DEMYSTIFYING THE STRUCTURES OF LUDIC TEXTUALITY:
NARRATIVE, RHETORIC, AND GENRE IN
HYPERERGODIC COMPOSITION

by

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Abstract

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In an increasingly remediated world, it has become an increasingly relevant
necessity not only to understand how immersive participatory experiences convey
messages, but also to be able to convey to students the knowledge of how these
contemporary systems might attempt persuasion. However, contemporary discourse
surrounding the discussion of ergodic and ludic textuality often relies on one of many
arguably underdeveloped theoretical frameworks. Just as ludocentric criticism of ergodic
textuality often yields, at best, a limited understanding of the reader experience, the
application of narrative criticism, as well as the use of theoretical frameworks, generally
result in a misrepresentation of the ideas conveyed by the text. Even critics who
acknowledge these texts as an amalgamation of several forms of art often fail to consider
how the sometimes dissonant elements of narrative configurations and design structures
might frame ludic engagement or aesthetic depiction. This study will propose that a
comprehensive framework that allows the critic and student alike to develop a
comprehensive understanding of ludic schemas should be adopted in order to unlock the
meaning behind hyperergodic composition.
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CHAPTER 1
INTRODUCTION

1.1 The Problem of Genre

In his 2004 article titled *Genre Trouble*, noted video game theorist and media critic Espen Aarseth raises several questions regarding the current systems of categorizations used when discussing video game texts. While he frames these questions as taking part within a broader discourse regarding approaches to video game analysis in which “one side argues that computer games are media for telling stories, while the opposing side claims that stories and games are different structures that are in effect doing opposite things” (45), Aarseth notes that one of the core questions to be resolved within this discussion is that of the "genre at play," or how to appropriately categorize these texts. To focus on the importance of this question, Aarseth states that “the fight over the games’ generic categorization is a fight for academic influence over what is perhaps the dominant contemporary form of cultural expression” (45). Although Aarseth’s statement is somewhat dramatic, he is correct in pointing out "the aesthetics and hermeneutics of games and simulations and their relations to stories pose a rich problem" that further complicates the notion of games and genre.

In order to answer the question of genre in video game texts, Aarseth suggests that critics take a ludic approach. This approach would imply the critic looking at the actions which the player performs in a game while ignoring aesthetic and narrative elements in their assessment of genre. In a statement that complicates the issue of genre by associating it to that of games as an art form, Aarseth notes that “because games are not one form, but many, they cannot be one art form. […] Some games may have artistic ambitions, others do not. Games are games, a rich and extremely diverse family of practices, and share qualities with performance arts (play, dance, music, sports) material
arts, (sculpture, painting architecture, gardening) and the verbal arts (drama, narrative, the epos). But fundamentally, they are games” (47). Although in this statement Aarseth acknowledges the existence of narrative, visual, and aural elements as part of video game texts, he later argues that these elements exist only to provide context for the play experience.

In his 2002 book *Video Games: A Popular Culture Phenomenon*, Arthur Asa Berger partly agrees with Aarseth. In his book, he states that "Trying to decide which genre a given game should be put in is worth doing, since it tells us something about the nature of the game, but we must keep in mind that as in other kinds of texts, sometimes a game has elements of several different genres in it" (8). Like Aarseth, Asa Berger wants to properly understand how the concept of genres are manifested within video game texts. However, his approach relies more on narrative conventions than it does on play mechanics. Because the purpose of his text is to understand how narrative affects play and how, in turn, video games have affected storytelling, his comparative approach leads him to integrate the issue of video game genre with the discussion of games as art. Asa Berger, thus, argues that "video games are probably best understood to be similar to the novel in that there are many different genres of videogames; both novels and video games are, then, from my perspective, art form" (5). He states that because "the novel is an art form using the medium of print that has many different genres - everything from genre stories such as mysteries and science fiction stories to non-fiction" (5), then it would stand to reason that the same principles should apply to video game texts, as there are also "many different genres of video games such as action adventure, sports, science fiction, simulation, and role playing" (8).

The ideas offered by Aarseth and Asa Berger might seem contradictory at first. However, Aarseth's notions of what defines a video game text and Asa Berger's ideas
regarding narrative and genre are not mutually exclusive. Certainly, Aarseth's comments ring true in that video game texts do offer a unique experience when compared to other forms of media. However, it is unquestionable that Asa Berger's observations regarding games, narrative, and genre are also correct. To reconcile the ideas presented by Asa Berger's and Aarseth's ideas of games and genre, however, one would have to look not only at their arguments, but at the schools of thought which influence their theses.

1.2 Ludology and Narratology in Video Games

On July 2001, the first volume of *Game Studies: The International Journal of Computer Game Research* was published. This first volume of *Game Studies* declared 2001 as "year one of computer game studies as an emerging, viable, international, academic field" (Aarseth 2001). In his introduction to the issue titled *Computer Game Studies: Year One*, Aarseth argues against the colonization of the study of video game texts by established academic disciplines such as film studies or cultural studies, instead favoring the creation of a new discipline that looks exclusively at the elements of play present in a game text. He contends that because video games are a new form of media, there should be a dedicated field of inquiry that focuses solely on unlocking the meaning behind the kinds of experiences offered by these texts. While he does concede that "games should also be studied within existing fields and departments, such as Media Studies, Sociology, and English," he argues that video games "are too important to be left to these fields" (Aarseth 2001).

Supporting Aarseth's assertions, media theorist Jesper Juul argues against the notion of narrative and video games existing simultaneously and points out that video games that do rely on a narrative of any kind use the story elements in order to give context to play and not as an element of play itself (Juul 2001). Providing what is, perhaps, the most extreme perspective, Markku Eskelinen, who famously said "If I throw
a ball at you I don't expect you to drop it and wait until it starts telling stories," argues that because video games are a configurative practice - that is, readers are expected to create their own play experiences - theories of narrative and textual analysis are rendered obsolete (Eskelinen 2001).

Offering an antithetical perspective to Aarseth, cognitive scientist Selmer Bringsjord argues that video game texts have the potential to build dramatically compelling theatrical spaces and characters, while narrative scholar Marie-Laure Ryan argues for a framework of narrative understanding of digital media. In her article *Beyond Myth and Metaphor: The Case of Narrative in Digital Media*, Ryan notes that those who deny the narrative elements present in video game texts because of the interactivity principles present in the medium subscribe to a narrow interpretation of what it means to be a video game. Although she does concede that traditional narratology frameworks are unprepared to account for the play experiences that video games provide, she argues that rather than throwing away the concept of narrative in ludic study, "we need to expand the catalog of narrative modalities beyond the diegetic and the dramatic, by adding a phenomenological category tailor-made for games" (Ryan 2001).

It is important to note that while *Game Studies* did offer scholars a viable space to discuss theories of gaming and interactive media, it did not in itself mark the birth of academic inquiry into video game or interactive texts. The ideas presented by the likes of Juul, Eskelinen, Bringsjord, and Ryan in the first volume of the journal draw from much of the early scholarship into digital and interactive texts performed by the volume editor, Espen Aarseth, and by scholars of narrative such as Brenda Laurel and Janet Murray. Furthermore, since the publication of the journal, many of the frameworks there introduced have evolved into far-reaching theories used for unlocking the meaning of video game texts.
Aarseth first introduced his models for the analysis of video game texts in his 1997 work *Cybertext: Perspectives on Ergodic Literature*. In his book, he introduces several new concepts, the two key terms being that of cybertext, which, he explains, "focuses on the mechanical organization of text by positing the intricacies of the medium as an integral part of the literary exchange," and that of ergodic text, which is defined as any text where "nontrivial effort is required to allow the reader to traverse the text" (1). Aarseth defines trivial effort as one where there are "no extranoematic responsibilities placed on the reader except, for example, eye movement and the periodic or arbitrary turning of pages" (1). In other words, an ergodic text is one that requires intellectual and physical effort beyond that of passively reading text. In making a distinction between ergodic and non-ergodic (or interactive and non-interactive) texts, Aarseth establishes the groundwork for a mode of analysis of video game texts where the theories of criticism developed for non-ergodic texts are considered as obsolete. Aarseth is especially inflexible when it comes to considering the narrative elements present in video game texts. Despite conceding that there is some overlap between games and narrative in certain individual texts, Aarseth argues that "to claim that there is no difference between games and narrative is to ignore essential qualities of both categories" (5). Ultimately, Aarseth constructs a lens by which the critic can understand video games as virtual spaces governed by systems which allow players to engage in play. This lens, he argues, can be used to understand the structure of texts as either unicursal - that is, a text that can only be traversed in only one predetermined linear path - or multicursal - a text that can be configured in a multitude of ways, with each reading giving the reader a different experience.

An example evoked by Aarseth in his descriptions of ergodic textuality is a hypertext novel by Michael Joyce titled *Twelve Blue*. The novel is structured as a system
in which the reader is forced to make choices. The novel will reveal itself to the reader as different forms depending on choices made by the reader as they traverse through the text. The result is that the reader never reads the novel in its entirety. Instead, the reader navigates through various sections of the novel attempting to pull together a cohesive narrative. Because the text is inherently ergodic, as it forces readers to actively make choices regarding the outcome of the narrative, Michael Joyce's *Twelve Blue* is thus, Aarseth notes, built as a multicursal maze-like structure with multiple pathways and entry points, as opposed to the unicursal labyrinth structures with single routs that he equates with non-ergodic texts.

Building on the ideas put forth by Aarseth, in his book *Half Real* (2005) Jesper Juul proposes a mode of analysis that focuses primarily on ergodic video game texts that conform to what he calls emergent rule systems. Emergent rule systems, Juul explains, are systems in which a collection of simplistic rules that work together to create compelling play variations and player interaction. Examples of this category of systems include video game texts such as the *Disney Infinity Toy Box* (2013), in which readers are encouraged to create their own fantasy theme park free from any authorial influence guiding play, and *World of Warcraft* (2004), in which the reader is inserted into a virtual space and given minimal guidance as to their actions. Video game texts that adhere to progressive rule systems, on the other hand, are those in which a number of challenges are presented in a pre-determined sequence (Juul 5). Examples of these texts are *Bioshock Infinite* (2013) and *Atelier Ayesha* (2012), both of which offer the reader partially guided play experiences, the latter of which can only be accessed once the player has satisfied certain narrative requirements.

When discussing narrative, Juul spends considerable effort dismissing video game texts that use progressive systems in tandem with narrative elements, deciding to
focus instead on texts that consolidate different design aesthetics. While denouncing the idea of narrative taking part in the meaning-making process of video game texts, Juul does argue for the role of fiction as a catalyst to prompt the reader into understanding the inherent rules of the designed systems (189). Although he is reluctant to concede the co-existence of play and story, in arguing for the existence of a fiction as catalyst for play, Juul does acknowledge the existence of some kind of digital exigency that invisibly prompts the reader of a video game text towards the goal. What his analysis fails to address, however, is that this fiction, as he calls it, or virtual exigency is part of a narrative formulated by the experience offered to readers by the video game text.

It is his definition of the term video game that is perhaps his most meaningful contribution to the discussion of games as text. In his book, Juul defines games as "a rule based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable" (36). This definition is an important one not because it is inclusive, but because it actively attempts to consider texts that are considered as video game texts by both critics and scholars as being non-games. It is attempts like this which complicate the issues of meaning-making and of genre in video game texts.

Borrowing from the ideas of Aarseth and Juul that video game analysis should focus on ludic and systemic elements, on 2007 Ian Bogost created a framework for understanding game texts through the ideologies inherent in game systems which he presents in his text titled *Persuasive Games: The Expressive Power of Videogames*. Although like Aarseth and Juul before him Bogost's mode of analysis relies primarily in understanding the text through the analysis of ludic elements, Bogost also draws from rhetorical tradition and proposes systems and play as entities having a rhetorical function,
thus distinguishing himself from scholars like Aarseth and Juul. In this book, Bogost analyzes the history of the rhetorical tradition, explores how different types of media resort to different styles of rhetoric to make arguments, and comes to the conclusion that videogames, being a new form of media, have their own style of rhetoric.

In his discussion of rhetoric, Bogost offers a thorough exploration of oral rhetoric, visual rhetoric, and digital rhetoric while offering a working definition of rhetoric as "effective expression" (Bogost, 19). He then builds his argument by analyzing the principles of procedure within the context of interactive digital texts. He explains that the core difference between interactive texts and traditional, linear texts is "defining ability to execute a series of rules" (Bogost 4). Because Bogost views the procedural structure of videogames as devices for expressing ideas and forming arguments, he marries the concept of procedure to the rhetorical tradition. He combines these two concepts in order to define procedural rhetoric as "the art of persuasion through rule-based representations and interactions rather than the spoken word, writing, images, or moving pictures" (ix). By arguing that systems of rules make rhetorical argument and that both readers and critics should understand not only how these texts persuade the reader, but also the messages imbedded in the text, Bogost successfully gives a meaningful purpose to the idea of studying the rules of systems present in video game texts. Before Bogost's proposal, those advocating for what Aarseth calls a ludic approach to game analysis engaged in the study of game texts to understand how the systems represented in game texts function. With the advent of procedural rhetoric, however, the study of systems as represented in game texts gained the purpose of understanding how they persuade and what ideologies, if any, they communicate.

While Bogost offers various readings as examples for the implementation of his framework, the most complete procedural reading of a text is found in his article titled The
Rhetoric of Videogames (2008). In this article, Bogost deconstructs the systems found in the Nintendo game Animal Crossing (2005). Bogost notes how the systems in the game encourage the player to perform several tasks, such as fishing and farming, to acquire a steady income. The system then encourages the player to expand his properties. After this expansion of space, the system incentivizes the player to acquire new objects to decorate his new space. This never-ending system, Bogost notes, continually encourages the player to engage in an endless quest for expansion and the acquisition of materials. Thus, Bogost concludes, Animal Crossing (2005) portrays and reinforces elements of capitalism and materialistic cultures.

Perhaps mirroring Bogost’s model of procedural rhetoric and expanding its application to multiple texts, Rod Humble, the designer of Second Life (2003), stated in his piece Game Rules as Art that while “rules are not entirely obvious as art, especially within the recent age of computer game development,” these unseen rules that guide procedure are “highly compact artistic statements which can be played with as the user experiments with the system to see if it contains lessons which may be of use” (Humble 2006). Humble even goes as far as stating that “even when the designer is not trying to make any kind of artistic statement about life, players often find worthwhile lessons communicated by these rules” (Humble 2006).

Opposing Bogost’s ideas, in his piece Kosmosis: Procedural Rhetoric Gone Wrong, UC Santa Cruz’ Mike Treanor makes the argument that while it is of utmost urgency for academics, designers, and gamers alike to comprehend the nature and effects of procedural rhetoric, in most cases designers attempt to use procedure to convey a message and, because of their lack of understanding of the rhetorical framework of procedure, instead make a different argument. He does this by exploring the procedural rhetoric of Kosmosis, a game which the developer states represents the
ideological struggle of “a hegemonic set of non-degenerated socialist values,” but is, instead, because the text “failed to actually make any worthwhile claim about the supposed dangers of capitalism, the war machine or socialism,” its message shifts from what the author originally intended into the complete opposite. To Treanor, the message of Kosmosis is to “use your abnormal special abilities to amass an army and destroy the enemy” (Treanor 2009).

When one considers Treanor’s argument in relation to Bogost's models, one would have to accept that procedural rhetoric is an inherent principle native to all video game texts, whether designers are aware of this or not. Indeed, even if the message received by Treanor from the text Kosmosis was not the one intended by the author, there was a message that was conveyed. To Treanor, then, the text in question is one that potentially makes an argument in favor of nations amassing wealth and resources and participating in military interventions at a global scale. The question is, then, not whether procedural rhetoric works, but how procedural rhetoric can be made to support the intentions of the author. In the example of Kosmosis, it is likely that the failure in the transference of the message was due to a lack of fundamental understanding regarding the principles of how visual design and procedural rhetoric converge in individual texts.

Following a similar, yet perhaps more exploratory, approach, Todd Harper of MIT offers an example of how visual design, narrative, and procedural rhetoric function together within an individual video game text, as he attempts to analyze a text with a narrative focus through the lens of procedural rhetoric. In his piece Rules, Rhetoric, and Genre: Procedural Rhetoric in Persona 3, Harper examines how “Persona 3’s use of genre conventions and gameplay based rhetorical frames construct the game’s message” (Harper 395). More importantly, Harper also explains how the procedural structures implemented in Persona 3’s system can inform the player’s understanding of
genre for the digital game form. Although his analysis of the text takes into account the narrative presented in the text, the focus of his study revolves around the rules that work in the virtual game world and how these rules influence the perspective of the player. In his text, he explains how systems of character interaction leading to the development of the protagonist are representative of real-world interactions and personal growth. The narratives presented through character interactions are regulated by the systems of relationship-building put in place by the text's creators. By using these systems, Harper shows, the game is making the argument that the more bonds that one creates during life, the better their lives will be.

Despite the merits of Aarseth's and Bogost's ideas, not all scholars who engage in the inquiry of video game texts recognize the usefulness of understanding how systems of rules serve as a catalyst for meaning making. Opposing Aarseth's school of thought that advocates for ludic analyses of games, and, perhaps, to a lesser extent that of Bogost's procedural rhetoric, there are critics and scholars who argue that in order to understand video game texts, one must turn to narratological frameworks.

The practice of analyzing interactive texts as narrative form finds its roots in Brenda Laurel's text Computers as Theatre (1991). In her text, Laurel argues that in order to understand interactive texts, it is viable to use theories of theatre criticism to understand how the design of computer software interfaces and Head's-Up Displays used in video game texts facilitate the human-computer interaction process. In her text, Laurel draws on Aristotle's Poetics and the fundamental elements of dramatic theory in order to explain how the concepts of agency and engagement are made manifest in virtual and representational environments. When addressing the design of productivity software, Laurel notes that "even in task-oriented applications, there is more to the experience than getting something done in the real world." She notes that the focus of all
human-computer interaction should be one where real-world objectives are accomplished "in a way that is both pleasing and amenable to artistic formulation" (120). While Laurel does admit that the technical limitations of available hardware will often shape the kind of experience the user is allowed to participate in, she argues that whenever there is an interactive text in question, one must always turn their attention to the issue of how the reader will be able to "participate as agent within the representational context" (21). This kind of agency given to the reader, then, forces one to think of the user experience in terms of it being an emergent narrative and of the text itself as a platform that facilitates the co-creation of reader-centered stories. Although Laurel's text shows its age through the examples she cites, most of them being computer software titles from the late 1980s, her ideas have been adapted and updated by several scholars.

Reader as co-creator of an emergent narrative being presented in the text as a platform is the core premise of Janet Murray's *Hamlet on the Holodeck* (1997). To Murray, a computer is a platform that allows for various user-created configurations of narrative possibilities. Following Laurel's notions of interactive texts as drama, Murray coins the term 'cyberdrama', which she sees as "a reinvention of storytelling itself for the new digital medium," and uses it to define video game texts as an emergent story that takes space in a fictional representational space.

To support the idea of cyberdrama and players as cyberbards, Murray uses the broad genre of massive multiplayer online role playing games, which she refers to as virtual worlds. Murray notes how when players interact with each other in these online worlds, they often create a collaborative emergent narrative. By juxtaposing the practice of online role play in virtual worlds to various forms of participatory theatre, Murray successfully creates a framework by which virtual worlds can be understood as a stage and the events crafted by the text's designer can be considered as basic scripts.
While building on the ideas of narrative presented by Laurel, Murray, and others, film studies scholar Torben Grodal states in his piece *Stories for the Eye, Ear, and Muscle: Video Games, Media, and Embodied Experiences*, that “a story is a sequence of events focused by one (a few) living being(s); these events are based on simulation of experiences in which there is a constant interaction of perceptions, emotions, cognitions, and actions” (130). This definition of the term story, Grodal argues, is relevant to traditional printed text narratives only available in book media, but it is also an inclusive one that can include new media representations of narratives such as video games, hypertext fiction and other forms of interactive texts.

While Aarseth and others who subscribe to the ludic school of thought would argue that such definitions are irrelevant to the analysis of game systems of rules and mechanics of play, as they are narrative definitions and they consider the study of game texts as one that should focus exclusively on play, any observer would note that video game texts include narrative elements as much as they include mechanic, visual, and design elements. Although one must concede that this is not true of many video game genres - puzzles and sports video games, for example, do not contain any immediately observable narrative - a large number of video game texts do include narrative and story elements as part of the experience that they offer. While Juul and others may opt to call these narratives a “fiction,” when one takes into consideration Grodal's definitions alongside narrative-driven video game texts such as *Lightning Returns: Final Fantasy XIII* (2013) and *The Elder Scrolls: Skyrim* (2011) it becomes evident that such statements as those made by proponents against narrative are incorrect.

Perhaps the largest leap in understanding how narrative functions in interactive environments was made by Henry Jenkins in his text *Convergence Culture* (2006). Jenkins argues that due to increased interconnectivity, narratives can be dispersed
Jenkins sees video games not as an isolated form with the potential for storytelling, but as one element in an ecosystem of narrative media that includes film, books, and television. When discussing narrative and media, Jenkins writes that “most often, transmedia stories are based not on individual characters or specific plots but rather complex fictional worlds which can sustain multiple interrelated characters and their stories” (2007). He explains that transmediated narratives can have a starting point in one type of media, develop through a second type of media, and find resolution in a third type of media. In his text Jenkins explains how individual texts transmediate from one form of media to another, and notes several contemporary narratives which follow his models of narrative transmediation.

Jenkins further expands on the idea by arguing that the way in which stories are spread throughout different media affects how the reader thinks about narrative structure. This process, Jenkins states, is known as convergence. He writes that convergence is “the cooperation between multiple media industries, and the migratory behavior of media audiences who will go almost anywhere in search of these kinds of entertainment experiences” (2). Jenkins explains that while narratives can be articulated through transmedia storytelling techniques, the process of convergence is not one of the narrative text itself, nor is it entirely pertinent to constraints of delivery modes, as much as it is a process that “occurs within the brains of the individual consumers and through their social interactions with others” (3).

In addition to introducing the concepts of transmedia storytelling and convergence, Jenkins makes one important distinction in regards to how the reader engages with the text. In his book, he notes that there exists a difference between the terms "interactivity" and "participation." Jenkins' distinctions are reminiscent of Aarseth's ideas regarding ergodicity - an ergodic text requires non-trivial effort to navigate, while a
non-ergodic text simply requires the reader to passively consume the text as it has been 
created by the author (1997). Building on these concepts, Jenkins defines interactivity as 
"the way that new technologies have been designed to be more responsive to consumer 
feedback," while defining participation as "open ended, less under the control of media 
producers, and more under the control of media consumers" (133). To exemplify his 
definitions, Jenkins states that interactivity reflects an activity such as playing a game, 
while participation might involve interacting with others at a movie theater. Although these 
definition play a role in understanding transmedia ecosystems, it is worth noting that the 
way in which Jenkins uses these terms denote a process in the part of the reader - they 
are not attempting to describe the function of any given text. Thus, it is entirely possible 
to interact with non-ergodic texts just as it is to interact with ergodic texts. This process of 
interacting with the text, however, does not make a text ergodic in nature.

1.3 The Lack of a Unified Framework

Currently, Bogost’s concepts of procedural rhetoric and Jenkins’ ideas on 
transmedia narrative largely dominate discussion of video game texts. Whether these 
discussions focus on case studies of individual texts (Dor 2014), closed readings of a 
text’s narrative as alternate history (Lizardi 2014), or discussions on the rhetoric of 
agency (Voorhees 2014), the divide between ludic and narrative approaches to the 
analysis of video game texts is evident. This is true not only of scholars engaging in 
research, analysis, and higher levels of criticism, but also in situations in which game 
critics publishing in forums that lack an element of peer review are concerned, and 
especially when discussing issues of video game genre.

Proving Asa Berger’s comments that "it is difficult, at times, to assign a particular 
genre to a video game because in recent years video game designers have mixed 
genres together in the same way that novelists have" (8), video game critic Jamin Warren
attempts to wrestle with the concept of the shooter game and comes to the inaccurate conclusion that every game presented in the first person view is a shooter. He arrives at this verdict by attempting to analyze the mechanics of first person games and how they are presented. His argument is that whenever the player interacts with an in game object, the player is shooting at an object regardless of whether there is a depiction of virtual gun. Warren is not the first to hint at a convergence of genres. Scholars such as Thomas H. Apperley (2012) and Dominic Arsenault (2009) have similarly grappled with ideas of genre convergence and player input with only a measured degree of success. These studies, as well as Warren's superficial interpretation, however, fail to consider the interconnected relationship between ludic mechanics and visual representations. While it is certainly true that when one interacts with an object in an exploration-based first person video game text said interaction happens through similar player actions as when one actively shoots at an enemy combatant in a first person shooter game, with the player action being the click of a mouse or button, Warren's ludocentric interpretation fails to take into account the visual depiction of the actions being performed and the ways in which the player might interpret said actions. Although the player action of clicking a mouse to interact with an object is the same player action as clicking a mouse to shoot at a virtual actor, the resulting representations where under one circumstance the player's character picks up an object and can proceed to analyze or read said object and under the other circumstance the player's character is engaging in actual combat are distinct enough to warrant individual classification.

Part of the problem that scholars and critics alike have faced when attempting to unlock the mysteries of games and genre was articulated by Bogost in his book *Persuasive Games* (2008), where he writes that "a number of studies have addressed the adventure game as a literary genre-or at least have discussed them from a perspective of
literary theory and criticism. The distinction here is important, because while the critics apply or suggest literary perspectives, they do not always treat the adventure games as they would a literary work” (108). The problem here defined stems from a fundamental misunderstanding of how the individual components of a video game text function to create a cohesive whole. Authors have followed cues from Aarseth and focused solely on representation. However, as Alexander Galloway notes in his book *Gaming: Essays on an Algorithmic Culture*, "the concept of representation does not account for the full spectrum of issues at play" (71). Galloway explains what while "representation refers to the creation of meaning about the world through images" and that current discussions of video game texts and the process of meaning making have focused on the inherited debate of "whether images are a faithful, mimetic mirror of reality thereby offering some unmediated truth about the world, or conversely whether images are a separate, constructed medium thereby standing apart from the world in a separate semantic zone" (71). As with previous discussions alluded to, this frame of reference for thinking about video game texts is incomplete because, as Galloway notes, video game texts are not simply watched. Because they are a participatory medium, elements other than visuals must be considered when analyzing a text.

The core of the problem in all discussions regarding not only genre but analytical approaches to the study of game texts in general is that critics and scholars are often influenced by a single school of thought, thus rendering any analysis of a text, no matter how thorough, as only partial. To remedy this problem, this work will focus on creating a unified theory of textual criticism that can be applied to video game texts. In order to do this, I will draw from the works on procedural rhetoric of Bogost, the narrative ideas presented by scholars of narrative such as Ryan and Murray, the concepts of
convergence and transmediation presented by Jenkins, and the often ignored elements of visual rhetoric advocated by Galloway and others.

This study will first address the issue of whether ludic texts can be art and the major discussions surrounding this question. Drawing from various definitions of play, a definition will be suggested that makes a distinction between the ludic texts under analysis in this study - video game texts - and other types of texts. A framework will then be proposed to argue for an updated understanding of types of games and players where, rather than conflating game and player types as "hardcore" and "casual," a nuanced approach is used to classify games by the modes of play engagement they offer the player and to classify players by the frequency of play. Attention will then be given to the question of the player's role in the game text. It will be proposed that the player's role varies depending on how much freedom of design is given to the player and the perspective which frames play. Finally, having addressed these issues, and using current definitions of art as reference, an argument will be made that video game texts can be art.

After addressing the issue of games as art, attention will be given to the design of narrative elements of ludic textuality. First, a taxonomy will be proposed in which texts can be classified by level of ergodicity and type of textuality. Then, the spatial and temporal elements of the texts will be discussed in a manner in which linearity denotes temporal configuration and cursality addresses spatial design. This will allow critics to develop a more nuanced understanding about the composition of ludic texts.

Having discussed how ludic texts configure temporal and spatial elements, the study will consider how currently existing theories of narrative can be deployed to understand video game texts. This chapter will discuss how Bakhtin's concept of the chronotope and Morson's ideas regarding sideshadowing provide for endless possible
narrative configurations. Then, it will be discussed how video game texts have three possible narrative layers - the player action, the character narrative, and the story within the narrative - and how each of these can be experienced differently because of the manner in which the concept of the time loop is manifested in each layer. Finally, the concepts of space as narrative and of mechanic as narrative will be discussed.

The fifth chapter of this study will focus on the rhetoric of the text. It will first address design, play mechanics, and remediation as rhetorical concepts that help shape the meaning of the text. The concept of procedural rhetoric, first coined by Bogost in his 2008 work *Persuasive Games*, will be discussed and expanded on. Following this, it will be discussed how visual elements can influence the rhetoric of a text. By relying on currently existing grammars of visual rhetoric, it will be demonstrated that ludic texts use not only procedural representations to make arguments, as Bogost suggests, but also rely on visual representations to convey their claims.

Having set up a framework for understanding narrative function and rhetorical process in ludic texts, the study will then expand on Clint Hocking's ideas regarding ludonarrative dissonance. By framing it as one end of a scale which measures the level of cohesion between audiovisual, ludic, and narrative elements, this chapter will introduce the concept of audiovisual ludonarrativity as the convergence of visual, ludic, and narrative elements. This can then be understood as being either dissonant or harmonious. This will allow the critic to assess whether the procedural rhetoric, the visual rhetoric, and the narrative message of the text all support the text's claim or whether they are in conflict.

Having fully proposed a framework for understanding ludic texts, chapter 7 will offer a reading of two distinct ludic texts in order to demonstrate the application of the framework. Attention will be given to *Watch_D0gs*, which will be analyzed through an
audiovisual ludonarrative lens in which player perspective and ludic rules are used to make claims regarding the represented systems.

Building on the framework here proposed, chapter 8 will discuss the genre problem currently facing critics of ludic texts. Current taxonomies will be discussed and it will be demonstrated that, despite their best attempts, most authors fail to consider the multimodal nature of video game texts and, thus, propose taxonomies that fail to account for all possible genre configurations. In response, a system for genre classification will be suggested in which the genre of a text can be understood as being an amalgamation of ludic, visual, and narrative elements. In order to demonstrate ludic and visual genre, the study will borrow from currently existing schemas, some of which argue for a visual and ludic understanding of genre. In order to support the idea that narrative and literary elements should be considered when determining genre, three literary genres will be analyzed and juxtaposed to video game narratives. It will be argued that *The Elder Scrolls V: Skyrim* and *The Fabula Nova Crystallis* saga can be understood as epic texts, that *Lunar: The Silver Star*, *Final Fantasy VIII*, and *Ar Tonelico* can be understood as variations of romance stories, and that Jenova Chen's *Journey* can be understood as an extension of the zeitgeist of romantic poetry.

The final chapter of this study will address the educational implications of the methods here discussed. It will be argued that not only should instruction be structured in a way that more closely follows the pedagogically sound principles identified by Gee in his 2003 work *What Video Games Have to Teach Us About Learning and Literacy*, but also that educational programs, and specially programs of rhetoric and composition, would benefit from the inclusion of ludic texts in their discussions. To do this, the study will rely on a number of studies which have shown that the integration of ludic texts into
traditional lessons ultimately complements, but does not replace, traditional frameworks and better equips students to navigate an increasingly networked world.
CHAPTER 2
WHOSE GAME IS IT ANYWAY?

2.1 Introduction

The question of the validity of video games as an artifact deserving of critical attention has been at the forefront of nearly every discussion about the medium. Although video games have been examined within the field of computer sciences in order to understand coding patterns, the medium until recently had managed to escape the critical gaze of academics who attempt to understand the literary, narrative, social, and cognitive elements of cultural phenomenon. The reason for this relative lack of critical attention is that despite the popularity of the medium, it has never been able to shed the stigma of being considered as a toy, rather than a legitimate mode of cultural expression. When one considers the nature of video games, how their history is rooted in the cold war, and how even the early texts served to reflect the anxieties of the culture that produced them, these artifacts take on a new role where, rather than toys, they can be considered as modes of cultural expression. As technologies have advanced, so has the capacity of video game texts to tell complex stories and make nuanced arguments. However, despite video games like *Bioshock* attempting to explore the ideas of Ayn Rand’s approach to objectivism or complex experiences like *Watch_D0gs* serving as a commentary on the state of reliance of technology and the state of mass surveillance, the stigma of video games being a toy unable of expression remains. This, perhaps, could be attributed to the broadly held belief that video games cannot be art.

The question of whether video games can be considered as art is one that has been raised often in the past decades; however, as Aaron Smuts notes in the *Journal of Aesthetics and Art Criticism*, “unfortunately, there had been no sustained argument on either side of the video games as art debate” (2005). One of the more recent discussions
regarding the issue involve Roger Ebert’s comments suggesting that video games cannot be art (Ebert 2007). Ebert wrote that the attributes often seen in video games - those of “(1) point and shoot in many variations and plotlines, (2) treasure or scavenger hunts, and (3) player control of the outcome” are not attributes of art, but rather that “they have more in common with sports” (2007). Even game designers such as Hideo Kojima, creator of the Metal Gear series, has stated that video game creation is a service rather than an artistic process (Gibson 2006). There are, of course, voices that disagree with Ebert, with writers like Clive Barker firmly stating that video games are art (Ebert 2007), and with critics such as John Michael Bell calling video games “the new novels” (Bell 2014).

It is unquestionable that the legal status of video games as art in the United States cannot be refuted. In the 2011 resolution to Brown v. Entertainment Merchants Association, a legal challenge to a California law that attempted to ban the sale of certain mature-rated video games, the Supreme Court of the United States ruled that video games cannot be censored and that they should enjoy the same first amendment protections as other forms of art and media. In the majority decision, Justice Scalia wrote:

Like the protected books, plays, and movies that preceded them, video games communicate ideas - even social messages - through familiar literary devices (such as characters, dialogue, plot, and music) and through features distinctive to the medium (such as the player’s interaction with the virtual world). That suffices to confer First Amendment protection (Scalia 2011).

Further supporting the opinion of the Supreme Court justices, several museum curators have shown support for video games as a form of art, with institutions such as The Smithsonian featuring collections of video games being featured in interactive displays (McCormick 2013) and with the Museum of Modern Art in New York featuring 40 distinct video games in an exhibition focusing on the history of games (Solon 2012). Supreme
Court decisions and museum displays, however, seem to be unable to persuade critics that video games can be art.

Responding to the Museum of Modern Art's announcement, Jonathan Jones comments that video games are playgrounds made with the intention of interaction between a player and the software, and that "because the player cannot claim to impose a personal vision of life on the game," there can be no art (Jones 2012). Likewise, following the footsteps of Hilary Goldstein, who in 2012 made an argument that video games are not art, Eric Zimmerman has suggested that video games are not art because "games are not masterpieces of meaning" (Zimmerman 2014). These arguments, however, much like those that argue that games are art, are, as Smuts points out, superficial and fail to address many of the questions surrounding the debate. The core problem with all games and art arguments is that they fail to define any parameters. As Smuts asks, "can we even define 'video game' or 'game'? We often say that video games are interactive, but what is interactivity and what are the effects of interactivity on eliciting emotional responses from players?" (Smuts 2005). This chapter will attempt to answer the questions raised by Smuts, and then proceed to make an argument regarding the status of video games as art. It will first address the definition of video game and propose that the media be considered as a mode of communication - that is, each video game will be defined as a text with unique characteristics, not simply as an electronic rendition of traditional games. The chapter will then turn its attention to the types of games and types of players in order to dispel myths regarding the "casual" and "hardcore" games and players. It will then address the various roles of the player within the context of a video game text, and attempt to explicate how some of the roles might be used by the designer to purposefully instill certain emotions in the player. The chapter will finally turn its attention again to the question of whether video games can be art, and suggest that while
not all video game texts should be considered as high art, there are certainly several
texts which demonstrate that video game texts can, indeed, be art. This will help
authenticate video games as a valid object of cultural and textual inquiry which is in need
of robust analytical frameworks to help in the analyses of these texts.

2.2 What is a video game?

The question of what is a video game - that is, how to define the medium - is one
that exists at the center of most, if not all, discourse regarding these texts. While those
who follow the school of ludology might define a video game as a virtual space governed
by a set of rules (Aarseth 1997, Juul 2001), narratology scholars might lean towards a
definition that focuses on the narrative potential of the medium (Murray 1998, Ryan
2001). Most definitions of video game, whether they are proposed by those advocating
for purely ludic approaches (Consalvo 2006), exclusively narrative lenses (Simons 2007),
or interpretations of game as metaphor (Ryan 2001), most definitions of what a video
game is refer back to a handful of already established definitions.

As Juul notes in his article *The Game, The Player, The World: Looking for a
Heart of Gameness* (2003), perhaps the oldest and most referred to definition of game
can be found in Johan Huizinga’s 1944 text on play, *Homo Ludens*. There, Huizinga
suggests that the term game can be defined through play, and that play is an activity
which is spatially and temporarily self contained, encourages social groupings and
interactions, and which exists outside of what he calls "ordinary life." Building on this
concept, other scholars have created their own definitions, with Katie Salen and Eric
Zimmerman providing a commonly accepted interpretation of 'game', which, they
suggest, is "a system in which players engage in an artificial conflict, defined by rules,
that results in a quantifiable outcome" (Zimmerman & Salen 96). This definition, however,
is not the most comprehensive.
In his 2003 paper, Juul defines video games as containing six distinct features. These features are (1) fixed rules, (2) variable outcomes, (3) player valorization of outcome, (4) player effort, (5) player attachment to outcome, and (6) negotiable consequences. Juul contends that the removal of one or more of the six elements identified will render something as a borderline game or as what he calls a “not game.” In the diagram reproduced below from Juul’s article, the author shows the relationship between the six central elements of Juul’s article, the author shows the relationship between the six central elements of games and other types of texts.

Figure 1: Juul’s Game Definition Diagram

Of special interest in Juul’s definition of games is how he positions pen and paper role playing games and hypertext fiction. Although both of these types of texts have often
been categorized as games, as can most recently be evidenced with the controversial hypertext novel *Depression Quest* (2013) being featured as a game in major publications and retail outlets, Juul correctly notes that they are not games by any traditional definition. However, Juul, as is also true of Salen & Zimmerman, Greg Costikyan, and other authors who have proposed definitions of video games, fails to consider the multimodal nature of video games when he tries to expand his definition of games into the digital domain. Juul writes that “the definition of games proposed here does not tie games to any specific medium or any specific set of props. Furthermore, we know that many games actually move between media: Card games are played on computers, sports continue to be a popular computer game genre, and computer games occasionally become board games” (2003). These comments certainly make a valid statement when it comes to certain types of video games. The popular card game *Magic: The Gathering* can, indeed, be played in physical reality with cards purchased from a retailer or in the digital world through the *Magic: The Gathering* video games. Likewise, it is true that one can play sports in the street with friends, or play a video game about the sport in question. These types of video games do, indeed, fit Juul’s criteria of games. However, there are video games in which outcomes are predetermined in that they will not allow the player to stray from a given path. In the video game *Final Fantasy XIII*, for example, the player is constrained to a predetermined path where they will engage a predetermined number of enemies. In this game, the player is guided towards an inevitable resolution. Other games, like *Missile Command* (1980), will always lead to the same outcome regardless of player effort. There are no negotiable consequences - the player will always lose the game. If one is to adhere to Juul's model, then one would have to accept that *Final Fantasy XIII* or *Missile Command* are not games. However, scholars such as Alexander Galloway agree that *Missile Command* is a game, as he explains that
"during the Cold War, games like *Missile Command* presented a protorealist anxiety narrative about living under the threat of nuclear annihilation" (Galloway 2004). Even Juul himself agrees that *Missile Command* is a game, as he uses it in his article *Games Telling Stories: A Brief Note on Games and Narrative* in order to explain the relationship between player and game. In order to mitigate the problem presented by this situation, Juul makes some final observations regarding how computers modify the classic model of game, where he notes that "the concept of variable outcome is modified in online role playing games such as *EverQuest* (1999), where the player never reaches a final outcome but only a temporary one when logging out of the game," and that when it comes to games where there is lack of valorization for the outcome such as *The Sims* (2000), his model is modified by "removing the goals, or more specifically, by not describing some possible outcomes as better than others" (Juul 2003). Although Juul's explanations on how computer games modify the traditional game model are accurate, they are not comprehensive, as they fail to take into account several distinct possibilities, especially concerning video game texts that rely highly on narrative prompts.

In *Video Games: A Popular Culture Phenomenon* (2003), Arthur Asa Berger proposes that for something to be considered as a video game, it must adhere to eight criteria. These criteria, paraphrased from his text, are:

1. **Video games** are a form of entertainment that are played for amusement.  
   Play denotes a "momentary divorce from real life and the consequences of our failures" (12).

2. **Video games** have rules by which players are bound.

3. **Video games** take place in a specific location.
4. Video games are often competitive and explore notions of the player against the self, the player against the other player, and the player versus the machine.

5. Video games are artificial and unreal, but at times mirror reality.

6. There are different genres of video games.

7. Video games provide the possibility for cheating.

8. A player can stop engaging with a text at will.

Unlike Juul, Asa Berger takes into account a few of the nuances of the medium of video games. While Juul suggests that "games" are some sort of immutable construct that only shifts form slightly when it migrates into the digital world, Asa Berger understands that there is a difference between the traditional form of 'game' and 'video game'. However, although he concedes the possibility of different genres within the construct of 'video game', like Juul and others, he seems to consider the concept of the video game as one that finds its roots exclusively in play. To Asa Berger, as its true of most scholars attempting to understand video games, there exists some sort of underlying universal grammar that, if discovered, will explain how all video games function. This universal grammar, they contend, finds its roots in games such as Chess and Go. And while this might be true of video game versions of real life games - as Juul notes, a video game version of a card game is still a card game - this is not true of many video games. In many video games, the focus is not the "game" as much as the narrative, the aesthetics, or the aural experience.

Unquestionably, several video game texts focus on the play experience. Texts such as Tetris (2012) and Candy Crush Saga (2012) offer player a set of mechanics framed in such a way that the focus is the play experience. In Tetris, the player controls falling blocks. Players need to align the falling blocks in order to make lines, and once the
blocks are aligned, they disappear. The player loses the game if the blocks stack past a
certain section of the screen. In _Candy Crush Saga_, the player is given a board full of
candies. It is the player's role to mix candies in order to make them disappear. The player
loses when the time runs out. Both of these games easily adhere to both Juul's and Asa
Berger's definitions. However, titles like _Final Fantasy XIII_ and its sequel _Lightning
Returns_ (2014) do not.

In _Final Fantasy XIII_, the player takes control of Lightning, a female security
officer from the planet of Cocoon. The player's task is to control Lightning and her
associates through the narrative presented in the game world as they attempt to flee from
religious and political persecution. Likewise, in _Lightning Returns_, the player is tasked
with the mission of saving the souls of the residents of the world before the universe is
consumed by the darkness. The narrative present in the game shifts the focus of the text.
The player doesn't engage with the text to win, but to experience the narrative. In a way,
it can be said that while _Final Fantasy XIII_ does indeed include play elements, it does not
come from the same tradition as _Tetris_ or _Candy Crush Saga_. Rather than drawing on
inspiration from _Chess_ and _Go_, _Final Fantasy XIII_ finds its roots in heroic epics such as
_Beowulf_ and in steampunk literature like Percival Leigh's 1844 story _The Aerial Burglar_,
with visual aesthetics drawing heavily from Fritz Lang's 1927 film _Metropolis_. With this in
mind, it may be worthwhile to reconsider how one thinks about and attempts to define the
term 'video game'.

When one looks at a broad range of video game texts, not just the purely
narrative or purely ludic examples, it becomes evident that a video game can be a variety
of things. A video game can be a game in the classic sense of the term as defined be
Juul (2003), theater as suggested by Murray (1997), a narrative that takes the form of a
story as suggested by Ryan (2001), a combination of all three possibilities, or something
else entirely. This being the case, it becomes beneficial to think of ‘video games’ not as a form, which seems to be the favored approach, but as a medium; and while this, at the surface, is something that many scholars claim to profess, their modes of inquiry into the medium is one that seems more in line with analytical approaches concerned with form. Although a single video game text might serve as a parallel to a novel or a tabletop game, this does not mean that all video games are novelistic or ludic. Instead of thinking about the term ‘video games’ as being the equivalent of ‘novels’ or ‘games’, it would be beneficial to think of the term as a parallel for ‘books’ or ‘film’. Just as books contain printed characters configured into science fiction, romance stories, poetry anthologies, or scholarly analyses and film contain images configured into action movies, music videos, or documentaries, video games contain a combination of textual, visual, aural, aesthetic, narrative, and mechanic elements which are configured into puzzle games, sports simulations, open world narratives, cinematic adventure games, and interactive fiction. If one takes this approach to thinking about the term ‘video games’, the question of whether the format of distribution changes the value of the object becomes obsolete. With this perspective, it becomes possible to create a comprehensive framework that takes into consideration all the possible elements found within a single video game text - mechanics, narrative elements, visual representations, and aural compositions - and apply them selectively as they appear in each individual text in order to fully understand its meaning. With this way of thinking about the textuality of video games, it becomes necessary to propose a viable and inclusive definition of the term - one that does not exclude any text for not having enough "gameness" (Juul 2003) enough or for not allowing enough narrative possibilities (Murray 1997). Borrowing from previous definitions and expanding on them through observed phenomenon, a video game, then, will be considered as a digital text in which:
1. A virtual space is represented in visual form.
2. Virtual actors in the form of characters or objects either populate the virtual space or can be created by the player.
3. The player interacts with and affects one or more virtual actors.
4. Nontrivial effort is required of the player.
5. There are rules, or game mechanics, which govern interaction within the virtual space and constrain player action.
6. The player is given a variety of options to interact with the actors or the virtual space.
7. There is some mechanic to measure progress.
8. Creates at least one narrative from the player's perspective and may present stories as narrative.

Although the definition here presented might seem similar to Asa Berger's proposal and borrow elements from Juul's idea of the classical game, there is one major distinction and two important concessions that differentiate it from those previously presented. Both Juul and Asa Berger, as did scholars who came before them, attempted to define the game as a concept which can be represented in video game form and where the only relevant element is play. The perspective here offered considers a video game as a type of text in which play is facilitated through visual representations of game spaces and where player interaction with objects placed therein result in, at least, a rudimentary play narrative. Unlike Juul's model, the definition here presented does not discard something as not a game because it doesn't meet enough arbitrary standards of what a 'game' should be. However, it is specific enough to not include all forms of digital media - eBooks for example - as a video game. It should finally be noted that although the definition here presented does not necessitate all of the game elements presented by
Juul and others, it does not discard them either. A video game may have, for example, a variable outcome, but said element is not required for a text to be considered as a video game. In order to demonstrate how the definition here proposed would qualify specific texts, it will be applied to four distinct titles: (1) *Tetris* (2012), (2) Daniel Benmergui’s *Today I Die* (2009), (3) Markus Persson’s *Minecraft* (2009), and (4) *Final Fantasy XIII* (2010). Attention will then be given to the genres of the text adventure, the hypertext fiction, and the visual novel in the context of the definition here presented and the question of whether they can be considered as video games.

*Tetris* is a digital puzzle game in which the player controls a series of falling blocks and arranges them in order to make lines and make the blocks disappear. The player actively controls the blocks - the actors - and rotates them to arrange them in the play field - the virtual space. In order to create vanishing rows of blocks, the player must consider the frequency with which the blocks fall, how the blocks interlock with each other, and how the system allows the player to hold different types of blocks in reserve. Furthermore, the player must modify the approach to play as the speed with which the blocks fall increases. From the player’s perspective, a simple play narrative is created in which the blocks are stacked in a certain order and reach a certain height before being cleared away or, ultimately, passing the threshold and costing the player a game over. Progress here is measured by levels - that is, a score which keeps count of how many lines the player has cleared. These components each point to one or more elements in the definition.

Just as *Tetris* fits the definition of a game, so does *Today I Die*. Daniel Benmergui’s game opens with a drowned corpse tied to a rock. Below the corpse are shadowy piranha, and above the words “dead world full of shades, today I die.” The player at first is only able to replace the word “dead” with the words “painful” and “dark,”
which are written below. As the player does this, the space in which the corpse is floating changes from the deep ocean to a crimson sea to a dark cave. In each space, the player is required to accomplish a task with a specific skill, and each task in turn unlocks new language to modify the original phrase into “free world full of beauty, today I swim until you come.” In this title, progression is measured both through the evolution of the phrase presented in the game space and by the state of the player character, which initially is a corpse and, as the player accomplishes certain tasks, revives and swims to the surface. Although the text offers only a two minute play experience, it meets the requirements of a game.

Under Juul’s schema, the game Minecraft would not be considered as a game, as being an endless game it lacks a clearly defined outcome and, therefore, a valorization of said outcome. Juul would classify Minecraft as an open world simulation, a borderline game. If one is to accept the definition here presented, however, Minecraft is a video game text in which the player takes control of a character and travels the virtual world in order to create objects out of materials mined from the game space. As with other video games, players are bound by rules and restrictions. In Minecraft, the player is restricted in movement, in mining, and in crafting - all complex systems which must be mastered if one is to be successful. Progress is measured by the player through the number of structures that have been built, the amount of space that has been explored, or through any other arbitrary goal set by the player.

Just as Tetris, Today I Die, and Minecraft are games, so too is Final Fantasy XIII despite its focus on narrative and not on play. In this game, the player controls a character as they navigate through a series of maps while escaping persecution. The player will be forced to control the protagonist in a series of battles and to complete a series of requests granted by non-playable characters. Character actions in battle are
determined by their chosen job type, and exploration is constrained to a predetermined space. Progress is measured at multiple layers, including player character strength level, map position, and stage of the narrative. In this text, mechanics play a complementary role to the narrative - that is, combat and exploration are as important to the overall experience as the narrative presented therein. This narrative prevents several of Juul's elements of play from being made manifest. However, while this might mean that *Final Fantasy XIII* is not a game in the classical definition of the term, it does not mean that it is not a video game.

It has so far been demonstrated that several of the elements of Juul's definition of the classical game are rendered unnecessary when considering video games as a type of text rather than as a virtual manifestation of game. However, the question remains of whether text-only games and software can be considered a "video game." Just as there needs to be a distinction made between "video game" and "game," so too must there be a distinction between video games and other forms of digital texts. As it was previously stated, the definition here presented outlines distinctions between video game texts and other more traditional digital texts such as the eBook. Text only computer games, such as the text adventure *Zork* (1977) and the work of hypertext fiction *Afternoon: A Story* by Michael Joyce, cannot be considered as video games for the reasons here outlined.

Although not many works of hypertext fiction bother with the description of a space, as the majority of them focus on projecting emotions onto the reader, both hypertext fiction and text adventures have the ability of representing a space through text. However, this representation is not visual as much as it is textually descriptive. Although there are virtual actors in both text adventures and hypertext fiction, however, the reader can only meaningfully affect the actors in the text adventure. In *Zork* (1977), for example, the opening text reads "You are in an open field west of a big white house with a boarded
front door. There is a mailbox here." The reader, then, is prompted to input any command desired. Readers may attempt to open the mailbox, which will reveal a leaflet which they can then choose to read, or they may select to go into the house, turn around and walk through the field, or perform one of many actions as dictated by the player. Players are able to tackle the puzzle before them at their own pace and through their own unique approaches. In *afternoon: a story*, however, the player is simply asked to click on links - the virtual equivalent of turning a page. At times, the text will require the reader to whom the story is being told to make choices regarding an answer of a character, which places the player in a reactionary role at best. Rather than the player interacting with actors represented in the game, they are responding to prompts given by the author.

The question of how much effort is required of a reader in order to traverse through a text is one that can be said to lie at the core of whether text adventures or hypertext fictions are video games. In hypertext fiction, there is very little effort required from the player. At best, the player will select a choice from a list of choices. In text adventures, on the other hand, players are required to master the syntax of the game and think about the many possibilities that may arise due to the order in which they perform their actions. This links to the question of whether the player is given different options to interact with the actors in the game world. In both cases, the options available are limited at best. Certainly, from the player’s perspective, there is a narrative thread that is created through the reading of both text adventures and hypertext fiction. In both cases, players can coherently retell a story of what they "did" in the world given to them. However, said player narrative is made manifest not because of rules of game mechanics which govern the virtual space and the narratives presented therein, but because of previously scripted chunks of text. Because text adventures and hypertext fiction are lacking many elements of what make video game texts a video game, they cannot be classified as such. This
does not mean, however, that hypertext fiction and text adventures are not games. Indeed, in his discussions regarding the history of computer games, Juul seems to suggest that text adventures are a sub-genre of games in which "a certain amount of nostalgia is directed to the old games and newer, graphical games are views with skepticism" (2001). However, because video games are being defined as a type of text that is both digital and visual, text adventures cannot be counted as such, even if they, much like e-books, are read in computer devices. It is worth noting that when text adventures include visual elements rather than rely only on text, as for example *Shadowgate* (1987), they cross the line into standard adventure games. The only question that remains, then, is whether visual novels can be considered as games, since regardless of how one defines video game, visual novels have the potential of being structured in such a way where they can be considered as video games while simultaneously resisting classification as such.

A visual novel is a form of interactive fiction that focuses on narrative and storytelling. They use static visuals to represent non-playable characters and the game space, and seldom give the reader an avatar to control. These mixed media novels offer the reader the opportunity to read / play through a story in which conversations and thoughts are represented in text, while characters, environments, and objects are represented visually. The way in which visual novels can be said to defy classification is in its mechanics or lack thereof. Because there is no defined generic structure for works of this type to define how the reader engages with the text as game, the creators of visual novels sometimes implement design choices where the reader is expected to participate in a continuous feedback loop with the text in order to actively affect the outcome of the narrative, while others designers may decide to give the reader a more passive role, with some opting to design their visual novels as a work where there decision points are
entirely absent and the reader's task is that of clicking a "next" button on-screen. In other words, while some visual novels do expect some form of nontrivial effort from the reader and offer multiple approaches to a single problem, other visual novels do not expect anything from the reader beyond their attention. In order to make the distinction between these two types of visual novels, the type of visual novels that include play elements such as *Symphonic Rain*, which requires that the reader plays musical games and obtains passing scores before progressing the game, or *999: Nine Hours Nine Persons Nine Doors*, which requires that the reader solve puzzles to escape locked rooms, will be considered as graphic adventure games, and thus fall under the category of "video game," while those visual novels where the reader is expected to only click on the "next" button at sporadic intervals will not be considered as such.

The definition of the term video game here presented sees video games as digital texts in which a virtual space populated by virtual actors that the player can interact with through nontrivial effort is represented in a visual form, where the interaction of the player is governed by predefined mechanics, and where player progress through the game can be measured and narrated. This definition is broad enough to include all forms of video games, including those rejected by other models, such as games whose focus is narrative, those which have no negotiable outcomes, and those which have no ultimate win state, while rejecting digital texts that either are entirely textual and have no visual elements or that have no elements of play. This definition proves useful when attempting to answer questions regarding the artistic value of games, which will be addressed in a later section of this chapter, or when investigating issues regarding the narrative and rhetorical qualities of games or regarding generic configurations of video games, all of which will be addressed in later chapters. Before doing this, however, it
might be worthwhile to make a distinction between different existing categories of games and to address the role of the player.

