Gaming and Literature:

Virtual Game Immersion in Contemporary Print Text

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Contents

Abstract

This study seeks to determine whether video games, specifically narrative role-playing games, have matured enough as a narrative medium to be remediated by their predecessors. Whilst scholars have already begun documenting how cinema has begun incorporating elements unique to video games, no such research has been conducted on whether video games have begun to impact print literature in a similar way. Writers have often used ludic strategies such as elaborate puzzle-solving and labyrinthine narratives to keep the reader engaged, such as is found in an analysis of the ergodicity and immersive qualities of Vladimir Nabokov's 1962 novel *Pale Fire.* However, such pre-digital texts provide a physical interaction on the part of the reader but only through narrative means. Writers of hypertext fiction have explored using the computer's multimedia capabilities to create a sense of reader immersion; however, as shown through a breakdown of James Pope's analysis of the four major problems to 'mainstream' hypertext fiction, such limited and scripted interactions do not capture the mainstream reader quite like video games do. Video games, however, have created new strategies while remediating older ones, particularly through tying the player's ergodic agency and decisions to both a ludic progression in the game as well as a narrative one. Bethesda's continually popular and critically acclaimed virtual role-playing game, *Elder Scrolls V: Skyrim* (2011), is used to explore these immersive elements and how they are accomplished differently from postmodern ergodic texts and hypertext fictions. Finally, in comparing the elements of *Skyrim* to those present in J.J. Abrams and Doug Dorst's *S.* (2013), a text published after the rise of contemporary video game consoles, and contrasting *S.* to the earlier ergodic text *House of Leaves* (2001) by Mark Z. Danielewski, a pattern of current and future back-and-forth remediation emerges, solidifying video games' structural impact on current and future print literature.

Introduction

Into the Digital Labyrinth I Go…

Although video games have been a source of academic study for at least the last twenty-five years, much of that research has focused on whether video games could be considered as borrowing more from traditional representational media such as print literature and cinema, or from non-digital games such as board games and sporting events. This borrowing, or *remediation*[1], is not unique to video games, though: all media, to some extent, borrow from each other, but not in the sense that they simply transpose one medium's narrative into a different one (as electronic books such as the Kindle or iPad do with print books). Remediation is the process of one medium (usually the newer one) incorporating some structural or representational element (usually of an already established medium) as a method for presenting information. This concept is as old as our current concept of *media*: the printed novel began as "an amalgam of older forms, which it explicitly invokes and imitates—the romance, the picaresque tale, certain forms of religious narrative […], and various forms of journalism and historical writing," while cinema began as a "borrowing and restaging of styles, formats and performances taken from a range of older media such as theatre,[2] still photography, visual art, and prose fiction […as well as…] carnivals, the circus, amusement parks,

[1] A term coined by Jay David Bolter and Richard Grusin in *Remediation: Understanding New Media* (Cambridge, Massachusetts: MIT Press, 1998).

[2] 'theatre,' as used here by Bolter and Grusin, is not meant to envelope all of theatre into a form of media but to acknowledge its relevance as a structural and narrative predecessor to cinema.

and vaudeville."[3] In this way, all representational media, to some extent, could be said to remediate a previously established one.

This idea of media convergence, or the ability of newer forms of media to incorporate older forms, has gained traction as a point of academic discussion since at least the turn of the century. While much has been published documenting the back-and-forth remediation between cinema and print literature,[4] as well as how video games have remediated narrative tropes and structures from prior media, there still seems to be a lack of any real scholarship identifying whether video games have matured enough into their own unique medium to be remediated by these so-called older forms. There are some scholarly articles and video essays chronicling how cinema has begun to *visually* remediate video games,[5] but little, if any at all, has been written about print literature doing so, structurally or otherwise. This hole in the research forms the basis for the main research question of this study: if video games are following a similar trajectory of academic maturity as cinema has, have video games finally matured enough as a storytelling medium to be remediated structurally by print literature?

One hurdle I had to overcome in terms of defining video games as a narrative medium is the resistance to accept them as a form of literature, digital or otherwise. If defining digital-born literature as those texts "written for and read on a computer screen that pursues its

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[3] David Thorburn and Henry Jenkins, introduction to *Rethinking Media Change: The Aesthetic of Transition*, ed. by Brad Seawell, David Thorburn and Henry Jenkins (London: MIT Press, 2003), 10.

[4] As seen most notably in the collection of essays edited by Julian Murphet and Lydia Rainford, *Literature and Visual Technologies: Writing after Cinema* (Houndmills: Palgrave Macmillan, 2003); of particular note is the discussion of Joyce remediating early trick films and cartoons in a chapter of his *Ulysses*, found in Keith Williams, "Ulysses in Toontown: 'vision animated to bursting point' in Joyce's Circe," 96-121.

[5] A number of these examples, such as how the film *Kickass* (2010) remediates the first person night vision shooting scene from *Call of Duty: Modern Warfare* (2007) and *The Amazing Spider-man* (2011) visually remediates the first person parkour-style running scenes found in the game *Mirror's Edge* (2008), can be found in Mathias Stork, "*Transmedia Synergies—Remediating Film and Video Games"* (video essay), posted June 2, 2012, accessed 20 March 2018, https://vimeo.com/43326496.

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,"[6] then video games would fall into this same category being that they, too, like digital-born texts, must utilise the computer or network context in such a way as to be rendered inaccessible when removed from said context.[7]

However, as recently as 2014, the Electronic Literature Organization (ELO) lists these various forms and practices of digital texts as:

- Hypertext fiction and poetry, both off or on the Internet
- Kinetic poetry presented through computer platforms such as Flash
- Computer art installations requiring viewers to read them or otherwise frame literary aspects
- Conversational characters, also known as chatbots
- Interactive fictions (such as point-and-click or text adventures)
- Novels which are told through emails, text messages, or blogs
- Poems and stories generated by computers, either based on computer programming or from the reader's interaction with the programme
- Wikis, or collaborative writing projects that allow readers to add to and/or alter the text of a work

[6] Alice Bell, Astrid Ensslin, Dave Ciccoricco, Jess Laccetti, Jessica Pressman, and Hans Rustad, "A [S]creed for Digital Fiction," *The Electronic Book Review* (3 March 2010), http://www.electronicbookreview.com/thread/electropoetics/DFINative (accessed 22 October 2016).
[7] Scott Rettberg, "Electronic Literature." *The Johns Hopkins Guide to Digital Media*, ed. by Marie-Laure Ryan, Lori Emerson and Benjamin J. Robertson (Baltimore: Johns Hopkins University Press, 2014), 169.

- Literary performances online that develop new ways of writing[8]

Although not meant to be exclusive, the fact that video games are not represented in this list in any form highlights the never-ending argument as to whether they could or should be considered literature at all. Many digital literature theorists argue against the inclusion of video games because there is no solid storyline which could be critically analysed in terms of its semiotic, semantic, and affective elements.[9] The question for these theorists is why would they want to study a medium which has no point of comparison (apart from being an extension or point of translation) to literature?

I argue that video games do have a point of comparison—beyond being a vessel for transmedia worlds and/or adaptations—as a kind of *ergodic text*. Espen Aarseth defines the ergodic text as a narrative that requires a more kinaesthetic action on the part of the reader than simply turning the page.[10] Ergodic texts are not their own classification but more a function of literature and can range from extreme (as found in the Oulipian texts discussed in chapter III of this study) to nearly inconsequential. Whilst Aarseth further develops his idea into the concept of the digital *cybertext*,[11] I found Aarseth's concepts and analyses limiting as he includes only the popular digital fictions of the late twentieth century: hypertext fictions, adventure games (his term for text-based interactive fictions) and multi-user dungeons (MUDs). This expanded my research questions to discover: where could or would video games be placed on this spectrum of interactive texts? And with the advent of digital technology and methods

[8] Rettberg, 172.
[9] Bell et al, 2010.
[10] Espen Aarseth, *Cybertext: Perspectives on Ergodic Literature* (London: John Hopkins University Press, 1997), 1.
[11] An ergodic text which can only be represented and experienced digitally due to its *reactive* narrative experience, such as the video game. (as defined in Aarseth, Cybertext, need the page.

for reproduction, how exactly, and to what extent, could video games be changing the depth and breadth of interactivity in current ergodic print texts?

Like Marie-Laure Ryan's distinction between a narrative and narrativity,[12] I see a distinction between what Aarseth calls *ergodic* and what I call a text's *ergodicity*. I use *ergodicity* to refer to the extent a text needs to be physically manipulated by the reader/player in order to be successfully navigated and consumed. By focusing on those literary texts—both in print and digital forms—which have a high level of ergodicity, I compare where the ergodicity of video games differ from those postmodern ergodic print texts released for the rise in popularity of digital media. Since so-called 'old media' often finds a new function and audience as a new medium fills its mainstream place in society,[13] I use my findings from comparing the ergodicity of video games and these pre-digital ergodic texts to highlight their relevant influences in a more recent form of contemporary ergodic print texts: those seemingly hybrid, bookish print texts which use digital means and technology to create distinct multimodal works that, if rendered digitally, would lose some sense of their aesthetic and meaning in the process.

To bring together these threads of inquiry, I begin by identifying where video games fall on this spectrum of ergodic texts in relation to other narrative media. In chapter one, I explore the narratology-ludology debate through a breakdown of the five dualities which have driven the academic debate of video games thus far: are video games more game or narrative (or can they be both); do the rules or the fiction in a game matter more; where do games belong—in an ecology of media or games; does what a video game *does* matter more than what it *represents*; and should video games be studied as objects or as experiences? A few conclusions

[12] See my explanation of this in the 'Game or Narrative' section of chapter 1
[13] Thorburn and Jenkins, 2

are drawn from this literature review: the first being that, like 'older' media, video games have become too vast a field with varying forms and genres. I needed to limit my research to those most capable of storytelling—the narrative role-playing game.

The most relevant conclusion I discover from this review of the early academic literature on video games is that there is still a need for what Thorburn and Jenkins advocate in *Rethinking Media Change*: "a less reductive, comparative approach [to] recognize the complex synergies that always prevail among media systems, particularly during periods shaped by the birth of a new medium of expression."[14] By focusing too much on the tension between established narrative and ludic forms, video games scholars have essentially stalled video game study and ignore the "significant hybrid or collaborative forms that often emerge during times of media transition."[15] Considering the rising prevalence of those more "hybrid or collaborative forms" of literature—both digitally and in print—such a point is relevant to explore in my study.

Chapter two is my attempt to reconcile this drawback by identifying the common points of comparison between different storytelling media. While I could have focused on issues of video games dealing with psychological or sociological issues (such as gender, violence, or stereotyping), knowing how print texts have begun remediating structural elements of video games requires a more structuralist approach. To define this methodology, I begin chapter two by exploring the different terms commonly used to approach the study of video games as a *storytelling* medium: *interactivity*, *presence*, *engagement* or *immersion*. While all terms have value in analysing any representational medium, I come to the determination that the concept of immersion (specifically Laura Ermi and Frans Mäyrä's three-pronged approach of

[14] Thorburn and Jenkins, 3.
[15] *Ibid*.

imaginative, sensory and challenge-driven immersion) is best suited to comparing pre-digital ergodic print texts to those narrative video games and contemporary ergodic print texts due to encompassing the various elements found in popular storytelling media of the last century.

Before I could begin analysing pre-digital postmodern texts[16] for their immersive capabilities, I define the specific subset of print texts relevant to my study: the ergodic text. I do that in chapter three as I explore Aarseth's concept of the ergodic in more detail through the mythic concept of the labyrinth as both a metaphoric and structural device, introducing and further developing Aarseth's idea of the unicursal and multicursal labyrinths: two ends of a spectrum by which the ergodicity of a text can be placed. I then use these ideas, along with Ermi and Mäyrä's approach to immersion, to analyse the ergodicity of Vladimir Nabokov's *Pale Fire*, so chosen as it is considered the inspiration for the first hypertext imagined by Ted Nelson, the 'Father of Hypertext.'

Chapter four is a shorter chapter focusing on hypertext fiction as a digital bridge between postmodern print texts such as *Pale Fire* and narrative video games. A popular genre of literature from the late 1980s through the 1990s, hypertext fictions were once lauded as the way forward for literature during the rise of the digital age. However, they fell out of favour around the turn of the new millennium. Rather than analyse any one particular work (as there are far too many to choose from), I use James Pope's empirical findings of the four shortfalls of hypertext fiction and analyse how they disrupt reader immersion on all three levels (but with specific reference to suspense, a core element necessary for imaginative immersion). This then

[16] Those written and published before 1975; hereafter referred to as 'postmodern print ergodic texts.'

leads into my argument as to why narrative video games may be a more successful form of digital storytelling than hypertext fiction has been thus far.

Chapter five discusses in more detail the specific type of video game relevant to my study: the narrative role-playing game, or those video games which aim to transport the player into a separate fictional world with the aim of immersing them in role-playing and adventure narratives. Whilst not all players approach these narrative role-playing games with the aim of becoming immersed in the narrative and dual identity as player-character, the very existence and mainstream popularity of these types of games speaks to a desire by many players for some sort of fictional world to inhabit with a sense of realistic escape. Through a close analysis of the immersive methods of one of the most successful virtual games of the past decade, Bethesda's *Elder Scrolls IV: Skyrim* (2011), I discuss the importance of meaningful ergodic choices in creating and maintaining both imaginative and challenge-driven immersion, as well as how sensory immersion through realistic graphics heightens the sense of 'deep play' or 'flow'[17] a player feels when inside the game world.

Chapter six is my exploration of how the 'old' medium of printed text is beginning to incorporate elements from the newer one of narrative role-playing games. I begin with a discussion of multimodal hybrid texts, or those which seem to be celebrating both the book as an object and the digital methods by which it can currently be produced. Because of Alison Gibbon's extensive work on multimodal literature, I begin by presenting her taxonomy of the relevant forms of this literature and analysing the ergodicity of each. From this, I end the chapter with a comparative analysis between Mark Z. Danielewski's *House of Leaves*, published

[17] Fuller explanations of these terms are explored in chapter 2

in 2000 and considered the seminal representation of contemporary hybrid texts, and J.J. Abrams' and Doug Dorst's *S.*, published in 2013 after the explosion of social media networking and release of contemporary video game consoles. It is through this comparison, as well as comparisons with *Pale Fire* and hypertext fictions, that I argue in favour of narrative role-playing video games making a uniquely video game-like impression on these contemporary ergodic texts by revealing where *S* incorporates video game elements in ways *House of Leaves* does not.

In my conclusion, I summarise these findings and discuss the implications my conclusions might have for contemporary ergodic media—both in print and digitally. As social networking and mobile phone technology advances to places beyond what we as academics have or will ever predict accurately, we must consider just how and where the print book will move and just what elements it will remediate in its effort to remain the medium for narrative storytelling. While I do not make any definitive predictions, I do argue that rather than focus academic study on each storytelling medium individually, we should look at the ways each medium is positively affecting others, what we can learn from these crossovers and where the act of storytelling will go next.

Chapter I

On the Study of Video games

Before I can begin analysing how video games remediate print literature pre-digitally or are remediated by contemporary texts, I must define what a video game is—academically speaking. Even now, after nearly three decades of research, scholars disagree on which discipline can lay the most claim to games studies. Can hypertext or interactive fictions be considered games? Can sports games, like the *FIFA* series, be considered narratives? Is there an element distinctive to video games that ties together the popular genres of action-adventure, sports, puzzle, driving, and strategy[1] into one discipline in a way established theories from literary or digital studies cannot? Why are video games so popular now when they failed so spectacularly in the early 1980s?[2]

While questions like these have driven the research into digital media and video games, particularly at the height of their popularity in the 1990s, the discussion often quickly breaks down into a pseudo-debate between two factions—the narratologists and the ludologists—in an effort to hold "academic influence over […] the dominant contemporary form of cultural

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[1] Espen Aarseth, "Quest Games," in *Narrative across Media: The Languages of Storytelling*, (London: University of Nebraska Press, 2004) 363.

[2] 29 September 1983 is considered the day that the first generation of video games—those based largely on arcade coin-operated games like *Space Invaders* and *Asteroids*—died as Atari quite literally buried all their un-purchased or returned video game cartridges in a large landfill. While the flop of the *E.T.* video game is often held responsible, many other factors played into this early 'crash,' among them: an over-supply of available video games (many of which were adverts packaged to look like games) in a short amount of time; lack of any real progress or change in the console systems on which they were played (the Atari 2600 stayed the dominant video game console for five years before the Atari 5200 was released in 1982, arguably with no noticeable changes); the rising popularity and affordability of VCRs and home-computer systems; and the shoddily-made games (such as *E.T.*) that were being released without any quality assurance or programming checks; Tristan Donovan, *Replay: The History of Video Games* (Lewes, Sussex: Yellow Ant, 2010), 95-109.

expression."[3] Each side seeks to prove its superiority over the other: narratologists argue that digital games and media are just a new medium to express the age old form of storytelling,[4] while ludologists[5] argue that video games can and should be viewed as remediated games. This resistance stems from the fact that ludologists feel defining all video games as remediated narratives places them in a culturally supplementary position and ignores the fact that games are cultural concepts considered at least the same age and importance as storytelling. [6]

In short, narratologists see video games as new media *stories*; ludologists see them as new media *games*. Although the debate has ebbed off to some extent since the turn of the century, the research is still fractured into dichotomies, limiting the ability to create a cohesive discipline. Jesper Juul's attempt to reconcile these two sides in his 2005 book *Half-Real* adequately identify the five main areas of contention which have come to define the video game argument:

1. Are video games remediated games or narratives?
2. Do the rules or the fiction define the video game experience?
3. Do video games belong in a *media* ecology or a *game* ecology?
4. Does what a video game is (its ontology) matter more than what makes it enjoyable (its aesthetics)?

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[3] Espen Aarseth, "Genre Trouble: Narrativism and the Art of Simulation," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 45.
[4] Janet Murray, "From Game-Story to Cyberdrama," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 2.
[5] Defined as "the study of games" in Gonzalo Frasca, "Ludology Meets Narratology: Similitude and Differences between (Video)games and Narrative," originally published in Finnish as "Ludologia kohtaa narratologian" in *Parnasso* 3 (1999): 365–71, English version accessed 12 March 2015, http://www.ludology.org/articles/ludology.htm.
[6] Aarseth, "Genre Trouble,"46.

5. Should we study the games as an object or consider simply the player's experience?[7]

I use these five areas as a structural frame for this literature review chapter in order to organise multiple threads of research on the subjects and to see just where each duality overlaps or creates a hole of study. I determine through this structure an understanding of not only how storytelling has influenced video games but also how video games could be contributing to their remediated media in return.

Games or Narratives

At the core of the narratological-ludological debate is whether video games can be best aligned with game activities (such as board games and sports), or with narrative representative media (such as books and cinema)[8]. Considering both sides seem to appropriate the commonly misunderstood terms *play*, *game,* and *narrative* for their own purposes, defining these terms is necessary before embarking on understanding each viewpoint. To do this, I use scholars of pre-digital games and narratives so to reach a more objective conclusion on whether or not video games are more *narrative*, *game*, or something else entirely.

Play and *game* are particularly misunderstood terms because they can be both nouns and verbs, and depending on the form used, can create very different associations. In Roger Callois' 1958 *Man, Play, and Games*, a seminal text on the history of *play* and *games* in various cultures, he recognises that there are four different types of *play* when it is used as a verb:

[7] Jesper Juul, *Half-Real: Video games between Real Rules and Fictional Worlds* (London: MIT Press, 2005), 11-18.
[8] I will be leaving theatre and other interactive art forms outside of this study as their structures are too broad to incorporate in such a limited space. Whilst theatre could arguably considered within the frame of this research due to its narrativity, the broad definitions by which theatre, and interactive art installations in general, are understood would require more research than this research project allows. I have noted these possible streams of research, though, and are considering them should I have the opportunity for further study.

agon, which contains competition or conflict (as seen in sports activities); *alea*, which is concerned with chance or luck (as in a lottery or gambling); *mimcry*, which relates to simulation or make-believe (such as when children role-playing different careers or family roles); and *ilinix*, which is associated with the adrenaline rush brought on by fear or dizziness (as seen in many attraction park rides). Callois also further differentiates between the noun forms of *play* and *game*: [9] *play* is a physical or mental activity which has no immediate use or defined objective and whose whole reason is based on the pleasure experienced by the player, while a *game* is considered a type of play or a structured activity organised under a system of rules that stipulate the conditions under which the player wins or loses.[10] In other words, *play* is an open environment aiming to keep the player completely contained within it, while *game* is a closed environment in which rules and tactics must be negotiated in order to produce a defined result. Games take place in a *game world* while play takes place in the *real world*.[11] Although video games come with separate game worlds, the open world and emergent type games (such as *The Sims*[12]) are actually more *play* because only basic operational rules have been established; no rules exist to create definable outcomes based on player activity. Only once a player creates or follows established parameters to structure the activity do these types of video games become true *games*.

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[9] Bo Kampmann Walther, "Playing and Gaming: Reflections and Classifications," *The International Journal of Computer Game Research* 3, no. 1 (May 2003), accessed 18 Nov 2014, http://gamestudies.org/0301/walther/.
[10] Frasca, "Ludology Meets Narratology."
[11] Walther, "Playing and Gaming."
[12] The Sims Studio, *The Sims* (California: Electronic Arts, 2000).

Ludologist Markuu Eskelinen's inflammatory comment "if I throw a ball at you, I don't expect you to drop it and wait for it to start telling stories"[13] highlights how the definition of *narrative* is often misconstrued in an effort to differentiate between it and *game*. As noted narratologist Marie-Laurie Ryan has pointed out, narrative is not just the telling of stories, but the interpretation of them, as well. She refers to this distinction as "being a narrative," in which the text literally narrates the plot to the observer, and "possessing narrativity," in which the elements of a text contain the potential for the reader/observer/player to create an interpretative image,[14] one in which the "causally connected states and events […] capture a segment of history of a world and its members."[15] Essentially, for something to possess narrativity, it must build a world inhabited by people and places, present an event which changes the state of that world and return to a non-conflicted state (whatever that may be) once the event has been resolved.[16] In this way, a game may not *be* a narrative in the strictest sense, but it can contain narrative elements within it.

Video games could also be considered remediated narratives through the similarities between the cause-and-effect structure of narrative progression and the definition of a game as a contest between two opposing sides. Even puzzle games like *Solitaire* and *Tetris* could be viewed as detective narratives: the player, like the detective, is in conflict with the restrictions of the senses and must overcome them in order to successfully identify the right choices.[17] But

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[13] Markuu Eskelinen, "Towards Computer Game Studies," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (MIT Press: London, 2004), 36.
[14] Marie-Laure Ryan, introduction to *Narrative across Media: The Languages of Storytelling* (London: University of Nebraska Press, 2004), 9-11.
[15] Marie-Laure Ryan, "Will New Media Produce New Narratives?" in *Narrative across Media: The Languages of Storytelling* (London: University of Nebraska Press, 2004), 337.
[16] Ryan, introduction *to Narrative across Media*, 8-9.
[17] Murray, "From Game-Story to Cyberdrama," 2.

this relation between the two media is flawed as the major difference lies between the print narrative's *defined* outcome and the game's *possible* ones. Sherlock Holmes will always identify the correct elements and solve the mystery because the writer has already developed the narrative through to its conclusion; it is printed in the book. A game of Solitaire, by contrast, never plays out the same way each time; the arrangement of the cards changes with each shuffle, and depending on the tactics employed by the player, the game may or may not be completed successfully. Games, then, differ largely from narratives in that they are not chain reactions in which only one outcome can be possible; because of the human element required to interpret and negotiate the rules and game world, a whole host of possible outcomes can happen in a game.[18] As anybody who has ever gambled on a sports event knows, no game ending is ever completely guaranteed.

This lack of a chain reaction and the possibilities for different endings allude to another difference between games and narratives: the orientation of the temporal space in which each takes place. For narratives, real time is displaced by the dual structure of *discourse time* and *story time*; while for games, this dual space is defined as *play time* and *event time*. Although the parallels between the two mediums seem obvious, the way in which each connects their two aspects of dual time is different. In a narrative, the story time can contain flashbacks and flash-forwards, affecting neither the time it takes to tell the story (discourse time) nor the events of the story itself (story time). The reader continues reading with the same pace and intensity as before, accepting these movements as necessary to understanding the narrative. Games, however, function on a much more linear time scale by having the actions the player commits

[18] Frasca, "Ludology Meets Narratology."

(play time) impact the flow of events (event time) [19]; to do otherwise would remove any sense of agency between the player and the game[20], which, as seen in its definition, is a necessary component of what differentiates a game from other forms of entertainment.

This linear time scale keeps play time and event time fairly close together and with immediate impact on one another. Where discourse time in narratives is only ever interrupted by the reader putting down the book to be read at another time, games can interrupt play time while continuing event time in various ways: loading screens, cut scenes, artefacts reflecting on previous events and level changing, to name a few.[21] Some games even continue the event time while the play time is non-existent. In *Fable III*[22], the player earns money every twenty real time minutes; when the player has turned off the game and returns later, they find they have gained more money and possibly more quests even while not actively engaged in play time. In narratives, such an advancement of story time could not be possible when discourse time is stopped; when the reader stops reading, the story stops unfolding.

The introduction of save points to the game complicates this argument a bit in that the player is free to restart the event time from a saved point in order to make different choices. Some narratologists view this as akin to "harbinger storytelling, [where] the protagonist gets a chance of a 'do-over'," [23] while others read it like placing a bookmark in order to stop discourse time temporarily; to "die" in the game is to misread the text, and the save point signifies where

[19] As defined by Eskelinen in "Towards Computer Game Studies," 37.
[20] Jesper Juul, "Introduction to Game Time," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 136.
[21] Juul, "Introduction to Game Time," 136-137.
[22] Peter Molyneux, *Fable III* (Guildford: Lionshead Studios, 2009).
[23] Murray, "From Game-Story to Cyberdrama," 6-7.

the player last completed a correct reading.[24] However, the play time of a game with save points and the discourse time of a narrative with bookmarks are not equal; if one were to chart the play time of *Fable III*, for example, the result would be less linear than the discourse time of a narrative. The play time would be more a tree with dead ends and branches while the discourse time in a narrative stays fairly static.[25]

The confusion on narrative and video games also stems from the confusion between the verb form of *play* and the noun form of *game*. In many narrative video games, one must first adopt a character, along with that character's history and skill set (*mimicry*), before interacting with the actual rules and world of the game (*agon*).[26] The mimicry aspect often contains the narrative elements of the game, providing a stage in which to inhabit both a make-believe world and the real one simultaneously. These narrative elements are not considered as *game*; they hold no real impact on the possible outcomes. As many reviewers have commented with regards to Bethesda's two major role-playing action-adventure games, the *Fallout* and *Elder Scrolls* series, the mechanics of gameplay are almost the same even when the narrative elements, or the *play* aspect, of the game change.[27]

However, as Barry Atkins argues in his video game analysis *More than a Game*, "If we accept that we are confronted with a form of narrative storytelling where the production of story is the end result of play, as well as with a game where 'winning' is everything, then an

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[24] Barry Atkins, *More than a Game: The Computer Game as Fictional Form* (Manchester: Manchester University Press, 2003), 49.
[25] Juul, "Introduction to Game Time," 136.
[26] Walther, "Playing and Gaming."
[27] Grant Tavinor, "Fiction," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 440.

analysis of the storytelling process is necessary."[28] Stories are essential to modern video games in creating an environment interesting enough to continue playing. Bethesda's aforementioned game series are highly popular because of the narrative elements provided within the game experience, not in spite of them.[29] Players are willing to negotiate the same rules and restrictions over different games because the story is different in each instalment.

Narratives, then, do not supersede the play aspect of a video game, but they do foster an interesting format for it. However, to attempt to classify a narrative video game as just a new form of interactive narrative ignores part of what constitutes a game: a sense of agency and interactivity on the part of the player.[30] Rather than simply choosing to study either *narrative* or *game* in exclusion of one another, some theorists of both narratology and ludology are looking at the way narratives can be utilised within game worlds and how they can be manipulated in order to improve the player experience.

Marie-Laure Ryan proposes that the importance of narrative in a video game differs with the type[31] of game being played. Adventure games tend to follow the archetypal hero's journey as defined by Joseph Campbell, with the player taking on the role of the hero. Simulation games, where the player is a "God" character, such as *The Sims (*and the *SimCity*[32] games before that), create a narrative through observing how the player's management choices

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[28] Atkins, 7.
[29] As seen in the review of Skyrim detailed in chapter five of this study.
[30] Celia Pearce, "Towards a Game Theory of Games," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 144.
[31] I avoid the term "genre" here as it is hotly debated among video game scholars; most video game genres were created by marketing directors simply based on the method of gameplay and not on the presentation. For example "role-playing games" could also be "adventure games" or "shoot 'em up games" simply because the player takes on a role. By defining games in terms of their presentation (quest, simulation, puzzle), I am addressing the way the medium is presenting narrative as opposed to presenting gameplay.
[32] First release: Will Wright, *SimCity* (California: Maxis, 1989); most recent release: The Sims Studios, *SimCity: Buildit* (California: Electronic Arts, 2014).

change the game environment; the player succeeds or fails in how life-like the game world becomes. Puzzle games are the most narrative because they have no real player agency; like a detective novel, there is only one correct ending which must be discovered through the necessary uncovering and piecing together of clues.[33]

Ludologist Espen Aarseth takes this division a bit further to argue against using the term *narrative* in games altogether in favour of calling them *quests*. For Aarseth, narrative can only be expressed in a video game during those moments when the player is fulfilling a quest; any action not in service of the quest goal is not inherently narrative (as when sending a space-ship across a galaxy or getting into a randomly spawned fire fight). The quests form a chain similarly to the way a narrative reads, with each quest feeding into another, harder quest until the final quest (and the end of the game) is reached, or there may be small, independent quests (such as in large-scale massive multiplayer online games) designed to provide experience points or new gear.[34] Some games may even have a combination of the two, as seen in Bethesda's open-world titles mentioned earlier, with game designers releasing downloadable independent quests created to keep the player interested enough in the game world to keep literally buying more time within it.

However, quest games do not support the idea that video games should be considered as simply remediated narratives. Where a narrative requires the reader to proceed through the chain of events in order to reach an end, players have the choice to complete a quest or not; as opposed to print narratives where, in order to read the entire text, the reader must complete all side-narratives or extra information presented sequentially. In some video games, this may

[33] Ryan, "Will New Media Produce New Narratives," 350-352.
[34] Aarseth, "Quest Games," 368-374.

lead to a not-so-pleasant experience, but that the choice of engaging with the quest is even an option is enough for many theorists to define the video game as *not* a narrative.

Rules or Fiction

On the surface, the argument between rules or fiction as the dominant feature in a video game may seem redundant to the one on narrative or game; rules are inherent to defining a game, and fiction is often synonymous with narrative. Yet, what this debate is more concerned with is not so much how a game should be studied but which feature makes the game a more enjoyable experience to players.

