact with the text.

One of the most effective methods *Human Revolution* deploys in order to preserve its ludonarrative is having the dialogue of non-player characters change depending on the actions the players make. Specifically, the level of violence inflicted by Adam determines the way he and the player are treated by the rest of the world, another instance of narrative consequence for ludic behavior. That same first mission ends with Adam talking to his pilot, Faridah Malik, one of his only friends in the game. If Adam rescues the hostages, Malik commends him as the mission ends:

> You made a lot of people happy tonight, Jensen. And not just the men in suits… They pay you to put corporate interests ahead of people. You found a way to satisfy everyone. Guess Doctor Reed was telling the truth about you… Before you were hired. She said the papers were lying about Mexicantown. That you weren't fired from the force – you quit when you realized 'Protect and Serve' had become 'Protect and Serve the Corporate Interest'.

If the player fails to save the hostages, whether deliberately or through neglect, the conversation is completely different, and Malik admonishes Adam.

> Not quite what you signed up for, is it, Jensen? Sneaking into your own factory, hiding stuff while the boss keeps the cops at bay. Don't get me wrong, I love Mr.

> Sarif, but I hate it when contracts become more important than people. I thought you did, too.

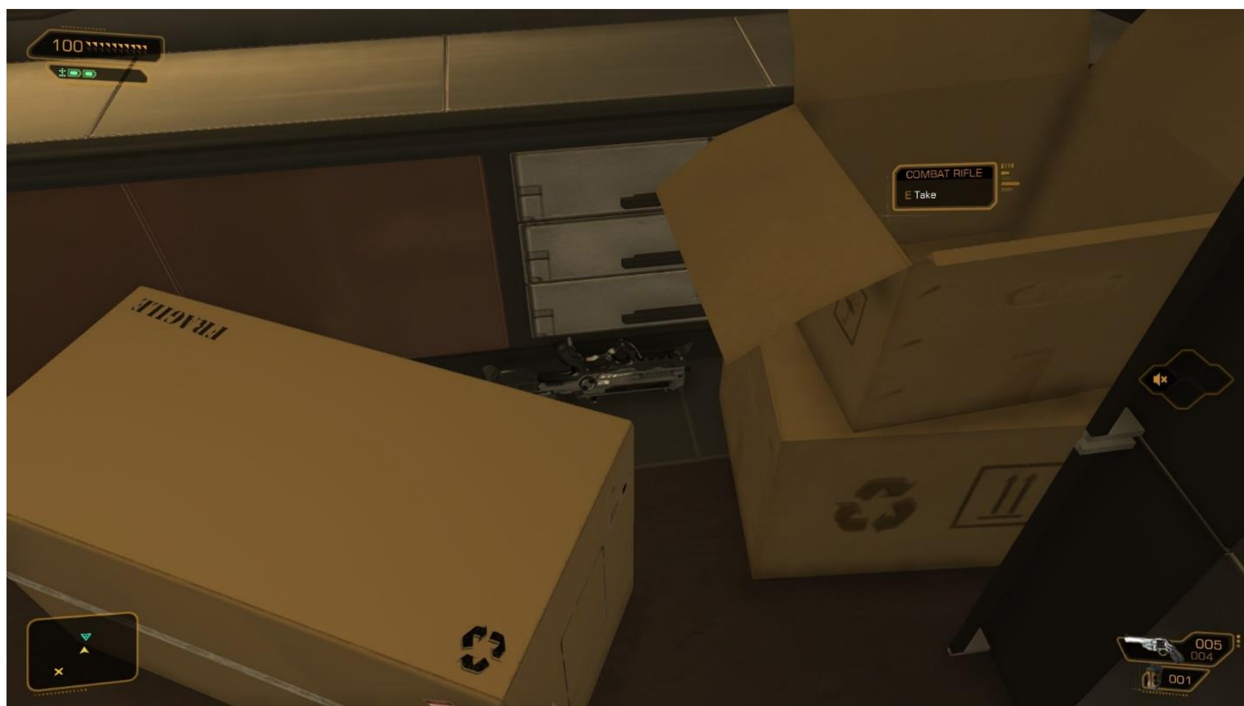
The differences between these two debriefs demonstrates again the narrative being made to account for the player's choices. When the player performs the moral action, the rescuing of the hostages, they receive praise from Malik, but they also learn something the other characters perceive about Adam. His ethical resistance to the corporate priorities is uncovered only after the player performs his character in a way consistent with that information. By the time the player learns that Adam in the past rejected corporate authorities in favor of a more humanist approach, the actions made in the ludic space already lead to the same reading of the character. In this way, the ludonarrative of the game is malleable but consistent. The player cannot easily disrupt the narrative, as the story and characters react to their actions. Conversely, the narrative is constantly cascading into the ludic spaces. The actual plot of the game, the story progression that moves Adam around within the world, determines how the player interacts with the game's systems. When a mission requires Adam to venture deep into cybergang territory, for example, the player engages with *Human Revolution*'s mechanisms in a different way than they would when they explore Adam's apartment, talk with his coworkers at the office, or sneak into the morgue at the police department. The ludonarrative of *Human Revolution* is therefore a symbiotic relationship, in which the ludic elements that construct the game are in constant conversation with the narrative elements that supply those systems with context and meaning. By understanding and sharing Adam's humanity from an interior view, we begin to understand our own from an exterior perspective as we see how *Human Revolution* reacts to our choices.

