Players and Readers:

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Players and Readers: Exploring The Role of the Reader in Cybertext

Literature

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Abstract

This thesis examines the role of the reader within the framework of cybertext literature. Emerging in the late 1980s, cybertext literature has reshaped narrative storytelling with the arrival of the technology of links and nodes which opened the way towards video games with a focus on reading and narrative. This shift has blurred the lines between traditional printed literature and digital literature, complicating and revising the way we categorize literary texts. Through the analysis of different types of printed and digital cybertext literary works - namely Mark Z. Danielewski's *House of Leaves*, Milorad Pavić's *Dictionary of the Khazars*, Austin Jorgensen's *Lisa*, ZA/UM's *Disco Elysium*, Ice-Pick Lodge's *Pathologic*, Obsidian Entertainment's *Fallout: New Vegas*, 11 Bit Studios' *This War of Mine* and Electronic Arts' *The Sims* - this thesis aims to provide insight into the dynamic relationship between cybertexts and their readers and into the way narrative meaning is conveyed through the way the reader is conditioned to traverse the text. Relying on the work of narratologists and cybertext theorists, this paper uses taxonomies of multimodal fiction to illustrate connections between printed and digital works and the distinctions in the way different types of readers and players can be constructed within a participatory narrative framework. Analysis of both printed and digital cybertext literature in this thesis provides insight into the three types of focalising perspectives or three types of cybertext readers - the doubly-deictic reader, the reader-as-protagonist and the omniscient multimodal perspective. As the analysis shows, two of the three focalising perspectives occur both in printed and in digital iterations of cybertext literature, with the third occurring only in digital literature. The final aim of this work is thus to demonstrate ways in which these focalising perspectives function in cybertext literature, as well as to convey the need for further analysis of cybertext readers in order to better understand the overlapping and intersecting categories of *reader* and *player*.

Key Words: cybertext, hypertext, video games, ludology, ergodic literature

Introduction

In a discussion about the status of video games and cybertexts in the conceptual field of literature, ludologist Janet Murray states that "stories can be participatory" (Casvean, 2016). What kind of shape this participation takes and who - the author or the reader - is its key participant is another question altogether, one which the emerging field of ludonarratology aims to explore. With the arrival of a new type of storytelling technology - a programming technology of links and nodes - a different type of literature emerged, and with it questions about its status and position within the arts, as well as the types of relationships it cultivates between readers and texts. Whether cybertext is a new phenomenon enabled by the discovery of a new type of literary machine or a continuation of literary traditions that preceded it is one of the questions concerning this text. Another is the participatory role of the reader - the reader's predictability, the choices they can and do make during the process of reading, the way a reader is constructed by the narrative's formal elements. None of these questions are entirely new - Russian formalism, structuralism and poststructuralism have all explored these areas of study. Yet with the arrival of cybertext in the late 1980s, a need for a new field of narratology appeared, one which makes the reader and the way they engage with narratives the cornerstone and the starting point of its analysis. New taxonomies of literature were created, ones whose borders and categories were defined not only by the compositions of narratives, but also by the actions and reactions they evoke from their readers. A crucial element, the element of agency, of choice, has become the center of narratological analysis.

Cybertext theory provides important insight into a developing field of literary expression, but more importantly, it illustrates the links and similarities between formal elements of traditional literature and those of cybertext literature. As many examples of this work will aim to show, cybertext literature forces us to reconceptualize relationships between genres, mediums and narrative structures, as curious formal similarities can be observed between works that stand centuries apart in their development. Relying on recent taxonomies of cybertext fiction produced in the fields of game design, comparative media studies and post-structuralist narratology, this thesis will try to illustrate how fragile the conceptual borders between traditional and cybertext literature are. More importantly, it will attempt to define and categorize several types of participatory readers, the way they are constructed and motivated by the structure of narrative

and the amount of agency they have both in navigating the narrative space and in usurping and defying it. Who participates in narratives and how much, who is responsible for the way they unfold and how much a participatory reader can defy the intentions of the author - those are the questions cybertext theory aims to explore, and they are this thesis' primary concern. What follows is an exploration of examples of printed and digital cybertext literature which includes ergodic novels and video games alike. By approaching the wide scope of cybertext literature through a narratological lens with a focus on the process of reading and playing, this work will try to illustrate how interacting with cybertexts can affect the way they are interpreted by their readers through their cognitive, emotional - and, as we will find out, often physical - experience of navigating through the text. In other words, it is an attempt to analyze the process of reading as a vital part of the understanding of its themes. It is the analysis of stories acquired in its entirety only through participation - only through the willing efforts (or lack thereof) of its reader. Finally, this work aims to illustrate the need for further research and analysis of this complex relationship, not only within the framework of game design - which often provides useful insight for theoretical work - but also within the fields of comparative media studies and, most importantly, narratology. As the analysis of this paper will try to demonstrate, an interdisciplinary approach and collaboration between the fields of game design and narratology can yield interesting results, with each providing important insight for further analysis by the other. Both will be heavily relied on in this work and, as it will be shown, it is impossible to approach and define the structure of cybertext without relying on these separate but ultimately similar areas of study.

Theoretical Framework

The father of cybertext theory, Espen J. Aarseth, wrote in his 1997 magnum opus, *Cybertext: Perspectives on Ergodic Literature*, that "the concept of text, always contested and problematized, is once again under reconfiguration" asking "should we use the same term for phenomena as diverse as *Moby Dick* and *MUD*s? Or, for that matter, the *I Ching* and *Moby Dick*? If the answer is yes, we face some hard rethinking about the subject of media analysis" (Aarseth, 74). Twenty-five years later, this process of reconfiguration and redefinition has only grown

more complex, creating further questions with regards to defining what a text is, and what that means for the development of narrative, in the age of interactivity and artificial intelligence. Over thirty years have passed since the development of the first video game systems, yet the debate over whether games should be considered an art form has not subsided, and more importantly, questions on whether this medium is capable of producing texts persist despite the fact that video games have already generated decades' worth of varying perspectives and aesthetics, as well as narratives and storylines whose complexity of form and narrative diversity can easily compete with traditional narratives at their best. For example, for players to obtain 100% completion in the game *Fallout: New Vegas*, they must invest an average of 130 hours into the game's narrative experience. Furthermore, if every node of text, dialogue option, journal entry and note in the game was to be printed out, it would generate hundreds of pages of textual storytelling, without even considering the way the story of the game is accessed in a non-linear and ludic fashion. Similarly, games such as *Disco Elysium* provide examples of narratives which, even today, very heavily rely on text, on discussions of philosophy and political theory and on hour-long dialogue trees when it comes to constructing a game world and a player-oriented experience. Value judgements aside, video games have proven themselves capable of not only producing texts and narratives, but also sophisticated and complex formal frameworks which can rarely be reproduced in other media, with the notable and important exception of multimodal printed literature.

Aarseth himself noticed the absurdity of this approach to any medium. He states:

What these strangely irrelevant exuberances reveal, I think, is that beyond the obvious differences of appearance, the real difference between paper texts and computer texts is not very clear. Does a difference even exist? Instead of searching for a structural divide, this study begins with the premise that no such essential difference is presumed. If it exists, it must be described in functional, rather than material or historical, terms. The alternative, to propose an essential difference and then proceed to describe it, does not allow for the possibility that it does not exist and is, therefore, not an option. The emerging new media technologies are not important in themselves, nor as alternatives to older media, but should be studied for what they can tell us about the principles and evolution of human communication (Aarseth, 17).

Furthermore, Aarseth was hardly the first to widen the conceptual field of text to other media practices. The work of both Russian formalists and structuralists relied heavily on the developing field of semiotics which has further been applied to a wide variety of texts: from

Vladimir Propp's *Morphology of the Folktale* to the analysis of texts in fashion magazines made by Roland Barthes in *The Fashion System*, what a text is and what are the shifting parameters of its study has been discussed and reshaped many times in the tradition of literary criticism. It is a field of study that has interested both structuralists and post-structuralists alike, found in the works of Tzvetan Todorov, Mihail Bakhtin, Juri Lotman and Umberto Eco, and its scope has only widened through time to include the semiotics of film, the semiotics of art, biosemiotics, etc. It is thus even more surprising that a medium so alike in its form and structure to literature has been so easily discarded as trivial by the very community that could profit the most from knowing it.

By extending theoretical practice to a developing new medium such as computer fiction, Aarseth opened the way for the study of video games in the fields of narratology and semiotics, inspiring an entirely new collective of scholars who have developed their own taxonomies of multimodal literature after Aarseth, such as David Ciccoricco and Alison Gibbons, whose work, among others', will be relied on in this paper. Exploring this problem since Aarseth's 1997 book has produced interesting questions about the nature of storytelling, illustrating a need for new terminology, new taxonomies and an interdisciplinary approach to discussing computer fiction.

Terminology

Perhaps one of the most difficult challenges when it comes to defining and naming what Aarseth first referred to as ergodic literature is the problem of conflicting terminology. Apart from the term ergodic literature, several others have surfaced, such as cybertext, hypertext, interactive fiction, ludonarrative, multimodal fiction, etc. Several things cause this problem - the conflict between terminology coming from video game marketing or publishing houses and terminology defined by scholars; the novelty of the field of computer fiction sharing similarities to older printed works; the fact that many terms have been generated by developers and fan communities, forcing scholars to make decisions on whether to keep their terminology or come up with terminology of their own. Aarseth introduces several distinctions between the terms **ergodic literature**, **cybertext** and **hypertext**. Ergodic literature or cybertext is thus defined by Aarseth as any text-based narrative work which requires and possesses an information feedback

loop, which Aarseth refers to as "a machine for the production of a variety of expression" (Aarseth, 3). He further defines it as a reading experience for which "nontrivial effort is required to allow the reader to traverse the text" (Aarseth, 1). Nontrivial effort has further been defined as **extranoematic effort**, or rather a process which requires readers to become puzzle solvers (Perec, 11 in Hayles, 457), forcing them to approach the narrative through a variety of efforts besides the movement of eyes across the page or the process of turning to another page. As ergodic literature is capable of producing branching narratives, Aarseth defines it as a **multicursal narrative**, or a narrative of many paths which can exclude each other, as opposed to traditional, unicursal narratives which, whether chronological or not, produce an ultimately linear experience (Aarseth, 6). This makes cybertext, according to Aarseth, a text which needs to be approached as a labyrinth or a game, a place which "the reader can explore at will, get lost, discover secret paths, play around, follow rules and so on… the narrative is not perceived as a presentation of a world, but rather that world itself" (Aarseth, 3-4). While it will be shown in this analysis, as well as through later taxonomies, that not every ergodic narrative must be multicursal, many of those Aarseth studied were. He further shines a light on the processes of **aporia** and **epiphany**, the former of which is a result of navigating through a text which relies on the technology of links and nodes. When faced with the same nodes and options being offered repeatedly, users move in narrative circles, resulting in a sense of frustration and an inability to move forward through the text. When the thread of this process is finally severed by the user discovering a new path or node, allowing them to advance through the text, aporia is replaced with epiphany (Aarseth, 90-92).

While Aarseth defines cybertext as a text which relies on the production of links and nodes, he refers to several printed ergodic works as cybertexts, which creates a problem with distinguishing different forms of ergodic literature. While printed works Aarseth analyzes definitely fall within the category of ergodic literature due to their structure and relation with the reader, they never have and possibly never will be able to produce a text which relies on the production of links and nodes. Simply put, printed works need not and can not be programmed.[1]

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[1] It is important to note that what is discussed here are not instances of hypertext adaptations of printed works - as in the case of the hypertext edition of Milorad Pavić's *Dictionary of the Khazars* and Harlan Ellison's *I Have No Mouth, and I Must Scream* - whose *sujet* has been altered through the use of ergodic narrative devices in order to include the reader in the process of deciding the ultimate outcome of the *fabula*. Rather, what is discussed are printed ergodic works in their e-book iterations, which do not utilize the relationship between links and nodes in order to create a participatory reading experience. If anything, it could be argued that to turn a printed ergodic work into some form of e-book significantly alters the way

However, they can emulate certain components of computer narratives and, more importantly, create their own way of producing and encouraging the production of an extranoematic reader. Aarseth does make a distinction between cybertext and hypertext literature, positioning hypertext literature as a subcategory of cybertext which relies on computer technology and functions as a specific genre of literature set apart from forms like *Multi User Dungeon*s, printed works and text-based adventure games.

Taxonomies of Cybertext Fiction

Several terms have been redefined in the years following the publishing of *Cybertext*, some of which come from scholars and some of which were appropriated from gaming or reading communities online. As the production of cybertexts has exponentially increased, further clarity and insight was required into the definition of these kinds of texts. Alison Gibbons, Catherine Hayles and David Ciccoricco thus use the terms **multimodal literature**, **interactive fiction**, and **digital fiction** respectively as an umbrella term for different types of ergodic narratives, including hypertexts, adventure games, video games and printed works. These have further been divided into subcategories, as shown in Figures 1 , 2 and 3 provided below. While Gibbons still focuses primarily on printed works, Hayles and Ciccoricco expand this category further into the realm of computer fiction.

As Gibbons states, multimodal literature features many semiotic modes in the communication and progression of a narrative, often experimenting with the possibilities of book form, testing the limits of the book as a physical and tactile object (Gibbons, 2012, 420). Furthermore, it exists on a spectrum - from minimal to extensive in the level of incorporation of multimodality (Gibbons, 420). Its formal features include a varied typography, unusual textual layouts and page design, as well as the inclusion of images and facsimiles of documents (Gibbons, 420). Other features, like playing with the way the codex is designed and pushing its own ontological boundaries (metafictive writing, footnotes, self-interrogative critical voices) are

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it is read due to the immense importance ergodic literature puts on the materiality of the text's medium or vessel - Mark Z. Danielewski's ergodic novel *House of Leaves* and its many extranoematic requests of the reader come to mind.

further discussed and developed (Gibbons, 420). While she uses Hallet's (2009) definition of five significant "conceptual shifts" brought about when reading a multimodal novel - 1) monomodal to multimodal, 2) writing to designing, 3) narrator to narrator-presenter, 4) reading to transmodal construction of narrative meaning, 5) reader to user (Hallet, 149-50) - Gibbons disagrees with Hallet's likening of reading a multimodal novel to reading hypertext fiction, claiming that such comparisons to alternate media are generalizing (Gibbons, 2012, 421), even though all of Hallet's conceptual shifts can be observed in hypertexts and multimodal works alike. In other words, Gibbons leaves hypertext fiction in its own subsection, separate from multimodal novels, due to the nature of the machine it was produced for. Again, we are faced with a language barrier - while hypertext literature can certainly speak English, or any language of its writer for that matter, printed multimodal literature will never speak in code. Instead, Gibbons says that "we might want to think of reading multimodal novels in active terms: not just as using, but also as engaging and performing" (Gibbons, 421). Indeed this definition still applies to computer literature, perhaps even more so, imposing a question of how much the machine for which the text is produced regulates and dictates what kind of a text it will be. Printed multimodal literature might never occupy the same category as hypertext literature, yet other similarities between subcategories must not be disregarded.

Gibbons provides a taxonomy of multimodal literature as seen below in the form of a table (Figure 1). The table is divided into subcategories provided by Gibbons, their definitions and Gibbons' examples of each subcategory - illustrated works, multimodal revisions, tactile fictions, altered books and collage fictions, concrete/typographical fictions and ontological hoaxes.

Subcategory	Definition	Examples
Illustrated works	Visual elements of the text must be part of the narrative world, produced by the narrator and directly woven into the narrative discourse by the device of drawing upon them continuously in ekphrastic passages	Lance Olsen's *Girl Invented by Chance;* Dave Eggers' *You Shall Know Our Velocity*; Marlene Streeruwitz' *Lisa's Liebe*
Multimodal revisions	Existing novels to which illustrations have been added, transforming the original work into	Visual Editions' republishing of Laurence Sterne's *The Life and Opinions of Tristram Shandy,*

	a hybrid creature	*Gentleman*
Tactile fictions	Books that play with form in a way that both emphasises their materiality and makes readers engage with them in notably physical ways; they explore the physical and material aspects of the reading experience	Jonathan Safran Foer's *Tree of Codes*; Tom Phillips' *A Humument*
Altered books and collage fictions	Dialogic, bring about an exchange of ideas, give the text the visual organization of a collaged painting	Guillaume Apollinaire's *Calligrammes*; Tom Phillips' *A Humument*; Jonathan Safran Foer's *Tree of Codes*
Concrete/typographical fictions	The varying quality of type as well as the white space of the page is exploited. Often, the narration of different characters is represented in different fonts, which also creates the spaces of its narrative worlds on the page in concrete prose Concrete poetic designs may be used to create images with words	Mark Haddon's *Curious Incident of the Dog in the Night-Time*; Mark Z. Danielewski's *House of Leaves* (2000)
Ontological hoax	Works which masquerade as something they are not, disguising their fictional status	William Boyd's *Nat Tate: An American Artist 1928-1960*,

Figure 1. Gibbons' taxonomy of multimodal literature. Descriptions and examples taken from Gibbons' text, *A taxonomy of multimodal literature* (426-434).