Many ludologists argue that rules supersede fiction simply because without rules, a game would cease to be a game. A good game, according to Juul, has rules which are clear and specific enough to be consistently implemented across many playthroughs, and are essentially what create the game world itself, as well as the game tree.[35] The rules in *Tetris*,[36] for example, define the space for the blocks to fall into and stipulate exactly how a player must negotiate the blocks in that space in order to progress to the next level.

Video games can be said to have two sets of rules: diegetic and extradiegetic. The diegetic rules are those created by the game designers to reflect the fictional world of the game and all the elements belonging within it (i.e. the order of events, the dialogue among characters, the responses to player actions) while the extradiegetic rules are those directly concerned with the player's choices in and outside the game (i.e. the onscreen display of player information such as health or navigational direction, process of levelling, importance of

[35] Defined as the range of possibilities available depending on a player's choices in game; Juul, *Half-Real*, 55-56.
[36] Alexey Pajitnov and Vladimir Pokhilko, *Tetris* (California: Spectrum HoloByte, 1984).

background music to the scene). Extradiegetic rules can also correspond to the goals of the game, particularly if the player has a choice over which goals to follow.[37]

Clara Fernández-Vara suggests these extradiegetic rules be divided further into two separate categories: goals and mechanics. The goals are what most people consider the formal rules of the game as they constitute what the player must accomplish in order to win (i.e. score X amount of points, kill the evil dragon, save the Earth).[38] Those more open-world video games with very few goals are referred to as *emergent* because of the importance of the player's choices in regards to how the game world develops, while those with a fairly linear trajectory of goals are referred to as *progressive* because the player is left with little choice as to whether they should keep to the predetermined chain of events in order to progress to an end.[39] In short, emergent games are concerned more with player choices while progressive games are concerned with achieving goals and sub-goals,[40] which is why progressive games are often considered narrative games because most goals must follow a sequence of achievement in order to progress to the next goal. These extradiegetic goals could be viewed as more essential than the game's fiction in determining what *kind* of game will be played and the complexity of the mechanics used by the player.

Mechanics are the *verbs* of the game; the rules which constitute the method of gameplay needed in order to reach said goals (i.e. press B to attack, hide when the guards appear, keep health above 0). In some cases, the goals determine the mechanics; progressive games require more specific and limited mechanics to accomplish them while emergent games

[37] Clara Fernández-Vara, *Introduction to Game Analysis* (London: Routledge, 2015), 125.
[38] Fernández-Vara, 151.
[39] Juul, *Half-Real*, 56-57.
[40] Fernández-Vara, 152.

will have a larger range of mechanics available depending on choices made by the player in game.[41] No matter where a game lies on the emergent-progressive spectrum, designers and programmers must create mechanics for both the "cardinality of the gameplay" (regarding the player's movement) and the "cardinality of the game world"[42] (regarding object movement). How these two cardinalities interact determines the dynamics of the game, or "the rules in action."[43] The more complex and open the mechanics of the game, the more dynamic it becomes in terms of player involvement. The rules, in terms of mechanics, could also be considered more important than fiction in terms of how the game is designed to allow for and respond to the player's actions in game.

If the rules are important with regards to why and how the game is played, where does fiction enter the conversation? Many theorists claim that no fictive elements exist in video games, only virtual ones,[44] and that even those images in video games which have a fictional counterpart perform very different functions, elicit different responses, and respond in kind differently. Tolkein's Smaug is not meant to be fought or killed; the reader simply accepts the descriptions as a signifier of a dragon. By contrast, the dragons in the massive multiplayer online (MMO) game *Everquest*[45] are not intended to be just signs; the player must interact with the dragons, often fighting and killing them, eliminating them from interacting in other events

[41] Fernández-Vara, 98; 152.
[42] Fernández-Vara, 102.
[43] Fernández-Vara, 137.
[44] Tavinor, "Fiction," 434.
[45] 989 Studios, *Everquest* (California: Sony Online Entertainment, 1999).

in the game.[46] Fictive images in games are not just images; they are collaborators in the overall game experience.

The confusion here lies in claiming virtual worlds cannot be fictional ones and vice versa; the two are not mutually exclusive.[47] Digital game worlds are just another, new form of fiction, one in which players are invited to participate physically rather than just cognitively. Without a fiction to direct the rules or mechanics, there would be no game world interesting enough to engage a player in continually returning to play.[48] To claim such a distinction would deny the fictional elements contained in nondigital games (such as the 'owning' of properties in *Monopoly*); the only difference is that the fictional elements of video game worlds are navigable.[49]

The biggest fallacy of this argument is in equating fiction and narrative. Fiction does not have to encompass an entire game world and its history; it is simply the "portrayal of imagined events."[50] A painting, for example, can be considered fiction without telling a whole story; it may just present a single scene with fictional people, objects, and actions. Using this definition, video games which may not have previously been thought to contain fictional elements, such as *Tetris*, actually do; the player is not literally rotating the blocks, which are not literally falling

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[46] Espen Aarseth, " Doors and Perception: Fiction vs. Simulation in Games" in *Proceedings, Digital Arts and Culture Conference 2005* (Copenhagen: ITU, 2005), accessed 24 March 2015, http://www.luisfilipeteixeira.com/fileManager/file/fiction_Aarseth_jan2006.pdf, 1.

[47] As long as the definition of *virtual* is "equivalent to" or "as good as"; there is some argument, presented in chapter V of this study, of what *virtual* means when discussing types of video games.

[48] Tavinor, "Fiction," 438.

[49] Fernández-Vara, 103.

[50] Tavinor, "Fiction," 437.

from the top of the video screen.[51] A suspension of disbelief must be assumed, as when viewing cinema or theatre, in order to engage successfully with a video game.

Fiction also comes with its own set of rules, in the form of genre, regarding how a story develops.[52] They function on the understanding that players will be familiar with the tropes and style of the story genre (i.e. noir, sci-fi, fantasy) they are playing. This requires players to tap into previously learned literacy skills regarding those genres.[53] Janet Murray refers to this as "scripting the interactor," where expected behaviours are transmitted to the player without explicitly stating what those behaviours are.[54]

The answer to the question of whether rules or fiction are more important to a player's experience of a game is both. Although it may not be possible to discuss fiction without discussing the rules which govern it,[55] the fictional elements, digital or otherwise, give purpose to the rules. The addition of fiction to a video game is just as important as having good rules in dictating an engaging player experience. A game may be a good game without a believable or interesting fiction, but the opposite is also true; *Tetris*, without the fictional elements of the blocks and music speed, would just be computer code on a screen.[56] Players would not feel encouraged to return to the game because they would not feel there is any sense of emergence or interest in playing said game, regardless of how clear and challenging the rules may be.

In the preface to *Half-Real*, Jesper Juul provides an example of an early video game he created using his first computer processor; he placed a series of *X*s in two parallel, winding

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[51] Tavinor, "Fiction," 434.
[52] Fernández-Vara, 128.
[53] Atkins, 8.
[54] As referenced in Fernández-Vara, 128.
[55] Juul, *Half-Real*, 123.
[56] Tavinor, "Fiction," 436.

circular lines and timed himself on how fast he could move an *O* through it.[57] What is interesting is that, when presenting the example, Juul did not discuss it in terms of *X*s and *O*s; he called the *O* a "race car," the track created from the *X*s a "race track," and the timed revolution through the track a "lap." Even though Juul was presenting this as an example of how the rules create the fiction, Juul superimposed a fiction in order to make sense of the rules.

The overlap of the rules and fictional world in this way is what creates the simulation.[58] In Juul's race track example, the fictional elements were limited because he only used *X*s and *O*s but had he gone a step further and created an actual background, substituted the *X*s for realistic barriers and the *O* for a realistic race car, then the game would have looked more like a time trial as seen on television. Had he gone even further and had the player participated through a first-person perspective from inside the car, then the game would have lost almost all abstraction and been a more faithful simulation of the experience of a driver during these time trials. The more fictional elements a game has in relation to the rules, then the more a player feels involved in the game, and, hopefully, the higher the player enjoyment in playing the game will be.

Media Ecology or Game Ecology

What the above sections are truly concerned with is whether video games should be studied through the lens of media ecology or game ecology. Where the media ecology argument is based on the concept that video games should be included because of their tendency to remediate other media forms, the game ecology position argues that video games

[57] Juul, *Half-Real*, vii-viii.
[58] Fernández-Vara, 129.

also remediate formal game structures, which impact communication and society in a different way than print and cinematic media.[59] Media ecology can be viewed as an open, macroscopic approach to locate games within established media studies based on their common "aesthetic, cultural, industrial, and technological practices,"[60] while game ecology is more closed, recognising the limitations of media ecology to explain the differentiating (and necessary) element of player agency in video games.[61]

This confusion can be seen through the definition of media ecology itself: "media ecology argues that the media we use form a kind of communicative landscape, setting, or environment within which our communication occurs."[62] Before understanding how video games participate in this ecology, though, we need to understand what is meant by the term *media*. Is it the sign or symbol used to transmit information (i.e. word or image); the physical method of transmission (i.e. digital technology); or the mass production of that transmission for the public (i.e. news outlets and performance art)? In truth, media applies to all three definitions.[63] Books use the written word (be it print or electronic), cinema uses the video screen (both in film and television), radio uses the airwaves (transmitted via radio channels), and video games use a combination of the three, while also providing a space for people of various cultures and nations to collaborate and work together.

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[59] Kevin Schut, "Media Ecology," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 329.
[60] Tom Apperley, "Digital Game Ecologies," in *Gaming Rhythms: Play and Counterplay from the Situated to the Global,* Theory on Demand 6 (Amsterdam: Institute of Network Cultures, 2010), 14.
[61] Apperley, 11.
[62] Schut, "Media Ecology," 328.
[63] Marie-Laure Ryan, "Transmedia Storytelling: Myth or Reality?" (paper presented at the annual meeting for the International Society for Intermedial Studies, University of Transylvania, Romania, 24-26 October 2013), accessed 24 November 2014, https://youtu.be/zqFsg8zqcLA, 9:20-12:00.

Video games, then, can be viewed as part of the "media supersystem,"[64] breathing life into older mediums while remediating aesthetics and themes from them. An example of this is in the theory of media convergence, or the communication of concepts across multiple media platforms. The most relevant form of this convergence is transmedia storytelling, or the systematic dispersing of important elements within a fictional world over different channels with the intent to create a unified experience.[65] Transmedia storytelling depends upon the fact that the various textual media used in the narrative process work autonomously of one another, moving beyond intertextuality and into a deeper understanding of the narrative world beyond just the one narrative.[66] In other words, the seminal text (be it a book, film, television programme, graphic novel, or video game) can be visualised as a slice of Swiss cheese, where the holes represent a piece of the narrative depicted in another, different media platform. Each work alludes to the others in reference to how they fit within the larger context. The keener users can seek out a fuller image of the fictional world where the casually interested can be satisfied just engaging with one or two.

This concept of media convergence and transmedia storytelling is not new to the digital age; adaptation and transfictionality has been utilised by storytellers throughout human history as new media have been discovered, developed and produced for public consumption: the Greeks and Christians did it by painting pottery and stained glass with visualisations of religious narratives; writers and dramatists have done it when writing sequels, 'expanded universes,' and modernisations (i.e. *Don Quixote*, *Lord of the Rings*, *West Side Story*); and more recently, news

[64] Apperley, 12.
[65] Marie-Laure Ryan, "Transmedia Storytelling: Myth or Reality?", 24:40-26:00.
[66] Henry Jenkins, "Game Theory as Narrative Architecture," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 124.

outlets do it when they provide snippets of 'breaking news' stories, forcing users to locate more information where they can.[67] Video games fit nicely within this convergence branch of media ecology as games are meant to be explored and traversed as spaces, similarly to Japanese scroll paintings depicting landscapes and seasons (a fact acknowledged as an influence of the 8-bit, 2D, side-scrolling platform, such as was used in *Super Mario Bros*[68], common to video games after 1984.[69]

Yet, the current method of transmedia storytelling still relies on media remediating the tropes and methods of an older one, placing the newer media in an inferior space; narrative video games and graphic novels are still often viewed as supplementary to print books and cinema because of their less established history. Ironically, the ideal form of transmedia storytelling reiterates those elements specific to games: there must be a compelling, explorable fictional world (separation of reality and play space); the user must have something to do besides read or watch (interactivity and agency); the world, as presented in each medium, should provide a visual reference to each other (visual context of play space); and, especially in the case of video games as the seminal text, each narrative should take full advantage of the functionalities and limitations of their particular medium.[70]

Media ecology, and the study of video games within it, is about both the technology used in presenting information and the meaning being communicated, with reference to how it is explored via various media.[71] However, media ecology fails to provide an adequate methodology for studying video games simply because "we do not have a comprehensive and

[67] Ryan, "Transmedia Storytelling: Myth or Reality?", 12:00-18:00.
[68] Shigeru Miyamoto, *Super Mario Bros* (Kyoto: Nintendo, 1985).
[69] Jenkins, "Game Theory as Narrative Architecture," 121-122.
[70] Ryan, "Transmedia Storytelling: Myth or Reality?" 55:50-58:30.
[71] Apperley, 11-14.

widely accepted theory of the importance of the medium as *material support for the form and content* of the message."[72] A new ecology must be developed so to understand the new form.

Digital game ecology does not ignore media ecology but simply reinterprets it by focusing on how video games are developed and the way in which they are consumed. Much of digital game ecology focuses on various cultural issues, such as "homogeneity of content, inequality of access, and contradiction between play and commodification,"[73] but as this section seeks only to contrast how video games are situated within game ecology as opposed to the more accepted media ecology, such issues are not considered. What is relevant is the way digital game ecology locates video games within the everyday life of the player; video games cross cultural boundaries and connect people across the globe in a way other media cannot.[74] One is not part of gaming culture just because one plays a game; a person must know about a game or console's future and limitations, be able to share that information with others, and critique what's already out there (including others' criticisms).[75] In short, a digital game ecology can provide an understanding of the way a game develops, communicates, and relates itself within the context of similar games.

As games have become more sophisticated and more mobile (due to handheld consoles and smart phones), they no longer need to be as cognitively taxing as they once were. These casual, mindless, mobile games have become more popular because they, like gaming culture, fit more readily within the everyday rhythms of a person's life. Where media ecology sought to classify video games by the message and method of communicating that message, digital game

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[72] Ryan, introduction to *Narrative across Media*, 22, emphasis mine.
[73] Apperley, 14.
[74] Apperley, 12-13.
[75] Frans Mäyrä, "Culture," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 294.

ecology can use rhythmanalysis in an effort to understand all types of video games—handheld or home-based, casual or immersive.[76]

Rhythmanalysis, particularly in the context of everyday life, helps to structure this understanding by focusing on the concepts of repetition and context as points of comparison rather than be concerned with how the information is being transmitted, as with media ecology.[77] One of the biggest issues within game ontology is the idea that technology develops too quickly for theorists to adequately compare games differing by more than a few years. The solution there was to focus on how realistic a game emulates an event (within the confines of its technology). Rhythmanalysis highlights the same effect but in reference to the player; the less effort or work a player exerts to participate in a game, the more it fits within the natural rhythms of everyday life, and the more everyday it becomes.[78]

Rhythmanalysis also brings to light the concept that games must resonate with a player on some personal level in order to be successful. This does not mean that a game must be visually or systematically realistic in order for players to be attracted to it; the overwhelming success of the abstract, sandbox game *Minecraft*[79] is but one example of how players can become invested with the most minimal of graphics and dynamics. By analysing the rhythms inherent in both the game and players' lives, theorists may be able to understand where on the spectrum of work and play games need to fall in order to be considered a successful game,

[76] Apperley, 18-19.
[77] Apperley, 20.
[78] Apperley, 21-22.
[79] Markus Persson, *Minecraft* (Stockholm: Mojang, 2011).

solidifying a canonical list of video games, which many consider necessary to establishing video games as a discipline all on their own.[80]

Although a more closed system in dealing only with video games, a digital game ecology allows for a better understanding as to why and how these games fit within the larger social and everyday contexts. However, media ecology should not be entirely discounted. If there is a move away from overgeneralisations and toward understanding the tendencies and limitations of each medium, video games may still have a place within media ecology. "A medium is not an inert machine all by itself,"[81] and video games are proof of that, in abundance. By understanding where video games stand within both ecologies, a clearer view of the future in game development can lead to a better understanding of the nature of play and being within everyday life.[82]

Ontology and Aesthetics

Part of the issue with studying video games is in defining whether the ontology of video games is more important that its aesthetics. Both sides analyse the physical elements of the video game, just from different perspectives; what this dichotomy is really concerned with is how each side presents their position in relation to each other. What is more important: analysing the game as a *system* or looking at the game as an *art form*?[83]

Ontology, in its most basic philosophical form, refers to an object's state of being; what it is and how it does or does not relate to other things like it. Game ontology functions under

[80] Mäyrä, 295.
[81] Schut, 327.
[82] Apperley, 14.
[83] Espen Aarseth, "Ontology," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 485-486.

these same principles, seeking to identify how games, and particularly video games, vary within their own discipline.[84] The problem with game ontology, however, is that it is multi-disciplinary, allowing for several different perspectives (i.e. existential ontology, teleological ontology, etc.). For this particular research study, game ontology will be studied from the formal branch, which is concerned with the "formal mapping of an empirical domain and the construction and use of such descriptions in implementing simulation—or control-software that accurately models behaviours, objects, and relationships within that domain."[85] Essentially, formal game ontology focuses on elements such as perspective, goals, colour, and other design features. What makes the formal perspective difficult and limiting, however, is that technology is always advancing; superb games of one era may not be technologically equivalent with a superb game from ten years prior or later.[86] What must be developed, then, is a definition of game ontology which does not place so much attention on the actual technology of a video game but on how it is used by the player.

The most efficient way to avoid focusing on technological aspects is to consider video games as a type of simulation; as opposed to representation, defined as consisting of only descriptions, simulation includes the physical and behavioural characteristics of a world, and the real time responses by the player to those characteristics.[87] Analysing video games as simulations allows theorists to consider all video game types within the game ontology instead of just those with clearly aesthetic aspirations (such as adventure games); *Tetris* may not have

[84] Aarseth, "Ontology," 484.
[85] *Ibid*, 484.
[86] *Ibid*, 486-487.
[87] Gonzalo Frasca, "Simulation Versus Narrative: Introduction to Ludology," in *The Video Game Theory Reader*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2003), 223-224.

the same aesthetic value as *Skyrim*[88], but they can be compared for how they simulate behaviours in response to player input.

The reason behind this theory is simple: video games are not meant to be passively observed. The enjoyment of video games comes from the player's ability to actively engage in order to understand it, to accept the challenge and attempt to master it. Literature and cinema only allow for an interpretive, metaphoric effort on the part of the viewer, while video games provide a rule-based system in which a phenomenon can be explored: physically, ideologically, relationally, and so on.[89] Take, as an example, the phenomenon of owning a dog. A representation about the dog can only give descriptions regarding what the dog looks like or how the dog acts in accordance with predetermined actions chosen by the creator. A simulation, such as the *Tamagotchi*[90] pets, can provide a player with the ability to experiment on how a dog would respond to different behaviours; leave the animal too long, and the pet becomes sad or even dies.[91] The player has the opportunity to learn more fully from the experience and use that learning to influence their actions in similar situations, whether in the simulation or out of it.

Although video games seem to have a similar ending structure to other narrative and representative media, video games provide the opportunity for players to more fully understand *why* a choice or event has succeeded or failed.[92] For example, in a simulation of a dog trying to find its way home, a player can experiment as to whether a dog's intelligence,

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[88] Bethesda Game Studios, *The Elder Scrolls V: Skyrim* (Maryland: Bethesda Softworks, 2011).
[89] Aarseth, "Genre Trouble," 52.
[90] Aki Maita, *Tamagotchi* (Tokyo: Bandai Co. Ltd., 1997).
[91] Gonsalo Frasca, "Videogames of the Oppressed: Critical Thinking, Education, Tolerance, and Other Trivial Issues," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 86-87.
[92] Frasca, "Simulation versus Narrative," 226-227.

non-repeatable coincidences, or a combination of the two contribute to a successful ending, rather than just accept that it does. Although many people would not willingly wonder what events would cause a dog's death, the fact that players can explore *how* to avoid that death makes the simulation a more personalised experience than other modes of representation. Endings in representational media are usually predictable, while endings in simulations never are.[93]

What video games truly provide are experiences more akin to real life. While all media capable of storytelling have the ability to generate memorable moments which resemble their real-life counterparts, simulations are the only mediums which function on the same primary level as real life. Mediums of representation such as narrative and art function on a secondary level, only able to present a revision or repeat of the same event.[94] A good analogy is to consider narrative as presenting a representation of the past (because everything is described as already happened), drama presenting one of the present (because it unfolds as the viewer watches), and simulation presenting one of the future, where events are unknown because action has not happened to initiate it.[95]

In contrast to this idea of a video game ontology is the idea that video games can be studied as a new form of art. Roger Ebert was the most adamant antagonist to this idea, claiming that video games have no masterpiece by which we can compare the artistic value of all other video games. Game ontologists have joined the argument by touting the simulation as superior to a video game's artistic elements. Yet, both arguments are structured under the

[93] Frasca, "Simulation versus Narrative," 227.
[94] Aarseth, "Genre Trouble," 50.
[95] Frasca, "Simulation versus Narrative," 233.

flawed concept that for something to be art, it must create a new art form that encompasses the entire catalogue. However, even in the more accepted art forms of painting, literature, and cinema, this is not true; *Citizen Kane*[96] did not create cinema, per se, but it definitely aspired to some higher aesthetic plane than *American Pie*[97].[98]

If video games are going to be considered art, then a definition of art must be established. Rather than attempt what has not been done over centuries of philosophy, listing the characteristics more often found in works of art (in no particular order) can avoid making contentious claims beyond the scope of this study. This cluster theory or disjunctive list of qualities includes: "aesthetic properties, the display of a high degree of skill or creativity, the application of criticism, emotional expressivity, formal complexity, imaginative experience, individual point of view or style, and the presentation of intellectually challenging or meaningful ideas."[99] A video game would be considered a work of art depending on how many of these qualities it contains or the significance of the few it does have.

Bethesda's *Skyrim*, as I discuss later in this study, has many of these artistic properties: it is representational in its aesthetics and experience, has evidence of a high level of skill and style (on the part of the game designers), presents a highly creative and complex experience, and makes an emotional connection with the player through meaningful narrative elements. *Space Invaders*[100], on the other hand, is not considered art because the few elements it does contain—skill and creativity—is not substantial enough to overcome the game's lack in other

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[96] *Citizen Kane,* directed by Orson Welles (New York City: Mercury Theatre Productions, 1942).
[97] *American Pie,* directed by Paul Weitz and Chris Weitz (California: Summit Entertainment, 1999).
[98] Grant Tavinor, "Art and Aesthetics," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 59-60.
[99] Tavinor, "Art and Aesthetics," 62.
[100] Tomohiro Nishikado, *Space Invaders* (Chicago: Midway, 1978).

areas. Just like painting, literature and cinema, though, not all mainstream video games need to contain all these elements to be consider 'art'; just the more exceptional ones.[101]

If we accept that video games are art, then what kind of art are they? The nature of interaction on the part of the player adds another element to the list of qualities video games need: appropriate player immersion. The success of a game rests on its ability to present representations which seem completely real and unsimulated, as in a virtual reality environment.[102] In this way, aesthetics are the result of a successful simulation, not in opposition to it.[103]

Video game players interact with these aesthetics through the representations of objects within and outside the game world; pressing buttons to create actions may be the literal input but in the game world, those buttons *represent* something else. The aesthetics, then, are the representation of elements in the game world which may elicit an emotional response. The more realistic the aesthetics, the closer to simulation the game becomes, but at its core, a video game is still a game made up of representations, and those representations are meant to create a sense of connection to the actions performed by the player.[104]

Where narrative and fiction come into the discussion is that theorists find it easier to discuss newer forms of representation in relation to other representative forms.[105] However,

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[101] Tavinor, "Art and Aesthetics," 62.
[102] Allison McMahan, "Immersion, Engagement, and Presence: A Method for Analysing 3-D Video games," in *The Video Game Theory Reader*, edited by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2003), 73.
[103] Robin Hunicke, Marc LeBlanc and Robert Zubek, "MDA: A Formal Approach to Game Design and Game Research," in *Proceedings of the AAAI Workshop on Challenges in Game AI* (San Jose, California: AAAI Press, 2004), accessed 24 March 2015, http://www.aaai.org/Papers/Workshops/2004/WS-04-04/WS04-04-001.pdf, 2.
[104] David Myers, "The Video Game Aesthetic: Play as Form," in *The Video Game Theory Reader 2*, ed. by Bernard Perron and Mark J.P. Wolf (London: Routledge, 2009), 52-53.
[105] Torben Grodal, "Stories for Eye, Ear, and Muscles: Video games, Media, and Embodied Experiences," in *The Video Game Theory Reader*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2003), 129.

the representations in video games still differ; where the aesthetic experiences of literature and cinema are contemplative and often solitary, the video game aesthetic derives from the opposite. Players are invited to configure while interpreting, to interact not only with the game world but with other players and characters who may inhabit the world, and to transform various representative objects and forms of the game into something more conceptual and valuable.[106] The aesthetics of a video game are developed from their very dynamic nature, not despite it.

Video game aesthetics can also be viewed as an aesthetic of repetition, particularly where games favour challenge over other pleasures, because the enjoyment comes from the repeated attempts to master a difficult obstacle. Where the visual and auditory aesthetics of literature or cinema encourage curiosity from their audience about how an event might play out, the player is able to develop personalised explorative and coping strategies for managing the event once it begins. Where a reader or viewer may be surprised by an unforeseen element, the player is often prepared for it through coping strategies. Suspense is developed in similar ways (through music and colouring), but where a reader or viewer would lose that suspense upon a second experience (because of the foreknowledge gained during a first reading or viewing), a player's suspense is actually increased because their coping and explorative strategies have become more defined in an attempt to limit the 'surprise' obstacle they know is coming. [107]

[106] Myers, "The Video Game Aesthetic," 45-46.
[107] Grodal, "Stories for Eye, Ear, and Muscles," 148.

Ludologists often consider games like this, which are "easy to learn and difficult to master,"[108] the most successful because the player is invited to return and try again and again until he gets it right, their emotions changing each time they reach a difficult obstacle (thus changing the emotional connection of each play through). Emotions in video games change, not only from player to player, but also from a single player's different experiences of the same game.[109] What was fear in one play session may become determination or dread in the second. How the game manipulates the player's emotions through its aesthetic elements determines how successful it is in making the player want to keep playing; regardless of how close to a real-life simulation it is, the aesthetics are key to making the game "fun."

Games or Players

When studying other artefacts of cultural importance, the answer to this question is easy: both elements are studied but as separate entities. A piece of artwork is studied for its use of paint and perspective by one theorist while its impact on contemporary society is taken up by another, often using the former theorist's findings to support their own. However, games studies theorists,[110] and particularly those who study *video* games, have a problem with this division in research: the design of a game cannot be separated from its effect on the player's choice of actions within the game world itself. If video games are to be viewed as a form of interactive art work, then they must allow space for the player to "make decisions that has an

[108] Juul, *Half-Real*, 56.
[109] Grodal, "Stories for Eye, Ear, and Muscles," 150.
[110] As opposed to 'game theorists,' who follow the mathematical study of real world conflicts.

impact on the artistic structure of the work as it is displayed."[111] The mechanics and dynamics of a game cannot be created, much less analysed, without discussing how the player configures them into a pleasure experience.

What makes the player so important when discussing the success of a video game? If we take the basic definition of a game to mean "a voluntary interactive activity, in which one or more players follow rules that constrain their behaviour, enacting an artificial conflict that ends in a quantifiable outcome,"[112] then the role of the player becomes obvious: a game is only a *game* when a player engages with it.[113] The player is represented in each of the distinguishing elements making up that definition: "voluntary" implies choice on the part of *the player*, "interactive activity" implies a nontrivial impact on the game's structure by *the player*, "constrain their behaviour" implies a sense of restriction which creates a higher level of challenge for *the player*, "conflict" implies a contest between two people or groups (*the players*), and "quantifiable outcome" implies that importance is created not by the game designers but by the participants, otherwise known as *the players*.[114] No part of a game's definition can be analysed without referencing the player.

Even the classification of current video games has evolved to reflect the four different types of player interaction: casual games, such as *Tetris* and most mobile games, can be played without much engagement; sports games are slightly less immersive in that the players keep returning to how the player plays the actual sport matches (regardless of whether a virtual

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[111] Tavinor, "Art and Aesthetics," 63.
[112] Eric Zimmerman, "Narrative, Interactivity, Play, and Games: Four Naughty Concepts in Need of Discipline," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 160.
[113] Fernández-Vara, 137.
[114] Zimmerman, "Narrative, Interactivity, Play, and Games," 160.

element is added to create a narrative) but without actually feeling the sensation of being in a sports arena; strategy games, such as *Skyrim* and most other narrative role-playing and action-adventure games, encompass a much higher level of immersion due to their narrative elements; and multiplayer games, such as *Call of Duty*,[115] *Battlefield*,[116] and *Halo*[117], require the most involvement and engagement because players must negotiate not only the game's rules but those of social interaction, as well.[118]

Game designers use these gameplay types to structure the formal, learning, and experiential objectives of a video game. The obvious implementation would be with the formal objectives because they dictate the expectations and limitations of a player's interactions with the game.[119] If a game is casual, the formal objectives will be slightly less taxing, usually consisting of moving an object from one side of the screen to another.[120] Sports games include those objectives of the sport being represented but also those of physics because they would be present if the game were played outside by real people.[121] Strategy games have the most formal objectives because not only is the player's behaviour limited, but so are the behaviours of the characters in the game, the game world itself, and the events which are spawned by the player's choices. Multiplayer games often have fewer formal objectives compared to strategy games but the ones regarding social interactions are often determined by what the theme of

[115] First in the series: Activision, *Call of Duty* (California: Activision, 2003).
[116] First in the series: Digital Illusions, *Battlefield 1942* (California: Electronic Arts, 2002).
[117] First in the series: Bungie, *Halo: Combat Evolved* (California: Microsoft Studios, 2001).
[118] Richard Rouse, "Game Design," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 87.
[119] Louis-Martin Guay, "Objectives," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 192.
[120] While such lightening of formal objectives could be seen to increase the temporal pressure and intensity of play, these games are still defined as 'casual' because they do not require extended periods of time in one sitting to accomplish a particular goal or series of goals.
[121] Juul, *Half-Real*, 58.

the game allows; an historic war game would have formal objectives defining how to avoid gun fire, while a fantasy themed game may have objectives concerning magic use and turn-based play.

