

“PLAY ALONG” WITH THE AUTHORS:

HALF-LIFE 2, BIOSHOCK,

AND VIDEO GAME

NARRATIVE

By

Samy Masadi

An Honors Project Submitted in Partial Fulfillment

of the Requirement for Honors

in

The Department of English

Faculty of Arts and Sciences

Rhode Island College

2010

Table of Contents

- Introduction 1
- Narratology 3
- Ludology: Another Option 8
- Game Narrative Theory 11
- *Half-Life 2: The Enacted Narrative* 23
 - Arbitrary Imposition 26
 - Welcome to City 17 29
 - Man of Few Words 35
 - Feel Free to Look Around 38
- *BioShock: The Enacted/Embedded Narrative* 41
 - Would You Kindly? 44
 - Welcome to Rapture 47
 - A Man Chooses. A Slave Obeys. 52
 - Born to Do Great Things 57
- Conclusion 60
- Endnotes 64
- Works Cited 65

Introduction

Imagine entering a world that offers a vast, incredibly detailed reality beyond what you could ever possibly visit in your real life; but wait, before you can even do anything there, something whisks you away to a grand adventure, leads you on a long odyssey, and tasks you with a hero's quest. You might ask, "How did I get there in the first place?" "What powers or tools will I wield in my quest?" You need not worry, for you likely have the means right on your desk: using a computer monitor, you do more than peer through a window to a virtual realm; you envision yourself completely crossing into it. With mouse and keyboard in hand, you wield the most powerful tools to experience untold tales. Plunging into an ocean is your first act in one given world, which mirrors your initial plunge into the world itself. A bathysphere aids your descent until it takes you to an extraordinary underwater city in the 1950s, where your adventure awaits. Your use of your PC as a portal into other worlds is echoed, in another adventure, in your use of a portal to an Eastern European city in a far flung future where aliens rule over Earth. You have neither simply arrived at any typical world nor embarked on any ordinary adventure. Indeed, you have begun your experience within two separate video games that have some wondrous stories to tell. The stories, too, permeate the games so thoroughly that the player would have a difficult time playing without them; depicting adventures from *BioShock* and *Half-Life 2* respectively, the stories prove integral to the experiences.

In fact, as the video game as a medium evolved, games' use of story also became more sophisticated. The very earliest iterations of video games were simply games first and foremost, and had little, if any, semblances of story because of their technological limitations. With technological advancements came not only the improvement of aspects such as graphics in games, but an increase in developers' ability to use games to tell stories. Games like *Super*

Mario Bros. and *The Legend of Zelda* then contained stories of the very basic “Save the princess” kind, while others like the text-based adventure game *Zork* had a more extensive focus on their stories. Up until the more recent releases, story-based games depended mostly on established storytelling techniques, including text and non-interactive cinema-like scenes to complement their gameplay. However new the medium may be, the quick advancement of technology over a short few decades, relative to the longer development of other media, has not only advanced games in general, but has increasingly enabled the establishment of story-based games.

During the more recent couple of decades, games have not only become very popular, but story-based games have become an industry standard. Though not as popular as films, video games have become popular enough, despite their high purchase prices, to eclipse even the film industry in terms of sheer profits. And with the advent of games like *Half-Life* in 1998, the story-based game not only became commonplace, but finally started to emphasize storytelling using the interactivity inherent to the medium. More recently video games that tell stories have become the norm, and their technology in effect allows game developers to tell whatever stories their imaginations can conjure using whatever interactive or non-interactive methods they choose. Indeed, even the games that uphold gameplay as their most important feature frequently include stories as significant parts of their experiences.

The rise in the popularity of video games sparked critical and theoretical interest that led to the broad field of games studies. Within game studies, some critics have concentrated on the game-playing aspects of video games, while others have examined video games as part of our mass media entertainment economy. The rise of story-based games, however, presented an intriguing question for critics: given the video game medium’s unique reliance on interactivity,

to what extent can we consider video games as narrative forms? During the most recent decades, the field of narrative game theory has emerged, has argued that story-based games are indeed legitimate narrative forms, and has established the groundwork for analyses of story-based games as narrative texts¹.

This thesis seeks to apply a sustained narrative analysis to two specifically selected story-based games. It examines the work of narrative theorists and game narrative theorists alike in order to argue that story-based games do in fact share the basic features of other narrative forms even though they combine and rebalance the features in innovative ways. Then, in contrast to most game narrative analyses that provide a general overview of several story-based games but do not usually examine individual games in detail, this thesis undertakes thorough narrative analyses of individual story-based games. It examines the two games as they released in the order in which they were released and will include the ways in which the latter game maintains, alters, or adds to the narrative techniques of the former. This study thus treats each of the two story-based games, *Half-Life 2* and *BioShock*, as a text that can be read through the well-defined methodology of narrative analysis.

Narratology

Narratology has thoroughly defined narrative and has clearly outlined its structure and several of its major elements. In its most general definition, narrative theory equates “narrative” to “storytelling” as a method of communication. When discussing specific aspects of narrative, however, narratologists particularly emphasize the difference between “story” and “storytelling.” Although story is often interchanged with narrative in general usage of the term, narrative theorists describe story as a part within narrative. Narratologists define narrative as “*the representation of an event or a series of events*” (Abbott 13). They define story as the narrative

“content or chain of events (actions, happenings), plus what may be called the existents (characters, items of setting)” (Chatman, *Story and Discourse* 19). Narrative theorists Seymour Chatman and Marie Laure Ryan and developer/author Jordan Mechner also note that stories are not specific to a particular narrative medium, and, thus, many different narrative media can tell the “same” story (Chatman, *Story and Discourse* 20; Ryan, *Avatars of Story* 4; Ryan, “Beyond Myth and Metaphor”; Mechner, “Who Is the Prince?”). And to narrative theorists, story makes up only one half of a narrative; the other half consists of the discourse, “the expression, the means by which the content is communicated” (Chatman, *Story and Discourse* 19). Working together, story and discourse combine into storytelling; they make up the two essential qualities that identify a literary work as a narrative.

Since time essentially links to the elements of story and discourse, narrative theorists also define narrative by its unique use of time as compared to that of other forms of communication. Communications such as description and argument utilize a single dimension of time within their internal logic: the time they take to present their information, or the time a prospective listener or reader needs to consume their information (Chatman, *Coming to Terms* 9). Narrative, on the other hand, uses a “doubly temporal logic,” or two dimensions of time: story-time and discourse-time (9). On one dimension, a narrative’s story depicts a sequence of events taking place within a period of time; on the other dimension, a narrative’s discourse recounts story events, but takes its own time to express them (9). In essence, story-time and discourse-time are not necessarily equal to each other; however, they work interdependently to form different types of narration. When narrative specifically does not depict all the events of its story, its discourse either uses less time than its story, in the case of “summary,” or skips its story, in the case of “ellipsis” (Chatman, *Story and Discourse* 68). Narrative can also express more than the events of its story

when it uses “stretch,” where discourse takes more time to depict events than story, or “pause,” where story halts while discourse continues (68). Finally, narrative can utilize real-time storytelling, or “scene,” where discourse-time equals story-time (68). Authors can use such techniques as needed to construct an overarching narrative, and the use of two dimensions of time emphasizes a distinct communication method that only applies to narrative.

Narratology’s emphasis on the workings of time in narrative, furthermore, highlights the importance of the authorship behind narrative. Narrative relies on a “chrono-logic” sequence of events, which signifies not only the time dimensions, but also the act of logically ordering story events to construct the sequence (Chatman, *Coming to Terms* 9). The construction of a narrative thus depends on the author, or, as narrative theory more specifically describes, the implied author. Implied authors do not refer to real-world authors; in fact, they only exist when readers read narratives and imply their authors (Chatman, *Story and Discourse* 148). Readers can only reconstruct narratives because the original narrative construction work always exists prior to any reading; however, readers’ reconstruction, by definition, must form from some original construction, which thus implies an author (Chatman, *Coming to Terms* 74-75). The inherent structure and meaning of narrative manifest themselves where the reconstruction of the reader meets the construction of the implied author. The implied author guides all readings and interpretations of a narrative through his construction (74). In addition, readers also influence the structure and meaning of narrative because their reconstruction, with all their unique interpretations, can never form in exactly the same fashion as the implied author’s construction (74-76). Therefore, narrative, and its structure and meaning, can only exist after the reader reads and perceives an implied author and, by extension, after the logical construction work of the implied author.

Another important facet to narrative, and to readings of narrative, is the implied reader that complements the implied author. Like the implied author, the implied reader does not refer to an actual person, in this case, the real reader reading the narrative (Chatman, *Story and Discourse* 149). It instead refers to the assumed audience of the narrative, or those that the implied author appears to address in the narrative (149-150). While they read, real readers can deduce the identity of the implied reader, especially with regards to their understanding of and their stance on the narrative subject matter (150). Real readers then determine the nature of their reading depending on whether they accept the role of the implied reader, which they can do either consciously or unconsciously. If they read in the same vein as the implied reader, they choose to go along with the implied author's narrative guidance (150). If they do not accept the implied reader, they can read in alternate ways that complement or clash with the author's guidance, but their readings may also result in problems with their understanding of the narrative's logic (150). The real reader's acceptance of the role of implied reader works as a part of their overall reconstruction efforts, and qualifies the degree to which their reconstruction resembles the implied author's construction. The notion of the implied reader thus constitutes a significant aspect of narrative and narrative structure.

Narratology has further defined narrative through its space, which involves several of narrative's fundamental components. As seen above, a narrative comes from a discourse's telling of story as arranged by an implied author. In order for it to portray a story, a narrative needs a space for each of its story and discourse elements (96). Story-space depicts the diegesis, or everything existing or occurring within its world. It contains the explicit and implicit images, locations, or times that make up a story's setting, the world in which a narrative's story takes place (96). Stories also need events; every event within story-time, whether explicit or implicit

in the narrative, occurs within story-space (96). Furthermore, a story would not have events without characters, or existents, to make them happen; characters likewise comprise a part of story-space (96, 113). The interdependent characters and events, as well as all the above components, take place within story-space, resolve into a vast, infinite world that narrative can depict.

If story-space describes an unlimited, infinite illustration of characters, events, and locations, discourse-space describes much more specific images and objects. Generally, discourse space functions as a “*focus of spatial attention*” (102). For half of its function, it presents the vast makeup of story-space in the specific characters, events, and locations referred to in a narrative. For visual narratives, discourse-space presents specific components of story-space in the ways they appear on-screen or heard on the accompanying audio (102). For verbal narratives, it presents the specific components in the actual physical words of the text (102). Due to the physical limitations of discourse-space, a narrative must describe the story’s unlimited chain of events and space within the physical limitations; discourse-space requires a narrative, and its author, to construct, within the space, a specific sequence of story events, which narratology calls plot (43). Discourse-space, moreover, is not exclusively tied to story-space, and the other half of its function presents anything in the narrative that is beyond the scope of the diegesis of the story-space. Combining the functions of both its presentation of story-space and events through plot and its presentation of non-diegetic items, discourse space essentially forms the physical body of a narrative. All the components of space, such as events, character, and setting, together with the above-mentioned dimensions of time, thus essentially comprise the makeup of narrative.

All of these elements define the basic, fundamental components of the various narrative forms; even certain types of video games, when consisting of such components, prove to be narrative forms. Narrative theorists like Chatman have thoroughly outlined narrative features of story and discourse, story-time and discourse-time, story-space and discourse-space, the author and the implied author, and the reader and the implied reader, and story-based video games also share such narrative features. Like other narratives, story-based games have a story and a discourse, they contain a “chrono-logic” depiction of time and space, they have original creators for their content in their game developers and implied developers, and they have receivers or re-creators of the content in the players and implied players. While story-based games are very much narrative forms, narrative theorists have shown that, in the way that narratives differ across media, story-based games encompass a different recipe of the same fundamental narrative ingredients.

Ludology: Another Option

Narratology, while a valid way to analyze story-based games, represents just one approach within game studies, and any thorough narrative analysis of games should at least briefly consider the arguments of its largest game studies rival, ludology. Ludology is a formalist discipline that studies games in general, and more recently, it, alongside narratology, stands at the forefront of studying video games (Frasca 222). First and foremost, ludology claims that the video game is not a narrative medium, so it thus does not evaluate games against narrative standards (222). Ludology studies games’ structure and focuses on how their elements, like their rules, function (222). It then does not deny that games contain elements of characters, setting, and events; however, ludologists argue that games share these elements with stories and narratives rather than actually being stories and narratives (222). If the elements did form

stories, ludologists argue, they would create unsophisticated, simple ones that do not adequately relate the workings of its characters (Aarseth 50-51; Juul, “Games Telling Stories?”). Due to the ostensible insufficiencies of the stories, ludology claims that video games do not have true stories, and ludologists cannot deem them as narrative forms.