2.3 A Framework for Understanding Types of Games and Players

Once having defined the term "video game," in order to answer the question of whether video games can be art - a question that is inextricably tied to questions of narrative, rhetoric, and genre of games - one must address the problem of the term "gamer." In current discourse, there seems to be an acceptance of types of players being qualified as "casual players" or "hardcore players" depending on the type of games which are played. As Frans Mayra notes in his book *An Introduction to Game Studies* (2008), the term "casual player is used to refer to a person who actually invests rather heavily one's time into playing games, but is considered to be a casual one because of one's preference of game style or genre" (26). He notes that the distinction between the casual or the hardcore gamer is a cultural one within the game culture. Although one must acknowledge the existence of a "gamer" identity within the culture of gaming, it has proven counterproductive to equate a type of game to a type of player. It might be prudent, then, to separate the idea of the casual and hardcore players from that of casual and hardcore games. Doing so will give scholars a broader language to use when referencing said phenomenon, allow for a distinction of types of games game and types of player, and ultimately serve to answer the question of which types of video games, if any, can be considered as art.

2.3.1 Classifying the Player

Before continuing, one final distinction must be made. According to the yearly report by the Electronic Software Association, a "gamer" is anyone who plays a game regardless of how often they engage with said video games. This seems to be an idea that has taken root in discourse surrounding games, even to the point where those who
advocate that there be a distinction made between those who play with increased frequency versus those who only play casually (ESA 2014, Barefoot 2013, Siegel 2008). In order to avoid possible conflicts, this study will refer to individuals who play games as "players." Thus, those who play games sporadically will be considered as being "casual players," those who play frequently will be considered as "mid-core players," and those who play for extended sessions several times during a week will be considered as "hardcore players." The term "gamer," then, will be used as the cultural signifier for the group of individuals who self-identify as "fans" of the medium, regardless of their frequency of play - a term parallel to bookworm or cinephile.

If one is to reject player categorization based on game typification, then it is incumbent to propose an alternative framework of classification. To do this, the study will rely on Heather Barefoot's interpretation of what it means to be a casual or hardcore player as presented in her article In Defense of the Casual Gamer, where she suggests that "hardcore gamers are midnight release grabbing stay up all day and night playing barely stopping to eat warriors," while casual gamers "play leisurely in small groupings of time" (2013). Because the distinctions here being made rely on how often games are played, rather than the type of games played, it may be worthwhile to refer to Scott John Siegel's brief commentary on the "mid-core player," a type of player who enjoys games and dedicates some time to play, but does not feel compelled to purchase the latest games or consoles on their release date or to finish every game as soon as they are able. This third category encompasses players who spend more time than the casual player in the activity of play, but less than the hardcore player. It is worth mentioning that there are certain individuals who play video games as professional gamers at competitive national and international level. However, because the measurement being used to distinguish between player types is time spent with a game, professional video game
players will be considered as part of the group of players who play games frequently - that is, they will be considered as "hardcore players." According to the most recent Electronic Software Rating Board study, "the average gamer spends 8 hours a week playing video games," with other studies suggesting anywhere between 5 hours to 7 hours a week (Siegal 2014, Rubin 2010). It can be suggested, then, that a mid-core player is anyone who plays between 5 to 8 hours a week, with those who engage with the medium substantially less being classified as "casual player" and those who play substantially more as "hardcore player."

With types of players having been defined by play habits, one should turn to the categorization of video games themselves. As it was previously stated, categorizing games in a way where their form is dictated by the people who play them is counterproductive. In order to create an accurate image of the landscape of video games as text, it becomes necessary to define video games by types. It should be noted that this classification is not one that depends or has any effect on genre - the question of genre will be addressed in later chapters. Video games, however, being a multimodal form of text created with distinct types of audiences in mind, need to be accounted for in terms of broad categories dictated by play. Some critics have noted this need and suggested categorization schemas of their own.

In 1984, game designer Eric Solomon suggested a game categorization system in which video games could be classified as simulations, abstract games, and sports, each of them being able to adhere to single player or multiplayer variants, with a few outlying key titles, such as Conway's *The Game of Life*, adhering to the concept of the zero-player game. To Solomon, simulation video games are video games which to some extent mirror ontological reality, while abstract video games are those in which elements of mimetic representations of reality are absent. However, Solomon's categorization fails
to serve any purpose in the contemporary gaming landscape. It could be said that technology has outgrown Solomon's system. One of the problems with Solomon's categorization system is that it acknowledges Conway's curiously named *The Game of Life*, which does not allow for any type of player interaction, as a game. By any definition proposed for the term video game, the element of a feedback loop between the player and the game is a key element. This feedback loop, working in combination with other elements, is what makes a video game. Conway's *The Game of Life*, however, does not include such a mechanism. As such, it cannot be considered as a game. Furthermore, Solomon's schema makes an odd choice by categorizing sports games as a separate group from the clearly defined "simulation" and "abstract" games, since some sports games such as those from the Madden series attempt to simulate reality, while others such as *Wii Sports* (2006) attempt to simplify and parody reality.

A second mode of game categorization was proposed on 1996 by Funk and Buchman when studying game preferences among genders. In their study, they classified games as belonging to the categories of general entertainment, educational, fantasy violence, human violence, nonviolent sports, and violent sports. The problem with this system of categorization becomes obvious at a glance. What this system implies is that games can only belong to one of many binaries that have been arbitrarily defined. A video game, however, can belong to several categories of those proposed by Funk and Buchman. *The Elder Scrolls V: Skyrim*, for example, is a game designed with the intent of being primarily a piece of entertainment, which would qualify it as "general entertainment." However, the game also allows violence against fantastic creatures such as fairies and demons as well as against human characters.

Perhaps the clumsiest categorization method is proposed by Victor Strasburger and others in the book *Children, Adolescents, and the Media* (2013). In their book, the
authors suggest that video games be classified as sports games, educational games, sensoriomotor games, strategy games, vehicular simulations, and "other games." They further suggest that sensoriomotor games include action games, "video games," fighting games, shooting games, and racing simulators. This classification places racing games at odds with themselves, as they are forced outside of vehicular simulations and thrust into sensoriomotor categories. They further suggest that strategy games are composed of adventure games, war games, role playing games, and puzzles. Some of these, however, are themes. The game Bladestorm (2006) for example, is both an action game, an adventure game, and a war game. The key problem with this schema for categorization is that it attempts to mix media forms, genres, and themes into an overcomplicated system that in the end proves useless when attempting to understand either game categorization or genres.

2.3.2 Categories of Play by Frequency

Just as with the schemas previously discussed, most attempts at video game categorization suffer from the flaw of haphazardly mixing genre, types, themes, hardware, and other elements into an odd system of overlapping categories. The system here proposed is far more simple and useful. The question of game genre will be discussed on later chapters and will consider issues of narrative, literary structure, perspective, and play mechanics. The question of video game type as pertinent to their relationship to the player and play patterns is one that is best addressed through understanding game structure in relation to how the game asks the reader to play.

The first category is composed of games which encourage short play sessions. This includes both games which can be completed in a short play session of around 30 minutes, like Ultra Street Fighter IV (2014), and games which limit play with a form of counter or timer, such as Dragon Vale (2009). In Ultra Street Fighter IV, players select
one of many characters and fight through a number of rivals. Successful completion of a
game session often takes no more than 20 minutes of play. At this point, the player can
select another character and play through the game again, or declare their play session
completed. Likewise, in *Dragon Vale*, a player will collect coins, breed dragon, hatch
eggs, and build new structures. Completing this process takes the player between five
and ten minutes. Once this has been completed, the game forces the player to quit
playing. Once dragons have bred, they require time to rest in which they cannot perform
any actions. Eggs need to be developed before they are hatched. Structures need to be
restocked - a process that happens automatically after a certain period of time. This time
elapses automatically through the hardware's internal clock. During this time when
structures are being built and dragons are resting, the player becomes idle. In both the
case of *Ultra Street Fighter IV* and *Dragon Vale*, the game is actively discouraging the
player from engaging in a single prolonged play session. These games will be referred to
as burst games.

The second type of game as defined by its relationship to the player and the
game's intent regarding engagement is the feature game. Feature games are those that
expect the player to engage with the text for prolonged periods of time. Video games as
III*, the player takes control of a character who roams through a post-nuclear Washington
D.C. The game is structured in a way that actively encourages the player to engage with
the text for continued periods of time by including play areas that take long periods of
time to traverse, missions that take the player from one end of the map to the other, and
allowing the player to take on several missions simultaneously. Although the player is
allowed to save their progress at any point, the game actively disincentivizes the player
from stopping play halfway into a mission by constantly feeding the player new
information through in-game listening devices and by constantly updating the mission's
goals. The approach taken by *Tales of Vesperia* is slightly different, but nevertheless
courages prolonged play. In *Tales of Vesperia*, the player takes control of Yuri, a
modern brooding antihero, in his quest to find purpose in life. The game's campaign
takes over 60 hours to complete, and the game does not offer frequent save spots. In
order for a player to record their progress, they will have to travel to specific locations.
The time that it takes a player to travel from one location with a save spot to the next is
usually over one hour when time spent fighting enemies and exploring the virtual space
are factored in.

As far as play engagement is concerned, these are the only two categories
required - burst games and feature games. Using this new terminology will completely
break the relationship between "casual game" being inextricably linked to "the casual
gamer" and the "hardcore game" being something that only a "hardcore player" can
engage with. This does not mean that games cannot further be classified by genre,
perspective, or narrative. Indeed, in later chapters the issue of genres will be discussed
at length. Likewise, one could further classify games as being somewhere in a spectrum
of educational and entertainment games or as being independently published. However,
for the immediately relevant discussion of games as art, one only needs to differentiate
between burst and feature games - questions of the educational purpose of games or of
the economic and business state of the developer are irrelevant.

2.3.3 The Union Between Player and Game

The implication of the taxonomy here proposed - that games can be burst games
or feature games and that categories of players are defined by play patterns - have the
potential of transforming the current discourse surrounding games and players. This
would imply that the term "casual" no longer applies to simple games, but to an
approach to play. It means that games which previously would have never been considered as part of the same family - titles as diverse as Candy Crush Saga and Mortal Kombat - can now be considered as belonging to the same family of games based on the type of play they encourage, not on how complex the games are to master. Furthermore, this taxonomy suggests that player habits do not necessarily have a correlation with type of games played. As outlined below in the player / game type relationship list, it means that a casual player can just as easily engage with a feature game as a professional, hardcore player. The possible combination of relationships, then, is as follows:

- Casual player engages with a burst game.
- Casual player engages with a feature game.
- Mid-core player engages with a burst game.
- Mid-core player engages with a feature game.
- Hardcore player engages with a burst game.
- Hardcore player engages with a feature game.

By separating the idea of player type from type of game, this taxonomy allows for a more complex understanding of a player's relationship to the games which they play, and allows one to understand the possibilities of player / game configurations previously unobserved. This allows for the existence of casual gamers of the type of games previously understood as "hardcore" - now feature games - and of dedicated "hardcore" players of games previously understood as casual games, now burst games. This will allow one to understand the behaviors of, for example, the hardcore Dragon Vale or Farmville player and to comprehend how this plays a role in the question of whether video games can be considered as art, and perhaps even provide a more detailed glimpse into player demographics.
Certainly, the taxonomy here proposed is not without reproach. It could be argued that labeling games as burst and feature games, just as it has been said when considering games as casual or hardcore or as art house games, creates a sense of exclusion based on arbitrary criteria that attempts to place one type of game as “better” or “more of a game” than the other. However, under the proposed schema, no game is “less of a game” than any other. All video games are video games. They are different, but not necessarily better or worse than any other title.

This section has thus far defined what it means to be a video game, what it means to be a gamer, made a distinction between player types, and categorized games by intended frequency of play as understood through a game’s mechanics. The last question that must be answered before being fully prepared to answer whether video games can be considered as art is that of the role of the player in a game.

2.4 The Role of the Player

The last question to address before engaging in inquiry of whether video games can be considered as art is that of the role of the player in relationship to the text. The need to understand this role comes from the existence of several comments by prominent critics such as Ebert who argue that the core reason for which a video game can never be art is that video game worlds are governed by rules which allow for multiple resolutions to a conflict - that is, video games cannot be art because of the factor of player interaction (Ebert 2010). This calls into question the role of the player in a game. This, however, can only be done when one considers the role of the player next to the role of a reader in regards to the text and the role of the viewer in relation to art.

Whether one subscribes to Eric Berne's theory of transactional analysis, where he suggests that the reader and the text affect each other and that a text is not made complete until it is understood through past experiences (1964) or Ebert's own ideas
regarding the relationship of the viewer and art (Ebert 2010), the clear implication is that despite the fact that "art is created by an artist" (Ebert 2010), there must be a viewer in order for the art work to accomplish its purpose. Ebert draws a line, however, between what it means to be a viewer, reader, or reviewer of a text, and what it means to be the player of a game. Ebert comments that when someone changes a work of art, that person becomes the artist. His argument is that the role of a reader or viewer is to passively consume and reflect on art, as the work itself leads the reader or viewer to an emotional catharsis. To Ebert, rules governing interaction with art, spaces that allow the viewer to interact with objects in the text, and elements which allow for player control of the outcome are unrelated to art as, to Ebert, they have more in common with sports. However, not all art critics agree with Ebert's assessment.

In the article *The Rules of Art Communication Between a Viewer and an Art Work* (2009), Maria Tarasova argues that in order for a work of art to be complete, it must be experienced by a viewer, and that there are certain rules which guide the dialectic interaction between the viewer and the work of art in question. Tarasova writes that "the communication between the viewer and the art work is considered to be organized by certain rules which regulate speaking operations of partners in the art dialogue relationship" (131). She further suggests that individual works of art have distinct elements, and that "each element of the art work is a sign addressing its meaning to the viewer who discovers it and fills it with his own personal sense" (131). She goes as far as suggesting that there is an ideal way of experiencing art. The implication of Tarasova's comments is that the process of decoding art, being a process governed by a clearly defined set of rules, is one that creates a play-like process where the viewer of a work of art is playing at attempting to understand the meaning which the author has hidden behind the artwork itself. Furthermore, because the work of art cannot exist devoid of
context - that is, there can be no art without the viewer - this process of play is integral to any discussion of art, especially those where the role of the viewer is taken as an integral element.

This mode of thinking about the viewer of art is not new. In a 1957 address titled *The Creative Act*, Marcel Duchamp discussed the role of the viewer in art. There, he discusses how it is up to the judgment of the viewer, not the artist, to determine the value of any given work of art. It is this judgment which dictates the role of the art work in the context of art-history. Duchamp then proceeds to declare the role of the viewer as a form of co-creator. He states that "the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualifications and thus adds his contribution to the creative act" (78). Without the viewer, then, the work of art can never be complete. What Duchamp is suggesting can be interpreted as the viewer taking on the role of a co-creator in a way that contextualizes the work of art within a broader context outside of "the text itself." This, Duchamp notes, "becomes even more obvious when posterity gives a final verdict and sometimes rehabilitates forgotten artists" (78). This means that when a reader / viewer engages with art as a critic of the object, the critic effectively becomes a form of co-author of art history. Likewise, during the 1970s, reader response criticism took up these ideas and applied them to the study of literary texts.

Although Louise Rosenblatt is often credited with establishing the preliminary framework for reader response criticism in her 1938 text *Literature as Exploration* (Suleiman and Crossman 1980, Thompkins 1980, Probst 1981), it was not until the late 1960s and, more expeditiously, during the 1970s that reader response criticism would be considered as a viable mode of inquiry. Work in reader response criticism, especially during the 1970s, argued that the reader’s role in the text is more than that of a passive
reader. Serving as a contrast to the New Criticism of the previous decades, rather than paying attention to the contextual exigencies surrounding the text or to the content and form of the text, reader response theory sought to answer questions regarding the reader's experience while engaging with literature. Rosenblatt's 1969 essay *Towards a Transactional Theory of Reading*, where she famously argued that a poem is not the text on the page nor the metric elements as much as the experiences lived by the reader because of the idea that a poem presupposes active reader engagement, as well as the work of Stanley Fish and Normand Holland are often considered as the foundation of modern reader response theory.

Stanley Fish has argued that any approach to textual analysis that would consider the text as object while describing form but avoiding function fundamentally misunderstands the role of literature. To Fish, literature signifies only when read. This modality of approaching textuality is what frames much of Fish's work. In his work regarding the reader's role in the meaning making process (1970) and later on interpretative communities (1980), Fish explore how a reader's interpretation of the text is variable based on one's subjective and shared community experiences. However, by relying on the concept of linguistic competence as a linguistic system shared by every reader, Fish argues that the way in which a reader approaches the text is not entirely arbitrary, as there exists a form of internalized linguistic understanding in native speakers that creates constraints for one's linguistic experience.

Using a similar approach to Fish, Holland has relied on psychoanalytic theory and theories of identity to argue that while writers may create texts that serve as an expression of their identity, the reader recreates the writer's identity based on their own perceptions of the text as framed by their own experiences (1973). In a later study, Fish demonstrated that the literary experiences of students who are given the option to
engage with a text and offer what he calls free association responses are shaped by the reader identity rather than the textual content (Holland 1975). His argument, thus, is that the reader's interpretation of the text is not arbitrary, but rather it is shaped by the reader's understanding of the world and by the reader's experiences.

Reader response theory acknowledges that the reader is an active agent whose engagement with the text gives agency to the content depicted therein. Because it considers literature as existing only within the reader's consciousness, the focal point of reader response studies can be found in the readers themselves. In other words, according to reader response theory, that each reader holds a unique interpretation of the text. It can be suggested, then, that because each reader has a different experience with the text, literature can be considered as a form of performance in which readers create unique experiences. These ideas have been expanded into other forms of media by scholars such as David Bordwell, who has explored the semiotic process of meaning making when engaging with film (Bordwell 1989), and Ernst Gombrich whose studies into visual art relied on the foundations proposed by Rosenblatt and others.

Certainly, the viewer does have a role in the artistic experience. The same is also true when addressing the reader / text relationship. Just as a viewer of art is expected to engage with the work of art at a level where both the observer and the observed are actively changed by each other's gaze, it can also be said that the experience of a reader with a text is one where the reader is affected by the text as much as the text itself is affected by the reader's interpretations of the ideas presented therein. As readers engage with a text, they are not only absorbing the ideas presented, but reshaping and rearranging them into a form that best serves the reader to make sense of the text. The reader, thus, effectively becomes the author of his or her own version of the text being read or the art being observed. It is obvious that the relationship thus far described
applies not only to the viewer and art or the reader and text, but to any participant engaging with any kind of cultural artifact, regardless of whether they are visual, textual, aural, or ludic. The player's relationship with a video game text, however, is more complex than that of the viewer of any other form of media.

Video games present their readers / players with a multimodal form of textuality. In a video game text, voice recording, musical scores, visuals, and mechanics converge in a single experience. Because it is a form that borrows from media as diverse as film and the novel while introducing elements of play, the role of the reader / player is expanded through the control offered to the reader / player. At any given time during play, the reader is either given complete control over the game experience, partial control over some elements of the game experience, or no control over the events being presented. This leads to the possibility of reader not only configuring the text in whatever form might be found the most suitable in the mind of the reader, but also to the reader having the ability to actively modify elements of the text itself. This is one of the core elements that, to Ebert, make video games unworthy of the moniker "art." However, before asserting such statements, or, indeed, attempting to denounce them and offer alternative ways of approaching the issue, one would have to understand what the role of the player is in relation to the text.

As it was previously mentioned, a player of a video game text is given three distinct degrees of control over the text itself. The first level of control is that where the player is given complete control over one or more elements present in the represented virtual space. What can be controlled depends entirely on the ludic structure of the text, but the question is not how many elements the player can control, but how completely the player can control those elements. In the virtual world of Second Life, for example, the player is given control over all the elements of their avatar. Players control the way in
which the avatar movies, looks, and behaves. Players can, at will, replace entire avatars with other custom-designed elements as well as create new animations for their characters. In addition, players have the option of purchasing virtual land. Should they do so, players are given the ability to modify this land for their personal use as a living space however they desire. In this case, players are given complete control over the avatar and over the virtual space itself. In *The Elder Scrolls V: Skyrim*, the player is only given control over the character of The Dragonborn. The player can modify the character's appearance and control the character's behavior, but is not able to significantly alter the play space. It is worth mentioning, however, that the player does have the ability of controlling the outcome of the narrative in significant and meaningful ways based on the behaviors which they ascribe to their character.

At times, video game texts might opt to take away some degree of control from the player for narrative or aesthetic reasons. This is the second mode of control - limited input. During these moments, many of the mechanics traditionally allowed to the player are taken away, and the player is only allowed a limited range of movement. This is not a mechanic used in all video game texts, nor is it one that is successfully implemented in many of the texts that employ it, but when used successfully it is meant to give the player a sense of helplessness, dread, and anxiety. This is what one experiences in the opening moments of *Skyrim*, as the player finds his character tied down, with only the ability to look around, as they are being taken to their execution. The player is asked to explore the surroundings, but at the same time is being asked to remember that they are effectively helpless.

The third mode of control - or lack thereof - is found in cut scenes; that is, in moments when control is taken away from the player entirely as the text asks the player to pay attention to the events unfolding in the virtual space. This technique is often used
by the creators of a video game text in order to convey to the player that some elements are an integral part of the narrative that will not be changed. Cut scenes represent moments in play when the text itself takes over the experience and asks the player to passively consume the moment as if they were reading a book or looking at a painting. They are often used as a mechanism to convey an element of a narrative that could not have otherwise been presented. Although *Skyrim* never takes away full control from the player, many other video game texts do. *Beyond: Two Souls*, for example, routinely wrestles away control from the player and asks to passively view the narrative as it unfolds according to how the artist created the text.

The three modes of control here described allow the player to experience different parts of the text in different ways, all according to the design of the author. If the player is meant to feel empowered, the text will give the player control. If the player is meant to feel disempowered or frustrated, the text will take away control from the player to varying degrees. These degrees of control, however, mean nothing regarding the role of the player when looked at in isolation of other elements. In order to understand how control affects the role of the player, one must also consider perspective and the number of elements over which a player is given control. When combined with these two elements in different configurations, the player can then be seen as taking on one of five distinct roles: (1) the player as god / creator, (2) the player as director / co-creator, (3) the player as puppeteer / co-author, (4) the player as avatar / actor, and (5) the player as viewer / consumer. These player roles can be made manifest in one or multiple texts, depending on the creative approaches used by the creators. To demonstrate how each of these roles exist within games, various texts will be referenced.

The role in which the player has the most creative freedom is when the player is given the role of god or creator. When players take on this role, they are expected to
create their own play experience and their own narratives. The designer of the text gives the player a toolbox with a few mechanical constraints. The perspective given to the player in many of these situations is one from above the field of play, with the player having the option of inhabiting an avatar to later explore the creation. Within that environment, the player can first take on creative purpose and later explore that which has been created. One such example is the *Disney Infinity 2.0 toy Box* (2014). In this text, the player is given an empty space and several digital objects. With these objects, the player can create a virtual space to navigate or share with others. As the player builds increasingly complex worlds, the player continues to assert his role as creator. The player will populate the world with virtual actors, friendly and hostile alike, and ultimately design an experience uniquely meaningful to the self. As the player creates the play space, the entire play space is revealed and the player has complete creative freedom over what is constructed. The player, thus, becomes a god and creator of the text. The player then has the ability of taking control of one of many Disney-themed avatars, from Mickey Mouse to Captain America, and explore the world created.

A second role which players might find themselves inhabiting is that of the director, or the co-creator of a narrative. In this role, the player assumes the position of a commander or instruction-giver to several pre-existing actors who inhabit the digital space. The player has the ability of directing the virtual actors to perform actions, and - at times - create new game actors. However, this creation of new actors is done through already established systems and not through the player’s will. The player will not be able to, for example, place a soldier out of thin air in a certain place in the virtual world. However, the player is able to hire a soldier and direct it to the desired place in the map, or direct a non-soldier actor into a training came. One text which exemplifies this mode of control is *Starcraft II* (2010). In *Starcraft II*, the player is given the role of a commander.
The player does not create actors out of nothing, nor does the player create the play space, but the player can direct troops to attack incoming enemies, mine for resources, create new infrastructures, and train new troops. The game and the game's narrative unfold as the player directs the actors to certain actions. However, as the player directs his actors, the opposing team, whether it is controlled by the game itself or by another player, performs similar acts of direction. Because the player is allowed to alter the structure of play to a certain degree based on the directions that are given to the actors, the player takes the role of a co-creator. The virtual space and base actors have already been placed in the virtual world, but the player can direct the actors to create new elements.

The role of the player as puppeteer and co-author is one of the most common in video game texts, and it differs from the role of the player as avatar and actor by virtue of perspective. When the player takes the role of puppeteer, the text allows the player to take control over one visible avatar. The player is able to control the actions and behaviors of this avatar, but, although the avatar can be seen to be an extension of the player, the avatar itself is not the player. The purpose of the text is not to immerse the player into the story, as much as it is to allow the player to co-author the journey of a character. Although this mode of control can be seen in Disney Infinity when the player inhabits the chosen character avatar, a better example can be seen in Gears of War (2006). In Gears of War, the player takes control of Marcus Phoenix, a former soldier from the COG Infantry and a prisoner of war who is freed from Jacinto Penitentiary by Dominique Santiago in order to protect the world from an invading alien force called The Locust. The player is able to control Marcus' actions and behaviors through game mechanics. However, this control always takes place within a constrained space. Furthermore, the player is constantly reminded that Gears of War is not the player's story.
by always prominently featuring Marcus in the screen. The player instinctively knows that it is not them who rescue the other COG soldiers or delivers the scanning mechanism to the depths of the Loctus base. Players know that they are controlling Marcus, but it is Marcus, the character, who performs these actions. Marcus serves as a representation of the player in the game world, a conduit for the players actions, and a catalyst for events resulting from player actions, but Marcus is not the player. Because the player controls Marcus' actions in a highly scripted world, it can be said that the player is co-authoring one of several possible narratives. The same, however, cannot be said of games which feature a first person perspective.

The fourth player role that exists within video game texts is that of the player as actor. When the player takes the role of an actor, the game expects the player to actively participate and become immersed in the play and narrative experience. The player does not control a character; rather, the player is the character. This is conveyed through the use of the first person visual perspective. Placing the player in the first person perspective of the avatar suggests to the player that they are not simply controlling the character, but that they are the character. One of the more compelling examples of this player role can be seen in the text *Bioshock* (2007). In Bioshock, the players find themselves having just survived an airplane crash in the middle of the ocean. Players will find their way to a suspicious structure that will lead them to an elevator. The elevator will then take players to the underwater city of Rapture, an underwater city built on 1946 by visionary Andrew Ryan to escape from the pressures of society and to create a purely capitalist society free from religious and government interference. As the player travels down the elevator, it is to the player, and not to the character, to whom Ryan says:

I am Andrew Ryan, and I am here to ask you a question. Is a man not entitled to the sweat of his brow? No, says the man in Washington, it belongs to the poor. No, says the man in the Vatican, it belongs to God. No, says the man in Moscow, it belongs to everyone. I reject those
answers. Instead, I chose something different. I chose the impossible. I
chose Rapture. A city where the artist would not fear the censor. 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 be your city as well (BioShock, 2006)

As the player progresses through the game, it is the player, not the character, who
discovers that as the wealth gap in the city grew, the poor grew to resent the wealthy.
Because there is no avatar and the perspective presented is that of the first person, it can
be suggested that it is the player, not a character, who navigates the spaces of Rapture.
It is the player who kills the hostile citizens of Rapture, injects skill-enhancing drugs, and
decides whether to kill the Little Sisters non-playable characters, whose blood can be
harvested for additional power. It is the player who fights to the center of Rapture, learns
that society is in a downward spiral because of a drug smuggler who calls himself Atlas,
and it is the player who ultimately comes face to face with Andrew Ryan. Because it is
the player who performs, or, at times, chooses not to perform these actions, it can be
said that first person perspectives turn the player into the avatar itself, and thus pull the
player into the narrative as an actor.

The last role that a player can have within a video game text is that of the
passive viewer or reader. This most often takes place during cut scenes. Cut scenes are
moments in which the text takes all forms of control from the player and places them in
the role of the passive viewer. It is worth mentioning that even though many video game
texts use narrative cut scenes as a form of player reward to develop play motivation
during non narrative segments of the game, there are several texts that purposefully
avoid implementing this mode of play. It is most often the case that while video game
texts that place the player in the role of actor, puppeteer, or director may or may not
invoke the cut scene, very few games that place the player in the role of a god use this
mode of storytelling, as it tends to break immersion by taking away control. The purpose
of taking away control from the player is not only for the text to demonstrate that, ultimately, the player is at the mercy of the text, but also to show that while the player may have some control over the events unfolding when they assume the role of actor, director, or co-creator, there is an ultimate grand design to which the player must submit. These moments can be seen by the player as both rewarding and frustrating, depending on the implementation. One of the more rewarding cases where the player takes the role of viewer can be found in *Final Fantasy VII*. In this text, after the player assumes the role of puppeteer and guides the protagonist to the final battle, the player comes face to face with Sephiroth, the One Winged Angel. After a climactic battle that may require the player's sustained attention for over 40 minutes, the player can take the passive role of the viewer as the text tells the player how the events unraveled and the heroes went on to live their lives. A more interesting instance of the player as viewer, however, can be found in *Bioshock*, which purposefully uses it to instill unto the player a sense of helplessness and frustration. In *Bioshock*, once the player descends into Rapture, the player is given full control over the chosen actions. Although they are placed in the role of an actor, players can opt to act in whatever way they see fit. This is especially true when encountering the Little Sister-type enemy. These enemies are always accompanied by a Big Brother-type enemy. These are giant beasts with drills that deal severe damage to the player. These enemies, however, are not naturally hostile. It is up to the player to risk fighting with the Big Brother and possibly die in order to reap the reward of increased power after destroying the Little Sister, or to leave the two characters alone and move on without any substantial increase in power. As the player progresses through Rapture, they will make many similar choices as they learn the history of Rapture and join with the drug smuggler Atlas in order to take down Andrew Ryan. However, when the player reaches Andrew Ryan, the game purposefully wrestles control away from the player by
introducing a cut scene. In this moment, the player is helpless - they can do nothing but sit and look at the game as Andrew Ryan delivers a speech regarding the nature of man, and then forces the player, all sense of control and agency over the self robbed by the text, to murder Ryan in the final scene where Ryan speaks:

The assassin has overcome my final defense, and now he's come to murder me. In the end, what separates a man from a slave? Money? Power? No. A man chooses, a slave obeys. 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 activated by a simple phrase spoken by their kindly master? Was a man sent to kill, or a slave? A man chooses, a slave obeys. Come in. [Player is forced to approach] Stop, would you kindly? [Player follows commands] Would you kindly? Powerful phrase. Familiar phrase? Sit, would you kindly? [Player sits] Stand, would you kindly? [Player stands] Run. [Player runs] Stop. [Player stops] Turn. [Player turns to face Ryan] A man chooses, a slave obeys. [Ryan gives the golf club to the player] Kill! [Player strikes Ryan] A man chooses! [Player strikes again] A slave obeys! [Player strikes again] OBEY!! [Player lodges the gold club in Ryan's skull; Ryan falls over dead] (Bioshock 2007).

As the events described above unfold, the player is left without any sense of agency. All the power that the player's role as actor had handed to the player is suddenly taken away, and the player is left as a helpless viewer. In this moment players realize that all the choices made during play were not theirs to make. In this moment they discover that in the context of the game narrative, the phrase "would you kindly" is a form of catalyst for mind control which commands the player's character to perform an action. The player's quest through Rapture and all the player's struggle to reach Ryan were not born from a desire of the self, but instead placed there by the "kindly master." This realization can only happen because at the very end, the text takes control from the player as an actor and places him in the role of a viewer. Because the events are still taking place in the first person, however, players are seeing themselves perform actions that, perhaps, they might have wished to not perform.
One must note that while many video game texts only place the player in a single role, there are a number of titles in which the player assumes multiple roles. In *Final Fantasy VII*, for example, the player largely plays the role of puppeteer as they control Cloud through the land of Midgar. However, during battles, players take on a limited role of director as they command multiple actors simultaneously. Likewise, in texts such as *Disney Infinity*, the player can choose to take the role of god as they create their own world, or take on the role of puppeteer as they control one of many avatars through a world of someone else's creation. Finally, games like *Skyrim* allow the player the option of engaging with the text through a first person perspective, which places the player in the role of the actor, or through a third person perspective, which places the player in the role of the puppeteer. Now that the roles of the player in a game have been discussed in the context of reader vs text and viewer vs art, one can finally turn to answer the question of whether video games can be art.

### 2.5 Video Games are Art

Having defined what it means to be a video game and discussed the various roles of the player, one can now turn to addressing the comments made by proponents of the position that video games are not, and can never be, art. As previously mentioned, Ebert's major problem with understanding games as art is that the medium allows players to actively make choices. When commenting on how video games are "inherently inferior to film and literature," he argues that his assessment is based on the structure of games. He states that "video games by their nature require player choices, which is the opposite of the strategy of serious film and literature, which requires authorial control" (Ebert 2005). While Ebert concedes that "video games can be elegant, subtle, sophisticated, challenging, and visually wonderful" and that games can "aspire to artistic importance as a visual experience," he firmly states that "the nature of the medium prevents it from
moving beyond craftsmanship to the stature of art” because they “represent a loss of those precious hours we have to make ourselves more cultured, civilized, and empathic” (Ebert 2005).

If one is to take Ebert’s complaints seriously, it can be said that the reasons as to why he sees games as inferior to other forms of art is because of a perceived lack of authorial control and because of the assumption that games do not make players more cultured, civilized, or empathic. This position, however, demonstrates a fundamental ignorance of video games as a medium as, despite the critic’s statements, video games do, in fact, have authorial intent and make people more cultured, civilized, and empathic.

In order to show how video games do have authorial intent, one need not go any further in the history of video games than 1980 with Missile Command. Missile Command, a game designed by David Theurer, is a video game in which the player takes control of three poorly stocked missile bases tasked with the defense of six cities from an incoming onslaught of Inter Continental Ballistic Missiles. When a player completes a stage they advance to the next one, which includes faster and more numerous incoming ICBMs. The player repeats the defense process endlessly until they inevitably lose. At the end of the game, rather than the game showing the traditional “game over” screen, the game flashes the words “The End” across a giant explosion. Certainly, Ebert might argue that this is just a game with no point other than that of entertainment and that it lacks authorial intent. However, the authorial intent of the game is clear for one who understands the medium. Through its mechanics, the game attempts to convey a message that there are no winners in war, that it simply ends. When asked about his approach to design and the purpose of the game, Theurer said that “Missile Command embodied the Cold War nightmare the world lived in” (Rubens 2013). Theurer further stated that:
Realizing that the bombs would kill all of the people in the targeted city, I did not want to put the player in the position of being a genocidal maniac. However, defending against such an attack would be a noble effort. Still, I had nightmares about nuclear attacks. During that time, I lived near Moffett Field, where the Air Force would randomly launch spy planes, which made a tremendous roar when taking off. I'd wake up, and while half asleep, hear the launch sounds and for a moment wonder if it was an atomic blast. I would dream that I was hiking in the mountains above the Bay Area, with the fabulous view of the San Francisco Bay. In the dream, I'd see the missile streaks coming in and know that the blast would hit me while hiking there on the mountains (Reuben 2013).

To Theurer, the six cities in *Missile Command* were six coastal cities in California. Based on the context in which *Missile Command* was produced, the way in which the play experience is structured, and Theurer's comments, it is unquestionable that, whatever lessons the player may take away from the game, there is an invisible hand which ultimately controls everything that happens in play. It is the author's intent that players feel frustrated as the incoming streaks increase in number and speed, just as it is the author's intent for the player to walk away with a new perspective on war.

Just as *Missile Command* can be shown to have authorial intent, so it is true of many other titles. Just as the * Bioshock* titles (2007 - 2013) are designed with the intent of providing criticism of objectivist ideals (Gibson 2011, McClancy 2012, Lizardi 2014), *Spec Ops: The Line* (2012) is designed with the dual intent of criticizing the First Person Shooter as a genre as well as to explore notions of post-traumatic stress disorder in military veterans to show the player that what lies beyond the power fantasy is a descent into madness (Keough 2013). The question remains, however, whether video games can lead to a more cultured, civilized, or empathic state of being.

According to Steven Johnson's *How Everything Bad is Good for You*, video games, as well as all forms of traditionally maligned media, can make an individual more cultured. His argument is that not only is the player / viewer / reader becoming more cultured by virtue of actively engaging with a cultural artifact, but that the stories and
experiences communicated through games, films, television shows, and comic books can serve as character-building tools in the development of older kids and teenagers. As an example, he shares a story about how he once introduced his nephew, at the time 7 years old, to *Sim City*. Johnson recounts how the child's first comments were "Ooh, look at the big building!," but that after watching several minutes of play and noticing that Johnson's factory district was failing, the child suggested that the industrial tax rate should be lower (Johnson 2006). Likewise, in *What Videogames Have to Teach Us About Learning and Literacy* (2003), James Paul Gee calls video games a "life enhancing experience" as they provided "a new form of thinking and learning" (3).

Ebert's original comments were not universally accepted, and when he faced criticism for his comments, he expanded on his ideas by suggesting that "art is created by an artist; if you change it, you become the artist" (Ebert 2007). This is a curious notion. Ebert's example to support this assertion relies on his use of Shakespeare's *Romeo and Juliet*. He asserts that Shakespeare's play is unequivocally art. However, if a producer were to change the ending to one where Romeo and Juliet live happily ever after, the producer of the new version would be the artist. He then raises the question of which of the two versions of the play would be considered "more artistic" (Ebert 2007). The reason why this reasoning is curious, is that one could easily take a video game text as the equivalent of Shakespeare's play - not in quality, but in the role of the text. Shakespeare's play, as would be the video game text, would serve as the urtext, with both the contemporary versions of Shakespeare's plays and the resulting play experience from engaging with a video game being the rewritten contemporary equivalent. If one is to accept Ebert's rationale, not only does the player become an artist, but whatever experience is created through the player/artist's engagement with the virtual world would also be considered as art. When faced with similar criticism (Hocking 2007), Ebert
explained how he sees art as the creation of one artist, and how even though a cathedral is built by many and yet is art, one could consider the cathedral as "countless works of art unified by a common purpose," that a tribal dance is the work of a community that "reflects the work of an individual choreographer," and that the key difference between art and games is that "one can win at games" (Ebert 2010). Ebert finally states that while someone might cite an immersive game without points or rules, he would argue that it then stops being a game and "becomes a representation of a story, a novel, a play, a dance, or a film" (Ebert 2010). Ebert's comments, and those of likeminded critics (Jones 2012) show, again, a fundamental degree of ignorance when it comes to the composition and function of the medium.

In his comments, Ebert notes that, in his opinion, art is something that is crafted by a single author, and that even in situations where a case can be made that a single work of art was created by various artists, Ebert notes that the final work represents the vision of a single artist. The same is true of video games - some are created by single individuals, while others are created by teams working together under the direction of a single producer. *Cave Story*, for example, is a 2004 exploration game developed by Daisuke Amaya that focuses on exploration, while *Braid* (2008) is a video game created by Jonathan Blow that attempts to explore ideas regarding shifting perspectives across the passage of time. Likewise, Mike Bithel's *Thomas Was Alone* (2012) uses play and visuals as metaphors for emotions in order to convey a sense of loneliness, while *Minecraft* (2009), created by Markus Persson, attempts to engage the player through a sense of adventure. A single artist designed the visuals, wrote the music, built the architecture of the game world, produced the mechanics, and implemented the design in order to create their unique video game texts. Likewise, during the creation of a video game that, due to their size and scope, require multiple artists, such as Hideo Kojima's
Metal Gear Solid: Rising (2013), Momoru Toriyama's Final Fantasy: Lightning Returns (2013), and Cid Meyer's Civilization V (2010), all the artists who have a role in the creation of the text work under the direction of a single producer whose vision is ultimately made manifest in the video game text.

Ebert's only remaining complaint would be that one can "win" at video games. However, as he correctly notes, there are many video games which cannot be won, they can only be experienced. However, because video games are assumed to be a group of individual texts, rather than the imaginary abstract concept full of gaminess that Juul (2001) and, apparently, Ebert make it out to be, it would behoove one to look at actual examples of video game texts in order to determine whether Ebert's assertions are correct.

Video games, as defined earlier in this chapter, were considered to be digital texts in which there is (1) a visual representation of a virtual space, (2) virtual actors, (3) player interaction, (4) a requirement of nontrivial effort from the player, (5) mechanics, (6) variable options for interaction, (7) progression, and (8) the creation of a player narrative. This definition does not include a win state because this definition is attempting to describe video games, not games in general, and certainly not sports. It is obvious to any observer that sports and many competitive games do have win states. However, not all games have win states. As previously stated, Missile Command (1980) cannot be won. Many early video games shared this trait. Defenders (1981), Space Invaders (1978), and Donkey Kong (1981) are all video game texts with no win state - they continue until the player inevitably loses. Likewise, there has recently been a trend to create games with no explicit win state, like Minecraft (2009), or where the experience and the narrative told through the world exploration is the only existing game mechanic, as is shown in Every Day the Same Dream (Molleindustria 2009) and Gone Home (The Fullbright Company
Certainly, Ebert would suggest that these titles are not "real" games and that they are closer to interactive experiences or experiential novels, but there is another, more interesting, perspective that one must consider.

Because of his experience, Ebert sees art as inherently static - an object that can never change where the author's will is absolute. Other scholars like Mark Stephen Meadows and Arthur Asa Berger, however, begin their arguments from the assumption that (a) the interactive can be art and (b) video games share similarities with more traditional forms of art. Regarding forms of narrative that are interactive in nature, Stephen-Meadows writes that "interactive narrative is the most ambitious art form existing today because it contains traditional narrative with visual arts and interactivity" (2). He further notes that interactive narratives - a term which he clumsily defines as "a narrative form that allows someone other than the author to affect, choose, or change the plot" (2) and of which video games are the highest form currently possible (67) - is a form of art that "constantly borrows from multiple disciplines" (67). To Stephen-Meadows, the potential for interactivity and the convergence of multiple forms of art in a single medium make video games more artistic than any of the individual disciplines can be by themselves.

In his assessment of video games as art, Arthur Asa Berger shares common ground with Stephen Meadows. Like Meadows, Asa Berger focuses on how video games are a convergence of multiple forms of art, and on how they share similar traits with said artistic works. In his book, he suggests that "video games are probably best understood to be similar to the novel in that there are many different genres of video games; both novels and video games are, then, from my perspective, art form" (5). It can be said, then, that for Asa Berger, the more elements that a given form of expression shares with already established forms of art, the more merit that new form of expression has as a
form of art on its own right. This is a position not unique to Asa Berger. In his 2007 book *Reset: Changing the Way we Look at Video Games*, Rusel DeMaria explains that “video games are in some ways like movies, in that they combine a variety of technical and artistic talents, and while moviemakers can tug at your emotions and thrill you with camera techniques and car chases, videogames do even more - they motivate. They motivate the player to take action. They motivate players to think, plan, and do” (3). Like Stephen-Meadows, DeMaria sees video games as a convergence of multiple art forms where interaction is used to further prompt the viewer / reader / player to engage with the text. Jenkins takes this a step further in his book *Convergence Culture*, where he suggests not only that video games are art, but that video games can influence older, more traditional forms of art. He writes that “games increasingly influence contemporary cinema, helping to define the frantic pace and model the multi-directional plot of *Run Lola Run*, providing the role-playing metaphor for *Being John Malkovich*, and encouraging a fascination with the slippery line between reality and digital illusion in *The Matrix*” (44). To Jenkins, these films, and others that draw from the narrative structure of video games discussed in the following chapter, exist only because of the influence that video games as an artistic medium has had on the older artistic media of film.

It has so far been demonstrated that the criticism leveraged against video games by the likes of Ebert and Jones do not, ultimately, serve to exclude video games from joining the ranks of painting, architecture, and film as art. It was further demonstrated that many scholars see video games as belonging in the realm of art because of how diverse forms of art converge in a single form of media. In order to finally cement the idea of video games as art, however, it becomes worthwhile to consider extant definitions of art.

According to Plato’s definition of art as presented in his *Republic*, art should always strive to imitate nature - that is, art should be mimetic. Plato notes that artworks
are dependent on reality, but at the same time are inferior, as they can only ever simulate reality, but not achieve it. One would have to consider, then, do video games attempt for mimetic fidelity of the ontological world? Certainly, if one looks at the many power fantasies currently available, one would be hard-pressed to contemplate the idea. *God of War*, for example, features a Spartan soldier who is able to take down the entire Greek Pantheon of the gods, while *Bayonetta* conveys to readers the tale of a witch who clothes herself with her own hair and intends to destroy angels and demons alike with her automatic machine gun high heel shoes. However, at the same time, there are games which simulate reality mechanically and through visual representation, with a few titles attempting to simulate the real world.

One game which successfully represents the real world through mechanics is *Sim City* (2013). In *Sim City*, the player takes control of the mayor small town. It is the player's role to create a bustling city. To do this, the player must enact sensible tax and labor policies, negotiate with investors and businessmen, and deal with wealthy and powerful corporations. The player's choices during play affect the growth rate of the various sectors, and it is through the player's actions, laws, and policies that the citizens of *Sim City* decide whether to stay or leave, to open businesses or find jobs in already established industries, or even to adopt fuel or electric cars. Ultimately, the player's actions dictate whether the city will become a bustling, successful city, or a giant wasteland. Although the game is certainly simplified in its approach to politics and policy, it can be said to be mimetic in that it shows how the enacting of policies at the highest governmental offices might have an effect on the lives of the individual worker. In that sense, *Sim City* can be said to be mechanically mimetic.

A game that can be said attempts to imitate reality in its representation of humanity is *The Last of Us* (2013). Although its setting of a zombie-infested United States
can hardly be said to be mimetic, its representation of humans and the relationships depicted therein can be said to approach reality. In *The Last of Us*, players take control of Joel, a middle-aged man who lost his daughter early during the outbreak of the mutated cordycep fungus. The cordycep is a real fungus which infects insects, takes control of their nervous system, leads the insects to the highest possible location, and bursts through the insect to infest the colony. In the world of *The Last of Us*, the fungus has mutated to affect humans. As the player navigates through the vast virtual space to escort Ellie, the only human immune to the fungus, to a research lab across the country, Joel and Ellie bond in a father-daughter relationship. As Joel and Ellie travel, they run into different groups of people. Joel first meets Ellie when his girlfriend, Tess, asks him to take Ellie to the lab of the group The Fireflies. Both of them are willing to engage in acts of murder and theft in order to survive. As the narrative progresses, the player finds Joel and Ellie travelling through various places, each presenting the player with different situations. Joel first finds himself attempting to traverse a city which has been littered with traps in order to find an old acquaintance. The game then takes Joel and Ellie on a trip through the suburbs, where they meet a similar group of travelers. Eventually, Joel and Ellie make their way to a dam where Tommy, Joel’s brother, has married and is establishing a colony. The game then forces the player into Ellie's perspective as she finds herself alone and trapped by a group of robbers. In every situation, their relationship and their contact with other characters constantly asks the player what it means to be "the last of us." The game constantly reframes the question - from the opening moments when it asks the player what it means to be the last of humanity, to later what it means to be the last of a community or the last of family. In this game, not only can the depictions of the characters be said to be mimetic, but the relationship between the characters as well.
Another powerful definition of art can be found in Kant's *Critique of Judgment*, where he defines art as "a kind of representation that is purposive in itself and, thought without an end, nevertheless promotes the cultivation of mental powers for sociable communication" (44). If the purpose of art is to promote mental powers for sociable communication, then it could be suggested that *World of Warcraft* is art. *World of Warcraft* is an online virtual world in which thousands of players gather to engage in mutual quests. As Janet Murray notes in *Hamlet on the Holodeck*, players can be considered as actors putting on a mask and taking the role of their character. The way in which the game is structured, players are forced to communicate with each other to accomplish goals. These sociable communication skills developed through collaborative problem solving can then be used in sociable conversation taking place in ontological reality (Chen 2009).

Other definitions of art, according to Shiner (2001), Levinson (1990), Beardsley (1982), and others as cited in Edward Zalta's *The Stanford Encyclopedia of Philosophy*, suggest that any work of art must include eight key elements. These elements are:
1. Entities endowed by the artist with a significant degree of aesthetic interest.
2. These entities might be produced by non human species and might exist in other possible worlds.
3. These entities may sometimes have non-aesthetic - that is, propagandist, ceremonial, or religious - functions.
4. The works of art must be marked with a significant degree of aesthetic interest, often surpassing that of everyday objects.
5. Art must have a complicated history, new genres and art forms develop and standards of taste evolve.
6. There are institutions which involve a focus on artifacts and performances related to the aesthetics of the artistic artifact.
7. These institutions at times classify entities that might seem as lacking aesthetic interest with entities that have a high degree of aesthetic interest.
8. Many entities are at times described as having aesthetic properties.

Again, video games seem to meet the criteria of what it means to be art. Video games, and the elements therein, do possess aesthetic interest, could be produced by non-humans, and, as will be discussed in a later chapter, at times have non-aesthetic functions. Not only do video games have a complex history as a medium, but they also have a complex history as part of interactive art. Likewise, there are several institutions that already consider video games as an aesthetic artifact. This would imply that video games can be art. However, while one might be inclined to accept this conclusion, the truth is that not all games can be considered as art. Despite the sublime experiences afforded to the player by texts such as Journey (2012), Flower (2009), or Shadow of the Colossus (2005), there are games such as FIFA 2014, Madden XX, and NBA Street, which, as Ebert correctly notes, do not offer any form of original artistic expression.
2.6 Conclusions

In this chapter, the role of video games as aesthetic and artistic artifacts was explored. First, it attempted to define video games as a type of text with specific qualities, rather than as some sort of abstract digital representation of general games. It then explored the types of games based on demonstrated intent of play and types of players based on frequency of play, and proceeded to discuss the role of the player in relation to the role of the viewer and reader. Finally, the role of video games as art was discussed. It has here been demonstrated that video games can aspire to be art. Although not all video games can be said to be art, the same is true of all media. Not all books can aspire to be literature and not all drawings or paintings can aspire to the role of art. Likewise, many video games fall remarkably short of any definition of art. However, this does not mean that, as Ebert suggests, video games will never be art. Indeed, many titles already achieve such lofty goals as that of the most sublime art. As noted scholar James Paul Gee notes, in the future, it is very likely that video games will be taught in the classroom next to the great works of literature; and while Ebert might be correct in his assessment that no one can mention a video game that compares with the works of Shakespeare or Wordsworth, there are plenty of video games that surpass the quality of the greatest film has to offer, both visually and experientially, with *Unfinished Swan* (2013) and *Child of Eden* (2014) being two such titles. This, of course, does not mean that video games are not mass produced means of entertainment. Like film, video games inhabit a space where they are simultaneously art and means of general entertainment - video games are popular art; or, one should say, they have the potential to be popular art. This is, as Asa Berger, Bogost, Murray, Gee, and others note, what makes them a worthwhile object of study. With this in mind, this study will now turn its attention to the often misrepresented and misunderstood narrative elements present in video games.
CHAPTER 3
HYPERERGODICITY, MECHANICS, AND TEMPORAL LINEARITY

3.1 Introduction

It could be argued that the field of narratology - that is, the systematic inquiry into the structure of narrative and narrative texts and how they affect and are interpreted by the perception of the reader - has a long and rich history stretching back to Aristotle's Poetics, where the concept of dramatic structure was introduced. Certainly, although the term "narratology" was coined by Tzvetan Todorov in his 1969 text Grammaire du Decamerone the practice of modern narratology finds its origins with the works of Russian formalist Vladimir Propp and his analysis of fairytale in Morphology of the Folktale (1928) and, perhaps to a lesser extent, in Percy Lubbock's The Craft of Fiction, where Lubbock focuses not only on understanding the "formal techniques that hold together a novel into a coherent whole" (12), but also on making the argument that the novel is a worthwhile object of study - an idea that was widely rejected due to the widely held notions of poetry and drama being a superior form of art to that of the novel.

Unquestionably, narratology shares some parallels with structuralism in the sense that, to some extent, both approaches to textual analysis attempt to devise formalized systems useful for the analysis of any narrative content - that is, they both seek to uncover a grammar of the text. However, as David Herman, Marie-Laure Ryan, and others note, narratology has evolved since its inception (Herman, Jahan, & Ryan 2005).

As Jonathan Culler notes in The Pursuit of Signs: Semiotics, Literature, and Deconstruction (2001), there was an early differentiation in narrative studies between story as "a sequence of actions or events conceived as independent of their manifestation in discourse" and an discourse as "the discursive presentations of narrative events" (574). This has led to what two distinctly different approaches to the study of
narrative texts, with one tradition focusing on thematic analyses of texts and a second tradition focusing on modal approaches to narratology (Ronen 1990). Scholars such as Meir Sternberg (1993), however, argue that for true narratological analysis to be complete, thematic and modal approaches should be used separately.

Since first proposed, narratological approaches have found practical applications in different fields outside of textual criticism. As Norrick (2000) notes, sociolinguistic analyses of oral storytelling and linguistic studies of spontaneous verbal interactions rely on narratological frameworks. When it comes to the study and analysis of digital and interactive texts, however, there is a surprising lack of comprehensive narrative frameworks or studies. Although scholars such as Janet Murray (1998), Henry Jenkins (2008), and Marie-Laure Ryan (2001) do attempt to shed some much needed insight into understanding the narrative qualities of texts such as hypertext fiction, visual novels, and video games, much of the work done on these texts thus far has been both limited in scope and narrow of perspective. This chapter will present and argue for a comprehensive narratological framework.

The following section of this chapter will focus on Espen Aarseth’s work on ergodicity and linearity and will use several of Aarseth’s concepts to expand on Asa Berger’s taxonomy of textual linearity. This will be followed by a discussion on how Jenkins’ ideas of transmedia narrative can affect the degree of ergodicity with which a text is perceived. The discussion will then turn to the question of linearity, and explain how ergodicity and linearity are fundamentally different elements. The study will show examples of how texts with varying degrees of ergodicity can be seen as linear or nonlinear depending not on how ergodic a text is, but on how the reader interprets the narrative presented in the text. In this section, a distinction between story and narrative as applicable to video game, hypertext fiction, and visual novel texts will be proposed.
The study will then turn its gaze to how Bakhtin's idea of the chronotope as a unit of configured time and space existing in a narrative and Gary Saul Morson's ideas regarding sideshadowing can help illuminate understanding of the narrative structure of ergodic multilinear texts. This will be followed by much needed explications of how some interactive digital texts, specially video game texts, can use design mechanics and visual cues as a means of crafting a narrative, and of how these texts not only present the reader with a narrative, but also force the reader to participate in additional narrative layers made manifest through the play experience. The chapter will conclude by discussing the implications that the theory of narrative here presented might have on the study of interactive and digital texts and on the field of narrative as a whole.