The learning objectives help to accomplish the formal objectives and actually determine the type of gameplay required from the player; learning objectives usually are created within an OCR (objective-challenge-reward) loop. The more loops, the more immersed the player must become to complete the game. [122] A casual game has far less for the player to learn to manipulate in order to progress; *Tetris* only needs the player to learn how to rotate and slide each block to fit into the others under increasing time and speed constraints, while *Candy Crush* requires the player to learn only how to move candy pieces from one row or column to another with increasing difficulty added through barriers and the like. Sports games' objectives are based around manipulating the controller to enact whatever real-life movement needed to score points; martial arts games use button combinations of kick, punch, and duck to create special moves, while *Madden* and *FIFA* require players to negotiate the buttons quickly enough to choose receivers and attempt goals before their attempts are blocked. Strategy games have many more learning objectives besides simply learning which buttons perform which actions; many strategy games require the player to ride a horse or drive a car, effectively changing the button configurations for those actions, and some strategy games even require the player to learn how to subvert the basic rules of the game. A successful ending to *Portal*[123], for example, forces the player to unlearn the laws of physics and ignore the in-game authority, two tropes of video games which had gone somewhat un-challenged until then. Multiplayer games require

[122] Guay, "Objectives," 192-193.
[123] Valve, *Portal* (Washington: Value Corporation, 2007).

players learn not only the button configurations but also how to work with the team to compete against in-game or other online teams. Players of *World of Warcraft*[124] must learn how to utilise their characters' particular skills individually and as a complement to the rest of the group in order to successfully complete quests and raids.

Player interaction becomes most important in regards to the experiential objectives, or those which designers create in hopes of making the game enjoyable. Designers Hunicke, LeBlanc and Zubek have defined eight different types of enjoyment video games generally aspire to: sensation, or deriving from appealing to each sense; fantasy, or existing entirely within a make-believe world; narrative, or participating in a dramatic event; challenge, or overcoming an obstacle; fellowship, or working with other players to accomplish goals or overcome challenges; discovery, or exploring uncharted territories; expression, or discovering elements about one's self, often through in-game character development; and submission, or separating from the real world (as a pastime). Different gameplay types incorporate two or more aesthetic goals in order to make the experience engaging. A casual game like *Solitaire*, for example, contains elements of submission and challenge; a multiplayer online role-playing game like *World of Warcraft*, on the other hand, contains all of the aforementioned elements, with fantasy and fellowship as the most prominent goals. Knowing which goals take priority over others can guide game designers to develop mechanics which work to highlight those aesthetic goals dominating the video game experience.[125]

Even with those pleasures guiding game design, designers must develop careful balance of mechanics which are both easy and challenging. Make the player's input unstable, and the

[124] Blizzard Entertainment, *World of Warcraft* (California: Blizzard Entertainment, 2004).
[125] Hunicke, LeBlanc, and Zubek, "MDA," 2.

player becomes frustrated at the game's unreliability. Make the game's responses to the player too predictable or limited, and the player becomes frustrated at the lack of difficulty. Confine the player's actions too linearly, and the player becomes frustrated at the lack of interaction they have.[126] User actions must have a nontrivial impact on the game environment while keeping conventions and expectations consistent.[127] Regardless of what aesthetic elements are present in the game, players need to feel as if they have a real sense of control over the game environment.[128]

In fact, the ability of the player to manipulate the game's mechanics to create new, unplanned actions can arguably be what separates video games from other entertainment and artistic forms.[129] Whereas literature uses verbal and visual representations to express an idea, video games use a procedural one; regardless of whether a particular ideology was included in the game design, what a player does within the confines of the game will impress upon them a particular meaning. *The Sims* may have been designed with an anti-materialistic ideology in mind, but the player only thinks about that when they consider which actions will make their characters happy. *Pac-Man*[130] may have simply been created as a form of arcade entertainment, but the player may begin to think about efficient pattern creation and immediate (points) versus delayed (life) gratification.

The way players interpret and manipulate game structures has also helped advance the technological capabilities of the game system itself. Over the last twenty years, the more immersive video games have surpassed cinema in popularity since they took advantage of

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[126] *Ibid*, 194-195.
[127] McMahan, "Immersion, Engagement, and Presence," 68.
[128] As detailed in the section on ontology as simulation
[129] Fernández-Vara, 137.
[130] First in the series: Toru Iwatani, *Pac-Man* (Tokyo: Namco, 1980).

three-dimensional technology; the freedom of exploration and control over the environment afforded by these games have allowed players to feel more immersed in the experience, which keeps them returning as they would to a particularly engaging novel or television series.[131] Some theorists even consider this unique and individual reading of the video game as evidence of video games being a new remediated form of narrative (as opposed to remediated games),[132] and the basis for my current study in regards to how print narrative is changing to reflect a similar type of involvement on the part of the reader.

The most prominent theme among all five of these areas of debate is the involvement of the player, both on a literal level and an interpretative one. The way video games engage the player, make them feel like they are a part of something bigger than just a game, is the key to understanding how video games have grown to compete with literature and cinema as the dominant cultural phenomenon. Rather than discuss whether video games are remediated narratives or games, theorists should be focusing on the ways video games have created a more immersive experience and how that immersive experience can be (and, in the case of this study, has been) remediated by more traditional narrative texts. To that end, the next chapter of this study presents my methodology for analysing the experience of the reader/player across printed texts as well as video games: that of *immersion*.

[131] McMahan, "Immersion, Engagement, and Presence," 67.
[132] Atkins, 74.

Chapter II

From Debatable Object to Immersive Experience

> "Hotshot digital cinematography doesn't make a digital story immersive. What [does] is a world where no territory is off-limits, anything you see is fair game, and all your actions have consequences."—J.C. Hertz, *Joystick Nation*[1]

Even though no real answer has been reached as to whether video games are more *narrative* or *game*, what "the debate that took place"[2] has provided game studies is the realisation that the game as an *experience* seems more important to understanding video games than studying them as *objects*.[3] Why is it that players of abstract, non-narrative games such as *Tetris* have as enjoyable an experience in playing as those who play more complex and cinematic games such as *Call of Duty*? In order to understand this, researchers have begun

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[1] J.C. Hertz, *Joystick Nation: How Video Games Ate Our Quarters, Won Our Hearts and Rewired Our Minds* (London: Little, Brown and Company, 1997), 155, as quoted in Allison McMahan, "Immersion, Engagement, and Presence: A Method for Analysing 3-D Video Games," in *The Video Game Theory Reader*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2003), 67.

[2] As described by Gonzalo Frasca in his article "Ludologists love stories, too: notes from the debate that never took place," in Level Up: Digital Games Research Conference Proceedings, ed. by Marinka Copier and Joost Raessens, (Utrecht: DiGRA and University of Utrecht, 2003), accessed 24 March 2015, http://www.digra.org/digital-library/publications/ludologists-love-stories-too-notes-from-a-debate-that-never-took-place/.

[3] Yellowlees Douglas and Andrew Hargadon, "The Pleasure Principle: Immersion, Engagement, and Flow," in *Proceedings of the Eleventh ACM on Hypertext and Hypermedia* (San Antonio, Texas: Association for Computing Machinery, 2000), accessed 18 July 2015, doi:10.1145/336296.336354, 153.

delving into what creates this player experience, or in more layman terms, what makes these games "fun."

Problems with Interactivity, Presence, and Engagement

As referenced in the previous chapter, many games studies scholars determine a game's enjoyment based on the level of interactivity afforded to the player. The problem with the term *interactive*, though, is that it is too broad. If one uses a basic dictionary definition as a guide, the "allowing of a two way flow of information between a device and a user, responding to the user's input," [4] then any and all media are capable of interactivity, to a greater or lesser extent: the reader, viewer or player makes cognitive choices (the input) in order to negotiate meaning (the output), achieving a new experience with each approach (response to user input).[5] *Interactive* also implies a critical distance by the participant and self-reflection on the part of the medium;[6] although some video games do contain elements which highlight their "gameness," many games are designed as realistically as possible in order to allow players to lose themselves to a state of "deep play." This loss of self into a fictional space seems more indicative of the contentious, nineteenth-century tradition of *immersion*.[7]

Whilst immersion is also used to describe a deeper involvement with literary and cinematic media, the definition has been ever expanding to account for different genres and digital media such as video games. Immersion, though, like interactivity, becomes a slippery

[4] Eric Zimmerman, "Narrative, Interactivity, Play, and Games: Four Naughty Concepts in Need of Discipline," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 158.
[5] Espen Aarseth, *Cybertext*, 2.
[6] Marie-Laure Ryan, *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media* (London: Johns Hopkins Press, 2001), 5.
[7] Ryan, *Narrative as Virtual Reality*, 21.

term to define as the two most basic definitions—1) the depth of illusion enacted on a person's senses and cognition to make that person believe they have changed location (without literally physically moving), and 2) a cognitive experience of believing that one is inside another world (along with that world's history, characters, and events) which has been created by a separate device without feeling as if one is *using* said device[8]—are still too broad. Both definitions allow for all texts to be considered immersive to one extent or another: print literature which follows the tradition of the nineteenth century novel allows the reader access to the inner lives and thoughts of the characters (cognitive experience); music and dance evoke bodily and emotional responses through rhythmic sounds (physical experience); and conventional realist theatre and film provide a "fly on the wall" perspective within a darkened auditorium so as to enable the spectator to forget they are watching a constructed fiction (cognitive experience).[9]

However, to compare only these immersive elements in video games to other representative media loses what makes video games unique—literal and active player involvement.[10] Immersion is already a difficult concept to define as it is inherently subjective,[11] but it is even more difficult when considering video games because not only does one have to research players' motivations for playing the game and their emotions and cognitive processes during and surrounding the experience, a researcher must also take into consideration how the game designers have created those affective elements and how players have responded to

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[8] Daniel Ortqvist and Mats Liljedahl, "Immersion and Gameplay Experience: A Contingency Framework," *International Journal of Computer Games Technology* (2010), accessed 17 July 2015, doi:10.1155/2010/613931, 3.
[9] Phillip D. Deen "Interactivity, Inhabitation and Pragmatist Aesthetics," *Games Studies*: *The International Journal of Computer Game Research* 11, no. 2 (May 2011), accessed 12 May 2015, http://gamestudies.org/1102/articles/deen .
[10] Grodal, 129 & 139.
[11] Ryan, 17.

those elements *in particular*[12]; McMahan refers to this as nondiegetic immersion, that which is focused on the strategic and ludic elements of the video game. Yet, even with a more specific definition, immersion can be a number of different things, depending on which discipline a researcher hails from; as we will see, McMahan herself, a virtual reality scholar, confuses and equates *immersion* and *presence*, even while arguing their differences. So varied are the disciplines which have researched the term that as recently as 2010, most still have been undecided as to what immersion definitively is with regards to video games.[13]

The most advantageous method for defining immersion is to begin by identifying what immersion is *not*. Some troublesome terms arise throughout various articles and essays regarding immersion in video games; the two most common being *presence* and *engagement*. A systematic breakdown of how these two terms are equated to and yet differ from *immersion* is necessary to understanding the way video games achieve immersion differently from other media and non-media experiences.

Brown and Cairns define a state of total immersion as that of *presence*, or "being cut off from reality and a detachment to such an extent that the game [is] all that matters."[14] They claim that the only barriers to this state are the lack of empathy and atmosphere, overcome via an emotional connection to and response by the game in regards to sensory input and output.[15] Nacke and Lindley echo and extend this definition in calling presence "a state of mind (of being

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[12] Lennart Nacke and Craig A. Lindley, "Affective Ludology, Flow and Immersion in a First-Person Shooter: Measurement of Player Experience," *The Journal of the Canadian Game Studies Association* 3, No 1 (2009), accessed 17 July 2015, arXiv:1004.0248v1, 2.
[13] Ortqvist and Liljedahl, 1.
[14] Emily Brown and Paul Cairns, "A Grounded Investigation of Game Immersion," in *CHI'04 extended Abstracts on Human Factors in Computing Systems* (New York: Association for Computing Machinery, 2004), accessed 17 July 2015, doi: 10.1145/985921.986048, 1299.
[15] Brown and Cairns, 1300.

transferred to an often virtual location)."[16] *Transportation*, then, seems to be key to understanding of how presence and immersion correlate with one another; a player must feel as if they are physically in a simulated environment without it feeling simulated.[17]

McMahan argues that most texts accomplish presence in one of two ways: perceptual or psychological. In perceptual presence, all sensory input outside the virtual space is blocked, allowing only that which is provided within to access the participant. Examples of this could be seen in ancient landscape rooms or panoramic scenes, as well as cinema and theatre. Psychological presence is achieved by creating a world which mentally absorbs the participant, such as the riveting storylines and characterisations in print, cinema and theatre. Virtual reality, and by extension video games, combine the two, and even take psychological presence a step further by allowing the participant to act within the space and allowing the space to respond to said actions.[18] McMahan claims there are actually seven elements which must work in some combination in order to create a truly immersive experience via presence: a realistic world (in the context of events having logical consequences), completeness of fictional space, feeling of transportation into the fictional space, agency in committing and accomplishing significant actions, social interaction, social impact of significant actions, and response by participant to "the computer as an intelligent, social agent."[19]

However, *presence* and *immersion* are actually quite different concepts(although, researchers have generally accepted that a sense of presence is necessary in order to achieve immersion). *Presence* derives from *telepresence*, which is the feeling of "being there" via

[16] Nacke and Lindley, 5.
[17] McMahan, 72-73.
[18] McMahan, 77.
[19] McMahan, 73.

teleoperators (such as satellite or radio transmissions) while still existing in the current physical space.[20] As entertainment and computer technology have advanced, the term has evolved to be simply the psychological feeling of being in another space, as when a participant becomes particularly engrossed or emotionally connected to a narrative in print or film, imagining themselves experiencing the events being witnessed.[21]

In relation to digital virtual reality environments, the field in which McMahan operates, immersion is considered part of *presence* because the participant accomplishes it through similar channels as is used for telepresence.[22] Because of this distinction in hardware requirements, the type of presence experienced during a video game is different from that of traditional media: print and cinematic texts have *imaginative presence*, where the reader or viewer does not exist within the imagined space and is a witness without any sense of agency on the events as they play out. Video games, and other virtual texts like them, have *acknowledged presence*, where the player is recognised by the text system via a physical avatar or other input-response programme.[23]

McMahan herself even argues for a distinction between the two terms, as she equates presence with a *physical embodiment* of another space (without leaving the physical one) and immersion as *engagement* or *involvement* to the exclusion of all else.[24] This turn toward a

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[20] McMahan, 70-72.
[21] This is the biggest issue with the use of the term *immersion* and why some scholars (such as Gordan Calleja, mentioned later in this chapter) are seeking different terms with less value judgements attached to them. I use *immersion*, though, because of its ability to incorporate—in one term—multiple forms of involvement, as well as the important sense of presence discussed here.
[22] Jan-Noël Thon, "Immersion Revisited: On the Value of a Contested Concept," in *Extending Experiences: Structure, Analysis and Design of Computer Game Player Experience*, ed. by Olli Leino, Hanna Wirman, Amyris Fernandez (Rovaniemi, Finland: Lapland University Press, 2008), 31.
[23] Calleja, 21-25.
[24] McMahan, 70-72.

mental absorption, blocking out all other sensory and cognitive input, is indicative of another confusing term often used when defining immersion: *engagement*.

Although not used as interchangeably with immersion as presence often is, confusion with regards to *engagement* (or *absorption*, depending on the researcher) comes from using it to define the *depth* of immersion. Engagement, at its simplest, is the "directing of attention" to a task.[25] Brown and Cairns consider it the first step toward immersion, that which initially piques the interest of the player. In order to move beyond engagement, the player must overcome two barriers: access and investment. Players overcome access when they complete the opening or tutorial sessions of a game: learning the controls, becoming comfortable with the objectives, understanding their role within the game world itself. Overcoming investment happens afterward by learning how much time and effort is required to achieve objectives and progress through the game. What defines the difference between engagement and immersion, for Brown and Cairns, is that there is no emotional investment on the part of the player when they are simply engaged.[26]

The problem with Brown's and Cairns' three stages of engagement->engrossment->immersion is that they consider video games unique in this process. However, almost any everyday task could be said to follow this same trajectory, even the researching and writing of an essay: the researcher becomes *engaged* when they understand and define what is expected in the final product and how to go about identifying the resources necessary; they become *engrossed* when they begin locating and organising information in preparation for writing; and

[25] Laura Ermi and Frans Mäyrä, "Fundamental Components of the Gameplay Experience: Analysing Immersion," in *Worlds in Play: International Perspectives on Digital Games Research* 37 (New York: Peter Lang Publishing, 2005), 40.
[26] Brown and Cairns, 1298.

they become *immersed* when they actually begin writing the paper because they are emotionally invested in the final outcome.

How, then, are the immersive qualities of video games different? Like Brown and Cairns, Torben Grodal claims that immersion happens in a stage-by-stage process, referred to as the Perception-Emotion-Cognition-Motor Activation (PECMA) model. Where most mediums of representation can only ever achieve a cognitive immersion, interactive media are the only ones to reach the motor activation stage,[27] allowing an unprecedented "fusion between the roles of spectator and participant."[28] However, this, too, fails as a useful definition of *immersion* because Grodal seems to be equating it to *interactivity* by suggesting that one must interact with a text in order to become immersed within it, circling back to the problem of *interactivity* as a useful term.

One study has been able to define, on a surface level, how video games differ from other media without incorporating the falsity of equating *immersion* with *presence*, *engagement* or *interactivity*: Ermi and Mäyrä's 2005 qualitative study of Finnish game-playing children and their non-game-playing family members. They claim that the immersion of video games differs in that it is developed through multiple methods, working in tandem, and often changing depending on the game or the player themselves. Video games are unique because they contain all three of the immersive strategies—imaginative, sensory, and challenge-based—where other representative or interactive media contain, at most, one or two.[29] Since my study compares contemporary print ergodic texts with video games and pre-digital ergodic texts, Ermi

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[27] Carl Therrien, "Immersion," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 456.
[28] Torben Grodal, *Embodied Visions: Evolution, Emotion, Culture, and Film* (Oxford: Oxford Press, 2009), 187, as quoted in Therrien, 457.
[29] Ermi and Mäyrä, 19-21.

and Mäyrä's findings prove a most beneficial basis to developing my methodology. By defining each of the three types of immersion, as well as how video games achieve each, I will identify what makes video games unique to pre-digital ergodic texts and the extent to which contemporary print ergodic literature is appropriating those unique elements, as opposed to just incorporating pre-digital elements. Since video games have always been a visual medium, sensory immersion is the best place to begin.

Sensory Immersion

Marie-Laure Ryan aptly states that "in contemporary culture, moving pictures are the most immersive of all media"[30] because they immediately provide a channel for *sensory immersion*, otherwise known as *perceptual immersion*, which can be defined by the degree to which the senses are blocked from accepting input outside the immersive activity.[31] It is the most recognisable element of video games, with players and non-players alike able to comment upon such elements when surveyed, and also the one which has changed the most as technology has changed.

The computer has led to the manipulation of the image in order to allow participants to enter a space and interact with it as in real life. As Oliver Grau aptly points out, "illusion techniques, simulated stereophonic sound, tactile and haptic impressions, and thermoreceptive and even kinaesthetic sensations all combine to convey to the observer the illusion of being in a

[30] Marie-Laure Ryan, *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media* (London: Johns Hopkins Press, 2001), 120.
[31] Therrien, 451.

complex structured space of a natural world."[32] The less a participant is able to perceive as outside the virtual environment, the less simulated the environment seems, leading to the participant feeling as if all sensory input from the simulated space is natural or real.[33]

Whilst video games are not wholly encompassing of all senses, they create this sensory immersion through a number of methods, many of which have been remediated from other media, such as art and cinematography. The most commonly acknowledged remediated elements are those of the visual and auditory; like cinema, most video games[34] attempt to make their visuals and sounds as realistic as possible, even in what could be considered the most abstract of games. Worlds are designed to follow internal rules and physics consistently so that the participant does not become frustrated and quit playing.[35] In an effort to create a more sensory-immersive experience, however, video games have expanded upon these elements, particularly those of perspective, space and colour, making each one more unique to the video game than the medium from which it was remediated.

Humans have long desired total sensory immersion: landscape chambers, in which an entire room—floor to ceiling—was painted with a landscape image in order to feel physically transported to that place, have been in existence for centuries. As far back as the late Roman Republic, artists sought to include the observer by creating images that reached outside the barriers of the picture frame and into observer's space. The Great Frieze in the *Villa dei Misteri* at Pompeii, a 360-degree image of a Dionysian initiation ceremony, is depicted as a single unifying event in a fully enclosed room (except for a three metre doorway); although predating

[32] Oliver Grau, *Virtual Art: from Illusion to Immersion* (London: MIT Press, 2003), 15.
[33] Grau, 200.
[34] Abstract games (such as *Tetris* and *Minecraft)* are not included in this generalisation, as they do not aim to create a *realistic* game world for the player.
[35] See section on Rules vs Fiction in Chapter I.

the development of perspective, the Great Frieze provides the observer a sense of inclusion in the event through painted gestures which traverse the observer's space onto walls opposite.[36] After perspective was developed in the fifteenth-century, rooms like Peruzzi's *Sala delle Prospettive* (as seen in Figure 2.1 below), a single room painted as an open-air palisade looking out at Roman countryside from the top of Mount Olympus, enhanced the sensory-immersive effect by incorporating existing architectural elements in the room, such as door frames, fireplaces and roof beams, so that the illusion could stand unbroken.[37] Panoramic images would expand upon this immersive technique 250 years later, and technology such as the stereoscope and moving pictures would further engage the observer through realistic renderings of remediated space.[38]

Figure 2.1: Baldassare Peruzzi, Perspective view of the *Sala delle Prospettive*. Fresno. 1515-17. Villa Farnesina, Rome. **http://www.wga.hu/html/p/peruzzi/farnesi3.html**.

Like painted art, video games began with two-dimensional renderings of abstract images; *Pong*[39] consists of two squares and a circle representing tennis rackets and ball, respectively. As computer technology advanced, the abstraction of viewpoints lessened. In

[36] Grau, 25-31.
[37] Grau, 38-39.
[38] Grau, 140-173.
[39] Allan Alcorn, *Pong* (California: Atari, 1972).

1980, the Atari game *Battlezone*[40] was the first game to utilise the first-person viewpoint, drawn with vector graphics and a wireframe outline, and in 1982, the isometric perspective was incorporated, providing images of 3D objects with no vanishing.[41] The perspective which I argue to most fully create sensory immersion is the subjective and individual viewpoint meant to be based from the player themselves because the dual identity of player-character becomes further broken down through a lessening of the distance by which players feel their real time actions impact the characters' in-game actions. Released in 1981, *Castle Wolfenstein*[42] is considered the first game to utilise this perspective,[43] with *DOOM*[44] enhancing it by including a view of the player's hands and gun similarly to how we would see them every day.[45]

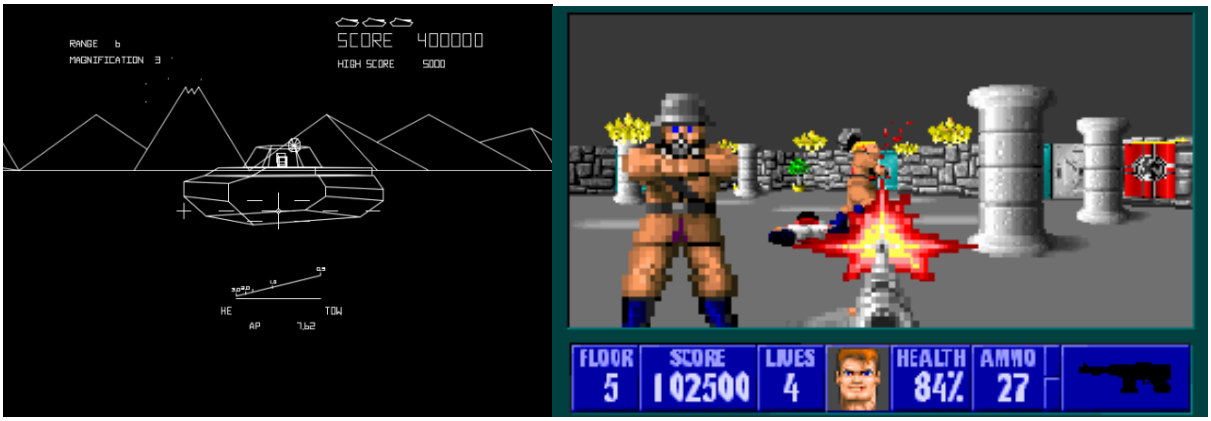

Figure 2.2: Screenshots of *Battlezone* (1980) and *Wolfenstein 3D* (1981)[46]

Narrative perspective becomes equally as important to video games as they become less abstract. As a filter through which the story is presented, the narrative perspective

[40] Atari, *Battlezone* (California: Atari, 1980). Arcade game.
[41] McMahan, 70.
[42] Muse Software, *Castle Wolfenstein* (Maryland: Muse Software, 1981).
[43] McMahan, 71.
[44] id Software, *DOOM* (Louisiana: id Software, 1993).
[45] John Sharp, "Perspective," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 112.
[46] *Battlezone* screenshot: US Army, "Bradley Trainer screenshot," accessed 1 November 2015, http://www.atariage.com/news/Bradley/ ; *Wolfenstein 3D* screenshot: iD Software, "Wolf3d pc" accessed 1 November 2015 via Wikipedia, https://en.wikipedia.org/wiki/File:Wolf3d_pc.png#/media/File:Wolf3d_pc.png.

provides the player with a sense of critical distance. In literature and cinema, as in video games, this filter is done in one of three main ways, each with varying levels of engagement: first-, third-person and omniscient points of view. Although each provide a different level of learning about the world presented, I hold that the first-person narrative is the one which creates the deepest sense of sensory immersion as the player feels their avatar is literally present in the events unfolding because of that lessening between real time actions and in game responses mentioned above. Whilst in the omniscient and third-person perspectives, the player is just a witness, seeing their actions unfold through a delay of sorts; in the first-person, the player feels as if they are *inside* the world of the text.[47] In this vein, video games have also begun utilising the epistolary narrative perspective (in which the player discovers and can read in-game books and other documents) more often as a method of providing backstory because it becomes part of the action rather than interrupting the gameplay like cinematic cut scenes do.[48]

Where perspective in video games becomes unique is how these perspectives—the vantage point, viewpoint, and narrative—work together to develop the player perspective. Because the player is paramount to defining the game experience, how the player sees themselves is instrumental in how they negotiate what they can do and how they feel about those actions. If a video game presents an isometric, "God"-like perspective, the player is responsible for every aspect of the game and can observe every part of the game space; sensory immersion is less likely because the player does not feel present within the game world as there is no singular character with whom to identify and work through. If a video game is presented from the first-person, three-dimensional perspective, sensory immersion is more

[47] Sharp, 109.
[48] Sharp, 111.

likely because the player must work with the special skills and history of the character being inhabited and can only discover and manipulate those elements of the game space available to *that* character. The player, like in the illusionary spaces of old, becomes a part of the game and, unlike those spaces, the game responds to the player.[49]

Detailed imaginary worlds in video games also increase the sensory immersion of the player. Vantage points are important to how these worlds are portrayed, but only as a means of depicting the world as expansive and navigable.[50] Ancient illusionary spaces also understood that sensory immersion require a sense of physical navigation within a space. The two examples mentioned above (the Great Frieze and *Sala delle Prospettive*) were both large rooms in which observers were encouraged to move, but two later spaces, the *Sacre Monte* of Varallo and Robert Barker's 1793 *Panorama Rotunda* in London, both actively incorporate that movement in order to further the sense of physical immersion. The *Sacre Monte* consists of forty-three chambers, incorporating perspective, faux terrain and strategic overhead lighting to create a snapshot of different times in Christ's life so that pilgrims could walk amongst the scenes and feel immersed in the passion as they ascended the mountain, creating a kinship with Christ and his sufferings.[51] The *Panorama Rotunda* excluded as much outside sensory input as possible through the use of raised platforms set at the points of the natural horizon presented by the completely enclosed painted landscapes, and the only light allowed was an invisible overhead light that simulated natural sunlight and created natural-looking shadows.[52] In both of these installations, spectators were encouraged to walk amongst the space and its faux terrain, which

[49] Sharp, 113-114.
[50] Calleja, 41-45.
[51] Grau, 41-45.
[52] Grau, 56-59.

allowed them a much more realistic experience of being physically transported than simply observing a flat representation from a distance.

In a visual narrative medium such as cinema,[53] expansive worlds are detailed by creating events, sounds and light sources that come from off-stage/screen, relaying to the viewer that what is seen is only a small part of the world presented.[54] Video games accomplish this task differently than cinema or literature, though. Whereas a reader must cognitively traverse a world as they read along or watch as actors do so in a film, a player in a video game must literally plot a route and actively direct their avatar to follow that route, leading to a fuller sense of physical presence and a deeper sense of sensory immersion. Game worlds also encourage the player to discover areas "off the map," those places which may not be part of the overall goal of the game but which contribute to the feeling of expansiveness and fullness in the virtual space.[55] Bethesda's *Fallout* series are notorious for forcing players to do just that, rewarding them with otherwise unobtainable quests or items that flesh out the world's narrative.[56] Knowing that there are places set outside of the immediate area and knowing that the player can often reach those places by actively moving towards them helps to increase sensory immersion through a combination of the imaginative and kinaesthetic elements present.

McMahan refers to three sensory details of video game environments which help to create sensory immersion in a game world: sureties, the mundane details a player expects in an

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[53] Again, I exclude theatre here only due to the limiting aspect of this study; a comparison between theatre and video games would require at least 80,000 words of its own.
[54] Mark J.P. Wolf, "Worlds," in *The Routledge Companion to Video Game Studies*, ed. by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2014), 126.
[55] Calleja, 74-75.
[56] An example of this takes place in Obsidian's *Fallout: New Vegas* (Maryland: Bethesda Softworks, 2010): if the player tries to head to New Vegas immediately after retrieving the quest to head there (rather than go through the smaller towns in a more roundabout way), they will always be bombarded by enemies at least three levels higher than they are, which results in death nearly every time.

environment like clouds in the sky or blades of grass in a field; shocks, those elements which highlight what is and is not accessible in the game world; and surprises, the logical but unpredictable environmental elements. Surprises can be further divided into three sub-types: attractors, the elements which draw the player's attention to a particular object or quest; connectors, the orientating devices used to help progress through the game (such as maps or quest indicators); and retainers, the "interesting things that make users linger and enjoy the [game] such as hot spots, learning areas, puzzles, gadgets and so on."[57] Although film and literature contain many of these elements in their own way, the elements in video games are designed to respond back to the player's input; in other words, the imaginary world of a game is alive to the player's intent and input, rather than static.