Since it bases its video game analysis on game-specific standards, ludology defines video games as a form of simulation rather than narrative. In terms of the traditional narratological model of story and discourse, ludologists find problems with the potential of games as narratives. They primarily take issue with games’ extensive use of real-time storytelling, where story-time equals discourse-time. They conclude that games’ heavy reliance on real-time storytelling constructs events as they occur: a game’s discourse does not retell, or reconstruct, story events to then form a narrative because the player’s actions generate the game’s events on-the-fly (Juul, “Games Telling Stories?”; Juul, “Introduction to Game Time” 131-134). The events generated can then become a story or narrative, but the game that generates them is not necessarily story or narrative itself (Aarseth 50). According to ludologists, simulation best describes video games’ real-time event generation and interactivity, and accounts for game players’ impact on the events (Frasca 223-224). In addition, because players can influence game events, their actions can often be independent of the construction work that the authors, or game developers, must use to compose the necessary logical structure behind a narrative (Aarseth 52). Ludologists argue that only simulation can describe a game world where players can freely interact with objects and create events (Frasca 224-225; Juul, “Games Telling Stories?”). Considering the nature of game events and time, ludologists rule out games as narrative forms and, by their standards, can only define them as simulations.

Since the ludological standpoint on video games explicitly denies that they are narratives, it clearly clashes with the narratological standpoint; both narratologists and ludologists often refer to a debate between the two game theory methodologies. While notable ludologists like Gonzalo Frasca insist that ludology does not focus on the “technical inaccuracy of the narrative paradigm,” and instead simply focuses on the importance of holding video games to game-specific standards, ludology, by definition, cannot accept the coexistence of perspectives that view video games as narrative or as simulation (222). Theorist Joost Raessens, who helps summarize the game studies debate, reveals that other notable ludologists, such as Espen Aarseth, do in fact rule out narratology as an “outdated paradigm” (Raessens 55; also, Werning). On the other hand, with the exception of Porter Abbot, who agrees with the ludologists (35-37), narratologists simply defend the position of video games as narrative forms, and do not explicitly deny the validity of other methodologies and their viewpoint on video games. In his assessment of the debate, Raessens agrees with narratologists, particularly Henry Jenkins, inasmuch as they accept a coexistence of multiple methodological approaches to video games (Raessens 55; also Perron and Wolf 10, 14-15; Werning). In my analysis of *Half-Life 2* and *BioShock*, I will not explicitly enter the game studies debate by applying both narratological and ludological points. I take a stance against the ludologists’ dismissal of other methodologies; I agree with Raessens and Jenkins and welcome the possibility of choosing among valid methodologies to study video games. In this case, knowing full well that in another context I could potentially apply the ludological perspective as a valid alternative, my analysis of story-based games will ground itself on the model of game narrative theory.

Game Narrative Theory

More specific than the general, traditional model of narrative theory, and as an alternate to ludology, the field of game narrative studies provides a solid foundation for an analysis of specific story-based video games. Several narrative theorists have applied a narrative-focused study to the story-based game as a textual form. They generally look at a broad view of interactive media, outline the evolution of narrative from the traditional form to the newer interactive forms, and then discuss important narrative elements of video games using a varied selection of titles. Building on this work, an extended reading of individual games can use the major points made by game narrative theorists in order to look at the structure of game narratives, compare their storytelling methods to traditional narrative, pinpoint the games' innovative storytelling techniques, and ultimately place the games within the context of the evolution of game narrative and within the larger context of traditional narrative.

When applying narrative theory to story-based games, narratologists stress two issues: narrative immersion and interactivity. The first, narrative immersion, is discussed by Janet Murray, in *Hamlet on the Holodeck*, a highly influential work within game studies. Murray discusses the pleasurable sensation readers and viewers feel in response to the created worlds within various forms of texts. She likens readers to Don Quixote, a fictional character who seeks to shut out our real-life worlds and enter the world depicted in books (97). Films, too, can entertain the same desires, as viewers can likewise want to enter the world on-screen (97-98). In addition to her overview of the sensation of *being* in fictional worlds, Murray also discusses the sensation of *living* within the worlds, and digital media, she claims, works especially well to accommodate both because it involves a participatory element (98). But whether they satisfy the desires to enter or live in their worlds, both traditional media and newer, digital media reflect

varying degrees of immersion, which Murray defines as “the experience of being transported to an elaborately simulated place” (98). And since the forms of media have essential differences between them, they in turn allow for immersion in different ways and at different levels.

In general, the potential for reader immersion in a given text depends greatly on both the content of the text itself (story in the case of a narrative) and the text’s medium, or discourse. For all texts, the act of immersion, theorist Ryan states, requires the transparency of the text’s medium (*Narrative as Virtual Reality* 175). In order to enter a fictional world and achieve immersion, a reader must somehow look past the actual physical object, such as a book or cinema screen, that acts as a border between the real world and the fictional world. According to Murray, the act of “looking past” doesn’t necessarily mean a “passive” suspension of disbelief that the fictional world is not actually real, but rather an “active” creation of belief: we easily look past the physical border of the medium and accept the reality of the fictional world of the text because we want to satisfy our desire for immersion (*Holodeck* 110). A text can achieve a transparency of its medium and aid our creation of belief in two ways: by ignoring its medium or by embracing its medium. A story, for example, can create an “elaborately simulated place” (98) using the words of books or the images of film without explicitly referencing the actual physical presence of the printed words or images in the reader’s reality, so that it can allow for a transparency of the medium and for reader immersion. However, Murray also points out that a narrative’s story can achieve the same effect by explicitly calling attention to the narrative’s discourse, or physical borders (103). In *Duck Amuck*, one of her examples, Daffy Duck actually becomes aware of the film strip on which he, and the rest of the film, is printed (104). The effect, and Murray’s point, is that the film, the medium, becomes transparent despite its explicit representation because the viewers perceive a fictional world that includes the border, an object

of the real world; and, with such a transparency of the medium, the viewers can then immerse themselves in the fictional world. In all cases, the immersed reader actively desires immersion, so Ryan calls these readers “world-readers,” as they look at narrative texts as worlds (*Virtual Reality* 176). Immersion occurs in readings of narratives in general, but as a look at game narratives will show, story-based games facilitate immersion in special ways.

While “world-reading” represents a way to read narratives, Ryan also describes an alternate way to read narrative in “game-reading.” This alternate way involves the second issue central to game narrative theory, interactivity. Unlike the world-reader, the game-reader does not desire immersion within a narrative world, but instead seeks to “play” and interact with the text (178). In fact, as Ryan notes, a reader’s reading of a text-as-game can complement a reading of a text-as-world, but the types of reading cannot occur simultaneously in traditional media (176); the game-reader must forego the transparency of the medium and the feeling of immersion altogether. Game-readers derive pleasure from doing activities within a world bound by rules, and, in the case of traditional narrative media like books and film, they actively pay attention to the medium, or the narrative’s discourse, in addition to the narrative’s story (178). Discourse can convey story, for example, in ways that foster game-like activities for readers, such as mysteries or riddles to solve (179). In addition to games within a narrative, Ryan also describes how a narrative itself functions as a text-as-game due to “the unavoidable consequence of the arbitrary nature of its medium”; neither the words in a book nor the images in film can perfectly convey the fictional world and story imagined by the author because if it did, all readers would be able to imagine the exact same perfect construction of world and story (188). Murray’s explanation for the “active” act of reading can explain how readers engage a narrative text as a game: they play with its intrinsically ambiguous words or images, interpret them, and only “win” when they

successfully create their own cohesive reconstruction of the narrative's story and world (*Holodeck* 110). In essence, game-reading is a participatory and interactive method of reading texts, and game-readers desire such interactivity. All forms of narrative can satisfy readers who seek a text-as-game, but story-based games satisfy such a need for interactivity to a much greater extent.

An analysis of story-based games will affirm what game narrative theory concludes: like other forms of narrative, story-based games facilitate the immersive act of world-reading and the interactive act of game-reading, yet in unique, enhanced ways. Both Murray and Ryan mention that electronic media, including games, work very well to grant access to worlds or construct worlds themselves; advances in technology give electronic media a powerful advantage to represent, or render, worlds and thus heighten the acts of immersion and world-reading (Murray, *Holodeck* 99, 103; Ryan, *Virtual Reality* 308). As in traditional narrative forms, the story of a game narrative can preserve the transparency of its medium and facilitate immersion by using the same methods of ignoring or embracing the physical computer displaying the narrative. During a scene in the game *Max Payne*, for example, the main character experiences a drug-induced nightmare where he reads, "You're in a computer game Max!"; the self-reflexive scene creates immersion for the player much like the self-reflexive scene of *Duck Amock* does for the viewer. Game narratives, however, require that their readers, or players, interact with the story and thus have some awareness of part of the physical borders and discourse of the medium, particularly the method of input, such as a keyboard and mouse. Yet unlike in traditional narratives, the discourse also aids the "active creation of belief" involved in readers' immersion. Ryan suggests that interactivity, as an essential element of a game's discourse, can cause an immersive experience because players effectively enter the fictional worlds when they participate in them

(*Virtual Reality* 307-308). Story-based games always function as texts-as-game, and game players always read game narratives through interactivity; however, game players can practice immersive world-reading *in addition to* game-reading when they play a game narrative, rather than as an alternative as in traditional texts (307). Readings of story-based games involve the immersion and interactivity inherent in readings of all narratives, but individual examinations of story-based games, as well as game narrative theory in general, proves that games use immersion and interactivity to greater extents and allow for them to occur simultaneously.

Although all forms of text allow for some form of interactivity, as previously mentioned, one specific type of interactivity that traditional texts do not often permit and that will prove crucial to a narrative study of games is the power of agency. Murray defines agency as “the satisfying power to take meaningful action and see the results of our decisions and choices” (*Holodeck* 126). Readers of traditional texts surely have some power of agency, in the form of interpretation, over the texts’ meaning, but rarely do they ever have the power to actually make decisions that would change the content of the texts. In the case of narrative texts, for example, only a few depict the events of their stories with enough ambiguity so that their readers have agency to decide how the events unfold. Some narratives like “choose-your-adventure” novels or participatory theater performances provide the most obvious examples of traditional texts that specifically accommodate a limited sense of reader agency (127). Most narratives, however, depict events clearly, and while readers can interpret the meaning of the events, they can neither change the events nor change the order of the events. Of course, readers could practice agency on narratives by taking out pens and directly rewriting parts of a novel or using scissors to cut and paste parts of a film, but their resulting works would be totally different narratives altogether. Without having readers physically rewrite the narratives beyond the work of their

authors, the power of agency seldom lends itself to traditional texts, and rarely can traditional narratives allow readers the agency to decide the courses of their stories.

Unlike traditional texts, games naturally provide for agency. In fact, in addition to the games' ability to satisfy the desires for immersion and interactivity simultaneously, the commonness of agency in games further explains why games can create a much more heightened sense of interactivity than traditional texts can. Games, especially story-based games, can deliver agency on many different levels. On the level of pure gameplay, players have the greatest agency in games that provide several choices; for example, in chess, players can choose to move one of several game pieces during their turn to directly impact the game's outcome (128). In games that contain worlds to explore, particularly those with digital environments, players can harness a satisfying ability to be their own "tour guide," "cameraman," or "director" of their game experience; even if players cannot directly affect the events they witness, they can still feel pleasure from an agency of navigation, in which their decisions about what to see and where to go can change their experience (129). On the level of narrative, many story-based games also offer players the agency to directly influence the events of the story (140). Some story-based games, for instance, provide set points along the course of the narrative where players, much like readers of "choose-your-adventure" novels, simply make a choice among various options that will determine the outcome of the story. Often in such cases, however, players' agency within the narrative has little to do with the nature of the gameplay (be it shooting, fighting, puzzle solving, etc.), and players' satisfaction with the narrative can either complement or, as with Murray's example in the game *Myst*, oppose their satisfaction with the gameplay (141). Other story-based games do, in fact, combine players' gameplay actions with their narrative choices by making the two seamless, interdependent, and unified. In effect, the

more that story-based games successfully give players high, varied levels of agency, the more they give players the chance to experience higher levels of narrative involvement—especially if the games already lend themselves to immersion and interactivity—than those provided by traditional narrative texts.

Two important questions arise when an analysis of game narrative considers the power of player agency: can players be considered authors or co-authors of a story-based game? And how can the player have choice and agency in a story-based game when an author or designer has already written, plotted, and predetermined the course of the game narrative? (Murray, *Holodeck* 152; Ryan, *Virtual Reality* 320). The answer to the former question, that players are not authors but rather agents, makes way for the answer to the latter question: in theory, no matter how the player chooses to direct the game narrative, the game's original author will have anticipated all possible choices and prepared narrative outcomes appropriately. Players employ their agency for choices that resemble story creation, but the extent of their decisions must remain within the limits of the game narrative system that the author constructed (Murray, *Holodeck* 152). With respect to player agency, the implied player plays a similar role in game narrative as the implied reader does in traditional narrative: in addition to accepting the implied player's understanding of the game narrative, players can accept the degree of choice and freedom of exploration that the developer allowed for them within the narrative, and on a conscious or unconscious level, they understand that their enjoyment of the narrative depends on their acceptance (Ryan, *Virtual Reality* 321). Of course, players can always actively work against the game narrative by trying to enter parts of the world they cannot or trying to access parts of the story before they should be able to, but such actions would be the equivalent of, as mentioned above, physically rewriting or rearranging the pages of a book. Unlike readers of traditional texts who must use a purposeful

effort to work against narrative, however, players can experience inconsistencies in a game narrative purely by accident, as they may, for example, make a logical decision that, because the developer did not make sure to block the option, leads them a story event that they should not yet experience (320). In the end, although players might have a lot of choice in a story-based game, they are not the ones who need to worry about creating a narrative.