As it can be observed from the table above, certain examples can fall under more than one category. Jonathan Safran Foer's *Tree of Codes* is both a tactile fiction and an altered book/collage fiction, while Mark Z. Danielewski's *House of Leaves* encompasses elements from concrete/typographical fictions, tactile fictions, illustrated works and ontological hoaxes[2]. These categories thus provide a language for cognitive formal elements used in the making of a multimodal work. Can digital fiction benefit from these categories? When taking certain examples of digital fiction into consideration, several parallels can be drawn if formal elements of multimodal fiction are translated into their digital fiction equivalents. The altered table below shows the results of this shift. The table remains unchanged apart from its examples which have been replaced with examples of digital fiction for the purposes of this work.

[2] While Gibbons uses Danielewski's novel to only illustrate concrete/typographical fictions due to the fact that components of these are the most regularly used in the novel, the analysis of this work illustrates that *House of Leaves* falls under several categories.

Subcategory	Definition	Examples in digital fiction
Illustrated works	Visual elements of the text must be part of the narrative world, produced by the narrator and directly woven into the narrative discourse by the device of drawing upon them continuously in ekphrastic passages	Infinite Fall's *Night in the Woods*; Square Enix' *Life is Strange* → employ interaction with the protagonist's diary, whose entries include photos, musings, drawings and clippings inserted by the protagonist
Multimodal revisions	Existing novels to which illustrations have been added, transforming the original work into a hybrid creature	Cyberdreams' game adaptation of Harlan Ellison's *I Have No Mouth and I Must Scream*; Cyanide's game adaptation of *Call of Cthulhu* → transform a monomodal novel into a hybrid multimodal work
Tactile fictions	Books that play with form in a way that both emphasises their materiality and makes readers engage with them in notably physical ways; they explore the physical and material aspects of the reading experience	Galactic Cafe's avant-garde interactive drama *The Stanley Parable* → initially released as a modded version of another game, exploits several established conventions of ludic narratives in order to shift focus towards the game's formal elements
Altered books and collage fictions	Dialogic, bring about an exchange of ideas, give the text the visual organization of a collaged painting	Inscape's *The Dark Eye* → a series of performative recitations of Edgar Allan Poe's stories, framed through a newly introduced plotline. The framing plot and the level of Poe's stories are further aesthetically divided.
Concrete/typographical fictions	The varying quality of type as well as the white space of the page is exploited. Often, the narration of different characters is represented in different fonts, which also creates the spaces of its narrative worlds on the page in concrete prose. Concrete poetic designs may be used to create images with words	Computer fictions with different playable characters - Buka Entertainment's *Pathologic*, Bioware's *Dragon Age: Origins*, Dingaling Productions' *Lisa: The Painful* → while colors shift more often than fonts when it comes to different focalising perspectives, a shift in the layout or color of the character's interface is common, as is a change of extradiegetic options provided to the user. Double Fine Productions' work *Psychonauts* even uses diverse and character-specific level design to illustrate different characters' states of mind.

Ontological hoax	Works which masquerade as something they are not, disguising their fictional status	*SCP Foundation* → an expansive hypertext fiction presented as a database of a government organization concerned with cryptids and paranormal phenomena. The user must write their credentials before being allowed to enter the database.

Figure 2. An inclusion of examples for digital fiction within Gibbons' taxonomy.

As the table demonstrates, digital fiction is more than capable of producing narratives by employing Gibbons' formal elements. The connection is sometimes more visible, as in the case of the category of illustrated works, where there is little difference when it comes to the way multimodal fiction and digital fiction employ visual elements. In cases such as concrete/typographical fictions, this similarity becomes clear only if we widen the categories of 'fonts' and what 'creating images with words' constitutes. While some digital narratives do not use different fonts to signify focalising perspectives, they might use other similar formal elements related to the medium - different layouts of character interfaces, different colors for varying characters' dialogue, and most importantly, a shift in extradiegetic and extranoematic options provided to the user - while Character A is very strong and quick, Character B is weak and fragile, meaning that the user's approach to their narrative options changes with the shift in focalising perspectives.

In other words, it seems that, while printed and digital works might forever be divided by the language barrier of code, multimodal narratives are not required to be either printed or digital. David Ciccoricco provides another useful taxonomy in another attempt to classify ergodic narratives.

As Gibbons provides useful tools for the redefinition of the parameters of discussing printed multimodal works, Ciccoricco provides an equally useful system for approaching computer fiction, referring to it as "the emergence of a distinctly new narrative poetics - namely the poetics of link and node" (Ciccorico, 469). While he points out the "continuity with both traditional and experimentalist narrative fiction in print" and digital fiction's similarities with temporal contortionism, literary cubism and proto-hypertextuality (Ciccoricco, 470), he nevertheless makes a clear distinction between printed and digital works. He uses Bell's definition of the latter to illustrate that digital fiction is "fiction written for and read on a

computer screen that pursues its verbal, discursive and/or conceptual complexity through the digital medium, and would lose something of its aesthetic and semiotic function if it were removed from that medium" (Bell et al. 2010 in Ciccoricco, 471). This view of digital fiction is useful as it clarifies the differences between printed and digital multimodal works without excluding either category from the realm of ergodic literature in general. A work of fiction can thus be multimodal regardless of its medium, yet specific media restrict or allow certain formal parameters of the writer's and the reader's participation in the narrative to be realized.

Ciccoricco further divides digital fiction into three basic categories used to describe hypertext documents in general. The categories are presented in Figure 3 below (Ciccoricco, 473-474), divided by the category's name, its definition and my examples of such narratives.

Category	Definition	Examples
Axial narrative	A narrative where digressions are present in the form of glossaries or notes that are secondary to the main narrative → a reader returns to the main text after the digression	Mark Z. Danielewski's *House of Leaves*
Arborescent (branching) narrative	A narrative with branches but specifically those that contain mutually exclusive story events or outcomes → the reader makes choices and continues on until the end of one of the branches is reached	Milorad Pavić's *Dictionary of the Khazars*
Networked (alephic) narrative	A narrative which emerges gradually through a recombination of elements in a database	Electronic Arts' *The Sims*

Figure 3. David Ciccoricco's taxonomy of digital fiction.

Reasons why the three examples were chosen for this table are discussed in more depth in the Analysis of this work but, if this choice proves to be reasonable, they illustrate a potential problem with defining digital fiction - and only digital fiction - as strictly an arborescent narrative. Not only did a printed work fit into the category of arborescent fiction, but also a digital narrative fit into the category of a networked narrative. Pavić's novel requires both choice making and following branched text paths in order to engage with the narrative. An argument could be made that digital arborescent narratives enforce this approach more strictly by denying

access to other branches upon making a choice, yet if the player decides to repeat their experience by following a different path, they can gain access to the ending of each branch in a video game, just as they can in *Dictionary of the Khazars*. Furthermore, as the analysis of this text will in part aim to prove, Electronic Arts' *The Sims* is perhaps the best executed example of a networked narrative to date. Again we are faced with a problem of defining the unstable boundaries between printed and digital multimodal works.

Katherine Hayles proposes a different taxonomy which aims to reconfigure the parameters of multimodal fiction. As opposed to categorizing what she refers to as "interactive fiction" according to its unusual formal elements, Hayles recontextualizes these elements and classifies multimodal fiction according to a relationship between authors, readers and texts. Drawing from David Herman's definition of "storyworlds" or "mental models of who did what to and with whom, when, where, why, and in what fashion in the world, constructed by readers" (Herman, 5 in Hayles, 452), Hayles creates a "storyworld approach" to multimodal literature which "starts with the insight that readers engage in cognitive mapping through textual (or spoken) cues and from these construct a mental model of the world, within which everything else can be located, contextualized, and inferentially understood" (Hayles, 453). Hayles positions the cognitive processes the reader employs in order to navigate a multimodal text at the center of the attempt to define multimodal texts in general. She refers to George Perec's remarks in *Life: A User's Manual* about a shift in executive roles that occurs as "the reader occupies the role of puzzle solver and the author that of the puzzle maker (...) every move the puzzler makes, the puzzle-maker has made before; every piece the puzzler picks up, and picks up again, and studies and strokes, every combination he tries a second time, every blunder and every insight, each hope and each discouragement have all been designed, calculated, and decided by the other" (Perec, 11, in Hayles, 457). In other words, by constructing a narrative around the reader's potential participatory and interpretative behavior, multimodal literature forces both writers and readers to engage in the creation and the interpretation of the text through the anticipatory process of puzzle solving and cognitive mapping. Hayles thus creates a different taxonomy, this time putting printed and digital multimodal fiction under the same umbrella. The taxonomy is provided in Figure 4 below, again divided by category, including definitions and examples provided by Hayles (Hayles, 454-464).

Category	Definition	Examples
Random shuffle	The sequencing of events is undetermined and the storyworld is extremely fragmentary → the codex becomes an unbound set of texts	*Composition No. 1, Roman* (Saporta, 1961), *Heart Suit* (Coover, 2005)
Multiple reading paths (horizontal and vertical)	A multivariant structure that can be read straight through, encountering a mass of material in which different storyworlds are encountered in rapid succession (horizontal reading strategy), or by jumping around so as to string together a number of related narrative segments (vertical reading strategy). While vertical reading creates more narrative consistency, horizontal reading makes clearer the cross-links that tie diverse narrative sequences together	*Choose Your Own Adventure (CYOA)*, *Hopscotch* (Cortázar, 1963), *Life: A User's Manual* (Perec, 1987), *Dictionary of the Khazars: A Lexicon Novel* (Pavić, 1989)
Multiple reading paths (annotation)	A narrative of multiple reading paths created through the attachment of annotations which quickly grow into a story in their own right and threaten the hegemony of the putative "main" narrative	*House of Leaves* (Danielewski, 2000); *Pale Fire* (Nabokov, 1962)
Interactive fiction on the computer	Not a book, but a program that simulates an underlying world and, by accepting typed input and producing textual output, presents a subjective view of that world	*Adventure* (Crowther 1975) and *Zork* (Anderson, Blank, Daniels and Lebling, 1979), Steve Meretzky's *A Mind Forever Voyaging* (1985), the adaptation of *The Hitchhiker's Guide to the Galaxy* (1984) (Disch and Bentley 1986)

Figure 4. Hayles' taxonomy of interactive fiction (Hayles, 454-464).

It is of note to compare Hayles' second category of multiple reading paths (horizontal and vertical) to Ciccoricco's concept of an arborescent (branching) narrative. While Ciccoricco's category specifies those narratives that contain mutually exclusive reading paths, Hayles extends this category to those paths which are not mutually exclusive, dividing them into three subcategories - horizontal, vertical and annotative. Interestingly, Hayles refers to this type of fiction explicitly as "print" fiction, while Ciccoricco positiones his category squarely within the realm of digital fiction. The similarity of these categories as well as their different positions on

the spectrum of multimodal fiction inform us that, while the divide between printed multimodal works is certainly there, it is not as clear or wide as it initially seemed to be.

Ludonarrative

Further work into the analysis of multimodal fiction comes from the field of **ludology**, referred to in this work as **ludonarratology**, a field particularly concerned with readerly and interpretative practices of players. For the purposes of this analysis, the neologism ludonarratology will be used because the more widely spread and established term ludology encompasses a wide variety of approaches to video game analysis - historical, economic, sociological, psychological, etc. On the other hand, ludonarratology is concerned specifically with the relationship between ludic and story elements of a video game's narrative and draws many key concepts from the work of narratologists and cybertext theorists. While notable ludologists like Jasper Juul have argued for ludology and narratology to remain separate studies (Juul, 2004), others like Janet Murray insist that "stories can be participatory", making interactive fiction a reasonable object of narratological study. In short, ludic elements of multimodal narratives need not - or, as this analysis will aim to prove, must not - be viewed and analyzed separately from their narrative elements. If only specific types of texts (texts which incorporate ludic elements) require this synthesis, and if that synthesis is the basis of any approach to multimodal works, then these texts must be analyzed through a slightly modified lens. Neither ludology nor narratology will suffice - multiple perspectives are necessary. A hybrid theoretical framework might be more successful in critically approaching hybrid genres like those created by the development of multimodal literature.

The term 'ludonarrative' is here appropriated from Wendy Despain's essay *Designing for Ludonarrative Harmony*, in which she uses the term to describe narratives which include or rely on ludic elements, with a narrow focus on digital multimodal works. In her work, Despain refers to Zimmerman's redefinition of formal elements of narratives within the framework of digital fiction. These elements are game, mechanics, narrative, system, story and playspace (Zimmerman, 6-10). Zimmerman's definitions of these elements are provided in Despain's essay as a chart, which is reproduced below for the purposes of this work.

Term	Definition
Game	a series of willful, meaningful choices in an imposed artificial framework with uncertain outcomes [7]
Mechanics	actions taken by the player in a game that interact with the game's systems and are performed within the playspace [8]
Narrative	how the story is told and *why* the story exists; the communication of how and why the story exists [9]; the context of the story as it relates to the play space; & the experience of play through the use of game mechanics and interactions with systems
System	an underlying, automatic process that directly affects the game without the player's direct control, but can be altered by mechanics
Story	the sequence of events characterized by having a beginning, a middle, and an end
Playspace	the major area(s) of the game where the player interacts through mechanics with the game systems and experiences narrative [10]

Several key concepts defined by Zimmerman correlate with previously mentioned theories. Zimmerman's definition of a playspace is shown to be very similar to Hayles' storyworld approach, while the category of mechanics provides further insight into the attempts to define extranoematic efforts required of readers and players by multimodal works. Most importantly, Zimmerman redefines narrative in the context of digital fiction, emphasizing how important the player's interactions with systems and game mechanics are to creating or defining multimodal works. This creates a vital narratological perspective which places ludic elements in the category of narrative, shining a different light on Murray's claim that "stories can be participatory".

Further insight into the dynamics of storytelling and participation comes in the form of ludonarratological concepts of **ludonarrative resonance**, **ludonarrative cohesion** and **ludonarrative harmony** (Figure 5), as initially defined by Brice (2011), Beans (2016) and Abraham (2013). While cohesion refers to the overlap between narrative and ludic elements (e.g.

Bioshock's verbal command "Would you kindly…" directing players where to go, while also denying them any in-game choice to do otherwise), harmony refers to ludonarratives which are completely structured around the interaction between game mechanics and narrative (Despain, 3). In other words, a difference in the approach to constructing a digital narrative can be observed - while some keep ludic and narrative elements separate (e.g. *Metal Gear Solid* or *Final Fantasy* which employ the use of cutscenes in between chunks of gameplay), others integrate them, making them function in tandem and losing parts of the narrative experience if one or the other is ignored. In other words, for ludonarrative harmony to be achieved, game mechanics and narrative must have a symbiotic relationship, increasing players' immersion and emotional attachment to the narrative (Despain, 4).
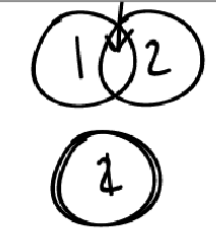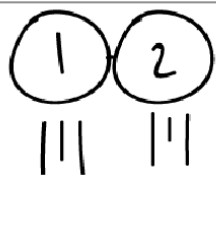
Ludonarrative Cohesion	when the thematic elements of a game are inherently tied to the player's narrative use of those mechanics.	
Ludonarrative Harmony	the synchronized interaction between the mechanics and narrative that creates a unified story.	
Ludonarrative Resonance	the reaction the player gets from experiencing a moment where the game mechanics and narrative impact each other.	