An often-overlooked element of sensory immersion is that of colour. Colour in games, as with film, has developed through and with graphics technology. In both mediums, colour must be considered in terms of how the effect is created when combined with specific lighting techniques. Unlike films, though, video games have always been based around the red-green-blue (RGB) spectrum because of their origins on early pixelated television screens. Even today, games are generally developed around a two or three-base colour palette to accommodate the large variety of monitors through which these games can be accessed. Rather than detract from sensory immersion, game designers have found ways to manipulate these limited colours to highlight the senses and direct player emotion.[58]

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[57] McMahan, 76.
[58] Simon Niedenthal, "Color," in *The Routledge Companion to Video Game Studies*, ed. Mark. J. P. Wolf and Bernard Perron (London: Routledge, 2014), 67-68.

Even in the earliest games, designers recognise the need for varying colour palettes to both keep the game interesting and continually engage the player. Games for the Atari and Sinclair ZX Spectrum in the 1970s and 1980s began the use of different colours to signify player affordances (such as edible fruit in *Pac Man*) or level changes (as in *Super Mario Bros*[59]). These splashes of bright colours—again, often blue, red or green—provide the player with a break in what could be monotonous gameplay. As graphics technology has advanced, colour contrasts have been introduced in order to create a more realistic and emotive environment.[60]

As with other visually representative media, colour is often used in video games to create a specific mood or atmosphere: educational or children's games have a more saturated palette; games focused on love or relationships as their core theme have a warmer palette; and scary or suspenseful games have cooler, darker palettes. Where video games differ here is in the cultural associations given to particular colours. In general, red implies a danger to the player's health, black implies death or depression, and yellows implies a useful element or reward;[61] but some games, through conditioning on the part of the game mechanics or narrative, can attribute other colours to those emotions instead. In the *Dead Space*[62] horror series, the entire environment is dark and as such, all harmful elements are coloured white or yellow, changing the player's association of those colours from purity and helpfulness to avoidance and danger. Game designers also use non-realistic elements to direct the player's attention; looking for a sparkling treasure chest increases the player's presence in the game

[59] I am referring specifically to the bright yellow of the first level in each board as contrasted with the dark grey of the dungeon levels.
[60] Niedenthal, 68-69.
[61] Niedenthal, 70-71.
[62] Visceral Games, *Dead Space* (California: Electronic Arts, 2008).

world even if such elements are not realistic.[63] Colour in video games, as its own device, has not been utilised much differently than in film or art, but in analysing how colour is used to manipulate the player, it has become important to deepening a player's sensory immersion through tapping into other imaginative and kinaesthetic elements.

Sensory immersion becomes important to my own research in that I argue pre-digital postmodern ergodic print texts contain very little sensory immersion with regards to visual elements related to perspective, space and colour, and as such, where contemporary print ergodic literature does contain these elements, I argue this is due to an influence by narrative video games. Although I discuss how all three types of texts incorporate some sensory details, I also argue that those details included in a pre-digital ergodic print text are in service of imaginative immersion rather than sensory due to a lack of visual elements.

Imaginative Immersion

Imaginative immersion is considered a cognitive process which transports a participant into a fictional space of events which often happens in narrative media. Originally focused on how 'real' the narrative world and events are portrayed, the definition has expanded to include "within an established world" to account for different genres that may present unnatural or realistic events (science-fiction, fantasy, etc) but can be equally as immersive.[64] The desire here is not so much how *real* the space feels, as with sensory immersion, but how *realistic* events and people are within the space described. These expansive worlds are often created with its effect on the narrative in mind, known as *narrative architecture*, which "evoke pre-existing

[63] Niedenthal, 68.
[64] Therrien, 454.

narrative association," "provide a staging ground on which narrative events are enacted," "embed narrative information within the mise-en-scene" and "provide resources for the emergent narrative,"[65] most often through including certain words, phrases, or names which will activate prior connections to the participant; if a text presents the word *farmhouse* or its description, the reader will inevitably remember other associations they have with the object and project those into the narrative. The more detail presented about the imaginary world, the more realistic and relatable the environment feels, and the more imaginatively immersed the participant becomes.

Where video games differ from older narrative media in this regard is in how such elements within the worlds are presented. As Marie-Laure Ryan states, "language can only [create] a gradual approach to [the] textual world,"[66] meaning that the reader of a print text is only provided one image at a time, which is only as detailed as the words or images provided; the participant has no opportunity to explore those parts of the world which are not immediately relevant. Where readers of print texts might feel a sense of presence through description and schematic associations of these expansive worlds, such a presence is simply imaginative; the participant is not really there and the elements of the narrative do not recognise them the way they do in video games.[67]

Imaginative immersion can also be defined as *mental simulation*, in which participants place themselves 'in another person's shoes' or, more specifically defined as:

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[65] Henry Jenkins, "Game Theory as Narrative Architecture," in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (London: MIT Press, 2004), 123.
[66] Ryan, *Narrative as Virtual Reality*, 122.
[67] Calleja, 29.

> placing oneself in a concrete imaginary situation, living its evolution moment by moment, trying to anticipate possible developments, experiencing the disappearance of possibilities that comes with the passing of time but remaining steadily focused on the hatching of the future.[68]

This fuller definition is important because it highlights all the relevant elements of imaginative immersion: "placing oneself in a concrete imaginary situation" relates to the textual/game world that participants imagine inhabiting; "living [the world's or situation's] evolution moment by moment" refers to participants witnessing events and their consequences within these fictional worlds; "trying to anticipate possible developments" is the anticipation of how concerns, as raised by the given narrative, will be resolved; "experiencing the disappearance of possibilities […] but remaining steadily focused on the hatching of the future" is the drive toward that closure, since suspense increases as possibilities decrease.[69]

Regardless of whether a narrative is a book, film or video game, imaginative immersion takes place when the participant feels compelled to finish it, due to emotional or cognitive investment.[70] Unlike sensory immersion, which happens almost immediately depending on how completely the viewed medium involves the senses, imaginative immersion is an engaged cognitive process, requiring the participant to consciously take on a textual identity (via the narrative perspective), willingly adapt to the conditions set within the text and forget their 'real' world responses to them, and, hopefully, return from the text with new ideas about themselves or their environment.[71] A more common term for this engaged cognitive process is *suspense*.

Marie-Laure Ryan details four types of suspense narratives use to increase imaginative immersion and a desire for closure: *what*-, *how/why*-, *who*-, and *metasuspense*. *What suspense*

[68] Ryan, *Narrative as Virtual Reality,* 113.
[69] Ryan, *Narrative as Virtual Reality,* 140-142.
[70] Thon, 37-38.
[71] Ryan, *Narrative as Virtual Reality,* 93.

is the most commonly used suspense as it creates anxiety in the participant as she lives out the narrative with no foreknowledge of its conclusion. Essentially, the participant is constantly asking the question "what will happen next?"[72] Video games are especially focused around *what suspense* since the events and consequences which play out are often chosen by the participant.

How/why suspense is more common with ending-first narratives in that the conclusion is known but not how or why that conclusion took place. Genre tropes often indirectly create *how/why suspense* even while directly attempting *what suspense* because of prior experience with similar storylines;[73] horror films are especially associated with this move in that certain character archetypes always seem to die first or last, so the suspense is not in *will* they die but in *what order* or *for what reason*. Video games utilise this type of suspense sometimes, particularly when following a certain genre style, but it is less often used than the more open-ended *what suspense* due to a decrease in player agency.

Who suspense is the core of detective-style narratives, the 'whodunits' of Arthur Conan Doyle or Agatha Christie. The dramatic tension of these narratives derives from a dual temporal narrative: as clues are discovered in the present, the narrative of past events leading to the crime arises.[74] Video game narratives do not incorporate this type of suspense as often as literature or film, as the predestined decisions leading to discovery dramatically limit player agency. The closest game-type would be detective games, in which players discover the clues and make judgements based upon them, but like completing a jigsaw puzzle, there is still

[72] Ryan, *Narrative as Virtual Reality,* 143-144.
[73] Ryan, *Narrative as Virtual Reality,* 144.
[74] Ryan, *Narrative as Virtual Reality,* 144-145.

usually only one "right" way to assemble the evidence in order to choose the correct suspect, which limits what a player can do; hence such games are not truly *games* but more *interactive fiction*.

Metasuspense is the 'connecting the dots' type of suspense, where the participant has no idea how the various elements of the narrative come together to make a cohesive whole. Instead of feeling immersed in the events as *causes and consequences*, the participant becomes immersed in what the events *mean* in the greater scheme of the work. This type of suspense is more interactive and challenge-based than imaginative because the participant is left outside the text looking in rather than involved in the world itself. All types of narrative can utilise *metasuspense*,[75] but I argue that ergodic texts do it more effectively than the more traditional linear ones.

Suspense, and the desire for its resolution, is not the only element which drives imaginative immersion; if it were, nobody would ever reread a novel, re-watch a film or replay a game. But people do, and often with the same intensity of suspense as before, even though the outcome is already known. Such anomalous, or repeated, suspense comes from the ability of the participant to pretend as if the narrative never took place, returning to a point at the beginning in which all options are open and a new ending is possible.

Video games also contain another method of creating imaginative immersion via suspense and affective involvement. Where more traditional texts create imagination immersion slowly as a "smooth passage from physical reality to the textual world," through

[75] Ryan, *Narrative as Virtual Reality,* 145.

various linguistic and cinematic cues, [76] video games create imaginative immersion through a combination of textual interpretations and the effects on the system created by the player; the narrative is not just created *for* the player but rather *through* them.[77]

Gordon Calleja refers to this player-generated narrative not as the emergent narrative, due to the term's varied disciplinary uses, but more specifically as the *alterbiography*, due to the player's subjective interpretations of the avatar's actions within and in response to the game environment.[78] These assumptions are often based on pre-existing cultural and societal associations, even if they are not built into the game system specifically. Calleja provides an example of this from the character creation tutorial in Bethesda's *Elder Scrolls IV: Oblivion*[79]:

> The chosen race of a character in Oblivion modifies her starting attributes and physical appearance, but the other characters in the game will not treat her any differently based on race alone. Despite this, if our character is of the Redguard race, we might choose to interpret a negative interaction with a Breton character as a sign of racial snobbery and react to it with anger. We might react this way because we are inclined to follow our imaginative input into the alterbiography or because our lack of knowledge about the game system prompts us to assume that this racial issue is built in when it is not. Whatever the case, our alterbiography can also be shaped by representations that are not supported by the simulation.[80]

The depth of such assumptions depends on the narrative perspective employed by the game. Where there is a removed, omniscient perspective, the alterbiography is limited to that of the miniatures being controlled; [81] rather than become part of the game, the player remains outside of it, thus limiting how deeply they become imaginatively immersed. They can still

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[76] Ryan, *Narrative as Virtual Reality,* 96.
[77] Calleja, 136.
[78] Calleja, 114-119.
[79] Bethesda Game Studios, *The Elder Scrolls IV: Oblivion* (Maryland: Bethesda Softworks, 2006).
[80] Calleja, 131.
[81] Calleja, 125.

make assumptions, but those assumptions may more than likely not hold the same impact on the player's actions due to removed sensory immersion of the player's omniscient perspective.

In those third-person games where the player controls and observes a character from the outside, the alterbiography develops through an entity. One could argue that this type of alterbiography is the closest to that of commonly considered narrative works in that the player never really becomes the character but experiences the narrative through that character. The difference here between those works and the alterbiography of an entity is that the player still has agency over the actions of the entity based on their assumptions of the character's thoughts instead of knowing them directly.[82] How the player interprets or desires relationships to progress determines how the player assumes the character would react to certain dialogues or events. In many contemporary video games, these assumptions (and the actions leading from them) may lead to the player creating or removing options allowed in the scripted narrative. Imaginative immersion deepens through this type of alterbiography creation because the player begins wondering how their choices might affect other, non-playable characters in the story, providing that the scripted narrative is emotionally captivating and suspenseful enough.[83]

Where imaginative immersion and the alterbiography often become completely entwined is through those first-person games in which the player experiences the game directly or, at least, as directly as a digitally remediated narrative can allow. Where the alterbiography of an entity is almost always thought of in terms of the character being controlled ("I think Commander Shepherd would probably want a relationship with Katherine"), the alterbiography

[82] Calleja, 125.
[83] Calleja, 132-133.

of the self develops through the player's own dispositions ("I will romance Katherine because I like her the most").[84] Affective involvement and suspense are at their highest in this form because the player's decisions directly affect and are affected by the player rather than the player's representative as with the alterbiographies of miniatures and entity.

The alterbiography is not an explicit development created within the game, and just as when reading a print text, it requires a great amount of configuration on the part of the player. If the scripted narrative fails to provide elements of suspense or affective involvement, then the alterbiography may never develop. When the scripted narrative and alterbiography do develop effectively, video games create a deeper sense of imaginative immersion and the player becomes free to become focused on challenge-based immersive elements.

In my own research study, imaginative immersion is most prominent as all the texts I analyse contain an imaginative narrative to some degree. Understanding the way suspense and the alterbiography is created in narrative video games helps to distinguish how contemporary print ergodic texts are creating imaginative immersion differently than postmodern print ergodic texts.

Challenge-based Immersion (or GameFlow)

Not surprisingly, the immersive element Ermi and Mäyrä cite as the most prevalent in video games, regardless of genre or complexity, is that of challenge.[85] Some even consider referring to this type of immersion as *ludic* because the challenges presented and actions taken by the participant are based on goals, constraints, and altered states as dictated by the game

[84] Calleja, 126.
[85] Ermi and Mäyrä, 25.

environment.[86] Because of the large investment players make in creating, implementing, and revising strategies for accomplishing in-game goals, many also consider this type of immersion the driving force behind addictive or "deep" play.[87] However, adopting such a term would negate those challenge-based elements of the game which are equally as engaging but not in service of the game's main objectives.

Attempting to understand how challenge works in video games has led to a development of several theories—attitude, parasocial, transportation, disposition, cognition—all of which are too narrow in focus for a structural analysis and comparison across narrative representational media. What many theorists have found is that Csikszentmihalyi's work on flow, which attempts to understand what makes an activity feel enjoyable and worthwhile, combines many of those other theories in describing the broader spectrum of challenge-based immersive elements in common past times, such as video games. Beginning with interviews and questionnaires of people who find pleasure in autotelic tasks such as surgery, rock climbing, and chess, Csikszentmihalyi recognises that flow experiences are those with a difficulty level matching a participant's skills set; tasks could not be too easy or too difficult to accomplish in order for the participant to reach a flow state. Or, as Csikszentmihalyi states: "when all a person's relevant skills are needed to cope with the challenges of a situation, that person's attention is completely absorbed by the activity."[88] Csikszentmihalyi also identifies a pattern amongst those tasks which seem to induce a flow state: the tasks have a very clear goal which could be completed; the participant has the ability to concentrate on that task to the exclusion

[86] Thon, 36-37.
[87] McMahan, 69.
[88] M. Csikszentmihalyi, *Flow. The Psychology of Optimal Experience* (New York, NY: Harper & Row, 1990): 53, as quoted in Thon, 37.

of all else; the task is able to provide immediate feedback during and after the process; the participant was allowed control over their actions in service of the task; the task encourages deep, effortless involvement which alters the sense of self during and after the task; and the participant feels an altered sense of time while in the flow state.[89] Essentially, flow experiences function very closely to games in that they are "goal-directed, bounded by rules, and require mental energy and appropriate skills."[90]

Reading is often considered one of the most enjoyed flow experiences because the act has no extrinsic motivation; readers enjoy prose works because the imaginative immersion required allows them to "lose themselves" in the book.[91] However, reading does not meet all the requirements of the flow experience as there is no real control on the part of the reader (in terms of how the narrative progresses) nor is there any direct, immediate feedback (beyond the trivial movement of turning a page). However, I argue that narrative video games do seem to meet all these requirements, and in their 2005 literature review of real-time strategy games and their professional game reviews, Sweetser and Wyeth present the concept of GameFlow as a method of explaining how those more popular and critically acclaimed games accomplish challenge-based immersion compared to the less successful ones.

Having clear goals is a precursor to being considered a game, so Sweetser and Wyeth do not really expand this concept too thoroughly, but the other elements of Csikszentmihalyi's theory—concentration, challenge, skills, control, feedback and immersion—are given much more depth in terms of how video games accomplish them as different from other activities.

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[89] Penelope Sweetser and Peta Wyeth, "GameFlow: A Model for Evaluating Player Enjoyment in Games," in *Computers in Entertainment (CIE)* 3, No. 3 (July 2005), accessed 20 October 2015, doi:10.1145/1077246.1077253, 2-3.

[90] Sweetser and Wyeth, 3.

[91] Sweetser and Wyeth, 3.

Concentration in video games is defined not just in terms of feeling present within a game world but also in terms of providing the right kind and number of stimuli to keep the player engaged. Tasks should not be too overwhelming, both in size and difficulty, nor should the player feel distracted from accomplishing such tasks (without reason relevant to the game experience).[92]

Challenge and skills relate to the difficulty of the tasks within the video game as they relate to the narrative and player skill set; players should be able to learn the controls easily, and the challenges should not be overly difficult or easy but should progress as the player progresses and also serve a purpose to the game. [93] This could be accomplished via in-game assistance such as lighted paths/treasures or colour-coded objects or could simply be presented textually through quest directives or dialogue.[94] Challenges could also be kinaesthetic or cognitive depending on whether the player must physically manipulate the controls in a particular way to defeat an enemy or cognitively choose the right dialogue option to avoid/cause conflict with non-playable characters.[95] Regardless of how the challenges are presented, the player must feel they have a purpose and can be completed. For example, the amount of time and effort a player devotes to the menial task of mining for minerals should directly impact the level and capabilities of weaponry and armour those minerals will be used to create; essentially, a player needs to feel they get out what they put in.

Control is the element which relates to the all-important concept of player agency. Although most video games could be said to be deterministic in that there is a scripted

[92] Sweetser and Wyeth, 4-6.
[93] Sweetser and Wyeth, 6-7.
[94] Therrien, 453.
[95] Calleja, 57-59.

narrative defining the game's ending, a player must be able to impact the finer details of how their particular game progresses differently from other players' games. As Sweetser and Wyeth state: "players should feel a sense of control over the actions that they take and the strategies that they use and that they are free to play the game the way that they want (not simply discovering actions and strategies planned by the game developers)."[96] Without this overarching control over the experience, a video game stops being a *game* and becomes an *interactive fiction* because the player loses the sense of physical presence and is simply observing various branches of a pre-determined narrative. TellTale's very popular game series *The Walking Dead* has been lauded as one of the more immersive interactive fictions because of the imaginative connection players make with the characters. I argue, however, that the experience could be said never to reach a flow state because the player has limited control within the game world; the player is never really present, only making choices on which branch of the narrative to explore.

Feedback is as equally important to a video game as control in that a player needs to feel their actions matter. Without that feedback, the control exerted by the player has no purpose, and the player may become frustrated or bored, which breaks the flow experience and may lead to the player no longer interacting with the game. Whereas other representative media also provide feedback through the reward of reaching the ending or discovering the underlying meaning of the text, the feedback of video games are rewards in themselves: kill a particularly difficult enemy and the player is often rewarded with advanced items and/or experience points, which lead to increasing a player's abilities, which lead to opening new

[96] Sweetser and Wyeth, 5.

options within game play; or complete a set of puzzles in the correct order and open a door in order to continue to the next stage of that particular quest. To continue the flow experience, a player must be provided feedback on failures as well: if the player did not slay the enemy, the video game needs to provide information which can help the player succeed upon another attempt; or if the puzzles were completed out of order, the game should provide feedback on which step the player mistook.[97] An appropriate level of feedback links back into the previous elements of challenge, skills and control in dictating whether the player reaches or stays within the flow state.

What Sweetser and Wyeth refer to as the immersive component of GameFlow is what I feel to be the combination of sensory and imaginative features with successful implementation of the other GameFlow elements: the player has an emotional attachment to the game as well as a loss of time and awareness of the self and the surroundings outside of the game.[98] Immersion in this sense is not so much an element of GameFlow but indicative of the player reaching the flow state because any one element in either the sensory, narrative or challenge stages could disrupt immersion and lead to the player feeling unfulfilled and possibly no longer playing the game.

To prove their theory of GameFlow, Sweetser and Wyeth review two real-time, isometric strategy games: one highly lauded, Blizzard's *Warcraft 3*,[99] and one critically panned, Sony's *Lords of EverQuest*[100]. *Warcraft 3*, the more critically acclaimed of the two games, was found to possess every aspect of the GameFlow spectrum while the more critically panned

[97] Sweetser and Wyeth, 9-10.
[98] Sweetser and Wyeth, 10.
[99] Blizzard Entertainment. *Warcraft 3* (California: Blizzard Entertainment, 2002).
[100] Rapid Eye Entertainment, *Lords of EverQuest* (California: Sony Online Entertainment, 2003).

Lords of EverQuest was found especially lacking in the most important elements of challenge and player controls. Sweetser and Wyeth speculate that the reason *Warcraft 3* is considered the "better" game is because of its adherence to the GameFlow model but also reason that other genres, such as the first-person role-playing genre I focus on in my research, may adhere to it more stringently.[101]

Other games studies scholars have attempted to quantify how video games create challenge-based immersive experiences, but much of their studies utilise questionnaires and interviews which are highly subjective, a recognised drawback to analysing an *experience* as opposed to an *object*.[102] I considered including actual player experiences in this study but as I am comparing the immersive experience of four different types of models, I would have had to ask my participants to not only play the same narrative video game but to also read Nabokov's *Pale Fire*, Danielewski's *House of Leaves* and Abrams' and Dorst's *S*. I would then have to coalesce the individual experiences of those reader-players and I could not guarantee they would all have the same level of engagement with each individual text that such a comparative study requires. For this reason, I chose to focus on my own scholarly interpretation.

This is what makes Sweetser's and Wyeth's GameFlow model so important: it lays out—in a structured method—how to approach analysing challenge-based immersion. I use this model to remark upon, in equal fashion, the way in which pre-digital ergodic texts and narrative video games create the flow experience, then use the differences to support my argument in favour of video games when analysing contemporary print ergodic texts.

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[101] Sweetser and Wyeth, 21-23.
[102] Ermi and Mäyrä, 25.

Social Immersion

With the advance of networking capabilities, another type of immersion, the social, has been proposed by various researchers. Most non-digital games have always had some sort of social element being as they are derived from a competition of some kind, and game consoles such as the Nintendo and Atari have usually been multiplayer in some way, so to assume video games also provide an element of social immersion is not surprising.[103] Social immersion in video games, though, does not just mean interacting with other human-controlled characters; it "concerns the engagement derived from awareness of and interaction with [all] other agents in a game environment, whether they are *human*- or *computer*-controlled."[104] Calleja details three potential stages of social immersion found within video games: competition/conflict, cohabitation and cooperation.[105] Conflict, in some form, is inherent in the definition of a game, whether against other people (as in sports or online games) or the object being manipulated (as in *Solitaire* or *Tetris*). [106] When other people or characters are present, the challenge of the game delves into social immersion through the necessity to hypothesise and manipulate strategies against those agents. Instead of dealing with a static problem with one right answer, the game becomes dynamic and unpredictable. The goal becomes about beating the other agent rather than just besting the self, and the feedback becomes not just about the player's actions in the game world but about how those actions have affected the strategies and progress of the other people or characters within that game world.

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[103] Calleja, 93.
[104] Calleja, 112, emphasis mine.
[105] Calleja, 101
[106] Zimmerman, 160.

Cohabitation as social immersion can be found in more traditional print and cinematic texts in that there are characters who have a 'life of their own' based on the creator's and reader's desires and interpretations, respectively. In a video game, though, the various agents respond to the player's presence overtly, and who or what controls the character determines the set of interpretations and skills the player must adopt. "Characters are like improved theatre actors set in a larger environment than a stage,"[107] and the player's input literally manipulates those characters rather than just figuratively.

Populating a game environment with a society of other characters impacts more than just challenge-based and imaginative immersion; it also contributes to the feeling of transportation within a system.[108] By having the game environment provide a potential audience for the player's actions, the imaginative world feels more real because the player must modify her actions in anticipation of others' interpretations.[109] The game environment also feels more like a society rather than a game world because the player feels a sense of shared experience with other characters, regardless of whether they are controlled by humans or programming.[110]

When the other characters are known to be controlled by humans, another stage of social immersion takes place: cooperation. These multi-player games across networks have become more like social circles within which players operate much like outside the game. Through the various modes of social interaction—group chat conversations, random meetings

[107] Calleja, 101.
[108] MacMahan, 73.
[109] Calleja, 95.
[110] MacMahan, 73.

with other human-controlled characters, the "background hum of the general chat"[111]—the player feels as if they have created a figurative network of potential allies and friends. Some players interviewed for various studies report that they still play the game, not so they can win or achieve some other end-goal, but to continue to contribute to and feel a part of their gaming society. Many developers of massive multi-player games such as *World of Warcraft* (2003) and *EVE Online* (2003) create game environments for this reason because they hope that these social ties will provide a lasting desire to return to the game as a community.[112]

My research study does not discuss social immersion in too much depth as a separate element to immersion for various reasons. Some narratives have had universes with a social aspect develop around and outside of them, but these social interactions are separate from the text itself and the actual experience of the narrative, thus eliminating the competition and cooperation elements from my study. To me, social immersion as defined here is less a separate concept and more one which helps to heighten the other three: having other entities in the game world heightens sensory immersion through increased transportation; allowing the player to interact with other characters, regardless of the agents controlling them, increases imaginative immersion through the player's need to interpret the interactions in the context of the narrative; and competition with other characters in the game increases challenge-based immersion through the player's necessity to analyse, plan and implement a strategy for overcoming that challenge. In this way, social immersion may factor into my analyses of the various texts, but as a separate immersive element, it provides no real benefit to my research.

[111] Calleja, 94.
[112] Calleja, 95-96.

Ermi and Mäyrä's research on the three immersive strategies provide a structure by which to analyse two texts with very different methods of presenting narrative. By discovering how video games approach these immersive strategies as different from postmodern print ergodic texts, I better analyse how contemporary print ergodic texts are remediating video games, as opposed to simply remediating postmodern print ergodic methods. Although much research on immersion in any type of narrative is subjective due to the focus on the participant's *experience* rather than the *objects* themselves, Ermi and Mäyrä's model, as well as the other definitions presented here which help to explain and expand their model, keep the research grounded in those elements of each text that are the most objective and measureable.

Chapter III

The Labyrinth of the Ergodic: Immersion in *Pale Fire*

In previous chapters, I have discussed the video game and the three-pronged concept of immersion (sensory, imaginative and challenge-driven) as a methodology for my research project: in chapter one, I analysed the various theories of how video games should be studied, arriving at the conclusion that the *experience* of playing a video game (rather than the game as *object*) is more relevant to my study. In chapter two, I took that revelation a step further in understanding what *kind* of experience the video game provides, exploring why interdisciplinary terms such as *interactivity* and *presence* detract from an accurate comparison of video games to literature. These conclusions have led me to determine that the best method to understand how the video game experience differs from the reading experience lies in the video game's immersive elements.

As I describe in the "Sensory Immersion" section of chapter two, one of the main differences between the experience of playing video games and the act of reading a print text is the inclusion of visual elements such as navigable space. This preference for exploring an "ever expanding environment"[1] is not uncommon to digital environments like video games; even users of the World Wide Web can find themselves in a 'blue-link spiral,' following a never-ending thread of information connected by hyperlinks and home pages.[2] This ability to 'get lost'

[1] Janet Murray, *Hamlet on the Holodeck* (Cambridge, Massachusetts: MIT Press, 1997), 129.
[2] *Ibid*.

in a digital space and follow a thread to exit echoes another navigable space from ancient myth: the labyrinth.

The classical myth of the labyrinth as we know it comes from the Cretan story of King Minos and the Minotaur. While King Minos was attacking Athens in retribution for the death of his son, Minos' wife, Pasiphae, fell madly in love with a bull and mated with it through the use of a cow statue created by the famed sculptor Daedalus. When Minos returned, Pasiphae had given birth to a human-bull hybrid, the Minotaur, and in order to hide her treachery (and his shame at being so cuckolded), Minos commanded Daedalus to construct an elaborate labyrinth from which the Minotaur could never escape; so perplexing was this maze that Daedalus and his son themselves became lost within it (or, in some versions, Minos purposely imprisoned him for helping Pasiphae) and had to construct wings in order to fly out and over the top rather than exit from the ground. Although Daedalus escapes successfully, his son Icarus flies too close to the sun, melts his wings, and falls to his death. Daedalus goes into exile in Italian Cumae, where he builds a temple to Apollo, immortalizing the Cretan labyrinth in a relief on the temple's door.[3]

What's interesting about the myth is not so much the narrative of love, sex, and death, but in the labyrinth as a physical entity. As shown through the escape of Daedalus, labyrinths or mazes (the two are synonymous just with different etymologies[4]) contain a double perspective:

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[3] Penelope Reed Doob, *The Idea of the Labyrinth: from Classical Antiquity to the Middle Ages* (London: Cornell University Press, 1990), 11-13.

[4] The Oxford English Dictionary defines *labyrinth* as "A structure consisting of a number of intercommunicating passages arranged in bewildering complexity, through which it is difficult or impossible to find one's way without guidance; a maze" and derives from the Latin *labyrinthus.* "labyrinth, n.". OED Online. March 2016. Oxford University Press. http://www.oed.com/view/Entry/104763?rskey=vvb9Wi&result=1 (accessed 13 April 2016); *maze* is defined as "A structure designed as a puzzle, consisting of a complicated network of winding and interconnecting paths or passages, only one of which is the correct route through; a labyrinth" and possibly derives

from the inside, the building is a confusing, dynamic, constricted space constantly thwarting the maze-walker at almost every turn, but from the outside, it is a single, static diagram with somewhat obvious exits and entrances. From the inside, the paths may seem linear, but if viewed from the outside, they are often cyclical and may contain a large amount of doubling back,[5] much like those lost in the blue-link spiral of hyperlinks mentioned above.

This connection between the mythical labyrinth and the digital environment led me to identify the category of literature most likely to have been remediated by video games: those postmodern print ergodic texts written prior to 1975, published before the beginnings of the mainstream video game industry. I analyse Vladimir Nabokov's 1962 text *Pale Fire* in this chapter not only because it stands as an example of a structurally ergodic print text but also because of its relevance as the known inspiration for the hypertext markup language, the computer language which creates those blue-link network connections, thus creating the digital labyrinth of the Internet. By identifying how the ergodicity and immersive qualities of *Pale Fire* exploit the labyrinth, as both metaphor and structural analogy, I will sketch a trajectory of remediation from print media to hypertext to video games and back.

Ergodic Texts and the Mythic Labyrinth

Considering the types of the texts I will be discussing throughout my thesis, what makes the labyrinth equally vital as a symbol is its ability to act as:

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from the Old English word for *amaze* to signify confusion and bewilderment. "maze, n.1". OED Online. March 2016. Oxford University Press. http://www.oed.com/view/Entry/115347?rskey=94dB6A&result=1 (accessed 13 April 2016).

[5] Reed Doob, 1.