As important as the interactions made by the rules upon the narrative are, it is equally important to examine the instances in which those rules are diegetic or extradiegetic, if they exist

within the narrative or above it. A completely comprehensive list of every system in the game is not necessary for this thesis, as the list of systems in *Human Revolution* is long, but there are particular mechanisms that are worth considering for how they contribute to the overall ludonarrative of the text.

The first is something most players familiar with the RPG genre might overlook as being completely standard to conventions. Throughout *Human Revolution*, players receive wealth in the form of science fictional “credits” in one of two ways. They are either given credits as a reward for having completed a mission, or they “find” credit chips around the world and pick them up. Since only the player uses credits, it is expected by both the game and the player that they will pick them up wherever they see the credit chips. This is one of the ways the game encourages exploration of its environment, after all. Without the lure of possible credits, a player might not search every room, open every drawer, or hack into every computer, which in turn makes them less likely to find all the in-game books, notes, e-mails, and other extra content that illuminates the game world. However, though the game responds to the large moral decisions the player repeatedly makes over the course of the game – characters act horrified of his murders, in some instances – no mention is ever made of Adam’s thousands of casual petty thefts that accumulate during the average playing of the game. The game’s moral values are silent with regards to the thousands of credits Adam loots from personal lockers, desk drawers, unconscious people, and locked apartments. In this way, Adam’s thefts are much more of a player action than a character one. The lack of narrative response in a system that does respond within the fiction to other actions indicates that Adam is not actually a kleptomaniac. Rather, his thefts are extradiegetic ludic actions performed by the player who inhabits Adam, not diegetic narrative actions made by the character himself. The presence of the credit chips themselves could be read as being extradiegetic, since

they serve no purpose except to be collected and spent by the player. There is no world economy that necessitates their use – the few shopkeepers in the game stand ever-ready at their counters, always waiting for their only customer, Adam Jensen, to approach. In *Human Revolution*, credit chips are but one example of how a game object existing in textual space can be non-diegetic. Part of the value of this approach to game analysis is that it allows the critic to see procedural genre conventions as being integral parts of a text, not just a design framework carried across titles.



Screenshot 14: A combat rifle hidden behind some boxes in Adam's apartment. A display of extreme recklessness on Adam's part, or a reward for the player exploring their character's home?

There is another important system in *Human Revolution* whose diegetics are important to understanding the ludonarrative of the game. I have already discussed the game's Experience Point system, and how XP are used to unlock augmentations, but the game's narrative justification for the purchasing of skills is worth close observation. When Adam is finished with the hostage rescue mission and is later directed to checking into the LIMB medical clinic in Detroit, he is greeted by

Doctor Markovic, whose dialogue exposits to the player that during the surgery that gave Adam his cybernetics, not all of the augmentations were "switched on". The player is then told that they can purchase PRAXIS kits, specialized software that will manually activate Adam's latent enhancements. This narrative attachment to a ludic system makes both XP and the augmentation unlocking a diegetic progress. When the player earns an augmentation upgrade through XP accrual it represents Adam's brain naturally attuning to his augmentations, whereas the purchase of PRAXIS kits is a normal narrative interaction. There is no constituent narrative change determined by what upgrades Adam has, and so the PRAXIS and upgrades are a functionally ludic element. They are, however, referred to by the narrative, which gives a completely game mechanism a diegetic status. The game deploys its narrative to explain its ludic qualities, (the RPG power upgrade design trope) as a way of preserving and elevating its overall ludonarrative.

Conclusion

Even a critic who has not and may never play *Human Revolution* should not have a grasp of not only the specifics of Adam Jensen as a character, but also of how the player participates in the revelation of that character through their actions. Adam's professional versatility is demonstrated by the ways the player is afforded to play the game. The breadth of narrative variety displays a classic cyberpunk protagonist whose morality and heroism are not fluctuated by player interactions. Instead, the player constructs their own interpretation of Adam's given character by manipulating his actions within the text. These actions, however, are always within what is established about his character from the choices the player is allowed to make, the static environment of the fictional world, and the interwoven ludic and narrative systems of the text.The character is internally consistent within *Human Revolution*, and the simultaneity developed by the player experience is the effect of the available ludic agency. Contrary to what some critics believe

about iterative characters in videogames, we see that there is a canonical depiction of our protagonist. Adam exists and has nuance within the game, and these methods of reading *Human Revolution* allow us to understand him. These analytical techniques display that the choices we make in revealing Adam's character ultimately reflect on how we understand ourselves in the ways we interact with the text.