Narrative theorists discuss, and a closer look at game narratives affirms, how the responsibility falls on the developers to construct a game narrative that enables player choice and interactivity. They ultimately determine how much choice the player can have within a game narrative, and again, much as in traditional narrative, some semblance of an implied author guides players through the experience (319). Developers' authorship is procedural², which means that the developers construct a narrative system that responds to player actions with a storyline or multiple possible storylines (Murray, *Holodeck* 152). Yet their game does not necessarily become simulation, as ludologists would suggest, because their system does not exist solely to respond to the input of the player; it exists primarily for the purpose of advancing a cohesive narrative (with one or more possible storylines) that the developers had prepared and written before the player even touches the game (Ryan, *Virtual Reality* 319-320). By giving players some degree of choice, they must also make sure the choices lead to a coherent, consistent story (or stories) and try to eliminate or minimize any inconsistencies that may arise from the choices. For the most part, the end result of a story-based game may seem like a narrative that generates from player choices, but really game narratives reflect, upon closer readings, how the developer anticipated the choices and authored the narrative from the very beginning.

The nature of a game designer's authorship of a story-based game clearly differs from authorship of traditional narrative texts and also creates various unique forms of narrative. Henry Jenkins, one of the foremost scholars of digital media, proposes that story-based games largely fall into four types of narrative that range from traditional forms to those exclusive to video games. Evoked game narratives rely the most on the traditional forms, and, more specifically, on players' prior knowledge of traditional, preexisting narratives (Jenkins 124). Such game narratives tend to lend themselves to adaptations and retellings of stories from other media, especially since they exist in dialogue with those prior works (124). For example, no one would say that the gameplay events in the *Star Wars* game, on their own, function as a narrative, but they make sense as a narrative to players who have seen the *Star Wars* films (124). Another relatively traditional narrative form, enacted game narratives, use a plot with a specific order as authored by the developer (124). Enacted narratives give players an overarching story-based goal to achieve, and, while the game may allow them freedom of interactivity and play towards achieving that goal, it provides them little opportunity to have an impact on the course of the story (124). In addition to an overarching goal, enacted game narratives can use what Jenkins calls "micronarratives" at predetermined points in the player's path (125). Micronarratives, taking the form of non-interactive cinema-like scenes, including cut scenes in which the game demarcates the non-interactive moments with "cuts" away from and back to the interactive moments, and interactive moments specifically designed for narrative salience, essentially keep players "on track" towards completing the narrative (Jenkins 125; Werning). Such narratives, both the enacted and evoked, appear akin to traditional forms as their structure and order solely and strictly come from the authoring work of the developer.

Jenkins's other two proposed types of game narratives, on the other hand, allow players higher degrees of interactivity and agency with regard to both gameplay and the progression of the story. His third category of narrative, embedded narrative, involves the designers' strategic placement of salient story information or events in parts of the game worlds and environments (126). The discoverable, or otherwise "unlockable," story elements function similarly to micronarratives except for the fact that players to some extent can decide the order in which they experience them, whether they want to experience them or simply skip them, or, in some situations, whether to choose a story event that in turn blocks access to another event. While players harness some agency over embedded narratives, they have more in emergent narratives, Jenkins's fourth category, where they produce narrative through their actions (128). Although emergent narratives are the most similar to simulations, especially in the case of Jenkins's example of *The Sims*, such emergent story-based games do impose limitations and rules on the player in such a way that the player's actions must generate logical sequences of events, or narratives (128).

The first three of Jenkins's categories are consistent with the game narrative descriptions explored by both Murray and Ryan (and Jenkins directly references *Hamlet on the Holodeck*). However, Murray's procedural authorship only partially accounts for Jenkins's emergent narratives, particularly with their lack of a predetermined narrative as constructed by an original author and their highest level of player agency (129). Jenkins suggests that the definition of narrative needs to change to encompass emergent narrative and thus expand beyond predefined, authored sequences (also Montfort, "Interactive Fiction" 316). He also notices how, in most cases of game narratives, game designers typically author narrative around their game worlds, and he thus concludes that designers of story-based games are narrative architects rather than

storytellers (Jenkins 129). Adding to the work of theorists like Murray and Ryan, Jenkins's exploration of game narrative proves an invaluable guide to classifying story-based games and breaking down their integral narrative structures.

Whether narrative theorists accept a traditional definition of narrative or prefer to expand the definition, they all agree that game narratives use a discourse to tell story through a heightened sense of interactivity. Jenkins's observation that the experience of story-based games does not simply equal that of their stories applies to all other forms of narrative as well (120). As previously shown, narratology has long noted that narrative is comprised of both its story and its discourse; any narrative analysis therefore should examine both essential elements. Many narrative theorists³ agree with Barry Atkins when he claims that story-based games do not receive much scholarly critical attention because the analyses focus only on their stories (5). Granted, he concedes that the games' stories usually mirror the unsophisticated forms that seldom garner analysis in traditional narrative texts, yet he certainly does not believe that games naturally deter analysis (5). Jenkins further notes that story-based games usually deemphasize the types of character development that typically lend themselves to more traditional narrative analysis; he explains how they depict "spatial" and "environmental" stories similar to those in quest or journey tales, and that such tales may receive popular attention, but remain outside the great literary canon (122). In the case of games, spatial storytelling ties directly to the interactive exploration of the player, and as such exemplifies how the sophistication of game narratives relies less on traditional elements, such as character development, and more on an exploratory story, particularly through interdependency between the story and the interactive discourse. And since the interactivity of story-based games causes their narratives to focus on untraditional story

elements, a narrative examination of story-based games would logically, as theorists like Atkins suggest, find untraditional conclusions even when it uses a traditional critical approach (8).

Since game narratives tell stories in unique ways due to their inherently interactive medium, an analysis of specific story-based games needs to take this difference into account. An analysis of game narrative, in effect, could utilize the notions of narrative's author and implied author, reader and implied reader, and story and discourse. Instead of a focus, however, on how the story's characters work as agents to react to or further cause story events, an analysis of game narratives would look at the player as an agent of narrative, especially since he, because of his control of the protagonist, empathizes and becomes one with his character. An examination of the implied developers, then, would look at how he structures the game world, story, and characters to guide the player. Primarily, a narrative analysis of story-based games would account for the foremost topics discussed within game narrative theory: immersion, interactivity, agency, and Jenkins's narrative categories.

The games *Half-Life 2* and *BioShock* lend themselves to narrative scrutiny that will and detailed analysis. Because they are relatively recent games, they tell their stories in innovative ways within the contexts of both video games and narrative in general. Compared together, they appear similar in both game and story genre: they are both first-person shooting games with dystopian, science fiction stories. They both entail spatial stories and accounts of journeys. Their stories' first-person protagonists are both mostly silent and faceless. The two-games are certainly similar, yet their parallels isolate and highlight differences they have in storytelling methods and narrative structure. The analyses for each of the two games compares them, studies each of their narratives, and points out how different game storytelling techniques can tell similar types of game stories. The two games show that story-based games not only lend themselves to

narrative analysis, but also are not all alike: while they all contain the elements of traditional narrative, they employ the elements in various ways to produce game narratives that can be closer or further from the traditional narrative form.

Half-Life 2: The Enacted Narrative

Half-Life 2 is a critically acclaimed video game that is generally well-known for its interactive storytelling, so it makes a prime example for a discussion of video game narrative. Developed by Valve Software as a follow-up to their highly successful original title for the PC in 1998, *Half-Life*, *Half-Life 2* was released in 2004 for the PC platform. It was rereleased two more times: in 2005 it came to the Xbox platform and in 2007 it came as a part of *The Orange Box*, a package of five Valve games, for the Xbox 360, PlayStation 3, and the PC. It falls into the first-person shooter game genre, where the game's player controls the protagonist using a keyboard and mouse while the action displays through the monitor (on the original PC release), shoots enemies using various guns, and tries to avoid getting shot and dying. As a narrative, *Half-Life 2* on some level belongs to Jenkins's evocative narrative category. As a sequel, it, of course, evokes the story of the first *Half-Life*. Also, in terms of genre, it evokes common themes of the science fiction and dystopian genres. Within the genres, however, *Half-Life 2* illustrates a journey story for its first-person protagonist and therefore it primarily belongs to Jenkins's enacted narrative category, in which the player reenacts events in order to move towards certain story-based goals (124-126).

Building on the story of *Half-Life*, *Half-Life 2* has the player continue Freeman's journey. In *Half-Life*, Gordon Freeman, a physicist at Black Mesa and an MIT graduate, inadvertently takes part in scientific experiments that rip open a hole into other dimensions. By the end of the original title, a mysterious unnamed man—known only through the *Half-Life* apocrypha as the

“G-Man”—implicitly reveals he has had a hand in the events at Black Mesa and places Freeman into a sleep state. *Half-Life 2* opens with the G-Man waking up Freeman some years later to fulfill some sort of task that the G-Man never makes clear. Freeman finds himself in City 17, a city in Eastern Europe that reflects how much Earth has changed; the Combine, an alien race that rules over multiple dimensions, have used the dimensional tear that Freeman accidentally made to take over Earth. Freeman meets some friends, Barney and Alyx, who send him to Dr. Kleiner, a former Black Mesa scientist who can best help Freeman reorient himself. At Kleiner’s lab, Freeman learns much about the current state of affairs: Earth’s rule by a puppet king, Dr. Breen, the former administrator of Black Mesa, while Kleiner and Eli Vance, Alyx’s father, have formed a resistance against the Combine. The journey to Kleiner’s lab serves well as an exposition that motivates the rest of *Half-Life 2*’s game narrative.

After Kleiner’s lab, the game narrative proper begins, including the greater part of Freeman’s journey and the game’s shooting gameplay. Kleiner gives Freeman a hazard suit, which the player will use for boosts to Freeman’s running, as a shield against gunfire, and as a way to heal any of Freeman’s potential wounds via health packs. Kleiner then tries to teleport Freeman and Alyx to Eli’s lab at Black Mesa East, and though Alyx teleports fine, something goes wrong for Freeman, who instead finds himself right outside Kleiner’s lab. Freeman then takes the long route to Black Mesa East, and fights many Combine along the way. Not too long after he meets Eli and his research partner, Dr. Mossman, the Combine raid Black Mesa East and separate Freeman from everyone else. Freeman escapes, but soon learns that the Combine have taken Eli captive, and Alyx wants Freeman to help her free her father from Nova Prospekt prison. Freeman and Alyx very nearly save Eli; however, Dr. Mossman, who they discover is a spy for the Combine, takes Eli through a teleport to the Citadel, the Combine headquarters.

A malfunction in the Combine's teleport causes it to explode at the moment Freeman and Alyx use it, which causes them to teleport very slowly. They perceive their journey as instantaneous, but Dr. Kleiner informs them that one week has passed, and that their assault on Nova Prospekt has inspired a full-scale human uprising against the Combine. Using the uprising as a cover, Freeman and Alyx attempt to trek to the Citadel. The Combine capture both Freeman and Alyx on separate occasions during their journey, and they take the two to Dr. Breen at the top of the Citadel. Dr. Mossman, also present, decides during the confrontation to atone for her betrayal attacks Dr. Breen. Breen escapes, but Freeman and Alyx then chase him down. In the final climactic confrontation, Freeman destroys the Citadel's portal to the Combine's dimension before Breen can use it. The portal's destruction causes a massive explosion, but before Freeman is consumed, the G-Man stops time, wrenches the hero away, and thus ends *Half-Life 2*'s narrative.

Half-Life 2's game narrative experience comes through the player's journey: the player uses his interactivity and agency to reenact the story in the sequence that the game's implied developers have outlined. As in the case of any narrative, the very existence of the game narrative implies the developers (authors) who authored the linear spatial story. They write the tale so that an implied player (implied reader) will reenact the story as if the player acts out a script for a drama or play (Mateas 20). Unlike in a traditional drama, however, the player will not have an awareness of the script; the implied developers utilize a myriad of interactive and non-interactive storytelling techniques that intuitively task the player with the completion of goals that, in turn, advance the narrative. The implied developers accommodate a balance between the limits of the world, story, and narrative and the player's immersion, interactivity, and agency that ensures narrative occurs. The real player (real reader) takes the game narrative,

as the implied developers have constructed it for the implied player, and uses his interactivity and agency to reenact the story sequence and reconstruct the narrative (Atkins 72). Using the inherently heightened degrees of immersion, interactivity, and agency, *Half-Life 2*'s game narrative and storytelling methods essentially stress the importance of the implied developers and the player.