3.2 A Taxonomy of Ergodicity

On 1997, Espen Aarseth published a book titled *Cybertext: Perspectives on Ergodic Literature*, in which he establishes a framework for the analysis of ergodic texts. Arguing against the term "interactivity" due to its broad use and multiple definitions, Aarseth instead introduces the term "ergodic" to refer to a type of literature in which "nontrivial effort is required to allow the reader to traverse the text" (1). What Aarseth suggests is that because the term "interactive" has lost any meaning, scholars should instead develop a new vocabulary exclusive to the study of texts in which the reader is expected to have some form of participatory input or a co-creative role. It stands to reason, then, that if there exist ergodic texts, then the opposite must be true. Aarseth notes that "if ergodic literature is to make sense as a concept, there must also be nonergodic literature, where the effort to traverse the text is trivial, with no extranoematic responsibilities placed on the reader except (for example) eye movement and the periodic or arbitrary turning of pages" (1). Aarseth thus establishes a schema in which novels, anthologies of poetry, musical arrangements, and film are considered as
nonergodic, while choose your own adventure books, hypertext fiction, visual novels, and video games are categorized as ergodic. This second category of text, Aarseth considers as "cybertext."

Although the term cybertext might invoke notions of digital-only or born-digital texts, this is not necessarily an idea that Aarseth would agree with. Although he concedes that the term cybertext is derived from Norbert Wiener's 1948 work on cybernetics titled *Control and Communication in the Animal and the Machine*, Aarseth is quick to point out that Wiener's work encompasses not only the digital and mechanical world, but also focuses on organic systems. The core of Wiener's perspective as presented in his work, Aarseth points out, is one that "includes both organic and inorganic systems; that is, any system that contains an information feedback loop" (1). Cybertext, Aarseth explains, constantly reminds the reader of "paths not taken and voices not heard" (3). The reader is constantly reminded that the current narrative which they are experiencing is not the only narrative, that there exists a multiplicity of narratives, and that if the reader is to experience all of them, they must engage with the text more than once. Because of these observations, Aarseth contends that the concept of cybertext is not limited only to the study of computer driven or electronic textuality, which he notes "would be an arbitrary and unhistorical limitation, perhaps comparable to a study of literature that would only acknowledge texts in paper-printed form," but instead focuses on "the mechanical organization of the text, by positing the intricacies of the medium as an integral part of the literary exchange" (1).

Although Aarseth is correct in suggesting that the creation of an arbitrary exclusion of a given type of text from a broad category because of the medium through which the text was published, any comparative study into the textuality of printed ergodic texts versus born-digital ergodic texts will demonstrate key differences not only in how
the texts are approached and how the reader engages with the text, but also in the
degree of freedom warranted to the reader in the co-creative process. The key difference
to note is that in print texts, regardless of the level of ergodicity, there exists a narrative,
or a series of narratives, that have been laid out for the reader. Print texts often follow a
traditional narrative structure in which the reader engages with a linear story arranged in
the dramatic structure first laid out as a unified plot structure by Aristotle in his Poetics
and later expanded on by Gustav Freytag in his 1863 work Die Technik des Dramas.
Even the most ergodic of texts is systematically arranged in what Marie Lynn-Ryan calls
a narrative tree structure. This kind of narrative offers the reader a starting point, and as
the reader systematically progresses through the text, they are prompted to make
choices which will lead the reader through one of many predetermined narrative
branches and unto one of many conclusions. Ultimately, the reader’s experience
assumes the form of reading through a narrative that adheres to Freytag’s interpretation
of the dramatic structure. Because all the possible narratives have already been laid out,
the reader of a printed ergodic text will ultimately fail to be a true co-creator of the
narrative. Instead, the reader becomes a spectator and a passenger or, at best, a puzzle
solver and traveler. Digital texts, however, give the reader far more options than to
traverse through an already existing narrative. Because digital texts are published in
platforms that allow a higher level of textual malleability than a printed page does, digital
texts are able to take on narrative structures that are impossible to represent in a printed
page. Furthermore, because digital texts are both produced and consumed using similar
mechanisms, the reader of a hypertext fiction, a visual novel, or a video game has the
ability not only to experience the text as the creator intended it to be experienced, but
also to modify, recreate, and remix the text at their leisure.
There is little question regarding a digital text's ability to represent linear narratives that are able to adhere to the dramatic structure (Murray 1998). Robert Cassar's analysis of the narrative structure of games, in which Cassar applies Joseph Campbell's schema of the monomyth as interpreted by Christopher Volger to *God of War*, demonstrates that video games can, in fact, represent traditional dramatic structures. Furthermore, the tree structure, as Lynn-Ryan points out, is easier to represent in a virtual space than it is to create on the printed page. Indeed, titles such as *Mass Effect* (2007) and *Beyond: Two Souls* (2013) feature several instances in which the player is prompted to make certain choices that affect the outcome of the narrative in sometimes unforeseen ways. In addition to these two structures, Lynn-Ryan notes that digital texts can adhere to a model which she calls the directed network structure (2001). This narrative structure is similar to the tree structure in the way that they both have certain points in which, depending on reader input, the narrative can manifest different outcomes. The directed network structure, however, has intersecting nodes in which all divergent branches of a tree eventually converge, before ultimately diverging again into multiple potential narratives. Certainly, it might be possible to assimilate the directed network structure into a printed text. However, due to spatial constraints, it seems highly unlikely for such an approach to be successful if deployed in a print medium.

In addition to serving as a seemingly ideal platform for the deployment of directed network structures, digital texts serve as what is possibly the only viable platform for the implementation of the open world narrative structure. As Lynn-Ryan (2001), Murray (1998), and others note, the open world model of storytelling offers the reader the opportunity to become immersed in a world in which several narratives take place simultaneously. The narratives that populate the virtual world can manifest as traditional dramatic structures, tree structures, or direct network structures, and they all expand the
global narrative. One such example of this approach to narrative can be seen in *Fallout III* (2008), in which the reader takes the role of a character who just escaped from an underground vault and ventured into a post-nuclear war Washington D.C. In this open world, the reader is able to follow any or all of the many narrative paths made available to them by the designers and actively make choices that affect not only the outcome of the narrative, but the composition of the game space.

When engaging with digital texts, readers have a heightened ability not only of reading through the presented narrative, but also of modifying the text at a fundamental level. Because digital texts are both created and read in computer systems and through software, readers with enough knowledge of the composition of digital texts are able to read the source code of the text and add, remove, or modify sections at their discretion. With sufficient knowledge of hypertext markup language, a reader of the digital hypertext fiction *Afternoon: A Story* by Michael Joyce, for example, would be able to download the entire narrative into a local host, insert one or more hyperlinks, modify the text, delete one or more sections while inserting new portions of narrative, and create an entirely new narrative. Likewise, a reader of the open world narrative *Fallout III* would be able to, with sufficient knowledge of the text's source code, include images of children's cartoons into the world or create entirely new narratives revolving around the collection of monsters.

Certainly, it is entirely possible for a reader of traditional media to modify the meaning of the text as well as the reader experience when engaging with the content presented therein. This is especially true when one considers the reader through the lens of reader response theory. Furthermore, when a reader engages with a print or celluloid text, there are no restrictions preventing the reader from physically altering the text in order to modify the outcome of a narrative. However, books and film as forms of textuality were not designed with such considerations to be accounted for. Many digital texts, however,
are distributed in conjunction with tools that allow the reader to easily modify the text, with many publishers such as Blizzard actively encouraging the reader to make such modifications. It is this last element - the easy access to the ability to modify the composition of the text itself and later distribute it to a community of expectant readers - which truly differentiate between digital and non-digital texts. It is important, then, to make such a distinction evident in the language used to study such texts.

This is not the first time in which such an argument has been made. On 2002, the prolific electronic communications theorist Arthur Asa Berger advocated for a similar model. In his book *Video Games: A Popular Culture Phenomenon*, Asa Berger notes that "we can deal with stories and narratives along two axes: (1) the media in which they are found and (2) their degree of non-linearity" (30). In his book, Asa Berger points out several differences between what he calls electronic narratives and print narratives. Asa Berger explains that while electronic narratives tend to take the form of immersive non-linear and multi directional narratives in which the reader is part of a narrative where a space is explored, print narratives tend to take the form of imaginary linear and multi linear narratives in which the reader listens to a story that the author is narrating and in which the reader is guided through imaginary space (32). He further attempts to visualize the distinctions made in an organizational chart where type of media and degree of linearity are represented along two distinct axes:
Asa Berger’s Classification of Media by Linearity

<table>
<thead>
<tr>
<th>+ Strong</th>
<th>Weak -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic</td>
<td>Video Games</td>
</tr>
<tr>
<td>Audio/Visual</td>
<td>Music Videos</td>
</tr>
<tr>
<td>Film</td>
<td>MTV</td>
</tr>
<tr>
<td>Television</td>
<td>Avant-garde Films or Videos</td>
</tr>
<tr>
<td>Radio</td>
<td></td>
</tr>
<tr>
<td>Children’s Books</td>
<td>Post-modern novels</td>
</tr>
<tr>
<td>Comic Strips</td>
<td>Plays</td>
</tr>
<tr>
<td>Stories in Magazines</td>
<td>Etc.</td>
</tr>
</tbody>
</table>

Figure 3: Asa Berger’s Intersection of Linearity and Medium

Asa Berger’s analysis of media, although accurate, is too limited in scope. Just as Aarseth’s inclusion of all ergodic texts as cybertext, an inclusion based on the assumption that despite the fact that there are essential qualities to print and digital texts, "the difference is not clear cut, and there is significant overlap between the two" (5), fails to consider the nuances of digital and print texts, so does Asa Berger’s taxonomy fail to account for textual variety. Furthermore, the language which he uses to refer to the texts in question can be misleading.

In his schema, Asa Berger makes the argument that texts should be classified by linearity. The concept of linearity, however, as Aarseth points out, is one best suited to address the way in which the reader approaches a text and not the text itself. As Aarseth remarks, he has been challenged in that hypertexts, adventure games, and other ergodic texts:

Are not essentially different from other literary texts, because (1) all literature is to some extent indeterminate, nonlinear, and different for every reading, (2) the reader has to make choices in order to make sense of the text, and finally (3) a text cannot really be nonlinear
because the reader can read it only one sequence at a time anyway (Aarseth 1997, 2).

These concerns are certainly valid. However, as Aarseth later notes, when the terms linear and nonlinear are used, they can be seen as a source of contention. As Aarseth notes, the notion of linearity is interpreted by some as "a literary concept used to describe narratives that lacked or subverted a straightforward storyline," while other critics assumed that the word could not describe any text, because "the act of reading must take place sequentially" (Aarseth 1997, 2). The issue here is the association of the term "linear" with the practice of reading, not with the text itself. Therefore, it becomes prudent to modify Asa Berger's taxonomy by using Aarseth's concept of ergodicity when referring to a text, and using the terms "linear" and "nonlinear" to refer to how a reader can approach a text.

The use of the term "electronic text" further complicates Asa Berger's taxonomy in a manner similar to that which the use of the term linearity might confuse some readers. The term electronic text, or e-text, has become synonymous with electronic versions of printed texts (Yankelovitch, Meyrowitz, and Van Dam 1985, Gardiner and Musto 2010). To engage in continued use of the term electronic text, then, would mean to exclude all born-digital texts. Rather than using the term "electronic," Asa Berger's schema will further be modified to refer to any text that can be read in an electronic device as a digital text. This term will include texts as varied as e-books, online hypertext fiction, and adventure games.

While the linguistic limitations of the terminologies chosen by Asa Berger for use in his schema is problematic, what is perhaps the most disputable component in his taxonomy can be seen in his categorization of audiovisual texts exclusively as electronic. This means that the core problem with Asa Berger's taxonomy is the assumption that digital texts can be aural and visual, while print texts are lacking this element. This is
evident not only when one reads Asa Berger’s descriptions, but also when one looks at his, ironically, printed visual representation of his classification. Not only would careful consideration of the examples Asa Berger proposes to test his taxonomy show that print texts can have visual components, but when one considers the type of texts excluded by Asa Berger it will become obvious that digital texts do not necessarily have to be aural or visual. When one considers the configuration of comic books, for example, it becomes obvious that visual elements play a large role in the composition of the text. Furthermore, if one is to take onomatopoeic representations of sounds as a “sound mimesis of the world” or as an “aural reference (or sound mime) of the phenomenon of the world,” as Mladen Ovadija explains in *Dramaturgy of Sound in the Avant-garde and Postdramatic Theatre* (2013, 83), then it follows that the aural is also prone to take a role in certain print texts. Likewise, if one is to consider an electronic versions of purely text-based novels originally published in print, such as the electronic book versions of J.K. Rowling’s *Harry Potter* series, it becomes evident that just because a text is published in a digital format does not mean that it must adhere to aural or visual conventions.

Figure 4: Batman Punching Criminals: The Visual as Linguistic Communication
If one is to consider texts, both digital and print alike, as being in a spectrum where on one corner there exists a purely linguistic textuality and on the other end reside entirely visual texts, then the implications for Asa Berger’s taxonomy are considerable. Rather than creating a chart in which narrative texts can be categorized as one of four types of texts within a spectrum of two axes, the result would be a table in which texts fall under one of four major categories: digital-textual, digital-audiovisual, print-textual, and print-audiovisual. Digital-textual texts include electronic texts, or e-books, such as the electronic version of Shakespeare’s compiled works, and hypertext fiction such as Michael Joyce’s *Afternoon: A Story*. Digital-audiovisual texts include texts presented in a digital form and which rely on audio or visual elements to convey the narrative. This includes visual novels such as *Analogue: A Hate Story* (2012), and video game texts such as *Watch_Dogs* (2014). For a text to be considered as print-textual, it must be published in a print form and rely on linguistic forms as the primary means of conveyance. Books such as J.R.R. Tolkien’s *Lord of the Rings* (1954) and Ian Bogost’s *Persuasive Games* (2006) fall under this category. Finally, print-audiovisual texts rely to some extent on visual or aural imagery in their deployment of narrative. Graphic novels and comic books fall under this category.

Unquestionably, aural texts problematize this kind of classification. However, the question of classification for musical texts is easily resolved when one considers the form in which it is manifested. A musical score is composed of notations on a page. It would, therefore, be considered as a printed text. A recording of the score, however, would be considered as digital. This distinction is of special importance when considering texts which are themselves composed of several types of textualities. Video game texts such as *Watch_Dogs*, for example, are composed of linguistic elements manifested in the form of on-demand information, visual elements manifested in the representation of the virtual
world, and aural elements manifested through the musical scores which play as the reader engages in various narrative-related tasks.

Before finally proposing an appropriate replacement for Asa Berger’s schema, one must consider the degree of ergodicity of a text. Aarseth provides an appropriate definition for ergodic and non-ergodic texts. However, it is worth noting that if an ergodic text is one that requires nontrivial effort from the reader in order to traverse through the narrative, there are certainly texts that require more effort from a reader than others. The branching narrative presented in *Analogue: A Hate Story*, for example, is malleable by the reader through the input of simple mouse and keyboard commands. The user can navigate through a communications interface and read expository text which reveals information on the characters and the narrative being presented. Furthermore, moments in which the reader is expected to make a choice which will affect the outcome of the narrative are usually limited to making a choice from a list of possible options. Certainly, these choices are made based on the information that the player has uncovered through the reading of the narrative, but ultimately the action of making the choice becomes a task of selecting from one of many multiple choices. By contrast, *The Elder Scrolls: Skyrim* requires more from the reader than making a selection from a multiple choice menu. In *Skyrim*, the reader is tasked with controlling a character in a narrative. Readers are expected to master complex crafting systems, point allocation mechanics, and advanced skill mastery structures. Readers are furthermore expected to actively discover not only the “Dragonborn” narrative presented to them as part of the core of the experience, but are also invited to unearth the lore of the world of Tamriel through the location and reading of hundreds of in-game fictional history texts and lineage records. The systems therein presented expect the reader to become actively involved in the personal narratives of several non-playable characters and encourage the reader to
actively solve problems and make choices that might change the ultimate outcome of the narrative. Finally, the system expects a certain level of manual dexterity from the reader, as they are often tasked with missions that incorporate quick series of inputs in order to climb hills, open treasure chests, cast magical spells, or wield weapons. The actions expected from the reader in *Skyrim*, then, can be said to be far more complex than those required of the reader by *Analogue: A Hate Story*. *Skyrim* can, therefore, be considered as a hyperergodic text, which makes it out to be a text which is "more ergodic" than *Analogue: A Hate Story*.

Because the schema here presented will deal with broad categories of textualities, rather than with individual texts, the general trends in the design of the type of text will be considered in order to locate the types of texts in the ergodicity scale. In other words, because the majority of visual novels often expect no more than the attention of the reader in order to ask them to make choices regarding the outcome of the narrative, visual novels will be considered as less ergodic than video game narratives, which often expect complex input combinations from the reader. The expanded taxonomy of media versus ergodicity, thus, takes the following form:
In the above presented schema, nonergodic texts are those that are composed in a way in which the narrative content is presented sequentially. Films, e-books, graphic novels, and plays are presented in a sequential structure and actively discourage, and in some cases outright disallow, non-sequential access to the content. These texts are designed to be consumed as a passive spectator. These texts, thus, are considered as nonergodic. Texts with weak ergodicity are those which allow the reader to experience the text non-sequentially, but in which the choice of the reader to engage with the text in a random order do not affect the experience provided. Online publication platforms such as Youtube and Wordpress, for example, allow users to engage with their chosen content in an order defined by the reader. This, however, does not change the content itself. Self-contained comic book serials and anthology collections fall under this category. Texts with strong ergodicity are those in which the reader is expected to engage in some form
of meaningful decision-making that can actively affect the outcome of the narrative. The
application of Aarseth's definition of an ergodic text applies to the texts that fall on this
category. These texts include visual novels, hypertext fiction, and choose your own
adventure books. In all of these types of texts, readers are encouraged to engage with
the story, at times solve puzzles, and make choices for the character. These choices then
affect the outcome of the narrative. If texts with strong ergodicity expect some kind of
input from the reader and react to said input, hyperergodic texts then can be said to be
those which either expect significant effort from the reader in order to traverse the
narrative or those texts whose composition and core elements can be actively modified
by the reader. Many video game texts, which are composed through the convergence of
multiple narrative and mechanic systems, fall under this category. Likewise, dice-based
game systems that allow the readers the versatility to create their own narratives and
card-based play that features narrative components can be said to be hyperergodic.

While the taxonomy here presented offers a broader and more comprehensive
gaze into the textuality and composition of narratives classified by levels of ergodicity as
presented in print and digital forms, it bears noting that because of recent developments
in narrative strategies, the ergodicity of a text, specially newer texts, can be said to be
fluid. An individual film, for example, can be considered as nonergodic when taken as an
individual text, but it can be said that the text gains a weak level of ergodicity when
placed in the context of other intersecting narratives. To understand how this fluidity of
ergodicity is manifested, one needs to turn to Henry Jenkins' ideas regarding transmedia
storytelling.

Transmedia storytelling is a modern narrative technique which Jenkins defines as
"a process where integral elements of a fiction get dispersed systematically across
multiple delivery channels for the purpose of creating a unified and coordinated
entertainment experience" (Jenkins 2007). The implication is the existence of referential markers within any individual text which point to an outside text which, when taken as part of an overall narrative, will create a comprehensive narrative. This does not necessarily entail a narrative sequence that leads from one text to the next, nor does it mean that in order to understand one text the reader would need an in-depth knowledge of the previous narratives. As Jenkins points out, "ideally, each individual episode must be accessible on its own terms even as it makes a unique contribution to the narrative system as a whole" (Jenkins 2007). This means that for a narrative to be considered as transmedia narrative, each text must be linked to each other in order to create a comprehensive narrative while simultaneously offering the reader a self-contained narrative.

In his 2008 book *Convergence Cultures: Where Old and New Media Collide*, Jenkins points to *The Matrix* films and the referential content that creates the overall narrative of the Matrix Universe as a prominent example of transmedia narrative in function. Because *The Matrix* integrates "multiple texts to create a narrative so large that it cannot be contained within a single medium" (Jenkins 2008, 95), it can be said that the *Matrix* films introduce the world, narrative, and key aspects of the universe, the graphic novels and animations expand on the lore, and the video games allow for exploration of the narratives and the fictional world. Jenkins writes that "to truly appreciate what we are watching, we have to do our homework. [In the movies], the film maker plants clues that won't make sense until we play the computer game" (94). One such example, Jenkins notes, can be seen in *The Matrix Reloaded* (2003) when, towards the concluding segments of the film, the ship captains Morpheus and Nairobi separate in order to accomplish different tasks. The narrative presented in the film follows the exploits of Morpheus and his crew and seemingly disregards whatever events might have taken
place in Nairobi's ship. Nairobi's exploits, however, are chronicled in *Enter the Matrix*, a 2003 video game narrative. Another example can be seen within the same film, when the main character, Neo, runs into a new character called Kid. This new character thanks Neo for rescuing him from the matrix. A viewer of the film will assume that this is an event which took place outside of the depicted narrative of the Matrix Universe. The events depicting Kid's rescue, however, can be found in *The Animatrix*, a 2003 compilation of animated short films depicting the lore of the Matrix Universe and events tangential to the narrative presented in the film. The implications of transmedia narratives on textual classification in relation to ergodicity as it has been defined means that a text like *The Matrix* can be considered as nonergodic when analyzed as a singular text, but that it can also be considered as presenting signs of weak ergodicity when considered as part of a canon composed of several texts. This acquired weak ergodicity becomes manifested when the reader comes to the realization that the text in question can be considered as one narrative taking place in a broader spatial context.

As it has been demonstrated, the distinctions made by Aarseth between ergodic and non-ergodic texts are indeed important. However, to assume that print and digital texts can be subject to the same framework is a flawed idea. Indeed, there are many similarities between some print ergodic texts and some digital ergodic texts, just as there are similarities between print and digital non-ergodic texts. However, the differences afforded to each type should not be ignored. Extant distinctions aid in the process of text qualification in regards to narrative ergodicity - a term often referred to as linearity. Because there exist some misconceptions on the interpretation of the term "linear" in regards to how it is applied to the text versus how it is used to describe an approach to reading a text, the terms "linear" and "nonlinear" are considered as descriptors of approaches to reading, while ergodicity is used as a marker for the composition of a text.
It has also been shown that Asa Berger's taxonomy, while accurate, is neither thorough nor comprehensive enough to fully allow for contemporary textual diversity. In expanding Asa Berger's taxonomy and affording for differentiation of print and digital audiovisual texts, the expanded taxonomy affords a more open understanding of ergodicity per media. Furthermore, it was noted that Jenkins’ proposed framework of transmediated narratives actively affects how texts are qualified by degrees of ergodicity.

Much has been written about the majority of the textual types presented in the expanded taxonomy here presented. Academics such as Northrop Frye and Harold Bloom have built their careers on the scholarly analysis of nonergodic print texts. Likewise, critics like Roger Ebert, Robert Christgau, and Richard Zoglin have built their reputation by engaging in criticism of film, music, and drama respectively. Likewise, there is an broad category of academic inquiry - visual rhetoric - dedicated to the study of visual culture; a field whose modern form can be said to originate with the essay *The Rhetoric of The Image* (Barthes 1964). Furthermore, the number of texts dealing with print nonergodic texts in the Norton's *Anthologies* and Blackwell's *Companion* series alone number in the thousands. Consideration will show that texts near the hyperergodic end of the spectrum receive less critical attention than less ergodic texts. The ideas further discussed in the reminder of this chapter will, then focus on hyperergodic texts and the nature of hyperergodicity, with special attention being given to digital texts.

3.3 Linearity, The Story, and Narrative

In the previous section it was briefly mentioned how a text's level of ergodicity does not necessarily imply a correlating degree of linearity. While relying on Aarseth’s definitions of ergodicity and on Asa Berger's taxonomy, a detailed schema explicating how texts both digital and print can be placed along an axis depending on how much effort the reader expects from a reader in regards to the traversal of the text. The term
ergodicity was favored over linearity because, as Aarseth points out, there is some level of confusion regarding the term "linearity" and whether it means that a text is linear or that a text's narrative is experienced in a linear arrangement. It was discussed that texts such as choose-your-own-adventure books, tabletop narrative game systems, visual novels, hypertext fiction, and video games are usually more ergodic, while novels, web pages, and compilations of texts are less ergodic. This does not mean, however, that narrative linearity or nonlinearity does not have a place in the analysis of textuality. As it will be shown in this section, texts of all degrees of ergodicity can create narratives imbued with variable levels of linearity.

In *Narrative & New Media*, Paul Hazel suggests that the notion of narrative linearity - that is, when a narrative is arranged in a manner in which one event sequentially leads to the following event - has existed since Aristotle first proposed the dramatic arc and how it became widely adopted during the nineteenth century with Freytag's model when "mandatory education [...] created a need for literary standards that could readily be adopted by the curriculum of the day" (43). Nonlinearity, then, can be characterized by its ability of presenting a narrative in which events are portrayed by the author in a manner where the events depicted do not follow a direct pattern of causality. However, in the advent of ergodic and, specially, digital texts, the idea of narrative linearity has become misconstrued in that it is now, as has been suggested by theorists such as Asa Berger (2002), Chris Crawford (2004), Jesper Juul (2005), and Gonzalo Frasca (2007), used as a term referential to reader choice rather than narrative or temporal linearity. Through this perspective, video game narratives presented in an open world setting would be considered as nonlinear, while those presented in games with superposed interactivity (Szilas 1999) are thought of as linear. The problem with this perspective is that it is making a false equivalency between open world design and
narrative nonlinearity just as it tries to associate enclosed sequential virtual spaces and narrative linearity. However, this approach to the analysis of the linearity of narrative structure in games is counterproductive, as it relies on assumptions about the narrative that are made based not on actual analysis of narrative components, but on the design of the game. In order to discuss the problem with this design-based approach to linearity, one should consider the narrative of an open world video game text versus that of a title presenting the reader with a restricted world. One of the most recent examples of open world design is *The Elder Scrolls: Skyrim* (2011). As parallel example, this section will use David Cage's *Beyond: Two Souls* (2013).

The narrative presented in *The Elder Scrolls V: Skyrim* takes place in the snowy mountains of northernmost province of Tamriel, where the native Nords are amassing under the banner of Jarl Ulfric Stormcloak in order to gain independence from General Tullius and his Imperial forces. The narrative begins with the reader/player's character being taken to their execution. After a dragon attacks the town of Helgen, where the execution is to take place, the main character is prompted to go to the town of Riverwood and, eventually, to Whiterun in order to start on a path down a road that will lead to the discovery of superhuman powers that will aid in the purging of dragons from the land of Skyrim and to the end of the Imperial invasion. Because the text is a hyperergodic video game which features an open world design, however, the reader/player has the choice of following through the narrative arc or of engaging in one or more of the over 500 quests available in the game. Should the reader/player decide to not follow the pre-established narrative, they will be able to join the Bards' College, The Blades, The Dark Brotherhood, The Imperial Legion, The Thieves Guild, or any of the other ten joinable factions existing in the land of *Skyrim*. Despite the hyperergodicity of the text, which expects the player to master exploration, conversation, sneaking, thieving, crafting, and
other skills, and the freedom granted to the reader / player by the open world, the narrative is still experienced in a linear manner. Whether the player decides to first joins the Skyrim rebels, then masters the powers of The Dragonborn, and finally rids the land of dragons or instead chooses to first join The College of Winterhold, then destroy the Thieves Guild, and finally jump off the highest mountain, the narrative is experienced by the player in a sequential temporality. *Beyond: Two Souls*, on the other hand, is different from *The Elder Scrolls: Skyrim* in nearly every way.

*Beyond: Two Souls* opens with the main character, Jodie, played by Ellen Page, floating in a vortex and stating that she "was born with a strange gift - the ability to see what no human has seen before," and that she "needs to remember, put things in order right up to this moment," and remember who she is. "If I had to say how it all began," Jodie remarks, "I might as well start here." The narrative then takes the reader / player to a scene taking place in the sheriff's station in a small town where a Jodie in her mid 20s is being questioned by a police officer who found her lost in the woods. After some exposition where her guardian, played by William Dafoe, is leading some SWAT officers to the station in question, the game takes the player back into Jodie's childhood days, and demonstrates how she was used as a subject in government experiments. Afterwards, the game takes the player forward in time to a point where Jodie, now a spy for the CIA, must recover some intelligence from the home of a Saudi Arabian prince during a diplomatic gathering. The narrative continues moving back and forth throughout Jodie's timeline, until ultimately coming full circle and leading back to the starting point of the game. In *Beyond: Two Souls*, the player is unable to make major choices impacting the outcome of the narrative. Although the game is hyperergodic in that it expects the player to master mechanics of interaction with the world, conversation with other characters, exploration of immediate spaces, introspection, and control over a spectral
entity before the narrative is allowed to continue, it does not allow for the exploration of
an open world.

The two games here discussed show the problem with using the concept of
linearity as one that is linked to the design of the game text. Under this approach, the
narrative in an open world video game text like *The Elder Scrolls V: Skyrim*, would be
considered as “nonlinear” despite the fact that all the events in the narrative are
presented in sequential order. By the same standard, narratives such as that presented
in *Beyond: Two Souls*, which constantly move back and forth along the main
protagonist's timeline, would be considered as linear because they do not take place in
an open world. The implication for print and film texts would be that only Choose Your
Own Adventure Books would be considered as nonlinear regardless of narrative structure
because of the possibility of multiple narratives existing within the same text, and that film
must always be linear as they do not give the reader the option of affecting the outcome
of the narrative. This, however, is an idea that is demonstrably incorrect. Films such as
- that is, they begin in medias res and move back and forth along the narrative timeline.
Certainly, these texts are nonergodic, as they don't require any effort from the reader,
and the action takes place along a predetermined, constrained space. However, the
narrative itself is not linear. Likewise, the narratives presented in texts such as James
Joyce's *Ulysses* (1922) and Emily Bronte's *Wuthering Heights* (1847) can be said to be
nonlinear (Gillespie 1999) despite the texts being nonergodic. The same principle, then,
should hold true for video game narratives.

A broad consensus in video game scholarship and criticism is that linearity is a
question of design and that narrative linearity is tied to the degree of openness presented
in the virtual space. However, if one is to properly engage with these texts, questions of
narrative and design should be addressed through unique terminology in order to avoid confusion. The proposal, then, is to use the terms of linearity and nonlinearity when applied to video game texts, as well as other digital texts, in the same manner in which they are applied to print and film texts. To understand whether a narrative can be considered linear or nonlinear, the important element is not how the game world is composed, but how the reader experiences the narrative order. If a narrative presented in a video game texts moves back and forth along a temporal axis, then it will be considered as having a nonlinear narrative. If the narrative presented, however, represents a strict temporal progression from one event to the next, it will be considered as linear. The questions of whether the world design is open or not, or of whether there can be multiple strategies to the approach of play, become irrelevant. This perspective will interpret whatever configured narratives emerge from a reader engaging with the open world presented in *The Elder Scrolls: Skyrim* as linear because they take place in a sequential temporality. By the same virtue, the narrative presented in *Beyond: Two Souls* will be considered as nonlinear, as the way it is experienced by the reader is through a disjointed temporal sequence.

It is worth noting that a disconnect between narrative linearity and world design does not mean that the design of a game holds no influence over the narrative. It would be more than prudent to establish a language and a schema for when a video game text offers the reader multiple outcomes within a single text. This is the problem of player traversal through the narrative space. Texts like *Beyond: Two Souls* heavily constraint the potential routes in which the player can engage with the narrative. *The Elder Scrolls: Skyrim*, on the other hand, allows the player to explore the world and its narrative on their own accord. In order to develop a terminology to address this issue and begin building a
model that can describe the role of spatial navigation in video game narratives, one must turn, again, to Espen Aarseth.

In *Cybertext*, Aarseth engages in the exploration of the architecture of the maze vs that of the labyrinth as a spatial construct. Although in modern thought, Aarseth suggests, both the labyrinth and the maze are considered as having multiple branching paths, originally their structures were radically different. In their original architecture, labyrinths were designed as spaces with a single, non-divergent path leading into the center of the structure. Labyrinths were designed to have only one entry point and one exit, and although some featured lengthy roads, they were not difficult to navigate. This is what Aarseth calls a unicursal structure. Mazes, on the other hand, were designed with difficulty of traversal in mind. They were at times meant to have several entry and exit points, and they forced the traveler to actively choose which route to take and to be wary of dead ends. This is what Aarseth calls "multicursal" (Aarseth 1997, 7). As Aarseth notes when arguing against the use of the term multilinear, "if we refer to the courses, *multicursal* would be a much more accurate term than *multilinear*, indicating that the lines are produced by movement rather than drawn in advance" (8). He further notes that "a piece of writing on paper or a computer screen should not be confused with the act of reading it" (8). Because the term linearity is being used to represent how a narrative is perceived by the reader, the term cursality becomes a better choice to remark on issues of spatial representation.

The fact that linearity and cursality are two different elements does not mean that they are not intertwined. Much as a text can be categorized by media type and level of ergodicity, so too can a text be considered along the converging axes of narrative linearity and spatial cursality. This results in texts existing as the result of one of four possible configurations: (1) nonlinear unicursal texts, (2) linear unicursal texts, (3)
nonlinear multicursal texts, and (4) linear multicursal texts. Again, linearity refers to how the presented narrative is experienced by the reader in terms of temporality, while cursality refers to how many possible narratives can be configured within a given text.

Unlike with ergodicity and media, however, the question of narrative linearity and spatial cursality is one that, in most cases, can be ascribed to entire genres. Certainly, some broad generalizations can be made. Choose your own adventure books, for example, are by the inherent nature of their design multicursal, while the 19th century novel can consistently be said to be unicursal. Likewise, hypertext fiction can consistently be said to be multicursal. All of these forms, however, can take the form of linear narratives or nonlinear narratives - classifications which can be discerned on a text-by-text basis rather than on a genre or media type basis. Considering the previously discussed texts *The Elder Scrolls V: Skyrim* can be said to be a linear multicursal text, as the reader has the freedom to create their own narrative, but that narrative is presented and perceived in a linear structure. *Beyond: Two Souls*, then, qualifies as a nonlinear unicursal text, as the player is expected to explore a limited space in a predetermined order, but the narrative is presented in a temporally disjointed order. The chart below demonstrates the interaction between linearity and cursality, and places various video game texts along the different axes. The functionality of this schema, however, is not exclusive to video game texts. It can also be used to understand the relationship between temporal and spatial considerations for print texts as well.
With this classification of texts depending on cursality and ergodicity, there are a total of four major categories to consider when attempting description, categorization, and analysis of a narrative presented in a text. The first category is degree of ergodicity. This asks questions regarding the effort expected from the reader in order to traverse the text. Texts can be considered as nonergodic, having weak ergodicity, having strong ergodicity, or being hyperergodic. The second category is the type of text. This category asks questions regarding the media. Media can be categorized as digital audiovisual, digital textual, print audiovisual, or print textual. The third category, linearity, asks questions regarding the temporal configuration and presentation of the narrative. A narrative can, then, be either linear - that is, presented in a chronologically coherent order - or nonlinear - presented in a temporally disjointed order. The fourth and final category, cursality, addresses whether the narrative can be experienced in different ways on each reading.

When taken together, the elements here discussed create a total of 64 possible configurations. A text which is classified using this taxonomy will yield a specific profile and demonstrate its membership within a class of other similarly designed texts. 

Figure 6: Examples of Text: Temporal Linearity versus Cursality
Elder Scrolls V: Skyrim, for example, is a hyperergodic, digital audiovisual, multicursal video game with a linear narrative. Beyond: Two Souls, on the other hand, is a hyperergodic digital audiovisual unicursal video game with a nonlinear narrative. They are similar in form and media, but not on design or narrative configuration. Understanding this schema will allow the critic of video game texts to later make assessments regarding the purpose of the narrative and how it works within the context of mechanics and visual design, and will help critics of traditional literary forms understand how traditional narrative practices are influenced by contemporary techniques.

3.4 Conclusion

In this chapter, a new mode of categorization in order to understand texts has been proposed. Drawing from and expanding on the work of Aarseth and Asa Berger, it was suggested that any type of text published in any form of media can be grouped within given groups, or families, based on their position within the two scales of ergodicity and type of media. Expanding Aarseth's work, who suggests that media exists in a binary of ergodic and nonergodic, it was suggested that media instead exists within a spectrum in which texts that require no effort from the reader in order for the text to be navigated can be considered as nonergodic and texts that require the highest level of effort from the reader can be considered as hyperergodic. It was further suggested that texts can not only be understood as electronic or print, as Asa Berger suggests, but that they can exist as digital or print texts while being audiovisual or linguistic in design. Finally, rather than subscribing to the more ambiguous use of the term linearity employed by scholars of video game studies, in which the concept is used to denote the multiple possibilities of play as manifested in the virtual space, linearity was defined to mean temporal linearity in the narrative as experienced by the player. This gives the study a clear term that can later be used to address purely temporal considerations in a text's narrative without
invoking the notion of play or spatial design. In the following chapter, the elements here
discussed will be framed within the context of theories of narrativity, specifically those
proposed by Morson and Bakhtin, in order to fully develop a framework for understanding
the composition and, later, rhetoric of video game narrative.
CHAPTER 4
THE CHRONOTOPE AT PLAY

4.1 Introduction

In the previous chapter, the relationship between types of textuality, textual ergodicity, and temporal linearity was discussed. By expanding on and converging Aarseth's and Asa Berger's work, a schema for understanding types of textuality as existing within a spectrum of ergodicity was proposed. It was also suggested that even when discussing video game texts, the term linearity should be used to denote temporal configurations in texts, rather than its more common usage in the discourse surrounding ludic texts in which linearity is equated to the game's design. In this chapter, the study will further consider the composition and configurations of video game narratives as they are represented in a number of texts. It will also suggest that theories of narrative can be used in order to understand said configurations.

The chapter will first address Gary Morson's ideas regarding sideshadowing and suggest that it can be used to understand the multiple possibilities of play afforded by the medium. Furthermore, Bakhtin's chronotope will be expanded in order to account for both narrative and play elements. It will further be argued that when a game creates a system file in which the reader's progress is recorded, said file can be understood as a chronotope, which helps one understand the function of multiple readings in a given text. Following this, attention will be given to the multiple structures of game narratives. It will be argued that video game texts present opportunities for three layers of narrative to exist simultaneously. These layers are best understood through the relationships between the player and the character. It will then be considered how the idea of the time loop may affect one's understanding of a text's narrative. Finally, the spatial and ludic elements of a text will be discussed within a narrative context.
4.2 The Chronotope and Sideshadowing

In the previous section, the issue of temporal representations in the narrative of video games, or linearity, was discussed alongside issues of spatial design and cursality through a virtual space and the narrative presented therein. However, before being able to fully understand the spatial and temporal elements of the narratives present in video game texts, one must turn to Bakhtin's concept of the chronotope and Gary Saul Morson's notion of sideshadowing, and how they can be used to understand how time and space are configured within the narrative space.

4.2.1 The Chronotope at Play

A chronotope - a term which Michael Holquist considers an "anaphoric designation in that it takes its meaning from reference to another term, time-space" (19) - is a literary and philosophical concept used to describe how temporal and spatial elements are configured in discourse and modes of communication. A term appropriated from scientific discourse by Mikhail Bakhtin, the main function of the chronotope is not only to help the reader understand the representations of time and space in literature, but also to help readers gain valuable insight into how spatial and temporal elements are realized. The proposition of the chronotope transpired as Bakhtin, as he explains in *Dialogic Imagination*, was "trying to grope [his] way toward the basic structural characteristic of this most fluid of genres," the novel, and discovered several "characteristics that might determine the direction of its peculiar capacity for change and of its influence and effects on the rest of literature" (11). There, he defines the term as a core unit meant for use in the inquiry of textual structures according to the spatial and temporal configurations being represented. The core difference between the chronotope and other units meant for the analysis of how space and time are configured in literature is that the chronotope "is thus characterized by a technical, abstract connection between
space and time, by the reversibility of moments in a temporal sequence, and by their interchangeability in space” (Bakhtin 100).

The concept of the chronotope, while useful, is ambiguously defined. Scholars Nele Bemong and Pieter Borghart have indeed noted that “a definitive definition of the concept is never offered” (5). They note that where Bakhtin “comes closest to formulating some sort of definition” is in his essay *Forms of Time and of the Chronotope in the Novel: Notes towards a Historical Poetics*, where he writes:

In the literary artistic chronotope, spatial and temporal indicators are fused into one carefully thought-out, concrete whole. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and responsive to the movements of time, plot, and history. The intersection of axes and fusion of indicators characterizes the artistic chronotope (84).

Although Bemong and Borghart do quote Bakhtin’s proposed definition, they also note that after Bakhtin “starts off with the formulation of some initial remarks,” he then “proceeds to alternate between concrete examples and further generalizations” (5). This, according to Bemong and Borghart, results in that “the concept seems to acquire ever new related meanings” (5). Because, as Bemong and Borghard argue, Bakhtin's definition only underlines the “basic assumption that narrative texts are not only composed of a sequence of diegetic events and speech acts, but also - and perhaps even primarily - of the construction of a particular fictional world or chronotope” (6), and because of the lack of an explicit definition of the term, the reader is welcome to create their own meaning as to what a chronotope is, as long as at its core lies the unity of time and space into a single unit of measurement. Bart Keunen agrees. He writes that “in Bakhtin scholarship, there is general agreement about the polysemic nature of the concept of the chronotope, and about its ability to establish its presence on the different levels of a literary text (35).
In order to deploy the use of the term chronotope in any analysis, then, it may be prudent to further explicate the context in which it will be used. For the focus of analysis in this text, hyperergodic digital audiovisual texts, the chronotope will take Bakhtin’s original proposed form as a marker of a temporal and spatial situation in the text. It will be deployed, as Tara Collington suggests, to understand the visual concretization of space unfolding over time (181). Furthermore, it will be used as a means to “consider overlapping or competing temporospatial frameworks within a single text” (Collington, 181). The chronotope will then be used to understand, as Gary Saul Morson suggests in his essay The Chronotope of Humanness: Bakhtin and Dostoevsky, how when a character “chooses wrongly, they may experience regret,” which “presupposes that something else might have been done” (181).

If a chronotope refers to the coordinates of time and space as depicted in any given narrative by considering narrative space and narrative time as part of a single construct, then the chronotope takes on a life of its own when used to describe virtual worlds. When applied to video game texts, any moment in the narrative or in play can be measured as chronotopic. When it comes to these texts, however, a distinction must be made between the different types of chronotopes.

To understand the need for distinct chronotopes, one must turn to Jesper Juul and his comments regarding video games and narrative. In a paper presented at the Digital Arts and Culture Conference in Bergen, Norway, on 1998, and later in the article Games Telling Stories?: A Brief Note on Games and Narrative, Juul explores the relationship between games and narrative. In his 2001 article, Juul asserts that video games cannot be stories and bases his stance on three axioms. These axioms are that “(1) games are not part of the narrative media ecology formed by movies, novels, and theatre, (2) time in a game works differently than in narratives, and (3) the relation
between the reader/viewer and the story world is different than the relation between the player and the game world” (Juul 2001). Assuming that Juul is referring to a "reader" as someone engaging with a nonergodic text and a "player" as someone engaging with an ergodic text, it is certainly true that the relationship between a "reader" and the story world and a "player" and the game world is different. What is the most problematic with Juul's assertions is that gamers are not part of a narrative media ecology, as this is a notion that is proven false by Jenkins in *Convergence Culture* (2006), and which has already been discussed in this chapter. Furthermore, his assumptions on different narrative times as represented in video game texts versus print texts assume that all print texts follow certain temporal patterns while all video games follow distinctly different temporal structures. Just as there are novels with diverse temporal structures such as like Alex Haley's *Roots* (1976), which spans generations, and Samuel Richardson's *Clarissa* (1748), which focuses on a short time period, so too there are video games with different temporal structures. *The Elder Scrolls V: Skyrim*, for example, may take a reader/player a hundred hours to complete, but will only cover the adult period of the protagonist. *Beyond: Two Souls*, on the other hand, spans over 20 years in the life of Jodie Holms but will take the reader/player no more than ten hours to complete. That being said, Juul's acknowledgement of complex temporal structures in video games versus temporal functions in narrative demonstrate the need for distinct functions for different types of chronotopes.

Perhaps more interesting in Juul's scholarship is his assertion that even in video game texts which include narrative, the narrative is never a part of play. Juul argues that play and narrative are two distinct entities that co-exist but never meaningfully interact with each other. Although his work fails to acknowledge the numerous cases in which the game is the narrative and in which narrative and play exist simultaneously, as well as the
element of player / reader-based narrative - all concepts which will be discussed later in this chapter - Juul does make the astute observation that in cases just as numerous the narrative presented in a video game text and the play elements do not take place simultaneously, but that instead the narrative is used to frame and contextualize play. This distinction between narrative and play is an indication that when analyzing the structure of a video game text, one needs to consider different types of chronotopes. Having defined a chronotope as a unit that encompasses space and time and which can be used to describe a single moment in the narrative, and having explained the need for multiple chronotopes, the following segment will focus on defining these different types of chronotopes. In order to show how each of these chronotopes can be defined, this section will focus on *The Elder Scrolls V: Skyrim* as the main example.

The first kind of chronotope that exists within a video game text can be considered as the play chronotope. These chronotopes can identify elements such as the location of a player character, the state of the virtual world, the number of puzzles completed, the number of enemies defeated, the amount of time played, and other play-centric elements. These chronotopes are always fluid and change in each reading of the text. An example of a play chronotope in *Skyrim* might read as follows:

> The player has explored 120 miles of space in 18 hours of play. The player currently has the Iron Armor set equipped, has died 21 times, killed 378 enemies, and found 9 treasure chests, 2 of which held legendary items. The player has also completed 29 side quests and 3 major quests. The player also has succeeded in mastering the skills "one handed sword" and "lockpick."

This chronotope, then, can be said to measure elements relevant to the reader as player. These are elements that are quantifiable, but - more importantly - that are largely elements which the narrative shifts into a secondary position.

The second kind of chronotope that can be said to exist within a video game text can be called the narrative story chronotope. These chronotopes describe events which
have taken place in the character's narrative. These include conversations had by the character and deeds performed. Depending on the cursality of the text - whether it follows a dramatic structure or an open world structure - this chronotope can be considered as variable or as static. In *Skyrim*, a multicursal text, a narrative chronotope might read as follows:

The Dragonborn escaped his execution after a dragon attacked the town. Having made his way to the keep of Ulfric Stormcloak, The Dragonborn joined the effort to keep the Imperials off Skyrim. Instead of immediately joining the battle, The Dragonborn went to the town of Winterhold, where he joined the College of Winterhold in order to learn secrets of the dragons and how to unleash their powers on the invading force.

While the play chronotope measures play elements, the narrative chronotope can be said to store information regarding the narrative as experienced by the character. These events take place in either sequential or nonsequential time within a predetermined space, and are each stored as an individual chronotope. This will give the reader / player information regarding how the text arranges space-time within its own narrative.

It is worth noting that the play chronotope and the narrative chronotope are not mutually exclusive. Indeed, in some instances they can exist simultaneously. Because of the relationship between the reader / player and the narrative character as explained in Gee's work (2003), both the play chronotope and the narrative chronotope can exist in the same time-space coordinates of a video game text. It is simultaneously true, for example, that The Dragonborn escaped the execution and joined The Stormcloaks and also that the reader / player has engaged with the text for a total of 1 hour and completed two quests.

A third type of chronotope that exists within video game texts is the fixed-point chronotope. These chronotopes can exist both in the narrative or in the ludic (play) domain. They describe certain moments within play or narrative that the reader must experience in order for the narrative or play to progress. In *Skyrim*, one of the few fixed
Point chronotopes can be found during the opening moments of the game. As the narrative opens, the protagonist is engaged in conversation with the other passengers regarding the state of affairs in the land of *Skyrim*. Afterwards, the protagonist will always be led to the execution during which the player will be asked to assign gender and other traits to their character and which will always be interrupted by a dragon attack. Regardless of what choices the player makes afterwards, the execution, the original dragon attack, and the character creation process are fixed point chronotopes.

Opposite to the fixed-point chronotope, there exists the variable reaction chronotope. Again, these chronotopes can exist both within the ludic and the narrative domains of a text. They describe a moment in the narrative in which the protagonist is faced with a choice that might dictate the outcome of the narrative or of the narrative space. They are manifested whenever the narrative prompts the character to make a major choice. Narratives that are created following the branching tree structure, or open world narratives where each of the smaller imbedded narratives feature an element of choice, heavily feature this type of chronotope. In *Skyrim*, this chronotope is observable in many situations. One of the more dramatic variable reaction chronotopes can be seen when The Dragonborn is attempting to join a group of assassins known as the Dark Brotherhood. After having completed various tasks, reader / players will find themselves locked in a room with a character called Astrid, who is the leader of the Dark Brotherhood, and three other characters who have been bound and gagged. Astrid tells The Dragonborn that "there's a contract out on one of them, and that person can't leave here alive. But which one? Well, you figure it out." At this point, The Dragonborn is faced with a choice - to kill one or more of the hostages and join the Dark Brotherhood, or to kill Astrid. The former choice will lead The Dragonborn down a path in which Astrid ultimately
asks The Dragonborn to "rebuild the Brotherhood," while the latter choice will set The 
Dragonborn on a path to destroy The Dark Brotherhood.

Although, unlike play and narrative chronotopes, fixed-point and variable reaction 
chronotopes cannot exist in the same space-time coordinates, they can certainly exist in 
proximity of each other. It is entirely possible for the protagonist to have completed a 
fixed-point task, only to be asked to make a choice regarding the outcome of said task. 
To see this in *Skyrim*, one can again turn to the introductory sequence in which, just after 
having escaped execution, the reader / player is asked to join The Imperial Legion.

The last kind of chronotope that can exist within a video game text manifests 
itself within the narrative of the text, in the ludic domain, and - to some extent - in the real 
world. This is what can be called the "save chronotope." At an ontological level, the save 
chronotope resides within the system being used to interpret the text. It is what stores the 
information describing all the events that have transpired in the text and all the tasks that 
have been completed by the reader / player. It includes within it all the narrative 
chronotopoes that have been made manifest through the exploration of the text, all the 
play chronotopoes that have been completed through engagement with play, all the fixed-
point chronotopoes experienced, and all the choices made in variable reaction 
chronotopoes. This means that at the ludic level, it tells the reader what tasks they have 
yet to accomplish, and at the narrative domain they tell the reader, among other 
information, the current state of the narrative and where it is headed next.

The function of the five outlined chronotopoes in the analysis of hyperergodic 
audiovisual digital texts are certainly varied. Their most obvious role is descriptive - an 
analysis of the chronotopic arrangement in any given text will yield insight into how time 
is represented in the text. When organized in temporal alignment, they can help answer 
questions regarding the linearity of a narrative, and when arranged spatially they can help
increase understanding regarding the cursality of a text. When the gaze is turned to the save aspect of the chronotope, it can help explore how combinations of narrative and ludic time-space are made manifest in ontological reality and how the medium can be used in order to mediate relations between the narrative and the real world. A third possible function of the chronotope can be seen when dealing with nonlinear narratives - chronotopes can help the reader rearrange the nonlinear segments of a narrative into a coherent chronology of events in order to understand the cause-effect relationship between different narrative segments. And yet, perhaps the most interesting application of the chronotope is that it helps the reader / player understand the concept of possible outcome in narrative and play. In order to further explore this last function, one must turn to Gary Saul Morson's work, specially his ideas regarding sideshadowing.

4.2.2 Endless Possibilities Shadowed

In *Narrative and Freedom: Shadows of Time* (1994), Gary Saul Morson introduced the concept of sideshadowing - a mode of narrative analysis to aid critics in understanding how unrealized or possible narratives are manifest within unicursal nonergodic print texts. Before Morson introduced the concept of sideshadowing, the critical assumption regarding temporal arrangement in texts was that time existed only in the past through flashbacks presented in scenes which take place in the past relative to narrative time, the present narrative time, and in events that take place in a future relative to narrative time and which are manifested through foreshadowing. Even if the narrative is presented in a nonlinear manner, this approach to temporal narrative structure creates an illusion of a purely linear narrative where no outcome other than the one presented by the text was ever possible. In introducing the concept of sideshadowing, Morson challenges this idea of an entirely linear and closed narrative system by introducing a
mode of analysis that allows for inquiry into, and the manifestation of, potential narrative realities. In his book, Morson argues that:

Sideshadowing deepens our sense of the openness of time. It has profound implications for our understanding of history and of our own lives while affecting the way we judge our present situation. It also encourages skepticism about our ability to know the future and the wisdom of projecting straight lines from current trends or values (6).

Morson’s concept of sideshadowing does not focus on understanding what happened or what will happen, but on answering questions regarding other narrative possibilities that might have manifested, but for some reason were not. Because it does not attempt to understand the past, current, or future narrative time - that is, because it does not concern itself with the practices of flashback or foreshadowing - the concept of sideshadowing, Morson argues, opens up new possibilities for the reading of any given text.

Perhaps a more thorough definition of sideshadowing can be seen on pages 117 to 119 of Morson’s Narrative and Freedom, where Morson defines sideshadowing as a way of understanding narrative representations of multiple possibilities. Specifically, Morson explains that "sideshadowing relies on a concept of time as a field of possibilities" that can only exist because of the existence of an "excess of actualities," or a "surplus of temporalities" (119). Morson explains that when a reader engages a text through a perspective that allows for sideshadowing, the reader is shown that the events taking place in the narrative time are only one of multiple possible outcomes. Morson argues that when authors use sideshadowing techniques, a multiplicity of alternatives exist simultaneously, and eventually only one becomes manifested in current narrative time. The reader, then, sees only the possibility that was made manifest and not the possibility that was not realized. However, Morson explains, the realized narrative became manifested through the influence of one or more factors.
In his book, Morson shows how sideshadowing is manifested in nonergodic unicursal print texts by analyzing the works of Russian writers Leo Tolstoy and Fyodor Dostoevsky. Morson explains how in the work of these writers, whenever a character speaks of what could be, the author is giving the reader a glimpse into a sideshadowed reality. One such example, Morson notes, is in Dostoevsky's *The Possessed*, where the character of The Chronicler constantly reminds the reader of what could have happened. An example invoked by Morson can be seen on page 125, where he discusses the power structure present in the novel and the possible outcomes of a certain revolution described in the text by the character of The Chronicler. Morson quotes from Dostoevsky:

> Moreover, this riff-raff almost always falls unconsciously under the control of the little group of "advanced people" who do act with a definite aim, and this little group can direct all this rabble as it pleases, if only it does not itself consist of absolute idiots, which, however, is sometimes the case. It is said among us now that it is all over, that Pytor Stepanovich was directed by the Internationale, and Yulia Mikhailovna [the governor's wife] by Pytor Stepanovich, while she controlled, under his rule, a rabble of all sorts (Dostoevsky, 470).

According to Morson, it is possible within the context of the novel that "there was no worker's revolt" and that "the revolutionaries had almost no effect," but that it is also possible that the revolutionaries "successfully produced a violent confrontation, burned down the better part of the town, and were able not only to infiltrate the factory, but also to direct the government through the governor's wife" (125). Morson continues his analysis by discussing how, after the police department responds to the assembled workers, the police chief states that "it was not true that he galloped to the spot with three horses at full speed, and began hitting out right and left before he alighted from his carriage" (Morson 126). These events, Morson contends, are events that are described within the text. Even though they were not realized, Morson argues, because they are described, they cast a shadow "from the side" on the realized events being described in
narrative time. These are possibilities that never became to fruition, but that were plausible within the context of the narrative.