Table 1. Table comparing the three types of ludonarrative found in game research and their definitions

Figure 5. Despaine's table comparing the three types of ludonarrative processes found in game research

Even though concepts of ludonarrative resonance, cohesion and harmony are a better place to begin creating a taxonomy of ludonarratological devices, they were preceded by the definition of the concept of **ludonarrative dissonance**. Game designer Clint Hocking was the first to employ the combination of Zimmerman's elements in order to define what he calls ludonarrative dissonance as a disconnect between a digital fiction's game mechanics and its

narrative (Hocking, 2007). In his analysis, he discusses Irrational Games' video game *Bioshock*, stating that the game offers players two contracts, a ludic contract and a narrative contract. While ludic elements of the game enforce the game's underlying themes, its narrative aspects undermine these themes at the same time. Developed as a critique of Randian Objectivism, *Bioshock* positions players in a dangerous and extreme playspace which is challenging to navigate and survive, yet it provides them with a difficult, yet potentially beneficial choice: put simply, murder a child, get stronger and increase your chances of survival or defend the child from an extremely powerful enemy, potentially lowering your chances of survival. According to Hocking, this dynamic forces players to justify using others and choosing their own self-interest as a correct choice to make:

> Thus, the ludic contract works in the sense that I actually feel the themes of the game being expressed through mechanics. The game literally made me feel a cold detachment from the fate of the Little Sisters, who I assumed could not be saved. Harvesting them in pursuit of my own self-interest seems not only the best choice mechanically, but also the right choice. This is exactly what this game needed to do – make me experience – feel – what it means to embrace a social philosophy that I would not under normal circumstances consider… To be successful, the game would need to not only make me somehow adopt this difficult philosophy, but then put me in a pressure-cooker where the systems and content slowly transform the game landscape until I find myself caught in the aforementioned 'trap'.
> (Hocking, 2007).

However, as Hocking goes on to say, the game's second contract disrupts this harmonious dynamic. The game's narrative structure forces players to help a stranger named Atlas dismantle this system, which is something that the player is otherwise discouraged from by the game's mechanics. While players can choose whether to harvest or save small children, making it a meaningful choice, the game's narrative never lets players choose any other action they take. They can not oppose, sabotage or ignore the person they are helping, nor can they refuse to help them. As the ending of the game informs players, their character has been brainwashed throughout the game by Atlas, who uses the phrase "Would you kindly…?" as a trigger to make players do what he tells them to. As Clint explains, "this contract is not in line with the values underlying Randian rational self-interest; 'helping someone else' is presented as the right thing to do by the story, yet the opposite proposition appears to be true under the mechanics (Clint, 2007). On the other hand, as Despaine points out, recent criticism claims that "choosing to save or sacrifice the little sisters is one of the only times Atlas asks the player to do something without

saying "Would you kindly...?" [12] [13]. Meaning this is the only choice where the player character makes the decision freely" (Despaine, 2). Jenkins thus identifies the problem of ludonarrative dissonance as a problem of employing traditional storytelling linearity to a multimodal digital work (Jenkins, 15). As Despaine sums up, "since the narrative design is being told to the player; the player cannot simultaneously tell that story. A traditional[3] storytelling mindset naturally fights with a game's present-tense, active storytelling environment" (Despaine, 2).

The final category of ludonarrative resonance is not concerned with the structure of the text but rather with the player's response and feedback, with Brice defining it as "the successful use of mechanics to communicate a specific narrative experience" (Bryce, 17; Despain, 3). This category is vital, as ludonarrative harmony relies heavily on mechanics which require engagement, choice making and puzzle solving for the purposes of eliciting emotional responses or questions from players. In other words, the reader's and the player's emotional involvement in a narrative has become an integral part of understanding multimodal works and digital narratives.

The Player

Whether called ergodic, multimodal or ludic, cybertext is, in all of its many forms, primarily constructed around the active participation of its readers and players. As the concepts of ludonarrative dissonance and harmony illustrate, emotional investment in a multimodal narrative depends - to a variety of degrees - on the process of cognitive mapping, puzzle solving, and on direct input from readers and players. This necessitates a process of anticipation of the readers' and players' behavior, instincts, cultural knowledge, prior experience in life, prior experience with a certain genre, etc. It seems that the reader - what they know and do not know, what they can or can not do, how they engage with narratives - is considered both in the process of narrative creation and narrative interpretation in ways that they have not been considered before. As Aarseth puts it, the "reader/user" of a multimodal narrative is "deeply integrated in

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[3] As the analysis of this work will aim to prove, the term 'traditional' is not the same as the term 'printed', as traditional works certainly do have their digital copies and, more importantly, multimodal printed works follow ludonarratological guidelines, aligning them more closely with hypertext fiction and video games than with any other genre or medium. Similarly, 'digital fiction' is not a digital copy of an unaltered traditional text, but a text which relies on the combination of Zimmerman's ludonarratological elements which necessarily rely on computer technology to be produced.

the meaning-making process" (Aarseth, 1). The aim of this analysis is thus to explore the ways in which readers and players are incorporated into multimodal narratives, as well as the complex relationship between authors, texts and readers of erodic works. For the purposes of this analysis, the term player-reader will be used to refer to a reader of a specific kind of narrative, which tends to appear both in printed and digital forms, within the realms of literature and video games alike. Since the aim of this analysis is to observe and compare readerly and participatory behaviors of those who enter multimodal narratives, neither the term 'player', nor the term 'reader' suffices, necessitating the formation of yet another hybrid. Furthermore, by comparing printed multimodal novels, independent and box-office video games and simulated narratives, this work will try to illustrate the notion that the anticipated - or often even unanticipated and unpredictable - behavior of readers is what connects various disparate types of multimodal works and simultaneously makes them stand apart from traditional forms. As Aarseth notes, "the main question here is user activity. Any text directs its user, by convention, mechanism, or social interaction. The reader is (and has always been) a necessary part of the text, but one that we now realize can (or must) perform more than one function" (Aarseth, 74). What these new functions are, and how they affect the production of narratives, is the main question this text tries to answer.

Analysis

Multimodal Focalising Perspectives

In his work *Postmodernist Fiction*, Brian McHale uses the term 'semipermeable membranes' within literary works to define the one-way crossing of boundaries between different narrative worlds and levels within a narrative. He further defines such a boundary as "not an impermeable but a semipermeable membrane… a fiction's epidermis" (McHale, 34-36). According to Alison Gibbons, this notion can be applied to literature by "signifying the possibilities for transgressions between and across narrative worlds" (Gibbons, 2011, 50). These include transgressions between different diegetic levels or entire narrative layers, but also those transgressions between the reader's world and the text-world of the narrative.

One way to form such membranes is through what Nina Nørgaard refers to as different yet mutually inclusive semiotic principles of typographic meaning: iconic, indexical and discursive (Nørgaard, 148-157). Indexical meaning "invokes the material origin of its own coming into being" by, for example, inserting segments of handwritten text into the narrative, while iconic meaning utilizes "the visual salience of letterforms to convey a different kind of salience" through the employment of underlined words or phrases, words written in italics or words written in different colors. Finally, discursive meaning alludes to arbitrary and conventionalized relationships between font types and that which they evoke - for instance, the font Courier is often used to signify typewritten text (Nørgaard, 148-157).

One multimodal narrative which utilizes the interrelationship between these three elements is Mark Z. Danielewski's *House of Leaves,* an annotation narrative of multiple paths, significant parts of which are presented as an ontological hoax. Divided into four diegetic levels - provided that the reader is excluded - it tells the story of Johnny Truant, a tattoo artist based in L.A., who discovers an academic text written by a dead, blind man named Zampanò. The paper analyzes a documentary film called *The Navidson Record*, in which another protagonist, Will Navidson, records several explorations of the hallways of his eldritch house of cosmically impossible proportions, which is bigger on the inside and whose dimensions and composition keep changing during and after each exploration. A third narrator can be found within the novel's Appendix, in the shape of Truant's mother Pelafina, who writes Truant coded letters from a mental institution and further informs his part of the narrative. Each level of the novel is presented as a different layer - *The Navidson Record* is a documentary film told through Zampanò's academic text, while Truant's narrative is positioned within the margins of the text as a series of footnotes which sometimes take over the text he is commenting on. Truant's footnotes are further explained by the appearance of the Editors, who appear at certain points in the text in order to correct him or add more information. Furthermore, Pelafina's letters and more evidence collected by the Editors appear in several Appendices at the end of the novel and can be easily missed. For easier understanding, Alison Gibbons' chart of *House of Leaves'* narrative levels is provided below (Figure 6).

Gibbons refers to the novel as what McCaffery and Gregory (2003) call a "chinese-box novel", or rather a "recursive narrative structure composed of embedded or nested worlds" (Gibbons, 2011, 46). Furthermore, according to David Ciccoricco's taxonomy of hypertext

documents, Danielewski's novel falls under the category of an axial narrative, or rather a narrative littered with digressions in the form of notes or appendices which are secondary to the main story but impose heavily upon it and require the reader to traverse back and forth between the main text and its multiple digressions. Finally, the novel perpetuates the creation of storyworlds, as it relies on "cognitive mapping through textual cues" (Hyles, 453), the navigation of which heavily influences the reader's experience of traversing through the text.
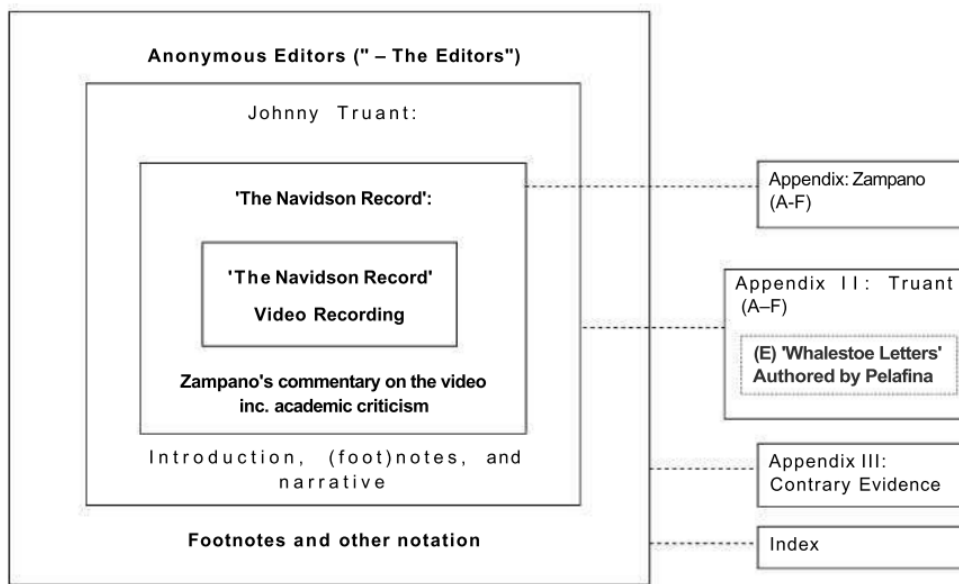
Figure 4.1 Narrative levels of Danielewski (2000a) *House of Leaves*.

Figure 6. Alison Gibbons' chart of narrative levels in *House of Leaves*.

Various levels of diegesis in the novel are set apart from each other by different fonts which signify and infer different meanings - Zampanò's academic text is written in Times Roman usually associated with newspapers and academic work; Truant's footnotes are written in Courier which signifies, through discursive import, typewritten and old data and thematically identify him as the "courier" of the manuscript; while the Editors' notes are appropriately written in Bookman (Gibbons, 2011, 48). Furthermore, both Pelafina's letters and Zampanò's journal entries as well as the title of Danielewski's novel are written in Dante, inferring their own symbolic meanings and further destabilizing the ontological boundaries between narrators and authors. Furthermore, certain passages are crossed out, blackened by ink or organized to form different visual layouts - passages representing hallways and doors, blank pages, space between

people represented through space between sentences, etc. Perhaps the most notable typographical cue can be found in the coloured version of the novel, which has every instance of the word 'house' written in blue.

Despite these typographical divides, characters from all levels of the story world have narrative access to the appendices of the world they border - Zampanò has access to *The Navidson Record* (albeit arguably so, considering his blindness and the fact that Truant never manages to find the recording or anyone who knows about it), Truant has access to Zampanò's manuscript and to Pelafina's letters, while the Editors have access to the entirety of the presented work, including the several appendices. The reader, in turn, has access to all five diegetic levels of the story world, six if they decide to include themselves as one of the co-creators or interpreters of the presented works.

In the essay *A [S]creed for Digital Fiction*, Alice Bell states that semipermeable membranes usually found in hypertext fiction function as a tool of readerly alienation from the text world by creating ontological boundaries (Bell et.al, 2010). Yet, as Gibbons argues, "the permeations in *House of Leaves* do not result in a comparable distancing of the reader." Instead, Danielewski encourages and creates breaches of these semipermeable membranes in order to obscure and hide these same boundaries, which proves to be critical to the intensity of the novel as a reading experience (Gibbons, 2011, 50). As each level's ontological status of Danielewski's narrative is inherently unstable from the beginning - from the never ending questioning of the very existence of *The Navidson Record*, across the contradictory and often purposefully misleading information given to the reader by Truant, to Pelafina's coded letters; subjective parallels between readers and characters can be created and the semipermeable membranes between different layers are allowed to be breached. This allows the reader to be blended into the narrative in various ways, one of which includes the merging of the reader with several of the novel's characters, notably Truant and Navidson.

Danielewski achieves this merger through the use of several multimodal and semiotic approaches, the first of which appears in Truant's introduction to the novel and continues to appear in other parts of his narrative sporadically. As Truant's point of view is presented mostly through homodiegesis, which is only in part broken by several direct addresses to the reader, it can be jarring and unnerving to discover apparent mistakes in Truant's writing in which he switches between the personal pronouns 'I' and 'you' in seemingly accidental ways. Seemingly

accidental pronoun switches do not happen only to Truant, but to Zampanò as well, such as in the now famous line "He might have spent all night drinking had exhaustion not caught up with me" (Danielewski, 320). According to Gibbons, this "invites the reader to project into its deictic centre, the character of Johnny Truant; through this conceptual repositioning, the reader experiences the narrative events through this focalising perspective" (Gibbons, 2011, 61). Furthermore, according to Kacandes, through the usage of the apostrophic 'you', readers are invited to accept the position of "direct addressee, the desired other of the narrator" and are "positioned to feel the emotional force of the relationship created" (Kacandes, 179). As Gibbons highlights, this employment encourages the reader to develop an affinity with Truant, thus drawing the reader deeper into the world of the novel and creating deeper emotional investment in the narrative (Gibbons, 2011, 63).

The second method Danielewski employs in order to merge the role of the reader and the role of the protagonist within the narrative is a series of multimodal interventions into the text, methods for which the novel has ultimately become famous for. Most of these take place within the framework of *The Navidson Record* as Navidson and his colleagues embark on a series of explorations of the shifting interior of his house. As each exploration becomes exponentially more complex, convoluted and dangerous, the multimodality of the narrative increases and requires the reader to construct it through a multitude of semiotic modes, in a process similar to target mapping (Gibbons, 2011, 65).

As the reader traverses through the house along with Navidson in Explorations #4 and #5, textual layout plays a vital role in integrating the reader's experience with that of Navidson, blending not only the reader with the protagonist, but the novel itself with the structure of the house. Exploration #4 quickly shifts from Zampanò's established writing style to a fragmented series of columns of text which form "corridors of words" (Gibbons, 2011, 67), which are in turn intruded upon further by Truant's footnotes. Some columns are upside-down, others are lying diagonally across the spread of the page, and chunks of text stand disconnected in separate squares in the middle of certain pages. The text in these squares is mirrored on every even page it appears in, and much like most of the text written in various corridors, it is preoccupied with listing every conceivable object that does not appear in the house, as well as an endless stream of names of architects, art critics and essay titles Zampanò finds important to mention in this

section. For a visual demonstration of what Exploration #4 looks like, see Figure 7 provided by Gibbons below.

The effect of these multimodal intrusions is the reader's confusion and frustration blending with that of Navidson and his fellow explorers. As the exploration progresses, the number of corridors and dead ends increases with it, both for the reader and for Navidson. As Slocombe notes, Danielewski hardly expected the reader to carefully read through all of these corridors of text, most of which are comprised of unconnected lists of names and objects - a more plausible result of this kind of multimodal approach is the fact that the reader starts treating the unexplored parts of text the same way Navidson treats the hallways he doesn't explore or the dead ends he encounters. According to Gibbons, "these are not "footnotes" but rooms within a house, sometimes empty (the blank boxes), sometimes full of people (lists of people such as the "authors of buildings" section on page 121) (Gibbons, 2011, 69).