Arbitrary Imposition

Even though *Half-Life 2* grants the player interactive control over much of its game narrative, the fact that it starts with a completely non-interactive scene is not a surprise or even much of an inconsistency. Some traditional narratives start *in medias res* without a lot of exposition, so explanations of their story's times, settings, and characters come later, as their plots unfold. *Half-Life 2* does, in fact, do this, but at the same time it does not thrust the player into its world without some sense of orientation. By all means the G-Man has control and the player does not; in the brief, minute-long non-interactive cinema-like scene, he can only watch and listen to the G-Man's ambiguous statements while the odd man's transparent face overlays a depiction of strange scenes. The scene justifies its lack of interaction in three ways. The first is diegetic: the player has no control because the G-Man has not yet released Freeman. The second is exposition: the implied developers, like the G-Man, want to introduce the player to some basic details, and make sure that he pays attention so that he is not lost or confused when they give him control. Finally, the third is to build up gradually to immersion: instead of plunging the player into the deep-end and risking his drowning in the interactive world, the narrative uses the cinematic scene to let him wade into the world gradually. The cinematic scene is a traditional form of narration and functions as a transition between the real-life world and the game world because it provides one sense of immersion in the alternate reality before it gives way to

interactivity, which adds an extra participatory layer of immersion (Murray, *Holodeck* 98). No doubt, the G-Man and his enigmatic words leave the player scratching his head, though by the time he fades away, the player has fully entered *Half-Life 2*'s world and is prepared for the interactive experience.

As an enacted game narrative, *Half-Life 2* uses the initial non-interactive cinematic scene as a means of basic exposition. On the level of story, the G-Man reveals little more beyond identifying the player character as *Half-Life*'s hero, "Mr. Freeman." When the G-Man says, "The right man in the wrong place can make all the difference in the world," he certainly sounds vague, but he subtly provides a broadly defined goal on the level of gameplay. As Jenkins notes, broadly defined goals hold spatial, enacted stories together (124). The G-Man's parting words, "Wake up and smell the ashes," might instill a fear of what is to come, yet that conflict, in turn, motivates the player to explore the world, enact the game narrative, and hopefully figure out how to make a difference (124). The G-Man, and the implied developers, impose words, however few they may be, for a reason: to provide just enough detail to set up the player's, and Freeman's, search for more, which will then escalate the G-Man's plan as well as the developers' narrative.

The second non-interactive scene takes place shortly after the game's start, and, like the first, its use in the game appropriately matches the nature of the narrative content. On the run from the Combine Overwatch, the player controls Freeman through a chase sequence over rooftops and through apartment buildings until he hits a dead end. A group of Combine surrounds Freeman, and the game momentarily suspends interactive control just as the Combine whack Freeman with their stun batons. Although interactivity itself, as Ryan correctly points out, can cause a particular level of immersion in a game narrative (*Virtual Reality* 307), the story

event here represents an instance where interactivity and immersion clash. Since Freeman is in an unfamiliar area surrounded by numerous Combine, some players might not believe a narrative where they can reenact Freeman's successful escape; in this case, they would thus lose their sense of immersion. Players, too, would lose immersion if they could still control Freeman after the Combine attack because they would expect their experience to match the reality of Freeman's situation: anyone knocked out would temporarily lose control over their own bodies, and players would likewise lose control over knocked-out characters. The scene reflects a case where non-interactivity is sometimes necessary even in an interactive narrative medium; here, the implied developers use the non-interactive opportunity as a useful storytelling technique.

Half-Life 2's final scene effectively combines the preservation of immersion seen in the second non-interactive segment with a function similar to a reversed version of the first scene. With no further gameplay or interactivity to take place after the scene, the ending does not need to motivate gameplay, but rather resolves the story. The implied developers potentially could have had an ending that preserved interactivity up until the Combine portal's explosion, which would consume Freeman and turn him into a messianic tragic hero. Instead, the implied developers choose to intervene with a freeze on time and the player's control just before the explosion hits. "Dr. Freeman..." an eerie, familiar voice calls. The G-Man returns with his seemingly "arbitrary imposition," his hold over Freeman, and his control over Freeman's perception of time and space, which justifies taking away the player's interactivity. The G-Man's imposition then preserves immersion, akin to the second non-interactive sequence, as it allows Freeman to survive the explosion in a believable way. The sense of immersion is the relatively lesser, traditional type of narrative immersion, which acts as a transition in a way that is similar to the very first scene. The G-Man literally effects the player's move out of the

participatory world of *Half-Life 2* to his non-interactive conclusion and finally back to real world as the credits roll. Therefore, the ending scene, added to the other non-interactive sequences, complements the story content and provides a satisfying, “efficient” kind of storytelling through a precise, effective use of non-interactivity (Mechner, “*The Sands of Time: Crafting a Video Game Story*” 112).

Welcome to City 17

After the game sets the goals, as it does in the motivational non-interactive preface, the player then reenacts *Half-Life 2*'s linear enacted narrative. The linear adventure closely follows Jenkins's definition of the enacted narrative, while sequences like the G-Man's preface embody the very “micronarratives” that provide the game narrative's overarching goals (125). As a spatial or journey story, *Half-Life 2* oversees the adventure of Freeman that takes him from one point in the story's setting to the next; as a computer game, it not only has the advantage of rendering an immersive virtual world, it also allows the player to explore its environments, direct his experience, and naturally choose where he want to focus his attention. At the same time, the game levels' linear structure itself generally compels him towards the goals via a pre-planned, directed narrative experience. While the player basically controls the pacing of the narrative progression through the speed of his exploration, his ability to handle the puzzle-solving and shooting gameplay, and his achievement of ongoing goals, the designers subtly guide him in the fashion of an implied author. Forward progression often means the player can no longer access areas from whence he came, for he will find that the implied developers intentionally authored the story's events or characters to add new obstacles, such as locked doors, to keep the player from getting lost and to spur him in the correct direction. Sometimes the player will also run into obstacles on the path ahead, whereby he must solve a puzzle or trigger a story event that will

cause the forward path to open. In any case, his actions as the player character combine with the guiding will of the implied developers to ensure he progresses through and reenacts *Half-Life 2*'s linear narrative.

From the moment the G-man releases Freeman into the world through about the first half hour of interactivity, the game largely focuses on exploration, exposition, and narration. With nothing but the clothes on his back, Freeman can only find his bearings and set out from the train where the G-Man left him. Although *Half-Life 2* is primarily a shooting game, the game's introduction serves to expose details of the story so that the player will ostensibly have a diegetic reason and motivation to play the shooting elements later. "Welcome. Welcome to City 17." The first words the player hears after walking Freeman out of the train of course refer to the setting; the fact that they come from a man on a large video screen, in addition to the numerous floating cameras, suggests that an imposing, watchful government entity currently rules. The effect of the man's video messages is like that of cut scenes, but the fact they play within the context of the world itself grants the player agency to choose how much story he wants to experience before he continues exploring. As he moves through the levels, he cannot help but overhear the story details: clearly the design of the levels reflects a focus on narration and exhibition because no matter where he goes, he will always be within earshot of general chatter that reveals much about Earth's current oppressed state under the rule of an alien race, the Combine.

Most of the introduction therefore passively reveals story information to the player as he explores, though at points it does employ more direct methods to narrate exposition and story. Exploration eventually leads the player to a Combine security checkpoint. The guards immediately flag and surround Freeman; however, one of them, who takes him to an

interrogation room, reveals himself as Barney, one of Freeman's old friends. The scene serves to introduce the player to two more main characters, Barney and his video contact, Dr. Kleiner, and it provides him a specific goal—going to Kleiner's lab—to motivate further exploration and narrative progression. Later on, when a Combine guard blocks the path and demands that the player pick up a can and throw it in the trash, the situation overtly depicts the Combine's overbearing oppression of humanity. In a way, the guard's demand reflects the most extreme form of the implied developers' narrative guidance: they still give the player a choice—oblige and throw the can away or ignore the guard and get beaten—but anything he does opens the path, illustrates the intended oppressive presence of the Combine, and advances the narrative. With these scenes, the developers implicitly enable the player's choice to explore and progress, while their design of the levels, as well as events within the levels, directs the player to reenact the predefined narrative.

If individual scenes showcase immediate ways for the implied developers to guide the player within the narrative, the roles of non-player characters in the story by far represent their most direct method of guidance. In a way, the developers implicitly enter the narrative in the form of various avatars, or graphical representations of people in a virtual world, to fulfill the traditional narrative role of the implied author. While Barney or the G-Man are very avatar-like in that the implied developers use them to divulge story through dialogue, characters like Alyx are the most prominent avatar figures because they literally guide the player to move the game narrative forward. After the non-interactive segment where the Combine attack Freeman, for instance, the player would most likely be as lost and disoriented as the downed hero if not for Alyx. Alyx talks to the player, who regains interactive control after the incident, and reveals more story details through her dialogue. In the meantime, she also takes the player on a trip

down an elevator, through some secret passages that only she can open, and, finally, lets him into Dr. Kleiner's secret lab, the very same lab the player needs to reach to fulfill one of the narrative goals. Alyx is the primary avatar-like figure for the implied developers, as she performs the same narrative guiding role again in the chapters "Nova Prospekt" and "Dark Energy," while other characters, including Brother Grigori in the chapter "We Don't Go to Ravenholm," perform similar developer-avatar roles. The story events that involve both Freeman and another character, including Grigori and Alyx, lend themselves to the developer-avatar form of narrative guidance; in such scenes, the developers virtually walk beside the player, and together they unfold the narrative.

Dr. Kleiner's lab marks the point in *Half-Life 2* where exposition and exploration-only interactivity end and where a narrative rhythm between gameplay-driven and story-driven sequences begins. The scene at Kleiner's lab itself tasks the player with the next overarching narrative goal—to get out of City 17 and head to Black Mesa East—but the way to carry out the goal now involves a mix of exploration, the game-specific elements, including shooting enemies and puzzle solving, and micronarratives. In effect, any given micronarrative point along the linear path will motivate the player in multiple ways to continue the gameplay and exploration until he reaches the next micronarrative (Jenkins 124-126; also, Atkins 61-62; Mechner, "Crafting a Video Game Story" 112). Checkpoints with groups of refugees or resistance fighters, for example, will give him ammunition, weapons, and vehicles to keep the gameplay experience interesting, while they will also remind him of his overarching narrative goal and provide direction for the next leg of the path. Additionally, the interdependence and alternation between the gameplay and micronarrative sections regulate the narrative's dramatic highs and lows. The player mostly experiences stress and tension during gameplay, whereas the

micronarratives provide him relief and motivation. The sequencing of both the micronarrative and gameplay kinds of segments meticulously draws out all the events throughout Freeman's journey; as the player moves through the segments, he reenacts the basic events of Freeman's linear, spatial story.

One very specific method of narration that the game employs involves a form of voiceover dialogue running in tandem with the gameplay action. Of course, the gameplay action itself, coming from the player's shooting, puzzle solving, and exploring, represents parts of the sequence of story events. When the implied developers overlay diegetic broadcast messages on top of the gameplay action, they achieve another unique type of interactive narration. The broadcast messages are like those seen and heard in the introduction except they have a different effect. In the prison of the chapter "Nova Prospekt" and in the interior areas of the Citadel in "Our Benefactors," Dr. Breen directly addresses Freeman. Unlike the broadcasts of the introduction, the later ones occur while the player undergoes some heavy firefights. The implied developers choose the storytelling technique to set the tone for the events and action in "Nova Prospekt," but also to give the player choices about how he wants to absorb Breen's narration and its corresponding thematic effect (Mechner, "Crafting a Video Game Story" 116). The player can pay attention to the narrative background while playing, find a quiet place to listen without hindrance, or simply ignore the messages and just play. In any case, the broadcasts during the gameplay make up another of the game's narrative techniques, one that the implied developers designed and about which the player has a relatively high degree of agency.

A second form of narration that occurs during gameplay and exploration comes through salient story details from the setting, or the game's linear paths and environments. Due to the advantages of electronic media, a computer game like *Half-Life 2* can render highly detailed

environments rich with graphics, art, and sound and thus enable high levels of immersion (Murray, *Holodeck* 99, 103). The observation of the details by the immersed player, in turn, enriches his narrative experience. Some of the details correspond to Jenkins's embedded narrative category (126-128). The player may, for example, explore a seaside home adjacent to the linear path in the chapter "Highway 17" and discover the tragic fate of its former inhabitants. Most of the environmental details, however, are not "embedded" but rather "hidden in plain sight" along the linear paths. The observant *Half-Life 2* player will notice at several points along Freeman's journey the figure of the G-Man creepily observing him off in the distance. And in "Our Benefactors," the player can interactively move Freeman's head to observe all of the interesting sights within the Combine Citadel while a mobile cell takes the player up the tower. Unlike in the embedded narrative, here the player does not choose to uncover the details; he notices them rather through an ongoing willingness to pay attention. And unlike the player's decision to listen to Breen's voiceover broadcasts, which play over the action regardless, the player can pass by the environmental details without notice. By design, the implied developers place the details along the linear spatial story, and the player who takes heed of them will add such details to his overall reconstruction of the enacted narrative.