Several critics have since applied and expanded on Morson’s ideas. In her 2001 essay titled *Latent Narratives: Sideshadowing in Fortuna y Jacinta*, Linda Willem explores how the concept of sideshadowing is made manifest in Benito Perez Galdos’ 1887 novel. Expanding on Morson’s concept, Willem sees sideshadowing not only as what a character or narrator might state should have happened, might have happened, or did not happen, but also as realized events that became manifest through the element of chance. She further argues that sideshadowing can also help shed light on unrealized narrative possibilities that are accessed through reader interaction with the text. This, she describes as “what if” unrealized possibilities. These possibilities, she notes, are stimulated not only by choice, but “also by the characters’ own speculations about what might happen in the future” (301). As evidence, Willem mentions a scene in the text where Fortuna is conversing with Maurica about escaping Juanito’s plan to seduce her, while Maurica describes her boredom and constant contact with her small circle of acquaintances that could lead Fortuna to “have an affair with the mayor, the doctor, the judge, or even the priest of the town” (302). Because “this portrayal in no way exhausts all the possibilities of small town life, the reader is left to imagine others, including ones that could yield positive results instead” (302).

Unquestionably, the idea of sideshadowing allows for the expansion of a narrative that allows readers to consider multiple possibilities. By framing the events that are manifested through chance circumstances or character choice as one of many possible realities, sideshadowing allows readers to take a deeper gaze into the narrative, the narrative space, and the characters represented than possible if probability, chance, and choice were not taken into consideration. This is, of course, also true in cases where
a character explicitly states that an unrealized possibility should have been made manifest. The question that remains to be answered, then, is how can sideshadowing help illuminate one's understanding of ergodic digital texts, especially that of video game texts. In order to more easily understand how sideshadowing works in video game texts, it must be assumed that the concept works hand in hand with the previously defined chronotopes. Furthermore, it must be understood that sideshadowing is manifested differently in multicursal texts than it does in unicursal texts, and that it can be manifested both at a ludic level as well as at a narrative level. In order to demonstrate this relationship, we will revisit *The Elder Scrolls V: Skyrim* and *Beyond: Two Souls*.

As it was previously explained, *Skyrim* is a hyperergodic text featuring a linear narrative. *Skyrim* is full of both narrative and ludic variable reaction chronotopes. The previously mentioned example involving the Dark Brotherhood is one such instance. As it was explained, when Astrid asks the main character to deliver the life of one of the hostages, the player / reader has the option of turning on Astrid, which will result in one distinct narrative line, or of joining the Brotherhood, which will lead to another unique narrative line. When the reader / player is confronted with the choice presented in that specific variable reaction chronotope, two distinct possibilities become at odds with each other. Depending on the actions of the reader / player, the text will react one way or another. Regardless of what choices the reader / player makes, only one possible narrative becomes manifested. The alternate possibility, at that moment, becomes an unrealized possibility casting its shadow unto the realized narrative - it becomes a sideshadow. This other narrative, it is worth noting, casts its shadow both at the narrative and the ludic level. If the Dragonborn joins Astrid and the brotherhood, the question of whether the character could have saved the hostages will cast its shadow on the narrative, while the question of how many quest branches were closed off will cast its
shadow at the ludic level. *Beyond: Two Souls* offers the opportunity for a more traditional, narrative-only application of the sideshadow.

The narrative presented in *Beyond: Two Souls* is nonlinear, and play is unicursal. This means that whatever instances of sideshadowing are present in the narrative will be similar to those found in nonergodic print texts - that is, when a character says that something else "could be" or when an event precipitated by chance takes place, there is a unrealized possibility casting its shadow from the side unto the realized narrative. One such example can be seen in the early moments of the game where Jodie Holmes is working in her first mission as a CIA agent. Jodie Holmes was born with a unique ability - she is able to communicate with and, to some extent, control a supernatural entity called Aiden. During her first mission, Jodie is tasked with finding a quiet place and guiding Aiden through a wall in order for the spirit to read a secret document. If the player takes too long, or if the player attempts to explore an extended area, the text will focus on Jodie and she will say "Aiden, don't go too far. It hurts when you're too far," and "I feel like I'm going to pass out." In this moment, a possibility where Jodie does not faint and completes her task becomes realized, while a narrative possibility where she faints and is discovered fails to become realized. However, the possibility of what could have been is still hinted at during the narrative, thus casting its shadow on the reality that came to be. Depending on the information present in the play chronotope (where is the player taking Aiden?) present within a fixed point chronotope (the CIA mission), a sideshadowed reality (Jodie faints) presents itself through narrative dialogue.

4.2.3 Conclusions

In this section, it has been demonstrated that the way in which a reader experiences a multicursal text depends on how the chronotopes interact with each other within the context of a narrative. It was further shown that Morson’s concept of
sideshadowing not only retains relevance, but morphs to encompass an even larger number of possible narrative realities than a nonergodic unicursal print text would allow. These elements can be used to demonstrate ergodicity and linearity alike, and further shed light on the overall composition of a text. What remains, then, to create a complete picture of how video game texts create narratives is to (1) answer the question of how video game narratives create multiple layered narratives simultaneously and (2) understand how the mechanics of a video game text - that is, what Juul calls the "gameness" of a game - can be narrative in nature.

4.3 Multiple Layers and Time-Looped Narrative

Despite the recent proliferation of studies into the narrative structure of video game texts, there has been surprisingly little, if any, commentary of some of the fundamental ways in which video games present narratives. Janet Murray's work deals with player identity and focuses largely on text-based dungeons, and while Marie-Lynn Ryan's work does shed some light into how narrative behaves across media, the short sections dedicated to video games as narrative present an incomplete image of how these texts create narrative. More recent scholarship has either (1) largely relied on Murray and Ryan's models in order to understand how narrative elements function in specific texts (Jorgensen 2010, Gibbons 2011), (2) attempted to explain how player representation and identification affects the narrative (Simons 2007), or (3) suggested models to "improve" narrative in games (Hall & Baird, 2008). However, few scholars have addressed the question of how the video game as a text and how what Juul calls "gameness" function as narrative devices. In order understand this, however, one must first acknowledge a fundamental truth of how narratives are manifested in video games - that video game texts, regardless of linearity or cursality, do not present reader / players with one singular narrative. Instead, they expose the player to three distinct narratives.
Although the multilayered narrative structure inherent in video games has not been explicitly addressed, several scholars, including Murray and others, have at one time or another remarked on some element necessary to understand how multiple layered narratives can exist simultaneously.

4.3.1 A Multiplicity of Narratives through Player Identity

In *Hamlet on the Holodeck* (1997), Janet Murray remarks on how, as a designer, one should always keep in mind that when a reader/player engages with a video game, there are three layers of identity existing simultaneously. Murray defines the first identity as the "actual person" - that is, the reader/player who is engaging with the text through some input mechanism that facilitates interaction with the text. The second identity is defined as the "constructed identity" of the reader/player. This identity is made manifest when the reader/player is given agency over the actions being performed as the reader/player discovers the narrative space. The third and final identity, Murray notes, is that of "the character." The character, she explains is the fictional entity existing within the text and which has a role that is made clear to the reader/player.

Offering a similar yet, perhaps, more thorough explanation of how the reader/player has multiple identities, James Paul Gee explains in *What Video Games Have to Teach Us About Learning and Literacy* (2003) how he perceived his own cognitive processes as he played through the video game *Arcanum*. In his book, Gee writes that there are three identities which the reader/player grapples with: (1) the virtual identity, (2) the real identity, and (3) the projected identity. In his example, rather than using abstract discussions, Gee uses his experience with his character *Bead Bead*, a female half-human half-elf. Gee argues that although both the reader/player and the character are a singular entity, the three identities are made manifest depending on the focus of attention being given to any single part of the whole.
Regarding the virtual identity, which he represents as "James Paul Gee as Bead Bead, where Bead Bead is italicized to indicate that, in this identity, the stress is on the virtual character acting in the virtual world" (49), Gee suggests that although he, as the player, is controlling the character, he is only partly responsible for the actions of the character because, even though he is the one who decides what skills the character will practice, he does not have control over the other narrative or ludic elements. Gee writes:

For example, at a certain place in the game, Bead Bead wants to persuade a town meeting to fund the building of a monument to please the town's mayor. To do this, she needs to be intelligent and persuasive. (49)

Although the outcome of the persuasive attempt was successful, Gee contends that his role in this situation was relegated to having "built" Bead Bead as a persuasive and intelligent character, but that it was the narrative and ludic elements themselves that ultimately decide whether Bead Bead is successful in this persuasion attempt. Gee further notes that the motivations for creating the statue were not intrinsically his, as much as those of the character.

Gee describes the second identity as the real identity - that is, "my own identity as James Paul Gee, a nonvirtual person playing a computer game" (50). Gee represents this identity as "James Paul Gee as Bead Bead, where James Paul Gee is italicized to indicate that, in this identity, the stress is on the real world character James Paul Gee playing Arcanum as a game in real time" (50). The main desire and motivation of this identity, Gee notes, is not to build a statue. It is to complete the game.

The two identities that were proposed by Gee and have been discussed so far overlap with Murray's interpretation of player identity. Although they have dissenting philosophical views in that Murray sees the reader/player as a distinct entity separate from the character and Gee sees the player and the character as a single unit unto which a gaze can be applied and focused on different parts of the whole, Gee's virtual identity
can largely be seen as being a parallel to Murray's "character," while his real identity can be interpreted as Murray's "the person." When it comes to the third identity, however, there are some fundamental differences.

To Murray, the constructed identity is one that combines both the reader/player and the character and asks of the player to understand how they visualize themselves in the virtual world. It is the result of a constant negotiation between the player and the character in order to determine how the character will ultimately act. To Gee, however, the main concern of this third identity, which he calls the "projected identity," isn't so much the identity itself as it is the process by which the identity is created and the interface used to create it. Gee sees this identity as one where the reader/player both "projects one's values and desires onto the virtual character" and sees "the virtual character as one's own project in the making" (50). For Murray, the third identity is the object resulting from the interaction between player and character. Because Gee already assumed the player and the character as a single entity, the third identity is the process of negotiation itself. Gee writes:

I represent this identity as James Paul Gee as Bead Bead, where the word as is italicized to indicate that, in this identity, the stress is on the interface between the interactions between the real world person and the virtual character. [...] In my projective identity, I worry about what sort of person I want Bead Bead to be, what type of history I want her to have had by the time I am done playing the game (Gee, 50 - 51).

Although Gee and Murray disagree on whether the third identity is an identity unto itself or the process by which two identities interact, it is clear that both Gee and Murray agree that, even in video game texts where the player is allowed to create a character resembling their real world counterpart, there is a clear distinction between the identity of the character and the identity of the reader. However, while Murray continues exploring how this may affect the performance of the player as actor and Gee discusses
motivations, neither of them remark on the implications this may have for the discussion of narrative in video game texts.

In Pause and Effect: The Art of Interactive Narrative (2003), Mark Stephen-Meadows discusses what he calls "interactive narratives. He describes an interactive narrative as "a narrative form that allows someone other than the author to affect, choose, or change the plot" (2). Although Stephen-Meadows' use of the term "interactive" is misguided, as he later uses the term to refer to the linearity and structure of a narrative as well as for the design of the narrative space, if one extrapolates from his definition and the examples he uses for context, it becomes certain that what for Stephen-Meadows is an "interactive narrative" is what in this chapter has been defined as a multicursal narrative. When discussing multicursal narratives, Stephen-Meadows briefly advocates a perspective explaining the existence of a fundamental divide between the identity of the character and the identity of the reader / player. The result, Stephen-Meadows argues, is the existence of two distinct "perspectives." He writes that "interactive narratives generate a set of multiple perspectives" (60), and that "because interactive narratives contain a character and a reader, it is an intersection of these multiple perspectives (62). It is safe to say, then, that to Stephen-Meadows the two distinct perspectives in question are that of the reader / player, and that of the character. He later proceeds to explain that in a video game text, just as it is true of any form of narrative, "the particular view of the narrator or character is important in determining what the reader learns, sees, and understands" (161). Stephen-Meadows easily demonstrates this by explicating how it is impossible for the reader / player to learn information regarding situations which might or might not take place in a narrative world outside of the character / narrator's immediate knowledge. However, he still fails to address the implication of his observations on multiple narrative. In order to understand how two narratives - one created by the reader /
player and one manifested around the character - can coexist in the same space, one must consider how Tzvetan Todorov’s comments regarding the detective novel can provide context for the understanding of chronotopic configurations.

In *The Poetics of Prose* (1971), Todorov proposes several ideas in four major sections. Of special interest for unlocking the structure of multiple coexisting narratives can be found in his chapter *The Typology of Detective Fiction*. His comments on the two different narratives present in detective fiction also hold true when discussing video game narratives. Todorov suggests that detective fiction is composed of two different stories. The first story, "the story of the crime, tells 'what really happened', whereas the second - the story of the investigation - explains how the reader has come to know about it" (45). This distinction between the two narratives is at the heart of video game narratives.

When a reader / player engages with a video game text, they play through a narrative designed by one or more developers. This narrative might be linear or nonlinear, unicursal or multicursal, always ergodic, and always digital. That narrative might be structured around a purely dramatic structure, a networked structure, or an open structure, and may take place in an open or constrained space. In the case of *The Elder Scrolls V: Skyrim*, this is the narrative of The Dragonborn, the protagonist who escaped his execution and eventually decided the fate of the continent. In *Beyond: Two Souls*, this is the story of Jodie Holmes, the young girl on whom the government experimented and grew up to be a CIA agent. These narratives are experienced through and can be analyzed by various configurations of narrative chronotopes. This level of narrative is the one that is experienced by Murray’s "character" identity and Gee’s virtual identity. It is the tale being told to and experienced by the reader / player. This level will be considered as the character’s narrative. Depending on the configuration of the narrative voice and the spatio-temporal location of the protagonist in relation to the narrative voice (if there is a
narrative voice at all), this narrative layer can be made manifest both as an extradi
tropic narrative, as is the case of *Beyond: Two Souls*, or as intradi
tropic, as can be seen in *Skyrim*; that is, the game perspective can place the reader as existing outside of the story
through a third person perspective or as existing inside the story through a first person
perspective.

The second type of narrative that can exist within a video game text is the
narrative which is told to the player. This includes events which exist in the past relative
to the current narrative time and are told to the character / player through verbal, textual,
or visual cues. In many video game texts, this takes the form of an introduction which
tells the reader / player about the lore of the game world. However, these stories also
include information about past events told to the character / player, or information
obtained by reading virtual documents found within the game world. This level of
narrative can be considered as "the stories within the narrative," or metadi
tropic narrative, and is specially abundant in *Skyrim*. In this title, as the player / character
explores the virtual world, a number of virtual books will be found. These virtual books
include lengthy histories regarding the monarchic traditions of the land, extensive
mythologies explaining the gods and worship practices present in the game world, and
books of fiction that, in the game world, adults tell children before going to bed. Among
these texts one can also find volumes that are referential to other in-game texts and
which featuring analysis and criticism of other story within game narratives that populate
the virtual space.

The third narrative layer is that which is manifested in the real world and which is
effectively created by the reader / player and is defined by their actions. This is the
narrative which is created by Murray’s player and Gee’s real identity. This narrative can
best be analyzed through the description of play chronotopes. Rather than being a
narrative arc, it can be considered as a play arc or action arc which creates a narrative. A reader / player might discuss this narrative layer as a first person. This level of the narrative will be considered as player action. Where a narrative chronotope within the character's narrative in *Skyrim* might say "The Dragonborn protected the town from a band of thieves," a play chronotope within the play action might instead read "the player killed 5 NPCs in a town." These two chronotopes are referring to the same narrative event, but it is interpreted differently by each of the identities. The character's narrative depicts the events which transpired, while the player action depicts how those events were interpreted by the reader / player.

These three types of narratives seldom take place in isolated circumstances. Although many video game texts do feature sections in which only one of the three layers is being conveyed to the reader / player, in most situations there will be at least two narrative layers being made manifest simultaneously. One example of the three layers of narrative taking place simultaneously can be seen in the opening sequence to *Skyrim*.

In *Skyrim*, the reader / player is confronted with this kind of narrative before the player is able to take control of the protagonist. In this scene, as the player character is being taken to his execution, he and other prisoners engage in conversation regarding the sociopolitical state of the land. Although the reader / player is given control over the perspective of the character, all other actions are constrained. The transcript of this opening moments of this interaction can be found below:

Prisoner 1 (Stormcloak): Hey, you. Finally awake? You were trying to cross the border right? Walked right into that Imperial ambush. Same as us? And that thief over there...

Prisoner 2 (Thief): Damn you Stormcloaks. Skyrim was fine until you came along. The Empire was nice and lazy. If they hadn't been looking for you, I could have stolen that horse and been halfway to Hammerfell. You there. You and me. We shouldn't be here. It's the Stormcloaks the Empire wants.
Prisoner 1 (Stormcloak): We’re all brothers and sisters in binds now, thief.

Soldier: Shut up back there.

Prisoner 3 (Stormcloak): Shut your dove. You’re speaking to Ulfric Stormcloak, the true high king.

Prisoner 2 (Thief): You’re the leader of the rebellion! If they’ve captured you... where are they taking us?!

During these first minutes, the reader is told why the protagonist was captured - a failed attempt to cross the border, which presumably the character knows - and both the character and the reader / player are told that (1) Skyrim used to be a stable and “lazy” place that was tossed into turmoil with the arrival of the Stormcloaks, that (2) the Stormcloaks are a faction of rebels fighting against the empire, and (3) that the leader of the Stormcloaks is Ulfric Stormcloak. Other information conveyed in this scene includes how the Thalmor, a foreign nation, aligned itself with General Tullius, the military governor, in order to capture Ulfric, that the best mead was made in the town of Helgen, where Ulfric “was sweet on a girl that used to live here,” and that there are gods which the people worship. All the information being conveyed and the stories being told are made manifest as stories within the narrative. The scene in which they were conveyed - that is, the chronotope describing “the dragonborn was being transported to his execution and during the trip a conversation with Ulfric Stormcloak took place” - exists as part of the character narrative. The chronotope describing the player action reads as “the player looked around and learned new information.” These three different narratives are made manifest simultaneously and exist as a single entity, but at the same time can be regarded as three different layers. These narrative layers, however, might become increasingly complicated if one considers how, thanks to the save chronotope and the play mechanic of the "extra life," the structure of video game texts allow the player /
reader repeated attempts at navigating the spaces therein represented by equating repeated attempts to the narrative technique of the time loop.

4.3.2 Play Turning Back on Itself

The time loop is a narrative technique in which a character is forced to repeat a fixed amount of time indefinitely. Everyone in the narrative space is reset to the fixed point in which time begins to fold unto itself, with the exception of one character - the protagonist of the time loop narrative - who keeps all memories of the previous instances. In modern interpretations of the time loop, time repeats itself until the protagonist is able to correct some major problem. Once the protagonist has corrected some fatal mistake or recognized a fundamental truth, time is allowed to move forward.

With the most often cited example of loop narratives in film are 12:01 P.M. (1990), Groundhog Day (1993), and Lola Rennt (1998), a common argument regarding time loops is that this is a mode of video game-based narrative. In the book Unnatural Narratives - Unnatural Narratologies (2011), Jan Alber and Rudiger Heinz argue that the existence of films like Groundhog Day and 12:01 P.M. subscribe to the video game storytelling technique of trying again until one "gets it right" only thanks to how "at the beginning of the 1990s New Media not only made an impact on the level of visual aesthetics but also on the narrative level in time-loop films" (160). Nichola Dusi would agree, arguing in his essay The Internal Variant: Modularity and Repetition in Audiovisual Epitexts, that Lola Rennt "triggers a new narrative logic, which can be multiplied and is subject to variants, thanks to the fundamental undertext of the video game" (4). He further suggests that "video games do not only influence the film on a figurative level, but also on a deep and valorial level, as well as in terms of style considering the pressing rhythm of the music and the editing, and in the fast-changing isotopes of time and the possible turns caused by the dangers and lurking errors" (4).
Although these and other scholars have contended that the time loop is a video game-based approach to narrative, it is worth noting that, like many of the elements found in video games, the time loop was not pioneered by video games. The 1933 film *Turn Back the Clock*, for example, features a single time loop in which the protagonist is given the opportunity to "get it right." Likewise, the 1947 film *Repeat Performance* features time loops. Both of these works were created well before William Higinbotham created the first video game, *Tennis for Two*, in 1952. That being said, because of the fundamental nature of their design, video games have repeatedly used the technique since to the point where it can be said that they have appropriated the technique.

Further arguing for the idea that time loops are a form of video game narrative, Michael Fuchs argues in his essay *Remediation, Trauma, and Quantum Physics in Time Loop Narratives on Recent American Television* (2014) that this form of storytelling is, indeed, a game-based approach to narrative. While his analysis discusses three distinct television shows - *The X Files, Supernatural*, and *Fringe* - Fuchs makes some insightful observations into the structure of the time loop that are applicable not only to television shows, but to time loop narratives as a whole. Fuchs notes that in time-loop narratives "the script re-plays several times, with (more or less) minor changes, but always ends the same way" (95). He further comments on how the character who retains memory "has to play the same day all over again, as if she were returning to a save point and trying to figure out a way to advance to the next section or level of the game (97).

Fuchs' comments regarding the "save point" are specially revealing. Fuchs inadvertently touches on the important of what was here earlier defined as a save chronotope - a record of events thus far experienced by the player and the character and which exists as a digital construct which is stored inside a physical object. However, in light of the existence of multiple narrative layers, these parallels are also problematic.
4.3.3 Conclusions

As it was previously demonstrated, video games have three levels of narrative - the player action, the character narrative, and the story within the narrative. Each of these narrative layers behave differently according to chronotopic configurations. It was also shown that chronotopic configurations dependent on the save chronotope lead to the creation of sideshadowed possibilities. The implication of this, then, is that when a character in a video game text dies and the player begins anew from a "save point" and moves on to complete a narrative segment, the new events completely overwrite the previous failure. The characters do not retain their memory. They do not interact with other in-game NPCs about how on the previous attempts to complete a task they failed but now they have the knowledge to complete their quest. From the character's perspective, when they die and are reborn, their memories of the events are also erased. Unlike with the time loop narrative, the protagonist has no knowledge of the events happening or of how many times the player has failed at "beating the stage." To the character, all the events are experienced in sequence with no deviations. All the failed narrative and play moments are, to the character, erased as soon as the reader/player guides the character to the creation of the next save chronotope. At a character narrative level, all of the player's failures are not time loops as much as they are sideshadowed possibilities. To the player, however, failures and repeated attempts are a time loop. As Johnson and Soneson note, "in loop-based scenarios we can employ parallel and repetitive elements, we can establish and create an open narrative field where creative input from the user can add new story threads to the experience" (1). To the character, there are multiple possibilities, and ultimately the manifested reality is success. To the player, however, who is experiencing the narrative from a higher level, all the repetitiveness forms a time loop. In a platform game, Super Mario Bros, for example, the
player is given three attempts to finish the game. To the player identity and at the level of
the player action, whenever Mario dies, there is a time loop. The player tries again. To
Mario in the narrative, however, whenever Mario falls to his doom, that reality stops
existing. A new Mario with no memories of the events transpired is created at the
beginning of the stage. Mario isn't stuck on a time loop, the player is. The implication for
analysis of narrative is that if one is to consider the video game text as an artifact in
which the narrative is presented, one can ignore the effect of the time loop in the psyche
of the character. However, if one is to complement this with an analysis of the state of the
player identity after repeated attempts, one might want to consider how the concept of
the time loop might affect chronotopic configurations at the level of play.

4.4 Space and Mechanics as Narrative

This chapter has thus far discussed all the possible configurations of observable
narrative modes existing within video game texts. All of these configurations, however,
address only the types of narratives that video game texts share with other media. The
narratives conveyed to the reader through the story within narrative layer, in the vast
majority of cases, share similar structural and linguistic configurations with character
interactions in both print and film texts. Likewise, narratives experienced by the reader /
player through the character narrative layer is synonymous to the structures found in film.
Furthermore, the narratives exclusively experienced by the real persona at the layer of
player action form a first person narrative which ultimately takes a similar configuration to
that of autobiographical and epistolary texts. These are questions that scholars of
narratology have attempted to answer with varying degrees of success (Murray 1997,
Ryan 2001, Stephen-Meadows 2003, Jenkins 2008). However, although there has been
extended discussion regarding how narratives are presented in video games from
traditional perspectives, inquiry into narrative modes that are exclusive to video game
texts is limited.

Although video game texts can, indeed, convey narratives in a manner similar to
traditional print-based novels and films, they differ in how they allow the reader/player to
explore a world which is governed by systems of rules. These two elements serve as
methods of conveying narratives that are exclusive to hyperergodic textuality. Even
though there have been some commentaries made by designers regarding the validity of
narrative as an incentive mechanism, there has been surprisingly little scholarly attention
given to the question of whether mechanics themselves can create narrative, and even
less to whether video games can convey narrative through spatial means. In the following
sections, the ways in which video game texts tell narratives through mechanics and
through represented virtual spaces will be discussed.

There has been some discussion prompted by video game designers, largely
through informal forums and game development conferences, regarding the question of
whether a video game text's narrative can be considered as a game mechanic.
Designers like Ralph Koster argue that "narrative is not a game mechanic. It's a form of
feedback" (2012). He writes that video games "are made up of multiple other media,
typical in feedback. In other words, we rely on media such as film, writing, visual arts,
music, and so on in order to provide feedback" (Koster 2012). Other commentators,
however, have suggested that video game texts are more about narrative than they are
about mechanics. Max McFarland writes that "at their best, gameplay mechanics have a
notable positive impact on the player’s experience of the game; at their worst, they create
a barrier between the story and the audience" (McFarland 2014). As example, McFarland
invokes The Last of Us (2013), where he notes that the lack of crafting resources in play
and the minimalistic design interface all complement the ludic mechanics and spatial
design. Yet another designer, M.M. Hrehovcsik, writes that even though he "typically holds to a 'stories are not games' and 'games are not stories' rhetoric," it must also be acknowledged that there are "examples of games where understanding the narrative is essential to finishing the game" (2012), before proceeding to describe how narrative can be used as a game mechanic.

Although answers to the question of whether narrative can be a game mechanic do not directly answer the question of how mechanics create narrative, they do help contextualize how authors perceive the relationship between narrative and mechanics. Although a few authors have been shown to hold a bias against any design component reminiscent of narrative, the broad consensus is that narrative does play a role in the composition of a video game text. With the exception of a single highly informal source - an online video by Pixar animator Daniel Floyd - the question of how mechanics can formulate narratives has thus far been ignored by designers and scholars alike. In order to address this lack of understanding, then, one must turn to observation and descriptive annotations of the play mechanics found in several games in order to understand how the resulting play experience - what Juul and others have called "emergent play" - can be configured into a form of procedurally generated narrative. A procedural narrative will be defined as any unscripted narrative that is created, whether in the video game text or through the game-reader/player interaction, because of the existence of, or interaction of the player with, a game's inherent mechanics and design choices.

In order to demonstrate how the concept of procedural narrative is made manifest in video game texts, Daniel Floyd's comments regarding the mechanics of Missile Command (1980) and how they convey ideas will be discussed. Afterwards, the mechanics of The Sims (2000 - 2014) will be analyzed. The analysis of The Sims will demonstrate how the existence of mechanics can create a character narrative with
minimal reader / player input. Following this, attention will be given to the game *Tokyo Jungle* (2012) in order to understand how mechanics through play affect both the character narrative and the player action. Finally, the video game *Ico* (2001) will be discussed, with special attention being paid to the mechanic of holding hands. This will demonstrate how mechanics can be deployed in order to develop relationships between characters within the character narrative as well as to elicit emotional responses from the reader / player that help to further develop the narrative created at the level of the player action.

Daniel Floyd has proposed that video games are able to propose complex ideas through the application of mechanics and without the need of any form of explicit narrative. He argues that through player action only, a narrative can be created. To demonstrate this, he deconstructs the mechanics behind *Missile Command*. Floyd notes that *Missile Command*, developed in the 1980s, the player uses a trackball controller to “fire rockets from three missile defense platforms in order to protect six cities from a rain of ICBMs” (Floyd 2012). Floyd makes a passing observation regarding the low quality of the visual and aural elements present in the game and, correctly, notes that this is likely due to the technological constraints of the time. He proceeds to explain that in order to construct a narrative about nuclear war through play, *Missile Command* places the player in a defensive position. He notes that although players do use missiles in order to defend their territories, these missiles are never used in aggression or dominance. This, Floyd explains, places the player in a position of reactionary weakness in which the enemy is unknown. The story, Floyd argues, is one of finding the self in the receiving side of a nuclear strike. He reads the design choices as one where the player is placed in a position of responsibility, but is not given limitless power. By doing this, the game’s creator has given the player a role which they can understand. Floyd continues:
When the player steps up to the machine, they take the role of a regional commander of three small missile defense bases. This choice of scope is human in scale. We can understand six cities or imagine six real towns in our home state and project ourselves into the experience. We can all emotionally invest in those small bases and that handful of towns in a way that we simply couldn't if the game had tasked us with defending the whole country (Floyd 2012).

What Floyd is arguing by making these statements is that by giving the reader/player a task which can be imagined, the text is enhancing the level of immersion, thus facilitating the creation of the identity of the player as character (Gee 2003). Despite Missile Command having no protagonist, by inviting the player to take the role of the commander, the mechanics are creating a player-based character. The player effectively becomes the character in the character narrative. Floyd discusses how the commander "probably" thinks of the situation and suggests that the commander "thought of himself as a deterrent for a war that could never possibly come, but now, as soon as you put the coin in that slot, the war is upon you" (Floyd 2012).

Floyd suggests that his interpretation of the player-character Missile Commander is reinforced through mechanics in the form of questionable moral choices which the player is forced to make. In Missile Command, as the incoming missiles continue to fly towards the player's territories, players will ultimately have to begin to make choices. These choices, Floyd explains, are prompted by the game's mechanics which, at the same time, create a narrative of hopelessness and desperation. Floyd states:

You have limited resources in a seemingly endless onslaught to repel. Do you try to defend everyone? Do you go out of your way and try to save that one distant town, or do you let it and everyone in it blow up in a cataclysmic fire so you have a better chance of saving everyone else whom you are responsible for? Do you let the soldiers under your command die when it comes to protecting them or the civilians? Do you let a million lives go up in ashes so that you can defend one of your military installations which is vital for defending the other five million for whom you are responsible? (Floyd 2012).
Floyd argues that the mechanics tell a narrative of war and of the human struggles found therein. He suggests that this is because of the moral choices which the mechanics forces the player to continually make and because, ultimately, the game features no win state. Although the same can be said to be true of certain puzzle games such as Tetris, these other games often have modes of play with distinct win states, with Tetris offering a game mode where the player achieves victory after completing 40 lines. In Missile Command, however, there are no such modes of play. In this game, the player can play continuously, but ultimately incoming missiles will increase in speed and frequency until the player can no longer keep up. To Floyd, then, Missile Command creates a narrative where the player as character takes control of a series of military installations in order to defend a series of towns from an oncoming invasion. Despite the player's best efforts as the character Missile Commander, the player will ultimately lose all the cities and military installations. Although Floyd never explicitly uses the term, this is an example of a procedural narrative - a narrative which is created exclusively through play, mechanics, and design choices, and which has no clearly discernible form of a traditional narrative structure.

Certainly, Missile Command creates a narrative centered around the identity of the player as protagonist that is crafted through mechanics and play. However, it is worth explaining that video game mechanics can also create character narratives that don't necessitate player identification. One such text is The Sims (2000), a series of simulation video game developed and published by Electronic Arts. The Sims games give the reader/player an empty space in which to create a virtual space. Once a virtual space has been created, the reader/player is prompted to fill the world with "Sims" - human-like characters. The actions and behavior of each Sim is determined mechanically, as are their reactions to other broad types of Sims. A Sim whom the player has created as
friendly and outgoing, for example, might be mechanically predisposed to show disdain or active dislike towards an introverted Sim. The role of the player in this virtual space is not to take control of a character, as much as it is to influence the general emotions of the characters. As the reader/player builds their virtual space and populates it with Sims, it will become increasingly difficult to micromanage the emotions of individual Sims. Although the player is able to nudge Sims to “feel” in a certain way about certain objects, events, or Sims, the ultimate choice on how to approach a situation is largely left up to the mechanics system which governs Sim behavior. It is because of these mechanics, then, that any character narratives are made manifest.

After the player has created a virtual space and populated it with Sims, each Sim will proceed to act in certain ways, perform certain actions, and interact with one another depending on their personality types. Because The Sims attempts to simulate the daily routines of one or more characters, narratives are created procedurally thanks to the mechanics. A player might, for example, place two Sims in adjacent residential spaces with the desire of the two said characters meeting each other and producing a family. However, it is the game’s mechanics guiding character behavior, actions, and interactions which ultimately determines the outcome of the narrative. If the player constantly nudges the Sims feelings towards “lonely” but the characters’ personality types were created as incompatible, for example, or if the characters have distinct work hours, it is more likely that the system will create a situation in which each character will find romance elsewhere rather than with each other. The Sims 2 (2004) further complicated mechanics-driven narratives by introducing the Aspiration System. Under this system, each character, in addition to having certain behavioral patterns based on their personality types, actively show desires and fears that they are affected by. Each Sim’s aspiration points dictate not only how successful they will be at successfully finishing a
task, but also how many successful relationships the character is able to make. By doing this, the system itself - that is, the mechanics governing play - not the player or the author, create a procedural narrative as the game progresses.

Like *The Sims*, *Tokyo Jungle* (2012) offers a largely decontextualized space governed by mechanics in which interaction can happen. In the game, the player takes control of one or more animals and guides them through the streets of Tokyo as they fight against other types of animals for food and territory. Although the text does present the reader with a premise that can be considered as a story within the narrative when it tells players that "Tokyo has been abandoned and is now overrun by nature" and that only the strongest animals survive, this does nothing to further a coherent and cohesive character narrative. Instead, the narrative created by the play experience is created because of player interaction with the game's mechanics.

The world of *Tokyo Jungle*, and the reader/player’s interaction with the game world, are governed by several mechanics. The goal of these mechanics is to allow the player the goal of surviving. The text initially offers the reader few choices regarding their character. Depending on the player's choice - whether the character is a herbivore or a carnivore - the mechanics made available will be different. This will affect the play experience and, ultimately, the narrative. If the reader/player selects a herbivore, for example, the mechanics make it so that the character has a higher probability of creating a herd, while the mechanics made available to a player with a carnivore animal will make it easier to hunt for prey, rather than to build a herd. The resulting narrative, then, is manifested differently depending on the player's character choice. Furthermore, the question of how the player implements said mechanics further diversity the possible character narratives. If a player selects a herbivore character and decides to focus on growing a herd, the experienced narrative will be different from one where the player
instead decides to focus on hiding from predators. The result is that the constraints and player interaction with the game world and with the mechanics of the game, then, create a procedural narrative.

Just as mechanics can create a narrative, they also have the potential of creating and developing emotions and feelings between characters. This can be called procedural character development, and is one of the more crucial aspects of any character narrative. One of the texts which best exemplifies this phenomenon is *Ico* (2001). In *Ico*, the player takes control of the male protagonist, a child with horns. The protagonist, Ico, finds himself trapped in a castle alongside a young female, Yorda. Ico and Yorda are unable to linguistically communicate, and in order to escape the virtual space in which they have been imprisoned, they must work together. However, Yorda was designed as a largely dependent character. She will not move or perform any tasks unless prompted by Ico. In order for Yorda to move from one place to another, Ico must hold her by the hand and walk with her. It is through this mechanic of holding hands where character development is conveyed to the player.

In order to complete the game and escape the castle, the player must complete all of the stages with Yorda as a companion. Yorda has several skills which Ico does not - namely that of opening some locked doors. However, at the same time, Ico has several skills which Yorda does not. These include jumping over walls and climbing to difficult to access spaces. In order to do this, Ico must temporarily leave Yorda behind. In order to successfully complete a stage, the player must rely both on Ico and Yorda, which mechanically reinforces a bond between the two characters at the level of the character narrative. Likewise, there can be found in the game situations in which Ico has to leave Yorda behind in order to accomplish some task. When this happens, however, shadows emerge from the ground to attack both Ico and Yorda. Because Yorda is unable to
defend herself as Ico can, it is up to the player to guide Ico back to the place where
Yorda was left to wait and rescue her from her assailants, at times at his own peril. This,
again, reinforces the narrative notion of a growing relationship between the two
characters. The mechanics here build a narrative of two individuals who build a
relationship of trust and, perhaps, friendship because of a common goal. The relationship
between the characters, then, can be said to be procedurally generated.

It is possible that a few game designers and, perhaps, a few scholars might find
some parallels between the concept of procedural narrative here introduced and that of
emergent narrative. This is indeed the case. A strong feature of both emergent and
procedural narrative is the lack of elements traditionally tied to narrative. Both procedural
and emergent narratives lack the narrative voice and, to some extent, the linguistic
component of character conversations. However, procedural and emergent narratives,
very much like the character narrative and the player action, exist in different narrative
domains or layers.

In her conference paper titled "Emergent Narrative as a Novel Framework for
Massively Collaborative Authoring," Ruth Aylett, who coined the term emergent narrative
in a previous paper which she referred to as "preliminary thoughts rather than completed
work," defines it as "a narrative that is dynamically created through the interactions of
autonomous intelligent virtual agents and the user" (Kriegel & Aylett 2008, 73). Aylett
writes that "not only are emergent narratives non-linear but they are also unpredictable at
authoring time" (74). Although Aylett might have been better served by using the term
multicursal, her explication is fairly straightforward - there needs to be a user, there
needs to be a virtual agent, and there needs to be interaction. In her conference paper
*Narrative in Virtual Environments: Towards Emergent Narrative*, Aylett uses soccer as an
element of what an emergent narrative might be like. She explains that the events
resulting from the interaction between the players, if they can be arranged into a coherent narrative structure, result in an emergent narrative. She writes:

For example, the late substitution producing the winning goal; the new young player scoring on his début; the player committing a reprehensible foul who injures himself seriously in the process; the talented but petulant player who retaliates when fouled, gets sent off, and loses his team a crucial match. Arguably it is this emergent narrative structure that gives football and other multi-player games an appeal different from any gymnastics (Aylett 1999).

In the same conference paper, Aylett argues that the basis for an emergent narrative is free improvisation, that the user must play an active role and interact with other participants, and that "the narrative will only emerge through the right type of components interacting in the right type of way" (Aylett 1999). Emergent narratives, then, can be said to manifest from the interaction between the user and the virtual agents. In a video game text, this would be a narrative manifested through the interactions of the identity of the player (Murray 1997) or the real identity (Gee 2003) with that of the character (Murray 1997), the virtual space, and the NPCs which inhabit the virtual space. A procedural narrative, on the other hand, does not necessitate player interaction.

A procedural narrative has been defined as a narrative which is made manifest through the existence of video game mechanics. As examples, The Sims, Tokyo Jungle, and Ico were used. In light of Aylett’s ideas regarding emergent narrative, it could easily be suggested that these titles do not represent procedural narratives and that they are indeed emergent. However, the emergent narrative requires some degree of player input. Procedural narrative, on the other hand, does not. It is certainly a factor that can affect the procedurally created narrative, but it is not a requirement. In The Sims, once the player has constructed a space, each Sim will perform actions by themselves whether the player affects the mood of each individual character or not. A narrative will be manifested with or without the player’s input. Even if the player were to intervene, the emergent
narrative is created because of the interaction between the player and the virtual actors. This means that the emergent narrative is one which takes place at the level of the player action. The procedural narrative, however, revolves only around what happens in the text. Even when the player alters the emotions of a Sim, the procedural narrative is what results within the text itself.

In a previous section it was discussed how from the same series of events in the introduction to the game *The Elder Scrolls: *Skyrim*, three different narratives could be discerned. A similar distinction is to be made between the emergent narrative - a concept that concerns itself mostly with the concept of play and the result of the player's interaction with the actors in the game world - and procedural narrative, which focuses on the events which take place within the game space whether player input is extant or not, because of the mechanics which govern the game text. The emergent narrative can be said to be built from play chronotopes, while the procedural narrative is built from narrative chronotopes. In *The Sims*, then, the emergent narrative might read as “the player created a city where he placed several Sims, and through careful manipulation of emotions managed to make the Sim Clara and Sim Doctor move in together and create a family,” while the procedural narrative might read as “Sim Clara didn't pay attention to Sim Doctor during her daily routine until one day she fell and sprained her ankle. Sim Doctor tended to her wound, and they decided to get to know each other, which led to them moving in together and creating a family.” Likewise, in *Tokyo Jungle* the emergent narrative, if we adhere to Aylett's definition, would focus on player action and the reaction of the virtual actors in a form of feedback loop prompted by player action. The procedural narrative would focus on the behavior of the world and the virtual actors which populate the digital space. An emergent approach to *ICO* would focus on how the player guides
Yorda through the castle, while a procedural approach would discuss how the world's design and mechanics encourage the development of character relationships.

An extreme example of what a procedural narrative might take the shape of can be found in Alexander Galloway's 2006 book *Gaming: Essays on Algorithmic Culture*. When discussing the behavior of players and non-playable characters in a virtual world, Galloway describes possible actions as belonging to two distinct groups: machine actions and operator actions. Galloway writes that "machine actions are acts performed by the software and hardware of the game computer, while operator actions are acts performed by the player" (5). He then moves on to explain what he calls an ambience act. In an ambience act, Galloway notes, things continually change, although, he suggests, nothing changes that is of any importance. He explains how mechanical elements such as timers and scores remain static, but events continue to take place within the game world even without player input. He explains that in an ambience act, the machine continues operating while the player is idle. As example, Galloway invokes the game *Shenmue* (1999) and explains how the characters continue on their daily routines and the climate changes, thus creating a procedural narrative, but the character narrative does not progress (Galloway 2006, 10). It can be said, then, that the ambience act is a form of procedural narrative, and that emergent narratives are made manifest at the layer of player action when the player actively interacts with a virtual actor during an instance of procedurally generated narrative.

The final narrative element exclusive to video game texts which is rarely discussed is that of how video game texts have the ability of creating a narrative through the representations of space. One of the few articles which tackle this topic is Henry Jenkins’ *Game Design as Narrative Architecture* (2002). In the article, Jenkins correctly notes that although not all video games attempt to be narrative in nature, it is an
undeniable fact that in just as many texts, narrative is at the core of the play experience. He then notes that video games create narratives in a different way than traditional media, and focuses on the narrative potential of spatial configurations. Jenkins explains that a core element of video game texts is the ability of the player to navigate through what he calls "narratively compelling spaces," and argues that spatial narratives are molded into a cohesive structure by win states and by the protagonist's movement across the virtual space. He then defines four major modes of spatial narrative that exist within games.

The first of Jenkins' four spatial narrative modes is that of the evoked narrative. Jenkins explains that when spatial design (1) fosters a sense of immersion by presenting a familiar world or (2) offers alternative perspectives on a given narrative by modifying given details, the virtual space is evoking a narrative. Jenkins' second spatial narrative mode is the enacted narrative, which, he explains, is "structured around the character's movement through space and the features of the environment may retard or accelerate the plot trajectory" (2002). The embedded narrative, Jenkins' third identified mode of spatial narrative, is one where the virtual space takes the form of what Jenkins calls a "memory space whose contents must be deciphered as the player tries to reconstruct the plot" (2002). The fourth and last narrative configuration identified by Jenkins is that of which he calls a facilitator of emergent narrative. His concept of space as an engine for the creation of narratives is similar to Aylett's concept of the same name, except that rather than focusing on the interaction between the player and the virtual actors, Jenkins focuses on the spatial design of a game as facilitator for narratives. It can be said that Jenkins' comments show, to some degree, a parallel to the idea of procedural narrative here presented. Because Aylett defined an emergent narrative as one dependent on interaction and Jenkins' fourth domain of spatiality as narrative focuses on the virtual
space as a catalyst for storytelling, this form of narrative in which space lends itself to narrative exigencies based on player action will be referred to as spatially emergent narrative.

Perhaps one of the best example of a video game text featuring a spatial narrative can be seen in Valve's 2007 video game, *Portal*. The game *Portal* is a puzzle game where the reader / player takes control of an unnamed female avatar who wakes up and is required to complete certain puzzles in test chambers in order to test the latest scientific equipment developed by Aperture Labs. As the player progresses through the Aperture lab solving puzzles, the robotic voice of a central computer called GLaDOS prompts the player to complete the task and taunts the character by remarking how "at the end of the test, there will be cake." Despite the clear linguistic prompts given to the player as motivation, the narrative presented in *Portal* relies heavily on spatial configurations and visual representations of previous events for successful conveyance. This is not to say that *Portal* does not feature other types of narrative. Indeed, *Portal* offers the reader / player narratives at all three of the levels previously discussed, with the character narrative being simultaneously intradigetic and extradigetic. However, *Portal* simultaneously uses space as a narrative convention and relies on space perhaps even more so than other narrative elements.
One of the more interesting examples of spatial narrative in *Portal* can be seen in the level titled Test Chamber 16. In this area, the reader / player runs into a section of a wall where a platform has been dislodged and is being held in place by two large cubes. Should the reader / player decide to remove these cubes, the game will reveal a hidden room. In this room, the player will see scribbles written on the wall. The scribbles include a hand print, a tally, the phrase "can I help you?," and the words "the cake is a lie."

Although GLaDOS never tells the player what happened in the room and there is no explication given for the existence of the room, the implication is clear - at some point before the player's character awoke and reached Test Chamber 16, another subject had successfully completed the previous 15 challenges. When that subject reached Test Chamber 16, he or she discovered this "secret room," where a small improvised living space was created. There, the character in question lived for, presumably, over a hundred days if one is to assume that the tally depicted in the room is of days spent living in isolation, until eventually he or she went crazy and continuously began to scribble on
the wall that "the cake is a lie." The narrative is not told through aural or textual cues, nor is it created through player participation or player interaction with virtual actors. The narrative is not created because of the existence of game mechanics, nor is it conveyed to the player through cut-scenes. Instead, it is the space itself which tells the story of what happened and, to some extent, when it happened.

There are three broad categories of narrative which can be said are more easily expressed in ludic texts than in other forms of media, with procedural narrative being unique to this type of textuality. Emergent narrative is the narrative that is created through the process of interaction between the player and virtual actors. Spatially emergent narrative is the narrative which is made manifest thanks to spatial configurations within the video game text. Procedural narrative is the type of narrative which arises because of the mechanics which govern the video game world. The fact that these three distinct forms of narrative exist at different levels does not mean, however, that they are mutually exclusive. Indeed, it may very well be possible for a video game text to convey a procedural and emergent narrative simultaneously. As it was previously explained, The Sims and Tokyo Jungle are examples of this phenomenon. Likewise, it is possible for a narrative to be conveyed simultaneously through space and mechanics, as is the case of Ico, or through space and interaction with virtual actors, as can be seen in Portal. It is, likewise, possible for a video game to feature all three types of narratives simultaneously. One such example is Mirror's Edge (2008). In Mirror's Edge, the reader/player takes control of the "runner" Faith, a member of an underground organization whose job is to run across the rooftops of the city delivering various packages. The text does include elements of traditional narrative, but this section will focus on the video game exclusive modes of narrative.
The spatial design in Mirror’s Edge can be said to adhere to a distinct aesthetic. The city is colored mostly in white, with elements such as ledges, planks, and cranes prominently featured as red. The game’s mechanics allow the player to jump from rooftop to rooftop in order to avoid the police force, but it does not force such actions. Although the option of running is certainly available to the reader/player, and is, in fact, encouraged by the spatial design, the player also has the option to fight against any police officers. In this game, the space tells a narrative that focuses on the traversal of space, the mechanics attempt to provide a narrative of uncertainty, and the interaction with actors will convey a narrative of confrontation. Certainly, players are able to make the choice between fight or flight, and should they choose either, they will be able to consider varied approaches to each situation. At times it may be more viable to run up to an enemy in a head-on confrontation, while in other situations it may be more prudent to sneak around the virtual space and disarm the opposing character. Likewise, at times it
may be worthwhile for a player to consider jumping from one rooftop to another in haste in order to escape an enemy element, while at others it might be a more prudent choice to hide and wait for a threat to pass. All of these possible configurations to interacting with virtual actors and with the world itself simultaneously take place in a virtual space because of the mechanics which govern the text. The play experience can be said to occur when such a convergence of interaction, procedure, and space takes place, and it occurs simultaneously at the level of the play action and of the character narrative. Such situations have been referred to by scholars as play. However, this term simultaneously downplays the role of narrative in the meaning-making process of the text while focusing on the purely rules-based aspect of games and painting all play as similarly non-narrative. There is, however, a difference between the largely abstract play present in a game such as, for example, *Tetris*, and the type of play found in a narratively rich text like *Mirror’s Edge*. As such, the act of play must be differentiated from the object of a play narrative - that is, the narrative which is created when a player interacts with one or more elements in a virtual space that is governed by mechanics.

4.5 Conclusion

In this chapter, a comprehensive framework for understanding how narrative configurations are manifested in video game texts has been constructed. This framework first takes into account the type of media in which the text is contained and the amount of effort expected of the reader to traverse the text in order to situate the narrative within a taxonomy of ergodicity versus media container. The framework then considers whether the text allows for varied outcomes to a given narrative - that is, the cursality of a narrative - and whether the narrative is structured in temporally sequential way - that is, whether the narrative is linear or nonlinear. In order to determine these factors, Bakhtin’s concept of the chronotope was expanded in order to account for the nuances of
unrealized, or sidelines, narrative possibilities, the multiple coexisting narrative layers that exist within video game texts, and the potential existence of time-looped narratives as experienced by the "real" identity of what Murray calls the player (1997). The framework then addressed the thus far ignored narrative elements unique to video game texts, namely those of emergent narrative, spatially emergent narrative, and procedural narrative, and addressed the need for a type of narrative construct in which all previously discussed elements exist and which is distinct from the action of play. This concept was named as the play narrative. The criteria here discussed, if applied to any video game text, should be able to deconstruct the composition of the text and explicate the existence and effects of all possible narrative configurations on the experience of the reader / player. This application of the narrative framework here explicated will help the reader create a lens in order to understand how ideas are explored in the text through narrative configurations and visual representations of game elements as well as understand how the text's narrative creates meaning, presents themes, and makes arguments. These, however, are questions that will be explored in the chapter dealing with the rhetoric of video games.
CHAPTER 5
THE RHETORICAL SPECTRUM OF VIDEO GAMES

5.1 Introduction

In the previous chapter, the narrative dimension of video game text was discussed. There, a comprehensive framework for understanding how narrative is manifested in video games was proposed. This framework can be applied to individual texts or franchises in order to understand how narrative is structured and to understand generic, temporal, and thematic elements found within a video game's narrative. In order to fully understand how ideas, concepts, and authorial intent are conveyed through games, however, it is not sufficient to focus on a single element of the text. Just as it is true that in order to fully understand the messages being conveyed in a comic book or graphic novel one would need to consider not only the linguistic elements presented therein, but also the pictorial representations (Postema 2007, Badman 2010, Hatfield 2005, Round 2007), in order to fully comprehend what a video game text is attempting to convey one would have to analyze the game at a narrative, ludic, visual, and contextual level.

Just as the previous chapter addressed narrative dimensions represented in video game texts, this chapter will address ludic and visual elements in order to demonstrate that the rhetorical power of procedurality (Bogost 2007) is not the only factor to consider when unlocking the meaning of the text. The chapter will first address rules of play as mechanics and build on some of the concepts introduced in the previous chapters as applied to the concepts of play rather than narrative. It will then discuss three distinct approaches to the design of virtual spaces and explain why Aarseth's concepts of cursality, while useful for narrative analysis, are insufficient when considering questions of spatial and play design. The chapter will then proceed to discuss how mechanics and
narrative work together in order to create remediated representations of both abstract and real while drawing from and expanding on the concepts first introduced by David Bolter in his 2000 text *Remediation: Understanding New Media*. Attention will then be given to Bogost’s ideas of procedural rhetoric. His framework will be applied to a variety of texts in order to discuss how games make arguments mechanically, while simultaneously exploring how mechanics can be contextualized with visuals and narrative elements in order to change the claims being made by similar represented systems.

Expanding on the exploration of visual elements, the chapter will then turn to theories of visual rhetoric in order to further understand how visual elements are arranged on screen in certain ways in order to persuade players into certain behaviors or ideologies. Attention will then be given to how narrative elements and configurations can be used rhetorically. Finally, the convergence of visual, narrative, and ludic elements will be analyzed as a single cohesive unit in order to demonstrate how whether these elements all complement each other in order to create a cohesive play experience can result not only in a well constructed play experience, but in a well constructed play argument.

5.2 Design, Play Mechanics, and Remediation

In the previous chapter, it was discussed how a narrative can follow a structure that adheres to a traditional dramatic form, an open narrative, or networked composition. A traditional dramatic form is one where the narrative is presented in a form that is consistent to that presented by Aristotle and Freytag. The networked narrative can be seen as an extension on the tree structure narrative and is one where the story has multiple outcomes and a number of fixed chronotopes. The open narrative is one which allows the reader/player to fully create a unique narrative based on elements placed in the virtual space. These concepts of traditional, networked, and open narratives can be used not only to understand narrative configurations, but also the design of the virtual
space and play. Before discussing approaches to world design, however, it might be prudent to explicate how there exist different approaches to the design of play.

5.2.1 Play Solvency

The concept of play design is one that is different from narrative structure and spatial composition and which has two distinct approaches. The first approach to play in video games is one where any given problem - that is, any puzzle, enemy encounter, or any other situation encountered by the player - can only be solved in one way. These are situations in which the player is expected to, for example, interact with a series of switches in a specific order or hit an enemy in a specific spot, in order to progress to the subsequent play section. Borrowing the term from the field of mathematics in which a given formula can only be solvable in one unique manner, this approach to play design will be referred to as unisolvent play.

A prominent example of unisolvent play in practice can be observed in Valve's 2007 first person puzzle video game, Portal. In Portal, the player takes control of Chell, who is woken up from stasis in order to participate in weapons testing. These tests require the player to use a portal gun in order to navigate from one end of the test rooms to the other. Between the entrance and the exit of each room, the player will find walls, pits, spikes, automatic defense systems, and other deterrents preventing the player from reaching the exit. Although the player is allowed to walk around each individual room and solve the problem of how to reach the exit, each room has only one possible solution to the problem. In order to exit the first test chamber, the player must step on a switch in order to open a release system, pick up an object which the game refers to as the Companion Cube, and place the Companion Cube on said switch in order to permanently open the door leading to the exit. Later in the game, in the first step required in order to exist test chamber fifteen, the player must create a portal at the top of the room and
another on the floor aligned with the portal created on the ceiling. The player will have to
jump in through the portal on the floor, exit through the portal in the ceiling, jump again
through the floor in order to acquire momentum, and be propelled over a wall impeding
progress. See figure 4.1 below. Regardless of player attempts to circumvent this solution,
the game was designed so that players are forced to go through this process if they wish
to progress. This is a practical example of unisolvent play - that is, a play situation in
which there exists only one possible solution.