Another such instance of blending occurs in Exploration #5, Navidson's final exploration of the house in which he takes part in alone. As he traverses through the shifting interior of the house, the text visually represents his movements, giving the reader an overview of the navigated space through Navidson's eyes. One notable example of this is Navidson climbing an incredibly long ladder, which is accordingly mirrored for the reader as the text begins at the bottom of the page, with each new row of text forming a ladder-like structure the reader must also climb in order to continue through the narrative (Danielewski, 440-41). Furthermore, in order for this section to be traversed, the reader must rotate the book. For a clearer understanding of the way text is structured in this section, see figure 8. As Gibbons states, "Navidson, occupying the subject theme position and invested with agency and motion, is profiled as the trajector while the ladder is marked as landmark in the narrative world. His movement is part of an UP image schema whereby his path is one of ascent. This linguistic configuration, in effect, transcends its static manifestation, instilling dynamism and animation into the narrative world… the reading path involved in this extract creates subjective resonance. The reader's eyes and the character of Navidson become counterparts through upward motion and discomfort. The reader's physical and visual encounter with the text parallels the narrative depiction of climbing and by extension the actual exercise in the real world. This visual representation, enhanced by the linguistic use of present tense, thus forces the eyes to enact a conceptual metaphor: literary experience is physical movement" (Gibbons, 2011, 73-74). However, unlike the ladders in video games such as *Lisa*,

Navidson's ladder allows the reader to only move in an upward motion, significantly limiting their movements. More importantly, this decision allows Navidson to be treated as an agent, an avatar the reader occupies in order to be able to move within the confounds of the presented narrative world, not unlike the movement within an arcade video game.

Another similarity between Danielewski's novel and a certain subsection of video games can be spotted when analyzing Pelafina's letters to Truant, which need to be decoded both by Truant and the reader in order to convey their intended meaning, in a fashion similar to classic puzzle and point-and-click adventure games of the late '90s such as *Broken Sword* or *Myst*. Whether the reader finds and decodes Pelafina's letters significantly impacts their understanding of the narrative as a whole, but more importantly for this analysis, the act of decoding on its own enables the reader to once again occupy Truant's focalising perspective, as we can assume he himself needed to participate in this ergodic act upon receiving Pelafina's message.
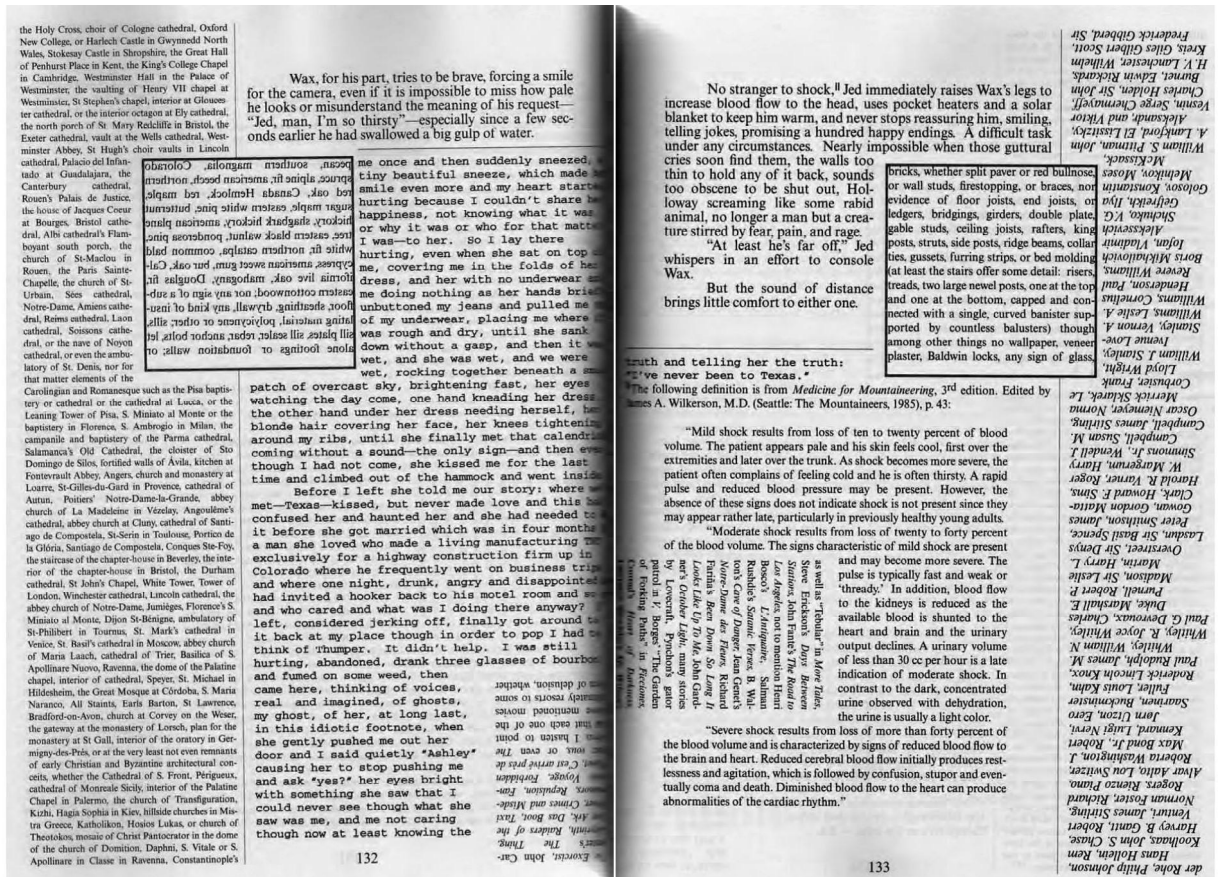

Figure 4.6   Danielewski (2000a) *House of Leaves*: 132–133.

Figure 7. An example of multimodal organization in *House of Leaves* (Gibbons, 2011, 67).

Figure text fragments (page 440–441):

standing inside a very↓
seconds and he is

rung. A few more
he reaches the last

Thirty minutes later,
tenacity is rewarded.

for a little longer. His
continues to push on

unappealing he
however, is so

sleep. This idea,
rung and try to

tie himself to a
probably have to

admits he will
bar, Navidson

high-caloric energy
have a bite of some

gulp of water or
stops to take a

with only brief
of climbing,

hours and hours
after presumably

the ladder. But
pulls himself up

Navidson

hand over hand,

Slowly but surely,

440

(inverted text, page 441)

the peculiar gravity of the self.

An idea Escher beautifully sub-
verts in *House of Stairs*, disen-
chanting his audience of the
gravity of the world, while at the
same time enchanting them with

'above' and 'below,'

exchange the words

and Hell, cannot

believe in Heaven
long ceased to

the word 'up.' Even
those who have

and the power of

the word 'above,'

due to the force of

redemption. That is

mountain reflects

The climbing of a

meanings:

comments on the force of vertical

berge (Frankfurt, 1960, p. 95)

Erich Kästner in *Obenge Wein-*

441

Figure 8. A visual representation of Navidson's "ladder climb" (Danielewski, 440-41).

It must be noted that, while *House of Leaves* is perhaps the most notable example of the creation of a doubly deictic subjectivity, other printed multimodal works have achieved the same effects. Narratives like Raymon Federman's *Double or Nothing* have similarly used the book as an object which needs to be turned over and examined for the reader to understand the meaning of the written text. A notable passage includes a diagrammed sentence, which the reader can understand only by turning the book in various directions, mimicking the struggle of the novel's immigrant protagonist who is trying to learn English (Tomasula, 436). Being put in a similarly

frustrating position of slowly and clumsily decoding the sentence creates a shift in the reader's focalising perspective. This purposeful frustration of progress will be illuminated as a common multimodal technique in the following works, proving it to be vital in eliciting an emotional response from readers. This approach is more commonly seen in digital works, as will be discussed below.

When it comes to digital multimodal works such as video games, the blending of the player-reader with the protagonist is much clearer and much more easily recognized. However, this blend must not be confused with the player-reader *as* the protagonist, which is something that predominantly occurs in open-world role-playing games such as the *Fallout* series and usually involves a character-creation process. In other words, not every video game experience involves a merger of the player-reader with the protagonist - sometimes the protagonist is the player-reader herself, while at other times the protagonist is controlled by the player-reader, yet the experience of navigating through the narrative world does not encourage emotional identification with the protagonist through the use of multimodal and ludonarrative components. In games such as Dingaling Studio's *Lisa,* Ice-Pick Lodge's *Pathologic* and ZA/UM's *Disco Elysium* on the other hand, this merger is successfully achieved through the use of several multimodal approaches in order to achieve ludonarrative cohesion, resonance and harmony.

Austin Jorgensen's role-playing video game series *Lisa* consists of three multimodal works: *Lisa: The First, Lisa: The Painful* and *Lisa: The Joyful*. The stories are interconnected and follow their predecessors closely, so the player-reader's knowledge of previous game elements influences further gameplay. The first game focuses on Lisa Armstrong, a girl trapped in her house by her violent father, Marty, whose abuse she is trying to escape through a series of hallucinatory journeys through her mind. The short game describes her many attempts at escaping her life through an exploration of her traumatised mind littered with images of her father, as well as her many unsuccessful attempts at killing a mysterious phallic character called Tricky Rick, through which Jorgensen heavily implies that Marty's abuse of his daughter was of a sexual nature. While nothing can directly harm or kill Lisa as the agent, every nonplayer agent in the game with the exception of Tricky Rick is embodied by the figure of her father whom Lisa is desperately trying to avoid. Every attempt at escaping Lisa's father faces the player with his inevitable reappearance.

Lisa's escape attempts rely on constant interactions with incarnations of her father, some more unpleasant than others. While at times the player is required to please Marty through giving him gifts, other areas require doing favors for him in order to obtain key objects needed to advance the game. Many interactions with Marty involve abusive dialogue to which neither the player nor Lisa can respond, denying them a great deal of agency in order to elicit a sense of hopelessness. One screen involves Lisa trying to get to the other side of a dark cave filled with spiders with her father's face on them. If the player happens to touch either of the quickly and erratically moving creatures, Lisa is teleported back to the cave's entrance, requiring the player to start from the beginning. The spiders' movements can not be predicted, evoking a sense of anxiety upon approaching them and positioning the player further within Lisa's focalising perspective, as they begin to dread Marty's appearance not only thematically, but in terms of game mechanics - touching the spiders prevents the player from progressing. Another screen solidifies this merger as the player encounters a huge, horrifically disfigured image of Marty blocking the door to the next room of the game. The player is forced to use Lisa to physically enter Marty from the left side of the screen, signifying both Lisa's and the player's inability to escape his image and symbolically forcing the player to re-experience Lisa's traumatic abuse.

Lisa: The Painful takes this approach further through a more complex use of turn-based role-playing mechanics such as item management, companion collecting and a hit point system. By far the longest and the most detailed narrative in the series, *Painful* takes place in a post-apocalyptic future version of Lisa's hometown, Olathe, and focuses on her older brother Brad as he discovers the only surviving female member of a now male-dominated and dying society. Guilt-ridden over his sister's tragic fate and his inability to change it, Brad lives his life addicted to a drug named Joy, which "makes him feel nothing", and upon finding the female baby lost in the wasteland vows to protect her from the hostile world around her by locking her in his basement and naming her Buddy. After a few flashbacks to Brad's life with his father and his many unsuccessful attempts to quit Joy, the game starts when Buddy beats and kills her captors and escapes Brad's basement. Certain that his daughter has been taken from him, Brad begins his journey to find her and bring her home. Utilizing and subverting role-playing elements such as collecting companions with different backgrounds, abilities and personalities; using a hit-point system and turn-based gameplay, and allowing players choices - albeit incremental and painful ones - *Lisa: The Painful* is an experiment in the identification of the player-reader with

the central characters of the story-world, as well as the way in which structural elements of the text influence the player's emotional experience of the game. Most of the small and seemingly insignificant choices the player is able to make throughout the narrative do little to change its outcome, but result in several different post-credits scenes which elaborate further on Brad's early life.

The narrative world of *Painful* is extremely unforgiving and difficult to navigate due to multiple enemies which attack the protagonist and make advancing the game a frustratingly slow process. Since the game is set in a post-apocalyptic environment, crucial items necessary to beat most of the game's enemies are scarce, expensive or hard to find, which makes them exceedingly valuable to the player. The second key element the player desperately needs in order to traverse the narrative world more easily are many companions the player can meet and invite to join them on their journey to find Buddy. There are 30 available party members Brad can recruit, most of which are optional, and each of which has their own special abilities and skills along with special moves unlocked in combination with Brad's attacks, which makes them crucial to defeating certain enemies The most important aspect of all the companions gathered throughout the game, however, is that any of them can die at any point.

As the player advances through the game, they are forced to calculate a series of losses in order to survive. The player is forced at multiple occasions to submit Brad's companions to a game of Russian roulette, and whether they live or die is randomly generated. This means that every one of Brad's companions can die one by one, as finishing the game requires the opposing party's men to lose and die several times. Furthermore, on several separate occasions, Brad, and by extension the player, is forced to choose between losing an arm or losing a companion, or losing an arm or losing all of their extremely rare and precious items. If the player chooses to remove Brad's arms, his attacks become significantly weaker and he is ultimately forced to bite his enemies, dealing very little damage.

Another crucial aspect of the world of *Painful* is the fact that in order to heal without using rare and expensive items, Brad can rest and sleep at several campsites scattered around Olathe. As with every other game mechanic in *Painful*, however, the rest has its price: several different things can happen to the player during or immediately after resting, each randomly generated and unpredictable. These things include fairly innocuous occurences with no negative effects (e.g. a masked man staring at Brad before exploding) and very rare positive occurrences

like receiving a gift or a message reading "I love you." However, most of the things that can happen to Brad are negative and include, among other things, being poisoned by spiders, having party members get kidnapped, party members deciding to leave forever during the night, important items getting stolen, raiders appearing and hitting Brad in the head with a bat, leaving the player with a permanent loss of SP[4] and Luck. This mechanic elicits a sense of unease within the player, making them hesitant to use campsites and making the danger Olathe's environment poses more tangible. This kind of gameplay facilitates a paranoid approach to the text, emulating Brad's own growing paranoia and forcing players into a series of uneasy choices in order to get through each part of the narrative.

Painful's choices and ludonarrative hostility force the player to dread making them as much as the protagonist does, as they actively affect the way the player can traverse through the text and engage with the story. While allowing more choice in the way they use items and companions, the players are left with a similar sense of dread and helplessness they were forced to experience with *Lisa: The First*, this time with a shift in focalising perspective - from Lisa to Brad. This is enforced through the aforementioned difficult gameplay choices, but also through a significant removal of player agency in key parts of the narrative. While they can at times choose between losing an arm or losing a friend, the player has little choice over most of Brad's actions throughout the game. One level requires the player to control Brad as he drives over innocent people in a bulldozer in order to get to the next screen, while another requires them to beat Brad's friend with a baseball bat several times, signifying both Brad's loss of control over his actions and the player's inability to make different ones. When Brad finally finds Buddy, she is hiding in a cave with Marty. Upon seeing Lisa's abusive father, the player is given a choice to spare him or to kill him. This choice is ultimately meaningless, as no matter what the player chooses, Brad can't help himself and attacks Marty anyway. Buddy, unaware of Marty's previous actions, steps in front of him in order to protect him from Brad. As she does this, the player is forced to injure her in order to make her move aside, and is further forced to repeatedly hurt Marty until he dies. While this lack of player agency might be dismissed as simply the narrative path Jorgensson decided to take - after all, players do not have agency in many narrative-heavy games, as the story's trajectory is predetermined - it is precisely the false appearance of choice which puts an emphasis on the player's inability to choose. The game does not simply decide

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[4] Skill Points, which are required to perform attacks.

what Brad's choice will ultimately be - it offers players a choice, yet it simultaneously dismisses it in order to convey a similar inability in Brad to restrain himself in front of his abuser. As Harris Brewis puts it, "this man has been fighting iterations of his father for years - what's one more?" (Brewis, 2017).

Painful thus employs both difficult choices and a purposeful removal of player agency in order to push the player closer to Brad's focalising perspective. While linear in its structure and ultimately ending the same way no matter what the player does, the game has several different post-credit scenes which change depending on whether Brad, through the actions of the player, takes the mind-altering drug Joy in order to progress through the game more easily. While this establishes a lack of control over what kind of person Brad ends up being, it reinforces a feeling of incremental change, eliciting what Lazzaro terms as *fiero* - a sense of personal triumph over adversity, albeit an incremental and seemingly insignificant one (Lazzaro, 5).

Lisa: The Joyful is a continuation of the first two narratives and centers Buddy herself as she tries to get retroactive revenge for the way she was treated by her adoptive father and the rest of the male population of Olathe during the events of *Painful*. She does this through an attempt to kill off the world's remaining warlords one by one, without any regard as to whether they are actually dangerous or not. It is a lonely and bitter stroll through a decaying world as it plays even more with the idea of Buddy's - and by that extension, the player's - inability to choose better for herself or the world around her. While choices are still present, they are few and far between, and much like *Painful*, a lot of them go against the protagonist's natural or learned instincts. There is not much the player can do to make Buddy less bloodthirsty or cruel - one can only minimize the damage she does and, apart from the decision about what her life looks like after the game's conclusion, the player-reader can not control the kind of person Buddy ultimately becomes. The *Lisa* franchise was chosen for this analysis precisely because of this subversion, as it explores many of its central themes through the way it was structured specifically to make players feel inadequate and powerless in their attempts to navigate the story-world.