All the narrative techniques seen in *Half-Life 2* certainly showcase the immersion, interactivity, and agency of the player that allow him to depict and reenact the story, yet just as importantly, they implicitly reflect the underlying design and authorship of the developers. Specific figures, including the Combine soldier in the beginning, the avatar-like character of Alyx, and the ominous surveillance of the G-Man, all represent the most forthright instances where the presence of the implied developers oversees the player's progress through the narrative. Their presence indicates the direction and design of the implied developers who guide

the traditional readings and interpretations (Chatman, *Coming to Terms* 74) and the game's more heightened interactivity and agency. As with any narrative, the game's structure and "chronologic" sequence of story events depends on its implied "author." The implied developers of *Half-Life 2* utilize the various storytelling techniques—non-interactive scenes, the interactive micronarratives, the exploratory segments, the characters' narration and dialogue, the gameplay segments, and the environmental story details—for various narrative purposes. Indeed, the player has a major role in the game narrative, but a closer analysis of *Half-Life 2* reveals the developers play an implied narrative role themselves, through their narrative construction.

Man of Few Words

Much of *Half-Life 2*'s interactive storytelling stems from the unique nature of Gordon Freeman, the first-person protagonist. One of the first traits the player notices is that Freeman is a silent protagonist, as he has no dialogue or voice of any kind. After Alyx saves Freeman from the Combine in "Point Insertion," she even humorously remarks on Freeman's apparent quiet stoicism. "I'm sure you don't remember me," Alyx says, and, of course, an awkward silence surely follows. "Man of few words, aren't you?" she responds, half chuckling. And because of Freeman's lack of speech, much of his history, characteristics, and motivations must come from the testimony of other characters. In the same scene, Alyx also says, "My father worked with you back at Black Mesa," particularly implying a preexisting familiarity between her and Freeman. In fact, even the knowledge of Gordon Freeman's name comes solely from the player's trust in the collective testimony of the other characters. The testimony could just as well all be wrong, and Freeman could actually be "Morgan" for all we know (Atkins 57). While testimony provides much of Freeman's character, the player's complete image of Freeman comes down to the player's acceptance and interpretation of such testimony, which reflects the

same form of agency that readers have that allows them to accept and interpret the information presented to them in traditional narratives. And as the game shows, the player's agency within his reconstruction of Freeman's character mirrors the overall agency he has when he controls the silent protagonist to reconstruct and reenact the game narrative.

Especially because of the silent, first-person player character, the player undertakes the role of the first-person narrator in *Half-Life 2*. In the mode of a traditional reading, the player can always fill in character details, as mentioned, to recreate an image of Freeman much in the same way he reads and interprets *Half-Life 2*'s story and discourse to recreate the narrative. The player's reconstruction of a game narrative through his interactive control of a first-person protagonist, however, provides specific additional forms of agency beyond those of traditional reading. Controlling Freeman from the first-person perspective, the player can thus choose what he wishes to see and focus on the parts of the narratives that he wants to experience (Atkins 78). Just as in a traditional text with first-person narration, the game's first-person narration limits the narrative experience to what the player sees and hears through Freeman's point of view (57). Although he cannot move beyond or outside of the limits of Freeman's perspective, the player retains the ability, as described above, to direct the experience as the controller of the first person narration (Atkins 74; Montfort, "Fretting the Player Character" 141, 145). The power of the player to reenact the narrative of *Half-Life 2* then, as compared to that of the reader of a traditional text, involves the heightened agency of first-person direction and narration in addition to the ability to interpret character and story.

While the player empathizes with Freeman and determines Freeman's character, the character of Alyx, though not the protagonist, is the primary sympathetic character (Tocci). Throughout the story, Alyx embodies the most traditional example of character development

within the context of her relationship with Freeman. When Freeman first meets her, they become allies in the fight against the Combine; later, their camaraderie develops into friendship. After their first meeting, Alyx briefly describes her role in guiding refugees away from the Combine; Freeman joins the resistance, and Alyx's cause initially motivates the narrative. When Freeman reaches Black Mesa East, the story shows hints of a possible romantic relationship developing between Freeman and Alyx, but it does not grow into fruition as of yet. After Alyx's father gets taken captive by the Combine, Alyx's resolve to free her father becomes the game narrative's primary overarching goal. The implied developers utilize her role as the sympathetic character to motivate the implied player to reenact the events of the story; if the real player plays in the same vein as the implied player, Alyx's effect as a character would extend to him too. Her role in the story is so prominent that it even approaches that of the protagonist, and the player could arguably see the events of *Half-Life 2* as her story; however, she does not appear enough in the narrative to drive it completely. The narrative still focuses on Freeman's journey, but Alyx, as a fully sympathetic, developing character, becomes an important element in the player's reenactment and reconstruction of the enacted game narrative.

As an agent with the power to determine his approach to the game narrative, the player essentially fulfills his part in the formation of the narrative: his reconstruction of the narrative from the source text. Just about any way the player harnesses his agency to advance the game narrative will lead him to reflect the implied player. By allowing the very malleable nature of Freeman's character alone, the game expects the implied player to use his agency to add his own narration and direction to those it already provides, and to answer the question, "Who is Gordon Freeman?" Therefore, one of the first things the player does, as mentioned, is to reconstruct his image of Freeman: he trusts or distrusts the testimony about Freeman from other characters and

then develops his own interpretation (Atkins 57). The player's ability to reconstruct Freeman not only mirrors his ability to reconstruct the narrative, but his perception of the character also determines how he will reconstruct the narrative. Because *Half-Life 2* is a linear narrative, the player cannot directly change the events of the story; however, he can indirectly, yet significantly have an impact on the events by directing how Freeman will explore and visually view the spatial story and by composing the motivations behind Freeman's actions (60). Perhaps Freeman is motivated by his sympathy for Alyx and her cause. Perhaps he seeks to figure out who the G-Man is and why he thrust Freeman into the world. Perhaps Freeman wants to correct his mistake—from the events of the first *Half-Life*—that inevitably led to the Combine's takeover of Earth. In contrast to *Half-Life*, which allowed the player to kill, accidentally or otherwise, important allies and thereby cause the termination of the game narrative (60), *Half-Life 2* places slightly more emphasis on an unbroken narrative experience by defining one concrete aspect of Freeman: no matter what the player does, Freeman always automatically lowers his weapon and ceases fire when aiming at a vital story character. On the other hand, since the game does not explicitly develop Freeman's character, it implies that this task falls on the player. And since Freeman is *Half-Life 2*'s protagonist and the story events surround him, the player's control over the character is the essential factor that lets him reconstruct the game narrative with such high levels of interactivity and agency.

Feel Free to Look Around

As narrative theorists describe and as *Half-Life 2* likewise reflects, narrative forms after the implied developers construct a story for an implied player and after the real player reconstructs the implied developers' construction. The scene at Dr. Kleiner's Lab in the chapter "A Red Letter Day," particularly marks one of the most concentrated points where the narrative

efforts of the player and the implied developers meet. As soon as the player enters the lab, he sees the entire scene set up specifically as a storytelling event, such that it puts on a “show” for the player while at the same time it involves the player, through Freeman, as one of the agents. The implied developers “set up” the scene for story by confining the player to the lab, having the characters speak a script of dialogue, and requiring the player to take part in certain events during specific moments in the script. The player, in the meantime, enters a story-rich playground where he can easily direct the presentation of the scripted scene by moving Freeman around the room and focusing on what he wants to see. He can stand near the characters and listen to their dialogue or he can explore the lab and choose whether or not to keep an open ear on the conversation. The implied developers certainly make way for exploration in the scene, as shown by their placement of another interesting G-Man sighting for the player who fiddles with the nearby surveillance monitors. While the scene gives the player a degree of freedom during the parts that run through an automated dialogue script, the narrative will not advance unless he complies with the parts that require the player’s action: namely, his donning of Freeman’s hazard suit and his entering of the teleport that brings him to the next location in the adventure. The narrative success of the scene does not simply flow from the implied developers or the player alone, but relies upon the work of both parties.

The similar scene at Black Mesa East in the chapter of the same name likewise provides a clear example that depicts the importance of the implied developers and the player in the formation of game narrative. When the player arrives here and enters the lab of Dr. Eli Vance, Alyx’s father, he observes that the dialogue and the events run along another pre-orchestrated script, yet the script has one main difference: it ceases at points just long enough to apparently give the player more freedom to explore. In fact, the words of Eli to Freeman, “Feel free to look

around,” are incredibly appropriate, and the implied developers, too, certainly intend the same for the player. The implied developers structure a scene that reflects *Half-Life 2*'s closest resemblance to Jenkins's embedded narrative (126-128). During the breaks in the dialogue, the player can look around and “activate” the “embedded” story moments. If the player looks at a bulletin board of newspaper clippings, Eli will talk to Freeman about Dr. Breen; for the framed photograph, Eli talks about Alyx and her mother; and similar brief moments occur for many of the other salient objects. Meanwhile, characters enter and leave the scene, as if on a set schedule, to advance the dialogue script. Consequently, their dialogue briefly occupies Eli, and the player cannot activate the embedded moments during these periods. Neither the player nor the implied developers have complete control over how the scene pans out, though together, their inputs combine to advance and form the narrative and shape the outcome.

The scenes at Dr. Kleiner's lab and Black Mesa East show how the implicit design of the developers meets the contribution of the player in concise, unifying mixtures; they are convenient examples that represent how the entirety of the game narrative forms and functions. The linear path through the game's spatial, journey story suggests the hand of the game developers, who meticulously design the world, direct the player's movement through it, and author the story events to occur in a real-time, linear sequence. Their guiding presence particularly comes through their avatar-like characters, who provide commentary and narration that guide the player's perception of tone and meaning and who literally guide the player in his effort to move forward in the narrative journey. They also give the player control over the first-person protagonist, which thus implicitly provides him with the interactivity and agency to influence the narrative. Because of the mute, sparsely detailed character of Freeman, the player first reconstructs the image of the protagonist, and his reconstruction extends to the narrative as a

whole. Using Freeman, the player becomes the director and actor in his reenactment of *Half-Life 2*'s enacted narrative. Like a traditional narrative, *Half-Life 2* must arise from the implied developers' creation and the player's recreation, their construction and reconstruction, and their authorship and reenactment.

BioShock: The Enacted/Embedded Narrative

Another narratively complex story-based game, *BioShock* is a more recent title that certainly lends itself to thorough game narrative analysis. Developed by Irrational Games and published by 2K Games, *BioShock* was released in 2007 for the Xbox 360 and the PC and then for the PlayStation 3 in 2008. Although a new intellectual property, much of the game captures the spirit of Irrational's earlier game series, *System Shock*, and *BioShock* is an evocative narrative in as much as it harkens back to *System Shock* and also, like *Half-Life 2*, to the science fiction and dystopian genres. A first-person shooter game, *BioShock* follows much of the same shooting game standards as *Half-Life 2* in terms of control and gameplay objectives except it has a much greater focus on exploration and the collection of items that help augment the shooting. Because of the construction of the setting and the nonlinear narrative, *BioShock* primarily reflects a mix of the enacted and embedded types of narrative. The player's narrative experience drastically changes depending on his discovery of narrative embedded throughout the world and on his choices during integral parts of the game that cause him to enact the narrative in various ways.

At the start of the story taking place in the 1950s, the protagonist Jack experiences a plane crash into the open ocean. In what initially seems to be a coincidence but of course is not, Jack finds a nearby bathysphere that takes him down to Rapture, an underwater city that just happens to be directly below. A video plays in the bathysphere that introduces the city: a man named Andrew Ryan founded Rapture in order to provide freedom for the individual without the

imposition of government. Upon arrival at Rapture, Jack sees that freedom has turned the city into a chaotic ruin that houses several violent inhabitants. Jack does make a friend, at least, in Atlas, who agrees to help Jack escape Rapture as long as Jack also helps Atlas's family escape. After much exploration and shooting, which makes up most of the player's gameplay, Jack reaches the bathysphere that holds Atlas's family, but it unexpectedly explodes. Blaming Ryan, Atlas tasks Jack with killing the tyrant ruler of Rapture once and for all. Jack eventually does find Ryan, yet Ryan then reveals the truth: the memories Jack has of his past and the plane crash are false, Atlas has deceived Jack, and Atlas has been controlling him through a simple subliminal phrase, "Would you kindly?". As a brutally grotesque way to prove his point, Ryan asks Jack if he'd kindly "Kill!". Jack, unable to control himself, then kills Ryan. Atlas thanks Jack as he reveals he is truly Fontaine, Ryan's most prominent rival in the rule over Rapture. Tenenbaum, another major character, corrects Jack's DNA to free him from the subliminal trigger, and the rest of the game entails Jack reaching and destroying Fontaine, to rid Rapture of his tyranny.