> a model [used] simultaneously for artistic intention, the integrity of a text, and the experience of the reader, [and as such] it suggests some possible ways of dealing with the often conflicting claims of authorial intention versus reception in critical discourse.[6]

Since video games are often executed as a balanced combination of both the designer's scripted narrative and the player's emergent one, a comparison can be made between video games and this model of the labyrinth. Yet the labyrinth has long influenced narrative media in creating a delicate balance between authorial and reader control: although the *I Ching* (or *Book of Changes*), dating back as early as 1120 BCE, is a written text consisting of sixty-four hexagrams (which further consist of a main text and six smaller ones), readers control their entrance to the text through manipulating a series of coins or stalks in order to find the answer to a question asked of the text.[7]

Ludologist Espen Aarseth refers to these physically manipulative texts, which can be viewed in terms of both literary artefact and reader experience, as *ergodic* texts, or those that require nontrivial actions, beyond periodic or arbitrary page turning and eye movement, in order to produce meaning.[8] Unlike non-ergodic texts, where the reader acts more as a spectator rather than an interactor, ergodic texts allow for the reader to make mistakes, choose paths which lead to unsatisfied endings or events which do not meet their expectations. The text is no longer linear in the strictest sense of the word, as with non-ergodic texts; a user has multiple paths they can take to create a unique and personal narrative, and the choice as to which becomes theirs and theirs alone,[9] much like the mythic labyrinth.

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[6] Reed Doob, 9.
[7] Espen Aarseth, *Cybertext* (London: John Hopkins University Press, 1997), 9.
[8] Aarseth, 1.
[9] Aarseth*, Cybertext,* 5.

Many literary scholars criticise Aarseth's concept due to the common tendency to use *labyrinthine* to describe experimental literature. Although a powerful metaphor in illustrating the confusion inherent to nonlinear or out-of-order narratives, such misuse either depicts an impossibility (in that all narratives must be read sequentially from start/entrance to end/exit) or creates a "misrepresentation of the relationship between text and reader" [10] through invoking only one type of labyrinth.

The modern concept of a labyrinth is that it "must contain many points of choice between two or more paths with dead ends leading nowhere, and intend to confuse and frustrate [the walker within it]."[11] However, such a definition only describes one type of labyrinth: the *multicursal* labyrinth, which consists of multiple series of choices and is characterised by an episodic type of movement from one fork to the next. The multicursal labyrinth, like ergodic texts, places the focus on the individual maze-walker rather than the creator; because the path through the maze is created via the walker's own choices, the multicursal maze emphasises individual choice and responsibility for their own fate instead of the end-goal. In literature, the multicursal concept is evoked through images of crossroads, open landscapes, cave systems, as well as through narrative structures such as the hero's journey, due to the importance of these elements on decision making by a character or reader.[12]

Where Aarseth sees the misunderstanding from literary scholars, though, is in their unintended use of the other type of labyrinth: the *unicursal* one, which consists of a single path

[10] Aarseth*, Cybertext*, 3.
[11] Reed Doob, 3.
[12] Reed Doob, 46-48

from beginning to centre or end, with no dead ends or forking paths, designed by the creator explicitly to create a sense of desperation or hopelessness in the maze-walker through an uncertainty of when the goal may be reached. The movement of a unicursal maze, like reading a non-ergodic text, is steady, from start to finish.[13] "Only persistence can achieve the desired end"[14] and the experience is appreciated not for its complexity but for the determination on the part of the walker in order to finish. Analogies of the unicursal labyrinth can also be found in literature, such as that of the wandering or meandering road or quite often in religious parables where an initial choice (between Heaven/Hell or Good/Evil) is highlighted.[15]

While both types of labyrinths can be viewed as positive, negative or neutral experiences (depending on the moral purpose of the labyrinth itself), the two cause very different reactions in the maze-walker. The maze-walker of a unicursal labyrinth will often experience confusion and frustration not at themselves but at the creator of the labyrinth for making it unnecessarily confusing. The walker of the unicursal labyrinth, then, could be viewed as a hypothetical one, representative of any potential maze-walker who chooses to enter as each one will follow the exact same path.[16] When comparing to reading an experimental text, it could be argued that this is more what literary scholars are referring to when discussing texts like Borges "The Garden of Forking Paths," considered a seminal labyrinthine text, because the only confusion the reader experiences is in following the intended path set by the author. There is no space of agency on the part of the reader to choose their own physical or material path through the text, and as such, there is only one single path for the reader to follow—from the

[13] Reed Doob, 48-49.
[14] Reed Doob, 49.
[15] Reed Doob, 51.
[16] Reed Doob, 50.

first page to the last.[17] In this way, most subversive texts like those written by Borges or Calvino (among others) are still topologically unicursal.[18]

Ergodic texts are more like the multicursal labyrinth in that the confusion of reading these texts comes from the multiple choices of path, and the frustration created in reading is aimed more at the self for making the wrong decision and having to double back or continue on an unexpected or unwanted path. A multicursal path or text can become unicursal if one traces or narrates the series of choices a particular individual makes in reaching the end or centre, but the labyrinth itself is still considered multicursal because a new maze-walker or reader can enter it and make different choices, thus creating a different unicursal path upon completion, one specific to their individual experience.[19] Julio Cortazar's 1966 *Rayuela*[20] is considered topographically a multicursal novel, consisting as it does of 155 chapters which can be read in almost any order (although Cortazar does provide instructions for two suggested unicursal reading structures: chapters 1-55 sequentially or a back-and-forth order starting with chapter 73).[21]

A multicursal labyrinth, then, is a sort of game the reader plays with the text rather than the author playing with the reader. This is an apt description as both can be appreciated for their artistic complexity and require the participant to learn certain movements and rules. In fact, the connection to *game* possibly comes from a Virgil reference, in comparison at least, to a complex equestrian ballet dance, the *lusus Troiae* or Trojan Ride, as he describes in Book V of *The Aeneid*. The dance is theorised as more ancient than the Cretan myth, since pottery art

[17] Aarseth, *Cybertext*, 5.
[18] Aarseth, *Cybertext*,, 7.
[19] Reed Doob, 50-53.
[20] Translated into English as *Hopscotch*
[21] Aarseth, *Cybertext*, 7.

from the Etruscan period (seventh or sixth century BCE) depicts two horseman engaged in the dance with a labyrinthine diagram beneath them (as seen in Figure 3.1 below); further evidence of this connection exists in the inscription within the labyrinth of the word *truia*, which is possibly Etruscan for *Troy* or Latin for *arena*.[22] Such a connection is further strengthened by later events in the Cretan myth in which Theseus and his friends present a celebration dance narrating his successful escape before returning to Athens.

Fig. 5. Part of the decoration of an oinochoe from Tragliatella in Etruria, circa 600 BC (G.Q. Giglioli, L'Oinochoe di Tragliatella, *Studi Etruschi*, Vol. III, Tav. 26, Firenze 1929).

Figure 3.1: As cited in Reed Doob, 27.

Both the dance and labyrinth (as well as games) are described as "complex in pattern, difficult to follow, and interwoven,"[23] providing for the two levels of perspective mentioned earlier in the chapter: when outside either the dance or labyrinth, viewers are in awe of the artistry needed to execute both successfully; when inside either, the learned successfully execute the necessary movements from memory but the uneducated can quickly become confused and lost.[24]

[22] Reed Doob, 27.
[23] Reed Doob, 28.
[24] Reed Doob, 29.

This is not to say that experimental literature is not playful. Depending on the type of literature (e.g. Surrealist, Oulipian, New-French) the experimental author may very well play with readers' expectations or the structure and form of the text itself, which often emphasises the *production* of the text as well as its *reception*.[25] Andre Breton plays with form through the very novel-ness of his "anti-novel" *Nadja*; although the narrator makes constant remarks about the subjectivity of his narrative, he also constantly narrates events unseen by the reader or narrator himself, similarly to the nineteenth-century novels he is attempting to subvert.[26] George Perec plays with both the reader and literary form in his lipogrammatic Oulipian novel *La Disparition,*[27] in which he excludes the letter *e* from an entire 300-page novel, going so far as to revolve the entire plot around acknowledging the void the missing letter creates.[28] Italo Calvino's texts are often playful, and in particular *The Castle of Crossed Destinies*, where he plays with poetic and narrative form, telling a story via tarot cards presented by other characters; by presenting the cards both visually and through a narrator's interpretation of the cards' story, the reader is invited to make their own interpretation and criticise or agree with the one presented by the text's narrator.[29]

Although a film might seem less likely to break from the traditional linear narrative due to its technological medium, a similar playfulness can be found in so-called "puzzle films." These puzzle films play with narrative structure either through a reordering of the plot or alternate timelines. Christopher Nolan's *Memento* has been highly acclaimed for its dynamic plot, guiding users in the plot similarly to the main character, whose short-term memory lasts no longer than

[25] Warren Motte, *Playtexts: Ludics in Contemporary Literature* (London: University of Nebraska Press, 1995), 21-25.
[26] Motte, 31-33.
[27] Translated into English as *The Void*
[28] Motte, 111-116.
[29] Motte, 111-116.

two minutes. Other films are playful through providing alternate timelines or endings, like *Run Lola Run*, or presenting a 'twist' at the end, altering the context of the whole film preceding it (a well-known example being M. Night Shamalyan's *The Sixth Sense*). The 'solution' is never truly revealed in these "puzzle films," forcing viewers to return to the film multiple times to see if they can 'solve' it.[30]

But again, as playful as all these texts are, they still leave the maze-walker (the reader or spectator) with no agency in the creation process; the creator (be it author or director) has created a unicursal narrative path which they must follow without deviance. The problem, then, when attempting to define the difference of ergodic texts from the non-ergodic is not in the use of *labyrinth* or *game* to describe these experimental texts, but in the assumption that unicursal experimental texts like Borges or Calvino are in some way *similarly* labyrinthine to the more literal multicursal labyrinths of ergodic texts, like Cortazar or Vladimir Nabokov, as we will see later.

As mentioned earlier in this chapter, ergodic texts are not new concepts; besides the *I Ching*, ancient hieroglyphics and later visual narratives painted on room walls could also be considered ergodic, as they often required the viewer to physically move around the room in order to read cross-spatially as well as horizontally. Marc Saporta's 1962 *Composition, No. 1 Roman* is a seminal example of a postmodern print ergodic text[31] as it comes with unbound, loose pages, designed to be read coherently in any order; the instructions with the book tell the reader to shuffle the pages like a deck of cards, creating a new narrative with each subsequent

[30] Warren Buckland, "Introduction: Puzzle Plots," *Puzzle Films: Complex Storytelling in Contemporary Cinema*, ed. by Warren Buckland (Chichester: Wiley-Blackwell, 2009), 5-6.

[31] I refer to all ergodic texts pre-1975 as "postmodern print ergodic texts" to differentiate between those ergodic texts printed before the introduction of video games to the mainstream and the "contemporary print ergodic texts" published after the year 2000.

shuffle and reading. [32] Although ergodic in the physical sense, it is not particularly labyrinthine as the path is still presented sequentially from the first page to last (once one has begun reading) and most importantly, there are no explicit or multiple choices made by the reader *while* reading.

B.S. Johnson pushes this a step further than Saporta's idea in 1969 with *The Unfortunates*, another "book-in-a-box" of twenty-seven unbound chapters, with instructions specifying only those which are meant to be read as the first and last chapters.[33] Johnson's version is closer to a true ergodic text in that the reader is personally responsible for choosing the order of the chapters rather than leaving the narrative up to chance shuffling as in *Composition, No. 1*. [34]

Tabletop games such as *Dungeons and Dragons* could also be considered ergodic in that a game-master writes a story with a series of choices, the accompanying rules for those choices and the consequences of each choice. Although tabletop games come closest of these examples to Aarseth's explanation of an ergodic text, tabletop narratives are still at the whim of the game-master. There is no internal system forcing the game-master to follow their own rules, and as such, the game-master can easily change the effects of certain choices to fit their own scripted narrative. An ergodic text, in order to provide for a faithfully unique experience with

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[32] Aarseth, *Cybertext*, 10.

[33] Chris Bench. "Review of B.S. Johnson, *The Unfortunates*. New York: New Directions, 2009," *Chicago Review* 55 (Autumn 2010): 230–233.

[34] While Aarseth acknowledges the ergodic element of interactive theatre, I am avoiding a discussion of those elements here purely due to the vast scholarly research available on interactive theatre and my study's limits to analysing the effects of video games on print literature.

each reading, must follow its own constraints as well as provide choices for the reader or player.[35]

Arguably the most effective contemporary example of a multicursal, ergodic text is the video game because users must "produce, encounter, and respond to various sequences of action"[36] in order to win or proceed to a narrative end. Each sequence of action has an impact on the overall experience; depending on the type of game being played, a loss or victory or avoidance in an event could affect how further events are configured or interpreted. In Lionshead Studios' *Fable* series, mundane choices, such as who to romance or whether to adopt or have one's own children, effects the very township through how moral or evil those choices are.[37] Every choice a user makes in a video game may possibly determine an outcome in a later, unforeseen event, and every consequence is monitored by an inherent rule-system. The actions taken are considered nontrivial because the user has to exert a kinaesthetic action in the form of button manipulation to control their avatar, and the story is considered multicursal because every choice the user makes leads them on a different path toward the centre/end of the text; even the kind of ending the user obtains is part of the multicursal experience as the user often recognises that other choices may have led to other endings.

There are, though, some postmodern print ergodic texts which seem unicursal in narrative but are in fact multicursal in the reading experience. Vladimir Nabokov's 1962 novel *Pale Fire* is one such text, allowing for the reader to appreciate the text from the labyrinthine perspective of the "artistic intention," or the scripted imaginative narrative, "the integrity of a

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[35] Greg Costikyan, "Games, Storytelling, and Breaking the String," in *Second Person: Role-playing and Story in Games and Playable Media*, ed. Pat Harrigan and Noah Wardrip-Fruin (London: MIT Press, 2007), 9-10.
[36] Markuu Eskelinen and Ragnhild Tronstad, "Video Games and Configurative Performance," in *The Video Game Theory Reader*, edited by Mark J.P. Wolf and Bernard Perron (London: Routledge, 2003), 197.
[37] Lionshead Studios. *Fable III.* California: Microsoft Studios, 2010.

text" or the text as a literal, sensory object, "and the experience of the reader" or the challenge-driven choices the reader makes while engaged with the text.[38]

The Labyrinthine Immersion of Pale Fire

Although Nabokov has been heralded as a late modernist, *Pale Fire* is thought to encapsulate the very definition of the postmodern condition in that it "prompts us to disagree radically about what we think we have found […], that there is no such thing as [a universal] truth, only local versions."[39] Written as a critical commentary of the poem *Pale Fire*, the work becomes even more interesting once it becomes apparent that poem, poet, and commentator are all fictional, and what's more, the commentator's narrative itself surpasses the poem in both length and meaning, with little, if any, relevance to the poetic lines referenced. Where John Shade, the poet, laments upon death and memory in a Frostian style, the commentator of the poem, Dr Charles Kinbote, weaves an exciting adventure story of the escaped deposed king of Zembla, King Charles Xavier the Beloved. Neither the Foreword nor the Index offer any real help in providing context for the co-existence of these two narratives, and in some ways, create an even deeper chasm between poem and commentary. The reader, upon finishing the novel, is often more than likely left a bit confused but also entertained.

Like Cortazar's *Rayeula*, the structure of *Pale Fire* requires a less conventional style of reading. Mary McCarthy, in her 1962 review of the text, refers to it as "a Jack-in-the-box, a Faberge gem, a clockwork toy, a chess problem, an infernal machine, a trap to catch reviewers,

[38] The quoted passages alone are from Reed Doob, 9; Reed Doob did not discuss Nabokov or *Pale Fire*. I use her quotes here merely to make a connection between what Aarseth refers to as an ergodic text and Reed Doob's explanation of the labyrinth as a structural metaphor.

[39] Brian Boyd, *Nabokov's Pale Fire: The Magic of Artistic Discovery* (Princeton, New Jersey: Princeton University Press, 1999), 3.

a cat-and-mouse game, a do-it-yourself novel,"[40] and as such, *Pale Fire* has inspired no less than four key modes of interpretation: as a treatise against the superfluity and absurdity of critical commentaries in poetry; as an elaborate commentary on the unreliable narrator—where the "Shadean" critics think the poet is the writer of both texts while the "Kinboteans" assume the commentator is; and finally, as a literary representation of the concerted effort of discovery, a path which never reaches its solution but gets ever closer with each step.[41]

This final interpretation comes closest to my position of the novel's multicursal ergodicity, as well as its relevance in studying the placement of video games within the larger paradigm of narrative media because, like those games, *Pale Fire* consistently thwarts the reader's expectations while seemingly guiding them to new ones. Nabokov was a well-known admirer of spirals and chess problems, and his writing reflects those interests through their often confusing and roundabout methods of reaching a conclusion.[42] *Pale Fire* could be considered unique, even among Nabokov's other fictions, in that it is accessible by both unicursal readers and more in-depth, multicursal ones through its three possible paths of reading: the Shadean, Kinbotean, and Nabokovian.

The Shadean-type reader will approach the work linearly, similarly to how we approach most novels, reading from cover-to-cover and placing the poem as the focus of the experience. The Kinbotean-type will approach the work via Kinbote's clear intertextual references and line notes, such as a more academic-reader might do, placing his commentary and own narrative as the focus and missing out on the poem's narrative entirely. The Nabokovian-type reader is the

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[40] Mary McCarthy, "A Bolt from the Blue," *New Republic* 146, 23 (June 4, 1962): 21–27, as quoted in Motte, 81-82.
[41] Boyd, 3-5.
[42] Boyd, 10-11.

re-reader, the maze-walker/puzzle-solver, one who has already consumed the narrative in one of the other two ways but now seeks to follow their own path in uncovering missed or unfulfilled connections between the two texts. How involved the reader wishes to become with the text determines what kind of reader they choose to be.[43]

This ability to read and reread *Pale Fire* in different ways echoes that of the multicursal labyrinth. Where there is always a straightforward path to the centre or exit (i.e. the linear 'Shadean' method), there is often a more roundabout route, as well (i.e. the intertextual 'Kinbotean' method). With multiple paths come multiple opportunities to reach the same point via different routes, and only through repeating the maze, taking a different path each time, can one effectively see the entire labyrinth from the inside (i.e. the metafictional 'Nabokovian' method). Where most texts present an opportunity for the reader to reread should they choose to, *Pale Fire* is different in that it actively encourages the reader to embark on a Nabokovian reading through Kinbote's prompts to the reader, both directly and indirectly via his ineffectiveness as a commentator, to take their own initiative to fill in the blanks on their own. Like a first-time maze-walker of one of these elaborate multicursal labyrinths, I will approach analysing *Pale Fire* using each of these three reading methods in tandem with their immersive elements. By determining how extensively *Pale Fire* draws upon elements of imaginative, challenge-driven and sensory immersion, I hope to have a good pre-digital baseline upon which to compare virtual games and contemporary ergodic texts.

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[43] Simon Rowberry, "'His and My Reader': Rereading *Pale Fire* Hypertextually," *Nabokov Online Journal* 4 (2012): 1-2, accessed 23 May 2015, http://www.nabokovonline.com/uploads/2/3/7/7/23779748/24_rowberry_pdf.pdf.

Imaginative Immersion and the Unicursal Narratives: a Shadean or Kinbotean Reading

When considering how to approach a new text, the reader's first act is to begin at the beginning; with *Pale Fire*, that beginning is Kinbote's Foreword. It starts predictably enough in describing John Shade the poet, "Pale Fire" the poem and the method by which Shade wrote the poem. Kinbote also explains how he came to be associated with the Shades and subsequently became sole owner of the poem: Shade was murdered on Kinbote's doorstep, and in order to 'save' the poem from the more "commercial passions and academic intrigues"[44] of other critics, Kinbote had Shade's wife Sybil sign over ownership and publishing rights to him.

What the Foreword also does is provide a choice. If the reader wants to enjoy the poem as the focus of the text, as one would expect to do with a critical commentary, then they can embark on a Shadean-type reading, proceeding linearly from the Foreword to "Pale Fire" and applying Kinbote's commentary notes to their understanding of the poem after. Or, one could follow Kinbote's advice:

> …to consult [the notes] first and then study the poem with their help, rereading them of course as he goes through its text, and perhaps, having done with the poem, consulting them a third time so as to complete the picture. I find it wise in such cases as this to eliminate the bother of back-and-forth leafings by either cutting out and clipping together the pages with the text of the thing, or, even more simply, purchasing two copies of the same work which can then be placed in adjacent positions on a comfortable table.[45]

This suggestion of Kinbote's highlights his intention to both claim and overwhelm Shade's poetic choices in favour of his own in his suggestion to reread his commentary, creating a sort of labyrinth within a labyrinth as we are warned early on that the paths through both texts will become obfuscated and interwoven to the point that the reader should just butcher

[44] Vladmir Nabokov, *Pale Fire* (New York: G.M. Putnum & Sons, 1962; Reprint, London: Penguin, 1973), 13-14.
[45] Nabokov, 22-23.

one in favour of the other. Kinbote does not specify which of the two texts should be chopped up, but the egotism he shows in the Foreword (and which his commentary later provides ample evidence of) suggests he intends Shade's poem be the one to come under the knife.

Each method of reading creates its own imaginative immersion; the choice of which to take entirely depends on who the reader wants to be in that moment. A Shadean reader aims to make the poem their focus, leaving Kinbote to the peripherals in order to make their own interpretations and narrative associations. Such a method does not disappoint, as Shade's poem draws the reader into a world of reflections on death, life, and the connections between the two.

These two themes—the desire to transcend death in order to discover what happens beyond it and the 'combinational fate' of natural details and artifice in an attempt, as both human and artist, "to transcend ignorance, brutality, suffering, […] mortality"[46] –are present from the opening lines of the poem:

> I was the shadow of the waxwing slain
> By the false azure in the windowpane;
> I was the smudge of ashen fluff—and I
> Lived on, flew on, in the reflected sky.[47]

By invoking himself as the shadow rather than the waxwing, Shade becomes the double, the reflection, penetrating the illusory world of art and nature in order to find the "truth" of things.[48]

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[46] David Walker, "'The Viewer and the View': Chance and Choice in *Pale Fire*," *Studies in American Fiction* 4, no. 2 (Autumn 1976): 206, accessed 19 February 2016. http://dx.doi.org/10.1353/saf.1976.0012.
[47] Boyd, 27.
[48] Walker, 205.

Canto I [49]continues in this vein, describing Shade's childhood and the many losses he suffered: the death of his parents while in his infancy, his lonely 'ugly duckling' childhood and his "playful deaths" in the form of debilitating migraines. He comes to terms with these sorrows through a love of nature and art, a duality reappearing throughout the poem and his life as he attempts to come to terms with further disappointments and griefs.

The rest of the cantos continue this reflecting on understanding those universal themes of death and how we create harmony from chaos, with each canto providing a different view of Shade's individual crises. In Canto II, Shade begins by recognising and admitting to the reader that this poem and his life have both been ruminations on his "lifelong quest to explore the 'inadmissible abyss of death, a quest pursued with passion and play, stinging scepticism and quiet trust."[50] He begins with mundane details of him trimming his nails at the window, which cause him to remember those moments of grief he has suffered throughout his life: the decline and death of his surrogate mother, Aunt Maud; the shame and anguish concerning the unremarkable life of his only daughter Hazel; and the guilt and sadness toward her unexpected suicide. Although interspersing these sad moments with pleasant ones, such as the meeting and courtship of his wife Sybil, it is the mundane details of the Shades—reading reviews of Shade's poetry, watching a television programme ironically about the place where Hazel was conceived, having a cup of tea and playing chess—placed in tandem with Hazel's movements the night of

[49] As Kinbote describes in the Foreword, the poem is divided into four cantos, calling forth allusions to T.S. Eliot's "Four Quartets." This is not accidental, as this particular Eliot poem is referenced in Canto II through Hazel. In comparing the two poems, however, the similarities end with their structures; where Eliot almost deliberately avoids rhyming structures and focuses on the modern and transcendental, Nabokov (via Shade) uses exact rhymes (most of the time), combined with internal and slant ones, to show how art can help order the chaos of the universe (a major theme of the poem). Boyd, 195-206.
[50] Boyd, 28.

her death which create a sense of emotional involvement on the part of the reader, nonesuch more than the moment the Shades are notified of Hazel's death:

> People have thought she tried to cross the lake.
> At Lochan Neck where zesty skaters crossed
> From Exe to Wye on days of special frost.
> Others supposed she might have lost her way
> By turning left from Bridgeroad; and some say
> She took her poor young life. I know. You know.
> […]
> The lake lay in the mist, its ice half drowned.
> A blurry shape stepped off the reedy bank
> Into a crackling, gulping swamp, and sank.[51]

Rather than leave the reader simply observing the moment from a critical distance, this turn to the second person pulls the reader in as if they are hearing about Hazel's death at the same time the Shades are. Even in the final couplet, in which Shade imagines the moment of Hazel's drowning, the reader is left suspenseful, wondering whether Hazel actually did kill herself or if she had just not realised how much the ice had melted.

Canto III furthers this suspense in the reader through describing Shade's own fleeting moment of death and his attempts to understand the strangely comforting vision of "a tall white fountain"[52] he had during that moment. Doubleness and reflection appear again within the poem when Shade, haunted by this near-death vision and attempting to come to terms with his own understanding of it, finds an article about a Mrs. Z who claims to have also seen a tall white fountain right before awakening from her near-death experience. However, once Shade has located her and the writer of the article, he finds that this moment of "twin display"

[51] Nabokov, "Pale Fire," lines 489-501.
[52] Nabokov, "Pale Fire," line 709.

which he has travelled over 300 miles to discover was created by an inconsequential misprint;[53] the article should have said *mountain* instead of *fountain*.[54] It is this misprint which causes Shade to remark on the combinational delight of coincidences such as these and to detail the dominant theme of not only his poem but arguably the entire *Pale Fire* text:

> Just this: not text, but texture; not the dream
> But topsy-turvical coincidence,
> Not flimsy nonsense, but web of sense.
> Yes! It sufficed that I in life could find
> Some kind of link-and-bobolink, some kind
> Of correlated pattern in the game,
> Plexed artistry, and something of the same
> Pleasure in it as they who played it found
> […]
> I have returned convinced that I can grope
> My way to some—to some—'Yes, dear?' Faint hope.[55]

By coming to terms with Hazel's death as well as his own associations with it, the poem smoothly transitions to Canto IV. He is no longer reflecting at this stage of the poem, but living in the present moment, from describing the way in which he rises and shaves each morning to admiring the beauty and tenacity of his wife. As the poem ends, Shade confesses that only through his art has he been able to solve his individual crises of faith concerning death and the afterlife:

> I feel I understand
> Existence, or at least a minute part
> Of my existence, only through my art,
> In terms of combinational delight;
> […]
> I'm reasonably sure that we survive

[53] Here Nabokov (possibly inadvertently) makes a comment on the unreliability and materiality of print; by having his main writer-character becoming obsessed with finding someone based on an accidental image, the inadequacies of the printed word becomes manifest in Shade's actions. Only afterward does Shade find humour in the mistake.
[54] *Ibid*, lines 800-801.
[55] Nabokov, "Pale Fire," lines 808-835.

> And that my darling somewhere is alive,
> As I am reasonably sure that I
> Shall wake at six tomorrow, on July
> The twenty-second, nineteen fifty-nine,
> And that the day will probably be fine.[56]

And while Shade penned these lines to show how predictable yet interesting life can be, the ultimate and unfortunate irony for the reader lies in knowing Shade will never see the 22nd of July 1959; as Kinbote has already stated in the Foreword, Shade is murdered soon after, before he can finish the final line and bring the poem to a harmonic end.[57]

The critical commentary structure of the text[58] creates an imaginative expectation that Kinbote's writing will in some way mirror Shade's, either in pattern or theme, and to some degree it does. Like the poem, Kinbote wrote the commentary in three months and his narrative is also littered with similar images of those doubling images Shade uses in his poem, such as butterflies, windows, birds, and mirrors.[59] Kinbote even slightly satisfies his role as commentator by providing some of the 'real life' biographical information of the poem—the events concerning the suicide of Shade's daughter Hazel, Shade's childhood memories and long gone neighbours, and even Shade's death[60]—but, as becomes obvious very early on, Kinbote is

[56] Nabokov, "Pale Fire," lines 836-840.
[57] Boyd, 28-32.
[58] Many have also seen a connection to T.S. Eliot's *The Wasteland* in the use of line-by-line commentary, albeit presented in *Pale Fire* as a separate section of the text rather than in-laid as footnotes like *The Wasteland*. Boyd (among others) argues that this is not accidental. The rhyming schemes and word pairings throughout "Pale Fire" the poem echo the unease and depth of Eliot while arguing against his distancing of poetry from personal experience. Much of the lines which seem to deliberately echo Eliot's style in *The Wasteland* also seem to come from the entitled "A Game of Chess," highlighting again the playful, game-like nature of the "Pale Fire" poem and book alike. Boyd, 195-206.
[59] Walker, 204-208.
[60] Ward Corn, 84.

less concerned with explaining the poem and more concerned with telling the 'real' story: his own.[61]

What makes a Kinbotean reading different from a Shadean lies in the role of the reader; instead of being a poetic reader traversing the text linearly, Kinbotean readers take on the role of detective, jumping back-and-forth between Kinbote's notes and the poem in an attempt to determine Kinbote's real identity as well as the reason behind Shade's untimely death. However, as he does with most novel tropes, Nabokov inverts the traditional detective fiction archetypes through his confusion of who plays the villain, victim, and detective in the text.[62]

Pale Fire has a clear crime with a victim and villain, multiple in fact, but the structure of the novel confuses which crime is THE crime to solve and who the detective is supposed to be solving that crime. If Shade's death is the main crime, then Jack Gray/Jakob Gradus is obviously the villain, making Kinbote the detective who elucidates for the reader how Gray/Gradus came to mistakenly murder Shade. However, subtle clues in the Commentary and Index call into question Kinbote's own supposed identity, which in turn brings doubt on the motive for the crime: if Kinbote really is the exiled King Charles of Zembla, as he hints himself to be, then the crime becomes one of 'inaccurate shooting' as Gradus was aiming for Kinbote not Shade,[63] but if Kinbote actually is the crazy Russian professor Viktor Botkin, then the crime becomes one of mistaken identity as Jack Gray becomes simply an escaped convict who mistook Shade for Judge Goldsworth, the owner of Kinbote's temporary lodgings and Shade's neighbour.[64]

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[61] Boyd, 43.
[62] Helen Oakley, "Disturbing Design: Nabokov's Manipulation of the Detective Fiction Genre in *Pale Fire* and *Despair*," *The Journal of Popular Culture* 36, no. 3 (March 2003), accessed 19 February 2016, http://dx.doi.org/10.1111/1540-5931.00018, 480.
[63] Oakley, 480-483.
[64] Walker, 218-219.