A similar link between the protagonist and the player can be observed in *Joyful* in a level where Buddy encounters a village of Pacifists, a tribe dedicated to avoiding conflict in a post-apocalyptic and violent world. Since Buddy is on a rampage, her goal is to reach the Pacifists' leader, Mr. Beautiful, and kill him, regardless of the lack of danger he poses to her or the world she inhabits. Advancing towards Mr. Beautiful requires the player to pass by several of

the pacifists and approaching each of them triggers a screen with two choices: kill them or leave them alone. Notably, the first and highlighted choice is to kill them, implying that Buddy's first instinct is to kill. With the employment of the choice menu which highlights the negative choice immediately - often forcing quick-fingered players to choose violence accidentally - the player is put in the position of Buddy, having to actively and consciously avoid violence in order to spare their lives. This choice is denied the player when they reach Mr. Beautiful, though, as they are forced to fight them because Buddy, much like Brad before her, denies them the choice to do otherwise.

Similar strategies are employed by Ice-Pick Lodge's *Pathologic* (Russian: Мор. Утопия, tr. *Mor. Utopiya* - a pun on Thomas More's *Utopia* combined with the Russian word for plague): while this game offers players much more control over the agents they inhabit, choices they are forced to make are equally unfair, with the harsh environment making moral choices extremely difficult. The pressure of an oppressive narrative world paired with the purposefully unfair game mechanics elicit similar sensations of frustration and unease which are integral to both games' approach to the achievement of ludonarrative resonance.

The survival horror role-playing game is set in a small 19th century town affected by a disease referred to only as the "sand plague." The player-reader occupies the role of one of three main healers whose mission is to cure the plague befallen the town, but whose primary goal is only to survive for the 12 in-game days. The small town is located next to a mysterious structure of impossible proportions in the shape of a huge impenetrable building called the Polyhedron, which the town's children use as shelter from the plague. The three characters occupied by the player are aligned with different socio-political parties of the town and each have different backgrounds, motivations, skills and starting points in the game. While the player can occupy the role of the three protagonists, each of them is present in the town while they are not being played and each is treated differently by the inhabitants of the town. Depending on the chosen character, different aspects of the game are easier or harder to navigate through and different outcomes are possible for the player to achieve. Each character discovers a different set of information based on who trusts them and on which quests they managed to complete. The player-reader gets a main quest to complete each day, but the only real goal of the game is to simply survive in an extremely harsh social and economic environment. Because of the plague, and according to the

player's choice of character, the game has a complex and fluctuating economy which has a significant impact on the player's available choices within the narrative.

The three available healers, The Bachelor (Daniil Dankovsky), The Haruspex (Artemy Burakh) and The Changeling (Clara) are treated very differently by the town's inhabitants - while The Bachelor, an outsider to the town, is able to navigate through the town in peace, socialising and helping the upper echelons of the town's society, The Haruspex, the town's native accused of murder, is immediately treated with hostility by the people of the town. This drastically impacts the player-reader's choices in the game and the way they navigate through the game's economic and social structure. Not only is the game's complex world difficult to navigate due to the inhabitants' varying levels of mistrust and a lack of funds, it is complicated further by the game's core mechanics. While collecting and keeping track of contradictory information given to the character by the people of the town, the player-reader must keep track of the character's Health, Immunity, Hunger, Exhaustion, Infection and Reputation meters, while simultaneously keeping track of time which is always running out. These meters are extremely difficult to maintain and painful sacrifices are necessary in order to progress through the game. While the characters sleep, their Exhaustion meter empties out, but their Hunger rises rapidly. Their Reputation meters decide whether the town's inhabitants will turn hostile and attack the characters on sight - in the case of the Haruspex, this happens immediately due to his reputation as a murderer and he and the player along with him are placed in a constant struggle between trying to survive and trying to better their declining reputation. For example, because every person in the town attacks him on sight, the Haruspex needs a weapon much earlier than the other two characters, yet to obtain it he must kill a child, further damaging his reputation. Unlike *Lisa*'s emphasis on the lack of agency and choice placed on the player, *Pathologic* is filled with choices, yet these choices are constantly affected by the environmental and economic factors surrounding the player characters.

In order to achieve the game's various endings, each character must protect their Bound - the person they were meant to protect from the disease. Depending on the choices made by the player, four endings can be achieved. Each character has an ending unique to them, yet any of the three endings can be chosen if the player keeps the designated healer's Bound healthy and alive for the 12 in-game days. The fourth ending is given to those players who were unable to keep all of the Bound alive, resulting in the plague taking over the town. There is an extra ending of the game discovered upon entering the Polyhedron, revealing that the entirety of the player-reader's

efforts were futile to begin with because the plot was completely made-up by two children playing with dolls. This gives insight to some of the key plot points of the narrative, such as The Changeling having an evil twin and needing to maintain her reputation against the efforts of her clone in order to save the town. With the fifth ending in mind, The Changeling was simply a character whose alignment the children could not agree on, with the first child interpreting her as good and the second as evil. This creates a significant parallel between the game as an artifact and the Polyhedron as an impossible structure, and serves not only as a thematic parallel to Danielewski's *House of Leaves* - in which the book itself represents the house of alien proportions - but is also reflective of its roots in lovecraftian cosmic horror and magical realism, both concerned with the impossibility of predicting or attaining knowledge as a monolith, and postmodernist ergodic literature (as seen with a similar thematic link between mortal bodies and mortal books in Pavić's *Dictionary of the Khazars*).

Much like *Lisa*, *Pathologic* allows the player to inhabit three different protagonists throughout the game, all of which are aware of each other. Unlike *Lisa*, though, *Pathologic*'s characters all go through the same event simultaneously - the player controls each character through the 12 days they need to survive in the town afflicted by the plague. While *Lisa* employs the companion and item management system in order to make the player's navigation through the story challenging, *Pathologic* does this through the management of several interlinked stats: immunity, hunger, exhaustion, infection, reputation and time. The management of each of these stats is exhausting and difficult. Due to the town entering quarantine, rations are low and food is incredibly expensive. The protagonists get tired easily and need to sleep, but sleeping drastically increases their hunger. In order to obtain money, food or weapons, the player is forced to complete quests which put them at risk of getting infected and lower their immunity, and medicine is even harder to come by. Furthermore, stealing, killing or otherwise harming others in order to obtain vital objects lowers the characters' reputation, making other people in the town hostile and prone to hurting or killing them on sight. The game runs on a 24 hour clock, with the days ending whether or not the player has completed the day's main quest. Traversing the town is a slow and agonizing process, as the walking pace is deliberately slow and certain quests require players to travel to remote parts of town and risk losing time in the process, while other quests end up being dead ends, wasting the player's time and resources.

One such quest involves The Bachelor being asked by a manager of a safe-house, Lara, to help her stock up on supplies. Due to the streets being too unsafe for her to do this on her own, she asks The Bachelor to gather these supplies by donating a large sum of money to one of the three supportive townsfolk, with the lowest amount being 2000 money - his own money. After purchasing the supplies and upon arriving at the safe house, the player discovers that the house is infected and everyone in it has died. This raises The Bachelor's exposure levels significantly. When informing Lara of this, she decides to set up a shelter in her own home instead and rewards the player with three peanuts, three hazelnuts and two walnuts, food items which only lower the player's hunger meter an incremental amount and are significantly worse at keeping the character alive than the food which was handed to Lara. As Brewis notes, this not only wastes the player's time, but punishes them with a loss of money and food, making the choice to help Lara meaningful not only thematically, but on a formal level as well, as the player loses an incredible amount of time and resources they could have spent on themselves instead (Brewis, 2017).

While difficult choices and exhausting gameplay help the player identify with the protagonist's struggles, shifting perspectives between the three characters allow them alternating insights into each characters' motivations. Similarly to *House of Leaves*, the player has access to all three diegetic levels and inhabits three different focalising perspectives, each of which influences the way the others are interpreted. While occupying the role of The Bachelor is exhausting, frustrating and difficult, engaging the town as The Haruspex raises the difficulty level to astronomical heights. When the player stumbles upon him while playing as The Bachelor, The Haruspex is in prison for murder, having the reputation of a butcher and a murderous psychopath. One of The Bachelor's main quests involves freeing him from prison, as he has been charged with murder and suspected of ripping apart dead bodies. On the other hand, when the player inhabits the focalising perspective of The Haruspex, they are immediately attacked upon their arrival to the town, prompting them to murder three people in self defence and barely surviving the attack. This makes the entire town immediately hostile towards the player from day one due to The Haruspex' low reputation meter, making the experience of navigating through the town without involving The Haruspex in further murthers even more difficult and dangerous.

A new game mechanic is introduced with him, as he is a surgeon capable of performing autopsies and harvesting blood and organs which can be used to create antibiotics, painkillers and similar medicine. As he is barred from trading with most merchants due to his low reputation meter, The Haruspex needs this skill in order to survive, shining a different light on his reputation as The Ripper. Furthermore, as a native to the town and a fugitive, he is barred from interacting with certain groups of people, but allowed to interact more deeply with groups that don't trust The Bachelor, giving the player insight into previously unexplored areas of town. These kinds of focalising shifts and contradictory information resemble the way Milorad Pavić's *The Dictionary of the Khazars* structures its themes and information, giving the reader three different perspectives of the same event, with some sources contradicting each other and others filling in the gaps of information left by previous writers.

The approaches covered in this chapter - creating deictic shifts through typographical meaning, evoking a sense of familiarity and closeness with the controlled agent through the employment of ludonarrative harmony, utilizing unpleasant and frustrating gameplay elements to create ludonarrative resonance and the shift to the second-person narration which directly addresses the player-reader - can be used to create a kind of readerly involvement which results in the formation of a doubly deictic subjectivity (Gibbons, 2011, 77). In other words, a new kind of reader is required and created, one whose subjectivity merges with that of the work's protagonist, thus blurring the lines between the two.

The Player-Reader and the Protagonist: Doubly Deictic Subjectivity

As it was demonstrated through the taxonomies provided in the theoretical framework of this paper, as well as through the albeit small number of examples given in this analysis, the structure of multimodal narratives makes it possible for readers and players to form a doubly deictic subjectivity with the protagonists of such works (Gibbons, 2011, 77). This not only means that they are able to identify with characters through the use of multimodal and ludonarratological devices, but also that they, in many instances, form an entirely new diegetic level which includes the player-reader as a participant in the narrative. While this is achieved more easily and straightforwardly in multimedial works, examples of this process can be found

in printed multimodal narratives as well. Two main ways of achieving this result will be covered in this chapter: the application of the deictic pronoun 'you' and the employment of figured trans-worlds and text-world theory.

The application of the deictic pronoun 'you' was most notably used in Italo Calvino's proto multimodal novel *If on a winter's night a traveler (Italian: Se una notte d'inverno un viaggiatore)*, as the novel's central character is the reader herself attempting to read a novel of the same title. Every chapter of Calvino's novel begins with a heterodiegetic narrator speaking in second person, describing the reader's experience of reading the same chapter, thus positioning the reader as the central character of the narrative. While Calvino's novel took this approach the furthest, Danielewski employs the deictic pronoun 'you' at several crucial points of *House of Leaves* in order to create this deictic shift.

House of Leaves begins with an anti-dedication to the reader in the form of the sentence "This is not for you" (Danielewski, x). As Fludernik states, "you, even if it turns out to refer to a fictional protagonist, initially always seems to involve the actual reader" (Gibbons, 2011, 50). In this case, the reader is introduced as a participant in a discourse world through the act of prohibition which necessitates the reader to break a rule in order to continue traversing the text, akin to Pavić's male and female edition of *Dictionary of the Khazars*. As Text World Theory demonstrates that participants involved in written communication normally occupy different spatio-temporal locations (Gibbons, 2011, 51), the opening line of *House of Leaves* invites the reader to pass through the text's semi-permeable membrane by ignoring the opening sentence's prohibitive statement and turning the page. Through what Gibbons refers to as a performative act of prohibition, the reader is immediately invited to engage with the novel with a heightened sense of emotional involvement. If the novel was translated to a multimedial work such as a video game, the opening sentence would similarly evoke the sense of ludonarrative dissonance within the player, as the written content of the statement "This is not for you" would stand in opposition to the player's next action, in this case the turning of the page and advancing through the text. A similar instance of this discrepancy occurs when Brad repeatedly bashes his friend with a baseball bat in *Painful* - as the game's textual output begs the player to stop, the game's mechanics do not allow them to do so, creating a stronger emotional reaction in the player due to the necessity of breaking or dismissing explicit rules or pleas in order to advance the game. Similarly, as Gibbons notes, the opening lines of *House of Leaves* are likely to provoke the

reader to insist further on reading the novel due to the intensity of their emotional reaction, creating a sense of agency within them which will prove to be crucial in the formation of their doubly deictic subjectivity (Gibbons, 2011, 54).

More importantly, the opening lines of the novel create the first choice the reader has to make through the course of their reading experience - as the lines stand alone across a white page of text, in order to move on towards the beginning of the novel, the reader must turn the page instead of proceeding out of habit, reasserting their autonomous behavior (Gibbons, 2011, 58). This is not unlike the title screens of most video game experiences which require the player to press some variety of the command PLAY in order to begin the game. *Painful* presents its title screen in an interesting way: before the player can engage with the game's opening sequence, they are greeted with a blue title screen, at the lower right corner of which appears Lisa herself, hanged and dead. The screen informs the player of what happened to Lisa before *Painful* properly begins, letting the player know from the start that they will be occupying a different focalising perspective than that of the previous game. While the game uses both Lisa's name and image in its opening title, it explicitly lets the player know that Lisa is dead - her narrative has already ended. The player, however, must ignore this fact in order to proceed by pressing the command NEW GAME in order to enter the narrative world of *Painful*.

Perhaps a stronger thematic link can be drawn between the opening of *House of Leaves* and the opening of *Fallout: New Vegas*, in which the player is directly addressed through a non-controllable agent, Benny, with the following statement:

> You're crying in the rain, pally. Time to cash out. Maybe Khans kill people without looking them in the face, but I ain't a fink, dig? You've made your last delivery, kid. Sorry you got twisted up in this scene. From where you're kneeling it must seem like an 18-carat run of bad luck. Truth is… the game was rigged from the start.

The player, or rather the agent they control, is then promptly shot in the head by Benny in a similar act of performative prohibition of text-world entry. Furthermore, the player is similarly addressed using second person narration, establishing them as the sole protagonist of the narrative. Beginning the story requires what Gibbons terms as an ontological transgression in the direction of the text-world from the discourse-world (Gibbons, 2011, 60) - in order for both the reader of *House of Leaves* and the player of *New Vegas* to continue with the story, they need to

break an ontological boundary, with the reader turning the page and the player pressing a button in order to find out they have survived their near fatal blow. Furthermore, the entirety of the player's experience in *New Vegas* consists of dialogues and conversations with over 200 non-playable agents they can come across, all of which address the player directly and are vital to their understanding of the text-world. Further engagement can be employed by players who choose to create or install different mods to the game, some of which change its visual structure and others which add more dialogue options and people the player can interact with. The level of player inclusion in the process of creation and interpretation of certain games through their modification is extensive and far exceeds the scope of this work, yet it must be mentioned as another vital component of crossing ontological thresholds through textual semi-permeable membranes.

A digital narrative which utilizes the singular second-person pronoun 'you' much more often and more directly is ZA/UM's 2019 game *Disco Elysium*. A game which very heavily focuses on dialogue and written exposition, *Disco Elysium* famously contains over one million words, which amount to roughly 2800 pages of text, a large portion of which addresses the player-reader directly. While it employs visual elements, problem solving and role-playing mechanics, reading remains the cornerstone of *Elysium*'s narrative experience, raising questions about its categorization: it is mainly referred to and described as a video game, yet it shares a multitude of ludonarrative and formal elements with hypertext literature.

The player-reader embodies the character of Harry Dubois, a detective suffering from drug and alcohol induced amnesia who must solve a murder case in the span of seven days. Unlike what can be observed while studying *Lisa*, the kind of person Harry ends up being is entirely up to the player's choices and the way they build Harry's character. The skills they choose to enhance or ignore significantly alter the kind of interactions Harry will have with other people, as well as how good he will be at approaching different personality types through skills like Empathy, Authority, Conceptualization, Rhetoric, etc. More importantly, the player's experience is haunted by the constant presence of those choices the player decided not to take. As Julialicia Case states, "the simultaneous narratives encourage players to see themselves and their stories as a part of a larger meta-narrative composed of a variety of incongruous experiences", showing how "player choice often contributes to a similar sense of layered, overlapping—and sometimes incoherent—stories" (Case, 79).