Whereas the above sequence details the events that occur in all play-throughs of *BioShock*, certain major story points have alternate versions that drastically affect the final turn of events. Rapture's inhabitants have discovered a way to give themselves superhuman abilities by altering their own DNA using pure genetic material known as Adam. Adam, however, only has one source: the "Little Sisters," young girls that Ryan, to put it bluntly, turned into Adam-processing machines. In the story, Jack receives two opposing accounts of the Little Sisters. According to Atlas, the Little Sisters are no longer little girls, but rather tools in the evil dystopian machine that is Rapture; killing them, Jack would ostensibly take advantage of the machine not only to collect a lot of Adam to make himself stronger but also to ultimately destroy

the corrupting system itself. Tenenbaum describes the girls, on the other hand, as innocent victims of Rapture. She pleads that Jack, rather than sacrificing his own humanity and morality to take down Rapture, instead save the little girls; rescuing them would provide less Adam than harvesting, and thus fewer super powers, but at least Jack could still dismantle the system of Rapture with his humanity and morality intact. The player chooses whether Jack harvests or rescues the Little Sisters; the choice, moreover, not only changes the story of Jack's Little Sister dealings, but it also results in one of three possible endings for the game narrative. The harvest or rescue choice changes the Little Sister sub-plot, the character development of Jack, and the narrative's ending. Indeed, such events within the enacted portion of *BioShock* considerably alter the narrative and showcase how *BioShock* consists of a collective of nonlinear, alternate storylines.

Much of *BioShock*, as a game narrative, requires the player to progress through its story events in sequence, while the rest of the experience consists of a more freeform style. The implied developers designed Rapture with a linear sequence of areas, yet at the same time they make each one large and wide open to better support the player's immersion, exploration, interactivity, and agency. Constructed by the implied developers, the narrative has the same focus in the makeup of its areas. On the other hand, the player progresses through one set of story events in sequence along a linear path; meanwhile, the player also experiences another set of embedded story details, such as Rapture's history and backstory, in a completely nonlinear fashion by uncovering them throughout the game's explorable environments (Jenkins 126-128). Even the "linear" portion of the narrative is in fact nonlinear, as seen above, but in a different way than the embedded details: the implied developers constructed the narrative so that player has a choice—coming down to whether he harvests or rescues the Little Sisters—between

alternate variations of the linear sequence; although most of the events in the sequence are the same in all iterations, the events that differ significantly change the end narrative result.

BioShock therefore is a nonlinear narrative made up of the enacted and the embedded forms, and the player experiences his version of the game narrative as a result of his interaction with both storytelling types.

Would You Kindly?

In terms of narrative progression, *BioShock* flows very similarly, in many respects, to *Half-Life 2* because it illustrates another journey-focused type of story. The game narrative houses a setting, Rapture, and plots Jack's path through the setting in a linear manner. As previously mentioned the player can have an impact on the narrative in several ways, but regardless of the player's impact, the narrative's path and the progression must go through a predefined sequence of Rapture's environments. The player will always start his exploration of Rapture at the bathysphere station and then advance the narrative by going through the Medical Pavilion, followed by Neptune's Bounty, the Smuggler's Hideout, and so on. The player, too, must either enact or be witness to certain story events at specific points along the path before the game will open, or make way for, the next segment in the path. Much like *Half-Life 2*, a significant portion of *BioShock*'s narrative thus uses what Jenkins terms the enacted narrative form (124-126). Unlike *Half-Life 2*, *BioShock*'s journey does allow the player to return, via the bathyspheres located within each of Rapture's areas, to previously visited areas; however, any backtracking motivated by the player alone (the game does intentionally entail Jack visiting Arcadia twice), does not lead to a progression of the enacted narrative. Perhaps the best way to describe the narrative structure is that, however nonlinear the player's path may be as later analysis will detail, the path of the narrative *progression* is linear.

In fulfilling much of its enacted narrative, *BioShock* hence has the player experience a mandatory, predefined sequence of micronarratives. Some of these micronarratives involve non-interactive cinematic scenes (Jenkins 124-126), which have functions similar to those in *Half-Life 2*. To reiterate their functions in brief, the beginning and end cinematic scenes bookend the interactive narrative's highly immersed experience with transitional, lower degrees of immersion provided by the non-interactive texts. Diegetic reasons, meanwhile, prompt the non-interactive scenes that occur within the narrative, and the scenes ensure that the player sees important story and gameplay related information.

All the micronarratives, of course, provide the player with goals that he will need to reenact the overarching narrative (124-126), and the interactive micronarratives are no exception. Soon after the game begins, the player's ride down to Rapture in a bathysphere, a small submarine transport, gives the player limited ability to move around inside the vehicle, while its confined space ensures that the player will see what the micronarrative intends to show him: Ryan's overview of Rapture's ideology and society and the micronarrative's implied broad goal of "explore Rapture." A bit later on, the player reaches a dead end where he sees, on the other side of a glass window, a "Big Daddy" protector defending a Little Sister from attack. The event introduces the player to the Big Daddies and Little Sisters; gives the player the goal of retrieving Adam from the Little Sisters, which is an important part of the gameplay and the narrative; and unblocks the path for the player's continued progression. The player's journey through the narrative, its linear path from micronarrative to micronarrative, essentially leads the player to reenact *BioShock*'s enacted narrative.

Both the linear path through Rapture and the micronarratives reflect the implied developers' guidance of the player using methods comparable to those in *Half-Life 2*;

meanwhile, *BioShock*'s extensive use of voiceover guides the player in another, alternative method. Since Atlas is the first person to be aware of Jack's arrival at Rapture, he communicates to the protagonist through radio transmissions; Atlas, as he initially leads the player to believe, will help Jack find his way through Rapture in exchange for helping Atlas's family escape. The two characters never formally meet face-to-face, yet Atlas, up until the story's climax, plays a vital, diegetic role for both Jack and the player, motivating them to enact story events and linearly progress through Rapture. Beyond Atlas, other characters, notably Ryan and Tenenbaum, also guide the player, and beyond live radio communications, they also communicate through taped recordings; all of the messages, moreover, remain accessible to the player from the game menu and can play simultaneously over their gameplay actions at any time. Their very presence, akin to the avatar-like Alyx of *Half-Life 2*, implies the developers' entrance, via a style of narration, into the game world to guide the player. In contrast to Alyx, however, the nature of the radio transmissions and tape recordings create a large, complex diegesis as they allow for narration beyond what the player directly experiences in front of him: characters often tell of things far beyond the player's current location and experience, including stories, or backstories, of their past lives in Rapture. Using such a specific style of voiceover narration, the implied developers divulge story details and direct the player through the enacted narrative.

Because the inherent connection between the voiceover narration and the guidance of the player is so prominent, it not only is a function of the narrative, but also actually makes for a major *diegetic* story element (Mechner, "Crafting a Video Game Story" 116). Revealed by Ryan to Jack and the player at the story's climax, the phrase "Would you kindly?" is a kind of cue embedded in Jack's DNA; it is a signal that Atlas has been using to make Jack obey commands. During the journey up until that climactic point, whenever Atlas wanted something from Jack,

he'd ask if Jack would "kindly" do it. The player complies with Atlas's "requests" for three reasons: he seeks someone to help him travel through the yet unfamiliar environment of Rapture, Atlas initially garners the player's sympathies with his façade about his family, and the player needs to follow Atlas's direction if he wants to progress through the narrative. All three reasons involve the player to some extent accepting the role of the implied player since he, playing the narrative for the first time, would yet have no reason to distrust Atlas's guidance. Atlas's control over Jack directly mirrors to the developers' implied narrative guidance of the players. If the player seeks, on either a conscious or unconscious level, to see the narrative through to the end, he must use his interactivity, his agency, and otherwise his "freedom" to play precisely into the developers' predefined path just as Jack irrevocably must obey Atlas's "Would you kindly?" commands.

Welcome to Rapture

Beyond the very linear structure of the enacted portion of the game narrative, *BioShock* allows the player interactivity to explore Rapture's environments in entirely nonlinear ways. As previously mentioned, the structure of Rapture is such that the player must move through the areas in a specific sequence, but progression by no means bars the player from returning to previously explored areas. Even more than in *Half-Life 2*, the player thus can control the pace of his narrative progression as he wishes. He can move from level to level and reenact the narrative events as fast as possible with the intent that he will return to previous areas later to explore them more thoroughly. Alternatively, the player can perform a thorough search of each of Rapture's areas during the times the narrative requires Jack to be in those areas, so that he would not need to return for further exploration and would reenact the narrative at a slower pace. Compared to *Half-Life 2*'s linear pathways, *BioShock* instead presents environments of such large areas that

they contain several interconnected paths. The player can ultimately reach a story event or micronarrative within a given level via any path of his choosing rather than one singular, well-defined path. The wide openness of Rapture's areas and the player's freedom to explore any previously explored area without having to restart the game, moreover, render a meticulously detailed and thoroughly structured image of Rapture. And since the player can ultimately access a complete, unified setting, he can perceive a salient, realistic, and thorough image of the underwater city that, in turn, has the advantage of enabling his deep sense of immersion. The player's freedom to explore *BioShock*'s setting and the resulting sense of immersion effectively enable the player's ability to direct and pace his own experience through the game narrative.

The events in Fort Frolic particularly empower the player, through a peculiar combination of photography and murder, to direct his narrative experience. A mad character named Sander Coen forces Jack into his domain, Fort Frolic, by denying him the bathysphere ride necessary to reach the next point in the main narrative, yet Coen's side story also exemplifies how the game grants the player a compelling level of agency despite his predefined reenactment of the narrative. Before he relinquishes the bathysphere, Coen demands that Jack assassinate four targets within Fort Frolic, then take photographs of each corpse, and then display them on a stage in the center of the area. Although the player must kill all targets to progress, after the first assassination, the player can approach the other three targets in any order. The structure of the mission ties in quite conveniently with the player's freedom of exploration within the level: he can freely explore and freely assassinate each target as he finds them. The photography, moreover, literally demonstrates how the player frames his experience through his first-person control of Jack. Each picture will be unique to the player's framing choices, and their display onstage depicts a way for the player to directly affect the presentation of the

environment and the story. Completing Coen's required mission, the player can continue his journey through Rapture; meanwhile, the mission exhibits just how the game gives the player complete autonomy over how he can undergo his reenactment of the enacted portion of the narrative.

As a side note about the environments of Rapture, the "Vita-Chambers" spread throughout the city represent one of gaming's few attempts to diegetically reconcile player failure and death with the narrative. Even the most skilled players cannot prevent their characters—whether they accidentally fall from a great height or succumb to enemy gunfire—from dying in games on occasion. Videogames, including *Half-Life 2*, traditionally do not treat player-caused death of the protagonist as a part the game narrative; the deaths are an inevitable consequence of a failure to "win" in shooting games (Tocci). Games typically have the player restart from an earlier checkpoint in the game narrative, so he can replay the scenario until he wins and can continue onward (Tocci). If the player's character dies in *BioShock*, however, the game automatically has the player continue from the nearest Vita-Chamber, which also enables a continuous, uninterrupted experience of immersion (Tocci). The Vita-Chambers were made to clone Ryan along with his memories in the event of his death; since Jack shares Ryan's DNA as his son, he can also use the chambers to resurrect himself. *BioShock* then wholly unifies the player's gameplay by including the protagonist's death scenario in the narrative in ways that other story-based games, usually ignoring the death scenario, rarely do.

The Vita-Chambers, because they reconcile player failure in the game with the narrative, reveal that the implied developers intended *BioShock* to have a greater narrative focus than other story-based games. In effect, the Vita-Chambers are a creative boon for the player's immersion and a complete implementation of gameplay within the narrative, but they degrade the pure

gameplay experience for some players (Tocci). The noteworthy point here is that the implied developers take care to anticipate the death scenario in *BioShock*'s narrative, but then author a story-based solution that overcompensates for the player's failure. The only "losses" the player experiences when failing are the mandatory relocation to a Vita-Chamber and the randomization of enemies in the environment; otherwise, the player simply cannot lose *BioShock*'s game. The lack of a true losing situation for the player means the implied developers balance the elements of the narrative's discourse differently than other story-based games: *BioShock* focuses less on gameplay and more on general interactivity and the preservation of immersion.

While the player freely explores Rapture, he will uncover far more than its ambitious environments, and not the least of these discoveries are the "memories" that unfold before his eyes. Upon entering a specific, contextual room, Jack will see flashes of still images in some cases, whereas he will see visions of "ghosts" reliving past events in others. Some of the memories, too, are required viewings within the narrative progression, or in other words, the player cannot avoid them because they await in areas that he must pass through in order to complete an enacted narrative goal. Such is the case with Jack's brief vision of two lovers at the entrance of Arcadia, which he must enter as part of his journey. The other memories unfold in areas that the player will only find through exploration, and so they fall under the category of Jenkins's embedded narrative (126-128). In Fort Frolic, for example, the player can come across a prostitute's bedroom that triggers flashes of images of Jack on a farm with his family. The audio tape in the room, furthermore, comes from a woman named Jasmine Jolene, who speaks of her impregnation by Ryan. Although the anecdote of Jolene and the triggered flashes of Jack's farm life appear unrelated at first, the player can recall their juxtaposition later, after he learns from Ryan that Jack's farm memory is a false one: the fact that the room triggers the false

memory implies that the details of the room and the recording are parts of Jack's "true" past, which means that Jolene is Jack's real mother. The revelation of Jack's mother is a truly embedded story detail that only arises after the player finds the prostitute's room. Indeed, Jack's memories, of the enacted or embedded kinds, represent a game storytelling technique that proves important to *BioShock's* narrative.