But what if the crime to be investigated isn't Shade's death? We are told definitively from the start who killed Shade, how the murder was committed, and why it was Shade who died—all according to Kinbote, of course—and as such, there is no mystery there to solve. The real mystery, then, becomes Kinbote himself: who is he really? Why did he steal Shade's poem for himself? Why has he created this elaborate narrative of an exiled king of the imaginary Zembla and place himself as its chief protagonist? Is he telling the truth or is he actually insane?

Hints toward the answers to these questions are given as early as the Foreword, in which Kinbote fully admits to stealing Shade's poem off his dying body and acknowledges that he had to adopt a pseudonym in order to publish his commentary (and avoid 'capture' by the academics who seek to do the same). Only later in the Commentary, does the reader find out exactly why Kinbote stole the poem for his own: Kinbote needs to prove, to himself as well as the world, that Shade did more than just tolerate him and really was intending to write about Kinbote's stories of Zembla and its escaped deposed king (later determined to be Kinbote himself) by locating hints of those elements, however loosely, in the poem itself.[65]

Kinbote, in his desire to "make people calmly see—without having them immediately scream and hustle me"[66] paints himself as the victim of the text, not just as the exiled king of Zembla and forgotten friend of Shade, but also and more realistically as the isolated, crazy, disliked professor Botkin,[67] in which "the truth of the tragedy—a tragedy which I had been not

[65] Walker, 219.
[66] Nabokov, 234.
[67] Oakley, 485.

a 'chance witness' but the protagonist, and the main, if only potential, victim"[68] is that even Shade only tolerated Kinbote's company rather than privilege it as Kinbote did.

So, who is Kinbote really? In terms of the detective story, he is all three: the victim of societal exclusion, the villain by stealing Shade's poem, both literally and figuratively, and the detective in determining how Shade came to be the one murdered. But, unlike Sherlock Holmes or Miss Marple, Kinbote/Botkin is far too mad and amorous to keep the investigation controlled and rational, and where explanations in detective stories often come at the end of the narrative as a final reveal, we, as readers, are given them throughout and encouraged, if not by Kinbote then by Nabokov himself, to solve the mystery of who and what Nabokov's *Pale Fire* is really about.

Nabokov, in his breakdown of the traditional authority of the narrator, forces the *reader* to become the detective rather than solve the mystery alongside the real detective within the narrative.[69] This "active detective" role also allows the reader to avoid assimilating too quickly to the text's strangeness and juxtapositions as doing so may cause the reader to lose or miss connections, even when considering the text in retrospect.[70] Through both methods of reading—Shadean and Kinbotean—a reader can become imaginatively immersed as either a passive, poetic reader or an active detective one, but there is a third type of reader, the Nabokovian *re*reader, who assimilates whatever was learned in a first Shadean/Kinbotean

[68] Nabokov, 234.
[69] Oakley, 486-488.
[70] Haegart, 414.

reading and becomes immersed in the challenge of locating and arranging all the information into a cohesive whole.[71]

Challenge-driven Immersion through the Multicursal Path: a Nabokovian Reading

What both a Shadean and Kinbotean first reading show is that Kinbote, from the very beginning of the Foreword, should not be trusted as a reliable editor or commentator of poetry, not only because of his desire to overwrite his own narrative onto Shade's but also because of his inability to identify sources for many of Shade's natural and literary allusions.[72] These holes may cause a reader to become suspicious and feel compelled to reread the text in order to fill in as many of Kinbote's gaps as they can; this desire to focus less on the narrative and more on the "solving" of the structural puzzle that is *Pale Fire* is referred to as a Nabokovian reading since readers end up going outside of the text to identify those sources Kinbote either does not know or knows only minimally.[73]

As Brian Boyd states in his critical discussion of *Pale Fire*, part of the reason many critics argue that *Pale Fire* must be the work of entirely one author, regardless whether it be Shade or Kinbote, is that there are too many coincidences between and within the narrative events of both poem and commentary. Others argue that, if not meant to be written by only one author, then these coincidences are meant to be intentional on Kinbote's part in an attempt to recreate what he feels should be the actual theme of Shade's poem: the escape of King Charles the Beloved from Zembla. The echoes of words or phrases from Shade's poem in Kinbote's

[71] Rowberry, 1-2.
[72] Haegart, 405.
[73] Rowberry, 8-10.

commentary (such as the azure of Shade's dead eyes and the azure of the windowpane in line 2; the "pale fire of the incinerator" Shade uses to destroy early drafts of the poem and the title itself) make sense if viewed from the perspective of Kinbote's egotism and eagerness to create this hidden relationship between his narrative and Shade's.[74] But the coincidences are far deeper and more complex than such obvious doubles. As Nabokov is a well-known lover of patterns and games, a Nabokovian *re*reader might take those less subtle coincidences more as a Hitchcockian wink from the author himself,[75] leading even deeper and ever closer to that 'brink' of discovery which lies at the centre of labyrinth that is *Pale Fire*.

The first and arguably most striking example of this is Kinbote's note to lines 39-40: "Was close my eyes to reproduce the leaves,/or indoor scene, or trophies of the eaves."[76] Kinbote states that, on Shade's original note cards, the lines were originally written as "…and home would haste my thieves,/The sun with stolen ice, the moon with leaves,"[77] which Kinbote correctly identifies in relation to Shakespeare's *Timon of Athens* Act IV, Scene 3. When he translates them from his Zemblan version back into English, though, he misses the point entirely:

> The sun is a thief: she lures the sea
> and robs it. The moon is a thief:
> he steals his silvery light from the sun.
> The sea is a thief: it dissolves the moon.[78]

The lines, as Kinbote writes them, should immediately seem strange for Shakespeare. Although in verse, it has none of the poetic imagery or metered rhythm other plays of his have. A

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[74] Boyd, 117-118.
[75] Walker, 203.
[76] Nabokov, "Pale Fire," 28, lines 39-40.
[77] Nabokov, "Commentary," 68.
[78] *Ibid*.

Nabokovian reader would key in on this disconnect and would seek out the original text to determine for themselves the relevance to Shade's poem:

> The sun's a thief, and with his great attraction
> Robs the vast sea: the moon's an errant thief,
> And her pale fire she snatches from the sun:
> The sea's a thief, whose liquid surge resolves
> The moon into salt tears: the earth's a thief,
> That feeds and breeds by a composture stolen
> From general excrement: each thing's a thief[79]

Immediately, the phrase "pale fire" stands out as both a description of the moon and title of Shade's poem; Kinbote's translation, however, misses that connection entirely, and without this extra work on the part of the reader, the comedic irony of a later note, which more explicitly references William Shakespeare, is also lost.

Lines 961-962 of Shade's poem read "But this transparent thingum does require/Some moondrop title. Help me, Will! *Pale Fire*."[80] By having already identified how "pale fire" and Shakespeare connect, the Nabokovian reader can see just how inept Kinbote is, for all his arguments to the contrary, at editing a poetic work:

> Line 962: Help me, Will! *Pale Fire*.
> Paraphrased, this evidently means: Let me look in Shakespeare for something I might use for a title. And the find is 'pale fire.' But in which of the Bard's works did our poet cull it? My readers must make their own research. All I have with me is a tiny vest-pocket edition of *Timon of Athens*—in Zemblan! It certainly contains nothing that could be regarded as an equivalent of 'pale fire' (if it had, my luck would have been a statistical monster).[81]

Without the effort of seeking out the original lines in the previous note referencing Shakespeare (lines 39-40), a reader would not be able to see the comedy in the fact that, for all Kinbote's disbelief, he actually does possess the one text he needs to locate the answer to this

[79] William Shakespeare, *Timon of Athens,* act IV, scene 3, lines 2149-2155.
[80] Nabokov, "Pale Fire," 59, lines 961-962.
[81] Nabokov, "Commentary," 223.

note.[82] As Brian Boyd states, "[Nabokov] does find incuriosity funny—and sad—but he always rewards the curious."[83]

Nabokovian rereaders might realise that they've also seen a version of the phrase 'pale fire' in other places not explicitly referencing the title but in relation to similar themes of discovery. In Kinbote's note to line 347, he connects Shade's use of "an old barn" to an important event associated with Shade's daughter, Hazel. In the year before Hazel's death, two would-be lovers were scared out of this old barn by some frightening sounds and flashing lights, and although Shade attributed the event to local mischievous college students, Hazel decided to research the lights and sounds herself, leading to her spending a night in the barn, all alone.[84]

Kinbote, in one of the few times he researches information outside of his own knowledge or materials, locates Hazel's original notes from Shade's assistant Jane and transcribes them verbatim. Hazel's record details her findings of that night:

> a roundlet of *pale light*, the size of a small doily; flitted across the dark walls, the boarded windows, and the floor; changed its place; lingered here and there, dancing up and down; seemed to wait in teasing play for evadable pounce.[85]

The light came and went intermittently throughout the night, at which points Hazel would ask it questions, and it would answer by flitting and bouncing in particular patterns. When Hazel asked the light if it had a message to give, the light replied "pada ata lane pad not ogo old wart alan ther tale feur far rant lant tal told."[86]

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[82] Boyd, 41-43.
[83] Boyd, 43.
[84] Nabokov, "Commentary," 149-150.
[85] Nabokov, "Commentary," 151, emphasis mine.
[86] Nabokov, "Commentary," 151.

Kinbote attributes the randomness of the letters not to scepticism on his part or confusion on Hazel's but instead to a lisp or speech impediment the ghostly light must have retained in the afterlife. Although nobody else ever witnessed the light (the Shades as a family attempted to do so together but to no avail), Kinbote maintains that what Hazel saw must have been real and tries desperately to locate any significance of her suicide in the event (also to no avail).[87]

But the Nabokovian rereader would immediately recognise another phrase in the ghost's message: the 'atalanta' of the Vanessa atalanta earlier in the poem, which Shade uses as a metaphor for the beauty and playfulness of his wife Sybil. However, if a reader were lucky enough to be familiar with Nabokov's book of poems about his wife, entitled *Vera's Butterflies*, then they would know the butterfly comes even earlier than the poem, even before Kinbote or Shade have taken over as authors of the text: on the dedication page (labelled simply "To Vera") of his dedication copy of *Pale Fire*, Nabokov drew a Vanessa butterfly for his wife Vera, effectively also equating her beauty and playfulness to the Vanessa, and thus Sybil to Vera.

Even without that foreknowledge, the continued reappearance of butterflies, and that one in particular, would cause a reader to take note, especially since the Vanessa always appears in association with death, either thematically or literally. Its first appearance in the poem, in describing Sybil, actually comes between the deaths of Shade's Aunt Maude and Hazel, then much later, the Vanessa again appears circling Sybil as she gardens next to a shagbark tree. This second appearance would seem to be an inconsequential event except for Kinbote's note in the commentary:

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[87] Nabokov, "Commentary," 152-154.

> *One minute before his death*, as we were crossing from his demesne to mine and had begun working up between the junipers and ornamental shrubs, a Red Admirable (see note to line 270) came dizzily whirling around us like a colored flame. Once or twice before we had already noticed the same individual, at the same time, on that same spot […] One's eyes could not follow the rapid butterfly in the sunbeams as it flashed and vanished, and flashed again, with an almost frightening imitation of conscious play which now culminated in its setting upon my delighted friend's sleeve.[88]

Knowing Shade dies soon after this moment brings a heavier importance to the Vanessa than simply evoking Sybil's (or Vera's) beauty, and Kinbote's description of the butterfly as flashing and vanishing, in "frightening imitation of conscious play" would call forth Hazel's description of the 'pale light' in the barn, which also seemed to be in 'teasing play' with her.

A Nabokovian reader, recognising the echo of Hazel's ghostly light with the Vanessa seen before Shade's death, may begin to wonder if the two are associated in some way.[89] Brian Boyd argues that, because Kinbote describes the butterfly as always appearing in the same spot and landing on Shade's sleeve, almost as if attempting him to stop from crossing the path, a rereader could go back to the ghost's message to see if such a warning exists there, as well. And another look would seem to confirm that assumption: her father (pada), after seeing a Vanessa butterfly (ata lane) should not go (pad not ogo) to Goldworth's (old wart) after his "Pale Fire" (alan ther tale feur) of far-off lands is all told (far rant lant tal told), with the far-off lands most likely being that of Kinbote's Zembla. Boyd goes even further by deducing that the speech impediment Kinbote remarks on is meant to hint to the reader the possibility that the ghost is

[88] Nabokov, "Commentary," 227, emphasis mine.
[89] Boyd, 132-133.

Shade's own deceased Aunt Maude, who loved "scenes of doom" and suffered a stroke which left her unable to speak properly.[90]

Following this lead to the lines in Shade's poem where he describes Maude's stroke reveals a John Shade ruminating on similar themes as the barn event:

> What moment in the gradual decay
> Does resurrection choose? What year? What day?
> Who has the stopwatch? Who rewinds the tape?
> Are some less lucky, or do all escape?
> […]
> So why join in the vulgar laughter? Why
> Scorn a hereafter none can verify:
> The Turk's delights, the future lyres, the talks
> With Socrates and Proust in cypress walks,
> The seraph with his six flamingo wings,
> And Flemish hells with porcupines and thins?
> It isn't that we dream too wild a dream:
> The trouble is we do not make it seem
> Sufficiently unlikely; for the most
> We can think up is a domestic ghost.[91]

The connection of message, Hazel and ghost seems tenuous at best, except for a line located a bit further down the page: "*Life is a message scribbled in the dark*/Anonymous."[92] Although Shade intends this message to reflect Hazel's death (as he remembers seeing it the day of her death), the sentence could be argued to very obviously relate to Aunt Maude's 'pale light' warning of Shade's own life and death.

Without the challenge-driven immersion of navigating the confusing and twisty-turny labyrinth that is *Pale Fire*, many of the less subtle interconnections become lost; only through active searching outside the text and within it does the depth and beauty of its artistic integrity

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[90] Boyd, 110.
[91] Nabokov, "Pale Fire," 34-35, lines 209-230.
[92] Nabokov, "Pale Fire," 35, line 235.

as both a novel and treatise on the critical commentary come to the forefront. This active role the reader plays when interpreting new, difficult material like *Pale Fire* is what makes it a truly multicursal novel.[93]

All readers project their own stories onto new ones in order to make sense of them; Shade and Kinbote are just narrative versions of this action. Their misreadings parallel our own while attempting to make sense of *Pale Fire* and the seeming disconnection between its included texts. Even the use of 'pale fire,' as the title of both the entire work as well as Shade's poem, highlights that readers will 'steal' the text by shaping it into whatever form is most agreeable and yet, like the moon's attempts to reflect the sun, readers will still be woefully inadequate in replicating whatever the 'original' purpose of the text might have been,[94] proving that:

> on its most literal level, *Pale Fire* is the story of our own experiences as readers: a parody (as well as a paradigm) of the interpretative process we all undergo as we confront the essential strangeness of new and difficult texts and attempt to reconcile them into familiar patterns.[95]

Like the individual paths of the multicursal labyrinth, the interpretive version of *Pale Fire* the reader creates in their harmonising becomes the 'real' one, insofar as they have inflicted their own material and textual connections on the two texts. *Pale Fire* is, at its core, an unfinished novel, one which is "in its raw, unresolved, pregeneric state"[96] and requires effort on the part of the reader to complete—much like a video game.

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[93] Haegart, 415.
[94] Haegart, 421.
[95] Haegart, 414.
[96] Haegart, 409.

Sensory Immersion but only through Narrative Means

If defining sensory immersion in terms of how fully a user's senses are engaged with the text to the exclusion of everything else,[97] and specifically in terms of the text's use of perspective, space and colour, then *Pale Fire* fails to appeal to this type of immersion. Where perspective is concerned, *Pale Fire* incorporates only the narrative perspective; an argument could be made that it creates a vantage point for the reader in its recognition that there even *is* a hypothetical reader through the commentator's constant use of the second person pronoun. The text subverts this argument, however, by not pretending to be anything other than a book by Vladimir Nabokov: the cover of the text holds Nabokov's name proudly, with a title page repeating this information along with a dedication written by Nabokov himself. Only once the user has reached the table of contents page does the book begin to move into its fictional world, supposedly organised and published by Kinbote.

As a method of differentiating Shade's poetic style from Kinbote's prose one, there is some attempt at activating the senses through imagery. Sight is the first sense to be activated, highlighting the importance of gazing into the future or seeing into the mysteries of life and beyond. But, as Shade admits to the limitations of his sight, sound begins to take over the poem through the layered use of different rhyming patterns:

> Retake the falling snow: each drifting flake
> Shapeless and slow, unsteady and opaque,
> A dull dark white against the day's pale white
> And abstract larches in the neutral light.
> And then the gradual and dual blue
> As night unites the viewer and the view.[98]

[97] See pg. 54 in previous chapter.
[98] Nabokov, "Pale Fire," 27.

Instead of just rhyming the couplets with each other, this second stanza of the poem plays with sounds of assonance (flake/Shapeless/opaque), internal rhyme (Retake/flake; snow/slow) and half-rhymes (dark/larches) in leading to those final two lines, which include a triple internal rhyme (gradual/dual/blue) and multiple use of the *u* sound,[99] almost signifying a turn to the reader without saying the actual word *you*. But these images, like the text's use of colour (azure/white/green/red in particular) are all still regulated to the narrative and thus are less sensory and more imaginatively immersive.

Some effort has been made more recently by publishers to present the text in a more physically ergodic way with manipulative artefacts, such as recreating the poem on what are meant to be the poet's "original" drafted note cards mentioned throughout, complete with scratch-outs and changes supposedly made by Shade;[100] but such artefacts were not intended as part of the original reading process, and as such, can only be viewed from a post-digital sense of navigable space. The navigable space in the text is also considerably print-oriented in that the user cannot physically move to the places or experience the events as described by Shade and Kinbote, only imagine them. As such, in terms of sensory immersion, *Pale Fire* is like a two-dimensional labyrinth which can be appreciated for its complexity but is always reminding the reader that they are outside of it, looking in.

The interwoven and intertextual labyrinths of *Pale Fire* thus function like a narrative video game capitalising on a reader's curiosity to know more when the opportunity presents itself; some argue that *Pale Fire* is so dense and convoluted that a reader may never find their

[99] Boyd, 26.
[100] See a discussion of this (re)imagining of *Pale Fire* on page 190 of chapter 6

way to the centre or exit, forever lost in the endless back-and-forth references. However, as Brian Boyd points out:

> Nabokov knows that life also offers too many simultaneous prompts to our curiosity for us to be able to follow them […] but Nabokov [also] suggests that not to trust in our curiosity at all, not to follow any trail, is the surest way of missing out on life's limitless surprises.

Although the reader could choose to simply complete a Shadean method of reading, ignoring the web Kinbote attempts to create between his story and Shade's, there are still clues abounding throughout, hinting at Kinbote's history; they just don't come until much, much later. But a reader who seeks to understand every allusion and cross-reference, embarking on a Nabokovian rereading, multiple even, is willing to lose themselves in the text's twists and turns until they have found and mastered its centre—just like playing a video game.

It's not surprising to know that, in the late 1960s, Ted Nelson, the man credited with coining the term 'hypertext', originally sought permission to use *Pale Fire* for the prototype of his hypertext system due to its use vast narrative network of back-and-forth commentary notes.[101] It has since been digitised as a hypertext fiction but to less fanfare and popularity than as a print book. As I discuss in the next chapter, that may be more due to hypertext fiction's lack of immersive elements at the expense of its medium than to any lack on the part of *Pale Fire* as an ergodic text.

[101] Rowberry, 3.

Chapter IV

Hypertext Fictions and a Lack of Immersion

As I discuss in the previous chapter, Nabakov's *Pale Fire* is a prime pre-digital ergodic text to analyse not only because ergodic theorists consider it a seminal example of a unicursal narrative in a multicursal format, but also because of the text's importance to the history of hypertext fictions. This chapter builds upon that idea of *Pale Fire*-as-hypertext by analysing hypertext fictions as a sort of bridge between the print ergodic texts of the 1960s and the digital ergodic texts of today's narrative video games and a lens through which I can analyse where these types of video games are accomplishing immersion in ways seemingly more traditional digital fictions are not.

What is most relevant to this study with regards to hypertext fiction, though, is the dual debate around their potential future in the mainstream market: on the one hand, they are heralded as the epitome of postmodern and poststructural theory, breaking down hierarchies and classification structures through using open-ended narratives and innovative technological methods of reading through free-choice linking;[1] on the other, hypertext fictions are considered a failure of new-media as each fiction often "confuses and disrupts the reader's imaginative enjoyment" [2] through an overreliance on hyperlinking and lack of closure to their narratives.

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[1] Aarseth, *Cybertext* (London: John Hopkins University Press, 1997), 80.
[2] James Pope, "A Future for Hypertext Fiction." *Convergence: The International Journal of Research into New Media Technologies* 12, no. 4 (2006), http://dx.doi.org/10.1177/1354856506068368, accessed December 31, 2017, 448.

This chapter will follow that structure of defining hypertext fictions in terms of their relevance in literary academia then contrasting that with the problems holding hypertext fictions back from creating the total immersive reading experience it was thought to do.

While there are a variety of different definitions for hypertext fictions, I am basing my understanding and explanation in this chapter on Marie-Laure Ryan's definition (below) as it includes what could be considered a fuller picture of what hypertext is—both in its early inception and now:

> Text [that] is broken down into fragments ("lexias," for George Landow; "textons," for Espen Aarseth) and stored in a network whose nodes are connected by electronic links. By clicking on a link (usually a highlighted phrase), the reader causes the system to display the contents of a specific node. A fragment typically contains a number of different links, offering the reader a choice of directions to follow […] regarded as a nonlinear mode of reading.[3]

Her definition also highlights the three most important terms to understand hypertext fictions—the fragment, the link, and the network. Breaking down what each mean, both individually and as a collective, is important to understanding what a hypertext fiction is (as opposed to other digital-born forms of literature such as kinetic poetry or interactive art) and its relevance to this study, as well as its immersive (im)possibilities.

The fragments of a hypertext are all the chunks of text available in the hypertextual system. They may or may not be used to create the narrative, depending on the choices of the reader. While Ryan mentions both Landow's Barthesian term *lexia* and Aarseth's more ludic one, *texton*, it is Aarseth's term, and his delineations around it, which is necessary to this research study.

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[3] Marie-Laure Ryan, *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media* (Baltimore, MD: Johns Hopkins University Press, 2015), 187.

Aarseth argues that the general, broad definitions of the term *text* cause two problems when comparing narrative and storytelling across media: (a) texts are dependent—and inseparable—from the medium in which they are written and (b) texts are not the same thing as the information they transmit. In fact, even the information itself, understood as a string of signs, can be further delineated into two categories: the texton, or string of signs as presented in the text, and scripton, or the combinations of textons as 'read' by the reader. Using Queneau's *Cent Mille milliards de poemes* as an example, the textons would be the 140 individual strips of phrases/sentences which make up one of the scriptons or the 10^{10} possible combinations. A third category might also exist, that of Landow's lexia, the story created by the scriptons when read sequentially.[4]

Aarseth goes on to say that the accessibility and manipulation of the scriptons and textons are essentially what determines a work's interactivity and ergodicity (regardless of being print or digital), and, along with the use of links and network (as discussed below), can create a sense of immersion on at least one, if not multiple, levels.[5] He defines those seven methods of manipulating scriptons and textons as: *dynamics*, or the capability of the medium to allow for unplanned or unprogrammed scriptons and textons; *determinability*, or the predictability of the medium in terms of what textons might appear based on a reader' choice; *transiency*, or the addition of a temporal element triggering a change in scriptons and textons, adding a sense of time-dependent tension for the reader to make choices; *perspective*, or the impact of the reader's choice on the fictional world; *access*, or the availability of the medium to allow the reader to choose the next texton they see; *linking*, or the use of visual markers to

[4] Aarseth, *Cybertext*, 62.
[5] Aarseth, *Cybertext*, 63.

allow a reader to progress the text; and *user function*, or the number of paths available to the reader in terms of both reading the textons[6] as presented or adding their own to make the text more personal to that particular reader.[7] While Aarseth further delineates these seven areas in terms of what digital texts are capable of versus print texts, he uses these delineations to discuss how hypertext fictions do not provide the interactive experience previously thought possible, and so the specifics of each area will be addressed in further detail when discussing why hypertext fictions do not provide the full experience of sensory, imaginative and challenge-driven immersion.

What will be discussed here is the *link* in a hypertext fiction, as the link's function is often one of the main elements separating it from other digital-born texts such as kinetic poetry or interactive fiction. Aarseth identifies only three methods of linking employed by any interactive work: *explicit* links, or those readily available and necessary to move to the next fragment; *conditional* links, or those only available after certain conditions are met; and *no* links at all, such as in story generators and randomised text machines.[8] Hypertext fictions make most use of the explicit link, as it can provide a sense of agency to the reader in choosing their preferred reading path. These explicit links can: alter the narrative by presenting the outcome of a reader's choice (thus closing the path not chosen); allow the reader to refocus the narrative either on a different storyline, another character's perspective (if provided), or allow for an omniscient perspective not otherwise available; present extratextual information such as maps, scripts, or images which illuminate something happening in that particular fragment; or

[6] I will be using the previously mentioned term *fragment* from this point on to discuss narrative screens in hypertext fictions as that is a more commonly appropriated term for lexia or textons.
[7] Aarseth, *Cybertext*, 62-64.
[8] Aarseth, *Cybertext*, 63-64.

even just make reading easier through mechanical means, often by enlarging a text or minimising/closing no-longer relevant fragments. Most importantly, though, links in a hypertext fiction create connections between text fragments which may not be readily obvious. Presenting the reader with two text fragments simultaneously through a hyperlink forces the reader to sub/consciously look for a connection where there may not have been one obvious so to derive the fragment's importance to the overall narrative.[9]

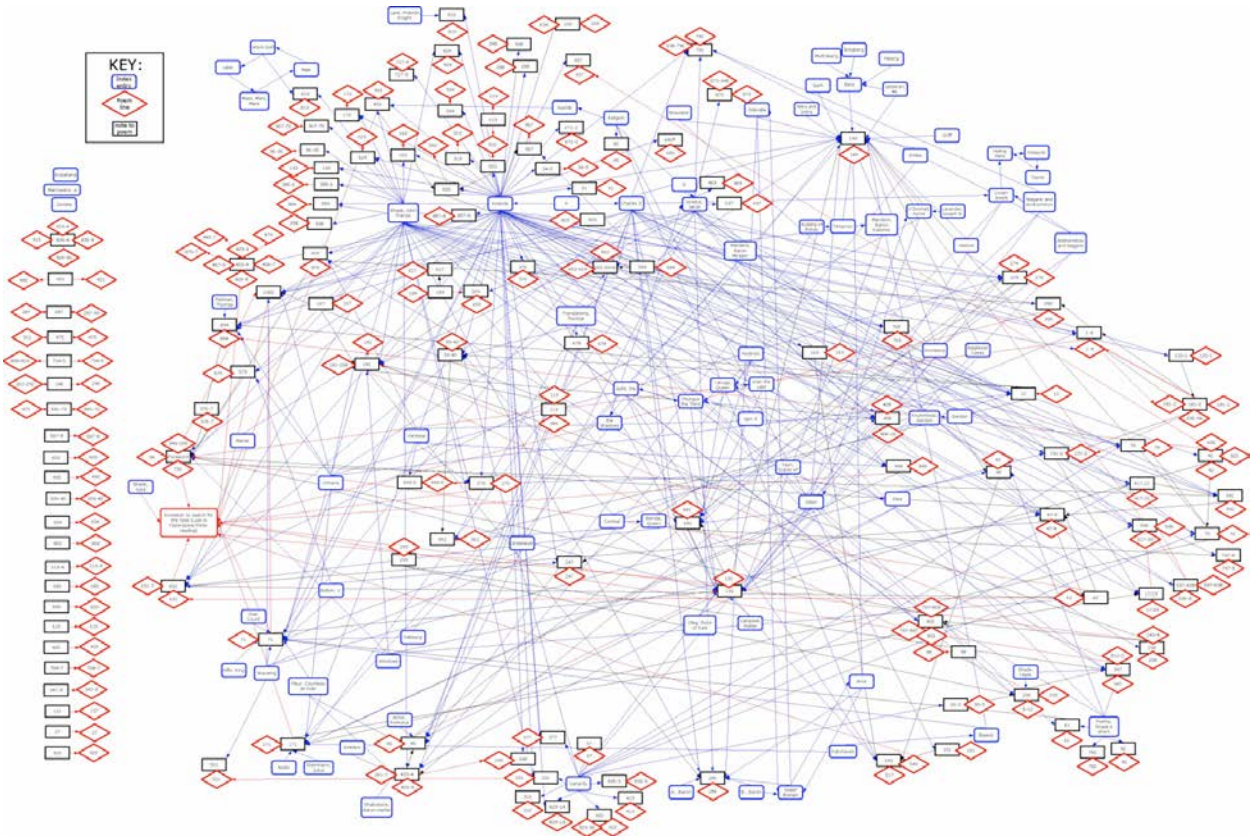

Figure 4.1: A hypertextual network map of *Pale Fire*'s links between Shade's poem (blue boxes), Kinbote's commentary (red diamonds), and the Index (black squares). [10]

As can be seen in the above pictorial representation of *Pale Fire*'s expansive hypertextual network, the number and function of these links to each relevant text fragment are what affects a text's ergodicity; the more link options on each fragment, the more options

[9] Ryan, *Narrative as Virtual Reality 2*, 193-195.
[10] Simon Rowberry, "'His and My Reader': Rereading *Pale Fire* Hypertextually," *Nabokov Online Journal* 4 (2012), http://www.nabokovonline.com/uploads/2/3/7/7/23779748/24_rowberry_pdf.pdf, accessed 23 May 2015, 5.

and paths for a reader to take. Essentially, the bigger the network, the more agency is provided to the reader and the more involved and innovative the hypertext fiction will seem.

Hypertext Fictions as Postmodern Thought

This concept of the network, in tandem with the reader-controlled movements within it, provide for a seeming freedom and fluidity of thought, with no concern for authorial control or strict sequencing. This openness of narrative led many literary theorists in the mid-1990s to herald hypertext fiction as "an instrument of liberation for some of the most notorious bêtes noires of postmodern thought: linear logic, logocentrism, arborescent hierarchical structures, and repressive forms of power."[11] Like Deleuze and Guatarri's rhizome, hypertext fictions are thought to have no real beginning or end; all text fragments can appear in any order depending on how the reader chooses to explore the text.[12] Hypertext fictions, then, are always in a state of incompleteness, less simulacrum and more simulation; where cinema and television were thought to represent both the world and the experience of being there, hypertext fictions represent the world only and provide readers with a unique experience in reading it, one which could never be reproduced exactly in another reading—whether that be a later reading of their own or another reader's entirely.[13]

Further support for hypertext fiction as the incarnation of postmodern thought lies in the paradoxical nature of the hypertext fiction in that it is, by nature, fragmented yet forces the reader to create connections between those fragments. Where the reader of a traditional print text has connections made for them through how the text is presented on the physical page,

[11] Ryan, *Narrative as Virtual Reality 2*, 189.
[12] Ryan, *Narrative as Virtual Reality 2*, 188.
[13] Aarseth, *Cybertext*, 80.

hypertext fiction allows the reader to experience multiple perspectives without being forced to choose one as the over-arching storyline. Hypertext fiction then is not one singular text, created by a sole writer with a specific sequence in mind; it becomes the sum of its parts, a DeleuzeGuattorian machinic assemblage, created from the reader's choice of links in that specific instance of reading.[14] "The writer does not adopt a top-down method, starting with a given idea and breaking it down into constituents, but proceeds bottom-up by fitting together reasonably autonomous fragments […] into an artefact whose shape and meaning(s) emerge through the linking process."[15] However, as I argue later in this chapter, the more engrossing hypertext fictions do not fully invoke postmodern theory but simply remediate traditional modernist print conventions , partly due to the limits of the technology early hypertext fiction writers used but also because readers rely on some sense of narrative cohesion to stay imaginative immersed in the narrative.