The game provides descriptions of people, feelings, sensations, reactions and perceptions, with the access to this information depending on Harry's skills and experiences. Apart from a multitude of people Harry can talk to in depth, with conversations often taking hours to finish, another set of voices can be heard throughout the game. These voices reside within Harry himself and manifest through the entities referred to as the Ancient Reptilian Brain and the Limbic System. Along with skills, which themselves talk, these entities describe the changing state of Harry's mind - yet they all utilize the singular second-person pronoun 'you', addressing the player-reader directly by addressing Harry, as shown in the following examples:

Rhetoric: Hey, psst.

You: Who — me?

Rhetoric: Yes, you. Word on the street is you're ready to start building *communism* again!

You: "Again"?

Rhetoric: Yes — you're ready to start building communism *again*. You've built it before, *they've* built it before. Hasn't really worked out yet, but neither has *love* — should we just stop building love, too?

Volition: No. This is somewhere to be. This is all you have, but it's still something. Streets and sodium lights. The sky, the world. You're still alive.

Half-Light: Damn, that felt *good*. Your heart is pounding nicely. You should tell people to fuck off more often.

You: Fuck yeah, motherfuckers!

Half-Light: That's the spirit! Never forget: The whole world's a wooden house and you're a goddamn flamethrower.

Ancient Reptilian Brain: There is nothing. Only warm, primordial blackness. Your conscience ferments in it — no larger than a single grain of malt. You don't have to do anything anymore.

Interestingly, despite embodying Harry as the agent of the narrative, the player's position is not marked as 'Harry' but as 'you', thus strengthening their connection with Harry's subjectivity. While the player has significant control over his actions and personality, Harry is not a blank slate - he is a character with well defined and heavily explored previous experiences and connections to the world he inhabits. This means that, while the player-reader embodies Harry's focalising perspective, their narrative experience is defined and marked by the

parameters of who Harry was. Who he ends up being is another story entirely, the unraveling of which depends on the player's choices.

Harry is a perpetual work in progress, a character who both is and isn't in the player's control. Important parts of Harry - his occupation, his position in the social structure, his relationships with friends, coworkers and lovers, his past mistakes - are predetermined by the game's narrative: for instance, he is an addict and an alcoholic whose struggle with addiction looms over the entirety of the story. Yet all of his mistakes, friendships and choices beginning with Day 1 are heavily influenced by the choices the player makes. The player, in turn, must grapple with Harry's instincts, with his vices and the limited perception of the world he has due to amnesia, trauma or a lack of certain skills. This creates an ongoing back-and-forth between the player and the agent they control, creating a sense of occupying an operational role within the confined space of the protagonist's brain. Perhaps the most in depth example of doubly-deictic subjectivity, *Disco Elysium* illustrates how deeply this kind of focalising perspective can influence the player's actions as well as the level of their ludonarrative immersion.

The Player-Reader As The Protagonist: Second-Person Narration, Character Creation and Puzzle-Solving

The employment of the singular second-person pronoun 'you' can also be seen throughout *House of Leaves* in its use of the apostrophic address to the reader. Several examples of this approach are listed in the examples below:

> "At least some of the horror I took away at four in the morning you now have before you, waiting for you a little like it waited for me that night, only without these few covering pages" (Danielewski, xvii).
> "You'll finish [the book] and that will be that, until a moment will come, maybe in a month, maybe a year, maybe even several years… Out of the blue, beyond any cause you can trace, you'll suddenly realize things are not how you perceived them to be at all. For some reason, you will no longer be the person you believed you once were" (Danielewski, xxii).
> "You might try then, as I did, to find a sky so full of stars it will blind you again. Only no sky can blind you now" (Danielewski, xxiii).
> "Picture that. In your dreams" (Danielewski, 141).

An extremely important occurrence of the homodiegetic narrator addressing the reader happens near the very end of *The Navidson Record*, as Truant describes his declining mental and physical state which ends with him aimlessly wandering the streets for months. As he claims, he runs into some friends who express grave concern for his well being and take him under their wing. A detailed description of Truant's healing process follows across the following few pages, before Truant cynically reveals that the entire story of his recovery has been a lie.. In a particularly interesting passage, he mocks the reader for believing the story even for a second, noting that the shift in narratological voice alone should have prompted the reader to become suspicious of his story:

Are you fucking kidding me? Did you really think any of that was true? September 2 thru September 28? I just made all that up. Right out of thin air. Wrote it in two hours. I don't have any friends who are doctors, let alone <u>two</u> friends who are doctors. You must have guessed that. At least the lack of expletives should have clued you in. A sure sign that something was amiss (Danielewski, 509).

This mockery and the significance it gives to the reader's participation in decoding whether certain parts of the narrative are true or not serve as an indication of the second approach Danielewski uses in order to transform the reader into a participant of the story. Through the employment of unreliable narrators, all of which occupy different diegetic levels, Danielewski forces the reader into a process of decoding and puzzle solving in order to interpret the text. This is done through the use of what Holland et al. refer to as figured trans-worlds.

As Gibbons interprets this notion, "a figured trans-world is generated when the reader is required and/or directed by the text into a performative role in the discourse-world, a role that calls upon corporeal activity and insinuates active reader involvement in the narrative (Gibbons, 2011, 80). Since the text-world (the narrative world of the novel) and the discourse-world (the world the reader inhabits) are ontologically separated, the reader's active participation helps to blur the line between them. The reader thus no longer simply observes a narrative, but is encouraged to actively explore it through their own participation and mediation (Gibbons, 2011, 81). As many places in the novel require the reader to manipulate the book in various ways - by turning it upside-down or sideways, putting a mirror next to certain passages in order to read them, going back and forth between chapters in order to compare contradictory information, visiting the appendix in order to explore additional evidence provided by the Editors, or solving

literary puzzles in Pelafina's letters - the reader begins to inhabit their own ontological layer within the text-world. This is further proven by the readers' necessity to write along the margins of the novel, whether they are using its pages to decode coded messages, remind themselves of important information which they might need later, or to connect pieces of information scattered throughout the story, thus physically imposing their presence upon the book as a material object. Gibbons sums this process up accordingly:

> The full title to Danielewski's novel is *House of Leaves, by Zampanò with Introduction and Notes by Johnny Truant*. Truant's footnotes interspersed throughout the novel, presumably sprawled onto the pages of Zampanò's manuscript, are his textual inscriptions. If we mark our copy of the book with literary and/or personal comment, we create a doubly deictic alignment with Truant and therefore another figured trans-world. In short, we do add our own words; we carry out Johnny's plea. In the process, we create an additional layer to the novel (shown in Figure 9), so that it becomes our rendered copy of a book introduced and noted by Truant, and written by Zampanò (Gibbons, 2011, 83).

Another chart of narrative levels of *House of Leaves,* provided by Gibbons, this time including the reader themselves, is presented below.
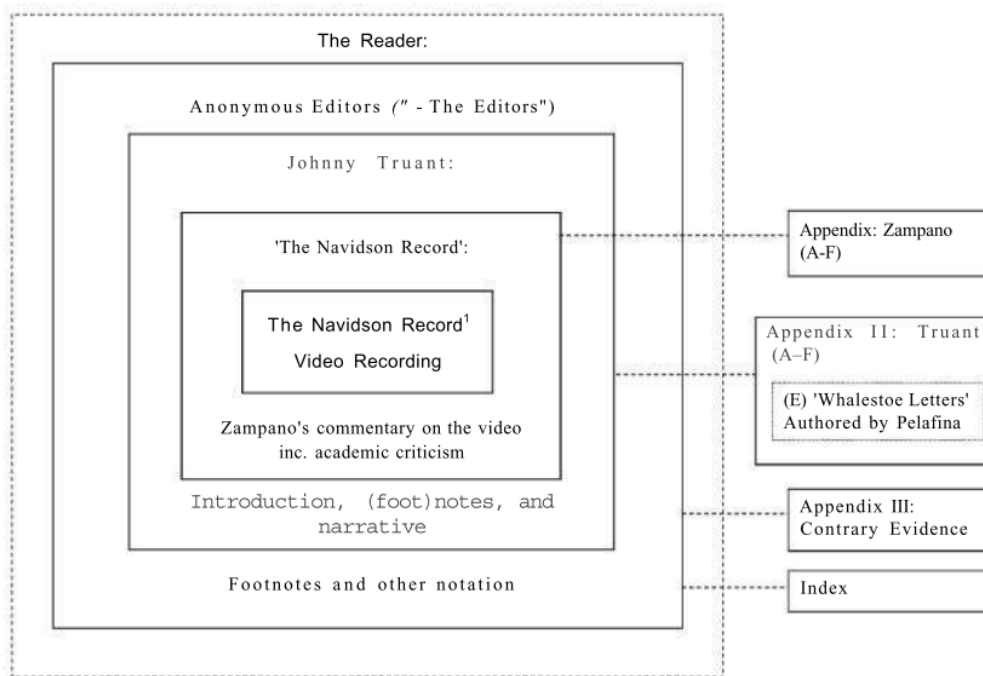

Figure 4.10 Narrative levels of *House of Leaves*, including readerly 'figured' layer.

Figure 9. Alison Gibbons' chart of narrative levels in *House of Leaves*, this time with the reader included.

As shown in the chart, the reader not only has access to every diegetic level below them (with Navidson having the lowest access and the Ediors having the highest), but also occupies a focalising perspective, creating an entirely new level of diegesis through addition of their own notes.

Milorad Pavić's *Dictionary of the Khazars: A Lexicon Novel (Hazarski rečnik)* elicits a similar approach from its reader, even though its multiple reading paths do not take Danielewski's annotation approach, but use horizontal and vertical structuring in order to create a proto-hypertext in printed form. What this means is that the novel can be read either vertically or horizontally, depending on the reader's choice. Due to the way it is structured, the novel's plot is fairly unconventional and its interpretation depends on the amount of effort the reader puts into gathering information from the novel, as well as on the reading path that the reader chooses to take. As Pavić himself wrote in the novel's introduction, "no chronology will be observed here, nor is one necessary. Hence each reader will put together the book for himself, as in a game of dominoes or cards, and, as with a mirror, he will get out of this dictionary as much as he puts into it, for you [...] cannot get more out of the truth than what you put into it" (Pavić, 19).

The novel is primarily concerned with the religious conversion of the Khazar people to one of the three Abrahamic religions - Christianity, Islam or Judaism, depending on the sources. It is divided into three smaller encyclopedic texts which correlate with the religion the Khazar people are claimed to be converted to - The Red Book, The Green Book and The Yellow Book. The books contradict each other in most places, often mentioning the same key figures but interpreting them differently, or retelling the same narratives but with different outcomes. The novel comes with its own semiotic classification system, labeling the parts of the narrative which only appear in certain books accordingly - a cross for the Red Book, a crescent moon for the Green Book, the Star of David for the Yellow Book and a triangle for those items which appear in all three of the books. Like Danielewski's novel, *Dictionary of the Khazars* comes with its own appendix which is labeled accordingly with the letter A. This allows readers to cross-reference specific dictionary entries throughout all three of the books, engaging in an act of repetition and traversing back and forth through the novel's saturated lexicon of information, which forces the readers who choose to take this path to engage with the novel with a similar set of skills necessary for traversing a dense hypertext narrative, excluding the technology of links

and nodes.[5] Finally, the novel comes in two different copies, the male copy and the female copy, which are virtually identical excluding one key paragraph which has been altered. If the readers take the directions of the novel seriously, the information they gather will be complete only if they cheat and read the copy which doesn't match their gender identity, meaning that in order to get the full story, the reader must break some pre-established rules.

As previously stated, the novel can be approached horizontally or vertically, depending on the reading experience the reader wants to have. As Katherine Hayles and Nick Montfort note, "while vertical reading creates more narrative consistency, horizontal reading makes clearer the cross-links that tie diverse narrative sequences together" (Hayles, 455). Some key parallels concerned with the novel's structure can be drawn with Danielewski's novel and be noticed straight away. One important thematic similarity comes from the fact that, much like *The Navidson Record* and its many annotations, *The Dictionary of the Khazars* is presented as an ontological hoax - while it discusses a real, historical group of people, most of the characters, events and traditions described in the novel are completely fictional.

As the novel consists of equally unreliable sources describing the same general event, it asks its readers to sift through this information horizontally, comparing and contrasting those dictionary entries which appear in all three books and finding mentions of people, terms and items which appear in certain books, yet are only mentioned in others. Much like with *House of Leaves*, readers are encouraged to write things down, to double-check the provided sources and to compare different dictionary entries, often forcing them to go back to certain passages with newly acquired information. This process is not unlike reading a hypertext novel which requires readers to engage in an interlinked process of aporia and epiphany (Aarseth, 76-97), with aporia referring to the reader's constant re-reading of passages and options they are forced to go back to due to the structure of hypertext's nodes, and epiphany referring to the result of these frustrations which provides the readers with a new node of text to explore. While Pavić's novel is not a

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[5] According to David Ciccoricco's taxonomy of digital fiction, multimodal texts not written or adapted for a computational system of links and nodes can never completely correlate with actual hypertext fiction. As he writes, "repetition and variation comes to characterize both the elements of textual design and the interpretive models we design as we read. The same quality renders digital fiction fundamentally different from proto-hypertexts and networked narratives in print, even ones with mobile components [...] Digital fiction is excluded by code and orchestrated by algorithms; loops are integral to their design. In turn, such texts reanimate the dynamics of repetition on a narratological and aesthetic level through the workings of its literary machinery" (Ciccoricco, 479-480). While this is true, it is important for this work to compare the approach proto-hypertexts like Pavić's novel take to the gathering of information through repetition and fragmentation to the hypertext fictions that developed this model further, which is why this comparison was made.

hypertext novel since it does not use the link and note approach in its structure, it forces the reader into a similar repetitive process of reading, re-reading, double-checking, writing down and reading again in order to create a collage of meaning from the fragmented information provided to them.

It could be stated that this very fragmentation of knowledge and truth is the thematic core of *Dictionary of the Khazars*, both in the symbolism of its *fabula* and the construction of its *sujet*. Following the tradition of magical realists Jorge Luis Borges and Umberto Eco, both preoccupied with the endless atomization of knowledge and its relationship to human bodies, Pavić's novel is equally obsessed with the impossible task of the interpretation of history and truth. The history of the Khazars is eclectic, contradictory and incomplete, and its incompleteness is partly due to the way it is bound to the human body. One Khazar legend tells of the incompleteness of the "human parchment", a man whose tattooed body archives the entire history of the Khazar people (Pavić, 77). During a punishment, one part of his body was cut off, removing the information about the first and second great Khazar years from the parchment. The mortal vessel of knowledge of the Khazar people had been incomplete before the man even died. Further insights into the history ultimately prove to be fatal for the historians involved, much like the fate of the dream hunters whose aim is to reconstruct Adam's enormous fragmented body. Neither the *fabula* nor the *sujet* of Pavić's novel allow the text to ever be unified or constructed into a whole - it can only exist in a fragmented state of incompleteness.

What is even more important for this analysis is the fact that the reader of *Dictionary of the Khazars* is herself impacted by this fragmentation. There is no linear and complete way to approach or understand the text - the very experience of reading it requires entering a labyrinthine narrative structure which, much like *House of Leaves*, provides false and erroneous advice on how to progress and understand the relationship between a large number of atomized pieces of information within it. The reader is in a constant flux between aporia and epiphany, yet unlike in the case of most hypertexts, there is no finality or totality to *Dictionary*, no ultimate ending or even a number of endings. To read such a novel is to become lost, to experience and feel the dread presumably felt by the librarians of Borges' *Library of Babel*. The reader of *Dictionary*, much like the reader of *House of Leaves*, is a tortured one - they are supposed to become lost in the text, frustrated by it, seduced and deceived by it, so that the ontological boundary between the text world and the world of the reader can be blurred. The reader here too

becomes a link in a chain of researchers - be it Zampanò, Truant and the Editors of *House of Leaves* or Yusuf Masudi and Isalio Suk in *Dictionary of the Khazars* - and as such must bear at least some of their suffering. More importantly, the need of the reader to do research and keep notes throughout the novel similarly creates a new diegetic level - the reader has become one of the interpreters, an entity of her own within the space of the text.