This reading of *Human Revolution* is not exhaustive, as it would be incredibly difficult to analyze the entirety of a 25+ hour videogame within the confines of a reasonably-sized thesis. Enough substantial elements of the game have been discussed, however, that a comprehensive understanding of the game as a ludonarrative text can be achieved. From analyzing the interactivity of the narrative, we saw how the constituent and supplemental events inform not just the individual instances of Adam Jensen, but gestured towards understanding the character as a whole between every iteration. The game environment itself offered a concrete reading of the world of *Human Revolution*, which in turn described the fixed, bedrock elements of character that form a throughline of character choices. A close reading of not only the game's ludic elements, but the way those mechanisms interact with the narrative and the rest of the verisimilar world help the critic parse which parts of the text are merely genre conventions that do not affect the text. Those conventions can then also be isolated and examined to see how they influence the player's actions and their interactions with the game narrative. By synthesizing all of these methods together, the critic can construct a foundational awareness of the different ludic and narrative systems of the game from which they can begin an even more specific reading of the game.

Although certain aspects of the game are exclusive to *Human Revolution*, such as its world and narrative, the structuralist methodologies used in this reading can be extended to any other narrative videogame. The strategies presented in this reading are applicable to any game that offers

its player some amount of agency in its narrative. Any game with ludic representation in the way it constructs its story – that is, most story-based games, can be approached using the demonstrated analytical modes. Game studies a field that is currently concerned with creating a theory of criticism that is broadly applicable to a wide variety of games, such as Clara Fernández-Vara's structuralist approach and Ian Bogost's procedural rhetoric. These theories are certainly effective in understanding all games generally, but to understand narrative games specifically, the tools demonstrated within this thesis are the better suited.

The unstated goal of this thesis was to demystify a medium that is underappreciated by traditional studies. By displaying the current scholarship of the field and explaining the foundational elements of game studies, it is now hopefully apparent that there is, or will be soon a place for criticism of videogames within the field of English. Videogames are unique in their design and development, and interactivity may present an initial challenge to scholarship, but by paying close attention to the ludonarrative constructs that comprise story-based games, we can approach them as an important type of text that demands the sort of thorough criticism found among literary studies.

Works Cited

Bibliography

Bogost, Ian. *Persuasive Games: The Expressive Power of Videogames.* Cambridge, Massachusetts. The MIT Press, 2007. Print.

Fernández-Vara, Clara. *Introduction to Game Analysis*. New York, New York. Routledge, 2015. Print.

Aarseth, Espen. "A Narrative Theory of Games". Foundations of Digital Games, 29 May 2012. DOI: 10.1145/2282338.2282365. Raleigh, North Carolina.

Aarseth, Espen. "Computer Game Studies, Year One". *Game Studies*. July 2001, http://gamestudies.org/0101/editorial.html

Hocking, Clint. "Ludonarrative Dissonance in *Bioshock*. *Click Nothing*. 07 Oct. 2007, http://clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html. Accessed March 27, 2018.

Vella, Daniel. "Modeling the Semiotic Structures of Game Characters". Digital Games Research Association. August 2014, http://www.digra.org/wp-content/uploads/digital-library/digra2014_submission_40.pdf.

Keogh, Brendan. *Killing is Harmless*. Stolen Projects, 2012. E-book.

Ludography

BioWare. *Mass Effect*. Microsoft Game Studios & Electronic Arts, 2007. Windows PC.

Arkane Studios. *Dishonored*. Bethesda Softworks, 2012. Windows PC.

Ninja Theory Games. *Hellblade – Senua's Sacrifice.* Ninja Theory Games, 2017. Windows PC.

Yager Development. *Spec Ops – The Line*. 2K Games, 2012. Windows PC.

Eidos Montréal. *Deus Ex – Human Revolution.* Square Enix, 2011. Windows PC.

Other Sources

"Investing in the Soaring Popularity of Gaming". Reuters. 10 December, 2018, https://www.reuters.com/sponsored/article/popularity-of-gaming. Accessed 12 April 2019.

"Violent video games found not to be associated with adolescent aggression". University of Oxford. 13 January, 2019, http://www.ox.ac.uk/news/2019-02-13-violent-video-games-found-not-be-associated-adolescent-aggression#. Accessed 12 April 2019.

Recommended Videogames

Mountains. *Florence*. Annapurna Interactive, 2018. iOS & Android.

Sarepta Studio. *My Child Lebensborn.* Sarepta Studio AS, 2018. iOS & Android.

The Chinese Room. *Dear Esther*. 2012. Windows PC, MacOS.

Galactic Café. *The Stanley Parable*. 2013. Windows PC, MacOS.

Deconstructeam. *The Red Strings Club.* Devolver Digital, 2018. Windows PC, Nintendo Switch, MacOS.