Figure 9: A Problem Solving Sequence from Portal

The second approach to play is one where any given problem has multiple
solutions. Some of the solutions might be less than optimal, but they are nevertheless
available to the player. This approach to play offers players multiple possible solutions to
a given problem, as well as different ways in which to approach engaging an enemy.
Expanding on the borrowed term of unisolvent play, this approach to play design will be
referred to as multisolvent play - that is, a play situation in which multiple solutions can be adapted.

One example of multisolvent play in practice can be found in *Mirror's Edge*. In this text, the player takes the role of Faith, a smuggler who runs through the rooftops of the city while evading cops in order to transport goods for her clients. Because the game attempts to imitate the mechanics of parkour, players are given the option of navigating any given space in different ways. A player may, for example, run towards the end of a building, jump off the ledge, and attempt to land on a soft surface, or take a longer but safer route, jump over a fence, and climb down a pipe in order to reach the same exit spot. Likewise, when the player is confronted by a hostile non-playable character, the player is able to consciously decide whether to engage said character in combat or flee the area.

Certainly, the concept of play being unisolvent or multisolvent might invoke images of Aarseth's concepts of cursality as applied to video game texts (Aarseth 1997). The problem with Aarseth's concept is that it was limiting in both scope and application. To Aarseth, an entire text is considered as unicursal or multicursal, and if the text is spatial, ludic, and narrative, then the term would apply to all aspects of the text. This lack of qualification is problematic in that it does not allow for nuanced inquiry into distinct aspects of the text. Furthermore, Aarseth's model assumes the text to be unicursal or multicursal in its entirety. This deters the observer from considering the text's mode of engagement by segments, as it assumes that the entire text is designed one way or another. Under the model and with the terminology here proposed, a text can be considered as featuring both moments of unisolvent play and multisolvent play. Furthermore, the solvence of a given moment of play, or that of the text as a whole, does not correlate to narrative or world design considerations.
If a text features exclusively unisolvent play, then the text can be said to be uniformly unisolvent. Examples of this approach to play can be seen in titles such as *Final Fight* (1989) and *Lego Marvel Superheroes* (2013). In both of these titles, the player takes control of an avatar and guides it through a predetermined virtual space. In *Final Fight*, the player will only encounter one type of obstacle - the non player character enemy - and the only way to overcome that obstacle is to punch it. Likewise, in *Lego Marvel Superheroes*, players will encounter enemies which must be defeated. However, these games also feature a second type of obstacle in which the player must select a character with the ability to build Lego objects and create new elements from already existing pieces. This process, however, is automated, and the characters with the building skills are predetermined by the creator of the text. This means that in every play through the player will use the same characters and fight the same enemies in the same way while stopping at certain key spaces to have a predetermined character build an already defined structure. Every problem has a predetermined solution; therefore, it can be said that these games are uniformly unisolvent. Likewise, if a text features exclusively multisolvent play, the text can be said to be uniformly multisolvent. One example of a uniformly multisolvent text is *Tetris* (2012). In *Tetris*, the player takes control of falling, rotating, randomly generated blocks. As the blocks fall, players arrange the block in whatever order they wish. Each block can be placed in a number of places, and subsequent blocks can be placed adjacent to or separated from previously existing blocks. Certainly, there is a mode of arranging blocks that might be practically optimal to others. However, this does not negate the existence of continued multiple possible solutions for the arrangement of every single falling block. This makes the game entirely multisolvent.
There are, of course, a number of video game texts which feature both moments of unisolvent and multisolvent play. This is one of the major problems with Aarseth's mode of classification by cursality - it does not acknowledge the existence of different approaches to play. The titles originally mentioned in this chapter, *Mirror's Edge* and *Portal*, both feature instances of unisolvent and multisolvent play. *Portal*, a video game text which early on presents the player with a series of unisolvent test chambers, later becomes a space filled with traps which can be circumvented in various ways. Likewise, the worlds represented in *Mirror's Edge* give players a varied experience, as they shift between sections of unisolvence where the player must jump on certain platforms in a certain order and sections of multisolvence where the player can choose to jump through platforms, climb through drain pipes, or run on walls. It can be said, then, that video game texts - and perhaps all texts involving some kind of ergodicity - exist in what will be called, again, borrowing from mathematics, a solvency scale in which one extreme features uniquely unisolvent video games, the other extreme features uniquely multisolvent video games, and the majority of video games fall somewhere in between.

5.2.2 World Design

Now that approach to play design has been addressed, if one is to understand how design, narrative, and play converge, one would have to pay attention to questions of spatial design. In order to understand how virtual worlds are composed, one could turn to some of the elements discussed in the previous chapter regarding narrative. As it was previously explained, narrative can be composed and conveyed to the player in traditional, networked, or open arrangement. Similar claims can be made about spatial design. In video game texts, there are three predominant modes of spatial design.

The first approach is one where the play space has a single entry point, a single exit point, and a single way of reaching the exit point. The obstacles presented to the
player, or play, can be unisolvent or multisolvent - one could, for example, choose to fight or flee from an enemy - but the world itself is experienced entirely as a straight line. Whether the player is controlling an avatar or the text places the player in the game through a first person perspective, or whether the virtual space is represented from a two dimensional lateral perspective or from a bird's eye perspective, if the player, or player's character, is placed in any given spot at the beginning of play and there is only one spatial route to reach the exit space - that is, if the text requires the player to continually move towards the right side of the screen or from the bottom to the top of the virtual space. Aarseth would call this spatial design unicursal, but - again - Aarseth's term seems to bundle world design with play. This is undesirable if one is to fully understand all elements of a video game text. In order to differentiate this approach to world design from unisolvent play and traditional dramatic narratives, the design approach to virtual spaces with one point of entry, one exit, and one possible route will be referred to as hallway design.

Examples of this approach to virtual space design can be observed in the first half of the world represented in *Final Fantasy XIII*. In this game, the player takes control of Lightning as she attempts to escape from a theocratic military. Although play is multisolvent in that players have the option of deciding whether to confront or flee from enemies, and should the player decide to confront an enemy there are various options as to how to proceed with the encounter, the space which the player traverses has a single entry point and a single exit point, and there is only one predetermined path to traverse in order to navigate from one point to another. The player may have the ability to move back and forth in the virtual space, but this does not lead to the discovery of alternate paths or exit points. The space is, effectively, a long corridor filled with obstacles. For reference, see chart 5.2.
Figure 10: Maps of Hallway Space in Final Fantasy XIII

The second approach to world design creates virtual spaces in which (a) there is a single point of entry and one or more exit points and in which there are multiple paths of navigation available to advance from one point to the other, and (b) there is a single point of entry, one or more points of exit, and one route to navigate from one point to the other, but in which there are also several divergent pathways, many of them leading to undiscovered spaces or virtual actors, for the player to explore. This approach to spatial design allows the author of the text to retain creative control by ultimately guiding the player into a predetermined spatial coordinate, while simultaneously allowing the player to explore sections of the virtual space at their own pace. This type of virtual space will be referred to as a divergent space.

A recent example of this approach to spatial design can be found in The Last of Us (2013). The first virtual space represented in the game is Austin, Texas. Here, the
player takes control of 12 year old Sarah as she explores the house during a specially
dark and stormy night. The player is free to navigate through the house at their own
leisure, but the game will not progress until the player reaches a certain predetermined
spot in the house. After some events regarding a viral outbreak take place, the player
then takes control of Joel, Sarah's father, as he attempts to lead his family away from the
city and unto safety. As the text advances, players are given control of Joel and given the
ability to explore large spaces in Massachusetts, Pennsylvania, Wyoming, Colorado, and
Utah. However, player movement is restricted in a single direction and the latter spaces
represented in the text are not discovered until the player guides Joel to a certain spot in
the previous space. In figure 4.3, one such space is represented. Depicted in the chart is
a map of the top floor of a Utah hospital. In this space, players must guide Joel to the
operating room in order to prevent a group of scientists from dissecting 13 year old Ellie
in order to investigate the chemical composition of her brain. Players may guide Joel
through any chosen route, but ultimately there is a singular exit point.

Figure 11: Map of Divergent Space in The Last of Us
The hospital space in *The Last of Us* serves not only as an example of divergent spatial design, but also as a warning as to why Aarseth’s concept of cursality, while useful when discussing narrative, is insufficient when approaching spatial design. Each of the spaces in *The Last of Us* can be explored and navigated through in different ways. It is up to the player if Joel will jump over a window to enter a building or if he will go around the building and enter through one of the access points. This, according to Aarseth, would designate a given space as multicursal. However, because the player must guide Joel to a predetermined spot and because the text progresses from one general area to the next in an order predetermined by the author, if one is to follow Aarseth’s framework, it could be said that the space represented in the text is also unicursal. This is, of course, problematic as it does not allow for a nuanced qualification. Furthermore, if one is to suggest that space can only be represented in two ways, as either unicursal or multicursal, then one would have to assume that the design here referred to as hallway design would be the only unicursal type of space, while both divergent space here discussed and open spatial design would be considered as belonging to the same multicursal category.

An open space is one in which the designer of the virtual space creates a virtual space to which the player has complete access. This approach to spatial design has often been referred to as sandbox or free-roam world design, with the terms often being used interchangeably with that of open world. However, the term “sandbox” implies a play mechanic in which the player has complete control over all the elements in the virtual space, similar to that of the *Disney Infinity Toy Box* discussed in the previous chapter, while free-roam refers to the style of play emergent from the combination of a mechanic lack of exploration restrictions and a world that is immediately made available.
to the player - that is, the term "open" refers to the world, the term "sandbox" refers to a type of game, and the term “free-roam” refers to a style of play.

Examples of open worlds can be seen in many contemporary video game texts. One of the most recent and unlikely texts featuring open world design is EA’s *The Crew*, a 2014 racing video game. This game features virtual representations of major U.S. cities such as New York, Las Vegas, and Dallas. Players are given the ability to drive to and from any city at any point during the game, and although the game actively encourages players to take an optimal route when accomplishing certain tasks, there are no artificial barriers preventing the player from going anywhere else. Spaces which attempt to imitate situations of real life play, such as a basketball court or a board from a tabletop game, will be considered as open spaces, as players have access to the entirety of the represented spaces.

Finally, it is worth noting that although each mode of spatial design is distinctly unique, there are several texts which combine two or more modes of design. In *Final Fantasy XIII*, for example, the first half of the game which takes place in the planet Cocoon features exclusively hallway design in its spaces. However, the second half of the game, which takes place in the planet of Pulse, introduces the player to a vast open space in which the player is given the ability to travel to any place at their leisure. Likewise, the world of the video game text of *The Elder Scrolls V: Skyrim* features an expansive open world where the player can become immersed in exploration, but each of the caves and dungeons that exist within the open world adhere to both hallway and divergent spatial designs.

Any given space designed in a video game text can be considered as being a hallway, a divergent space, or an open space. Likewise, play can be categorized as unisolvent and multis solvent. Because the event of play must always happen in a given
space, it can be said that play and space intersect and converge into several individual play-spaces. As previously mentioned, video game texts do not necessarily have to subscribe to a single approach to play or spatial design. This means that video game texts can be classified as a whole belonging to a certain category, but also that moments within a single video game text may be divided and considered individually. This will allow for a more thorough analysis of the rhetorical and remeidative properties of video game texts.

If one is to accept that video game texts exist within specific intersecting classifications of play and space, and that video game spaces can be combined and do not have to exist in the absence of each other, then this would result in texts potentially taking one of seven distinct spatial design configurations, and that each of these configurations could be placed in a play solvence spectrum. This will allow one to better determine how the text in question remediates media and reality and how its design lends itself to the creation of arguments.

5.2.3 Remediating Space and Play

In his book titled *Remediation*, David Bolter makes an argument about culture in which he argues that societies constantly engage in a cycle of media production in which older forms of media are mediated through newer, more immersive forms of media. He further argues that while media attempts to integrate older forms, it simultaneously attempts to discard any evidence of the object being mediated. He calls the desire of a media artifact to be considered as an extension of reality, or at least a mimetic representation of the ontological universe, a quest for immediacy. These two evolutionary imperatives, Bolter notes, while existing simultaneously, can be seen as contrarian to the other. Bolter then suggests that this is a reflection of society. He writes that "our culture
wants both to multiply its media and to erase all trace of mediation: ideally, it wants to erase its media in the very act of multiplying them" (5).

In explaining his argument, Bolter correctly asserts that new forms of media borrow from older media in an attempt to be recognized as cultural productions, but simultaneously attempt to erase the constraints that mark them as obvious artifacts which need to be mediated by the reader / viewer in a desire for immediacy. He writes that it is this desire for immediacy that "leads digital media to borrow avidly from each other as well as from their analog predecessors such as film, television, and photography. Whenever one medium seems to have convinced viewers of its immediacy, other media try to appropriate that convention" (9). Bolter's comments resonate as true not only when looking at the world wide web, something which he does at length in his book, but also when one considers video game texts.

Similar in practice to the world wide web, video game texts can be said to be one of the most hypermediated forms of textuality. Simultaneously, they are also proven to belong to a family of media which surpasses all others in its potential for immediacy. This is especially true in first person narratives such as *Gone Home* (2013), where the player takes control of 21 year old Kaitlin Greenbriar as she returns home from an extended trip. Her home, however, is empty. The text places the player in the shoes of Kaitlin by forcing a first person perspective, thus forcing the player not only to control, but to be Kaitlin. The lack of a heads-up display or any other form of signification pointing to the perspective being presented as being one of a video game further contributes to the sense of immediacy conveyed by the text. Because there are no life bars, timers, or score counters, the player can become fully immersed into the game world. However, at the same time *Gone Home* is composed of elements borrowed from other media. Just as the virtual space represented is rendered from a set of blueprints which are reproduced in the
video game text in the form of a map, the elements populating said space - tables, columns, and desks, for example - attempt to imitate their authentic counterparts. Furthermore, as players explore the virtual space, they will be able to find virtual representations of audio tapes. When these are inserted into virtual tape players, the recorded music will play through the computer's audio systems. Furthermore, scattered throughout the house, players will find a number of notes and virtual books to read from. All these elements demonstrate how *Gone Home* simultaneously strives for immediacy and hypermediacy. This struggle between immediacy and hypermediacy is what Bolter calls remediation.

Although it may appear that media remediation is a relatively new phenomenon that owes its existence to digital media, Bolter notes that this is not the case. He argues that the process of remediation can be observed throughout "the last several hundred years of Western visual representation" (11). Bolter explains that "a painting by seventeenth century artist Pieter Saenredam, a photograph by Edward Eston, and a computer system for virtual reality are different in many important ways, but they all attempt to achieve immediacy by ignoring or denying the presence of the medium and the act of mediation" (11). This means that in painting just as in photos and video game experiences such as *Gone Home*, the purpose is to "put the viewer in the same space as the object viewed" (11). Likewise, when addressing hypermediacy, Bolter argues that the concept can be traced at least as far back as medieval Europe, where in manuscripts created by scribes "the large initial capital letter may be elaborately decorated, but it still constitute part of the text itself, and we are challenged to appreciate the integration of the text and image" (12). Remediation, then, can be understood as a process by which new media appropriates and reforms older forms of media while attempting to erase the borders between media and reality. This leads to what Bolter calls a rhetoric of
remediation - that is, a rhetoric which "favors immediacy and transparency, even though as the medium matures it offers new opportunities for hypermedia" (60).

The implication of the rhetoric of remediation for video game texts is that in order to fully understand the rhetoric of a given text, one must understand the rhetoric of all its elements. If one is to make a claim regarding the messages presented in a given text, then one must understand the arguments being made by the mechanics, or the text's procedural rhetoric, the suggestions being made by the visual elements, or the text's use of visual rhetoric, and the expectations being conveyed by the narrative, which will be called rhetorical narrative. Only then can one meticulously unlock the meaning behind a given text - a task that seems gargantuan given the limitations of contemporary frameworks of video game textual analysis. In the following sections, the rhetorical elements of video game texts will be discussed.

5.3 A Rhetoric of Procedurality

The idea of procedural rhetoric as applied to the analysis of video game texts involves considering the notion that video game texts and other similar texts can make persuasive arguments through rules and mechanics. In his 2007 book *Persuasive Games*, Ian Bogost, who coined the term, explains that "procedurality refers to a way of creating, explaining, or understanding process" (3). These processes, he notes, define the way in which one thinks about and engages with the world. Because "rhetoric refers to the effective and persuasive expression," then a rhetoric of procedure, or procedural rhetoric, "is a practice of using process persuasively" (3). In other words, to Bogost, any procedure that is used persuasively is, by definition, employing procedural rhetoric. Because, as Bogost notes, video games "represent how real and imagined systems work," they can be considered as a type of text that is advantageously positioned to use systems as means of persuasion, as "they invite players to interact with those systems
and form judgments about them” (vii). To Bogost, procedural systems and the persuasive
techniques which they employ are “unlike verbal discourse, which relies on deeply
ingrained metaphors that most people take for granted,” as they “deploy more abstract
representations about the way the world does or should function” (x). Certainly, video
games do make arguments through procedure. To understand why this is the case,
however, it becomes paramount to understand where the ideas that compose procedural
rhetoric evolve from, what they are, and how they can be applied to individual texts.

5.3.1 Where Process Comes From

Bogost's ideas regarding the rhetoric of process in video games owe their
existence to a philosophy of video games best articulated by Steven E. Jones in his 2008
book *The Medium of the Video Game*, where he writes that “video games are
simulations, systems of rule-based possible acts, and abstract structures” (93). This
reductive way of thinking about video game texts has its origins on Aarseth's (1997) and
Juul's (2001) reductive approaches to the analysis of the medium, and grew in part
thanks to the work of scholars of narrative seeing them as interactive systems.

One of the more noted works dealing with narratives in an interactive setting is
Mark Stephen-Meadows' 2003 book *Pause and Effect*. In his work, he attempts to frame
all media and interaction as narrative. However, while doing so, he focuses on what he
calls interactivity as “a continuing increase in participation” (2003). He states that
interactivity has three core principles which can be interpreted as binary systems.
Stephen-Meadows writes that "the first principle, the principle of input / output, says that
input should create output and the output should create input" (39), that "the second
principle, the principle of inside / outside, says that a dialogue should be created between
the internal and external worlds" (40), and that "the third principle, open / close, says that
the system should get better the more it's used" (43). By framing narratives as being
subordinate to interaction, Stephen-Meadows is prioritizing the analysis of systems over that of narrative, rather than the opposite. This approach to the analysis of video game texts is what ultimately led to Bogost's conclusions that the rhetoric of video games can only be discerned through analysis of game mechanics. Before coining the term of procedural rhetoric on 2007, however, Bogost first created a theoretical foundation drawing from both the fields of literary theory and computational sciences. This framework can be found in his 2006 text *Unit Operations*.

In *Unit Operations*, Bogost doesn't discuss procedural rhetoric. Instead, he focuses on creating a framework of analysis from theoretical constructs from both the fields of literature and technology. The core element in Bogost's framework is the unit operation. A unit, Bogost contends, is an element which "can be constitutive or contingent, like a building block that makes up a system, or it can be autonomous, like a system itself." (5). He further notes that at times systems "become units in other systems" (5). He then defines an operation by using a framework of system analysis where it is interpreted as "a basic process that takes one or more integral inputs and performs a transformation on it" (7). He explains that "an operation is the means by which something executes some purposeful action" (7). If one is to accept Bogost's interpretation of unit as applied to a video game text, then the implication is that every element, whether ludic, narrative, aural, or aesthetic, will be considered as a unit. In a video game text such as *Final Fantasy XIII*, each individual character is as much of a unit to be deconstructed and analyzed as each individual track, each narrative chronotope, each element in a map, as well as each map individually, and every character skill and game mechanic. Because Bogost's model considers unit operations as "models of meaning making that privilege discrete, disconnected actions over deterministic progressive systems" (3), it becomes
the critic's imperative to understand how each individual unit operates in order to create a discrete reading of the text.

Although Bogost criticizes Aarseth's formalist modes of analysis for favoring cybertextual functionalism over media centrism (Bogost 52), Bogost's own modes of analysis are lacking due to their focus on ludic elements. Bogost's mode of unit operations can be considered not as a antagonistic to Aarseth's approaches, but rather as an extension of said modes of analysis. Despite Bogost's intention to create a framework that would allow for comprehensive analyses of all of a video game text's elements, his model has been proven to work when engaging with the analyses of a text's mechanics, but the way in which it conflates and groups together narrative, aesthetic, aural, and ludic elements into a singular cluster of units limits the possible approaches that one could use when engaging in inquiry of how specific units interact with each other. This has been noted by scholars, some of whom have proposed that Bogost's model be complemented with other theoretical frameworks (Voorhees 2009).

Bogost's framework as an extension of Aarseth's work can best be seen in his 2010 book *Persuasive Games*, where Bogost expands on the framework laid out in *Unit Operations* and proposes the concept of procedural rhetoric.

Although in *Persuasive Games* Bogost concedes that "not all procedures are expressive in the way that literature and art are expressive," he argues for "a comparative criticism of video games that would connect them with so-called high art - poetry, literature, and film in peculiar" (vii). He does so by arguing that "procedural figures have much in common with literary figures like metaphor, metonymy, or synecdoche" in that "they are strategies for authoring operations for particularly salient parts of many procedural systems" (13). He further argues that procedures are "sometimes related to ideology" in that "they can cloud our ability to see other ways of thinking" (3). Bogost
further reminds the reader that "process that might appear unexpressive, devoid of symbol manipulation, may actually found expression of a higher order," as is exemplified in the case of bureaucracy, which "constraints behavior in a way that invokes political, social, and cultural values" (5). This proposition suggests that procedure is, to some extent, rhetorical. Bogost addresses this by defining procedural expressions as systems that "must entail symbol manipulation," as well as "the construction and interpretation of a symbolic system that governs human thought or action" (5).

Although for his definitions on procedure Bogost draws from comparatively modern theories of computational analysis, his usage of the term rhetoric finds its roots in Aristotle's works. Bogost shares his interpretation Aristotle's work by suggesting that "for Aristotle, rhetoric is designed as the faculty of observing in any given case the available means of persuasion" (18) before explaining that the concept of rhetoric has since been expanded "to account for new modes of inscription - specially literary and artistic modes" (19). However, Bogost notes that "rhetoric in writing, painting, sculpture, and other media do not necessarily make the same direct appeals to persuasion as oratory," that rhetoric can now refer to different forms of artistic "expressions including writing, speech, or art," and that good rhetoric "both accomplishes the goal of the author and absorbs the reader's views" (19).

Bogost's rationale for incorporating rhetorical modes of analysis with procedural units and systems derive from similar practices in the field of visual rhetoric. In his book, Bogost reminds the reader that Kenneth Burke expanded the domain of rhetoric into the visual to a mode where linguistic forms are still central to the understanding of a text, but that also acknowledges symbols and nonverbal domains as rhetorical. Bogost explains that because "visual communication cannot simply adopt the figures and forms of oral and written expression, a new form of rhetoric must be created to accommodate these
media” (21). He then suggests that in a similar manner, “visual rhetoric cannot help us address the rhetorical function of procedural representation” (24), as “images are subordinate to process” (25). He finally concludes that procedural rhetoric, as he intends it to be applied, differentiates from classical models of rhetorical understanding in that “following the classical model, procedural rhetoric entails persuasion,” whereas according to the contemporary model proposed by Bogost “procedural rhetoric entails expression - to convey ideas effectively” (29). To Bogost, procedural rhetoric of representation is successful not when the reader accepts the claims being made by the text, but when the reader understands them. Bogost suggests that procedural rhetoric happens, then, not when the audience is persuaded to change their views on the issues represented in a text, but when they understand that the text is attempting to make a claim to begin with.

Bogost’s differentiation of procedural rhetoric as understood through a classical lens versus how it is interpreted through modern perspectives, although perhaps warranted, fails to consider the possibility that the purpose of procedural rhetoric is not one to be understood as an exclusive binary, but rather as a cohesive whole. The implication is that any given procedure can be rhetorical in the contemporary sense of conveying ideas effectively - that is, procedures are successful, if one adheres to Bogost’s model, when the audience understands the concepts explored and reinforced through process - as well as in the classical sense of attempting to persuade the reader into action or an ideological perspective, and that it is entirely possible for a text to succeed at conveying an idea and fail at persuasion, succeed at persuasion despite failing to convey an idea coherently, fail at both conveying an idea and at persuading the reader, or succeed both in conveying an idea effectively and persuading the reader.

In his analysis of Molleindustria’s Kosmosis: a communist space shooter, Mike Treanor (2009) makes the argument that in many situations in which designers attempt to
use procedural rhetoric to convey a message, their lack of understanding of procedural frameworks result in the production of a text whose message is not that which was originally intended. The game places the player in control of a red dot whose function is to float around space while collecting other red dots and sporadically activating a special skill that pushes green dots off the screen. Treanor suggests that although the text is attempting to convey an idea and persuade the readers towards specific ideologies, it fails because of how the procedural rhetoric implemented do not accurately depict or criticize said systems. To Treanor, despite the developer's statement that the text represents the ideological struggle of "a hegemonic set of non degenerated socialist values," the game "failed to actually make any worthwhile claim about the supposed dangers of capitalism, the war machine, or socialism." To Treanor, the message of Kosmosis is to "use your abnormal special abilities to amass an army and destroy the enemy." This is a clear example of a disconnect between the text's intended purpose and argument and the message conveyed to the reader. Kosmosis, then, can be considered as a text that fails at both conveying ideas and at persuading the reader. The text Turboflex (2003), by the same collective, however, can be said to succeed in its critique of current employment practices.

The premise of the game is that in the year 2010, employees' need for mobility due to constant shifts in employment made it necessary for Turboflex Incorporated to create a city-wide mass transit system that relies on suction tubes. This system "makes it possible to dislocate employees in real time, depending on demand" (Molleindustria, 2003). The player is given control of an unmarked character who is sucked into the tube and dropped in a randomly selected place of employment. The player will then command the character to perform repetitive tasks. When employed in McDonalds, the player's job is to hand the customers their meal, while when employed in a factory the player's role is
to insert a single screw into machines in a production line. These actions are performed with the push of a single button. As players fail to perform their increasingly hectic duties, they lose reputation points. Once the player loses all reputation points as depicted in a life bar, the player is blacklisted and placed on the streets as a homeless avatar whose only recourse is to play music for the passer-bys. The game thus conveys the idea that contemporary employment opportunities available to those born into poverty is repetitive, boring, and pointless while reinforcing notions that employees have no control over their situation, that one should be prepared to face workplace maltreatment if one wishes to remain employed. At the same time, the text manages to make a commentary on the socioeconomic conditions of those living in poverty.

Although it is clear that the game succeeds in conveying an idea, the question of whether it successfully persuades the player to accept the idea of a deficient employment system that does nothing but maintain those without resources or connections in the lower social classes depends entirely on the player's life experiences and the predisposition to accept such claims as the game does not present any factual figures nor does it present a truly mimetic representation of the systems in question, elements that would make persuasion stronger. This game, like Tax Invaders, which Bogost analyzes in his text, is poor at making rhetorical appeals, but excels at framing an issue within an ideological framework (Bogost 106). Games that succeed at both framing an ideology and in making rhetorical appeals, however, are referred to as persuasive games by Bogost (46).

When discussing persuasive games, Bogost uses as example the genre of political games. He writes that "political video games use procedural rhetorics to expose how political structures operate, or how they fail to operate, or how they could and should operate" (75). By playing political games and attempting to discern the claims they make
about the systems being represented, Bogost suggests, one can "get an unusually
detached perspective on the ideologies that drive them" (75). Because these games can
alter player perceptions about the represented system, Bogost suggests that players and
critics alike turn to a number of inquiries that will help shed light on the rhetoric being
used by the game's operations. Adapted from Bogost, one must focus on addressing:

- **Reduction** - How much does the text reduce complex behaviors into simple
tasks?
- **Tunneling** - Does the text lead the user through a predetermined set of acts, or
does the text allow players to perform actions at their leisure?
- **Tailoring** - Does the text provide information relevant for the individuals to change
their attitudes, behavior, or both?
- **Suggestion** - Does the text encourage a certain type of player behavior?
- **Self Monitoring** - Does the text give players a tool to monitor their attitudes or
behavior to achieve a predetermined goal or outcome?
- **Surveillance** - Does the text allow one party to monitor the behavior of another in
order to modify said behavior in a specific way?
- **Conditioning** - Does the game system use principles of operant conditioning to
change or modify player behavior?

To Bogost, answering these questions will yield the answer of whether a game
can be considered as a persuasive text. This approach focuses on mechanics of play and
on the potential meanings they might convey. By addressing questions about the
systems represented and of the mechanics used to represent said systems, it becomes
possible to unlock the meaning behind the mechanics of the text.

Although Bogost's framework is comprehensive, the examples used in his text
are limiting as they are often too reductive or fail to convey appropriate meaning.
However, this does not mean that application of Bogost's model is unattainable; and while his selection of video game texts to test his theory on in the books is not ideal, in his 2008 article *The Rhetoric of Video Games* Bogost demonstrates how to perform a rhetorical reading of a video game text by analyzing the 2005 title *Animal Crossing*.

**5.3.2 Application of Procedural Rhetoric**

In his 2008 article *The Rhetoric of Video Games*, Bogost applies his mode of unit operations based analysis to understand the procedural rhetoric behind *Animal Crossing* (2005). In *Animal Crossing*, a game that Bogost calls an "animal village simulator," the player takes control of a character who has just moved into a small village. Here, the player is faced with the task of making a living. As Bogost explains, the non-playable character Tom Nook offers a player a small residence and a job planting trees and delivering goods. As time progresses, players can engage in work, trade, or developing personal relationships with the many non-playable characters. As players earn money, they are expected to pay down a mortgage on their virtual home. Once the mortgage is completely paid off, players are encouraged to expand their living space.

Bogost correctly notes that text "omits some of the more punitive intricacies of long-term debt, such as compounding interest" (117). At the same time, the text makes a requirement of the player to constantly upgrade their living space by obtaining additional mortgages on their virtual homes while encouraging consumerism in the form of creating incentives for the player to collect virtual objects. As Bogost notes, "this link between debt and acquisition gives form to a routine that many mortgage holders fail to recognize - that buying more living space not only creates more debt, it also drives the impulse to acquire more goods. More goods demand even more space, creating a vicious cycle" (117). It can be said, then, that although the text does present a reductive form of the mortgage
debt system and of retail consumerism, the systems are represented in a manner which still makes them identifiable as a version of their existent counterparts.

Bogost argues that *Animal Crossing* furthers its arguments by depicting the effects which debt has on the individual actors represented in the text. He explains that “in real life, when we pay our mortgage bills we don’t see where that money ends up. But in *Animal Crossing*, the player experiences the way in which his debt makes the bankers wealthy” (118). In *Animal Crossing*, the character Tom Nook represents both the financial and the market sector of the game’s economic model. Tom Nook buys consumables produced by the player, sells collectible objects to the player, upgrades the player’s home, and makes loans to the player. As players sell the products of their labor to Tom Nook, the character is able to further develop his store. A store which begins as Nook’s Cranny, a small general store, eventually becomes Nookington’s, a giant department store. Every time the player acquires new debt from Tom Nook to upgrade the living space, Tom Nook also expands his store to sell additional goods.

What has been discussed so far - that is, the representation of a system - may not be considered as enough evidence to propose that the text is making an argument regarding the finance industry and consumerist culture. However, when one considers the behavior of non-playable characters, it becomes evident that the game attempts to decry such behaviors as negative.

As Bogost notes, “none of the townsfolk ever appear in Tom Nook’s shop, although they occasionally refer to it somewhat disdainfully” (118). He explains that the non-playable characters who populate the village “sternly berate the player if they haven’t seen him around for many days, but they seem to have no concern for the quantity or type of material properties that the player possesses” (119). Although the text forces the player to participate in a consumerist model where the player pays off debt, and buys and
sells goods, the non-playable characters avoid this economic model entirely while simultaneously critiquing the one non-playable character that facilitates it.

Simultaneously, the player "sees Tom Nook convert wealth into increased commercial leverage" which results in the realization that "one's own debt makes the bank rich," while at the same time the bank "leverages that new wealth to draw more capital out of the player" (119). Although the game represents a system in which the player must participate, the character responsible for the proliferation of said system is presented as a detrimental figure representative of "a condensation of the corporate bourgeoisie" (119). The game, thus, can be considered as a persuasive game.

As demonstrated by Bogost's analysis of Animal Crossing, his approach to understanding the rhetorical principles behind representational systems is indeed helpful for understanding the meaning-making process and conveyance models for ideological thought present in video game texts. However, although Bogost does address the issue of texts in which players are predetermined to lose, games which employ what Bogost calls a rhetoric of failure, one rhetorical element that Bogost fails to address in his framework is that of the win state.

A win state is a condition or series of conditions that exist in games that do not employ a rhetoric of failure. The win state conditions must be met by the player in order for play to progress. Although Bogost fails to address win states in any of his texts, they are perhaps one of the most important rhetorical element existing within a game's procedure-based systems. While the game's rules and mechanics define how the game world functions, the win states, and by extension the lose state, are what mechanically dictate what is desirable and undesirable. Therefore, it can be said that when mechanics are taken as the core concept of play, as Bogost and others suggests, it is the win state that makes the value judgment on the represented systems as either desirable or
undesirable - value judgments which can be understood depending on the existence or lack of win and lose states.

An example of a video game text that uses win states to convey value judgments on specific ideologies is *Unholy Heights* (2013). In this text, the player takes control of a character called The Devil. The Devil runs a small apartment complex where he rents out his rooms to different monster types. As monsters move into the apartment complex, they create income. However, after a certain amount of time, depending on the profession of the monster - monsters in the game have jobs such as teacher and CEO - the tenants will be unable to pay the rent. It is up to the player / The Devil to decide whether to let the monsters in question live rent free in the apartment or to evict them. At the same time, the game features adventurer-type characters. These characters constantly attack The Devil’s apartment complex in their quest for glory. It is up to the residents to fend off these adventurers. It is this element of play which might make a player decide to let the tenant of a unit stay free of rent. Each character's strength is dependent on monster type and family lineage. Towards the end of the game, it might be a better decision for the player to let a rare monster type from a strong family lineage stay rent free in an apartment than evict said monster in exchange for a weaker, more common, wealthier monster type.

At the heart of the game is the struggle between power and money. The purpose of the game is both to amass as much wealth as possible in order to expand the apartments. This expansion will let the player recruit more monsters into their complex. Ultimately, however, the win state is to defeat The Legendary Hero. Because The Legendary Hero was created with comparatively high strength and defense, this can only be accomplished by having a large regiment of diverse monsters living in the apartment complex. It is increasingly difficult, for example, to defeat The Legendary Hero with a
regiment of snail-type or golem-type monsters only. The snail-type monster deals high amounts of damage from a relatively safe distance, but can be defeated with a single hit and moves slowly. The golem type monster, on the other hand, deals very little damage, but can serve as a wall. A player using only snail type monsters will have their force destroyed by The Legendary Hero within seconds, while a player relying on golem type monsters only will not damage the Hero enough to defeat him. The solution then becomes for the player to use a combination of different monster types, where the monsters with higher defense scores approach the Hero for close combat while monsters with ranged attacks damage the enemy from the distance.

The text portrays several systems, including diversity systems that allow for the inclusion of different types and genders of monsters to have different abilities, a system of property management where rental is presented as an ideal model for the landlord, and a system of defense where intruders are dealt with by the community. Because the mechanical win state is to stop an invasion, it can be suggested that according to the text, self defense is presented as a positive value. Because the game does not feature a mechanical feature to invade other spaces, it can be said that the game's mechanics do not make a comment on aggression, but rather on aggression as defense. Furthermore, throughout the game, the adventurers that attack the apartment complex do so out of hatred for monsters. At the same time, the monsters themselves are seen as diverse. The implication, then, is that when a group of individuals is threatened by an outside force, such as The Legendary Hero, it is practical, if not altogether "good," for individuals to set aside their differences in order to defend themselves against the common enemy.

Just as Unholy Heights has a win state that makes a statement about an ideology, so does Sim City (2013). In Sim City, the player takes control of a virtual space in which they are to build a city. Although players have the option of creating any type of
city they desire, the game actively reinforces the concept of the dense megacity as the desirable outcome. Win states and achievements are unlocked through the creation of larger structures, increasing GDP, and luring more residents into the city. The game does not reward sustainability by itself, although if it can be used as a tool to increase consumer confidence it is seen as a positive, nor does it reward the creation of suburb or farming cities. In Sim City, persuasion does not happen through the representation of systems as much as it happens through the inclusion of win states and achievements that force the player to approach city planning in a specific way.

Just as win states can be said to promote a certain ideology, lose states can be seen as a claim against the systems presented. An example of a game lacking a win state is Freedom Bridge (2010). In Freedom Bridge, the player takes control of a square dot representing a human being. The player navigates the space represented which is, according to the author, a representation of the Freedom Bridge over the Imjin River in the Korean Demilitarized Zone. For the player to cross the bridge, the character must be navigated through a series of barbed wire traps, each of them causing the player character to bleed out. By the time the player reaches the bridge, the character can barely move. The character is then shot in the middle of the bridge.

Regardless of how many times the player attempts to cross the bridge, the game will always kill the player character. The system represented is one where migration from one space to the other is deemed a crime worthy of immediate execution without a trial. Because there is no win state in the game, the claim being made is that the system being presented, and more specifically the situational context represented in the game, is an undesirable one. The value judgment being made by the win state is that because such situations lead to death, they are undesirable.
A third possibility regarding win states is that the game has neither a win nor a lose state. Bogost's own example of *Animal Crossing* is one such text. There are certain achievements which one can unlock, and these achievements make value judgments on the tasks for which they are bestowed on the player. Many of these achievements revolve around the collection of objects: the player can obtain achievements for building the largest possible house, obtaining golden plated tools, or completing a museum collection. In that way, despite the non-playable characters commenting on Tom Nook as a shady character, the mechanics themselves reward participation into the consumerist models therein depicted. However, there is no win state in *Animal Crossing* - a player cannot win the game. Play in *Animal Crossing* is endless, it continues forever. This lack of win or lose state in itself, coupled with the achievements and the systems represented therein, can be seen as a commentary on the enduring nature of economic and financial systems.

Indeed, Bogost's model is ideal to understand the arguments being posited by the mechanics of a video game text. His approach serves to isolate the system and unit operations of a text - what Juul calls gameness - and understand whether and how they are trying to frame an issue, convey an idea, or make an argument. However, Bogost's model is limiting as it fails to consider the remediative powers of video game texts. Despite arguing for a media-centric approach to understanding video game texts, Bogost falls into the same patterns first proposed by the likes of Juul and Aarseth. Just as ludologists argued for a purely formalist approach to understanding video game texts through their mechanics, Bogost's approach stems and ultimately reflects these same biases. His approach clearly reflects his ideas stated in *Persuasive Games* that, despite its value to digital and interactive textuality, "visual rhetoric cannot help us address the rhetorical function of procedural representation" (24). These comments fail to take into account the very real rhetorical power of visual elements. Because video games are as
much a visual medium as they are a procedural one, if one applies Bogost's model exclusively to unlock the rhetoric of a text, one will only have an incomplete understanding of what is being conveyed. In order to fully understand the message locked behind a text, one must consider not only the procedural rhetoric, but also how visual rhetoric and narrative play a role in framing and supporting unit operations and how context is created through the interaction between the visual, the narrative, and the procedural.

5.4 The Visual Rhetoric of Games

In his 2006 book *Gaming: Essays on Algorithmic Culture*, Alexander Galloway addresses the problem of representation and the rhetoric of the image in video game texts. Although he acknowledges that "in gaming, the concept of representation does not account for the full spectrum of issues at play" (71), he points out that the visual is an integral element to the meaning making and the conveyance of ideas. He explains that "so far, debates about representation have focused on whether images are faithful, mimetic mirrors of reality thereby offering some unmediated truth about the world, or conversely whether images are a separate, constructed medium thereby standing apart from the world in a separate semantic zone" (71). By suggesting that video games take part in this discourse, Galloway, unlike Bogost, implies that elements of visual representation in video game texts are part of an increasingly relevant discourse about the medium. Galloway does mention, however, that because "games are not merely watched but played, they supplement this debate with the phenomenon of action" (71). Although, like Bogost, Galloway makes an appeal for the theorist to focus on what he calls the phenomenon of action, he does acknowledge that understanding of the physical or game world in which the action transpires is necessary.
As W.J.T. Mitchell notes in *Picture Theory*, "all media are mixed media, combining different codes, discursive conventions, channels, sensory, and cognitive modes" (95). This is a core concept of the media centrism of games as much as it is of visual images, and it is one that critics of video game texts seem to forget when they make the argument that focus should be on rules (Aarseth 1997), mechanics (Juul 2001), procedure (Bogost 2007), or action (Galloway 2006). When discussing images, Mitchell acknowledges the role of linguistic forms in the image. He contends that the visual and linguistic elements function together to convey meaning in the form of a single unit which he calls the imagetext. He explains that "writing, in its physical, graphical form, is an indispensable suturing of the visual and the verbal, the imagetext incarnate" (95). Mitchell's observations regarding the multimodal hypermediated nature of the image holds true for video game texts as they do for visual images.

5.4.1 *Every Day the Same Dream*

An instance in which Bogost's model renders an incomplete understanding of the meaning behind the text if it is not coalesced with a mode of visual analysis can be found in Molleindustria's 2009 text *Every Day the Same Dream*. In this game, the player takes control of an unnamed avatar. The only instructions given to the player are to use the arrows to move and the space bar to interact with objects. The player begins the game in the bedroom. As the player navigates towards the exit of the screen, the game will prompt the player to get dressed. As the player moves the character towards the kitchen, the wife greets the player with an emotionless "you are late for work." The player then guides the character through his everyday commute to work - leaving the building via elevator, driving through a congested street, walking into the office building, getting scolded by the boss, and finally sitting down at his cubicle. The player is given little freedom of choice - the player cannot choose to have the character quit his job or divorce
his wife. The character's daily commute consists of getting dressed, taking an elevator, walking to the car, driving to work, going into the office, and walking past dozens of identical characters working at their cubicle in order to reach the character's own work space. However, because this routine becomes repetitive, and because of an in-game character in the form of a lady in an elevator that gives the player clues, the player's task quickly turns from one of conformity and of guiding the character to his job ad-infinitum to one of finding ways to subvert the limitations imposed on the player by the game world. This can be accomplished by interacting with people and objects in the world.

Although the player cannot modify the world or the play experience, the player can perform certain actions scripted by the game's designers. The player can choose whether to leave the television on for the protagonist's wife when leaving for work or turning it off, as well as the option of turning off the bedroom alarm upon waking up or leaving it on. These actions, however, have no effect on the outcome of the daily commute. However, the player can also opt to guide the character to work without getting dressed, which will result in the character getting fired. The player can select to skip work one day and visit a graveyard, or to walk past the character's cubicle to jump off the roof and commit suicide. On the way to work, the player can also get off the car during traffic and pet a cow, as well as stop before entering the office building to catch and ponder on the nature of a leaf. These five actions are what the old lady in the elevator refers to as "steps," and according to her, once the player has taken all the steps, they will become a new person. Individually, each step will result in the player returning to the bedroom of the character to guide him to work yet again. Once all steps have been completed, however, the world becomes empty of characters and the game ends.
These mildly subversive actions, or steps, of catching a leaf, visiting a graveyard, going to work in underwear, and petting a cow, represent an attempt from the player in figuring out what the boundaries of the represented systems are. Although each step may or may not affect the outcome of a specific day, each step will have an adverse effect on the productivity of the company for which the player works. Even stopping to catch a leaf will cause the productivity margin posted on the office building to drop. It can be said, then, that *Every Day the Same Dream* is a text about exploring the boundaries and limitations imposed on an individual by a system and of how the breaking of systemic rules affect said systems. The player wants to test the limits of the world as much as the character wants to test the limits of the system imposed by the system. This test ends in
death. However, due to the absence of non-playable characters on the final day, it can be said that the game makes the argument that if one breaks too many systemic rules, the system itself will collapse under its own weight.

Even though the designers say that the game is about alienation, it seems like the game touches on a deeper topic. It is about society, the repetitiveness of work, and the alienation that results from submission to arbitrary systems that may not have the individual's best interests at heart. *Every Day the Same Dream* is about the existential struggle of the average individual living as a faceless drone in a world that discourages individuality, and its bleak core message is that whatever people do becomes irrelevant in the face of set structures. This title is an example of how the procedural rhetoric of a title also tells a minimalist story that is told through short lines of dialogue, but creates a more detailed narrative when one considers the actions and events that take place in the virtual space.

The visuals play an important role in framing the systems being represented, and in this text play perhaps an even larger role than the mechanics themselves. In the above discussion of the text, understanding what is being represented and what systems the text is critiquing would have been impossible by only considering the games core mechanics, which consist only of, as the game states, "use the arrows to move, use the spacebar to interact." In order to understand that the text is referencing a system of repetitive work patterns, one must understand the spatial design being navigated, not just the rules which govern the game world. And although if one considers the limited range of actions made available to the player one will ultimately come to the conclusion that the text is critical of such systems, when one considers the aesthetic choices made by the author, this conclusion is reinforced.
The world depicted in Every Day the Same Dream is colored in bleak grays, a color whose meanings are those of unemotional responses, detachment, and indecisiveness (Elseman 2006, Eckstut 2013). This frames the space in which the player character lives as alienating, as the authors intended. However, there are a few instances of color present in the video game world. The red leaf at the entrance of the office building and the green exit sign leading to the roof of the office building demand special attention from the player, calling their attention to events that are seen as different and outside the norm. If the standard representation of the game world is one that is undesirable, then stopping to catch a leaf or committing suicide to escape a repetitive pointless existence are framed as desirable by the text. Ultimately, the text is telling the reader that living in conformity while working in a repetitive job where one's individuality fails to be acknowledged is undesirable. The text suggests that the reader should at times stop and take a break from their daily routines in order to enjoy life, but to be aware that ultimately they are just another cog in the system, and that the only way to escape the system is through death. Understanding this as the rhetorical claim of the text is only possible because of the consideration of procedural systems alongside visual representations, and could not have been understood by means of Bogost's model exclusively.

5.4.2 A Visual Rhetoric of Games

While the previous discussion on the rhetoric of the aesthetic present in Every Day the Same Dream demonstrates how visual elements must be considered alongside ludic processes in order to unlock the meaning being conveyed by the text, it is by no means exhaustive of how visual elements either complement ludic arguments or create arguments of their own. In order to fully understand how visual elements make arguments in video game texts, it is prudent to understand the various modes of analyses.
of visual rhetoric, perhaps going as far back as Roland Barthes’ 1964 essay *The Rhetoric of the Image*, which arguably can be said to be the precursor to the formalization of visual rhetoric as a field. In this essay, Barthes uses a Panzani advertisement in order to demonstrate a new proposed approach to visual analysis. In this approach, Barthes argues that the Panzani ad has three modes of messages, each interpreted subjectively through cultural cues. The linguistic message, which is made up of the actual text and other linguistic forms present in the advertisement, Barthes notes, is at the same time denotational and connotational - that is, the linguistic message simultaneously says and implies something. The implication of the Panzani ad, Barthes argues, is "Italianness."

Barthes’ literal message, the second type of message according to his proposed framework, answers the question of “what” an artifact “is,” the composition of the image and what it represents as an idea through the relationship of the signifier as the visual object and the signified as what it represents. To Barthes, market products represent an idea of freshness, the colors red, green, and yellow represent "Italianicity," the ingredients transmit the concept of balanced meals, and the way in which the objects are organized attempt to simulate real life. Barthes’ last message, the symbolic message, is the interpretation of the image by the viewer; it addresses the issue of the meaning of the image.

If one were to modify Barthes’ model of inquiry from the image to video games, then one would have to consider the function of linguistic objects represented in the video game space and the aesthetic cohesion and design choices of the virtual elements in the context of the symbols identified by the reader. This would supplement any conclusions reached regarding the rhetoric of the game via Bogost’s model of procedural rhetoric by contextualizing the mechanics through visual, aesthetic, and cultural cues. However, since the publication of Barthes’ essay, critics have developed new modes of inquiry into
configurations of visual elements. In *Picture Theory* (1994), W.T.J. Mitchell explores the relationship between linguistic and visual elements in different forms of media. He proclaims that because all media is mixed, there are no purely verbal or purely visual forms of art. In order to understand this, Mitchell introduces the concept of the pictorial turn - that is, a re-focusing of critical and analytic attention to the composition of visual or iconic imagery due to the increasingly visual nature of society - and accompanying vocabulary to be deployed in said criticism.

Perhaps the most relevant concept introduced by Mitchell is that of the metapicture, which he defines as an image that conveys messages about other images. Mitchell makes the distinction between three distinct forms and functions of metapictures. The first type of metapicture, Mitchell explains, is a self-referencing one where an image can be seen within itself. This concept can best be visualized in images where an individual is holding a frame of him or herself holding a frame of him or herself ad infinitum. A second form of metapicture that Mitchell points to can be seen as a re-contextualization of a visual. In these cases, an already existing image is placed within a new image in order to alter its meaning. The third form of metapicture identified are those in which an image is framed by discourse about the image being shown. This third form of metapicture is often referred to as an image macro, and the more popular forms can be seen in (de)motivational images. By using the existence of metapictures as support, Mitchell demonstrates that the pictorial turn is a form of post-linguistic rediscovery of the image as an interactive object that affords for verbal, visual, and figurative convergence. By arguing that the image is composed of different forms of media - a sentiment which Birdsell and Groake echo in their essay *Towards a Theory of Visual Argument* (1996) - he successfully creates a theory in which the visual and linguistic elements of an image
must be taken as a whole if one is to fully understand the meaning of the text, rather than divide it into individual elements.

Mitchell’s concept of the metaimage can also be seen manifested in video game texts. There exist a number of video games in which players can play games within the game. In SquareSoft’s *Final Fantasy VII* (1997), for example, the player is able to command the protagonist to play a video game about snowboarding, and in Yu Suzuki’s *Shenmue 2* (2002), the player can command protagonist Ryu Hazuki to play the 1987 arcade game *After Burner*. A more robust example demonstrating how Mitchell’s concept of the metaimage can be made manifest in video games, however, can be seen in the recent 2011 puzzle role playing text *Catherine*. In *Catherine*, the player takes control of an insomniac named Vincent Brooks. When Vincent manages to fall asleep, he dreams that he is climbing a tower made of falling blocks. During the adventure segments of the text, however, the player has the option of controlling Vincent around a pub inside of which players will find a virtual arcade machine. This video game-inside-the-video game which Vincent can play features a character climbing a tower of falling blocks, which effectively results in an effect similar to that of the metaimage. Because what is being displayed is not a static image, however, rather than a fully playable replicated play experience, it can be suggested that a new term is needed to refer to them. Because the term metagame is already well established and refers to events or strategies outside the predetermined rules of play which actively affect the outcome of a game, video game texts existing within video game texts will be referred to as embedded games. And just as Mitchell acknowledged that the image was composed of visual and linguistic elements, so too will games be considered as a construct of mixed media where visual, linguistic, ludic, and aural elements intersect.
Building on the notions of the visual as rhetorical devices, Sonja K. Foss proposes a practical approach to the analysis of visuals which mirrors that presented by Bogost for video game texts in *Unit Operations*. In her 2009 text *Rhetorical Criticism: Exploration and Practice* Foss expands on ideas first presented in *A Rhetorical Schema for the Evaluation of Visual Imagery* (1994) and argues that in order to engage with a visual artifact, the critic or observer should first select the artifact to be analyzed, analyze the object, and formulate research questions before writing an essay. She further suggests that the artifact should be divided into several units of analysis and that focus should be given to select units. When analyzing the artifact, Foss suggests that one should take notes about the artifact being observed - a practice which she calls coding the object - and then using one of many theoretical approaches to the analysis of the artifacts.

Perhaps the most comprehensive theoretical framework for the analysis of visual objects is that presented by Kress and Van Leeuwen in *Reading Images: The Grammar of Visual Design*. In this text, the authors explain how the structures of visual semiotics function in order to convey meaning. They argue that semiotic modes regardless of types of textuality must relate the represented participants, or the figures and objects in the page, the interactive participants, or the viewers and authors, and the elements of the page, that is, the spatial arrangement and relevant size of objects, to each other. Because they consider all semiotic systems as having a function that allows individuals to identify patterns of representation and social interaction, Kress and Van Leeuwen contend that all visual communication has a dual function to offer visual representations of the world and to encourage social interaction - functions that, again, mirror Bogost's views on the function of the procedurality of games. Although unlike Mitchell and others Kress and Van Leeuwen see the visual and linguistic elements as inherently independent
forms of communication instead of as part of a single image-text unit, they do concede that these are connected and can function together.

Because Kress and Van Leeuwen’s work is theoretically grounded in social semiotics, they see visual representation as the socially and culturally situated process of making signs to express meaning, a process which is guided by the sign makers’ own interests (6). Thus they see signs as motivated “conjunctions of meaning (signified) and form (signifier) in which sign makers choose the most apt semiotic modes to express their desired meaning” (6). According to Kress and Van Leeuwen, these choices made by the creators of images always arise out of the “interest of social groups who interact within the structures of power that define social life” (159). Part of the work, then, of those studying visual communication is to understand the values and interests which inform and benefit or do not benefit from signs in use in any given context.

A core element of Kress and Van Leeuwen’s ideas revolve around the principle that “as modes of representation are made and remade, they contribute to the making and remaking of human societies and the subjectivities of their members” (40). With this understanding of the visual as semiotic and as mode of conveying meaning, it becomes paramount to understand that:

a. Human cultures and societies use a plethora of modes of representation. These include, but are not limited to, visual and linguistic forms of representation.

b. Each mode has a distinctly unique potential for meaning-making that differentiates it from other modes, which in turn makes each mode of representation uniquely valuable.

c. Interpretation of these modes of representation are variable on the experiences of the viewer.
d. Each mode of representation is in constant interaction with other modes, which allows for the evolution of each mode in meaningful ways and which, in turn, affects communicative behavior.

Because the purpose of Kress and Van Leeuwen is to define a theoretical and descriptive framework that can be practically applied to the analysis of visual representations, they suggest that one should understand not only how the visual representation creates meaning, but also how participants create and understand meaning in distinct situations. They suggest, then, that the critic consider the grammar of visual design of the object in question - that is, that the critic take inventories of the elements existing in verbal and visual communication as used in the context of the piece. They further suggest that one consider the semiotic landscape - that is, the context in which visual communication in a given society is produced as well as the social action and history of the culture in which the visual artifact is present (33 - 34). They suggest that these texts, visual representations, be considered as “material objects which result from a variety of representational practices that make use of a variety of signifying systems, each of which contributes to the meaning of the text in its own particular way” (231). In other words, Kress and Van Leeuwen suggest that one consider the text as the result of certain cultural practices rather than as an idealized form of communication existing in a vacuum devoid of context. However, context is only one of the many considerations that one should consider if one is to follow Kress and Van Leeuwen's model.

According to the authors, images can function in a narrative capacity through coded words and symbols, thus acquiring the ability of storytelling. They suggest that the way in which images are constructed and how the author places emphasis on some elements over others in order to show a hierarchy of importance serves as a rhetorical
strategy to guide the gaze of the reader and to suggest which pictorial elements are most relevant to the ideas being conveyed. They further suggest, as it was previously discussed, that the use of color in an image can be used to send a message and trigger emotions, as - they argue - images contain information that is independent of linguistic information and which conveys messages in its own unique ways. Images do this through what the authors refer to as modality. Because a high modality is representative of veracity and the authority of an image, the creator of realistic images will be more likely to pay attention to background detail, illumination, color, and other technical aspects in the process of image creation. They further contend that images using low color modalities are attempting to differentiate between objects as well as creating a layer of separation between reality and the image, while pictures with high modality are engaging in mimetic behavior.