Like all digital-born texts, hypertext fiction developed as computer technology did. The first generation, beginning in the late 1980s until the mid-1990s, consists of those standalone narratives published via compact or magnetic disk, relying on authoring systems, such as Apple's Hypercard and Eastgate's Storyspace, for distribution.[16] Some of the seminal hypertext fictions of this generation are: Michael Joyce's *afternoon, a story* (1987), Stuart Moulthrop's *Victory Garden* (1992), and Shirley Jackson's *Patchwork Girl* (1995).

Because the writers using Storyspace and Hypercard had to work within the storage capacity of computer disks at the time, some critics argue that hypertext fictions of this first

[14] Ryan, *Narrative as Virtual Reality 2*, 187-188.
[15] Ryan, *Narrative as Virtual Reality 2*, 188.
[16] David Ciccoricco, "Digital Fiction—Networked Narratives," in *Routledge Companion to Experimental Literature*, ed. by Joy Bray, Alison Gibbons, and Brian McHale (Routledge: London, 2012), 471.

generation were really no different from print texts in their need to limit the reader's input and allow only those paths predetermined by the writer.[17] David Ciccoricco takes that argument a step further by equating these techniques directly to the modernist tradition:

> Many of these [first generation hypertext fiction] writers were entrenched in a Modernist poetic sensibility, invoking for instance the meta motif of piecing together a lost whole, which some lamented as yielding "conventional novels" in new form. They also shared more specific thematic preoccupations, such as an emphasis on mapping and topography and the unfamiliar 'spatiality' of networked texts, as well as a fascination with the "crash," which productively exploited the word's dual meaning of motor vehicle accidents and computer breakdown[18] [as seen in the central conflict of Joyce's *afternoon, a story*].

The second generation of digital-born texts began in the mid-1990s after the development of hypertext mark-up language (HTML) and Flash animation technology.[19] These works make use of the grand expanse of the Internet to create narratives via image, video and sound in combination with text. Where the first generation of hypertext fictions could be said to use hypertextual language as a tool for delivering familiar narrative structures, the technology available to the second generation of hypertext fictions allowed them to use the network as an environment to foster something truly new and truly multimedia.[20] In a sense, the World Wide Web (WWW) fostered a move from "hyper*text* to hyper*media*."[21]

Some of the seminal works of this generation—*Hegirascope* (1995/1997) by Stuart Moulthrop, *Grammatron* (1996) by Mark Amerika, *253* (1996) by Geoff Ryman, and *Chroma* (2001) by Erik Loyer—use multimedia to a varying degree rather than rely simply on linking text

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[17] Aarseth, *Cybertext*, 77.
[18] Ciccoricco, "Digital Fiction," 472.
[19] Ciccoricco does make it clear that the first generation style of hypertext fiction never ceased as some are still published today via DVDs or downloadable files, such as found in *TOC* (2009) by Tomasula; Ciccoricco, "Digital Fiction," 474.
[20] Shuen-shing Lee, "How Do I Cool Down the Overheated Medium? Reading Stuart Moulthrop's Hegirascope 2, 'the most typical hypernovel,'" Dichtung Digital Journal 4 (2004), accessed May 29, 2017, http://www.dichtung-digital.de/2005/2/Lee/index.htm, no page.
[21] Ciccoricco, "Digital Fiction," 474, emphasis mine.

fragments separately from one another,[22] making the reading experience more akin to watching a film or television show than reading a novel. Moulthrop's *Hegirascope 2* (1997) specifically has been argued to remediate even the advertisement breaks common to television programmes in the use of intervening fragments which have no narrative basis but consist only of "quasi-aphorisms, epitaphs, epigraphs, hints, quotes, statements, and literal number-word play" concerned with self-referential themes such as "the end of the world, the rise of the Internet, print vs. hypertext, and linearity vs. hypertextuality."[23]

While arguably closer to postmodern and poststructural theory due to their multimedia and multimodal methods, hypertext fictions of the second generation could be considered even less like novels and, in the case of those which impose a time-limit on readers to choose links rather than allowing them to do so through narrative interest, more like early digital video games, such as *Tetris* or *Break Out*.[24] Where print novels and many first generation hypertext fictions allow readers to linger and reread pages as long or as many times as they desire, giving readers a limited amount of time—15-20 seconds—to read and choose the next link negates any opportunity for the reader to become immersed, particularly on that most narratively important of levels—imaginative immersion.[25] As will be discussed in more detail below, the more arbitrary a reader's choice in narrative path, the less a reader can become immersed and, in combination with varying computer programmes and interface options available for

[22] Ciccoricco, "Digital Fiction," 473.
[23] Lee, "How Do I Cool Down the Overheated Medium?," no page.
[24] A third generation of digital fiction has been proposed, one which I believe takes into account the advancement of artificial intelligence (AI) in computer and console games, to focus on much readerly control is allowed, not by the author but by the machine itself; Ciccoricco, "Digital Fictions," 474. As this is more about video games and their ergodicity, this will be discussed in much further detail in the next chapter.
[25] Aarseth, *Cybertext*, 80.

publishing hypertext fictions, could very well leave the reader confused and frustrated with the textual experience overall.

Hypertext Fiction and the Problem of Immersion:

One question which kept arising during my research revolved around hypertext fiction's lack of mainstream success. If after twenty to thirty years of exposure and advancing technology, as well as nearly consistent high critical acclaim by literary and digital scholars, what was holding hypertext fictions back from becoming as popular as they were intentionally projected to be? In his article "A Future for Hypertext Fiction," James Pope begins his research with the same question, drawing a vital contrast with the popularity of video games:

> Despite a large amount of fanfare and discussion within the academic community, and a dynamic creative output from writers which continue to flourish, hypertext fiction appears to be of interest only to 'experts'—academics, journalist, and writers themselves. 'Ordinary' readers appear to be scarce. But why should that be, given the popularity of other multimedia products such as *digital games, which, like hypertext fictions, present narrative and interactivity and are delivered via computers*?[26]

These were some of the very same questions which I found myself asking when I embarked on this research project, especially as I am comparing and contrasting narrative video games with their print-based predecessors. Whilst the problems I found with video games revolved around their lack of critical literary study due to their position as 'pop' art,[27] James Pope finds the opposite in his research on hypertext fiction: even those easily accessible (both narratively and technologically) hypertext fictions are getting as little mainstream attention as

[26] Pope, 448, emphasis mine.
[27] As seen in my reference to the ELO's exclusion of video games from the list of digital-born literature (found in the Introduction).

those 'high art' works.[28] Could it be that hypertext fictions don't provide the same sense of immersion that traditional reading does? What exactly creates that block? And do (or could) narrative video games overcome that?

Where hypertext fictions are successful in providing keen readers with the freedom of choice in narrative and the integration of multimedia into a text-based story, the failures—"unsatisfying hyperlinking, seeming random plot structures, and apparent lack of closure"[29]—seem to be too large to be overcome by the successes alone. While Pope argues optimistically that hypertext fiction could be successful to the mainstream reader if a redirection and standardisation of writing style, linking structure and effective interface design is employed,[30] I see that as arguing for a need to change everything about hypertext fiction that makes it *hypertext* in order for it to successfully immerse a reader in the same way as the print books they supposedly remediate.

What I do find most useful in Pope's article is his empirically researched breakdown of the problems mainstream readers associate with enjoying and immersing themselves in hypertext fiction. As such, I will form my critique of the immersive impossibilities of hypertext fiction around these four problems: (1) the misconception of reading a hypertext fiction as the same act as reading a book; (2) too many variations of the narrative structure and interfaces between hypertext fiction; (3) disorientation due to unorthodox or illogical narrative structures; and (4) lack of closure in part due to disorientation but also as a function of the narrative itself. By breaking down how each of these problems disrupt or disallow immersion on any one of the

[28] Pope specifically mentions the ELO's 2001 Fiction Award winner, Caitlin Fisher's young adult work *These Waves of Girls* (2001), which is aimed at and concerned with adolescent teenage girls.
[29] Pope, 448.
[30] Pope, 449.

three levels—imaginative, sensory, or challenge-driven—I will show how hypertext fiction ontologically cannot create a fully immersive experience without becoming something else entirely.

Problem 1: Reading a Hypertext Fiction is NOT like Reading a Book

Because these digital texts are labelled as a hypertext *fiction*, many casual or mainstream readers approach the hypertextual reading experience with the same conventions as reading a print book; however, whereas *anyone* able to read can pick up *any* book and begin the act of reading instantaneously (regardless of understanding it), hypertext fictions come in many different narrative shapes and computer platforms, requiring a different reading orientation for each. [31] This will initially disrupt the reader by causing them to renegotiate how they approach the text before beginning to read it. This is different from the renegotiation required of the ergodic texts discussed in the previous chapter because the reader of a hypertext fiction is not deciding which narrative to read, or preference in one's reading, but in understanding how to approach the literal act of reading the text presented digitally. Where an electronic book could be approached like a print book, but with scrolling or clicking to advance a page rather than flip a single leaf, a hypertext fiction can have all sorts of varying methods for progressing the narrative, as well as narrative structures to accommodate (sometimes even multiple at the same time). Remediation from the print to digital, or at least society's expectations of it, seems to be limiting our understanding of storytelling in this digital-based medium.

[31] Pope, 450-451.

It could be argued that authors of hypertext fiction are "breaking too many conventions at once"[32] by playing with the narrative construction as well as the interface used for the narrative (as discussed in the next section), both at the expense of imaginative immersion. If imaginative immersion relies on a sense of narrative suspense or tension, affective involvement in the outcome of the characters, and an alterbiography through which the reader can identify so to feel that emotional connection,[33] then I argue that hypertext fictions fail to accomplish this sense of immersion due to the very interactive nature that makes them 'unique.'

Suspense, or narrative tension, is based on two elements: developing a reader's curiosity to know how a story will play out through presenting at least two equally possible outcomes, and surprising the reader through closing one of those paths which the narrative has thus far made out to be the more likely ending. Both these elements require somewhat strict authorial control over what information the reader knows and how that information is presented sequentially. The bouncing around allowed by hypertext fictions, however, removes that control by allowing the reader some degree of agency to choose their own order of information, which can cause problems in terms of narrative cohesion or cogency if the fragments provided have any contradiction of information—either narratively or chronologically.[34] This lack of narrative cohesion contributes directly to a lack of closure on the part of the reader, as described in a later section of this chapter.

It has been argued that the author *does* have control over the reader's associations via the placement of the links themselves. An ergodic print text like *Pale Fire* allows the reader to

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[32] Pope, 451.
[33] See pgs 63-71 on imaginative immersion.
[34] Ryan, *Narrative as Virtual Reality 2*, 200-201.

discover the relevance of an unknown term or phrase on their own, thus allowing the reader to create their own interpretation of its importance to the overall text. Hypertext fictions guide readers only to those words or phrases which are linked or in some way highlighted "to see what content the *author* relates to that word"[35] rather than deciding for themselves. So, while there is less authorial control over what and in what order information is presented, there is more control over *how* that content is meant to be interpreted.

Hypertext fictions can accomplish some sense of suspense by leaving the reader wondering exactly what has happened at the start of the narrative. Taking Joyce's *afternoon, a story* as an early example, this suspense revolves around whether or not the victims of the car crash that opens the narrative are Peter's (the main character) son and ex-wife. But to do that, Joyce actually works against the reader's agency by limiting part of the network available through repeating or interspersing links which highlight the accident over and over again.[36] Without those backtracking fragments (an example of which can be seen in Figure 4.2 below), a reader might forget about the accident altogether in the slew of memories Peter has in relation to his ex-wife and their relationship.

Figure 4.2: Screenshot from Michael Joyce, *afternoon, a story* (1987)

[35] Simanowski, 93, emphasis mine.
[36] Ryan, *Narrative as Virtual Reality 2*, 201.

Part of the reason many hypertext fictions cannot seem to create suspense is there is often no opportunity to create an emotional connection to the outcomes of the narrative. This is to some degree connected to the alterbiography the reader creates to make sense of the narrative perspective being employed[37] in the same way that computer programmes must give a familiar role or concrete task to the user to be operated successfully. Hypertext fictions do not provide a convincing enough purpose for repetitive link-clicking either digitally or narratively, and because affective involvement is tied to the reader's "sense of the inexorable character of fate, of the finality of every event in a character's life,"[38] the very element of hypertext fictions which make them new and unique—their capability to contain multiple possibilities within multiple worlds—makes any sense of alterbiography or catharsis and closure unobtainable.

If again taking the example of Joyce's *afternoon, a story*, affective involvement can exist, but only if viewing the narrative through the modernist stream-of-consciousness lens of Peter's anxiety and concern for his family. As the reader is 'inside' Peter's mind and, to some extent, witnessing the associations he makes in his worry, it is almost impossible not to feel his distress as one's own.[39] In particular are those slides that consistently disrupt the narrative coherence with remorseful images surrounding the accident and/or the downfall of Peter's and Giulia's marriage (as seen in Figure 4.3 below). Even in the 100 slides I limited myself to reading, these intercut thoughts interrupt the narrative no less than three times, probably more if I had followed the repeats and backsteps rather than going around them.

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[37] See pg. 69-71 on alterbiography
[38] Ryan, *Narrative as Virtual Reality 2*, 203.
[39] Ryan, *Narrative as Virtual Reality 2*, 204.

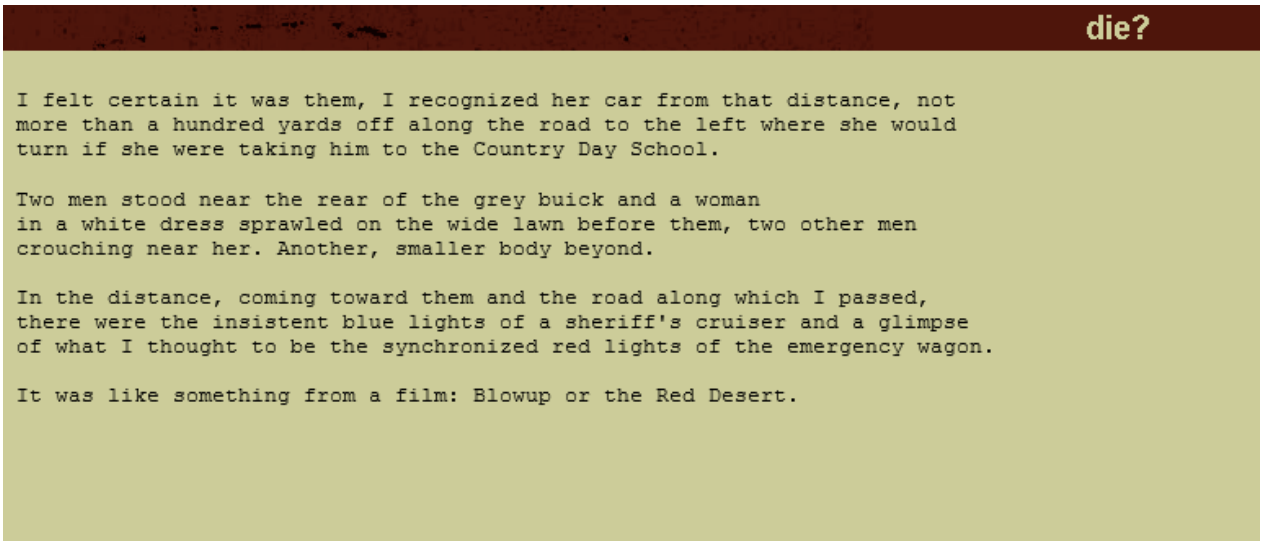

Figure 4.3: screenshot from *afternoon, a story* (1987)

Yet, certain slides confuse the stream-of-consciousness concept by moving from the first to the third person, identifying Peter by name and as a separate character altogether. Such changes in narrative point of view disrupt the narrative schema employed by the text and halt or break any affective connection to Peter the reader might have by causing confusion over whose narrative perspective the reader should be following. Many hypertext fictions manipulating narrative conventions often make similar breaks in narrative perspective; if these changes were chosen consciously by the reader, then the disruption to immersion would be minimal but as the reader in these types of hypertext fictions has no control, the shock of being thrown out of (or even into) the accepted narrative perspective ends the imaginative immersion by disrupting the player's alterbiography and affective involvement.

Problem 2: Too Many Variations in the Interfaces of Hypertext Fiction

Due to the inclusion of different links and moving images, as well as the knowledge of multiple reading paths, a reader can never devote their full attention to the narrative

presented, which means they will never become fully imaginatively immersed in the narrative, only in the action of reading on a screen.[40] Yet, while this argument surely has its evidence (as shown above), I find it highly reductive as it assumes such limiting of a reader's attention is a digital invention through the availability of a link one can click to reach the next fragment. This type of argument ignores the same process readers take in print texts when they find themselves frustrated or bored. I myself often skip pages in narratives from the Romantic period because I find the long descriptive paragraphs cumbersome. To say readers of a hypertext fiction are not imaginatively immersed because they are too distracted by other, later narrative possibilities is to say *all* readers of print texts progress from cover to cover sequentially, which, as shown in the previous chapter on ergodic print texts, is simply not true.

Pope finds that casual readers of hypertext fiction are often blocked from full immersion by confusion deriving from the different digital presentations of each hypertext fiction encountered. "'Essential' interface elements such as back-buttons, menus, maps, hierarchies, and visual signposting are not apparent, or if they are, they are visually obscure, inconsistent, or over-complicated."[41] Imaginative immersion cannot take place because readers become more concerned with learning a hypertext fiction's interactive conventions than in unravelling the story for story's sake.[42] The point-and-click nature of contemporary hypertext fictions are too heavily challenge-driven as readers are too concerned with searching a page of text for clickable/ interactive links rather than read the story presented on the current fragment.[43]

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[40] Anne Mangen, "Hypertext fiction reading: haptics and immersion," *Journal of Research in Reading 31*, no. 4 (2008), http://dx.doi.org/10.1111/j.1467-9817.2008.00380.x (accessed December 31, 2017), 409-410.
[41] Pope, 452.
[42] Pope, 450.
[43] Mangen, 412.

Readers become lost in the labyrinth of possibilities, clicking forever without ever really making meaning from what is read or connecting fragments meaningfully along the way.[44]

Again taking *afternoon, a story* as an example of how early hypertexts utilised their interface, the confusion is immediately apparent as each fragment is presented as blocks of text with no obvious links to click—almost all the words included on each fragment can be clicked although they are not highlighted (see figure 4.4). Another seminal example of hypertext fiction from the so-called second generation, Moulthrop's *Hegirascope 2* (1997) has four distinct links for the reader to click, one in each corner (see figure 4.5). In neither fiction do the links clearly relate to the fragment which follows, forcing a reader to reconcile what has come before to what appears without any sort of signposting on the part of the writer. On this comparison alone, *afternoon, a story* has an extra level of immersive disruption in that the reader must actively search for a clickable link or just create self-regulating parameters to keep the narrative moving (such as always clicking the last word in the text or, if that fails, the last clickable word). This makes *afternoon, a story* (and hypertext fictions like it) more an act of link-hunting than storytelling as the reader must first discover the method of *how* to make the story progress before concerning themselves with *what* story it is telling.

Hegirascope 2 has the added immersion-disrupting element of 10-20 second time-limits for each page, limiting the amount of time a reader has for choosing a link before the page progresses automatically. While a passive reading of hypertext fictions like *Hegirascope 2* does allow the reader a bit more freedom to read the narrative fragments without worrying how to progress the narrative, it nearly removes the interactive element altogether by not allowing the

[44] Aarseth, *Cybertext*, 88-89.

reader the choice to linger on the narrative fragment long enough to consider its place in the over-arching narrative and make an active choice of which link to click. While the added temporal element creates tension for the reader, it does not create that all important narrative suspense, which, as I discuss later in this chapter, is important for avoiding disorientation and for reaching a sense of closure.

Figure 4.4: Screenshot from *afternoon, a story* (1987)[45]

[45] Notice how the only signposted navigable links are at the bottom and provide very little direction to the reader.

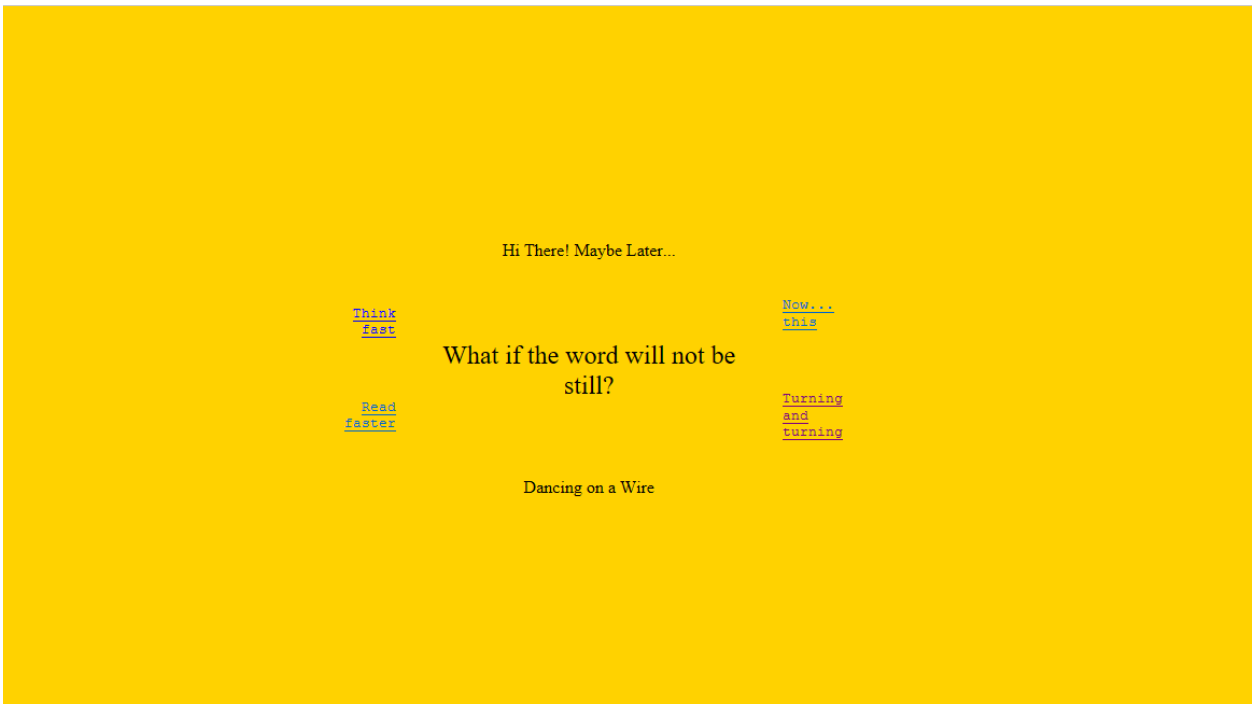

Figure 4.5: screenshot from Stuart Moulthrop's *Hegirascope 2* (1997).[46]

Problem 3: Disorientation Due to Unorthodox or Illogical Narrative Structures

While the previous problem is one of digital structure and function, disorientation deals with a reader's knowledge of where in the narrative labyrinth they are. Understanding how hypertext fictions create their labyrinths (as well as being able to compare hypertext fictions homogenously without considering the different technological formats or platforms used) requires an understanding of the different types of narrative structure they may employ; the three most common interactive narrative types are referred to as *axial*, *arborescent*, and *networked*.

Axial narratives are just as they sound: a main narrative with interesting side-paths that always return back to the main narrative without changing or affecting it.[47] Early digital

[46] Regardless of their position on the page, the only clickable links provide no guidance on what the reader will encounter on the next fragment or how this fragment connects to the previous one and/or the next one.

hypertext fictions and adventure games (such as *Myst*[48]) utilise this narrative structure to ease the player into the interactive element without sacrificing much story.[49] However, because the reader-player has very little choice as to how the narrative resolves itself, I would call these hypertext fictions and games more *interactive fiction* due to the lack of effect the reader-player's choices have on the narrative world.

The more common structure in many adventure video games and hypertext fictions is the arborescent narrative, which function like trees—choices are provided as forking points which close off other choices once picked, branching the narrative out into different directions depending on the command choices made by the reader-player. An example of a print analogue for this structure is the Choose-Your-Own-Adventure children novels popular in the 1980s and 1990s (which were inspired by computer-based text adventure games prior) because each choice provides at least two options and ideally once an option is picked, the others are no longer available.[50] This narrative structure could be what prompted critics to consider hypertext fiction as a quintessential postmodern text in its mirroring of real-world decision-making and consequences.[51]

A *networked* narrative exists without any real beginning or end; this is the type of hypertext fiction which epitomises Deleuze and Guattari's rhizome as all fragments are connected to each other both before and after; the entrance to the narrative may not be the

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[47] Also known as a 'Vector' narrative in Marie-Laure Ryan, *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media* (London: Johns Hopkins Press, 2001), 165.
[48] Cyan. *Myst*. Oregon: Brøderbund, 1993.
[49] Ciccoricco, "Digital Fiction," 474.
[50] I say 'ideally' here because readers of CYOA novels often follow an unwritten rule borrowed from chess: if a reader does not take their finger off the original page, they don't have to follow their original choice after seeing the outcome. This is most often the case whenever the choice leads to an immediate 'death' of the protagonist character and ends the reading experience.
[51] Ciccoricco, "Digital Fiction," 474.

start of it, per se, but merely a starting *point* from which to work. "A networked narrative […], then, differs not only in its nonhierarchical organization but also in that its narrative emerges gradually through a recombination of elements in a database."[52] Marie-Laure Ryan names this kind of networked narrative as "The Maze" as she sees it as more of a labyrinth with multiple entrance and exit points than a network database; although all paths are aimed at a single predetermined end, the reader's or player's choices could very well lead them outside the narrative before ever reaching that end.[53]

While other narrative text types utilise these structures with varying levels of success, readers of hypertext fiction often lose interest because most provide no signposting or narrative map for readers to know how far into the narrative they have progressed or which paths they have chosen.[54] As I discuss in the previous chapter, the key part of an ergodic text—be it print or digital—is knowing there are other paths *not* being taken (so to encourage the reader to return to explore these paths); to keep from becoming disoriented and frustrated, the reader of a hypertext fiction needs to know where those are and where, or how, they end.

Readers need to be able to make sense of how a text is developing—both structurally and narratively—to keep themselves engaged. As mentioned previously, suspense (and thus imaginative immersion) requires the reader to be constantly wondering whether their interpretations are the 'right' ones (and if not, having enough information to change those interpretations as the narrative moves to a close) so when a hypertext fiction's narrative structure is too cumbersome to overcome, that suspense and sense of immersion is lost.

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[52] Ciccoricco, "Digital Fiction," 474.
[53] A specific example of hypertexts which utilises this 'exit before the end' mentality is Moulthrop's *Hegirascope 2*. Readers sometimes find themselves stuck at pages with no text and no obvious link to click to exit the text or, if a link is found, reverts them to the Index instead (Lee, "How Do I Cool Down an Overheated Medium?").
[54] Pope, 453.

Hypertext fictions which rely too heavily on a poststructuralist nature cause readers to become lost in a blue-link spiral. Reading an ergodic text is like travelling (before the invention of handheld navigation systems) to a place one has never been: readers require a 'map' in the form of some sense of authorial control initially to acquaint them with the fictional world and best method of traversing it. "The reader [of a book/story/narrative] expects each new segment of text to add purposefully to what has already been read,"[55] and so those hypertext fictions with too much agency cause too much confusion. This could be why the interactivity of narrative video games and ergodic print texts work much more successfully than in hypertext fictions: after most choices, the reader-player always has a main path to follow and return to in order to reorient themselves within the fictional world.

This is not to say that hypertext fictions utilise more complex and multicursal narrative structures than ergodic print texts and narrative video games, but that the latter provide the reader with more opportunities to reorient themselves within their respective narrative labyrinths. Print ergodic texts do this via the medium by which they are presented: because a print text is finite and contained, readers can locate their place within the text as it is printed, while a narrative video game often has progress bars and/or completion percentages for the various narrative branches, usually accessible via the paratext of the Start menu.

Pope agrees with this in that his solution to unintentional disorientation in hypertext fictions is to include a similar progress bar, or at the very least a page marker, so that readers always know where in the narrative they are situated. By giving readers a map (of a sort) to the hypertext fiction, authors can ensure that readers become disoriented only when it benefits the

[55] Pope, 453.

overall reading experience rather than frustrating it.[56] However, such progression markers could arguably create more authorial control rather than remove it, the core of the final problem Pope finds with contemporary hypertext fictions.

Problem 4: Lack of Closure when the Narrative is 'Finished'

Closure of a narrative is what allows readers to cognitively negotiate all that has come before into a cohesive, cathartic, and/or satisfactory experience. Because hypertext fiction theory (as a realisation of modernist and postmodernist theory) operates under the idea that closure is not always possible or necessary, many fictions fail to satisfy any sort of suspense purposefully or accidentally created. In *afternoon, a story*, the reader never finds out who was harmed in the accident mentioned in the first fragment. If the aim of this hypertext fiction is not to 'create' a new story but to experience a static one through various associations, then it could be said that *afternoon* (and hypertext fictions of a similar construction) would have worked just as successfully if published as a print ergodic text (similarly to *Pale Fire* or *Hopscoth*) rather than a digital one.[57] For those second-generation hypertext fictions like *Hegirascope 2*, suspense is created only by chance and closure is even more elusive. Only by approaching the reading experience from a solely challenge-driven perspective can a reader ever purposefully find all the connected fragments and achieve a sense of closure; however, that closure is ludic not narrative, making hypertext fictions of this type less *text* and more *game*. The problem thus becomes: if hypertext fictions stay true to their modernist and

[56] Pope, 453.
[57] Ryan, *Narrative as Virtual Reality 2*, 201.

postmodernist theoretical roots, how can they also provide readers with a sense of narrative ending that the terms *fiction* and *narrative* imply?