Obsidian Entertainment's *Fallout: New Vegas* structures the information it provides about its world, key characters, events and history through a similarly fragmented process. The game allows players a great degree of control over the creation and behavior of their characters, giving them several creative and complex choices in order to progress through the game's story-world. Defined by the way multiple story events and outcomes can make others unavailable to the player, *New Vegas* can, not unlike *Disco Elysium*, be described as an arborescent or branching narrative. The third chronological installment of the *Fallout* franchise, *New Vegas* is set in a post-apocalyptic Mojave desert, ravaged by wars old and new. After the eruption of several atomic bombs which preceded Fallout 1, humanity has been significantly altered, creating tribal societies, ruined cities, gangs of raiders, emerging new communities, mutated and irradiated humans and animals alike and an extreme shift in the ecological and socio-economic landscape. While the first two installments deal with the fallout of the wars that preceded them in the shape of surviving forms of oppressive governments and rising doomsday cults along the coast of California, *New Vegas* takes place one hundred years after the first installment in the struggling ruins of Nevada.

The game begins with the player-reader getting shot in the head by a man in a checkered suit and waking up in a doctor's office where they are free to choose their character's S.P.E.C.I.A.L. stats based on the Generic Universal Role Playing System (GURPS) developed for tabletop role playing games similar to *Dungeons and Dragons*. The stats inc   lude Strength, Perception, Endurance, Charisma, Intelligence, Agility and Luck, heavily influencing the type of character the player-reader embodies, allowing significant freedoms in character creation reminiscent of the early *Multi User Dungeons*. Stats are followed by skills like Lockpick, Speech, Barter, Guns, Medicine, Science, Survival, etc. After choosing their stats, the players are free to choose the first of their characters' many perks, which are additional traits which help and/or hinder the characters accordingly or give them additional dialogue options - for example, one can choose the trait Night Person, which gives the character +2 Intelligence and +2

Perception between 6:00 P.M. and 6:00 A.M., but lowers the same stats by -2 during the day, or Black Widow which increases the damage female characters can do to male characters but also adds significant dialogue options. Fallout's character creation process has a significant impact on the type of person that will be entering the nuclear wasteland and on the way in which the character will be able to interact with the world. The game thus immediately has a wide variety of different playthroughs depending on the type of character created, as each skill, perk and stat - or lack of it - opens and closes different paths the player-reader can take throughout the game.

New Vegas is an open-world game, meaning that the players can go to any part of the huge game map whenever they feel like it, but the difficulty of the enemies found in each area can force players to choose different paths. As the player navigates the text-world of the game, they are presented with an abundance of information about what happened to the land and its people before the player's arrival. They learn about the key political powers in the region and about their influence on each other and the rest of the Mojave desert. There are 38 factions in this world, each of which with their own ideology and worldview which stands in opposition to the others, and each of which with their own idea about what happened to the desert, who's to blame and how to solve its problems. The player acquires this information through thousands of conversations with the game's inhabitants, as well as through the use of their skills - they can pickpocket notes from people, hack computers to get to their data logs, lockpick safes and lockers with information stored in them, read books, listen to audio logs they discover on corpses, barter or pay others to tell them what they know and so on. However, the player can never acquire all the information the world provides at once, as aligning with some factions makes others hostile or reluctant to talk to them and share information, while putting points into some skills makes them sacrifice points in others. This means that the player can have a really high Speech skill, making them better at making people talk to them about things in depth, while having a lower Science skill, meaning that they will be unable to hack certain computers in order to get to the data stored on them. Other skills are vital in conversation as well - having a high Medicine skill makes the characters good at psychoanalysis, which comes in handy when dealing with the many people with mental health issues found across the Mojave, often helping them avoid antisocial behaviors and getting them to confide in the player. In addition to their skills, the player can disguise themselves in the armor of any faction in order to infiltrate it and gather information that way, yet doing this requires them to find such armor, which is not always easy.

In other words, the process of finding information about the text-world in *New Vegas* is a highly individualized one, depending not only on the player's willingness to check and compare every information source available to them but also on the way the player's agent is created, what their skills and assets are, how intelligent, charismatic or strong they are, whether they use drugs and so on. Every player thus has access to different information clusters depending on what kind of character they create and who they choose to align themselves with, meaning that there are many different possible playthroughs of the game, each with their own outcomes and experiences. The game's algorithm provides a degree of randomness to this experience, making even similar approaches to the game ultimately different, as players are faced with changes to their experiences every time they enter the text-world of the game. All of this results in a personalized experience of the text-world, through which the player moves as a character, instead of inhabiting a previously made character such as *Lisa*'s Brad or Buddy, or *Disco Elysium's* Harry. Even though *Pathologic* and *Disco Elysium* employ similar ways of acquiring information, the player does not have control over the kind of character they begin with. In *New Vegas*, the character's appearance, personality, skills, traits and assets are all defined by the player, aligning the player's subjectivity much more closely with them than with any other previously mentioned protagonist. Unlike the constant exchange of focalising perspectives happening between the player and Harry Dubois, the personality, background, previous experiences and relationships of the protagonist in *New Vegas* are entirely controlled and defined by the player. In other words, the player-reader is not only deictically aligned with the protagonist; they themselves have become one.

The Player-Reader As a Mediator: The Omniscient Multimodal Perspective

As inherently ludic narratives, video games provide additional ways in which the player-reader can take part in and control the outcomes of the text-world. In addition to merging with the protagonist and becoming one, the player-reader can embody a third kind of focalising perspective most characteristic with simulation and strategy games. In such narratives, the

player-reader is able to create, observe and control multiple characters at once, guide their actions and ultimately decide on their roles within the story. Two examples will be used to illustrate this type of readerly participation: 11 Bit Studios' war survival game *This War of Mine* and Studio Maxis' and Electronic Arts' life simulation game *The Sims 3*.

As the tagline of *This War of Mine* states, "in war, not everyone is a soldier." The game's tagline is accompanied by an intertextual addition of Ernest Hemingway's quote, "in modern war… you will die like a dog for no good reason." The game also provides the source of the quote as Hemingway's essay *Notes on the Next War: A Serious Topical Letter. Esquire; Sept. 1935*. In the sea of first person shooters like Activision's *Call of Duty* series, which position players in the roles of soldiers and mercenaries who inevitably survive the horrors of war with no emotional consequences, *This War of Mine* focuses on a group of civilians trying to survive an occupation based on the Siege of Sarajevo during the Bosnian War (1992-1995). The game's title screen is an interesting subversion of the established visual layout of most war themed first person shooters - while most *Call of Duty* titles include some variety of the command PRESS START in order to enter the text-world, most often accompanied by a visual of an armed soldier holding a weapon, *This War of Mine* shows a silhouette of a man holding a child's hand standing next to a tank in front of a ruined building. On the right hand side of the child stands a piece of debris on which the words "fuck the war" are written in crude graffiti. Instead of the usual commands like PRESS START, NEW GAME and OPTIONS, the player enters the text-world by pressing the only available command: SURVIVE.

Framed by its strategy game mechanics, the game puts players in a position of caring for and keeping a small group of civilians alive in a hostile environment, using mechanics such as crafting, item management, scavenging, cooking, sleeping, drinking, finding medicine and, in some crucial cases, theft and murder. The player is the only one responsible for the fate and condition of every character, each of whom can get sick or depressed, addicted to alcohol, and most importantly die, either by getting too sick and not receiving aid, starving to death, getting shot by snipers, getting beaten to death or by committing suicide. The initial group members are randomized, but others can arrive and ask for shelter, thus either providing their skills to the group or draining the group of resources because they have no survival skills or are themselves in need of being cared for - one of them includes a small child and another a pregnant woman, neither of whom can leave the house to scavenge for materials nor guard the house in case of a

raid. While the child can be taught rudimentary skills like basic cooking and cleaning, he is far less useful than the others and gets scared and depressed more easily, requiring a greater dose of physical and emotional care.

Apart from each character arriving with their own set of skills - for example, Bruno is a professional chef and can thus make good meals using the least amount of supplies - they have different personalities and different degrees of emotional stability and sympathy for others. For example, Bruno is a Good Cook, a Smoker - meaning that he uses up more cigarettes from the inventory but smoking makes his happiness meter rise, he Likes Children and is happier when around a child, an Egoist, which means dialog with other people in the house doesn't make him happier if he's depressed and, most importantly, he is Emotionally Detached and generally unaffected by him or other characters stealing from or killing other civilians in order to survive, making him useful if the player chooses to raid or rob others for supplies. Zlata, on the other hand, Bolsters Spirits, making her ideal for cheering up other people in the house. Helping others makes her happier and she enjoys playing the guitar and plays it extremely well, contributing to other people's emotional wellbeing. On the other hand, Zlata is extremely empathetic and will get depressed if her housemates steal from or murder others, and in the case of being forced to do it herself, Zlata can very easily become suicidal. The survival and wellbeing of these characters depends on managing a variety of different aspects of their survival, including building furniture, patching holes in walls, gathering food and medicine, distilling alcohol in order to trade it for supplies, guarding the house and taking care of the housemates' physical and emotional needs. One Steam reviewer describes the emotional impact these choices can have on potential players:

"10 hours in review: I hate this game. Rather than adding and expanding, the game constantly offers straightforward but difficult choices. Does the scavenger bring home raw materials today so somebody can patch a hole in the wall, or does he bring medication in case somebody gets sick or wounded? Do I risk life and limb to steal from armed bandits or inflict myself with moral guilt stealing from the defenseless elderly? Do I give my last piece of food to the wounded guy who has to stand guard tonight or to the sick man on the bed? Do I trade away my last bandages while nobody's wounded so we can all eat tomorrow? If as a player you do not get upset by stealing or murdering for the sake of your group of survivors, then your survivors will. Morale is an important part of the game, and the horrific actions you commit in the name of surviving are as relevant as the ones that are inflicted upon you. Maybe even more so."

Another player who identified themselves as a former war refugee from the Balkans described the game as "some uncanny early-childhood simulator." Much like *Lisa* or *Pathologic*, the game intentionally evokes an emotional reaction in players through the employment of morally difficult choices and harsh game mechanics, yet a much greater degree of agency is afforded to the player when faced with challenging situations. It is up to the player to decide which person in the house will do each task, giving them not only a greater sense of control usually observed in role-playing games like *New Vegas*, but an omniscient perspective of people and events as well as the ability to control multiple agents whose actions in turn have consequences on other playable characters, changing and affecting their needs and abilities. In addition to this, non-playable agents shape the game's outcomes - traders, neighbors in need of help, children, homeless people, old men and women, rebels, scavengers and looters, army deserters, soldiers and guards. Some are hostile and attack the agents the player controls on sight, some are only hostile when provoked by trespassing, stealing or attacking, while others are passive and, if provoked, hide from the player or ask for help from nearby agents. While killing most characters in the game provides negative morale for controllable agents, killing certain characters provides agents with positive morale or even penalizes the players with negative morale if they don't intervene. An example of this mechanic is a soldier which players can encounter while scavenging in an abandoned supermarket - they witness him offering food for sexual favors to a woman scavenging for food and attempting to rape her upon her refusal. If the player doesn't intervene, either by approaching them and providing the woman space to run away - with the soldier attacking the player in retaliation afterwards - or by killing the soldier right away, their characters get depressed because they couldn't stop the rape from happening.

This haunting mechanic makes players actively think about the morality of the actions they make, essentially forcing players to interact with the game through what Hayles (2007a) defines as "deep attention", or an ability to enter the text-world without fully suspending disbelief, making them develop a critical meta-stance towards the game and their role in it (Gibbons, 2012, 500). Unlike artificial murder in many games where killing is optional, the impact of such an action in *This War of Mine* is not only decided upon by the player's interpretation of right and wrong, but by the game's core mechanics. It is thus much harder for players to pretend like the text-world of the game is simply fiction - in other words, the players can not play as ruthless raiders and murderers in order to gather as many supplies as they can

whilst telling themselves that the experience they are engaging with is simply a game. While robbing a house and killing the people trying to defend it might not mean much to some players due to their ability to distinguish the text-world from the discourse-world, the fact that such an act potentially results in the controllable characters's mental health deteriorating - committing suicide, getting depressed or irritable, fighting or crying all night thus making them unable to function during the day, etc. - they are forced to care about the impact of such actions because otherwise they are unable to proceed with the narrative.

The game's endings support the way the entirety of its narrative experience requires deep attention from players in order to get the best possible outcome for each character. The game ends when the player reaches ceasefire day, which occurs after a randomized number of days passes on each playthrough. Another possible ending is provided if every controllable agent in the house dies, making players start from the beginning. Like every game previously discussed in this paper, with the possible dubious exception of *Lisa*, *This War of Mine* provides multiple different endings to each controllable agent of the game. There are six possible ending possibilities for each character: Dead, Suicide, Abandoned, Karma, Sad and Good. The endings are determined by the things players command characters to do as well as on their ability to keep them healthy and alive. The first three possible endings are available during the duration of the in-game Siege and before the ceasefire - if the player can not keep their characters from dying or committing suicide, these endings appear immediately. If a character is too depressed, they sometimes choose to leave the squat, with some of their fates remaining undetermined, while others' hold information about what happened to them after the war and whether they survived until the ceasefire. A Karma ending is given if a character survived but killed too many innocent civilians doing so, while a Sad ending is provided if they survived and didn't commit too many crimes but did not experience enough good interactions like helping neighbors and other civilians when asked. Finally, a Good ending appears if the player keeps the character alive by committing as few crimes as possible and helping enough people when asked to.

The mechanics discussed above do not encourage players to form a doubly deictic subjectivity with the characters they control, due to the number of characters they can simultaneously control and the fact that the player only controls the agents by assigning them tasks instead of performing them themselves. Unlike in narratives like *Disco Elysium* and *Pathologic*, the player of *This War of Mine* does not have a perspective limited to one character -

while The Haruspex sees and experiences things The Bachelor doesn't, thus limiting what the player sees and when, *This War of Mine* provides the player with information about each character, their abilities, states and outcomes immediately and simultaneously. In addition to this, the player has no limitations on what they can see - the information about events, available supplies and the state of the shelter and its occupants is readily available to the player regardless of whether they are controlling Boris, Zlata, or any of the other controllable agents. These ludonarratological aspects of the game are also what make it the antithesis of the player operating as a character themselves, as games which cultivate that kind of focalising perspective tend to be first-person games or games in which the player has a high degree of control when creating their character's visual appearance, skills and personality. Instead, *This War of Mine* illustrates a new kind of focalising perspective which will be referred to in this paper as an omniscient multimodal perspective. A comparison with traditional literature must be drawn in order to understand this narratological approach.

Video games share the employment of different possible diegetic levels with traditional multimodal works - *The Navidson Record* employs a heterodiegetic narrator, as it is narrated by a person who has - arguably - seen the film, yet hasn't participated in its events. Its narrator is, however, intradiegetic, as he is a part of the text-world other characters inhabit, and has limited access to other diegetic levels - he only has access to *The Navidson Record*, but not to its footnotes which are made after his death. If we take into account his poetry, however, this turns him into an autodiegetic narrator. A more obvious autodiegetic narrator is Truant, as he both participates in the events he is narrating, has a limited perspective on their interpretation and mostly focuses on his thoughts and emotional processes. Furthermore, he lies and hallucinates often, making him an inherently unreliable narrator. Video games certainly have narrators - for example, Supergiant Games' *Bastion* employs a heterodiegetic narrator who tells the players a story of the actions their character takes in the game, while the same studio's game *Transistor* uses a homodiegetic narrator in the shape of the controllable agent's sword which speaks to the character and comments on the story as it progresses. *Disco Elysium* uses second-person narration, aligning the player more closely to the subjectivity of the text's protagonist. *This War of Mine* gives players information about what happens to the characters they control through extradiegetic narration, yet the unknown narrator of these informational chunks is not omniscient since a lot of the time the player is informed that the fate of certain characters remains unknown.

However, diegesis is further sectioned in video games, giving different meanings to the terms intradiegetic and extradiegetic than those implied by traditional literature: while the intradiegetic layer of a video game consists of the game's story, setting, characters and events, its extradiegetic layer consists of those elements the game's characters do not have access to, yet the player does: the game's user interface, its status icons and menu bars. Sometimes the lines between these levels are blurred, such as the interface of *New Vegas* being presented as a small computer device the controllable agent wears around their wrist, yet most of the time these are only visible to the player.