Kress and Van Leeuwen’s schema of low vs high modality can also be observed in video game texts. However, because video games are a convergent form of media, it would be hasty to assume that a given text has a low or high modality based on visual representations alone. Because they remediate all media and place them in a ludic context, it may be worthwhile to consider not only the visual modality of the text, but also ludic modalities. If one is to assume that ludic and visual modalities of representation work together as a unit, then this means that any given text will subscribe to one of four possible configurations resulting from the intersection of low and high visual modality and low and high ludic modality.

Video game texts such as the Madden Football series, the NBA 2k series, and the WWE series all adhere to high visual and ludic modalities of representation. This means that these texts attempt to represent reality in as accurate a way as possible. Each of the games in the above mentioned series feature realistic representation of real
life athletes participating in architecturally accurate spaces and participating in sports games whose rules and regulations adhere to their real life counterparts. These texts can be said to feature high modalities of representation both regarding visual and ludic representations.

Just as some games can subscribe to high ludic and visual modalities, others can follow alternating modalities. *Call of Duty: Modern Warfare* (2009) and *Protheus* (2013) are examples that feature alternating modalities of representation - that is, they are created in a way that either the visuals or the rules that govern the play space attempt to represent reality in as accurate a form as possible while featuring a low opposite modality. *Call of Duty: Modern Warfare* attempts to visually depict the horrors of war. It presents anatomically accurate and visually detailed models of soldiers which the player controls, virtual spaces whose architecture is representative of contemporary spaces, and in game objects such as gun models and tanks which are modeled after real military equipment. The rules governing the play space, however, do not represent reality as players are allowed to move around the map in unrealistic ways and once the player is shot, they revive and continue participating in play. The game can be said, then, to have high visual modality of representation and low ludic modality of representation. *Protheus*, on the other hand, gives the player an open world to walk around in. There are no game mechanics other than walking around admiring the world. This world, however, is represented in bright, colorful, highly contrasted, and pixelated aesthetics. Because the rules that govern movement within the game world attempt to replicate a real life experience in a non-realistic space, *Protheus* can be said to have high ludic modalities and low visual modalities of representation.

There are, of course, video game texts which completely disregard any attempt at mimetic depictions of reality. Instead of attempting to imitate reality in any way, they
create their own spaces with unique governing logics and distinct visuals in order to create a liminal space where the rules of physical reality do not apply. One such example can be observed in Disney's *Mickey Mouse: Castle of Illusion* (2013). In this game, the player takes control of the anthropomorphic mouse called Mickey and guides him through a series of bright and colorful high contrast areas filled with oversized books and giant blocks of gelatinous candy floating over rivers of milk. This makes the game's representation clearly of a low representational modality. Likewise, although the game does feature somewhat realistic functions such as walking, running, and swimming, most of these functions are represented in a non-realistic way. Mickey can, for example, swim underwater for endless periods of time and jump four times its height. Furthermore, as Mickey explores the play space, physically impossible events manifest resulting in situations such as books jump off their shelves and attack Mickey without any observable cause as catalyst, giant gelatinous blocks serving to help Mickey to jump higher, and statues magically lunging at Mickey. It can be said, then, that just as the text features low representational visual modality, it also features low ludic modalities. Because the text features low visual and ludic modalities, it can be said to be an attempt at abstraction.

While useful, modality is only one of the many components in Kress and Van Leeuwen's grammar. Kress and Van Leeuwen argue that in order for purely visual media to be enabled to make any form of proposition to the viewer, there must exist a vector - that is, a real or implied line that suggests direction. The participants, both represented and interactive alike, form a symbiotic relationship outlined by the vectors in the image in which the origin point of the vector is called actor and the arrival point of the vector is called the goal. The meaning derived by the viewer from such a construct can be referred to as a transaction, one in which if the viewer is included is called an interactive transaction.
Complementing the notion of vectors in image and ideas of the viewer as participant, Kress and Van Leeuwen discuss the perspective of the viewer, or first person perspective, and how it plays a role in defining whether the image is making an offer or a demand of the viewer. They suggest that the contexts in which an image makes a demand of the viewer presuppose a certain level of connection between the spectator and the represented participants, while contexts in which an image makes an offer to the viewer are those in which a barrier is placed between the represented and the interactive participants in order to create a sense of detachment. In other words, images which invite the viewer to actively participate in the events being depicted can be considered as making a demand of the viewer, while images depicting events seemingly independent of the viewer can be said to make an offer.

The question of perspective in the conveyance of an offer versus a demand is deeply tied to what Kress and Van Leeuwen refer to as the composition of the image. They argue that an image can be divided into major sections, with the left side of an image depicting the given, or what the viewer is already familiar with, while the right side depicts the new. The central panel, then, can be seen as the mediator between the given and the new. Likewise, the relationship between the top and the bottom of an image can be seen as that of the ideal or the emotive being depicted towards the top of the image while that represented at the bottom represents the real or practical.

Ultimately, using Kress and Van Leeuwen's framework to understand the visual elements of a video game text - a line of inquiry that has largely been ignored - will unquestionably yield valuable information regarding the rhetoric of the text. It is entirely possible that a text may, in fact, make arguments through mechanics, as Bogost suggests, but in such cases ignoring the visual elements of the text and how they serve to contextualize the mechanics being presented might lead to incorrect conclusions about
the text. Furthermore, in other situations, it may be that the text is making appeals primarily through its use of visual elements, with mechanics serving as a facilitator of ergodicity. In the following section, several game texts will be discussed through the lens provided by Kress and Van Leeuwen, with special attention being paid to how the visual elements represented therein either serve to contextualize the arguments made by the mechanics of the game or how the visuals themselves make arguments.

5.4.3 Games Making Visual Arguments: No Russian

In the previous section it was explained how Kress and Van Leeuwen's framework serve to explain the broad varieties of visual rhetoric present in video game texts. Their discussions on the grammar of the visual, modalities of representation, vectors in relation to the viewer, and visual narratives prove specially helpful. The few issues which they don't discuss are already addressed in Barthes' and Mitchell's work, which complement Kress and Van Leeuwen's work nicely. This section will present examples of implementation of the preferred framework for visual analysis to key video game texts.

Electronic Arts’ 2009 video game Call of Duty: Modern Warfare II is a video game text in which the player takes control of a soldier and participates in several war themed experiences. The text features two fundamental modes of play, with one of them being a persistent online experience where the player participates in one of many decontextualized war events that could be interpreted as war games and the other being the single player campaign where players engage in various interconnected missions. Each of the game modes is robust in its own way, with the multiplayer mode featuring nine distinct play modes - Free-For-All, Search & Destroy, Demolition, Sabotage, Domination, Team Deathmatch, Mercenary Team Deathmatch, Headquarters, and Capture The Flag - and 26 maps ranging from the Afghan desert to an amusement park
in the Brazilian city of São Paulo and the single player campaign offering the player a protracted play experience of five hours. It may be prudent, then, as Sonja K. Foss suggests in her text *Rhetorical Criticism* (2008), to engage in criticism of a section of the object itself, rather than in criticism of the full object. The object of inquiry for this section, then, will be mission called *No Russian*, a mission which was deemed so controversial due to the demands it made on the player that the scene was removed from the game for its Russian release and was heavily censored for its Japanese and German releases.

Scholars of visual rhetoric nearly universally agree that the way in which objects are arranged are essential to the success of the arguments being made, as they help contextualize any claims extant in the text as well as the role of the viewer in the context of the images being represented (Barthes 1964, Van Leeuwen 2009). Likewise, scholars engaging in inquiry into the rhetoric of the digital acknowledge that the way in which visual elements are placed on the screen can help convey arguments in a more accessible mode (Stephen-Meadows 2002). Because in order to understand visual arguments it is paramount to understand the immediate context in which said argument is presented (Birdsell 1996), the ludic and narrative elements which help to contextualize the visual arguments present in *No Russian* will be considered alongside the visual composition of the text in order to understand what the text is trying to convey.
In the *No Russian* mission, the player takes control of Joseph Allen, a deep cover CIA agent whose task is to infiltrate a Russian terrorist cell. Because the game adheres to well established aesthetics often relied upon by war themed video games, the play experience is presented in a first person perspective. Rather than allowing the player to control a character, designers have placed the player in the shoes of the character in order to create a heightened sense of immersion. The player isn't controlling Joseph Allen; rather, the player is Joseph Allen. As the scene opens, players will find themselves in the lobby of an airport. The way in which the opening scene is constructed makes certain demands of the player and, if one adheres to Kress and Van Leeuwen's framework, makes what is expected of the player explicit. As Kress and Van Leeuwen suggest, when a represented participant is portrayed using an extreme close-up, the implication is that there is some form of social relationship between the represented participant and the interactive participant. This is the kind of relationship formed between the player and Vladimir Makarov, the leader of the Russian terrorist cell. Because the assumes the role of a member who is a part of a hierarchy and who is faced with the
foremost figure of authority within said hierarchy, and because the perspective used is that of the first person, it can be said that the text is making a demand of the player.

To understand what the situation demands of the player, it is imperative that one turns to the patterns of visual narrative represented in the scene. The first noticeable element is Vladimir Makarov. The multitransactional vector demarcates a relationship between Makarov and the goal of his gaze which is the interactive participant. Although the goal of the vector being the interactive participant is not fully represented on screen, there is a visual element which stands in place for what would be the actor in the form of a gun. The gun being represented as part of the goal of the vector turns what would otherwise be a non-transactional vector into a transactional one both when the image is taken as a work devoid of context and when it is considered with the ever-important immediate context. The gun which serves as an extension of the player-viewer is what becomes the goal of the vector as the represented actor.

As the scene progresses, secondary and tertiary action processes begin to manifest themselves. Just as Makarov is looking at the player, whose first person representation implies that there is a demand being made, he also points at a group of citizens in the background of the scene. A second transactional action process is thus created where Makarov's weapon and the other Russian terrorists take the role of actors creating the origin of a vector where the citizens are the goal. A third narrative transactional vector can be seen originating from the projected interactive participant and finding its goal at the group of citizens standing at the distance. The convergence of the three narrative action vectors of Makarov-player, player-citizens, and Makarov-citizens create a demand being made by Makarov of the player to shoot at unarmed civilians.
The idea outlined by narrative vectors that the text is making a demand of the player to kill innocent civilians depicted in the scene is further reinforced when one considers the meaning suggested by the composition if one subscribes to Kress and Van Leeuwen's framework. While the player is placed at a distance that implies a social relationship to Makarov and other Russian terrorists, the non-playable character representations of civilians can be seen in what can be defined as a very long pictorial distance. This implies lack of social agency between the represented participants and the interactive participant. Furthermore, because of the way in which the camera creates the illusion that the player's character is slightly looking down at the citizens, it creates an idea of superiority in the mind of the player that places the citizens in a position of insignificance. This visual cue tells the player that the lives of the innocent bystanders at the end of the room are inconsequential and that it's acceptable for the player to accept the demands being made on them by Makarov.

Kress and Van Leeuwen suggest that the location of elements on the screen indicate the importance of each individual element. If one is to accept their model, the top of the image is meant to denote the ideal and emotive, while the bottom of the screen is meant to represent the real and practical. At the same time, the divide of the left and right
sides of the screen are meant to represent the given or familiar information, placed on the left side of the screen, while the right side of the screen is meant to represent new information. According to their framework, the center of the screen is meant to serve as a mediator between all parts of the screen. The elements found at the center of the screen, they argue, serve to frame and influence the message of the image. If one is to accept Kress and Van Leeuwen’s interpretation regarding the level of importance in regards to their hierarchies based on their on-screen coordinates, then one would have to accept that the least important information will be found on the lower left - information that is already given and which the viewer has been familiarized with, and the most important information being in the top right of the screen representing the ideal new. The way in which the Heads-Up Display (HUD), as well as the way in which the No Russian scene unfolds, adheres to these conventions.

The HUD in Call of Duty: Modern Warfare 2 is considerably uncluttered. It features three regions, each placed on the top left, bottom left, and bottom right of the screen. On the top left of the screen, the region designated for the given / familiar on the left and the ideal on the top part of the screen, the player is shown a bird's eye view of the map. This is an idealized visual representation of the space in which the virtual events unfold, as it allows players to find their position relative to that of other team members or enemies. However, it is also familiar information, as maps don’t change regardless of how many times players traverse through them. On the bottom right section of the screen, the section designated for real / practical information and new information, players will find the number of ammunition made available to them as well as other equipment that they might have at their disposal. This information is practical in that it is relevant to the player's performance. This is the information conveyed which tells a player whether they have sufficient equipment to engage in a particular task. Furthermore, it is
new in that the player can collect new items as they traverse the map, thus leading to a stream of information being represented and constantly updated. In the bottom left section of the screen, the practical given, players will find the faction to which they belong - a variable which players decide on before play begins - and when necessary how much time is left to complete a mission - something that the player is informed of before play begins. It is practical information, but it is information that the player is acquainted with before play. Because there is no information present on the top right section of the screen, then it can be said that the visual rhetoric in Call of Duty: Modern Warfare 2 gives players no notion of the ideal new.

The way in which the environment is presented to the player in the No Russian mission further resonates with Kress and Van Leeuwen’s ideas regarding the position of elements on the screen. The opening moments of the scene show Makarov on the left side of the screen, thus positioning him as the given / familiar element. As the elevator doors open and the player steps out unto the airport lobby, the innocent bystanders will be revealed from the right side of the screen. As the player and the team of Russian terrorists traverse the virtual airport, the corpses of the dead disappear to the left of the screen and behind the player. Later in the scene the player looks down at the massacre created and sees hundreds of dead bodies on the floor. This is shown in the bottom half of the screen as the real, with the top part of the screen showing the unaffected section of the airport - the ideal.

The arrangement of the participants in this scene, combined with the narrative and procedural elements, function together in order to force players to question their choices and their sense of right and wrong. This takes place visually by forcing the player to accept their role as a Russian terrorist and mechanically by giving the player a certain level of agency regarding choice and level of involvement in the events depicted.
Although from a narrative and visual perspective the player is allied with a terrorist group, the mechanics of play do not force the player to engage in any of the killing. The visuals and the narrative make a demand of the player, but it is a demand that the player can either accept by killing citizens or reject by simply walking behind the terrorists. By exposing the player to ludic rules that allow for the visual and narrative claims to be explored, the mission forces the player into an uncomfortable position on which to later reflect. By letting players make the ultimate choice regarding the level of participation, it is asking players to reflect on and make value judgments not only on the situation being presented, but on their actions as well. The closing moments of the mission further serve to emphasize a sense of guilt and moral reflection as they present the player’s character getting shot by Makarov. Makarov knew all along that the player’s character was a CIA agent. The last words heard by the player before the mission comes to a close are Makarov’s, who states that "The American thought that he could deceive us. When they find that body, all of Russia will cry for war." By doing this, the mission is trying to instill a sense of guilt about their own actions in the player in order to make them question morality and authority.

5.5 Conclusion

This chapter demonstrated that frameworks of visual and architectural analysis can be used to engage with video game texts as much as they can be applied to more traditional visual artifacts. However, it also demonstrated that the need for digital media and interactivity based frameworks are needed to fully comprehend a text in its entirety. It was shown that video games make arguments as much through their ludic elements as through the visual components. By allowing players to experience their surroundings, games create a form of multimodal persuasive discourse that integrates text, visual, aural, and ludic elements and which can be analyzed through a variety of frameworks. At
the same time, it was demonstrated that while visual frameworks can help the critic partially understand the arguments being made by a game text, they are, likewise, found lacking. The reason for this is that video games are a convergent form of media in which visual representation, narrative modes, and ludic elements collide in a cohesive manner in order to create a text. Because the text is composed of ludic, visual, and narrative elements, a single approach ultimately proves limiting and insufficient.

Even though models of procedural rhetoric do serve to make valid analysis and criticism of video game texts, it is an incomplete model. The focus of procedural analysis of rhetorical modes being exclusive to everything outside of rules of play serves to, at best, create an incomplete picture of the messages being conveyed by video game texts. Procedural analysis must, therefore, be complemented with analysis of visual and design elements in order to cohesively understand the arguments being made by the game text. These arguments can be arguments about how to approach play, as was demonstrated by analyzing the designed spaces of The Last of Us and Final Fantasy XIII and how each of them encourage a different form of play, about systems represented in a game text, as was shown through the ludo-visual analysis of Every Day the Same Dream, or about players themselves, as proved to be the case in the No Russian mission of Call of Duty: Modern Warfare 2.

Ultimately, if one accepts the video game as a form of text composed of various forms of media, then the inescapable conclusion is that no single approach will be able to unlock the full meaning behind a game. Rather than selecting Bogost's approach of procedural rhetoric, Murray's approach of narrative structure and cyberdrama, Kress and Van Leeuwen's framework of visual grammar, or any other lens, it becomes essential to use a combination of approaches in order to understand how the text conveys meanings and ideas and makes claims through mechanics, visuals, and narrative - that is, how the
game's ludonarrativity conveys meaning. In the following chapter, this study will address the concept of ludonarrativity as an expansion of Clint Hocking's ideas regarding ludonarrative dissonance. Following this, a comprehensive analysis of the 2014 text *Watch_Dogs* will be performed in order to demonstrate not only how to fully understand the meaning and rhetoric of a text by applying the framework herein presented, but also to show how narrative, play, and visual elements can serve to create harmonious or dissonant rhetoric.
CHAPTER 6

AUDIOVISUAL LUDONARRATIVITY

6.1 Introduction

In the previous chapters, a framework for understanding the types of narratives present in video game texts was developed. This framework relied largely on an adapted cybertext model based on Aarseth's work for understanding textuality (1997) and on Murray's observations regarding the structures existent in cyberdrama (1998). This framework was combined with Mikhail Bakhtin's narrative construct of the chronotope as an instance in the narrative where temporal and spatial elements converge and with the medium-specific narrative elements in order to create a theory of game narrative that can successfully account for all possible narrative configurations at all layers of the narrative. It was further suggested that in order for a reader to be able to fully comprehend the message and the rhetoric behind a video game text, one must also be able to ascribe meaning to the ludic and visual elements present in the text. In order to create a framework that could account for all the rhetorical elements in the text, the study considered Bogost's interpretations of game mechanics as procedural rhetoric (2008) and expanded on the understanding of ludorhetorical modes by placing play in the context of potential approaches to play. These ludic elements were then considered alongside theories of spatial design and visual design (Kress and Van Leeuwen 2006), which allows the reader to answer questions regarding the understudied and often misunderstood rhetorical spectrum of visual representations in the context of play.

This chapter will bridge the divide between narrative and rhetorical elements found in video game texts. It will consider narrative, play, and visual design elements as a cohesive construct in order to understand whether the rhetoric of a text can be said to be fully harmonious - that is, that all the rhetorical appeals used by narrative, visual, and
ludic elements support the claims being made by the text - or whether it is dissonant, which is to be understood as elements of play, narrative, or visual design giving the reader conflicting claims. With ludonarrativity being understood as the convergence of ludic and narrative structures in a text, this chapter will first discuss the idea of play and narrative each making opposite claims. This is what is often referred to as ludonarrative dissonance (Hocking 2007, Bissell 2012). Attention will then be given to ludonarrative harmony, a concept that, due to the current trends of focusing on unfavorable design choices in critical writing about games, has been largely ignored. The concept of ludonarrativity will then be expanded to accommodate rhetorical norms as well as visual design.

6.2 Ludonarrativity: Harmony of Dissonance

The term ludonarrative dissonance was coined by game designer Clint Hocking in his 2007 piece Ludonarrative Dissonance in Bioshock: The Problem of what the Game is About. In his article, Hocking argues that "Bioshock seems to suffer from a powerful dissonance between what it is about as a game and what it is about as a story." His observations suggest that Bioshock's ludic elements, which revolve around shooting enemies, and the game's narrative about an objectivist utopia brought to its knees by greed and the power struggles perpetuated by its guiding ideologies, are at odds with each other. Hocking suggests that "by throwing the narrative and ludic elements of the work into opposition, the game seems to openly mock the player for having believed in the fiction of the game after all." This disconnect between play and narrative, Hocking argues, "destroys the player's ability to feel connected to either, forcing the player to either abandon the game in protest or simply accept that the game cannot be enjoyed as both a game and a story, and to finish it for the mere sake of finishing it."
6.2.1 Ludonarrative Dissonance in Bioshock

In his piece discussing ludonarrative dissonance in *Bioshock*, Hocking suggests that when a player engages with a video game text for the first time, the text offers the players two contracts. The first contract is the ludic contract, it is composed of the rules and mechanics of the texts, specially the rules of progression. To Hocking, *Bioshock*'s ludic contract tells the player to "seek power and you will progress," a contract which, Hocking notes, follows the principles of rational self interest as proposed by Rand's objectivist philosophy. In Hocking's reading of the text, this was exacerbated by the existence of the non-playable characters called Little Sisters, genetically modified children who can be killed and harvested for power. Hocking explains that by harvesting these characters, "I literally experience what it means to gain by doing what is best for me without consideration for others."

The second contract, Hocking suggests, is the narrative contract. In *Bioshock*, this contract reads "help Atlas and you will progress." However, in the context of *Bioshock*, Hocking suggests, when one takes the ludic contract and considers it within the context of the narrative contract, certain discrepancies arise. The first conflict noted by Hocking is the fact that the narrative contract asks the player to help a third party, which goes against the underlying ideals of the objectivist philosophy proposed by play. He notes that aiding a third party "is presented as the right thing to do by the story, yet the opposite proposition appears to be true under the mechanics." This is further problematized by the fact that according to the narrative as presented in the text, Ryan, whom the player is asked to kill by Atlas, is ideologically aligned with the player's character. Hocking mentions that because "Ryan's philosophy is in fact the guiding principle of the mechanics" as they are experienced by the player, the text made him wonder why he would want to kill Ryan or listen to Atlas. Still furthering the disconnect
between narrative and play, Hocking mentions the lack of choice extant in the text in regards to the player’s alignment with either Ryan or Atlas. Hocking writes:

I don’t have a choice with regards to the proposition of the contract. I am constrained by the design of the game to help Atlas, even if I am opposed to the principle of helping someone else. In order to go forward in the game, I must do as Atlas says because the game does not offer me the freedom to choose sides in the conflict between Ryan and Atlas.

Hocking sees this lack of freedom in how players experience the text as problematic only because of the context provided by the play experience. He explains that under the ludic contract, if he accepts the objectivist philosophy of doing what is best for the player without regards for other characters, he has the option of killing and harvesting the Little Sisters to acquire more power, while if he chooses to reject said ideology he can ignore the Little Sisters as he plays through the text. However, when he considers the game’s fiction, if he chooses to reject the objectivist ideology he can play through the game in order to help Atlas defeat Ryan, but because the text gives no option to adhere to said ideology in the context of the game’s narrative, it creates a disconnect between play and narrative. This disconnect, however, is not exclusive to, nor was it first seen in, *Bioshock*.

6.2.2 Instances of Ludonarrative Dissonance

Despite criticism of the term coming from critics such as Chris Franklyn, who calls it "sloganeering" (2013), and Robert Yang, who makes the argument that ludonarrative dissonance does not exist because the player doesn't experience it (2013), the term ludonarrative dissonance has become common terminology in the linguistic toolbox of critics and scholars of the medium. Since Hocking coined the term of ludonarrative dissonance, scholars and critics alike have adopted it into their terminology, with some being more welcome of the term than others. Tom Bissell was quick to embrace the term, writing two editorials in the popular culture publication *Garland* dealing with the topic as portrayed in *Max Payne 3* (2012), where he argues that violent play is
dissonant with the character’s remorse and anguish at having led a life of violence, and 
*The Last of Us* (2013), where he argues that the violent overtones of the text are 
dissonant with the relationship displayed between the two protagonists, Ellie and Joel, in 
the text’s narrative. In his 2010 book *Extra Lives*, he also dedicated a chapter dealing 
exclusively with ludonarrative dissonance in *Call of Duty: Modern Warfare* where he 
notes that the player can violently kill all virtual characters without upsetting the outcome 
of the narrative. Other critics who have explored concepts revolving around the term 
include Jordan Woods, who explored the possibility of ludonarrative dissonant practices 
in the context of spatial design (2014), Jennifer Katherine Shields, who explored 
ludonarrative dissonance from an aesthetic perspective (2012), and Briger B. Priddat, 
who explored the concept as part of socioeconomic and linguistic systems in his book 
*Communication and Economic Theory* (2014). This broad acceptance of ludonarrative 
dissonance as a construct comes as no surprise, as the phenomenon which it describes 
has been prevalent since the debut of the first *Super Mario Bros.* title on 1985.

In *Super Mario Bros.*., the player takes control of one of two plumber brothers: 
Mario Mario or Luigi Mario. Their purpose is to rescue Princess Toadstool of the 
Mushroom Kingdom from King Koopa who has kidnapped her. As far as the fiction 
contextualizing play is concerned, the player needs no other motivation. The context in 
which play happens is simple and needs no explication. The player, thus, sets off on a 
quest to stomp on goombas and to eat magical mushrooms that, somehow, grow from 
bricks when they are hit with a jumping attack or with a turtle shell. Without any other 
information providing context for the player, there is no dissonance whatsoever - an 
enemy kidnapped the princess and it is up to the player to rescue her. However, when 
one considers the narrative of the game as presented in the *Super Mario Bros.* instruction 
manual, a disconnect between play and the proposed narrative to contextualize play
comes into the forefront. The story of the game as presented in the first page of the manual reads:

One day the kingdom of the peaceful mushroom people was invaded by the Koopa, a tribe of turtles famous for their black magic. The quiet, peace loving Mushroom People were turned into mere stones, bricks, and even field horse hair plants, and Mushroom Kingdom fell into ruin. The only one who can undo the magic spell on the Mushroom People and return them to their normal selves is the Princess Toadstool, the daughter of the Mushroom King. Unfortunately, she is presently in the hands of the great Koopa Turtle King. Mario, the hero of the story, hears about the Mushroom People's plight and sets out on a quest to free the Mushroom Princess from the evil Koopa and restore the fallen kingdom of the Mushroom People. You are Mario! It's up to you to save the Mushroom People from the black magic of the Koopa! (1985)

This notion of the Mushroom People as the bricks in the game is further reinforced on pages 5 and 6 of the manual, which state that some of the mushroom people turned into blocks will give Mario mushrooms that allow him to grow in size, flowers that allow him to shoot fireballs, stars that grant him invincibility, and coins that increase his score. Even if the blocks yield no reward, the act of breaking one will at least reward the player with 50 points, which incentivizes players looking to compete for higher scores to break as many blocks as possible on their way to completing the level. If one is to accept the brief fiction as presented in the manual as the narrative contract, then it follows that Mario, in his quest to save the Mushroom People, will do all in his power to prevent their destruction in their current brick form. However, because many of the bricks, formerly the Mushroom People, often yield power ups and coins for the player, play mechanics incentivize players to destroy as many bricks as possible. In journeying through the Mushroom Kingdom destroying blocks with his jump attack to rescue its citizens, Mario is effectively killing the citizens that he has set off to protect in the first place.
While the previous example of ludonarrative dissonance may not be one that alters the play experience in any way - it can, in fact, be suggested that the impact of dissonance in the play experience is negligible - it is the kind of dissonant relationship between narrative and play that one would expect given the technological constraints and the level of narrative sophistication present in the texts of the era. However, as technology progressed, the ability of game designers to create larger worlds, more diverse characters, and longer and more nuanced narratives alongside complex play mechanics and more detailed visuals, the presence of ludonarrative dissonance became more evident in the text itself. It is worth noting that although ludonarrative dissonance as shown in the examples of Hocking and others imply a total disconnect between play and narrative, or between the ideologies presented by play and those presented by narrative, it most situations where narrative dissonance is clearly observable what is found is not an entirely discordant disengagement between the entirety of the elements of the text, but rather instances in which the contract proposed by either play or narrative elements is broken only sporadically. Such cases of dissonance can usually be found in more sophisticated texts.
An example of ludonarrative dissonance in a text far more complex than *Super Mario Bros.* can be seen in the 1992 strategy role playing game *Shining Force*. In *Shining Force*, the player takes control of Max, an amnesiac swordsman in training who washed up in the shores of the Kingdom of Guardiana. Lord Varios, Max’ mentor, receives word that a small group of spies from the neighboring kingdom of Runefaust are causing trouble in the countryside and decides to send Max, along with a small group of warriors, to stop the ruffians from Runefaust. As the story progresses, Max discovers that Runefaust has been taken over by the dark influence of the wizard Darksol, who intends to revive an ancient evil that had been sealed for ages. In order to stop the forces of Runefaust and Darksol, Max must travel the world, recruit warriors into his force, and use a variety of skills to out maneuver his opponents. One such skill is the Egress spell, a technique that only Max can use and which the player can rely on to magically withdraw the entire army from the battlefield and into the safety of a nearby church. Throughout the progression of the game there are no instances of ludonarrative dissonance. However, towards the end of the narrative, the writers rely on certain techniques that, because of how egress functions in-game, create a conflict between play and narrative that leaves the reader with more questions than answers.

After having traveled through the world, recruited a number of warriors, discovered a magical sword, and thwarted the plans of Darksol, Max and the *Shining Force* finally arrive at Runefaust. There, they learn of how Darksol is attempting to resurrect the Dark Dragon in the Ancient Castle - an underwater ruin that can only be accessed through a portal in Runefaust. The player guides Max and the Shining Force through the ancient castle and eventually confront Darksol. After defeating the sorcerer, Darksol sacrifices himself in order to resurrect the Dark Dragon, which leads to the climactic battle of good against evil inevitably found in fantasy epics. After defeating Dark
Dragon with the help of the Shining Force, Max is forced to use his magical sword, the
Chaos Breaker, to seal Dark Dragon. This sets off a series of tremors that lead to the
collapse of the Ancient Castle. Unable to make it back to the portal leading out of the
ruins on time, Max decides to invoke the egress spell. This is where the writers' choices
regarding the outcome of the narrative are placed into conflict with rules of play and how
skills behave mechanically. Even within the confines of the Ancient Castle, when the
player identifies a need to withdraw from battle, the egress spell can be invoked; and
when it is, the entire force is transported from the field of battle to the nearest church.
However, upon defeating Dark Dragon, because "perhaps the seal requires a guardian,"
Max is not teleported to safety with the rest of the force. It is at this moment towards the
end of the text when mechanics and narrative come into a strong conflict. It can certainly
be argued that that the last scene of the text after the credits show that Max might have
survived, as it depicts a character similar to Max having a conversation with Adam, a
character from the force. However, because Adam is actively a part of the Shining Force,
it can be assumed that he would remember the face of its leader, and given that Adam
does not know the stranger represented in the closing moments, this which would signify
that the character in question shares various traits and similarities with Max, but is, in
fact, not the leader of the Shining Force, as Max died at the bottom of the ocean.

Figure 16: Max Stays Behind to Save the Shining Force
Perhaps the most well known instance of ludonarrative dissonance can be found in the 1997 title of *Final Fantasy VII*. In this text, the player takes control of Cloud, a member of an eco-terrorist group fighting against the Mako corporation which is trying to drain the land of its natural resources in order to create energy. The play components feature an assortment of items which allow the player to heal wounds and resurrect characters. One of the more efficient items in this regard is the item Phoenix Down, an item that can be used to bring characters who have been killed in combat back to life. Likewise, the revive spell can be used to bring characters back to life. The ludic contract that the mechanics make with the player is "as long as at least one character remains alive, the player will be able to revive all dead party members." However, after the player has accomplished a number of tasks, Cloud and his party will find themselves facing Sephiroth, the antagonist of the game. In this moment, the narrative takes over control from the player. At this moment, Sephiroth impales Aeris, the character who up to this point is presented as the heroine of the game, and irreversibly kills her. At this moment, the narrative and the game mechanics clash. The narrative dictates that Aeris must die, and although game rules suggest that characters can be revived, in this moment an exception to the rule is made in order to advance the narrative. This places the narrative and play at odds and, as Hocking suggests, creates a jarring feeling of disconnect between the player and the text.

Certainly, the above mentioned examples are not the only cases in which ludonarrative dissonance takes place. As technologies have developed and given creators more sophisticated tools to create multilayered narratives in conjunction with complex ludic schemas, it is often the case that at some point there will be a disconnect between play and narrative. In the *Drake's Uncharted* series (2007 - 2012), the protagonist, Nathan Drake, is portrayed as a highly intelligent multilingual witty treasure
hunter whose lighthearted banter with his colleague makes him a relatable figure during the narrative segments of the text. During play, however, the player takes control of Drake and effectively turns him into a mass murdering sociopath whose sole intent is to kill scores of enemies in his quest to uncover some artifact. Likewise, the latest iteration of the Tomb Raider series presents the player with a scene in which the protagonist, Lara Croft, is being sexually assaulted by one man. She narrowly escapes this encounter. In the following play scene, she is seen shooting scores of men who want to kill her.

Because of the current state of new media and games criticism, which focuses on the flaws of the medium, critics and other commentators have focused on ludonarrative dissonance in texts as defined by Hocking. The exercise of uncovering the requests made of the player by the narrative and ludic contracts and juxtaposing them allows critics to consider whether play and fiction work together in order to create a cohesive experience or whether they are at odds with each other. However, this focus on dissonance by itself is limiting when used by itself as it fails to acknowledge broader ludonarrative elements outside of the ludic and narrative contracts. More importantly, the focus on ludonarrative dissonance has created a vacuum when it comes to inquiry of the opposite - that is, only a handful of scholars have considered the implication of narrative and play functioning harmoniously as a unit. This concept will be considered as ludonarrative harmony.

6.2.3 Opposing Dissonance: Ludonarrative Harmony

As it was previously mentioned, scholars and critics alike were quick to embrace the term of ludonarrative dissonance; however, while the manifestation of such disconnects between narrative and play have been documented and exemplified, the same cannot be said of the opposite situation. If ludonarrative dissonance represents a
disconnect between play and narrative, then it becomes prudent to refer to instances in which narrative and play align. This phenomenon is referred to as ludonarrative harmony.

Ludonarrative harmony is a phenomenon of which little has been written, and that which has been recorded often refers back to one of two sources. The first of these sources is Michael Burden and Sean Gouglas’ analysis of Portal as an algorithmic experience in which, when analyzing the game’s narrative in the context of play, they note that the antagonist’s “murderous intent brings together multiple narrative elements foreshadowed in the game, but also emphasizes the appropriateness of the game mechanic for advancing the narrative - ludonarrative harmony” (2012). The second source often referred to when discussing ludonarrative harmony is Ben Abraham's analysis of Gone Home, in which he notes that the text is "a really nice example of ludonarrative harmony," as he often finds himself "experiencing exactly what the game mechanics (popping light bulb) and the story (scared 20 year old in the 'psycho house' at midnight alone)" is supposed to be feeling (Abraham, 2013). Although both of these sources provide an interesting insight into the nature of the authors as players as they played through their respective texts, fail to fully define exemplify ludonarrative harmony.

In his 2007 piece, Hocking suggests that the critic consider the text in terms of narrative contracts and ludic contracts. If one were to adopt this terminology while also accepting that a text can be considered for harmony or dissonance while looking at individual segments of the text in addition to considering the ideologies presented by the individual elements of the text, then ludonarrative harmony would be defined as a successfully reciprocal, or harmonious, relationship being established between the ludic and narrative elements of a text. If one is to consider that, as with ludonarrative dissonance, harmony can occur and be considered by the critic in individual segments of the text, then the definition can be expanded to include specific segments of play.
Despite claims to its dissonant nature by Tom Bissell (2013), an instance of full
textual ludonarrative harmony can be found in *The Last of Us* (2013). The text begins
with the player taking control of 12 year old Sarah, a girl who lives with her father Joel in
Austin, Texas. Sarah wakes up in the middle of the night to an urgent call from her uncle
Tommy to find that her father is not in the house. The narrative presents Sarah as a girl
who is scared and helpless. The game mechanics reinforce this by giving the player a
limited number of possible actions. The player's only available options when controlling
Sarah are to walk around the house and open doors. The player does not have the option
to run, jump, crouch, attack, or perform any of the actions traditionally associated with
action or survival video games.

After walking down to the living room, Sarah sees Joel rush into the house. Joel
explains that the neighbors are sick, and that Tommy is picking them up to leave the
state. As Joel, Tommy, and Sarah get into Tommy's pick-up truck, the narrative at this
point depicts Sarah as being paralyzed with fear. Mechanically, this is reinforced by
taking further control away from the player. When in the car, the player can only control
the camera to look around as Tommy drives while pointing out the several burning homes
in the outskirts of Austin. The narrative of a scared young girl at the mercy of the adults
who "know better" is thus mechanically reinforced by placing the player in the role of a
passive viewer as a non-playable character who "knows better" takes on the active
leading role and tells the player where to look.

Twenty years after Sarah was killed and Joel escaped Texas, Joel finds himself
struggling to survive in a world drastically different from the when that he knew. The
sickness that had overrun Austin, and most of the nation, was an evolved form of the
cordyceps fungus that has the ability to infect humans. The fungus turned humans into
mindless cannibals whose bodies are deformed as the infection progresses. The few
spaces that were able to be secured for those not infected have been declared under martial law, and the military state closely monitors not only the health of every resident, but also every interaction had. It is in this world where the player takes control of Joel.

In the narrative, Joel is framed as a strong, selfish survivor who takes on jobs as a mercenary in order to make money. He is shown to be confident, reliable, and loyal, but also selfish. He is someone who only thinks of the wellbeing and benefit of him and his personal circle. Mechanically, this is reinforced by allowing the player to control Joel as he performs a variety of actions. Unlike Sarah, Joel can walk, run, jump, climb, crawl, take cover, and use guns. To mechanically convey his antisocial behavior, however, players are given limited freedom as to which non-playable characters they can interact with.

As the game progresses, Joel takes a job to escort Ellie, the only person who appears to be immune to the cordyceps fungus, to a facility on the other side of the continent. In order to arrive at their destination, Joel must traverse a variety of spaces filled with infected non-playable characters whose only desire is to kill anyone who encroaches on their territory. The narrative crafts Joel as someone who is hesitant to begin violent conflict, but who is not hesitant to engage those who threaten him. This is, again, reinforced through the mechanics by making the majority of enemy encounters avoidable and difficult to survive should the player approach them haphazardly. However, it is always an option for Joel, and for the player, to sneak around the depicted spaces and silently kill his would be assailants silently.

The fact that Joel can kill others has been referred to by some critics as ludonarrative dissonance (Kohler 2013; Bissell 2013). They argue that Joel's use of guns is unwarranted and that the rampant murder of individuals, in many cases humans, is unnecessary. However, the narrative context in which the action takes place and the
actions that the players perform are not dissonant. Before making such judgments, one would have to remember that the narrative presents a fiction in which Joel has survived what can effectively be considered as a form of a zombie apocalypse. Joel lives in a dystopian world and is used to using violence to survive. Furthermore, Joel has been hired by a group to escort a young girl across the country in what they consider a dangerous mission. Certainly, a growing father-daughter relationship between Joel and Ellie is depicted in throughout the text as they travel the countryside. However, the focus of the game is not solely this relationship. The text focuses both on Joel and Ellie as individuals developing a father-daughter relationship and on Joel and Ellie surviving in a world full of hostile entities. Within this fiction, not only is it not irrational to expect violence, violence becomes necessary. In this context, then, it can be said that the play mechanics and the narrative depicted in The Last of Us is an instance of ludonarrative harmony.

6.3 Expanding Ludonarrativity

The previous Analysis of The Last of Us and its textual ludonarrativity can indeed serve as a short template to help critics use the ludonarrative framework in order determine when the narrative and ludic elements of a text are in alignment. This approach will help critics create a better understanding of a given text as well as help as a guiding principle for designers who wish to incorporate narrative and ludic elements working in conjunction into their craft. However, if one is to accept that video game texts are composed of all of its elements, then one would have to accept that under its current definition ludonarrative analysis is severely lacking, especially when it comes to how critics apply ludonarrative frameworks in their writing, when considering what elements of the text are considered as part of the ludonarrative framework, and when considering whether the text makes any rhetorical appeals.
6.3.1 Focus on Me: The Critic vs. The Text

One of the major limitations of trends in application of ludonarrative frameworks to the analysis of video game texts is the focus on the reactions and feelings of the critic. Because much of the currently existing commentary on the manifestation of dissonance focuses on the critic’s appreciation of ludic or narrative elements, rather than on their function, discussions of ludonarrative dissonance often steers away from textual analysis and the effects of a disconnect between the narrative and play and instead turns into the critic's opinion of the mechanic or narrative elements. This often results in the critic writing a piece wherein a value judgment is made about the quality of the text rather than one in which the associations between the narrative and ludic elements is examined, thus turning analysis and criticism into a commercial review.

One such example of critical discussion of ludonarrative turning into a reviewer’s opinion can be found in Kohler’s work. When discussing the text, Kohler correctly notes that at times the text forces the player to use stealth to eliminate all the enemies in a predetermined space. In his commentary on *The Last of Us*, in his haste to find a ludonarratively dissonant element and inject his opinion of the text, however, Kohler seems to overlook the fact that some of his criticism does not address ludonarrativity as a combination of play mechanics and narratives. Rather, his comments seem to focus on ludic expectations and his personal approach to play. Regarding the possibility of using stealth to circumvent, rather than to eliminate, Joel's opponents, Kohler writes that "The first time I expertly snuck around a group of thugs only to find a dead end that would only open if I killed all ten of them was a disappointing moment, and one that was repeated quite often throughout the game" (2013). Certainly, there is a ludic choice implemented by the designers in which in certain situations, Joel is expected to eliminate all of his enemies in a given space. If considered within the context of the narrative, observations
such as those proposed by Kohler could, indeed, serve to further discussion of the nature of the relationship between narrative and play. However, because his comments rely on personal experience and his individual reactions regarding his enjoyment of the text, his statements ultimately are transformed into a ludic complaint about how the design mechanics, specifically a given area’s win state, are not created to respect his individual approaches to play.

The same problem present in Kohler’s work is also present in Bissell’s criticism of the *The Last of Us*. Just as Kohler begins by proposing a critical framework and continues his commentary by shifting into praise or complaints of the text based on his feelings about the text rather than discussing the ludonarrative elements, Bissell presents a framework which hints at an analysis of ludonarrative dissonance as manifested in the text, demonstrates instances in which dissonance is manifested, and then writes that "for the vast majority of my playing time, my bullet total was in single digits. I often wished there were a hell of a lot more guns, especially when I was hunkered down behind a wall, hot-eared, my heart hammering away, while I waited to sneak to the next piece of cover, because there were five enemies I could see and I had only three bullets to my name" (2013). Again, rather than discussing the lack or abundance of weapons and how the text’s shooting mechanics and encounter design may conflict with how the narrative creates a fiction, Bissell’s comments revolve around purely ludic considerations of the text based on personal enjoyment. His commentary, then, turns from one where he claims to discuss how narrative and ludic elements are dissonant into one where he explains what elements of the text could have changed for him to have had a more enjoyable experience.

This trend on focusing on value judgments based on enjoyment when discussing ludonarrativity can be traced back to Hocking’s piece on *BioShock*, where he states that
the game needed to "make me experience - feel - what it means to embrace a social philosophy that I would not under normal circumstances consider" (2007). Certainly, Hocking's commentary on *BioShock*, when analyzed in its entirety, is less a player-centric analysis on the player's reactions as much as it is a commentary on ludonarrative dissonance as manifested in *BioShock* with an additional commentary on its effects on the player, with the author using the self as a proxy for player. However, if one is to consider the function and configurations of any of the ludonarrative elements of the text and not the level of enjoyment of the player, then one must avoid instances of value judgments focusing on mentions of how play affects player preference towards the text.

All three of the major pieces referenced are, as is most work regarding ludonarrativity, written with the experience of the critic as a central point of focus, rather than with the text being the key element being analyzed. This results in articles in which what is analyzed is not the ludonarrative elements, but rather the feelings that the text created in the critic and the processes through which such feelings were constructed. This is not to say that there is no merit in considering player attitudes towards a given text and how certain perceived design flaws in design and narrative elements may affect the player's affinity for the text. However, this line of inquiry is more relevant for market research and commercial reviews than it is for consideration of the rhetoric and composition of ludic texts. Because of these limitations, when discussing possible dissonance or harmony, the focus on player enjoyment will be rejected in order to focus on how elements in themselves are dissonant or harmonious.

6.3.2 Audiovisual Ludonarrativity

The second limitation of the current discussion surrounding ludonarrative dissonance is the lack of cohesive frameworks that are able to both understand how narrative is implemented in the text's design and manifested through play as well as
comprehend the different modalities of textual elements and their convergence. As evidenced by Hocking’s limited proposal of the ludic contract and the narrative contract and his interpretations of said contracts representing core values presented by each textual element (2007), as well as by the comments made by Kohler and Bissell briefly mentioning the textual fiction before commenting on their individual play experiences (2013), current discourse regarding narrative and play in the context of dissonance and harmony is severely insufficient. In many of these commentaries, a game’s narrative is explicated as some vague form of what the player perceives to be the text’s story, while every other element is considered as play. This, of course, fails to acknowledge the multiple layers of narrative, how said narratives interact with play mechanics, how mechanics help create meaning, how visual and spatial design help contextualize what is being represented, and how aural design may further provide a desired atmosphere thus complementing the visual space. The task becomes, then, to be able to differentiate between what is to be considered as a narrative, ludic, or audiovisual element.

In previous chapters, the composition of video game texts was exhaustively discussed. It was explained that there is no single narrative, but that there are three given narrative layers. The player action is the narrative that is experienced by the player and which can be manifested as what the player does, the character narrative is to be understood as the events as experienced by the player character, and the stories within the narrative are considered to be stories which are told to the player through in-game conversations or stories. With this in mind it was explained how the time loop may affect narrative layers, how chronotopes can be used to describe the flow of a given narrative, and how both mechanics and spatial design can serve to create and frame a given narrative. Likewise, the rhetoric of play and the rhetoric of the visual as manifested in video game texts was explained. Bogost’s concepts regarding procedural rhetoric were
expanded, ideas regarding unisolvent and multisolvent play were introduced, and questions regarding the rhetoric of narrative were addressed. Likewise, elements of the visual, spatial, and aesthetic design were addressed using Kress and Van Leeuwen's grammar. If one is to fully understand ludonarrativity, then it becomes obvious that not only is current application of the term limited, but that the concept itself fails to encompass all of the various elements found in a video game text. As such, it may be prudent to propose an expanded definition to account for visual and aural elements as a separate entity from mechanics and narrative - this will be the audiovisual ludonarrativity. In order to demonstrate how one would consider audiovisual ludonarrativity, it may be prudent to turn once again to the often maligned The Last of Us.

As it was previously explained, The Last of Us presents a narrative fiction in which the protagonist is one of many survivors struggling to stay alive in a post-apocalyptic nation. During play, the camera is placed above Joel's shoulders, featuring a medium-close perspective which places the player at a slightly inclined angle over Joel, thus creating an extradiagnostic character narrative. This implies the player's superiority over the character being controlled. Because of the perspective in which play is manifested, the player assumes the role of a puppeteer. The player, thus, is expected to co-author the narrative of the character being represented in the context of traversal through predefined spaces and within the constraints of ludic action previously determined by the designer without interfering with other narrative considerations. Because of the spatial design, which interjects a large number of hallway design spaces with a comparatively small number of open spaces, it can be said that the text intends to show the player a narrative in which they can participate but which they cannot affect in any meaningful way. Unlike texts such as Fallout 3, which give the player the freedom to create their own fiction, The Last of Us, through stories embedded in the narrative as well
as through the character narrative and through the use of the character as narrator, tell the player of the context in which the narrative is unfolding.

Ludic elements are consistent with narrative elements. In the narrative, Joel is portrayed as a survivor who cares about his group. This is reinforced mechanically by giving the player the ability to explore spaces at varying speeds while hiding behind covers, to jump and swim, to shoot a variety of weapons, and to use common items such as bricks as decoys while taking away the ability of harming their companion non-playable characters. However, at the same time the world presented in *The Last of Us* is shown to be hostile - a world in which one would be wise to tread softly. The ability for Joel to listen to his surroundings and picture surrounding enemies and their locations in his mind's eye, the limited number of weapons when compared to other texts in the same genre, and the limited health all serve to reinforce the threat of the world and of the cordyceps-infested mutants mechanically. While the narrative conveys the idea of Joel as a reliable survivor in a hostile world, the ludic elements force the player to navigate through the various play spaces, whether they follow a hallway design or a divergent design, in a careful manner. The player is meant to rely on and be confident in Joel's skills, but is also prompted by the world to constantly pay attention to the surroundings.

Curiously, Kohler's observations regarding the player's ability to sneak past a number of enemies and then being forced to backtrack in order to kill all enemies is partly correct. It is, in certain sections, entirely possible for a player to sneak around a series of enemies without being detected and then be forced to backtrack and kill a number of enemies. An early scene in which this is observable is on the first chapter, when Joel and Tess are trying to rescue another character, Robert, from a rival group of mercenaries. The game places Joel outside of a building guarded by a number of mercenaries which Joel and Tess must kill, even if the player wishes to play in a nonviolent form. The fiction
created by the narrative, however, is in harmony with the situation in question. As the scene opens, one of the mercenaries tells another that he should "be careful. Joel and Tess are probably on their way here already." There are mercenaries guarding every entrance to the building and a number of mercenaries inside the building itself. Although the player is able to sneak around the first few mercenaries, when encountering enemies later in the virtual space, those enemies left alive will be summoned to Joel's current location upon detection. This is not true, however, in most of the situations in which Joel finds himself surrounded by the infected. Although it is certainly impossible to navigate through all spaces without killing a single opponent, it is permissible in most situations for the player to guide Joel through the virtual space avoiding the infected in order to complete many of the game's locations. The situations in which Joel is forced to kill every enemy in a given map are those which are explained narratively in the fiction by injecting a group of individuals searching for Joel or in which the space is designed in such a way as to force player detection in a given point while simultaneously allowing unobstructed visual communication throughout the entire map.

Just as narrative and play propose the idea of a confident survivalist in a dangerous world, so does the audiovisual design reinforce the notion of the world as a dangerous space. The represented space has a high modality, meaning that the text attempts to imitate a possible reality. Within this represented possible reality, the represented participants are depicted with traits culturally accepted as threatening. Every non-playable character carries weapons, walk with a menacing posture that attempts to look down at Joel, and often assume defensive positions when approached by the player. Conversations had by the participants, which the player can overhear when approaching the non-playable characters, often revolve around acts of survival or violence. The buildings are often depicted in a state of disrepair, the animals are depicted as feral, and
the infected are represented as ravenous and deformed creatures whose only human feature is the human shape. The way in which the camera was designed creates an action process through frequent use of transactional and non-transactional vectors, with Joel being the actor and the goal, when represented, being a non-playable character. The implication of said perspective is an expectation of constant threat. This is further reinforced through the use of dark shades and the absence of light, the lack of bright colors, and the focus on showing the player how nature has overrun the nation.

Despite Kohler’s complaints, *The Last of Us* presents a narrative fiction of survival in a threatening land. This narrative is reinforced both visually by representing everything in the virtual world as a potentially threatening actor and mechanically by giving the player limited health and by incorporating mechanics whose focus is to force the player to hide and use stealth to Joel’s advantage. With all the elements of the game being harmonious throughout the majority of the text, it can be said that *The Last of Us* is harmonious in respect to audiovisual ludonarrativity, and that whatever arguments are made by the text are sure to be reinforced by all of its elements. Of course, to understand what these arguments are, one would have to consider not only audiovisual ludonarrativity, but also the rhetoric of the text.

6.4 Rhetoric and Audiovisual Ludonarrativity in The Last of Us

In the previous section, the concept of audiovisual ludonarrativity was discussed in order to propose an approach that can be used to understand how a text’s narrative, ludic, and audiovisual elements reinforce, or fail to reinforce, each other. This can, then, be used as a starting point for understanding the arguments made by the game. It is worth mentioning that audiovisual ludonarrativity, while extant in nearly all video game texts, is not a concept that every critic needs to adopt. Indeed, it may be enough for one critic or another to be content with merely demonstrating that there is some instance in
which a the narrative and the ludic elements of a text are not in complete harmony. If this is all a critic intends to unravel, then there is no need to consider how visual or aural elements frame the text, how the multiple narrative layers affect the play experience, or how the text attempts to persuade the reader. However, if a critic's aim is to construct a fully nuanced understanding of a given text, then it is imperative that the critic begin by fully understanding the full spectrum of audiovisual ludonarrativity. In this section, the study will build on the audiovisual ludonarrativity of *The Last of Us* as explored in the previous section in order to understand what arguments, if any, the text makes.

In the previous section, by showing how to perform an analysis of the audiovisual ludonarrative elements of a game, it was demonstrated that *The Last of Us* is a harmonious text in that all of the textual components support the fiction of the text. However, to fully understand the text, one would also need to comprehend what arguments are made by the text, whether those arguments are about the text itself or about something external to the work, and whether such arguments are persuasive. In order to understand this, one should first turn to Bogost's suggested method of inquiry into unit operations and then consider how other textual elements help support or hinder the arguments being presented. As it was previously stated, Bogost suggests than one rely on seven key questions:

1. **Reduction** - How much does the text reduce complex behaviors into simple tasks?
2. **Tunneling** - Does the text lead the user through a predetermined set of acts, or does the text allow players to perform actions at their leisure?
3. **Tailoring** - Does the text provide information relevant for the individuals to change their attitudes, behavior, or both?
4. **Suggestion** - Does the text encourage a certain type of player behavior?
5. Self Monitoring - Does the text give players a tool to monitor their attitudes or behavior to achieve a predetermined goal or outcome?

6. Surveillance - Does the text allow one party to monitor the behavior of another in order to modify said behavior in a specific way?

7. Conditioning - Does the game system use principles of operant conditioning to change or modify player behavior?

When considering whether a mechanic attempts to reduce complex behavior to simple tasks, one would have to consider the technological limitations of the platform in which the text is being portrayed as well as the degree of reduction which takes place. It is undeniable that without the implementation of multiple actors with fully simulated artificial intelligence - a feat of computing engineering that humanity has yet to achieve - human behavior cannot be fully simulated in play. One would, then, have to consider behavior simplification as existing in a spectrum in which on one end there exist video game texts that fully reduce a form of behavior or activity to a few clicks or button presses and on the other end there are video game texts that force the player to actively consider play elements and behaviors through the lens of reality. An example of a text that reduces a behavior to a few clicks is Farmville. In Farmville, the real life behavior of considering crop seasons, optimal weather patterns for planting seeds, harvesting practices, the quest for land and manifest destiny, and the endless capitalistic pursuit for endless wealth are all reduced to a few clicks where the player clicks a button to harvest all available crops and another click to plant new seeds. The diverse tasks of buying seeds, selling crops, feeding cattle, expanding land, and building structures are all represented as clicks. This reductionist approach will be referred to as extreme reductionist. On the other end of the scale one can find texts such as L.A. Noire. As part of the narrative in L.A. Noire, the player is required to perform interviews with possible
suspects. During these interviews, the player must observe the facial cues of the characters being interrogated, cross-examine their statements, confront them with evidence, and take notes of their testimonies. This more nuanced approach will be referred to as highly mimetic. Although it may not be accurate to say that the process of interviewing and cross-examining a witness is fully simulated in the game, it is certainly true that the representation of the process is by no means reductive. *The Last of Us* falls closer to *L.A. Noire* in the spectrum.