Audio diaries, like that of Jolene, make up the most substantial share of *BioShock's* implementation of the embedded narrative. The depths of Rapture hold 122 discoverable diaries, which play recordings from several of Rapture's inhabitants, including the main characters of the game's story. The player not only harnesses his ability to explore and re-explore *BioShock's* large environments to unearth the diaries in any order (within the limits of the already visited areas), but he also employs his agency to flesh out *BioShock's* overarching narrative with its optional, embedded portion. Altogether, the audio diaries contain multiple backstories and characters' points of view on the history of Rapture, which exhibit a multifaceted kind of storytelling aptly suited for the embedded game narrative (Murray, *Holodeck* 161). For example, the embedded story of Mariska Lutz, through her series of diary entries, details the origins of a Little Sister from her parents' perspective. Mariska's first diary in the series, addressed to her daughter Masha, says, "Ryan's men have taken you away and said you are needed to save Rapture," and it ends with instructions for Masha on how to return home. Following the instructions, the player can find Mariska's home and her next diary entry, which describes her terror upon seeing Masha in the form of an Adam-collecting Little Sister. As with Jolene's diary, the implied developers construct the scene to juxtapose Mariska's entry with the details of the room itself: from Mariska's reaction to her daughter's fate, the bed where two corpses lie, the nearby bottle of pills, and the picture of Masha found directly underneath the audio diary, the

player can deduce that Mariska and her husband committed suicide in the wake of their depression. Just as the player who finds Mariska's diaries will add to his knowledge of the Little Sisters, his overall search for the diaries adds to the narrative; the player who uncovers such embedded storytelling certainly will reconstruct a different version of *BioShock*'s narrative than the player who does not.

In addition to the more explicit storytelling of the memories and the audio diaries, "life" in Rapture—what it takes to exist in the city for both the player and the inhabitants—reflects another element of the embedded narrative. As Ryan's message in Jack's initial bathysphere ride explains, Rapture is "a city where the artist would not be censored, where the scientist would not be bound by petty morality, where the great would not be constrained by the small. And with the sweat of your brow, Rapture can become your city as well." In the city's current state, an extreme form of Social Darwinism has turned the city into a violent dystopia. The Splicers, comprising most of the inhabitants, attack the player on sight, and the kill-or-be-killed mentality provides justification for the game's shooting gameplay (Atkins 61-62). In turn, the majority of the player's gameplay and interaction with Rapture necessitates amoral actions: gaining new abilities by gene splicing, hacking vending machines and security devices, looting the dead, and generally killing everyone in the way. Because of the gameplay, Jack, in a way, becomes similar to the hideous, aggressive Splicers that he must fight. Not only is Rapture's dystopian story embedded in the player's amoral interactive options, but the player must also decide, as further analysis will show, how the dystopian ideal shapes Jack's character.

A Man Chooses. A Slave Obeys.

Compared to *Half-Life 2*'s Gordon Freeman, Jack has more character traits; however, he still allows the player a degree of agency to contribute to the narration and direction of the

storytelling. The player's ability to visually frame the narrative and explore the spatial story from a first-person perspective applies as much to *BioShock*, via Jack, as it does to *Half-Life 2*, via Freeman (Atkins 74). Jack differs most greatly from Freeman, however, where the implied developers use Jack to guide the player's understanding of the character, and by extension, the overall narrative (Montfort, "Fretting the Player Character" 141, 145). Although Jack is mostly a silent protagonist, his first and only words, heard during the introductory cut scene, mark a significant part of his character: "They told me," he says, "'Son, you're special. You were born to do great things.' You know what? They were right." His tone of voice, his attitude, and his belief about himself provide the player with a base personality that comes from within Jack himself, which is not true of Freeman. He is, in fact, silent for the entire rest of *BioShock's* narrative, which allows the player an opportunity to fill in and embellish Jack's character; however, Jack's spoken dialogue colors the player's image of the character (141, 145). In turn, the player's reconstruction of Jack's character will determine the decisions he makes regarding narrative interpretations and choices.

Beyond his one instance of dialogue, Jack's character, just like Freeman's, depends upon the testimony of others and the player's resulting acceptance or rejection of the testimony. Up until the game's climax, Jack appears to the player as a normal man who grew up on a farm, simply survived an airplane crash, and accidentally found himself in the exact spot in the ocean of Rapture's location. The implied player then, without the knowledge learned later about the character, has no reason to doubt the apparent character of Jack, and can then trust the testimony of Atlas. The implied player is led to think, at this point, that Jack agrees to help Atlas and his family, he empathizes with Jack's apparent motivation, and then reenacts the narrative in accord with Jack's objective. At the climax, however, Ryan finally reveals:

You think you have memories. A farm. A family. An airplane. A crash. And then this place. Was there really a family? Did that airplane crash, or was it hijacked? Forced down. Forced down by something less than a man. Something bred to sleepwalk through life until they are activated by a simple phrase, spoken by their kindly master.

Jack never truly complied with Atlas (Fontaine), but rather was “genetically conditioned,” as Fontaine says, “to bark like a cocker spaniel when I said ‘Would you kindly?’”. With the deception of Atlas and Jack’s true nature made clear, the player then has the agency to decide, when he reconstructs his image of Jack, whether to accept Ryan’s and Fontaine’s testimony or to believe Jack can learn, change, and become something more than a slave. In the end, agency that gives the player the ability to reconstruct Jack’s character will have a strong impact on the outcome of the narrative.

Jack as a character going through his undersea adventure essentially mirrors the player progressing through *BioShock*’s game narrative. “A man chooses,” says Ryan. “A slave obeys.” Up until his meeting with Ryan, Jack was a slave to Atlas’s “Would you kindly?” command. When Atlas asks Jack, “Would you kindly head to Ryan’s office and kill the son-of-a-bitch?”, Jack does not have a choice but to obey the command, and neither does the player. So long as the player has already made the initial choice to go through the game, killing Ryan is a required narrative goal that the player must complete. Adding to that, the implied player would initially feel sympathy for Atlas, who has provided him the motivation to kill Ryan; however, even if the real player rejected the feelings of sympathy and already knew of Atlas’s deception, he still would have to kill Ryan to progress in the narrative (Tocci). And Ryan’s use of the “Would you kindly?” command even justifies the scene’s non-interactive cinematic scene: the player loses

control, Jack helplessly obeys Ryan's command to "kill," and the player simply watches while Jack kills Ryan. Part of the player's experience with reenacting the narrative therefore makes him a "slave" to the enacted narrative similar to the way Jack is a slave in the first half of the story.

The most plainly seen form of agency that the nonlinear narrative of *BioShock* grants the player involves the way the player determines Jack's character development through his dealings with the Little Sisters. The player, on either a conscious or unconscious level, reconstructs his image of Jack by combining Jack's brief thoughts about himself in the introduction, all the testimony about Jack from the other characters, and the information the player uncovers, if any, from the embedded narrative of the audio diaries. The player's choice to harvest or rescue the Little Sisters also contributes to the character of Jack. If the player chooses to harvest the Little Sisters, he chooses a path where Jack does not change. After the climax, Tenenbaum frees Jack from the "Would you kindly?" enslavement, but if Jack harvests the Little Sisters, he remains a slave to the Social Darwinist system of Rapture. In this version of the enacted narrative, the player's immoral choice to harvest the girls makes Jack an antihero, a protagonist with corrupt, villainous aspirations. Alternatively, if the player rescues the Little Sisters, he chooses a path where Jack uses the system of Rapture to break free of it. In this narrative path, the player's moral rescue choice makes Jack a hero. In the case that the player is unaware of the connection between the harvest or rescue choice and Jack's character, the player would first make the choice and the results of the choice would then influence the player's subsequent interpretations of Jack's character. Otherwise, if the player is aware of the connection, he can use the choice as a part of his narrative agency: where he sees Jack as the antihero, the player then chooses to harvest the girls to fulfill the antihero interpretation; and where he sees Jack as the hero, the

player then chooses to rescue the girls to fulfill the hero interpretation. Either way, whether the player is aware of the results of the choice or not, the harvest or rescue choice marks the primary way that *BioShock* grants the player the agency to determine Jack's character, and, in turn, the narrative as a whole.

Because the harvest or rescue choice simultaneously affects the story and the gameplay within the overall game narrative, a potential problem concerning the player's satisfaction with the choices can arise. In either the harvest or the rescue cases, the implied developers anticipate the player's choice and author a corresponding story result: Jack is an antihero who remains enslaved or Jack develops into a hero who is free. While the player receives a satisfying story outcome as a result of his agency in the matter, he may or may not feel satisfaction in the gameplay because his satisfaction depends entirely on his skill level. For the harvest path, the player and Jack take the immoral, easy route: they both get more Adam this way, which they can use to gain stronger abilities. Skilled players might find that the gameplay becomes too easy in the harvest path, while lower skilled players might appreciate the stronger powers to fight their enemies. The rescue path, meanwhile, causes a potential inverse of the harvest path's dilemma. Rescuing the girls provides the player and Jack with less Adam than harvesting, which limits the extent of their abilities. Skilled players might find the level of gameplay challenge sufficient for them, while lower skilled players might find the gameplay too difficult. In either the harvest or rescue cases, the implied developers accommodate the player's agency with a resulting storyline, but they can not necessarily anticipate the player's skill, which can result in unsatisfying gameplay for some players.

As for the enacted portion of the narrative, *BioShock* provides a nonlinear path that grants the player an additional level of agency to reenact the game narrative in three possible ways.

The player's impact on the enacted narrative, besides the ways he visually frames the experience, explores the levels, or uncovers the embedded narrative, again, results from whether he harvests or rescues the Little Sisters. The harvest or rescue acts themselves represent major differences in the events of the storyline, and they additionally affect other important elements: the character of Jack, as mentioned, and the story's ending. Harvesting all the Little Sisters results in the "evil" ending, where Tenenbaum angrily derides Jack and Jack unleashes his power over Rapture in an attempt to take over the world. If the player harvests at least one girl while rescuing others, the story ends in a second possible way, which involves the same details as the "evil" ending except Tenenbaum speaks to Jack in a sad tone of voice. Finally, rescuing all the girls results in the "good" ending, where Tenenbaum praises Jack, the Little Sisters have lives outside of Rapture, and the girls become Jack's new family. The three possible narrative paths reveal the most direct results of the player's agency that culminate in drastically different experiences and endings.

Born to Do Great Things

The linear sequence of events in the enacted portion of *BioShock* in some ways corresponds to enacted narratives like *Half-Life 2*, though it primarily represents the backbone of the *BioShock*'s overall narrative structure. It is the one portion of the narrative that stays the most consistent throughout all readings, throughout all play-throughs, of the game. As he does in traditional narratives, the player uses his agency to interpret the events to form his narrative reconstruction. Unlike in traditional narratives, as *Half-Life 2* already demonstrated, the player has a high degree of interactivity and agency to take part in, to reenact, the events of the journey story, to direct his viewpoint of the events, and to control the speed and pacing of his reenactment of events. Aside from the player's power to depict and interpret the events, however, the actual events and their sequence, as the implied developers originally constructed

them, remain unchanged. While the enacted portion is the most consistent and the most prominent portion of *BioShock*'s game narrative, the way it works with the second side of the narrative proves to be essential to both the implied developers' narrative construction and the player's narrative reconstruction.

One of the innovations of *BioShock*, and games like it, is in the way the game narrative's discourse adds embedded storytelling to its primary enacted portion and its linear progression. The embedded portion exhibits story details that depend on their discovery by the player across various play-throughs, so they essentially add nonlinear aspects to the linear enacted backbone (Jenkins 126-128). The more audio diaries the player finds, in this case, the more story details the player will have to add to the enacted side and to use in reconstructing the overall narrative. Even if the player finds every last bit of the embedded narrative portion, the order in which he finds the diaries and his own readings of their meaning will ensure that he will reconstruct a unique, compared to any other player, and nonlinear narrative.

Of note, one thing is clear about *BioShock*: its diegesis and overall story are broad and thoroughly detailed. One of the advantages to having an extensive embedded narrative is that it utilizes the game's interactive and exploratory discourse in order to capture a more complex, multifaceted depiction of story than a linear enacted narrative could capture on its own (Murray, *Holodeck* 161, 181). As much as the embedded portion supplies a tremendous amount of story for the player's narrative reconstruction and although Jenkins does describe the possibility of a standalone embedded narrative (126-128), the embedded side of *BioShock* cannot function as narrative alone. While the audio diaries imply their strategic placement in the world by the developers—diaries about Atlas truly being Fontaine, for example, are in locales that the player only enters after he has already found out Atlas's deception—the fact that the player can find the

accessible ones in any order means they do not reflect the necessary “chrono-logic” narrative construction work of the implied developers. The stories inherent within the diaries mean little in relation to each other or as a collective, but they do serve to inform the enacted portion, which can, in fact, stand alone as a narrative. The implied developers thus use both storytelling methods in *BioShock* so that it can encompass a vast story; the primary enacted narrative fundamentally holds everything together with a directed, linear sequence while the embedded narrative considerably informs the whole, which the player reenacts and reconstructs.