Taking into consideration diegetic levels employed by traditional literature and applying them to video games, it is necessary to take what the player knows, how much they can control and what they can see into account. While rarely having narrators throughout, with some notable exceptions such as *Bastion*, video games encourage what will be referred to in this paper as homodiegetic, intradiegetic and heterodiegetic *players*. Homodiegetic players are players who take part in the formation of the narrative, yet the narrative focuses less on the player and more on a specific character they embody - when playing *Lisa*, the player takes part in the text-world through the character of Brad, who is himself part of its narrative world. Intradiegetic players are those who take part in a narrative as a character they create, focusing more on the actions they want to take and on the kind of person they want their character to become - *New Vegas* employs this through character creation and through leveling up: the player makes their character, plays as that character and continues to decide what kind of a person they are playing as through choosing new skills and character traits, as well as through constant dialogue and quest choices, essentially creating a story similar to those that could be found in a bildungsroman. Finally, heterodiegetic players control multiple agents in a story they do not participate in, yet they have a much higher degree of control over what they can see and which tasks they can assign to whom. This mostly includes simulation and strategy games which often require players to control dozens of characters at a time in order to progress through and sometimes even create a narrative. In other words, the story of the text-world is not happening *to* the player as it happens to them in games like *Lisa* or *New Vegas*. Rather, it happens to the player's *agents*, akin to a child creating a story which is happening to dolls in their dollhouse. A game which illustrates this best is a game whose experience is most often compared precisely to this kind of activity due to its virtual

similarity to a house full of dolls - Studio Maxis' and Electronic Arts' life simulation game *The Sims*.

The popular franchise allows players to create simulated people, place them in neighborhoods, create the spaces they live in and decide what will happen to them, whether professionally, socially, romantically or spiritually. Each Sim is created with a personality and can acquire a set of skills, get and lose jobs and loved ones based on their personalities and actions and portray behaviors specific to their particular traits. The player gets to decide in what kind of places their Sims live, who they live with, how much money they have at their disposal, what their family is like and more. Since the third installment of the game, *The Sims 3*, provides the most sophisticated and complex variables for the player to mold and maneuver, the examples provided in this text will be based on that particular installment.

The Sims 3 is set in an open world which Sims can navigate freely. The player can only control one household at a time, with the Sims which are not currently played moving and acting freely of their own accord and continuing with their lives in what is referred to as Story Progression. At any point, however, the player can decide to switch between playable households and decide to play another, letting their previous one be controlled by Story Progression. This means that, in order to play the game, the player necessarily enters into a dialogue between their own actions and those decided upon by the game's algorithm. This mechanic is further deepened by the deployment of Traits, or different characteristics each Sim can have, as well as a standard Needs bar which must be maintained by the player and which includes stats like Hunger, Bladder, Hygiene, Energy, Social and Fun. Additionally, Sims can get into Moods which depend on a wide variety of factors - their Traits and Needs, their surroundings, their wishes and their physical states - pregnant Sims will experience back aches and nausea, while teenage Sims will be riddled with mood swings and desires for temper tantrums. Finally, Sims have a variety of wishes which can be granted by the player and which depend on their Traits and positions in life. A Family-Oriented Sim might wish to have a child, while a Kleptomaniac might wish to get a job in the Criminal Career. Sims can spawn generations of descendants with their own narratives and problems, quit their jobs, cheat on their spouses, murder their coworkers, have nervous breakdowns or achieve their dreams in an endless stream of possibilities that arise from the combination of multiple variables and the players' actions. The combination of various traits, financial factors and the people the player surrounds their Sims with results in what Gibbons

refers to as an Alephic text, or "a narrative that contains all narratives, and in actuality one that entertains the utopian fantasy of the computer as inexhaustible literary machine" (474).

Tanja Sihvonen similarly describes the game, stating that "a large part of *The Sims'* appeal is based on the fact that it succeeds particularly well at functioning on the levels of both simulation and game. In addition, its 'toyish' quality, its malleability as a digital text allows the players to practically select the functions (rulesets) of their own game and create the stylistic and thematic elements they want to play with (2011, 11). This is further affirmed by the styles of gameplay developed by the gaming community, the most notable of which being Legacy Gameplay and Rotational Gameplay, as well as the wide creation and usage of mods created by the game's players. This means that players can set their stories on alien planets, in fantasy environments, in different parts of the world or in any historical era; they can make their Sims homeless, create brothels and ski resorts, reimagine book or movie narratives or recreate stories from their own lives using an endless assortment of assets and player-added game mechanics.

As previously stated, players can approach the game through Legacy or Rotational gameplay, meaning that they can either create a family and play through all of its generations, creating wide and complex family trees which span across hundreds of years; or they can play each household in the neighborhood for a limited amount of time before switching to the next, essentially playing the entire neighborhood and creating a multi-generational, multi-family perspective similar to Balsac's *Human Comedy* or Döblin's *Berlin Alexanderplatz*. The ability to create their own neighborhoods and control the appearance and personality of each person living in it furthers the potential of Rotational play as a multimodal narratological machine. As Sihvonen notes, "by suggesting that the player should adopt the position of a God, The Sims invites her to construct a game world and then take responsibility for her creation. Due to the initial elasticity and pilability of the game code it seems only natural that there is great divergence in the play practices of The Sims" (11).

Interestingly, each neighborhood and household made by the game developers comes with a small written introduction and a description of the house each household lives in. For player-created households, players themselves can write a short introduction to the household's dynamics and potential problems. For the purposes of this analysis, the premade Alvi family will be used in order to demonstrate several key game mechanics. The family consists of a single father, Iqbal and his two sons - a Teen named VJ and a Child named Miraj. The family

description is written as such: "Young Miraj Alvi wishes that his teen-age brother would stop giving their dad such a hard time. Is there some way he can help the two make amends?" As with every pre-made Sim, each member of the Alvi household comes with their own written description, as well as pre-determined traits and desires. Iqbal is stated as "the father of two boys. Iqbal's wife left unexpectedly one day, leaving him to raise his sons alone. He wants only the best for them, but one son is a rebel who tests his patience. Can he raise his sons and find love again?" He works as a Reports Processor in the Business career, which is a low-level position (the third out of possible ten) and thus does not pay much. He is Absent-Minded, Neurotic, a Couch Potato, an Angler and has No Sense of Humor. This means, among other things, that jokes fall flat when told to this Sim, he enjoys spending time in front of the TV and fishing the most, he often forgets the commands given to him and he often checks the sink or the oven in case they were accidentally left on. Even though he works as a businessman, his ultimate (Lifetime) wish is to Present the Perfect Private Aquarium, shining a new light to his Angler trait. He enjoys Latin music and Cookies, and his favorite color is Blue.

VJ's description states that "VJ is a troubled teen. He blames his dad for his mom leaving. He doesn't have any aspirations in life and is a horrible student. He spends his time inventing new ways to torment his father." He is a High School student with an average grade of C, and he is Childish, Evil, Inappropriate and a Snob, which makes him generally unpleasant towards most other Sims and prone to lashing out at them, offending them or picking fights with them, be it verbal or physical. He enjoys Indie Music and Sushi, and his favorite color is Red. Miraj is described as "having aspirations in life, unlike his brother. He gets along well with both his brother and his father and is the mediator in the family. He wants a career someday in law enforcement." His traits reflect his pleasant disposition, as he is Good, Neat and Family-Oriented. He enjoys Kids Music and Pancakes, and his favorite color is Sea Foam. Much like his brother, though, he is a C student. The Relationship Tab of each character reflects the initial family description - while Miraj is Good Friends with his father and Friends with his brother, VJ and Iqbal display the status of Disliked towards each other.

Playing the Alvis household is challenging if the player has their best interests at heart. VJ's confrontational nature makes maintaining good family relations difficult, while their overall unfavorable financial situation makes their wishes and goals difficult to achieve - Iqbal works for very little money and is the family's only provider, meaning that the family owns toilets and

fridges which are prone to breaking down, and the family is less likely to ever go on holiday, making them generally more stressed and less likely to work on their skills and personal development. The player can follow the narrative strands provided for them by the game and try to either mend Iqbal and VJ's relationship or make it worse, but they are also free to take the family in any other direction - they can make Iqbal change careers, move VJ out of the household, or make Iqbal fall in love or get married, potentially moving another Sim to the household. The options provided to the player are limited only by the characters' Traits - VJ is Evil and Inappropriate, making him a difficult Sim to find friends or partners for, as he generally pushes them away. Otherwise, the Alvi's ultimate outcome is in the hands of the player, and the player is the only one who can access and manipulate the extradiegetic information provided by the game. More importantly, the player has access to information which the characters don't have access to - if one Sim cheats on their spouse, the player can see it but the spouse can only find out if they catch them in the act or hear it from another Sim who witnessed it.

This illustrates the way the omniscient multimodal perspective works outside of the parameters of previously mentioned perspectives of the player as a character and the player forming a doubly deictic subjectivity with a certain character, as their perspective in *The Sims* is much wider, encompassing multiple characters and their many potential relations with each other. Another proof of this kind of subjectivity is the fact that most players of The Sims do not refer to their Sims as themselves - while a player of *New Vegas* reporting on something that happened to them while playing will most likely use the singular first person pronoun 'I', as in "I was attacked by a group of Legionaries while scavenging", most *Sims* players refer to the characters in the game in the third person singular, often using the syntagm "my Sims" or simply referring to the characters by their names. A prolific player and storyteller of *The Sims*, Youtube creator PleasantSims, is the most notable example of this kind of narratological play, as she not only refers to the Sims in the third person singular, but she often interprets many of her Sims' actions through the lens of telling their life story, using sentences such as "John and Jennifer have remained quite in love with each other over the years, never having cheated on each other" or "It's Friday morning and we're back with the Burb family, the day after their poor youngest son passed away. The family is getting ready for the day. They're still recovering."

This type of simulation approach to storytelling allows players like PleasantSims to create, manage and interpret a seemingly endless variety of stories, both human and alien alike.

The added practice of modding furthers *The Sims'* potential as an alephic narrative, providing players with an even greater level of agency when creating and mediating their narratives. In Sihvonen's words, "in Modding, the player's agency extends beyond an instantiation of the designer's agency to the authorship of a new artifact. These artifacts, in turn, become vessels of the player's agency, and play a key role in the social validation of their role as authors" (13). In *The Sims*, the player is both the author and the observer of a narrative, yet never its key participant, as they are removed to a level of diegesis above that of the agents they control. As Aarseth puts it, "...just as the game becomes a text for the user at the time of playing, so, it can be argued, does the user become a text for the game, since they exchange and react to each other's messages according to a set of codes. The game plays the user just as the user plays the game, and there is no message apart from the play" (Aarseth, 162).

This solidifies *The Sims* as the best example not only of an alephic narrative, but of an omniscient multimodal perspective taken by the player, which places them in the category of extradiegetic players, further setting *The Sims* apart from previously explored multimodal narratives. While this uniqueness of narrative experience has resulted in a wide misinterpretation of *The Sims* as a game with no story, Sihvonen argues that while "Juul may dismiss the stories players create in open world games such as *The Sims* by arguing that these narratives are personal and independent, that they depend on the individual and lack inherent linearity… This perspective neglects the ways that design elements in this type of game shape how players connect to the world and its residents, creating an underlying emotional core at the heart of every user-created story" (Sihvonen, 2011). In other words, the fact that the player-reader is the one creating or heavily influencing many aspects of the story of *The Sims* doesn't change the reality of it still being a narrative.

Discussion

As the Analysis portion of this text aims to illustrate through the exploration of multiple multimodal narratives, the role of the player-reader in a multimodal narrative is defined through the application of varying diegetic levels and extranoematic challenges. The player-reader can

engage with a multimodal narrative through the focalising perspective of its key characters or they can embody a character of their own, be it the character of the Reader or Puzzle-Solver - as illustrated by Mark Z. Danielewski's *House of Leaves* or Milorad Pavić's *Dictionary of the Khazars* - or the character of their own creation, as illustrated by Obsidian Entertainment's *Fallout: New Vegas*. A third way of player-reader engagement with a multimodal narrative employs the use of an omniscient multimodal perspective, allowing the player-reader to create, control and observe a narrative simultaneously, but not to participate in it, neither through a character's focalising perspective nor through a perspective of their own. While it has been illustrated that the first two perspectives of the player-reader can be achieved both in printed works and interactive computer fiction, the omniscient multimodal perspective has, to date, only been achieved within tabletop games or interactive computer fiction, specifically in the genre of simulation video games. This corresponds to Alison Gibbons' definition of an alephic narrative, providing potential for further analysis of the many differing narratives created within this genre. While only touched upon in this work, the scope and potential of modding practices in player communities could provide further insight into the ways player-readers influence their own experiences within different types of narratives, providing potential subcategories of deictic player-reader engagement.

The three focalising perspectives correspond to what this text refers to as three different levels of player-reader diegesis, namely that of the homodiegetic, intradiegetic and extradiegetic player-reader. While these differ from narratological diegetic levels, as well as from diegetic levels presupposed by video game narratives, they have illustrated the level of access the player-reader has to varying levels of the text-world as well as which semi-permeable membranes between the text-world and the discourse-world they can transgress. While this is not the case with non-multimodal narratives which don't require their player-readers to be divided in such a way, and while this mustn't be confused with the varying diegetic levels of narrators of multimodal texts, player-reader diegetic levels provide better insight into the roles they are intended to occupy within multimodal texts and into the way these roles are solidified through the use of extranoematic challenges and game mechanics. While the three aforementioned categories do not share each parameter discussed in this text - the most notable of which being the third category which has not yet been realized in printed works - this analysis has illustrated two things: that every type of player-reader of a multimodal narrative must approach such a

narrative through extranoematic effort, as was originally stated by Aarseth, and that the difficulty of this effort purposefully creates a higher sense of agency and involvement upon engaging with the text. This means that a lot of key segments of multimodal works elicit an emotional response from player-readers through purposeful frustration of their efforts, or through a series of challenging or often seemingly insurmountable obstacles and tasks. While the way player-readers respond and engage emotionally with multimodal narratives through the use of extranoematic challenges and game mechanics has been discussed many times in the fields of psychology, sociology and game studies respectively, it would be beneficial for both the field of game design and that of comparative media studies to further explore this type of engagement through a narratological and literary lens in the future.

Conclusion

The relationship between readers, authors and texts has been a diverse field of study since the beginning of the 20th century. The work of Russian formalists, structuralists and psychoanalysts has not only provided us with language with which to approach this relationship, but also with an attempt of creating either a methodical approach to understanding narrative (formalists and structuralists) or what Susan Sontag calls an "erotics of art" (Brooks, XIV), a deeper understanding of the emotional process that is the reading of a narrative (psychoanalysts). It was the aim of this analysis to shine a light on the importance of further work done (and being done still) by cybertext theorists, work which for the first time takes seriously and analyzes a new and still developing medium which itself is challenging to define. The medium in question - cybertext in all its forms - challenges the rigid binaries of literature and non-literature, texts and non-texts. Furthermore, cybertext theory and its willingness to grapple with a medium so difficult to define and categorize into genres gives new insights into readerly and authorial behavior, opening up a Pandora's box of questions about agency and ownership, that of readers, authors and texts alike.

The elastic and diverse relationship between cybertexts and their readers places a great deal of importance on the process and the experience of reading as not only a necessary tool for accessing a narrative but also as a way of understanding and navigating its themes. As both the taxonomies of cybertext and the analysis of this work prove to show, cybertexts - even the most

intensely visual ones - benefit immensely from being studied as narratives. More importantly, the analysis of cybertexts in turn gives important insight into a changing relationship between readers and texts, as cybertexts demand an entirely new kind of readerly behavior than that seen in traditional literary forms. As this text tries to illustrate, this new kind of readerly behavior is not evidence of cybertext's aberrant status in the broader family of literary texts - cybertext is not an anomaly nor an imposter within the sphere of literary practice. Rather, it was the aim of this work to show that, quite on the contrary, cybertext is an expected consequence of the development of the poetics of postmodern literature. As it began to engage with a new type of storytelling technology - the technology of links and nodes - postmodern literature both affected the poetics of cybertext literature and in turn was influenced by it. Both *Dictionary of the Khazars* and *House of Leaves* share important narratological similarities with cybertext literature, and digital cybertexts in turn show an appreciation and a tendency towards referencing, adapting or reimagining traditional literature - be it adaptations of novels and short stories or more complex influences seen in Shelley Jackson's deconstruction of *Frankenstein* in *Patchwork Girl* or ZA/UM's referencing of Zola, Robespierre, Marx and Flaubert in *Disco Elysium*. The divide between the printed and the digital has thus become more complicated, creating problems with the categorization and identification of cybertexts. As it was argued in this text, a new poetics of narratology needs to emerge in order to explore the nuanced and diverse field of cybertext literature - that of ludonarratology, of a narratology that dwells precisely in the dynamic back and forth of readers and texts, of *sujet* and *fabula*, a narratology that explores both the meaning of narratives and of the readerly process of acquiring it.

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