In *The Last of Us*, the player has control over Joel during what can be largely considered action segments. During these segments, the player can explore an area by walking, running, jumping, and crouching. Furthermore, the player can also engage enemies by using a variety of techniques, as well as use the environment to avoid enemy encounters. Combat actions include shooting, aiming, stabbing, punching, and choking, while strategies for avoiding encounters include listening for enemy noises and using objects to create a distraction. While scavenging the area, Joel can find and store a number of items and combine them in order to create more complex survival gear. Certainly, because interaction between the player and the text happens through multiple interfaces, one of which is a controller, each action is reduced to a combination of button presses. This is true of every video game text. However, unlike extremely reductionist games, which require only a few taps on the screen in order to harvest and sell thousands of dollars worth of crops, in *The Last of Us*, for Joel to create a spiked two by four, the player will need to navigate through the virtual space and find a two by four, find a blade, find some form of binding, usually duct tape, and find a rag. Once this has been accomplished, the player will have to navigate through a series of menus and combine the objects. This will result in the player having a stronger weapon to defend against the infected. Although the actions performed by the player are not mimetic on their own, the
way in which the actions are represented can be said to be a mimetic representation of the process.

Perhaps the action that can be said to be the most reductive is that of shooting and killing enemies. Indeed, in The Last of Us, the act of killing is reduced to the click of the trigger button in the controller, perhaps representative of the act of pulling the trigger of a real gun. Because the game does not actively threaten the player with potential jail time or with any of the deterrents to murder put in place by the legal system, it could be argued that there is no disincentive for taking the virtual life of a non-playable character. Some have even argued that because killing in game is fun, said play mechanic actually incentivizes violence (Kohler 2013, Keough 2012, Cassar 2013). However, it warrants mention that the idea of what is fun is highly subjective and is variable from one individual to the next. What one player considers fun, another may consider a chore. In a 2013 piece for The New York Times focusing on The Last of Us and Bioshock Infinite, Kirk Hamilton writes that “boring isn’t usually the first word that comes to mind when one thinks about violence. And yet that’s exactly how I feel about so much of the shooting, maiming, and torturing in the video games of 2013.” To Hamilton, the mechanic of shooting, one which Kohler, Keough, and Cassar find rewarding and enjoyable, is in many cases nothing more than “boorish action” and “thoughtlessly treated torture.” This shows a stark divide between what two critics find to be fun. As such, the element of fun cannot be used as a measure to determine which systems the text is attempting to promote over others except in cases of personal introspection. It may be useful to discuss the effect of the text on an individual player, but it is by no means a form of measurement that can then be expanded to make universal claims about the text. Furthermore, because any analysis of how “fun” a given game is revolves around the experience of the player with the game, it is at best a highly unreliable criterion to use.
when assessing the function of a given mechanic. Regarding the discussion of whether a
given system offers incentives for or against violent in game behavior, this is a question
that must be addressed individually for each text, as different texts have different systems
contextualizing allowed actions. In *The Last of Us*, it is true that there is no score penalty
against the player should the choice to kill an enemy who could have simply been
avoided be made. However, the choice of whether to engage an enemy is still not as
reductive as Kohler and others would suggest.

In every possible enemy encounter in *The Last of Us*, the player must consider
the spatial design and enemy placement as well as the number of enemies inhabiting any
given space. Players must first decide if it would be more beneficial to kill or to avoid an
enemy, and having done this they must decide how to proceed with their chosen action.
Killing an enemy with a firearm will make noise, which will alert other enemies in the area,
while using a melee weapon to kill the enemy will still leave a body that other enemies
might find and thus become alert to the presence of the player. On the other hand, using
bricks to create a distraction will clear a path for the player, but it will also alert the enemy
to the player's presence. These three scenarios yield the possibility of the player being
found and killed by the infected or by whatever mercenary bands are looking for Joel in
any given space. However, trying to sneak past an enemy without making any noises will
likely yield the highest chance of success without death. The choice of whether to engage
or avoid is one that the player has to make on a case by case scenario after factoring
variables such as number of enemies, enemy patrol routes, type of enemies, and
available weapons. It can be said, then, that shooting mechanics don't encourage
violence as much as they encourage survival. Players are not encouraged to kill every
enemy that crosses their path. Instead, players are encouraged to consider every
possible variable in the play situation and act in a way that least to the highest odds of
survival. At times this may, indeed, be shooting an enemy, but in other situations it may be to sneak around a group of enemies. This is, indeed, consistent with the fiction set by the game's narrative.

The Last of Us, like many texts within its genre, gives the player a number of markers for them to monitor their in game behavior regarding enemy encounters. As previously stated, the player must consider not only the items available in the surrounding spaces, but also what is available in Joel's current inventory. In order to survive any given encounter, the player must monitor their current situation, contextualize it within play, and behave in whatever manner will be most likely to lead to the goal of survival. Likewise, Joel's listening abilities could be considered as a form of surveillance that allows the player to monitor the behavior of a non-playable character. Rather than using said surveillance skills in order to modify the behavior of the non-playable character, however, the player will use the information in order to make choices regarding their own actions. This further reinforces the idea that The Last of Us is, in the end, about survival.

The narrative and mechanics of The Last of Us have thus far been analyzed and been shown to be harmonious in their ludonarrativity. The game was also shown to encourage a survivalist rhetoric in which every action taken by the player, whether that is to engage in or flee from combat, is one that will increase the chances of survival. By creating a fiction where Joel has a small circle of people in whom to trust in a post-apocalyptic world that seems interested in killing everything, the game suggests that survival of the self and those whom one holds dear takes precedence over that of anyone else. This is further reinforced in the closing scene of the text, where Joel learns that in order for scientists to synthesize a cure for the cordyceps fungus they must kill Ellie to analyze her brain. Joel, having decided that Ellie is part of what he defines as "us," kills all the scientists in the lab and walks away with Ellie, thus forsaking the world. It is a
resolution that invokes an idea of friends, family, and the self taking precedence over society and the wellbeing of humanity. It was shown that this is reinforced mechanically by forcing players to consider their surroundings and their equipment before engaging an enemy in order to survive. Furthermore, because the aesthetics and visual design further provide context clues for the player to modify behavior according to what is best needed in order to survive, it can be said that the audiovisual ludonarrativity of *The Last of Us* is one that reinforces a rhetoric of survival, which ultimately shows that unlocking the ludonarrative quality of a text is only the first step of many in a quest for the meaning of a text.

6.5 Conclusion

In this chapter, Clint Hocking's concept of ludonarrative dissonance, first introduced in his criticism of *BioShock*, was analyzed and expanded. With the concept being useful to understand how ludic elements and narrative structures might be in disharmony, a need for a concept explaining the opposite was needed. Ludonarrative harmony was thus introduced and defined as ludic and narrative elements existing in ideological and rhetorical harmony within the same text. The concept of ludonarrativity was then expanded to consider not just the broad constructs as presented in the ludic and narrative contracts made by the game's fiction and mechanics, but to also consider audiovisual elements, thus creating a form of audiovisual ludonarrativity whose elements may be harmonious or dissonant. This was then considered in the context of the rhetoric of the text, and *The Last of Us* was used as an example to demonstrate the rhetorical functions of audiovisual ludonarrativity.

Indeed, Hocking's term has proven useful to some extent, but without contextualizing it as part of a broader framework, it is as limited as only considering a text's narrative, mechanics, or visuals to the exclusion of everything else. The expanded
The construct of audiovisual ludonarrativity here proposed serves not only as a first step to understanding how a given text makes arguments and explores themes, but also serves as the linchpin of any given analysis - it is what holds together inquiry into narrative, ludic, and audiovisual elements, thus allowing for comprehensive analyses of videogame texts.

In the following chapter, two texts will be analyzed using the framework here proposed. It will consider the narrative, ludic, visual, and rhetorical elements of Watch_D0gs in order to demonstrate how a comprehensive analysis of a given text will yield a more reliable understanding of a given text than when using any of the established approaches individually. Furthermore, it will be demonstrated that this mode of analysis can be used to help the critic understand not only the rhetoric of the text towards itself, but also the rhetoric of the text towards the ontological systems represented therein. To do this, Watch_D0gs will be analyzed as a fully rhetorical text that makes arguments regarding contemporary issues of surveillance and privacy.
CHAPTER 7
LACKADAISICAL URGENCY AND THE MIRROR OF SOCIETY:
READING SURVEILLANCE IN WATCH_DOGS

7.1 Introduction

In the previous chapters, a comprehensive framework for understanding the entire spectrum of textual qualities of video games was developed. Contextualized within the discussion of whether interactive texts can be considered as art, the terms of video game and player were defined. To do this, Juul's definition of games was analyzed and proven to be ineffective. Based on his definition of games, as well as those of Arthur Asa Berger, Christ Crawford, and others, a definition of video game as a text was constructed. This definition proposed video games as having (1) a virtual space represented in visual form, (2) virtual actors, (3) some form of player interaction, (4), a requirement for nontrivial effort, (5) a set of rules or mechanics governing interaction, (6) player freedom, (7) measured progress, and (8) an emergent player action narrative. In addition, the role of the player was discussed, thus redefining the current discourse from one where a type of player is defined as "casual" or "hardcore" based on the type of game played and on vague definitions of what it means to be "hardcore" or "casual" to one where the type of game is defined by the type of engagement offered by the primary mechanics and where the type of player is defined by frequency of play. In addition to defining games and players, the previous chapters addressed the role of a player. Five major roles were identified and expanded upon based on the level of engagement expected of the player - that is, the role of the player was defined as a construct dependent on the level of ergodic expectation and the level of player freedom offered by the game text. This helped frame discussions regarding the role of the player and play engagement in a more accurate and less ambiguous manner.
The previous chapters also served to create a narrative and rhetorical framework for understanding games in which the text's narrative, mechanics, and visuals are considered in conjunction with the rhetorical situation of play in order to unlock the messages being conveyed by the text. In order to understand a game's narrative, the study suggested to consider linearity as a temporal construct and cursality as a spatial construct, rather than considering play in itself in the context of linearity, as has been suggested by Aarseth (1997), Juul (2002), and others. This combination of space and time can then be measured through a variety of chronotopes - a term borrowed from Bakhtin's narrative manifestos and adapted to function with multimodal texts. In addition, three narrative layers were identified. The player action is the narrative as perceived by the player, the character narrative is the narrative as perceived through the protagonist, and the story within the narrative was defined as stories that exist within the video game text. Finally, the concepts of time loop narratives and of mechanics as narrative were discussed and contextualized within the framework proposed for a full narrative understanding.

Just as game narrative was discussed, the rhetorical dimensions of video game texts were discussed. Borrowing from Bogost's work, unit operations were situated within the context of a procedural rhetoric, which was then considered alongside the visual rhetoric of a text, which is to be understood primarily through Kress and Van Leeuwen's grammar. Finally, narrative, ludic, and visual elements were considered through the lens of audiovisual ludonarrativity, harmony versus dissonance, and ludic and narrative contracts.

The framework herein proposed will help critics avoid pitfalls of reductionist readings based on personal interpretation of a single textual element, instead prompting the critical player to fully engage with all elements of a text. In this chapter, the process
for applying the framework thus far proposed will be demonstrated by performing a rhetorical, ludic, and narrative reading of *Watch_D0gs*, a text that has often been misinterpreted due to superficial, narrow, or restrictive commentary that relies on consideration of a single play mechanic. It will be argued that *Watch_D0gs* presents ontological systems and actively makes claims about them by placing the player in the role of the controlling entity.

Because the analytical framework to be used has been laid out in the previous chapters of this study and summarized again in the opening segments of this chapter, the analysis will begin with a broad description of the text in question, including mechanic, visual, and ludic elements, and a consideration of the role of the player. Any meaningful claims regarding the text, or existing analysis regarding the text, will be addressed in these opening sections. Following this, the text will be analyzed according to the framework herein proposed. First, the textual elements will be discussed within the context of narrative and play, and how broad design choices help reinforce the claims made by the text. Then, the narrative of the text will be considered. The three layers of the narrative will be deconstructed in order to understand the claims being made of the player by the narrative separate from those made by play or aesthetic considerations. Attention will then be given to ludic considerations and how they contextualize or are contextualized by the narrative. Claims made by ludic elements will be addressed before engaging the visual elements of the text and what these suggest about the text. Finally, an assessment will be made regarding the rhetoric of the text. This rhetoric may be one about the nature of the text itself and about how the text invites the player to engage with the game world or about elements that exist outside of the text.
7.2 Hax0r is teh 1337: Watch_D0gs and the Failed Surveillance State

It is uncommon for one to find academic inquiry into the question of whether ludic texts can be critical of the systems depicted therein. According to Bogost's analysis of political texts, the act of system representation can be regarded as a rhetorical act that carries with it all the elements needed for ludic criticism (2008). However, it is a more recent trend to suggest that the act of representation, especially in regards to representations of systems, does not necessarily imply a criticism of the systems being represented (Warren 2014). Discourse regarding this question, while relevant, is limited both in quantity and in scope.

It has certainly been attempted to engage in textual readings that endeavor to answer such questions, with the analysis by Bogost of Animal Crossing as a pro capitalist text discussed in a previous chapter serving as an argument that representations are, indeed, rhetorical. However, these purely procedural readings often fail to take into account narrative and aesthetic elements, which often leads to an incomplete understanding of the text or to flawed assumptions. This can be observed in Kohler's, Keogh's, and Cassar's commentaries regarding The Last of Us and, to a lesser extent, in Clint Hocking's work on ludonarrative dissonance in Bioshock (2007). However, Bioshock and The Last of Us are hardly the only text to cause critics to develop an erroneous understanding of the text because of their focus on singular elements. One such assumption often made about Watch_D0gs is that the text is simply a hacker power fantasy because it allows the player to use technology as a weapon.

It is certainly true that in the game, when players take control of Aiden Pearce, the player is able to take control of every surveillance and security system represented in the game and use them as weapons. However, if one considers the narrative context presented by the text, the character traits of the protagonist, and the aesthetics of the
game space in conjunction with the mechanics, it will become evident that *Watch_D0gs* serves as a warning against overreliance on technology, makes an argument against the surveillance state, and holds a mirror up to the player for them to consider their position on issues regarding surveillance and privacy.

7.2.1 *We are All Connected: Watch_D0gs as Game and Player as Puppet Master*

Before engaging with the narrative or rhetorical nuances present in *Watch_D0gs*, it may be prudent to understand not only what type of game the text is, but also what role the text expects the player to take. By understanding the demands made of the player by the text based on its design, it will prove more efficient to create connections between play, aesthetics, and narrative. Furthermore, understanding not only the role of the player but the extent to which the text expects the player to engage with the game space will make understanding the connection between the represented systems, the arguments made by the text, and the player reaction less cumbersome.

*Watch_D0gs* presents the player with a digital interpretation of Chicago. However, while several landmarks can be easily identified within the game space and some of the names remain intact, because the game is set in the nearby future rather than the actual present, the designers have taken some liberties with the way in which the space is designed. While *Watch_D0gs* depicts a mimetic representation of, for example, Cloud Gate in Millennium Park (see Figure 7-1), the game also represents a number of spaces, including suburbs and forests, which cannot be located in ontological space. This virtual Chicago is populated with a number of actors, many of which the player can control or are influenced indirectly by the actions of the player. However, although the text certainly allows for the player to affect many of the actors represented therein, including both non-playable characters and in-game objects, the relationship between the player, the world, and the actors who populate it is more complex than a
direct mode of interaction. While the game world, for example, is populated by a number of non-playable characters, many of which interact with the player directly, players are given the option of manipulating a number of the city's security systems, including security cameras and ATM machines. It is entirely possible for the player to hack a bank account of a non-playable character who has not been introduced into the narrative in order to take money from an ATM. Later, it is entirely possible for the player to meet a non-playable character who was affected by the player's hacking of a bank account and listen to them converse with another non-playable character about how they were hacked and they informed the bank which is investigating the situation. This results in the player interacting with one actor, the ATM, and affecting an entirely different actor. What the game is suggesting, then, by allowing the inclusion of actors who are indirectly affected by the player's actions is that the repercussions to one's actions often travel beyond the player's intended outcome, at times spiraling out of control and resulting in unforeseen consequences.

Figure 17: Real Chicago vs. Watch_Dogs Chicago
Certainly, the world of *Watch_Dogs* Chicago is governed by a number of systems that govern the interaction of the player with the game space. The player takes control of the protagonist, Aiden Pearce, and controls him with the camera hovering over the character's shoulder from a third person perspective. This places the player in the role of puppeteer, as explained in the first chapter of this study, and it is through the Aiden avatar that the player interacts with the game world and the actors represented therein. The fundamental systems for interaction include a system of surveillance by which the player is able to acquire information on any non-playable character by scanning them with a smartphone, a combat system in which the player can use a number of weapons to help the main character escape from dangerous situations, and a hacking system by which the player can take control of any object in the city and manipulate it. The game also simulates physical laws of gravity and motion in order to allow the player to navigate through the virtual space as one would in its real life counterpart, as well as a driving system implemented so that the player can escape from dangerous situations. Finally, the players, upon reaching a certain skill level as identified by the game's system of progression, can choose to learn skills that will aid in the navigation of the city space and in the creation of their own unique narratives.

The way in which play is structured places *Watch_Dogs* in the category of "feature game," that is, a text that requires nontrivial effort from the player in order for it to be navigated and whose play encourages the player to engage with the text for continued periods, rather than a burst game - that is, a text which encourages play in shorter clusters. Instead of artificially restricting play by including timers preventing the player from performing actions or offering a large number of short experiences, *Watch_Dogs* encourages the player to participate in play for longer sessions. It is, of course, up to the player to decide whether to engage with the text for extended periods of time, just as it is
the player's choice whether to engage with the text at all. However, because a single mission in *Watch_D0gs* can take a player anywhere between one to two hours to complete, and because the text will take a dedicated player between twenty to sixty hours of play, it can be suggested that the text demands at least a minimal level of commitment from the player.

Based on the elements thus far discussed, it becomes evident that *Watch_D0gs* is a game that gives the player a certain degree of freedom to control the actions of the avatar and to affect the objects around Aiden, but it doesn't frame the player as creator. While the text does give the player's character certain abilities that most non-playable characters lack - namely that of hacking - the player is still constrained to participating in the systems represented; that is, the player is still bound by the rules of the game world. Furthermore, the text requires some degree of player immersion and dedication, as the text features a form of ludic design in which the player is encouraged to engage with the text for extended periods at a time. This suggests that whatever topics are discussed in the text require sustained player attention. If one considers the arguments made by the text about the topics explored - elements that will be discussed in a later section - it can be suggested, then, that whatever issues are explored in the text are to be perceived by the player as enduring and having long-term repercussions.

7.2.2 The Narrative Structure of *Watch_D0gs*

In the previous section, *Watch_D0gs* was considered from the lens of the definition of video game proposed in the opening chapter of this study. It was inferred from the game's elements that the text requires sustained player attention. As it was argued in an earlier chapter, before addressing the message of the narrative and the rhetoric of play in a text, it is important to understand the configurations of the game in terms of textuality, ergodicity, linearity, and cursality.
It is unquestionable that *Watch_D0gs* is a digital audiovisual text. The text features visual representations of a near future Chicago, as well as visual representations of thousands of actors that populate the virtual space. The aural element of the text can be observed in the number of sound effects and conversations that the player can listen to as they explore the virtual space. Although the text exists in physical media in the form of a Blu Ray disc, it can only be accessed when it is read through a game platform and projected on-screen as a digital world. More importantly, the scale of ergodicity was defined as one where texts fall in any one of four broad categories. A text can be nonergodic, display weak or strong ergodic tendencies, or be hyperergodic. *Watch_D0gs*, as it was previously discussed, is a text that uses a number of ludic systems to regulate play. It includes a surveillance mechanic, a shooting mechanic, a walking mechanic, a hacking mechanic, a driving mechanic, and a skills progression mechanic. In order for the player to successfully navigate through the virtual city of Chicago and complete the narrative, the player must master these systems. This required mastery of ludic systems, combined with the existence of a space in which narratives can be made manifest, places *Watch_D0gs* as a hyperergodic text. However, it is worth noting that the text features two distinct modes of play - one in which the player takes the role of the puppeteer, as discussed in the previous section, and another in which the player takes the role of the observer. This second mode happens when players reach certain points in their progression throughout the text. It is these moments that best serve to illuminate the temporal narrative structure of *Watch_D0gs*.

The temporal configurations of *Watch_D0gs* is mostly linear. The ludic elements of the text ensure that play takes place in a linear temporality. However, when the player reaches certain key points in the map, the text often will depict flashbacks from a time in the game world that took place before the game began. This demonstrates the existence
of a fundamental disjunction and disorganization of narrative time that is revealed to the player through ludic progress - progress that, curiously, depends on the player's traversal of a open world featuring a multicursal narrative. In this open world, the player can control Aiden and force him to follow what is often referred to as the main storyline, or the player can instead explore the world at their leisure. Because the world is open, this creates a nearly infinite number of possible narratives. This, thus, makes *Watch_D0gs* a multicursal text.

The ludonarrative design in *Watch_D0gs* suggest that the text is an audiovisual hyperergodic text with a nonlinear multicursal narrative. While the text gives players the freedom to take control of the actions of their avatar and the option of affecting a number of actors in the play space, it does not give the reader the role of god or creator, thus suggesting that no matter how powerful of an entity the player might be, they are still constrained by the rules that govern play space. Furthermore, the narrative design emphasizes the fact that player action may have unforeseen circumstances. Given the subject matter which the text tackles, it is important to remember that the way in which the text is configured likely sets up the audience for the arguments made by the text. These arguments will be explored in the following sections.

### 7.2.3 The Story of Aiden

As it has been mentioned, *Watch_D0gs* is an nonlinear multicursal hyperergodic ludic text set in a fictional version of Chicago, Illinois. The narrative begins with hackers Aiden Pearce and Damien attempting to steal money from a network of banks protected by the CTOS, an operating system that regulates all of the city's hardware and software subsystems. During their hack, Aiden and Damien detect that a third party is simultaneously attempting to hack the CTOS. Aiden and Damien attempt to find the identity of the other intruding hacker, but fail. However, the owner of the hotel whose
network was used to access the CTOS finds out that Aiden and Damien hacked their network, which leads to the hiring of Maurice Vega, a hit man for hire, to kill Aiden. Aiden finds out about the hired hit man and attempts to drive his family to safety out of town, but as Aiden’s family was leaving Chicago, Vega blows up the tires of Aiden’s car. This causes Aiden to lose control. The car flips over, which results in the death of Aiden’s niece, Lena Pearce. It is in this moment when the fiction of the text is established. Aiden’s motivation is thus established to be revenge - Aiden wants to find Vega in order to question him and find out who was it that ordered the death of his family.

If one is to consider the formation of chronotopes in narratives as explained in the fifth chapter of this study, then these opening moments would be considered as two distinct chronotopes sharing the same types or categories. Because the situations above described are events that must always happen, they can be considered as fixed moments; and because the player has no control over Aiden as these events unfold, they can be considered as narrative rather than play chronotopes. It is worth mentioning, however, that while both of these events are fixed moments in the narrative, they do not necessarily belong to the same chronotope - rather they are two individual chronotopes of the same type. The scene in which Aiden and Damien are hacking the CTOS can be considered as the first fixed narrative chronotope of the text - that is, a narrative moment that must always happen - and Aiden driving his family out of Chicago when they are attacked by Vega can be considered as the second fixed narrative chronotope. Once these moments are shown, the player takes control of Aiden.

In the game, the player takes control of hacker and vigilante Aiden Pearce as he hunts down the criminals responsible for the death of his niece. The player’s role shifts between that of the puppeteer who controls Aiden from a third person perspective and of the viewer who sees Aiden perform actions and communicate with non-playable
characters. During the play sections of the text, the camera focuses on Aiden. There is no perspective present encouraging full immersion, as the play segments are experienced in a third person perspective. This creates a small disconnect between the player and Aiden, but because the framing used most often depicts Aiden at a medium-close distance, it can be argued that some level of player identification is expected.

The opening moments of play place the player's character, Aiden, in the basement of a baseball stadium. Having just finished obtaining some crucial information from a hostage, he is warned as to a rising police presence. Aiden's mission is to escape the baseball stadium. At this point, the player has a number of options - that is, the problem is multisolvent. The text gives the player the option of walking up to cops and shooting them, but this would increase the level of difficulty and make the game create additional law enforcement personnel. The other option that the player has is that of sneaking around the cops, using technology to mislead them and escape undetected. Each approach to problem solving has its unique advantages and disadvantages. As it was mentioned, being detected by shooting at a cop will trigger an alarm that will call additional non-playable characters to hunt Aiden down. Sneaking around, however, while less dangerous, takes a longer time to accomplish. Thus, it is up to the player to weight the benefits and drawbacks of each approach and come up with a solution that is satisfactory for the kind of approach the player would wish to take. Having escaped the stadium, the player is prompted to get into a car, escape the area, and travel to Aiden's hotel room. From this moment on, the player has the ability to go anywhere in the map.

Again, the events here described represent two distinct chronotopes that share a type. The play event involving the player's escape from the baseball stadium can be construed as a singular chronotope. This chronotope, of course, can take many forms depending on the player's approach to play. However, although the player's approach to
problem solving will inevitably yield variable responses, it is always an element of play that the player must guide Aiden to escape from the stadium. As such, the escape from the stadium can be considered as a Fixed Play Chronotope. The moment in which Aiden leaves, however, and is prompted to return to the hotel room to resume with the main plot of the text, the game world opens up and the player becomes able to go to different places, discover a number of missions, and interact with a number of actors. This moment in which Aiden leaves the stadium becomes the first variable play chronotope in the configuration of the text.

From this moment onward, it is up to the player to decide how to approach the narrative and how to solve each problem. Because the world design is open, the player decides where to go and where to avoid. Because the mechanics that rule the game world are systems that allow the player the freedom to explore and discover the virtual space at their leisure and to interact with any participants within the constraints of the rules established by the designer, each chronotope takes on the ability of being placed in any number of spots in a hierarchy of events. One player may decide to follow the instructions and travel to Aiden's motel room, while another may opt to explore virtual Chicago and, in doing so, uncover and complete a number of quests offered by non-playable characters. Whatever actions the player takes, then, take on the shape of variable chronotopes organized in a linear manner across play time but in a non-linear fashion across narrative time.

Regardless of player choice, all chronotopic configurations in the game will result in one of nearly endless potential narratives manifesting in non-linear time, because of the many narrative flashbacks, and multiscursal space. Because the world is open, players have the option of traveling anywhere in any order, which leads to endless sidewarded possibilities. The existence of randomly generated non-playable characters further
multiplies the number of possible emergent narratives and sidershadowed possibilities on all narrative levels. On the level of the player action, players visit places, hack systems, and drive cars. Meanwhile on the level of the character narrative, Aiden imitates the actions of the player while also engaging in conversations during the cinematic segments that place the player in a passive role.

Perhaps the most interesting narrative device employed by the text is the creation of the previously mentioned randomly generated non-playable characters. Unlike in other games, most non-playable characters in Watch_Dogs have traits that are discoverable by both Aiden and the player. As the player explores Chicago, they can listen to the other non-playable characters as they have conversations about their lives in Chicago. These are stories within the narrative. As the player explores, they might listen to a character speaking on the phone about how violence has increased over the past few years and they were recently mugged. This story helps build the image of Chicago as a city in decline. Other instances of stories within the narrative can be seen when the player hacks into CTOS and uses the system to spy on the citizens of Chicago. Peeking into the private cameras of citizens will reveal short vignettes about their lives, some of them going about their daily lives and others reminiscing about their past, with a small number tackling controversial issues such as domestic violence and suicide. Again, these stories help create an emergent spatial narrative about the virtual Chicago in which Aiden is hunting for revenge. This quest for revenge, however, seems to be the only trait visible in the text’s protagonist.

As previously stated, the fiction of the text is established within the opening moments of the narrative - Aiden is a hacker out for revenge. However, outside of his quest for revenge, Aiden seems to lack any remarkable characteristics. Aiden is so motivated by his vendetta, despite his own involvement in illegal activities being partly to
blame for the death of his niece, that when his sister, Lena's mother, asks him to stop
hunting for those who tried to kill him - a key event in the development of the narrative
that serves as a fixed chronotope - Aidan answers that "you are not in danger because I
protect you." Outside of this driven quest for revenge, Aiden can be said to be a blank
slate for the players to project part of their personalities into Aiden in order to reflect on
the topics explored by the text, topics such as corporate-induced paranoia, information
theft, and the surveillance state. These issues, however, are explored primarily through
the mechanics with the narrative serving as context for the criticism provided.

7.2.4 The Rhetoric of Watch_D0gs

As explained in the fifth chapter of this study, when one is to consider the rhetoric
of a game, one must address a number of questions in order to unravel the meaning
behind play. As it was discussed in a previous chapter, because games such as
Watch_D0gs can persuade the player to alter their perception of the systems represented
therein, Bogost suggests that inquiry regarding the rhetoric of game texts revolve around
the questions of reduction, in which one asks how much the text reduces complex
behaviors into simple tasks, tunneling, in which one considers whether the text guides the
player, tailoring, in which one decides whether pertinent and sufficient information is
given for the player to change attitudes or behavior, whether the text encourages or
suggests a certain type of behavior, whether the player is given tools to monitor the self
or others through surveillance, and whether the text attempts to condition the player by
using design approaches that draw inspiration from B.F. Skinner's work in behaviorism
and operant conditioning often referred to as Skinnerbox Game Design.

Regarding the mechanics of the text, it would be difficult to argue that the text
employs principles of operant conditioning in its design. Skinnerbox game design is
created with the explicit purpose of keeping the player returning to the game while
simultaneously driving the player away for a certain period of time. This is the approach
to design that many burst games such as *Candy Crush* and *Farmville* implement. These
games task the player with the performance of simplistic actions, often in the form of
tapping the screen, on the completion of which the player is rewarded with virtual
currency and an aural chime. The game then gives the player a wait period before the
action can be repeated. *Watch_D0gs* does not exhibit this approach to its ludic design.
Instead, *Watch_D0gs* offers the player an open world - a metaphorical playground - in
which the player can discover both the space and the narrative at their leisure. While the
system does reward the player for completing quests by advancing the narrative, the
game does not actively condition the player to complete said quests. Rather, throughout
the text, the player is encouraged to roam around virtual Chicago and progress through
the narrative when deemed appropriate by the player.

It was previously mentioned that *Watch_D0gs* attempts to create a mimetic
representation of Chicago. However, while many of the systems attempt to remediate
reality, there is some degree of reductionist representation in some of the processes.
This is especially noticeable in instances when technology is involved, namely in the
process of obtaining surveillance information from the inhabitants of the world and when
hacking a computer system.

Certainly, many of the technology related hacks present in *Watch_D0gs* can be
implemented in ontological space. In *Watch_D0gs*, the only thing that the player needs to
do in order to find out the personal information of an individual is point Aiden's
smartphone in the general direction of the non-playable character and press a button.
The text does not explain how the process works or how the system is acquiring said
data. In physical space it is certainly possible to gather a number of factoids and
information about any given individual much like Aiden does on *Watch_D0gs*. However,
in physical space, the process is more complex than clicking a button. As Alter notes, in physical space, an individual would have to download one of the many appropriately categorized “stalker apps” such as *Creepy* or *Stalker* into their phone. They would then have to configure the app to their location. The way in which these apps function is by siphoning data from several social media platforms and cross-referencing the profile names, thus giving the user the publicly available information on their target. If the user wants information on a given individual, the user will first have to find out said individual’s name and input it into the app. The app will then return a query with results showing the recent online activities of the target in question. If the target does not use social media, however, the query will return an empty result. Alternatively, the users of such apps can engage in a practice often referred to as “phishing,” where they access the map feature available in these apps and select a target at random. It is these processes and the variable quality of human nature that fails to be represented in *Watch_D0gs*, where the process is simplified into a simplistic “point and click” process and where everyone’s information is made readily accessible. Likewise, the process of hacking into a system is shown in an incredibly simplistic rendition in which, rather than simulate the real life processes of creating millions of lines of code based on hundreds of hours of source code analysis in order to infiltrate a system, the player solves a simple puzzle upon which control of the requested systems is granted. This simplification of complex real world actions does not necessarily mean that the text is attempting to glamorize them. Rather, based on the themes explored by the text and the personality of the protagonist, as will be explained at a later section, it is likely that this simplification serves as a warning to the player. By showing the player that it is indeed possible to hack into digital systems and siphon social data for a stalker to take advantage of, the text is showing the player a grim future in which not only surveillance has become universal but also in which neither
privacy nor safety are a primary concern of the system. This idea of surveillance as a possibility for stalking is further reinforced when one considers the methods given by the text to the player to monitor the self and others.

As previously explained, the text gives the player a tool with which to monitor other characters. One of the functions of this tool is to tell the player how likely a character is to commit a crime. This is done with the intent that if the player sees a character with a high percentage probability of committing a crime - a number that the surveillance system arrives at by factoring character in-game behavioral patterns - the player can follow that character and prevent the crime from happening. While this might be considered as the text depicting surveillance systems in a positive manner - that is, massive surveillance prevents crime - these pre crime possibilities are never addressed by law enforcement. Rather, it is up to Aiden, and by extension the player, to stop these crimes. When the player does decide to interfere with these crimes, the result is often that of Aiden dispensing "justice" on the would-be criminal by committing murder. These events are so common in the text that the inevitable result is that the player will find them unremarkable and forget about any given event.

Rather than showing the massive surveillance system in a positive manner, then, what the text is doing is showing that despite massive surveillance there is no great increase in the safety levels of the population. In the Chicago depicted in Watch_Dogs, the mass production and deployment of CCTV cameras, the existence of massive databases that compile the information of the population, and the creation of a software that identifies potential threats to personal safety still fail to stop crime. There are still, in the world of Watch_Dogs, robbers, rapists, murderers, pimps, and drug gangs. The massive surveillance system, rather than serve as an aid for the authorities to stop such crimes, works as nothing more than a means of recording all the events that transpire in
the city - including those that take place in supposedly private spaces - and storing them into a database for posterity. Rather than prevent crime, Watch_D0gs argues, mass surveillance simply records and, after some time, forgets. These arguments are further strengthened when one considers the way in which the narrative of the text frames the game mechanics and the player’s role within the context of the text.

7.2.5 Hacking the World through Aiden as a Mirror

Critics of games as a medium have often argued that representation does not necessarily entail criticism. Chris Franklyn makes such arguments regarding Watch_D0gs. After making a commentary on how Aiden Pearce is a detestable figure, Franklyn states that the game “does not make any commentary on surveillance culture, the overuse of social media, hacker culture, information culture, big data, predictive algorithms, or the loss of privacy” (Franklyn 2014). He is partly correct in his assessment. It is true that the text does not explicitly tell the player through dialogue or otherwise that these systems are negative. Instead, the text opts for the rhetorical approach outlined by Bogost in his text where a video game will represent a given system and contextualize its use through elements other than the depiction of the system itself in order to guide the player towards an opinion regarding the depicted apparatus (Bogost 118). In other words, when Franklyn suggests that Watch_D0gs does not make any claims regarding the systems represented therein, his claim can only be taken as correct at the most superficial of layers of textual analysis. By presenting the player with the CTOS and with the ability to invade the privacy of the residents of Chicago, and by contextualizing play within a narrative of political corruption and corporate espionage, the text is showing the player not only how easy it is for the corrupt to abuse the system, but also how the existence of such a system itself might be considered as an infringement on the privacy of the citizen.
Even though the action of hacking into the private lives of citizens is an optional action, the option is given to the player. By placing Aiden, and by extension the player, in the role of the peeper, the game is attempting to show the player how such systems are ripe for abuse. Two of the more explicit examples involve adult themes related to sex, drug abuse, and violence. When hacking the home computer of 41 year old divorced father Geoffrey O'Brien, the player sees a close-up of O'Brien's face as he is masturbating on his computer. After 30 seconds of O'Brien moaning, his baby begins crying, which leads him away from the computer screen as he states in a frustrated tone "it's not like I was doing anything." A second example can be seen when Aiden hacks into the security system of methamphetamine addicted prostitute Lindsay Bachmann while she is naked in a motel with a client. In this scene, the prostitute is threatening to shoot her nameless client over a monetary discussion. Other uncomfortable peephole events include listening to a married couple arguing, watching a man contemplating suicide, and stumbling on to a corpse. However, Aiden can also hack into systems where non-playable characters are simply having coffee or talking on the phone. These events are placed in the game to show the player how such systems function and can be exploited. Yet perhaps one of the more convincing arguments regarding Watch_Dogs as a mirror can be seen in the 2014 discussions regarding whether the text is inherently racist.

On May 28, 2014, a Watch_Dogs gameplay video titled Making the World a Better Place was uploaded to Youtube by a user named Moopoke. The video features the player using the Profiler tool, which allows Aiden to learn facts such as the name, ethnicity, salary, and religious affiliation of various non-playable characters, and killing nonwhite and Jewish characters only. This led to commentators such as Dave Walsh and Stephany Nunneley to raise the question of whether Watch_Dogs is a racist game. Their argument, however, is largely based on the gameplay and commentary shown in the
video and fails to take into account the incentives system set up by the text. The game does not force players to kill minorities, nor does it incentivize rampant murder of minorities as there is no mission where the objective is to kill as many bystanders as possible and there is no achievement for going on murderous rampages. Instead, whenever the player forces Aiden to commit murder, the game will implement a system in which the player's "wanted rating" will increase with every crime. As the player's Wanted Rating increases, the game will use increasingly forceful methods to capture or kill the player. The choice of killing minorities, then, lies entirely in the hands of the player, which does not make the text itself as one conveying racist values.

By portraying systems of surveillance and making them accessible for the player to exploit, the text is effectively placing the player in a position to develop critical thought regarding the systems being represented. Furthermore, by giving the player uncomfortable events to glimpse into should the player decide to abuse such systems, the text places the player in a position to grow critical of such systems. Although it can certainly be argued that the game features an achievement trophy for invading the privacy of 30 non-playable characters, the language used to describe said achievement denotes criticism towards the practice. By calling the achievement "peephole" and denoting the description as "complete every privacy invasion," the text is effectively placing the player in the position of a voyeur and conveying to the player the idea that the actions which they are undertaking are, in effect, an intrusion into someone else's private space. This is further reinforced by the use of the Profiler. In the text, when a player focuses on a non-playable character, character information is conveyed to the player. This effectively turns what might otherwise be a random non-playable character into Eric Parker, a 26 year old Christian who works as middle management at a retail store, enjoys music, and earns $46,000 a year. The player then can choose to perform certain actions
depending on the information conveyed, reflect on the type of system that would be so invasive as to be able to convey such information, and engage in introspection and explore and evolve ideas that the self might have about such systems.

7.2.6 Concluding Comments on Watch_D0gs

In the previous sections, it has been argued that Watch_D0gs presents a criticism of massive surveillance states. By representing said systems and giving the player the opportunity to peek into the lives of unsuspecting non-playable characters in moments of personal vulnerability, the text makes the player question the validity of said systems by forcing them to consider whether the risks on privacy are worth the rewards that enhanced safety might bring. Then, by depicting a number of crimes and by placing the player in the role of vigilante stopping the crimes that the law enforcement agencies are supposed to deal with, the game makes the argument that no amount of surveillance ever truly increases the safety of the population. Furthermore, by framing Aiden as a hacker and criminal himself, the text is arguing that such systems are not only unsafe, but ripe for exploitation. Although these arguments, perhaps, may be understood by the player at a subconscious level, they truly only become evident once a critic has considered the text not only through a ludic lens, but rather through a comprehensive framework that allows for the analysis of ludic, narrative, and aesthetic elements to be deconstructed and considered both as units and as systems. If critics fail to do this and only focus on a single element of the text, then all they might arrive at insubstantial conclusions about the text as they misunderstand the arguments being made, in the case of Watch_D0gs, against surveillance culture while instead seeing the text as nothing more than a power fantasy.
7.3 Conclusion

In this chapter, this study has applied the framework laid out in previous chapters and presented a closed reading of *Watch_D0gs*. It also demonstrated that when critics engage only one of the textual elements, whether they be ludic, narrative, or visual, the resulting criticism, while valid, is often incomplete or incorrect. By considering the narrative dimensions of the text in conjunction with ludic systems and visual aesthetics and asking questions regarding the claims made by the text, this section demonstrated that video game texts can, in fact, make arguments not only about how to approach the text itself or about human behavioral practices, but also about systemic structures represented in the texts.

*Watch_D0gs* was analyzed through the comprehensive lens of audiovisual ludonarrativity. By considering the player's role as Aiden Pearce, Pearce's narrative situation, and the depiction and application of systems, it was concluded that *Watch_D0gs* is not a game that glorifies violence and hacking, but that rather condemns it. By giving each non-playable character an identity and giving players control over the life and death of sometimes relatable non-playable characters, the text is shown to make the argument that comprehensive surveillance systems are too much of an invasion on the privacy of the individual.

It can be concluded, then, that the framework herein presented and applied can serve to further the current state of academic inquiry into visual interactive texts, as well as shape approaches to writing about said texts. By considering how narrative, play, and aesthetics function to work together or against each other in a given text, critics will be able to gain insight into the ideologies being conveyed in these texts. The issue remains, however, as to whether this framework can be used to settle disputes regarding non-specific texts, such as that of genre in video games. In the next chapter, this study will
combine the analytical framework here proposed with frameworks of textual genres in order to solve the question of genre in games by reconsidering game genres as a combination of visual, ludic, and narrative and literary elements.
CHAPTER 8
LITERARY GENRES AND INTERACTIVITY

8.1 Introduction

Perhaps one of the most divisive discussions surrounding the many discourses regarding games as art is that of genre. The first serious attempt to define the function of genre as manifested in the medium of the video game can be found in Mark Wolf's landmark book *The Medium of the Video Game* (2002). In his chapter *Genre and the Video Game*, he explains that "video game genre study differs markedly from literary or film genre study due to the direct and active participation of the audience" (114). He then argues against the idea of using traditional approaches to the study of video game genres and explains how elements considered in film-centric genre studies, namely Ed Buscombe's taxonomy composed of iconography, structure, and theme, "may be appropriate tools for analyzing Hollywood films as well as many video games" but are, nevertheless, lacking in that they fail to account for the element of interactivity, which Wolf considers "is an essential part of every game's structure and a more appropriate way of examining and defining video game genres" (114).

Although Wolf does concede that some video games can be classified by using similar approaches to those applied in the study of cinematic genres, he maintains that "classification by iconography ignores the fundamental differences and similarities which are found in the player's experience of the game," and that "just as different forms of dance are defined by how the dancers move rather than how they look," video games should be classified by how they play rather than by any other criteria (115). He finally makes a brief argument against the reliance on the use of theme as a genre qualifier, as "in a video game, there is almost always a definite objective that the player strives to complete" (115). As such, this motivation, Wolf argues, can be factored in the
consideration of video game genre. As an example, he classifies Pac-Man as both a "collecting" game and a "maze" game. Wolf's concerns regarding the limitations of traditional approaches for the study of genre when applied to video games as a medium are, to some extent, mirrored and amplified by Espen Aarseth.

In his 2004 article *Genre Trouble*, Aarseth frames the discussion of genre in video games as an extension of the ludonarratological discussions that took place between 1997 and 2002, where scholars of narrative such as Janet Murray attempted to frame video games as a means of telling stories while ludologists such as Juul and Aarseth argued for understanding games exclusively through mechanics. Aarseth argues against using narrative and story driven frameworks when analyzing video game genres by focusing on the unique interactive properties of the medium. Aarseth further explains that although relying on traditional modes of categorization might be comfortable, as it would allow the critic to rely on familiar forms, this approach can be seen as a form of academic colonialism, with the disciplines of film and literary theory playing the role of the colonial powers and the field of video game studies being a golden land of opportunity, a "virgin soil, ready to be plotted and plowed by the machineries of cultural and textual studies." He suggests that "as with any land rush, the respect for local culture and history is minimal, while the belief in one's own tradition, tools, and competence is unfailing" (2004). He then argues that game texts should be categorized based on their key aspects, which he identifies as "(1) rules, (2) a material / semiotic system (a gameworld), and (3) gameplay (the events resulting from application of the rules to the gameworld)" (2014). In other words, Aarseth argues that games should be categorized by the elements that make them unique, the most important being play.

Not only does Aarseth see the primary component of video games as being play, but he takes a step further and argues that "games are not textual" and are instead "a
rich and extremely diverse family of practices" that "share qualities with performance arts, material arts, and the verbal arts" (2004). However, although he correctly notes that several narrative-centric taxonomies for understanding game genres focus on the application of currently existing modes to the new medium (Murray 1997, Marie-Ryan 2001), he firmly sees textuality as unimportant, even asking the question "where is the text in chess?," and supports the perspective that any non ludic elements existing in a game are support for gameplay. Ultimately, Aarseth concludes that the question of using currently existing modes to understand genre in games is dangerous as it might lead to generic criticism. This, to Aarseth, is problematic as it can lead to the judging of individual works on the basis of their genre rather than on their individual merits.

Although Aarseth's comments on discussions of genre as an extension of the ludonarrativity debate and his comparisons of game studies to an unexplored promised land are certainly colorful and imaginative, they ultimately fail to address the intricate nuance of video game genre. Aarseth rightly critiques those who would categorize all games as interactive fiction or cyberdrama, but his commentary seems to rely more on arguments against the idea of games as narrative rather than against the use of traditional modes of understanding genre in the analysis of video game genres. Furthermore, unlike Wolf, Aarseth fails to provide any formal framework for understanding genre.

Seemingly building on some of Aarseth's ideas of genre, Dominic Arenault's 2009 article Video Game Genre, Evolution, and Innovation raises the question of whether is it exigent on the critic to address the genre of a text or whether the term should be eschewed in favor of another, as the term genre in the context of discussions of games "has no common basis in film and literature" (2009). Although he disagrees with Aarseth's notions of the dangers regarding genre criticism, Arsenault does argue for a ludocentric
His approach, however, argues for a fluid, constantly evolving system that "accounts for transformations, adaptations, and reinventions" as he attempts to show that "it is not problematic to have various crisscrossing criteria for determining video game genres." His suggestion for a haphazard approach stems from his view that "the very notion of genre is controversial and, quite bluntly, a mess" (2009).

By relying on the obvious observations that video games are a form of media where the visual and interactive converge, Arsenault addresses the problems with relying on static lists of genres. Rather than suggesting for a taxonomy that relies on what he calls "a simple checklist of specific game mechanics," Arsenault argues for a model where ludic considerations "play the part of the middleman in a complex ecosystem of functional considerations and aesthetic ideas." To Arsenault, genre serves as "a useful bridging tool between the over-particular and the over-universal" (2009). However, regardless of how texts are classified, Arsenault sees genre as a somewhat unreliable construct due to his perceived impreciseness of the qualifiers. Because to him "there can be no universal typology of genres, built on distinctions recognized by all, organized in stable categories," a claim he makes both about films and games, then it is best to rely on imprecise systems as a form of genre categorization.

To demonstrate how fluid genre categorization would function, Arsenault performs a case study using the broad genre commonly referred to as shooter games. Arsenault explains that several first person shooting games feature "sequences where the player must run and escape, or otherwise perform non-combat actions across space instead of shooting everything in sight" (2009). As examples, he cites *Thief: The Dark Project* (1998), where players are encouraged to sneak around the enemy and avoid confrontation rather than shoot the enemy and the closing moments of *Quake* (1996), where players are required to "monitor the movement of a small ball that floats around"
the room and enter a teleporter while the ball is floating through the boss." His criticism of genre leads Arsenault to conclude that "genre can be understood as codified usage of particular mechanics and design patterns to express a range of intended play experiences" in which the critic must "go beyond the 'laundry list' of mechanics and investigate the history of general play-experience of which the particular mechanics are only one possible materialization." One such example of the taxonomies which Arsenault argues against is Moby Games' genre categorization criteria.

Table 1: Moby Games Genre Schema

| Basic Genres | Action, Adventure, Educational, Racing / Driving, Role-Playing (RPG), Simulation, Sports, Strategy |
| Perspecties and Viewpoints | 1st-Person, 3rd-Person, Isometric, Platform, Side-Scolling, Top-Down |
| Sports Themes | Baseball, Basketball, Bike / Bicycling, Bowling, Boxing, Cricket, etc. (29 total) |
| Non-Sports Themes | Adult, Anime/Manga, Arcade, BattleMech, Board / Party Game, Cards, Casino, Chess, Comics, Cyberpunk / Dark Sci-Fi, Detective / Mystery, Fighting, Flight, Game Show, Helicopter, Historical Battle (specific/exact), Horror, Interactive Fiction, etc. (42 total) |
| Educational Categories | Ecology / Nature, Foreign Language, Geography, Graphics / Art, Health / Nutrition, etc. (14 total) |
| Other Attributes | Add-on, Coin-Op Conversion, Compilation / Shovelware, Editor / Constructor Set, Emulator, Licensed Title |

As Arsenault and others have noticed, a number of taxonomies for understanding the genre of games have been proposed. Although Arsenault discusses the relatively nuanced taxonomies used by Moby Games, Game Spot, and others, he still argues that "one thing that these different taxonomies highlight is the fluidity and impreciseness of the concept of genre itself, and how it is used in actually describing games" (2009). To show this, he mentions how the game *American McGee's Alice* (2000) "was identified with four different genres across four of the gaming magazines that reviewed it in
February 2001." He notes that the game was classified as "platform" in GEN4 PC CD-ROM #142, as a "third person action" game in Joystick #123, as "action/adventure" in PC Fun #69, and as "Adventure/Platform" in PC Team #65.

Arsenault’s commentary certainly demonstrates that the limited understanding and the lack of a universal taxonomy is problematic, and although critics have attempted to propose taxonomies to understand texts such as The Elder Scrolls: Oblivion (2006), where several genre conventions including the existence of both first and third person perspectives, an open world, a narrative arc, menu-driven skill systems, role play elements, and shooting mechanics overlap. One such taxonomy is that proposed by Thomas H. Apperley.

In his 2006 article Genre and Game Studies: Towards a Critical Approach to Video Game Genres, Apperley explores the concept of genres as represented in video game texts and makes the argument that currently existing categories are insufficient to describe the convergent medium that is video games. He explores video games as having a composite textuality where both narrative and ludic elements exist and create a tension between them which is reflected in the discourse surrounding both genre and ludonarrativity. He finally concludes that video games should be contextualized as existing between taxonomies of narrative and play. This idea, however, was not broadly accepted, as it represents what Aarseth had referred to as academic colonization of the field of game studies years previous (Aarseth 2004).

Despite the ongoing debate regarding genre, one of the more broadly accepted taxonomies is that proposed by Mark Wolf in The Medium of Video Games, one that classifies games in the following genres: Abstract, Adaptation, Adventure, Artificial Life, Board Games, Capturing, Card Games, Catching, Chase, Collecting, Combat, Demo, Diagnostic, Dodging, Driving, Educational, Escape, Fighting, Flying, Gambling,
Interactive Movie, Management Simulation, Maze, Obstacle Course, Pencil-and-Paper Games, Pinball, Platform, Programming Games, Puzzle, Quiz, Racing, Role-Playing, Rhythm and Dance, Shoot 'Em Up, Simulation, Sports, Strategy, Table-Top Games, Target, Text Adventure, Training Simulation, and Utility (Wolf 2002). This taxonomy is, of course, problematic for all the reasons raised by Aarseth, Apperley, Arsenault, and others. It does not take into account the nuance of fluctuating genres or overlapping mechanics, nor does it allow for consideration of the multiple forms of art that converge in games as a medium. Indeed, scholars such as Apperley have proposed rivaling taxonomies, but they fall in the trap of considering play as a more important element than all other considerations. Ultimately, despite a theoretical rejection of ludic elements checklists, proposed taxonomies often take a form similar to that proposed originally by Wolf.

Because video games are a form of textuality in which ludic, narrative, and aesthetic elements converge, it might be prudent to understand these texts as an amalgamation of said components. In addition to exploring games as art, the role of the player as reader, and the composition of games, in the previous chapters it was discussed how narrative functions in game texts, how procedural and ludic elements work in conjunction with aesthetic and design choices, and how all three domains converge to create game texts. If one follows a similar principle when discussing genre, then it will be revealed that in order to understand video game genre one must consider not only mechanics, but also other textual elements. As previously stated, other critics have stated similar comments. However, like Apperley and others, they often prioritize ludic considerations over others, thus falling back to the same pitfalls that plague Wolf's taxonomy. In this chapter, this study will propose a taxonomic system for understanding genre based on ludic, aesthetic, and narrative and literary elements. By subscribing to
Arsenault’s notions of fluidity in the creation process of game texts, the system here proposed will allow critics and business entities alike to consider a variety of elements before considering genre.

The following section will discuss the function of the proposed taxonomy. Because ludic and aesthetic considerations of genre will rely on the framework established in this study, this discussion will focus on existing video game texts rather than on establishing additional layers to the framework. Attention will then be given to the narrative and literary elements present in video game texts. It will be proposed that video games have literary qualities, and that these qualities can be used to understand genre. In order to demonstrate how literary qualities are manifested in games, the study will focus on the epic, the romance, the war story, and poetry. Each of these sections will begin by discussing the key elements for each genre and then discuss how the current understanding of literary genres can be used to shape understanding of video game texts. Furthermore, unlike other taxonomies, play will not be favored over other elements. Instead, all generic considerations will be considered as equally important for understanding genre as applied to video game texts.

8.2 A Taxonomy for Understanding Genre

With perhaps the only exception being Aarseth and other likeminded ludologists, most critics working on genre in games seem to agree that video games are a multimodal form of media in which different forms of art converge - this is why the question of genre becomes impossible to address if one prioritizes ludic components over other elements. While Aarseth’s criticism of scholars who choose to see games as text is certainly passionate, his approach to thinking about games as objects, best summarized by his question of where one can find the text in chess (Aarseth 2004) seems to ignore the fundamental multimodality of games. If one is to think of games as artifacts, whether one
agrees with the idea of game textuality or not, it must be conceded that even chess has visual cues and aesthetics that, to a certain degree, can be said to suggest size as a representative of power, freedom, and importance, as the larger pieces of the queen and king are more important and have a broader range of motion than the smaller pawns. Of course, when considering chess it is not necessary to think of the game in terms of aesthetics or textuality as the game of chess is one where the ludic component is the primary constituent and, as Aarseth mentions, has no text. However, the same cannot be said of all games. Board games like Monopoly and Scrabble, tabletop role playing games like Dungeons and Dragons and Call of Cthulhu, and card games like Pokemon and Magic: The Gathering all rely on some form of textuality as part of play. When one considers video games, one cannot deny the idea of games as text, nor can the fact that many games use some form of text as element of play. The lack of nuanced understanding that comes with privileging play over other textual elements when considering genre is what leads to genre confusion as identified by Arsenault (2009) and to confusing and convoluted genre conventions. This leads to games featuring a number of mechanics and themes, such as Metal Gear Solid (1998), to be referred to by a convoluted combination of terms like military tactical espionage action adventure stealth game and to games being defined by a single mechanic to the exclusion of others, like Grand Theft Auto III being considered an open world game. This is further problematized when considering genre terminology that is claimed by developers creating mechanically and aesthetically different games. This is the case of the Role Playing Game (RPG), where, in order to avoid confusion, gaming media has opted to refer to RPGs that follow menu driven turn-based mechanics and networked design aesthetics established by the early title Dragon Quest (1986) as Japanese RPGs and games that adhere to open world design and mechanics designed for immersion and immediacy as Western RPGs. This
is, of course, problematic, as certain games that could be considered as JRPGs, like Lost Odyssey and South Park: The Stick of Truth were developed in North America, while games that could be considered WRPGs, like Dark Souls, were developed in Japan. It, thus, becomes burdensome to classify games by where they were created. It is equally irrelevant to consider games by the platform for which they were published, a practice which Arsenault notes some critics apply. As Aarseth notes in Genre Troubles, a book is a book whether it is being read on paperback, hardcover, a phone, or a tablet. The Epic of Gilgamesh will always be an epic poem regardless of where the reader accesses it. The same is true, then, of video game texts. To say that the genre of a game should be determined by the platform for which it was published is both misguided and unwarranted. The solution to all these genre troubles, then, is to consider the genre of games based on the composition of the text.