Another of *BioShock*'s most significant strides in game narrative involves its complication of the linear enacted narrative through its nonlinear collective of mutually exclusive storylines. The implied developers design the game to offer the implied player a gameplay and story-centric choice to harvest or rescue the Little Sisters, they anticipated three possible scenarios that result, and they author some major parts of the story specifically in correspondence to each scenario. If he plays in accordance with the implied player, the real player will use all the story information given to him by the enacted and embedded parts of the narrative to better inform his decision so that he can experience the story that he wants. Otherwise, the player's decision would not be informed by the narrative, but the story-related results of the choice alter the course of the story nevertheless. Ultimately, the implied developers and the real player come together to decide between *BioShock*'s alternate realities: different versions of Jack's character, the Little Sister sub-plot, and the story's end.

The nonlinear aspect of game narratives like the one in *BioShock* does not only represent a technique rarely used by narrative, but also exists in a way that is totally transparent to the player. When traditional narratives house a collective of alternate realities, all of the realities must appear plainly in the texts so that the reader can see them. Games like *BioShock*, however,

hide the realities within the text, in its underlying computer code, so that only one reality, resulting intuitively from the player's agency, will surface at a time. When the implied developers construct a game narrative that encompasses alternate realities in such a way, they essentially become the "narrative architects" that Jenkins describes (129): they build a narrative system that anticipates player choice and enables the player to more naturally and instinctively choose between the realities, yet the implied developers must still have done, in advance, all the authorship work that each possible storyline requires in order for the final result to be narrative (Crawford 263). *BioShock* and games like it then do not simply reflect the heightened interactivity and agency of the player, but also reflect a new way in which the narrative relies upon the implied author and a new way that narratives can encompass various story realities.

Conclusion

Half-Life 2 and *BioShock* accurately reflect what theorists have already concluded about game narrative regarding immersion, interactivity, and agency. The fact that they enable immersion, interactivity, and agency is not in and of itself unique to the game medium, but rather an aspect shared by all narrative media; however, game narratives do offer more heightened forms of such narrative elements. The reader's sense of immersion, for instance, is simply part a mode of reading any narrative, which Ryan calls "world-reading," while the reader's sense of interactivity and agency is part of another mode of reading, or "game-reading." Both *Half-Life 2* and *BioShock* are good examples of game narratives that heighten the senses of immersion, interactivity, and agency for the player in ways not felt by the reader, especially since the games allow players to "world-read" and "game-read" at the same time. Narrative theorists point out how advanced technology gives computer-based texts a distinct advantage over traditional texts to render virtual worlds, and *Half-Life 2* and *BioShock* certainly put the technological advantages

to use to depict their highly immersive, detailed, explorable 3D worlds. In addition, the games' emphasis on interactive storytelling is not only part of the player's sense of heightened interactivity, but also itself further enhances the player's immersion; the games' most significant enhancements of the interactive storytelling found in traditional narratives involve the player's ability to direct his experience and use his agency to influence the course of the story. *Half-Life 2* and *BioShock* therefore confirm they both share and add to the aspects of immersion, interactivity, and immersion found in traditional narratives.

One of the surprising things about analyses of the narrative elements of story-based games is that they demonstrate how well a very traditional narrative model applies to *Half-Life 2* and *BioShock*, while also revealing how games have modified individual narrative elements to better accommodate the interactive medium. As outlined by Chatman, the traditional narrative model of story and discourse, author and implied author, and reader and implied reader, certainly applies to game narratives; at the same time, the application of the model to *Half-Life 2* and *BioShock* shows that each of those elements function slightly differently than they do in traditional narratives. Both games have a story and a discourse, and thus fulfill the traditional narrative definition. The game narratives' implementation of the two elements, however, has unique traits: their discourse tells their stories while emphasizing interactivity at much higher levels than traditional narratives do. The way the games' discourse tells story implies the narrative construction work of the developers; the player also perceives the way the discourse tells story and then mentally reconstructs the narrative. In *Half-Life 2* and *BioShock*, these efforts also take the games' interactivity into account. The two games exemplify how precisely game narratives correspond to the traditional narrative model; the games' interactive innovations

constitute a significant non-traditional method of storytelling, but instead of changing the traditional narrative model, they modify each of the elements of the model.

The interactivity in *Half-Life 2* and *BioShock*, in essence, keeps the balance between the constructive efforts of the implied developers and the reconstructive efforts of the player that mirrors the balance between implied author and reader in traditional narrative. The interactivity, however, modifies the activities of the implied developer and the player within the game narrative. The player reconstructs the game narratives in the same way he would for a traditional narrative: he makes interpretations about the characters and events to form his own image of the sequence of story events. In *Half-Life 2*'s linear enacted narrative though, the player also reenacts the story events using an added level of interactive control over the protagonist not found in traditional narratives. The fact that the player has such interactivity to reenact story events implies the fact that the developers not only constructed the narrative as an implied author would construct a traditional narrative, but also constructed it to enable such interactivity. In *BioShock*'s nonlinear enacted and embedded narrative, the player has *Half-Life 2*'s level of interactivity and an added degree of agency that enables him to uncover the embedded backstory and choose between three possible storylines. The construction work of the implied developers of *BioShock* then is similar to that of *Half-Life 2*, except the implied developers make an extra effort to author all the storylines and embedded backstory in proportion to and in anticipation of the player's enhanced level of interactivity and agency. In effect, the interactivity found in these kinds of enacted game narratives does not disrupt the integrity of the narrative, but rather requires both the player and the implied developers to augment their respective reconstructive and constructive roles.

Increases in interactivity and agency in story-based games like *Half-Life 2* and *BioShock* have thus far enhanced the game narrative experience, which still very much lends itself to narrative analysis. *Half-Life 2* reflects a focus on interactive storytelling and the player's interactivity within a predetermined, linear game narrative. Compared to *Half-Life 2*, *BioShock* reflects an even greater focus on the player's interactivity and agency, and it accommodates both by offering a nonlinear narrative that encompasses a linear storyline coupled with nonlinear story options. As story-based games after *BioShock* evolve further and if they implement even more interactive options for the player, they may move "beyond" the confines of a predetermined narrative altogether and, as a result, beyond traditional narrative analysis. Perhaps they will move away from a narrative focus and delve into pure simulation. Perhaps games will still have a narrative focus, yet offer so many predetermined storylines with so many choices for the player that the experience in the game worlds will be indistinguishable from pure simulation. Developers could also develop an AI that will not only do their narrative construction work in their stead, but also be powerful enough to produce a consistent narrative on-the-fly in accordance with player choices. Until such possibilities actually come into being, however, story-based games like *Half-Life 2* and *BioShock* will constitute the latest form of narrative text to emerge in popular culture. And the traditional narratological model is fully equipped with the tools that we can use to understand them.

Endnotes

¹ The theorists who argue that story-based games are narrative forms include Atkins, Crawford, Dickey, Jenkins, Mateas, Montfort, Murray, Ryan, Stern, Werning, Zimmerman, and the contributors to *The Routledge Encyclopedia of Narrative Theory*.

² In addition to Murray, theorists who also discuss agency and procedural authorship include Atkins, Jenkins, Mateas, Mateas, Perlin, Stern, Ryan, and Zimmerman.

³ The theorists who agree with Atkins on the point that game's stories, on their own, are not sophisticated include Aarseth, Bringsjord, Crawford, Murray, Jenkins, Juul, Mechner, Ryan and Zimmerman.

Works Cited

- Aarseth, Espen. "Genre Trouble: Narrativism and the Art of Simulation." Harrigan and Wardrip-Fruin, *First Person* 45-55. Print.
- Abbott, H. Porter. *The Cambridge Introduction to Narrative*. 2nd ed. Cambridge: Cambridge University Press, 2008. Print.
- Atkins, Barry. *More than a Game: The Computer Game as Fictional Form*. Manchester: Manchester University Press, 2003. Print.
- BioShock*. 2K Games. 2007. DVD-ROM.
- Bringsjord, Selmer. "Is It Possible to Build Dramatically Compelling Interactive Digital Entertainment (in the form, e.g., of computer games)?" *GameStudies: The International Journal of Computer Game Research*. 1.1 (2001): n. pag. Web. 4 Nov 2008.
- Chatman, Seymour. *Coming to Terms: The Rhetoric of Narrative in Fiction and Film*. Ithaca: Cornell University Press, 1990. Print.
- . *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca: Cornell University Press, 1980. Print.
- "Computer Games and Narrative." *The Routledge Encyclopedia of Narrative Theory*. Eds. David Herman, Manfred Jahn, and Marie-Laure Ryan. 1 vol. London: Routledge, 2005. Print.
- Crawford, Chris. "Interactive Storytelling." Wolf and Perron, *The Video Game Theory Reader*. 259-273. Print.
- Dickey, Michele D. "Engaging By Design: How Engagement Strategies in Popular Computer and Video Games Can Inform Instructional Design." *ETR&D*. 53.2 (2005). Web. 4 Nov 2008. <http://mchel.com/Papers/ETRD_53_2_2005.pdf>.

- “Digital Narrative.” *The Routledge Encyclopedia of Narrative Theory*. Eds. David Herman, Manfred Jahn, and Marie-Laure Ryan. 1 vol. London: Routledge, 2005. Print.
- Frasca, Gonzalo. “Simulation versus Narrative: Introduction to Ludology.” Wolf and Perron, *The Video Game Theory Reader*. 221-235. Print.
- Half-Life 2*. Valve Software. 2004. CD-ROM.
- Harrigan, Pat and Noah Wardrip-Fruin, eds. *First Person. New Media as Story, Performance, and Game*. Cambridge: MIT Press, 2004. Print.
- , eds. *Second Person: Role-Playing and Story in Games and Playable Media*. Cambridge: MIT Press, 2007. Print.
- Jenkins, Henry. “Game Design as Narrative Architecture.” Harrigan and Wardrip-Fruin, *First Person* 118-130. Print.
- Juul, Jesper. “Games Telling Stories? –A brief note on games and narratives.” *Game Studies: The International Journal of Computer Game Research*. 1.1 (2001): n. pag. Web. 4 Nov 2008.
- . “Introduction to Game Time.” Harrigan and Wardrip-Fruin, *First Person* 131-142. Print.
- Mateas, Michael. “A Preliminary Poetics for Interactive Drama.” Harrigan and Wardrip-Fruin, *First Person* 19-33. Print.
- Mateas, Michael and Andrew Stern. “Writing *Façade*: A Case Study in Procedural Authorship.” Harrigan and Wardrip-Fruin, *Second Person* 183-207. Print.
- Mechner, Jordan. “*The Sands of Time*: Crafting a Video Game Story.” Harrigan and Wardrip-Fruin, *Second Person* 111-120. Print.
- . “Who Is the Prince?” *Prince of Persia: The Graphic Novel*. New York: First Second, 2008. Print.

- Montfort, Nick. "Interactive Fiction as 'Story,' 'Game,' 'Storygame,' 'Novel,' 'World,' 'Literature,' 'Puzzle,' 'Problem,' 'Riddle,' and 'Machine'." Harrigan and Wardrip-Fruin, *First Person* 310-317. Print.
- . "Fretting the Player Character." Harrigan and Wardrip-Fruin, Second Person 139-146.
- Murray, Janet H. "From Game-Story to Cyberdrama." Harrigan and Wardrip-Fruin, First Person 2-11. Print.
- . *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Cambridge: MIT Press, 1998. Print.
- Perlin, Ken. "Can There Be a Form between a Game and a Story?" Harrigan and Wardrip-Fruin, *First Person* 12-18. Print.
- Perron, Bernard and Mark J.P. Wolf. "Introduction." *The Video Game Theory Reader 2*. Ed. Bernard Perron and Mark J.P. Wolf. New York: Routledge, 2008. 1-21. Print.
- Raessens, Joost. "Playful Identities, or the Ludification of Culture." *Games and Culture*. 1.1 (2006): 52-57. Web. 4 Nov 2008.
- <<http://www.let.uu.nl/~joost.raessens/personal/Publicaties/2006-Raessens-PlayfulIdentities.pdf>>.
- Ryan, Marie-Laure. *Avatars of Story*. Minneapolis, MN: University of Minnesota Press, 2006.
- . "Beyond Myth and Metaphor –The Case of Narrative in Digital Media." *GameStudies: The International Journal of Computer Game Research*. 1.1 (2001): n. pag. Web. 4 Nov 2008.
- . *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Baltimore, MD: The Johns Hopkins University Press, 2003. Print.
- Tocci, Jason. "'You Are Dead. Continue?': Conflicts and Complements in Game Rules and

Fiction.” *Eludamos. Journal for Computer Game Culture*. 2.2 (2008): 187-201. Web. 18 Nov 2008.

Werning, Stephen. “‘Translating Narrative into Code’ – Thoughts on a Technology-Centric Model of Digital Games as Programmable Media.” *Eludamos. Journal for Computer Game Culture*. 1.1 (2007): n. pag. Web. 18 Nov 2008.

Wolf, Mark J. P. and Bernard Perron, eds. *The Video Game Theory Reader*. New York: Routledge, 2003. Print.

Zimmerman, Eric. “Narrative, Interactivity, Play, and Games: Four Naughty Concepts in Need of Discipline.” Harrigan and Wardrip-Fruin, *First Person* 154-164. Print.