With video games being composed of textual, visual, and ludic elements, it becomes exigent to understand the genre the object as a composition of all its parts. In this section, this study will address the visual and ludic elements of video games for the discussion of genre based on currently existing texts while allowing room for expansion should new types of texts be developed. Due to the lack of commentary on the narrative and literary elements, these will be addressed in a later section.

8.2.1 Play as Genre

Although play should not be privileged over aesthetics, perspective, or narrative when discussing the genre of a video game text, it is, nevertheless, an important element for one to consider. Currently existing taxonomies focus on classifying games based on their mechanics. As Arsenault notes in his piece, these classifications serve to identify the actions performed by the player. Most of these taxonomies, however, fall into the pitfalls of integrating perspective, aesthetics, platform, or place of origin of the text as part
of genre. This leads to the creation of genres such as the Japanese RPG, Western RPG, or Computer RPG being designated to texts that have little in common. This leads to texts like *Dark Messiah of Might and Magic*, which feature a first person perspective and real time combat, to be categorized in the same genre as *Icewind Dale*, which features an overhead perspective and turn-based combat, and to games that focus on running and exploration, like *Mirror's Edge*, to be considered alongside games whose mechanics rely almost exclusively on shooting, such as *Battlefield 3*. It is important, then, to consider the genre of play exclusive from other considerations, just as one must consider aesthetics and design separate from play. To consider how play can translate into genre, then what must be considered is the core actions which players take in the virtual world. Based on these actions, one can create a taxonomy of play genres that correlates with some of the currently existing terminology. Below a proposed taxonomy based on current play mechanics, adapted from Wolf's proposed taxonomy.

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<th>Table 2: Proposed Taxonomy of Ludic Genre</th>
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<tr>
<td>Shooting games</td>
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<td>Puzzle games</td>
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<td>Beat 'em Up / Hack and Slash game</td>
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<td>Maze game</td>
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<td>Stealth game</td>
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traps and challenges. Examples include *Thief: The Dark Project* and *Hitman: Absolution*.

**Board game**
Board games are those in which the video game revolves around playing a virtual board game. Examples include *Mario Party* and *Monopoly*.

**Menu driven game**
Menu driven games are those in which the core mechanic revolves around using a menu to control the action. Examples include *Dragon Quest* and *God Save the Queen*.

**Trivia game**
Trivia games are those in which the core mechanic revolves around answering trivia questions. Examples include *Buzz* and *Disney Trivia*.

8 - 2 A Proposed Taxonomy of the Ludic Elements of Genre

The taxonomy of ludic approaches presented above is modified from Wolf's taxonomy. Unlike Wolf's proposed taxonomy, however, the one here presented does not take into consideration completeness of the text, purpose of the text, or aesthetic of the text. By removing these elements and focusing only on the actions taken by the player during play, this taxonomy does away with non-genres such as "demo" and "utility."

It is worth noting that the ludic genres here listed are not necessarily mutually exclusive. While it is possible for a game to be defined by a single mechanic - one could, for example, say that *Buzz* is a trivia game - it is entirely possible for a given text to be, for example, both a racing game and a simulation game, thus taking the form of a racing simulator, just as it is possible for there to exist a menu driven role playing game or a menu driven board or exploration game. The question is whether a given text demands for it to be classified by two or more ludic elements.

It certainly may appear that the taxonomy here proposed is far more rigid and strict than those previously proposed by other scholars. Indeed, it may appear as nothing more than a checklist of mechanics. However, this taxonomy is only partial. By avoiding listing "first person shooter" and "shooter" as rigid genres and instead considering "shooter" as an action performed alongside "solving puzzles" and "answering questions,"
this taxonomy, when combined with aesthetic and literary considerations to be discussed in the following sections, creates the basis for a fluid system of genre categorization to which new mechanics may be added as they are created.

One criticism which may be levied against this taxonomy is that it fails to take into account three criteria often used by critics - that is, it fails to list "real time" and "turn-based." With genres such as Real Time Strategy and Turn-Based Tactics being popular, it may indeed seem like a relevant omission. However, "real time" and "turn-based" are not actions that the players perform as much as they are temporal modalities that designate how actions behave in the game's space-time. A strategy game, then, can be a real time strategy game or a turn-based strategy game, just as a role playing game can take place in real time or in a turn-based temporality. The same is true of spatial design choices. A text taking place in an open world environment is not a mechanic consideration. Open world isn't something that the player does - rather, it is a place that the player explores. Certainly, it might be beneficial to address whether a given text features an open space, but that is a question best addressed alongside a game's aesthetics.

8.2.2 Aesthetics, Visual Design, and Genre

One of the defining features of video game texts lie in their aesthetics. Video games are as much an audiovisual medium as they are interactive. It therefore becomes pertinent to consider how different visual aesthetics and design choices can influence the genre of a given text. To understand the influence of the visual on genre, one can use the ideas addressed by scholars analyzing the rhetoric of the visual. Kress and Van Leeuwen's grammar and contemporary discourse regarding camera angles and perspectives already provide a language to classify perspective.
One of the more commonly used perspectives in video games is that of the first person. This perspective puts the player in the shoes of the in-game character by attaching the camera to the eyes of the character. The problem with this perspective is what when it is used, critics will usually refer to the text as a first person shooter, even when the text does not involve the act of shooting (Warren 2013). It is important, then, to consider the first person perspective separate from the mechanic of shooting. Although there are certainly many texts which use the first person perspective coupled with the mechanic of shooting, such as is the case with the Call of Duty games, there are texts that place the player in the shoes of the character by using a first person perspective and in which shooting mechanics are nonexistent. One such example is Gone Home (2013).

In Gone Home, the player takes control of Kaitlin, a 21 year old returning home. The perspective takes the form of the first person in order to place the player in Kaitlin's shoes. The player becomes Kaitlin. This text, however, does not have an element of shooting. Instead, play revolves around exploration. Players navigate Kaitlin's home attempting to find clues and find keys to open locked doors in order to find documents that describe what happened to Kaitlin's family. As the player explores the given space, a narrative is unraveled in which Kaitlin's younger sister ran away from home to be with her lover. The game can be said to be a first person game, but not a first person shooter game. This renders most taxonomies proposed that equate the first person perspective with the first person shooter genre ineffectual. Because the taxonomy here proposed separates play from perspective, however, one can consider the ludic elements and the aesthetic elements without jumping to conclusions about one while relying on the other. Rather than attempting to argue, as Jamin Warren does, that Gone Home is a first person shooter because it takes place in the first person perspective (2013), one can simply classify Gone Home as a first person exploration game.
Although understanding the first person perspective is fairly uncomplicated, understanding the third person perspective is a more complicated issue. Third person perspective implies that the player can see the character. However, video games feature a number of camera angles in which players can see characters. Games like *Gears of War*, for example, place the player's view hovering over the shoulder of the avatar, while titles such as *Mortal Kombat* and *Lost Odyssey* make the player's avatar visible from a longer distance. If one is to use perspective to understand perspective as genre, then it becomes important to differentiate the different perspectives.

Critics and reviewers alike, as well as developers in the gaming industry, usually reserve the term third person view for games that feature a camera at the rear of the character and where the frame's distance is no farther away than what Kress and Van Leeuwen define as long - that is, where the player's avatar covers half of the screen. This includes games like *Gears of War*, which features a rear camera placed at a medium-close range, as well as games like *Grand Theft Auto III*, which shows the player's avatar at a long distance.

Other perspectives commonly used by video games include the overhead view, where the camera is placed hovering above the player's avatar, as is exemplified in texts like *Lost Odyssey*, the three quarter angle, in which a space is depicted at an angle, as exemplified in *Final Fantasy Tactics*, and the profile view, where the camera points at the character from the side, as exemplified in *Street Fighter IV*.

Each of the above-mentioned cameras can either remain static or scroll in one or more directions. When relevant, the direction in which the camera scrolls can be relevant to defining genre. When direction of scrolling is combined the camera, the result will be a genre descriptor that can be used to categorize games as, for example, side-scrolling or vertical-scrolling. When combined with ludic genre categories, it creates a detailed
ludovisual descriptor of a given text. The problematic *American McGee's Alice*, a game in which the player controls Alice from a third person perspective as she navigates through a space, can be considered as a third person adventure platform game.

The taxonomy thus far presented is only partial. It has thus far been argued that considering ludic elements to the exclusion of others is detrimental to the understanding of genre. Similarly, framing game genres as a combination of play and audiovisual elements would be an equally incomplete assessment of a text's genre. In order to fully understand how a text might function, one would also have to consider the narrative and literary qualities of a text. In the following sections, this study will focus on understanding texts through the lens of literary genres.

8.3 The Epic Quest: From Gilgamesh to the Dovakhiin

If literary tradition and genre elements are to be considered as part of the genre conventions used to address game classification taxonomies, it becomes important to understand how classic genre conventions are manifested in video game form. It can certainly be argued, as Aarseth has, that video game narrative is not part of a game (1998). Juul has further suggested that even game texts that feature narrative only do so in order to add context to what he calls gameness (2002). Likewise, Markku Eskelinen argues that all non-ludic considerations in a game text are part of what he calls the gaming situation - that is, elements that surround and help contextualize play but are not part of a game. These claims, however, fail to consider that many texts incorporate narrative as a mechanic that serves not only to contextualize play, but also as a means of progression and immersion, as narratologists like Janet Murray (1997) and Marie-Lynn Ryan (2002) have noted when they argued not only that narratives can exist in play, but that they are an integral part of game texts.
In the previous chapters, a framework was created in order to understand games as a multimodal art form where various disciplines converge. If video game texts are to be accepted as such, then there needs to be a system that allows for classification of all the elements of the game. In this section, it will be argued that because of their narrative and literary qualities, video game texts can be considered not only by their play genres, but also by their literary elements. Due to common misuse of the term when referring to video game texts, the first genre to be discussed in this study will be the epic.

8.2.1 The Form of the Epic: Story, Structure, and Characters

Although the first recorded work of literature, *The Epic of Gilgamesh*, is an incomplete long form poem etched in clay tablets in the cuneiform language of the Sumerian people that is originally considered to have been a series of unrelated narratives (Dalley 2009), contemporary assumptions and understanding of the epic as a genre finds its origin in the Homeric epics of *The Iliad* and *The Odyssey*. It has been noted that epics since follow the conventions established by the Homeric epics, thus creating a genre now referred to as the epic.

Michael Meyer defines epic as a long narrative poetic text which is concerned with the extraordinary actions performed by a hero figure. He further suggests that both the epic and the actions described therein are of cultural relevance to the nation which gave birth to the given work. Offering a more comprehensive definition, Harmon and Holman attempt to define an epic as having a certain list of criteria. In their work identifying the core characteristics of the epic, Harmon and Holman identify the epic as a work that:

1. Begins in medias res.
2. Takes place in an expansive setting, often involving multiple nations, the world, or the entire universe.
3. Often begins via invoking a creative spirit or muse - something which Harmon and Holman identify as the epic invocation.

4. Clearly states the themes to be addressed in the work during the opening lines.

5. Relies on the use of titles and nicknames in the form of epithets.

6. Features long lists of objects, places, or characters referred to as the epic catalogue.

7. Presents characters performing a number of speeches.

8. Relies on the intervention of divine powers and entities on human affairs as a narrative device.

9. Casts protagonists in the role of heroes that embody the values of the civilization that gave birth to the work, often those being courage and valor.

10. Often represent as part of the hero's quest a descent into a parallel infernal space.

Certainly, a list of only ten traits to describe what is possibly one of the most nuanced and developed literary genres might appear to be somewhat reductive. A more thorough understanding of the genre, however, can be gained if one turns to C.M. Bowra's 1960 work *From Virgil to Milton*, where Bowra suggests that issues represented in epic poems are most often "events which have a certain grandeur and importance, and come from a life of action, especially of violent action such as war" (Bowra 1). In his work, he states the criteria for an epic that would later be echoed by both Harmon, Holman and Dalley. However, Bowra further explores the role of the epic hero beyond the narrative traits stated by Harmon, Holman, and Dalley. 

Bowra explains that while it is certainly true that the action of the epic begins at some point after the narrative has begun, thus implying that the narrative of the epic is incomplete, it is also noticeable that actions that transpired before the point of entry into
the narrative are often recounted through flashbacks. Examples of the use of such conventions can be seen in The Iliad on Book 22 as Homer recounts the days of Troy past before the battle ravaged the city. Homer's nostalgic recount reads:

But the other in the summer-time runs water that is like hail or chill snow or ice that forms from water. Besides these in this place, and close to them, are the washing hollows of stone, and magnificent, where the wives of the Trojans and their lovely daughters washed the clothes to shining, in the old days when there was peace, before the coming of the sons of the Achaians.

In this section, readers are given a glimpse into the past of Troy, what the city was like before the war came to its shores. Other examples can be seen early in book 1, where a flashback is used in order to explain why soldiers are dying of plague, as well as in books 9 through 12 of The Odyssey, which are narrated as flashbacks while Odysseus recounts the story of his travels. The device of flashback is not exclusive to Homeric epics, as it can also be found in Roman epics, as is the case in Virgil's Aeneid where, in the second book, Agamemnon can be found recounting the conquest and pillage of Troy, as well as in medieval epics such as Dante's Inferno, where many of those condemned to Inferno tell their stories through flashbacks.

Other heroic traits identified by Bowra include the heroic protagonist, often some form of demigod who has been blessed with superhuman trait such as increased intelligence and strength, serving as a well spoken figure who can address nobility with confident and eloquent rhetoric in addition to being a warrior and leader. This can be seen in many instances throughout both of the Homeric epics, as well as in epics throughout history, but is perhaps most explicit in book 13 of The Odyssey, where after conversing with Athena, the goddess of wisdom and military strategies, Athena tells Odysseus:

Always the same detachment! That is why I cannot fail you, in your evil fortune,
coolheaded, quick, well-spoken as you are!
Would not another wandering man, in joy,
make haste home to his wife and children? Not
you, not yet. Before you hear their story
you will have proof about your wife.

As a warrior, the hero is often found to be in ownership of some form of distinctive
weapon of great power. Examples of these mythical weapons include Achilles’ armor,
which was forged by the god Hephaestus, and Beowulf’s sword Hrunting. The epic hero,
although often suffering from a tragic flaw such as Achillies' heel, is often depicted as a
virtuous figure often embodying the traits most prized by society, with Odysseus often
being referred to as resourceful and Achilles as swift-footed.

Because, as Bowra notes, the epic hero can only establish his noble reputation
through single combat against foes that are more powerful than the hero, epic
protagonists must often undergo several journeys which often lead the hero into the
underworld in order to put his endurance, courage, and cunning to the test. Although the
epic hero may, at times, be accompanied by an entourage, it is the epic hero who
undertakes the tasks that no one else will, which often leads to a direct confrontation
between the epic hero and his antagonist. This heroic quest is often referred to as the
hero cycle, or the monomyth.

The framework of the monomyth was first proposed by Joseph Campbell in his
1949 text *The Hero with a Thousand Faces*. In his text, Campbell suggests that there is a
nearly universal quality found in myths throughout history irrespective of geographic
boundaries. This quality is composed of a number of elements including characterization,
events, values, and structures that, when considered as a cohesive unit, form the
construct of the heroic cycle. The monomyth, according to Campbell, involves a hero who
“ventures forth from the world of common day into a region of supernatural wonder:
fabulous forces are there encountered and a decisive victory is won. […] The hero comes
back from this mysterious adventure with the power to bestow boons on his fellow man” (Campbell 23). According to Campbell, there exist 17 stages of the monomyth, although it is rare for a single narrative to contain all 17 stages. He suggests that while some myths may include several of his identified stages, while others may deal with a few of the stages in thorough detail. These 17 stages, Campbell suggests, can be classified under three major categories: separation, initiation, and return.

The first step in the hero's journey is referred to as the call to adventure. According to Campbell, the hero is called unto adventure while performing some mundane action during which a crucial piece of information is conveyed. This information is what leads the hero to make the choice to embark in the quest. Alternatively, he notes, the hero may be unwittingly thrust unto the quest by a supernatural force. As examples, he mentions how Theseus heard about the history of the Minotaur during a visit to his father’s city and how Odysseus was taken from one end of the Mediterranean sea by an angry Poseidon while sailing.

According to Campbell, a hero will at times refuse to answer the call to adventure due to a sense of duty or obligation, fear of inadequacy, or a number of other reasons. However, when the hero ultimately accepts the quest, some form of supernatural aid is made manifest to guide the hero through the journey. Ultimately, the hero steps beyond his known boundaries and enters the unknown through what Campbell identifies as a metaphorical entrance beyond the confines of the visible world.

To Campbell, the initiation consists of the quest itself and is composed of all the events starting from the moment in which the hero transcends his known space until the moment in which the quest is completed. The first step of this initiation as identified by Campbell is composed of the heroic trials. These are a series of tests which the hero must overcome in order to begin the transformation from the character depicted during
the opening moments of the narrative into the heroic figure. During these test, three of the more common ordeals encountered by the hero are that of coming face to face with the hero's desires and temptations as they strive to steer the hero away from the quest, a confrontation with an entity which the hero perceives has some form of hold over the hero's consciousness or sense of guilt - something that Campbell notes is usually manifested in the confrontation with a father figure, and in the death of a loved one. Ultimately, however, Campbell notes, the hero will overcome all the challenges and have an experience with the supernatural, referred to as "a mystical marriage of the triumphant hero-soul with the Queen Goddess of the World," which will simultaneously serve as the final heroic test as well as serve as the catalyst for the heroic change. Having overcome all the challenges, the hero ultimately achieves the goal of the quest. The last broad category explicated by Campbell as part of the monomyth is that of the return. The return constitutes the final six steps of the monomyth. During the return, it is possible that the hero, having found a certain degree of enlightenment and accomplishment in the realm beyond his known space, may refuse to return to the ordinary world to bestow the object of the quest on humanity. When deciding to escape, however, it is possible that the object of the quest is "attained against the opposition of its guardian" or that "the hero's wish to return to the world has been resented by the gods or demons," in which case "the last stage of the mythological round becomes a lively, often comical pursuit" (Campbell 196). When crossing back into the world, the hero may require supernatural assistance. Having returned, the hero transcends and is able to "pass back and forth across the world division, from the perspective of the apparitions of time to that of the casual deep and back" (229). The return and the realization of transcendence leads the hero to live free from fear of death, which, to Campbell, represents true freedom.
The epic, finding its roots in the Ancient Sumerian work dating back to 2700 BC, \textit{The Epic of Gilgamesh}, is the oldest literary genre. However, it is also the most enduring, having survived throughout the centuries and having crossed geographical boundaries in order to become manifested in works such as the 14th century African \textit{Epic of Sundiata}, Milton's 17th century epic poem \textit{Paradise Lost}, and J.R.R. Tolkien's 1930 work \textit{The Fall of Arthur}. Although study of the genre has subsided in recent decades, and although some critics consider its study in media such as film as "one of the most despised and ignored genres" (Haydock 2009), the apparent thematic recurrences of elements native to the epic existing in newer works of literary and cinematographic fiction hint at the idea that the epic is still currently serving as inspiration for a generation of writers and film makers. The question remains, however, as to whether the literary qualities of the epic can truly be found in the medium of video games. To answer this question, this study will consider two video game texts within the context of the epic.

\textbf{8.2.2 The Elder Scrolls of Skyrim: A Case Study}

When discussing whether the elements of a literary genre can be remediated in a different form of conveyance, it is important to first discuss the elements that cannot be adapted due to the difference of the medium. In the case of the epic, as is true of any lyrical genre, it is the linguistic structure - that is, the prose, rhyme, meter, and other lyric elements that cannot be adapted. Because the epic poem, whether it is written or recited, is a linguistic composition that focuses on the telling of a story while video games are a multimodal text composed of visual, ludic, and linguistic elements that focus on allowing the player to experience the story, then it becomes unlikely that linguistic structures will translate into the play experience. However, this does not mean that literary elements are inherently impossible to be remediated by another form. Indeed, if one considers the majority of the literary elements of the epic as they are made manifest in interactive texts,
it becomes evident that interactive game texts do, indeed, possess enough literary elements to be considered part of the tradition of the genre. One such example can be seen in *The Elder Scrolls: Skyrim*.

The narrative of Skyrim takes place in the northern imperial province of Skyrim, a vast sprawling region filled with hundreds of towns, cities, caves, and fortresses, and populated by thousands of non-playable characters, which is located in the world of Tamriel. Skyrim is divided into several distinct regions, each unique in its fauna and flora and distinct from the others in the cultures and approaches to government. As the text opens, the player, who is now participating as an actor due to the first person perspective given, is given control of a character who has been captured by the Stormcloaks and is being led to the executioner's block. The reasons for which the player was captured are explained through stories within the narrative that explicate how a faction of the citizens of Skyrim, lead by local leaders called Jarls, have created a group of rebels called the Stormcloaks, named after their leader Ulfric Stormcloak, in order to liberate their land of Skyrim from the Imperial Capital of Cyrodiil. Although the Dragonborn plays a role in deciding the outcome of this dispute, the conflict between the Stormcloaks and the Imperial Legion is one that had been taking place before the arrival of the player's character. The narrative, thus, can be said to begin in medias res.

During the opening moments of the text, as the player is being driven to be executed, the Dragonborn has a conversation with other prisoners in which several of the gods of Tamriel are invoked and in which the major themes present in the narrative of Skyrim are hinted at. The first theme mentioned is that of change. When talking with the Dragonborn about the reasons for which they were captured, the horse thief remarks on how he preferred Skyrim when it was under the control of the Empire before the Stormcloaks rose up in rebellion. He states that "the Empire was nice and lazy," and that
had the Empire not been looking for the rebel Stormcloaks he “would have been halfway to Hammerfell by now.” This remark emphasizes not only change in space and governance, but also denotes a possibility of what could have been should change had not happened. This theme of change is further reinforced by the comments made by a captive nameless Stormcloak who, when passing by the town, says that he “used to be sweet on a girl from here” and how when he was a boy “the imperial towers made me feel safe,” but has not seen her in nearly a decade. This statement hints at change over time, offering a comparison of what was versus what is.

The themes of change over time and change of what could be versus what is are both continuously explored in the game both through the narrative as well as through the game’s mechanics. Skyrim allows players to interact with characters and make the choice as to whether to help them or not. The narrative of the game will change depending on the actions taken by the player. The game allows the players to join any of the factions in Skyrim, including both the Imperial Legion and the Stormcloaks. Because the player’s alliance will determine the outcome of the conflict, there is always the alternate outcome, the sidedshadowed possibility that was not realized or made manifest. Just as the player determines the outcome of the Stormcloaks / Imperials conflict, player choices determine the outcome of most regions in Skyrim. It is up to the player whether the College of Winterhold is restored to its former glory, whether the Thieves’ Guild gains its prominence, or whether the Dark Brotherhood of Assassins is ultimately destroyed. All of these represent explorations of change - what is versus what could have been had something not happened.

A second theme hinted at in the introduction and explored in game include the legitimacy of rulers, which is stated when a Stormcloak tells the player to be mindful of how they address his companion as he is “the true high king of Skyrim.” To this, the
guard retorts "the true high king, or leader of the rebellion?" The issue of what form a rightful leader should take is then immediately expanded when the prisoners discuss the commander of the region, General Tallius, who won his position by invading the area while relying on the help of the elves from the Aldmari Dominion. During play, the idea of the rightful leader is explored as the player visits with the various jarls in an attempt to secure their loyalty for the upcoming conflict between the Stormcloaks and the Legion. Again, the topic is explored through the player's choices as contextualized within the narrative, as it is up to the player to support or stand against various rulers, some of whom, like Ulfric, claim the title of High King. Other themes hinted at in this introductory conversation include those of freedom vs captivity, reliance on supernatural forces vs self reliance, and the consequences of one's actions. Ultimately, however, all the themes are explored by giving the player the ability to explore the world and engage with it at their leisure and on their own terms.

Although not a theme, the concept of the epic catalog is introduced early during this conversation. Before being led to his execution, Ulfric makes an observation regarding the absurdity of the empire keeping a list of names of those to be executed, as he states with disdain that "the Empire loves their damn lists." The concept of the epic catalogue, however, is one that is not only present, but crucial to the progress of the narrative. As Harmon and Holman note, the epic catalogue can be a list of objects. In Skyrim, these lists take the form of equipment lists, skill lists, location lists, and quest lists. As the player navigates through the world of Skyrim, it will be required to collect equipment. This equipment is then catalogued in various series of lists, including "weapons," "armor," "books," and "potions." Likewise, the player's spells and supernatural abilities, including a number of healing and offensive spells and numerous "shouts" learned as a form of dragon magic, as well as a multitude of physical and mental
skills including alchemy, lock picking, and weapon proficiency, are listed in catalogues of their own. The menu also provides players with a journal in which players can keep track of the places which have been visited and the tasks that have been accomplished. All of these can be seen as in game manifestations of the epic catalogue.

Another element of the epic that plays a major role in the narrative of Skyrim is that of the epithet. The player's character is malleable in that the player gets to select the race, gender, name, and features of the character. Regardless of the chosen character configuration, however, the player character is always addressed by a series of formal titles. These include Champion, Grand Master, Arch Mage, Paarthurnax, Nightingale, Dovakhiin, The Dragonborn, and The Chosen One. Likewise, many of the characters in game are often addressed by their title, as is the case of Ulfric, Jarl of Windhelm, Leader of the Rebellion, and High King of Skyrim and of Tullius, Imperial General and Governor of Skyrim.

Following the tradition of well spoken characters able to engage in elevated persuasive discourse with rulers and gods, when the Dragonborn engages in conversation with jarls, players are given the option of using speech choices as forms of persuasion in order to convince jarls to take certain actions. This remains in keeping with the speeches of the epic heroes of the Homeric texts, and just as it was the case in The Odyssey in which Odysseus is complimented by Athena because of his speech, so is the case in Skyrim when The Dragonborn is complimented by several jarls and guild leaders for being well spoken and of an astute mind.

Despite the Dragonborn's qualities being superior to humans, the Dragonborn at times relies on supernatural intervention. This is most often seen in the form of interactions between the player and werewolf clans, vampires, and vampire lords, many of which grant the player training or magical weapons, quests completed in the name of
gods and Daedric Princes, who are supernatural demon lords who gift the player magical weapons as reward for their services, and prayers made to the gods of Tamriel, which often grant the player temporary skill increases in the form of blessings.

The final battle in the main narrative path of the game features the missing elements of the epic. The final battle of the main quest takes place in an alternate dimension. The Dragonborn, accompanied by a number of valiant companions, must travel to the place in which Alduin the World Eater, Nordic God of Destruction, and Destroyer Devour Master, has been sealed in order to battle him. This battle invokes both the element of the hero traveling to the parallel dimension in order to accomplish the quest and that of the heroic companions who accompany the hero during the quest and offer aid and guidance.

Based on the observations here presented, it can be said that *Skyrim* can be considered as a text which remediates the epic. Not only does the protagonist follow all the archetypes set by the traditional epics as noted by Harmon and Holman, but all the narrative elements can be observed in the text. *Skyrim* first sets its tone as an epic by beginning the narrative in medias res, taking place in a vast landscape, and presenting the player with an invocation to the gods. This tone is held throughout play as the player explores the themes first introduced in the opening sequence through play and by actively interacting with the epic catalogues. Furthermore, by guiding the player into a final battle against a supernatural force in a parallel dimension, the text can be said to adhere to the epic tradition of a hero who travels to the underworld in order to complete a quest. By following the narrative traditions originally set by the Homeric epics, *Skyrim* can be said to implement the elements of the epic in an interactive space, thus showing that the literary elements found in a video game text qualify *Skyrim* to be, in addition to a first person role playing game, an epic text.
8.2.3 The Thirteenth Final Fantasy: A Case Study

It has been demonstrated that *The Elder Scrolls: Skyrim* closely adheres to the literary conventions of the epic and can, thus, be considered as such. Just as *Skyrim* follows these conventions, so do the other titles of the series. The fourth text in the series, *Oblivion*, is set in the region of Cyrodiil and grants players control of The Hero of Kvatch, also known as the Savior of Bruma, the Second Divine Crusader, and the 7th Champion of Cyrodiil, in the quest to prevent the daedric princes of Oblivion from invading Tamriel, while the third text in the series, *Morrowind*, gives players control over the Nerevarine, often referred to as The Chosen One and Indoril Reincarnated, in the quest to defeat the demonic Dagoth Ur. Likewise, the first and second text in the series, *Arena* and *Daggerfall*, give the player control over epic heroes whose quests take them to the darkest parts of Tamriel and beyond in order to restore order to Tamriel. It is clear that *The Elder Scrolls* saga implements the elements of the epic in their narrative conventions. However, while it is observable that *The Elder Scrolls* saga follows the traditions of the epic as established by Homeric tradition, to suggest that a literary genre is remediated into a newer form of media based on how a single text implements its elements can be considered as insufficient evidence to support such a claim. In order to remedy this, the study will now turn its attention to the titles of the *Fabula Nova Crystallis* saga, *Final Fantasy XIII*.

*Final Fantasy XIII* and its two sequels, *Final Fantasy XIII-2* and *Lightning Returns*, is mechanically and visually the opposite of *The Elder Scrolls*. While *The Elder Scrolls* gave players control over a single protagonist who is joined by a small number of heroes at certain points during the quest, *Final Fantasy XIII* gives players control over a group of heroes including Snow Villers, self proclaimed hero and leader of the revolutionary group NORA, the gunslinger Sazh Katzroy, and the protagonist of the text,
Claire Farron, also referred to as Lightning, The Savior, and Servant of the Goddess Etro throughout the saga. Similarly, while the world of *The Elder Scrolls* is designed as to become open to the player after several minutes of play, the world in the *Final Fantasy XIII* saga, although certainly expansive, is designed in order to force the player to be guided through a majority of the text, only allowing the player to explore the world at their leisure after several hours of being guided through the world. These discrepancies between *The Elder Scrolls* and *Final Fantasy XIII* are further exemplified in the framing of the game space, with *The Elder Scrolls* featuring a virtual world reminiscent of the spaces invoked in *Beowulf* by the poet and *Final Fantasy XIII* depicting a world filled with technology and artificial intelligence.

*The Elder Scrolls* and *Final Fantasy XIII* also differ in perspective and in approach to battle scenarios. While *The Elder Scrolls* places the player in the role of actor by forcing a first person perspective, the *Final Fantasy XIII* saga puts the player in the role of puppeteer, as the camera most often hovers above players. Furthermore, while engagement in battles in *The Elder Scrolls* occur through an immediate feedback system in which the player presses a button and an action happens immediately, combat in *Final Fantasy XIII* forces the player to wait for an action gauge to fill up in order for the player to input one of many available commands via a command interface.
It can be said that the differences between *The Elder Scrolls* and *Final Fantasy XIII* exist due to a difference in design philosophy. As game designer Kenji Inafune notes in a 2013 interview, design philosophies are influenced by cultural influences. He notes that western designers are often influenced by film and television, while Japanese designers are influenced by manga culture, which leads to distinctly divergent philosophies of aesthetic design. Likewise, distinct philosophies regarding play guide approaches to mechanics design, which is then manifested through the models of interaction that players use to exert control over the playable characters. This is expanded on by designer and animator Daniel Floyd, who notes in his commentaries regarding western and Japanese role playing games that the distinct divergence between western and Japanese designers exists due to each region having explored the concept of tabletop role play to the exclusion of the other (Floyd 2013). However, while there is no
question that *Final Fantasy XIII* and *The Elder Scrolls* differ both mechanically and aesthetically, when one considers the narrative and literary qualities of the texts it becomes evident that both *The Elder Scrolls* and *Final Fantasy XIII* follow the generic conventions established by Homeric epics.

As noted by Harmon and Holman, epics begin in medias res. This is true of *Final Fantasy XIII*. As the text opens, the player is given control over Lightning and Sazh as they complete a mission to rescue some civilians from the theocratic police state set up by Primarch Galeneth Dysley, whose attire was designed to resemble that of the Catholic Pope, and enforced by PSICOM soldiers. The player is not given any information as to why Lightning and Sazh are fighting against PSICOM or what their current mission is. They are simply thrust in the middle of a situation and are expected to complete the mission given to them by the text. Certainly, as the narrative progresses players are given new information regarding why the player is fighting against the theocratic police state, but in keeping with the traditions established by the epic this is done so through flashbacks.

The themes to be addressed are quickly presented in the opening moments of the text and then explored throughout the play experience. The opening words of the narrator state that "the thirteen days after we awoke were the beginning of the end." These ominous words quickly create a fiction in which the concept of an impending apocalypse will be explored. This is then explored throughout the game's narrative as the player navigates first through the landscape of the world of Cocoon in order to escape persecution and later through the world of Gran Pulse in order to stop the Fal' Cie Barthandelus, a biological machine demon, from destroying the world by collapsing Cocoon into Grand Pulse.
The opening moments also raise the themes of state oppression and propaganda as tools of crowd control. Through Lightning's flashbacks early in the text, players are shown that Lightning is fighting the state because she found its practice of exiling citizens branded by Fal' Cie as servants as inhumane. With Lightning having served as a Sergeant in the PSICOM militia, the text frames Lightning's actions as a question of loyalty to one's morals versus loyalty to authority in which loyalty to one's morals triumphs any kind of threat made by those in authority. By revolting against Dysley's orders to manage the exile of the citizens of Cocoon, Lightning is sacrificing all the benefits that come with being in a privileged position within a hierarchy for the sake of her own ideas. This is later reinforced throughout the narrative not only as Lightning and her party attempt to escape Dysley, but also after Lightning and company are branded as L'Cie servants of the Fal' Cie Anima and, instead of following instructions, decide to rebel against Anima, the Fal' Cie who branded them.

As it was previously mentioned, Lightning, whose real name is Claire Farron, is also referred to throughout the saga as Chosen of the Goddess Etro, Savior, and Goddess of Death. These epitaphs represent one of the many epic catalogues present in Final Fantasy XIII. Just as Skyrim features several list cataloguing weapons, items, and quests, so does Final Fantasy XIII. The Fabula Nova Chrystallis saga can be said to implement more epic catalogues than even The Elder Scrolls, as the lore and much of the information is kept in an encyclopedic directory which lists all locations visited, characters met, and enemies defeated in addition to the more common epic catalogues of weapons, items, and skills. In addition, Final Fantasy XIII features a system in which characters can take on one of many roles during combat. These roles serve as an additional epic catalogue into itself, just as the list of multiple configurations based on how many characters are currently accompanying Lightning can be seen as another form
of epic catalogue. Other elements of the epic noted by Harmon and Holman include the reliance of the hero on the intervention of divine powers, the interference of supernatural and divine entities in the affair of humans, and the hero, who often possesses abilities beyond that of normal humans and who is equipped with distinctive weaponry, descending into the underworld to complete the quest. All these elements are present in the *Fabula Nova Chrystallis* saga.

As it was previously mentioned, it Lightning’s task involves stopping the Fal’ Cie from destroying both Gran Pulse and Cocoon. The Fal’ Cie are in themselves supernatural creatures, created from the fusion of magic and machine. But perhaps more interesting is the reliance of Lightning and her party on supernatural creatures called Eidolons. Eidolons are spirits which Lightning and company can summon to aid them in battle. These include spiritual manifestations of mythological figures such as the Hindu deity Shiva, who is reinterpreted as a pair of snow spirits, the Norse god Odin, depicted as a half horse half humanoid creature, and Bahamut, the Arabic fish that supports the earth, therein portrayed as a dragon. These eidolons help Lightning and her party fight against the forces of Barthandelus and, ultimately, accomplish their quest.

Lightning’s quest takes her to various interpretations of the underworld several times throughout the *Fabula Nova Chrystallis* saga. Although in the first title of the trilogy, *Final Fantasy XIII*, the underworld is depicted as an underground space in which the Fal’ Cie sleep, it is from this place that Lightning emerges changed after being branded by Anima. In *Final Fantasy XIII-2* and *Final Fantasy: Lightning Returns*, the depiction of the underworld is far more direct. Valhallah, the home of the Goddess of Death, is depicted as a place in a dimension beyond death where Lightning sleeps for 500 years before reawakening to save the souls of the dead, just as Etro’s Shrine in *Final Fantasy*:
Lightning Returns is depicted as a place where chaos takes physical form and where the souls of the dead can manifest themselves.

Although Fabula Nova Chrystallis takes a different approach to its visual and ludic design from Skyrim, it can be considered as an epic. Despite taking place in a technologically advanced world, the large areas and the way in which the text adheres to the epic conventions and how the hero follows the cycle of the monomyth help to cement Final Fantasy XIII in the tradition of the epic. By making Lightning a character whose abilities are developed beyond that of common humans and equipping her with distinct equipment such as the gunblade and the Armor of the Goddess, the designers have placed Lightning as a character who follows in the tradition of epic heroes the likes of Gilgamesh, Odysseus, and Beowulf. Just as the epic heroes traverse into the underworld in order to emerge changed and victorious in their quest, so Lightning ultimately accomplishes her quest and saves the world. Finally, although it can be said that Final Fantasy XIII is lacking an epic invocation, the same cannot be said of other elements of the epic. With the text featuring several epic catalogues, a number of epitaphs, and themes first announced in the opening moments of the quest and later explored throughout the narrative, it can be said that Final Fantasy XIII features all but one of the elements of the epic. These elements, thus, help cement the Fabula Nova Chrystallis as a modern epic.

8.2.4 Conclusion

In this section it has been demonstrated that video games can follow the elements established by the Homeric epic and, thus, can be considered, at least regarding literary classification schemas and conversations of genre, as epics. This was demonstrated by using The Elder Scrolls: Skyrim and Final Fantasy XIII, distinctly unique texts with divergent approaches to ludic considerations and aesthetic elements, as
examples of texts which adhere to said conventions. By showing how despite differences in design both *Skyrim* and *Final Fantasy XIII* share elements such as the expansive world, the influence of the supernatural, the epic catalogue, and the cycle of the monomyth with epics such as *The Iliad* and *Beowulf*, this chapter frames these texts as ambassadors of the epic in an interactive medium, thus demonstrating that video games, in addition to fitting whatever ludic and aesthetic categories are required for descriptors, can be considered through frameworks of the literary genre of the epic.

It can certainly be argued that while *Final Fantasy XIII* and *Skyrim* do follow the elements of the epic, this does not necessarily mean that video games have literary merit. These are, after all, examples of two texts that follow the conventions of one genre. These concerns, however, while valid, are part of an entirely different conversation from the one currently being explored - that is, the question of whether video game texts have literary merit is a different question from whether game texts can be considered as belonging to a group of texts based on classification systems based on the literary tradition. As such, concerns regarding the literary merit of video game texts - that is, value judgments of the text based on their quality - ultimately prove inconsequential for the current discourse.

By considering video games as extensions of the traditional literary genre of the epic, it was demonstrated that categorization of video game genres might also include a variable allowing for textual interpretations of literary genres. It follows, then, that if one only considers the genre of a game based on ludic elements only, one will only uncover a partial understanding. Rather, one should consider the text's ludic, visual, and literary dimensions. This allows the critic to analyze a text like *Skyrim*, rather than by any of the genres that critics have ascribed to it, which range from "open world game" to "first person hack and slash," as a first person role playing epic. The system provides
uniformity when considering the genre of a text and thus give critics a uniform language to discuss the textuality of games, as well as suggests that interactive video game texts not only draw from the literary for inspiration, but also remediate its elements; and as such can also be analyzed through the literary lens.
CHAPTER 9
THE EDUCATIONAL ANGLE: WHAT GAME RHETORIC, NARRATIVE, AND GENRE MEAN FOR THE EDUCATIONAL INSTITUTION

9.1 Introduction

This study set out with the purpose of addressing the lack of fully integrated, comprehensive critical frameworks for understanding video game texts in order to change the discourse surrounding ludic textuality. Because of the lack of a comprehensive unified approach to the inquiry of ergodic audiovisual texts, this study has introduced a theoretical framework by which to understand the role of the player as well as the narrative, visual, ludic, rhetorical and genre dimensions of video game texts and how they function in relation to each other. By considering perspective and degree of ergodicity and ludic engagement, the role of the player was identified as existing within a scale where a player who enjoys full control of all virtual actors can be considered as god and creator and a player with no control over the elements on screen is considered as a viewer and consumer. In addition, current notions regarding narrative structures in game texts were expanded to include a multitude of texts. It was demonstrated that narrative is manifested at three distinct levels - those of the player action, the character narrative, and the stories within the narrative - and that engaging with the text at a single narrative level yields, at best, a limited understanding of how the narrative functions and of what it may attempt to convey to the player. It was also shown that game texts can make arguments through systems of ludic and visual representations, and that perspectives, visual narrative patterns, and modalities of representation play at least as significant of a role in the rhetorical process of games as narrative structures and procedural and ludic elements. In order to demonstrate application of this model, the study proposed a reading of Watch_D0gs, a text often maligned and dismissed by critics as a male power fantasy,
in which it is argued that by confronting the player with systems that depict severe
invasions of privacy the text is making an argument against such systems.

The study also argued that in order to understand genre - another understudied
and often misunderstood issue in the inquiry of ergodic texts - one must consider not only
ludic elements, as was suggested by Wolf in *The Medium of the Video Game* and as is
still the general consensus, but that visual and narrative elements should also be taken
into account. By proposing a system in which variable values can be quantified, rather
than a list of genres, the study frames the question of genre as one whose answer lies in
a malleable and adaptive system that is able to incorporate new trends and
developments. By considering the ludic dimension as what the player does, the visual
dimension as where the camera is placed, and the literary dimension by using traditional
frameworks in the study of genre in literature, this study proposes to answer the question
of how to properly classify video game texts.

The frameworks here proposed ultimately address the issue of whether games
are art. Indeed, games are mass produced cultural artifacts created for mass
consumption. However, it is argued, because these texts rely on existing art modalities,
propose a rhetoric of their own, and rely on shared elements with several works of
literature, they can be considered as art. The question remains, however, as to whether
this new way of understanding video game texts has any implications for current
educational practices.

If one considers video games as a mode of artistic expression through which an
idea can be expressed rhetorically and which shares several elements with literary
genres, then the implications for educational practices are indeed significant. This means
that video game texts could be taught alongside traditional texts in several courses; and
this is, in fact, a practice that has gained prominence in many disciplines during the past
decade. It is certainly true that video game texts such as *Civilization* and *Ages of Empire* are already being used to complement more traditional approaches to the instruction of history (Shreve 2005) and that a number of institutions are integrating the use of software such as *Brain Age* into their math lessons (Hogg 2006). Furthermore, According to Strayer and Raynolds (2004), several schools of medicine have used *Tetris* as a tool to improve hand-eye coordination. Likewise, many business schools in addition to those in Harvard and Berkley have used simulations as part of the curriculum, while noting that several schools of law use the video game *Objection!* as an instructional resources.

Regarding the liberal arts, with abstract texts such as *Panic!* (1994) finding its inspiration in the works of Salvador Dali and with more visually mimetic texts such as *Assassin’s Creed: Unity* (2014) depicting virtual renditions of French cities, it is eminently possible for video game texts to be included in courses that deal with artistic or architectural representations of spaces. It is further possible for courses revolving around the analysis of specific literary genres to include video game texts as part of a digital component explaining the remediation of genres by interactive forms. However, it is perhaps the study of rhetoric which has the most to gain by the inclusion of video game texts in the curriculum. In the following section, it will be discussed how it is possible to integrate digital game texts into the rhetoric curriculum without sacrificing any of the current content and how approaches to the instruction of rhetoric can be augmented by the incorporation of the principles of game based education models. By framing procedural rhetoric and audiovisual ludonarrativity as a digital extension of more traditional rhetorical practices, it will be argued that approaches to the instruction of rhetoric can be informed through video game principles and that video game texts could be implemented in the classroom in a manner in which procedural approaches to rhetoric can be discussed as an extension of the rhetorical tradition.
9.2 Educational Implications

It is difficult to address the educational applications of video game texts without referencing James Paul Gee's body of work, namely his highly influential 2003 book *What Videogames Have to Teach Us About Learning and Literacy*. In his book, Gee argues that current educational models are largely outdated and that the educational principles present in many video game texts demonstrate more effective application of educational principles than most theories of education. Based on his observations of video game texts, Gee proposes 36 education principles that video game design implements in order to convey lessons regarding play. These principles, Gee argues, can help inform approaches to education.

9.2.1 A Justification for the Integration of Ludic Texts in the Composition Curriculum

Gee's suggestions revolve around criticism of traditional education models in which predominantly lecture-driven instruction dominates and where there is a lack of student engagement. He argues that rather than rely on such outdated models, instruction should include elements of immediacy, immersion, and communities of practice - elements that, Gee suggests, should be manifested in lessons that follow engagement patterns similar to those found in video game texts. Thus, Gee argues that rather than forcing students to listen to long lectures, instructors should first offer what he calls a tutorial, which takes the form of a short lecture, an exposition of concepts, a discussion, or a demonstration, followed by a sandbox exploration which, in the context of the classroom, takes the form of guided practice or collaborative activities. These eventually lead into what Gee considers to be the play session, which can materialize in the classroom as individual practice, one on one discussions, or homework assignments.

Gee's proposals have since been welcomed by academics and educators alike, with some even arguing for integrated activities that include Gee's approach to education.
and the integration of video game texts for the discussion of more traditional topics. Such is the case of the work of David Hutchinson, whose 2004 book *Play to Learn* suggests a number of activities revolving around the use of video game texts. Hutchinson's activities follow the models proposed by Gee, and some of his work regarding ludocentric activities and lessons within what he calls language arts rely on the analysis of visual, rhetorical, and narrative elements found within video game texts. Hutchinson's lessons often revolve around careful consideration and discussion of both narrative and argumentative elements, with the instructor asking students about the appeals to logic and emotion employed by the texts in question and about whether the text requires the player to behave in certain patterns.

Despite the advocacy of scholars for the integration of digital texts into a variety of classrooms and the number of suggested activities (Hutchinson 2004, Aldrich 2005, Squire 2011, Quinn 2005), theoretical foundations for said integration can be found in Gee's work. In his 2003 text, Gee offers the reader 36 pedagogical principles which, he argues, can be found in video game texts but that are absent in many instructional environments. It is these principles that best make an argument for the integration of ludic texts into the composition curriculum.

Gee's Semiotic Principle suggests that in order for students to fully comprehend symbolic systems and systems of signification, students should be conversant in more than one system. Likewise, Gee's Semiotic Domain Principle states that students should not only be familiar with multiple systems, but also understand the interconnectedness of said systems. Certainly, Gee's focus is on linguistic systems and the meaning-making process of words, with his application borrows heavily from De Saussure's ideas regarding signification. However, it is likewise important to understand how non-linguistic systems participate in the meaning-making process. This suggests that by understanding
how procedural systems serve as signifiers along with linguistic systems, students become more prepared to understand the connection between rhetorical processes of language and systems.

If one is to consider rhetorical studies from this perspective, however, then it would suggest that in order for students to build a more comprehensive perspective regarding how persuasion occurs, it is in their best interest to understand more than a single rhetorical schema. This means that while instruction in traditional forms of rhetoric will help students understand the processes of composition and argumentation, complementary knowledge in different forms of rhetoric will not only result in acquiring knowledge about a new form of rhetoric, but also in enhancing knowledge about more traditional rhetorical systems.

Another of Gee's principles that supports the integration of procedural rhetoric into the composition curriculum is his Intertextuality Principle. Laying the foundations for the concept of transmedia narrative that would later be developed by Henry Jenkins in *Convergence Culture* (2008), Gee suggests that in order for one to understand the meaning of a given text, it is important to understand how it interacts with other texts that share genre conventions across several domains. If one is then to consider texts as part of an ecosystem, it becomes exigent to understand how, for example, a speech might be connected to previously existing books, documents, online spaces, or ludic texts.

One must emphasize that the educational implications here discussed, as well as Gee's principles and the proposals that stem from them suggest complementing currently existing models with models that allow for the understanding of ludic texts. This would allow students to understand how to engage with different types of textualities by understanding how the concepts of the rhetorical situation can frame the meaning of digital texts as well as how to address a more varied audience by learning to use
rhetorical devices in their writing about different types of texts. Despite this new level of rhetorical knowledge being bestowed on students, because the practice of procedural rhetoric is used as a complement rather than as a replacement, the core practices of rhetorical instruction would remain largely unchanged. In the following section, it will be explained how traditional concepts of rhetoric can coexist with the newer principles of procedural rhetoric and digital textuality.

9.2.2 Focus on the Student

It has been argued that the resurgence of rhetorical studies in the twentieth century owes much to the work of Kenneth Burke (Hocmuth 2009, Simons 2004). In his 1950 work The Rhetoric of Motives, Burke argues that rhetoric is "rooted in an essential function of language itself, a function that is wholly realistic, and is continually born anew; the use of language as a symbolic means of inducing cooperation in beings that by nature respond to symbols" (43). In other words, to Burke, rhetoric is a persuasive act, a practical act, and a linguistic act. Elaborating on Burke's ideas of rhetoric as practical and linguistic systems of persuasion, Lloyd Bitzer argued in his 1968 text *The Rhetorical Situation* not only that rhetoric is a linguistic act, but that all situations that involve an issue, constraints, and an audience are in themselves rhetorical, as each situation creates a unique rhetoric. Offering an opposing perspective, Vatz argued in *The Myth of the Rhetorical Situation* that rather than situations being rhetorical, it is rhetoric itself that gives birth to situations (1973).

Although the field of rhetoric has expanded and given birth to several schools of rhetorical criticism since Burke's manuscript was published and the conversation between Bitzer and Vatz took place (Foss 2009), it can be argued that current instruction of rhetoric and composition still emphasizes to some degree the teaching of rhetorical purpose as proposed by Burke. It has also been suggested that one of the concepts that
students of rhetoric should manage to obtain a sophisticated level of knowledge of is that of the rhetorical situation (Roskelly 2007). Indeed, students are expected to formulate an extensive awareness regarding the function of the rhetorical situation and its framing of texts. By integrating ludic texts into the traditional curriculum, students would be able to comprehend not only how the rhetorical situation creates the meaning of print and visual texts, but also be aware of rhetorical situations exert their influence on ludic texts. In these discussions, students will be able to discuss how the relationship between the readers and the authors of a given text might shape the meaning of the text.

In order to complement more traditional language or image-based examples of the rhetorical situation, instructors would rely on the rhetorical analysis of video game texts to show the rhetorical and meaning making process and how the elements surrounding the text help shape the meaning of the text. One text often relied upon when discussing the rhetoric of ludic texts is Molleindustria’s *Every Day the Same Dream* (2011). In this text, the player controls a male character on his way to work. The text never makes a win state explicit, nor does it make any suggestions regarding how to engage with the text. Instead, the text gives players the option of exploring the represented space at their own pace. Players will encounter a number of represented actors and be forced to navigate through certain predetermined events. Once the player reaches the office, the text resets and places the player back in the starting position.

Each time the player travels to work, the player is allowed to perform different actions. Players have the option of getting out of the car during a traffic jam in order to pet a cow, stopping to collect a leaf, or going to work naked. Each playthrough represents a different day, and each day represents a slightly modified rhetorical situation. Although the author and reader of the text remains unchanged, the context surrounding the text changes from one day to the next based on the player’s actions. In one day, the player
might choose to go to work without doing anything out of the ordinary, which might invoke a rhetoric of acceptance, while a day in which the player selects to go to work naked, or skip work, might invoke a rhetoric of rebellion. Player's choices, thus, results in a different meaning for each of the distinct days played and, by extension, in different claims being supported.

The inclusion of ludic texts would not only imply students applying traditional modes of rhetorical analysis to multimodal texts and the acquisition of newer rhetorical schemas, but also the writing of distinct types of texts. If one turns to Hutchinson's *Play to Learn*, one will notice a number of activities revolving around writing about games. These include guidelines for creating traditional game reviews that serve as consumer guides as well as for the creation of critical analyses of video game texts. These activities, when modified to accommodate frameworks such as Bogost's models of procedural rhetoric, or the comprehensive model for rhetorical analysis advocated for in this study, would result in students creating rhetorical analyses of ludic texts that use both traditional modes of rhetoric as well as newer constructs.

The application of multiple rhetorical frameworks to a variety of texts might also result in further fostering the students' critical thinking skills, another key component of instruction in the rhetorical tradition. By applying rhetorical frameworks to digital texts and by understanding the rhetoric of procedurality and system operations, students will be able to understand and critically engage with a more diverse variety of texts. This, of course, means that students will be able to deploy frameworks revolving around rhetorical appeals and linguistic forms not only when considering linguistic texts, but also when dealing with any manner of ergodic texts. Furthermore, because students will be considering how the rhetorical situation frames the meaning of the text as well as writing in different genres, it follows that students will also have to consider how to modify their
voices depending on audience expectations. Whether students are creating rhetorical analyses of the meaning of the unit operations of a given text or writing more direct texts attempting to persuade the reader to form an opinion about a given text, students will have to become actively engaged in understanding the expectations of the target audience for each type of text.

9.3 Conclusions

In this section the educational implications of the systems proposed in this study have been discussed. It was suggested that understanding games as text would warrant them a position in the classrooms of several disciplines, including that of rhetorical studies. Because ludic texts engage in persuasive practices, they would be analyzed through the lens of contemporary rhetorical studies and written about using a number of approaches. However, because these texts employ a new mode of rhetoric as well as more traditional rhetorical frameworks, students would have to learn new systems of analysis in addition to the rhetorical modes currently being taught. This would allow students to make connections not only between different types of texts, but also between different modes of rhetoric. Furthermore, because there exist a multitude of approaches for the analysis of ludic texts, students would be forced to select a specific genre to write about the text in question, consider the type of audience that traditionally reads their chosen genre, and learn to craft a voice that resonates with said target audience. This would, of course, force the students to develop a thorough understanding of the concept of the rhetorical situation and of how context and reader engagement shapes the meaning of the text. This will equip students to navigate ludic and ergodic texts while still acquiring knowledge of traditional rhetorical modes, eventually leading to major shift in the discourse regarding ludic texts.
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His research interests include new media rhetoric, digital narrativity, theories of education, writing instruction, technical communication, and visual culture.