According to Pope, hypertext fictions will never become popular to the mainstream reader unless their writers are willing to conform to a set standard of narrative or interface conventions, the very antithesis of what has always been and what has made hypertext fictions more innovative and avant garde. If "the effort of learning the author's particular method of interactivity as well as a new kind of narrative structure is too much,"[58] then hypertext fictions, as they are currently written and published, do not have the right balance of work-reward that casual, mainstream readers seem to desire.

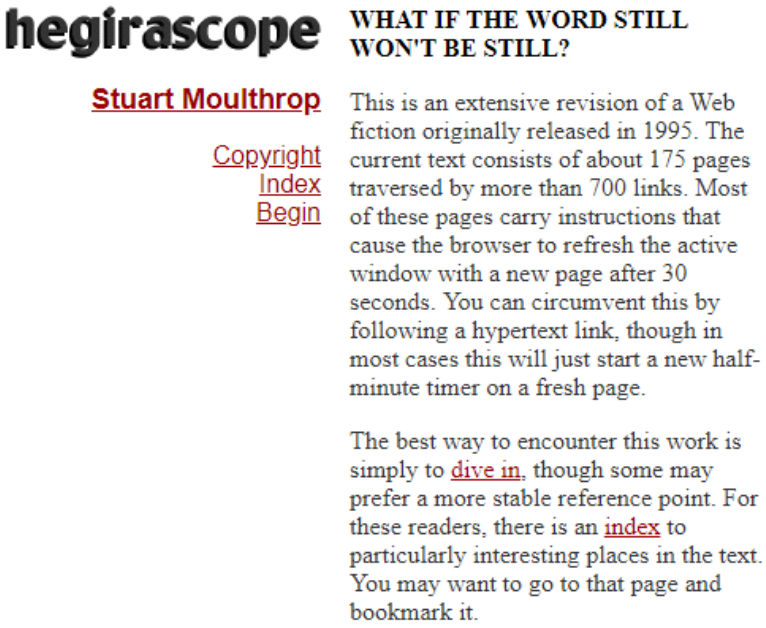

Figure 4.6: Screenshot of a portion of the 'About' page for *Hegriascope 2* (1997).[59]

I, however, find this solution reductive and think the solution is much simpler: hypertext fictions currently do not provide the skill-building required to read and interact effectively with

[58] Pope, 460.
[59] As you can see, Moulthrop provides an Index but, in a contradictory position to Kinbote in *Pale Fire* (1962), advises against using it in favour of just diving into the hypertext fiction itself.

their narrative. Other ergodic texts provide for this training space: the introduction of *Pale Fire* could arguably be a 'training-ground' space because Kinbote introduces multiple methods of reading the poem alongside his commentary and the index, and, as I discuss in the next chapter, all video games (narrative or otherwise) introduce players to the interactive controls needed via their own introductions where the player's actions have limited effect until the basic controls have been learned. Returning to the two seminal hypertext fictions discussed throughout this chapter, *Hegirascope 2* does have a "how to read this" page but it reads more like a manifesto than actual reading instructions (see figure 4.6 above) while *afternoon, a story* has little more than an acknowledgement of the three links at the bottom with no mention of the interactivity of the words within the fragments themselves. Readers of hypertext fictions, from across all technological generations and narrative structures, find themselves lacking not only in imaginative immersion—because they cannot pay enough attention to the narrative on the fragments to consolidate them into a cohesive story—but in challenge-driven immersion as well because they do not know how their actions work to progress effectively through the textual labyrinth.

As I show in the next chapter, this skill-building training ground is just one element of how narrative video games draw reader-players into the story-playing experience. By providing players with a transition stage from the analogue real-world to the digital virtual one, narrative video games, in particular those so-called virtual role-playing games (as I explain further in the next chapter), provide for a unique narrative experience which allows players to achieve that loss of time and self through immersion across all three areas—imaginative, sensory, and challenge-driven.

Chapter V:

The Ergodicity and Immersion of Virtual Role-Playing Games:

Immersion in Bethesda's *Skyrim*

In previous chapters, I have discussed video games as an all-encompassing medium, including sports games (such as the *FIFA* franchise), abstract games (such as *Tetris* and *Minecraft*) and casual, mobile games (like *Angry Birds* or *Candy Crush*). However, in order to accurately compare the immersive capabilities across narrative media, I am choosing to focus on those games which make narrative a core part of the game-playing experience: the virtual role-playing game. These games can go by other monikers—*sand-box* or *open world* games—due to their playground-like nature and eschewing of more commonly used progressive quest trees in favor of player exploration only loosely guided by a main storyline. In these virtual role-playing games, players are encouraged to go off the beaten path to discover side-quests and areas of interest they might not discover otherwise. What makes these virtual role-playing games particularly relevant to this study is that the endings of these games are not what engages the player but the journeys themselves,[1] which is directly relevant to my approach of

[1] Richard A. Bartle, "Alice and Dorothy Play Together," in *Third Person: Authoring and Exploring Vast Narratives*, ed. by Pat Harrigan and Noah Wardrip-Fruin (London: MIT Press, 2009), 105.

analysing the player's/reader's immersive experience rather than the game (or narrative) as object.[2]

Whilst it could be argued that the more emergent, open-ended multi-player role-playing games (such as *World of Warcraft*) allow reader-players more latitude and agency in the actual creation of the game narrative, I feel the potential narratives of these games vary too widely to be considered for this particular study. Too much time would have to be devoted to the ways in which the social aspect of these games create the narrative, and while Ermi and Mäyrä do state that social immersion could be a potential addition to their theory (pending further research), the aim of my study is to compare the level of ergodicity of print and digital narrative *structures* to explore the ways in which these types of video games are being remediated by contemporary print texts. To do that, I focus on those virtual role-playing games which have a definitive beginning and end (to some degree).

As discussed previously, the texts in this study all fall on a spectrum of ergodicity, defined in chapter II as requiring some form of physical, non-trivial input on the part of the reader in order to access the text from multiple directions. *Pale Fire* encourages the reader to approach the text in at least three ways—the Shadean, Kinbotean, and Nabokovian paths—each with a different goal or centre in mind. Hypertext fictions, whilst represented digitally, also require the readers to choose their narrative path through the non-trivial act of link-clicking. However, although both *Pale Fire* and hypertext fictions are multicursal (multi-pathed)

[2] While not all players approach these video games as texts, I am doing so in an effort to show how the unique structures and methods of these types of games are employed to engage the player as a reader. To incorporate all the ways these games can be played would not be relevant to my research of how narrative structures in video games might be remediated by narrative media. For this reason, As such, I will use the term 'reader-player' when I need to distinguish between those players who wish to engage with the narrative as part of the game experience and those who wish to simply complete quests/defeat the enemies in order to 'beat' the game.

labyrinths in *how* they are read, they are unicursal (single-pathed) labyrinths in terms of the *narratives* being accessed, in both cases limiting the reader's experience to that which was pre-written by the authors themselves.

Virtual role-playing games, however, have the added element of the visual, presenting the reader-player with a literal labyrinth (the game world) to negotiate at the same time as the figurative narrative one. Janet Murray argues that such invoking of an ancient myth is not surprising as both present "the melding of a cognitive problem (finding the path) with an emotionally symbolic pattern (facing what is frightening and unknown)"[3]; where the Athenian youths traversed the labyrinth with the fear and knowledge that the Minotaur could be around every corner, so too do reader-players of virtual role-playing games anxiously navigate the game world, mentally prepared to face a random, unforeseen conflict event at any moment. The story, for reader-players of virtual role-playing games, lies not only in the narrative unfolding but in where and how the narrative unfolds according to the reader-player's choices.

As the reader-player of a virtual role-playing game progresses through the main storyline, their knowledge of the narrative and game world itself—the setting, conflicts, themes, plots—develop more broadly and impact the ergodic actions the reader-player performs and in what order those actions place.[4] This dual identity as both player of a game and character within the story, who must navigate an environment while conscious of its limitations as a game played on a computer system, actually works to increase reader-player immersion rather than limit it (contrary to arguments of some digital narratologists such as

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[3] Janet Murray, *Hamlet on the Holodeck (*London: MIT Press, 1998), 130.

[4] Terrence E. Schenold, "After Ergodics: Noematic Work and the Function of Diegetic Information in Computer Roleplaying Games," in *Terms of Play: Essays on Words that Matter in Videogame Theory*, ed. by Zach Waggoner (London: McFarland & Company, 2013), 127-128.

Marie-Laure Ryan[5]). The reader-player's identity and ergodic agency as a *player* are directly influenced by the consequences of their choices identifying as their *character*.

This dual identity as player-character and deeper sense of imaginative immersion (for those reader-players) could be one reason why virtual role-playing games are becoming more popular and more recognised for their technical and narrative savviness (than in the earlier years of video games). A survey of the winners of the prestigious Academy of Interactive Arts and Sciences D.I.C.E. Game of the Year award shows a distinctive trend: since the start of the awards in 1995, virtual role-playing games, from the *Legend of Zelda: Ocarina of Time* in 1996 to the more recent *Fallout 4* in 2016, are gaining more and more critical acclaim for their contribution and advancement of the video game industry worldwide.[6] Bethesda's *Elder Scrolls V: Skyrim* is arguably a pinnacle of that recognition, winning thirteen of the sixteen awards for which it was nominated in 2012, including the D.I.C.E. Game of the Year award,[7] and ranking twenty-first in 2015 on PCGamer's list of Best RPGs of All Time.[8]

The importance of *Skyrim* to my research project goes beyond its industry accolades. Reviews of the game after its release in November 2011 call it "one of the most fully-realized, easily enjoyable, and utterly engrossing role-playing games ever made"[9] with "a vast and gorgeous world of exciting possibilities, fascinating places, engrossing adventures and flying

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[5] See Ryan's argument contrasting immersion and interactivity in chapter 10 of *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media* (Baltimore, MD: Johns Hopkins University Press, 2015), 229-250.

[6] "D.I.C.E. Awards," Academy of Interactive Arts and Sciences, accessed 10 November 2016, http://www.interactive.org/.

[7] "15th Annual D.I.C.E. Awards," Academy of Interactive Arts and Sciences, accessed 10 November 2016, http://www.interactive.org/awards/2012_15th_awards.asp.

[8] Cory Banks and Leif Johnson, "The Best RPGs of All Time," PCGamer.com, updated 19 December 2015, accessed 10 November 2016, http://www.pcgamer.com/the-best-rpgs-of-all-time-1/.

[9] Charles Onyett, "*The Elder Scrolls V: Skyrim* Review," *IGN*, 14 November 2011, accessed 20 October 2016, http://uk.ign.com/articles/2011/11/14/the-elder-scrolls-v-skyrim-review-2, para. 1.

lizards"[10] where "excitement and a true sense of discovery are tied to the secrets hidden within."[11] Although some portions of the reviews were devoted to system configuration (how quickly the graphics loaded or how seamlessly the combat played out), these elements were often included as an afterthought, secondary to describing the game itself and the opportunities for exploration and the story it presents. *Skyrim* practically beckons for reader-players to become immersed in its visually rich and well-rendered environment, imbued with an equally rich cultural narrative and multitude of challenges to overcome. Some reviewers boasted spending over 100 hours in the game, barely scratching the surface in terms of skills learned or quests completed.[12] *Skyrim* is not just a virtual role-playing *game*, it is a full-blown narrative *experience*.

These overwhelmingly positive reviews, combined with its critical acclaim and the attention it continues to get at academic games conferences, make *Skyrim* an ideal example of how virtual role-playing games are encouraging reader-player immersion, even with the dual identity that comes from interacting with a digital text. By analysing how *Skyrim* creates sensory immersion through its realistically portrayed environment, imaginative immersion through the development of the alterbiography and variety of pull narratives, and challenge-driven immersion through its meaningful use of ergodic agency, I hope to provide evidence showing how games like *Skyrim* could be said to impact contemporary printed ergodic texts like *S*. (as discussed in the next chapter).

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[10] Tom Francis, "*The Elder Scrolls V: Skyrim* Review," *PCGamer*, 10 November 2011, accessed 20 October 2016, http://www.pcgamer.com/the-elder-scrolls-v-skyrim-review/, para. 1

[11] Andrew Reiner, "*The Elder Scrolls V: Skyrim*: An RPG Worth Shouting About," *GameInformer*, 10 November 2011, accessed 20 October 2016, http://www.gameinformer.com/games/the_elder_scrolls_v_skyrim/b/xbox360/archive/2011/11/10/skyrim-review-an-rpg-worth-shouting-about.aspx, para. 5.

[12] Reiner, para. 6.

Sensory Immersion: The Mundane Comes Alive in *Skyrim*

The star of the show in *Skyrim* is arguably the expansive yet navigable world in which it is set. Set in the north of the continent of Tamriel (in which all of the *Elder Scrolls* games are set), the country of Skyrim goes by many names—the Old Kingdom, Throat of the World, Fatherland, Keizall—depending on whom the reader-player speaks to or what books the reader-player discovers/reads.[13] The landscape is filled with dozens of caves, a multitude of mountains (including the five highest of all the games; one the reader-player must climb as part of the main questline), old dwarven and elven ruins, as well as the more predictable settings of plains, forests, and rivers. Most importantly, these landscapes are not just pretty, unreachable backdrops to the setting for the main events; reader-players can access every cave, dungeon, ruin, and city, provided they have reached a high enough experience level to overcome whatever is found inside.[14]

Such finely-tuned sureties[15]—how the clouds move when the player is standing still, how the sunlight changes as day moves into night, how the snowflakes fall in line with the wind—further create a sense of a grand, inhabitable world. Rivers can be followed to where they turn into waterfalls, which turn into rivulets and lead out to the sea bordering Skyrim to

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[13] *Skyrim* contains nearly 1,200 documents, journals, and novels that the reader-player can read, separate from the game entirely. Some of these documents might lead to or be located via quests, but a vast majority are found lying on bookshelves in the various homesteads. The narratives of each novel has been fully fleshed (although sometimes over multiple volumes), and a keen reader-player could conceivably read an entire novel inside the game without ever disrupting their gameplay.

[14] David Simkins, Seann Dikkers, and Elizabeth Owen, "Unbroken Immersion: The *Skyrim* Experience," in *Well Played: A Journal on Video Games, Value and Meaning* 2, no. 1 (14 November 2012), ed. by Drew Davidson, accessed 24 March 2016, http://www.etc.cmu.edu/etcpress/wellplayed, 19-20.

[15] Defined by Alison MacMahan as: the mundane details included to increase a player's presence in the virtual world; see p. 60 in chapter 2.

the north. Wild animals dot the landscape and run away or attack when approached; they can also be chased and killed for their pelts and meat (which can become useful for quests and item crafting).[16] All these visual elements are made even more realistic with the accompanying diegetic sounds of insects and grass rustling, thunder and raindrops, hard gales and soft breezes, as well as the extradiegetic musical score setting the atmosphere of the entire experience.[17]

These three-dimensional renderings create a true sense of presence in the virtual world of *Skyrim*. Items can be viewed from all sides (no matter how insignificant), mountains can be climbed (no matter how difficult), and buildings can be vandalised (no matter how important to the plot). Every blade of grass reflects the sun and every artefact casts a shadow, changing as the player's position around the item changes. Backdrops are hazy and become clearer as the player approaches them, giving a feeling of depth and vastness. This is a world where the physics of the 'real world' still apply, with some magical exceptions. By providing these minute and mundane three-dimensional details, the player can go beyond reconfiguring their expectations of the environment and go directly into inhabiting it.[18]

[16] Onyett, para. 16.
[17] Francis, para. 9.
[18] Simkins, Dikkers, and Owen, 18.

Figure 5.1: Screenshot from *Elder Scrolls V: Skyrim* (2011)

This sense of presence is also made possible through the limited vantage point provided. Rather than have the isometric perspective found in other popular large-scale virtual role-playing games like *World of Warcraft*, the use of the first-person viewpoint to open the game further creates a sense of being IN the game.[19] Where other games (and even previous *Elder Scrolls* games) begin by having the reader-player first create their character, *Skyrim* launches the reader-player directly into the world through a quasi-passive introduction (only quasi-passive because the player is able to move the in-game camera to look around at the environment but cannot walk or exit the opening scene in any way).[20]

Although such limitation serves a gameplay purpose (as will be discussed more fully below), the forced initial first-person perspective creates a sense of entering the world *en*

[19] You can switch from first-person to an over-shoulder third-person vantage point but only after you have created your character and completed the limited opening scene.
[20] Simkins, Dikkers and Owen, 18-19.

media res; things have been happening before the reader-player arrived and will continue to happen once the reader-player has left. After completing the guided introduction and escaping Helgen, the player can change to the third-person, camera-on-the-shoulder viewpoint with the click of a button, should they so choose. So easy is this move that it often happens inadvertently, shocking the player out of sensory immersion from the sudden change in vantage point. But the shock is short-lived as the original vantage point can just as easily be restored (if the reader-player so chooses).

Beyond inadvertent vantage point changes, the only other shocks to be found in *Skyrim* are the notification messages. These messages appear whenever the player is attempting to commit an unallowable action or when the player is being damaged in some way not associated with combat. For example, when a building cannot be entered, either because it is not necessary to the game or because the quest needed to open it has not yet been discovered, a distinctly out-of-game notification pops up on the screen: "This lock cannot be picked. It requires a key to be opened." Another example is when a player attempts to sleep in a place where they would be put in danger (such as when they are trespassing on another's property or there are enemies nearby), the message "You cannot sleep while trespassing/enemies are in the area" appears on the screen.[21] Arguably, these messages could be said to break the sensory immersion of the player by acknowledging the virtual system upon which the game is being played. However, because reader-players exist within this dual identity as game player and in-game character, such shocks are not unexpected and thus do not literally 'shock' the reader-player out of their sense of presence in the world.

[21] Bethesda Studios, *Skyrim*.

As mentioned briefly in chapter 2, surprises are the third element necessary to create a sense of presence in a virtual world, and they too come in three forms: attractors, connectors, and retainers. The attractors, or those elements which draw attention to objects or quests of interests, are developed through both the graphics and diegetic sounds. As Simkins, Dikkers, and Owen describe:

> The graphics play fair. They show amazing sights, but are also used to let you see telltale hints, scorch marks or animal remains, that might, upon careful investigation, reveal a tripwire or a beartrap. The audio is similarly helpful, with breezes that blow cold down the mountain valleys and howls that suggest a wolf is nearby. With a limited scope of view, it is sometimes difficult to look up and around, so the roar of a dragon behind you might be your first hint that you should find some fireproof cover - and your first taste of panic that you just might be outmatched. Most of the NPCs in your travels will introduce themselves simply by speaking when they pass you, and might invite further discussion.[22]

Where more abstract virtual role-playing games might force the player to constantly be on the lookout for twinkling lights or assistance from a companion (as in the case of *The Legend of Zelda: Twilight Princess*[23]), the attractors in *Skyrim* come from all directions and are limited only by the attention the reader-player chooses to pay them. Not hearing or heeding the roar of a dragon could bring damage or death; not investigating those 'telltale hints' could cause the reader-player to miss out on a useful quest item or nonplayable character (NPC) interaction. The world is alive in *Skyrim*, regardless of whether the reader-player acknowledges that fact or not.

Connectors are those devices a player uses to orient themselves within the virtual world, such as health bars and compasses. As shown in the screenshot below, *Skyrim* uses

[22] Simkins, Dikkers and Owen, 19.
[23] Nintendo, *The Legend of Zelda: Twilight Princess* (Kyoto: Nintendo EAD, 2006).

these elements at their bare minimum, which avoid breaking the reader-player's sensory immersion too much; for much of the game, the reader-player only sees the compass at the top centre of the screen and their own health and stamina bars at the bottom (a magic bar appears on the bottom left once magic spells have been unlocked via in-game quests). Again, though, reader-players of these virtual role-playing games expect these visual elements to some extent, and the more computer-savvy reader-player seeking a fuller sense of immersion can eliminate these elements altogether through modifying the computer's code. The reader-player does not even have to create the modifications from scratch; many of these 'mods' have already been created and can simply be downloaded from the Internet and installed out-of-game.[24]

Figure 5.2: Screenshot from *Elder Scrolls V: Skyrim* (2011)

[24] A database of over 48 pages of these mods, specifically designed to increase sensory immersion/presence in the game world can be found at "NexusMods: Skyrim," accessed 10 November 2016, http://www.nexusmods.com/skyrim/mods/searchresults/?src_cat=78.

The message “[press] E [to] Search Stormcloak Soldier” in the image above is an example of a retainer, or an element which draws attention to ergodic actions the reader-player can commit. Committing the action takes the reader-player out of the game world momentarily (pressing E will bring up an inventory screen listing all the items the soldier contains which could be placed into the reader-player’s own inventory), but once the player closes the menu, both the notification and inventory screen disappear and the game environment is restored.

A retainer which removes the player from the world but arguably retains that sense of presence is the lock-picking screen. This puzzle involves as many of the reader-player’s real senses as possible to complete: players must rotate the tool until they feel a vibration in the controller as well as hear the lock successfully click open. Lock-pick tools can break and failing to pick the lock on the first try can signal guards to the attempted entry (if there are guards around to hear), so although the retainer draws attention to the game-aspect of the action, the method and consequences associated with it keep the player firmly rooted in the game environment.

Figure 5.3: Screenshot from *Elder Scrolls V: Skyrim* (2011)

Colour in *Skyrim* is also used to increase sensory immersion via virtual presence and ergodic actions. Because the history of the landscape is affected so deeply by its position at the most northern part of Tamriel, much of the visuals are given a blue tint to evoke feelings of bitter cold and blizzard-like snows. The further south the player travels, the lighter and clearer the landscape becomes, signifying that the climate has grown warmer and easier to negotiate.

Colour also has a more ergodic use in terms of signifying to the player certain affordances or consequences. For example, in the image below, there are three coloured bars along the bottom of the screen: from left to right, the blue bar is magic, the red bar is health, and the green bar is stamina. These are not labelled while in-play (as can be seen in Figure 5.4 below); the colours alone signify to the player what aspect each bar represents. Also note the green number in the middle of the image below; this is to signify that that particular skill has been boosted via an enchantment (either a potion, spell, or inventory item). If the number was

red, then it would be considered damaged and white is the base, unenchanted colour for all skills and items. Never are these colours explicitly stated (beyond the labelling of the bars in the skills menu). Requiring the player to glean for themselves the meaning of these colours could arguably deepen the sensory immersion of the player by not outwardly acknowledging that the colours have a meaning for the player to consider.

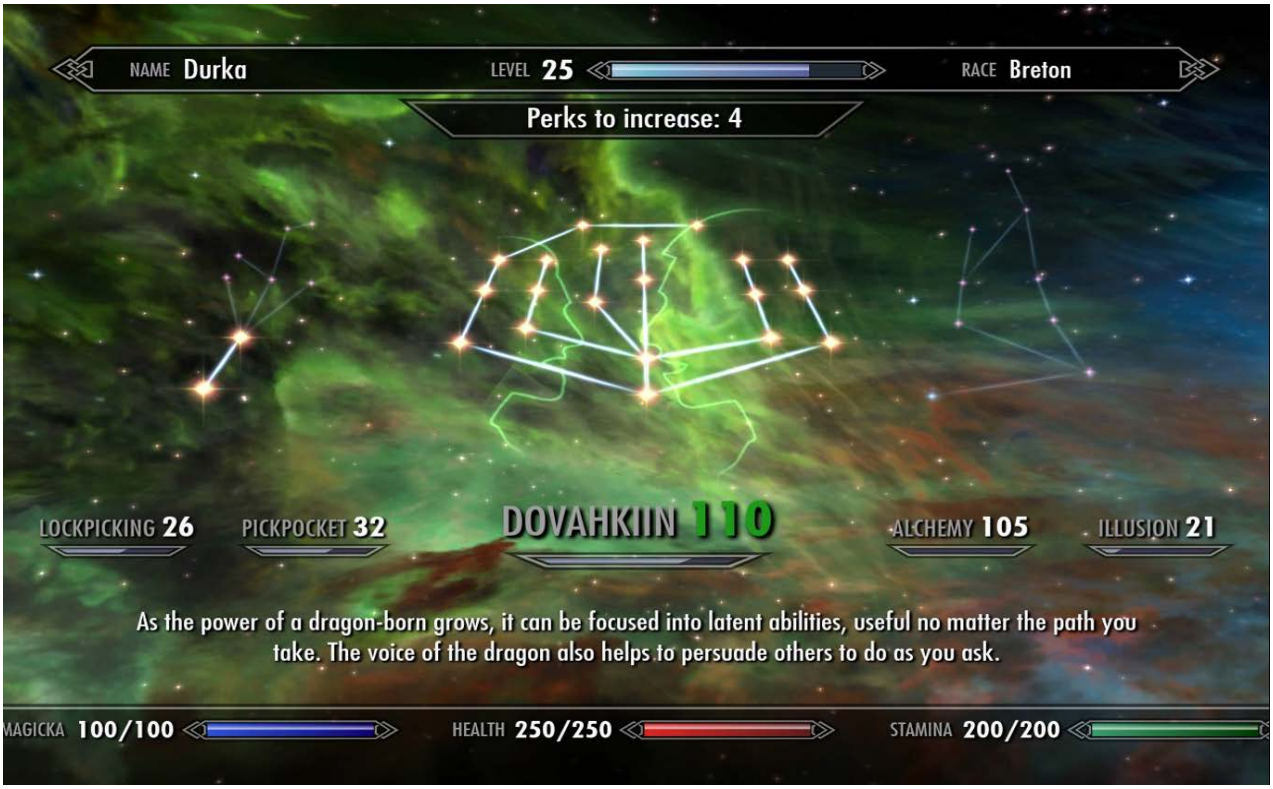

Figure 5.5: Screenshot of Perks Menu in *Elder Scrolls V: Skyrim* (2011)

Ergodic Agency: Where Game and Story Combine

Before embarking on an analysis of how *Skyrim* creates imaginative and challenge-driven immersion, an understanding how ergodic agency works in a virtual role-playing game is needed. Janet Murray defines agency as "the satisfying power to take meaningful action and see the results of our decisions and choices,"[25] but what constitutes *meaningful* action?

[25] Janet Murray, *Hamlet on the Holodeck (*London: MIT Press, 1998), 126.

Aarseth calls such ergodic agency *non-trivial*[26] but that does not necessarily equate to *meaningful*; a Nabokovian reader of *Pale Fire* could make the Vanessa atalanta connection between Shade's poem and Kinbote's commentary, but unless they knew what a Vanessa atalanta was, such action, while still being *non-trivial*, would have no real *meaning* to the reader. If "activity alone is not agency,"[27] then what is?

One issue with applying either Murray's or Aarseth's simplified definitions of ergodic agency is that gameplay often becomes reduced to being studied in terms of the physical actions performed rather than as a total encompassing experience.[28] This is the point of contention for James Newman in his 2002 article "The Myth of the Ergodic Videogame" in which he argues against describing virtual games as ergodic due to how little 'non-trivial' action reader-players actually complete in discovering the narrative. At the time Newman was writing, the most common methods of story exposition in virtual games were through those push-narratives of cutscenes and loading screens, which forced the reader-player into a passive position with little to no active engagement.[29]

Although ergodic agency is limited during these portions of gameplay, Newman acknowledges that these sections are necessary to keeping the 'game' experience because these instances often inform the reader-player of how well they are performing or progressing toward the end, or present to the reader-player important narrative framing information.[30]

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[26] See chapter 3, pg. 85
[27] Murray, 128.
[28] Schenold, 124.
[29] James Newman, "The Myth of the Ergodic Videogame: Some Thoughts on Player-Character Relationship in Videogames," *Games Studies* 2, no. 1 (July 2002), accessed 15 November 2014, http://www.gamestudies.org/0102/newman.
[30] This is particularly relevant as hypertext fictions were found to lose their readers due to a lack of progress-keeping or mapping such as this (see chapter IV).

Such passivity is referred to by Newman as "off-line" participation while he refers to the seemingly more ergodic, active player involvement (combat, action choices, etc) as "on-line" since the reader-player is actually engaging with the game mechanics in some physical way.[31] He takes into consideration that these two forms of engagement are not mutually exclusive and "should be thought of as the polar extremes of an experiential or ergodic continuum,"[32] but that he seeks to make a distinction between the two types of gameplay speaks to the need to understand how the passive "off-line" engagement can also be considered non-trivial *and* meaningful without being strictly 'active' in terms of reader-player input.

Newman seems to be pulling from Aarseth's simplified version of ergodic media as focusing more on the extranoematic[33] elements of the configurative, textonic and explorative modes in a virtual game rather than the equally as important interpretive, noematic[34] elements of empathy, inference, and reflection.[35] Depending on what kind and when the video game was made, the number of noematic choices of reflection may be greater than those extranoematic choices of reaction. Action games, such as fighting or multiplayer combat games, have a nearly unending number of extranoematic choices to be made in response to the events presented with very few noematic ones; interactive fictions or films have more noematic choices than extranoematic as their main goal is for the reader or spectator to interpret and make narrative choices in order to fill in the gaps of a story to complete it; while virtual role-playing games,

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[31] Newman, "The Myth of the Ergodic Videogame."
[32] Newman, "The Myth of the Ergodic Videogame."
[33] Defined in Schenold, 117-118, as actions which take place outside of a text in order to make meaning from it; in a virtual role-playing game, this specifically refers to actions a player must make in order to 'win'.
[34] Defined in Schenold, 117-118, as those interpretative elements necessary to make meaning of a text; in a virtual role-playing game, this specifically refers to the player's ability to choose a kinaesthetic action based on an affective connection with the narrative.
[35] Schenold, 117-118.

with their balance of reflective and reactive choices, require multiple playthroughs in order to access as much information as possible in various orders.[36]

Virtual role-playing games, such as *Skyrim*, often rely just as heavily on the reader-player's ability to digest and interpret the in-game, diegetic information of the game world as they do on the reader-player's ability to manipulate the controls and menu screens.[37] These choices can even take place before the reader-player enters the game proper (as in the case of character creation screens). In fact, the replayability of these games often depends on how much prior knowledge and experience is gained with each subsequent playing as some choices are only available to the reader-player at certain times or after certain actions are taken.[38] Given a large enough game world like *Skyrim*, a virtual role-playing game could become almost never-ending as reader-players discover new diegetic information not encountered previously.

Game designers are well-aware of this element to ergodic agency and often structure the main narrative in such as a way as to force the reader-player to learn about and make sense of the extra information in the game.[39] By designing a reader-player's choices in terms of each choice's importance, difficulty, and time allowed/presented, virtual game designers can make a game with unending playability. A good example of this lies in the fourth instalment of another of Bethesda's popular game series, *Fallout: New Vegas*. Once the reader-player has navigated the in-game tutorial (character creation, exposition, skill attribution and practice), the main narrative prompts reader-players to proceed from the starting village, Goodsprings, directly to New Vegas; however, if the player actually attempts to walk in the direction of New Vegas with

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[36] Mark J.P. Wolf, "Assessing Interactivity in Video Game Design," *Mechademia* 1, *Emerging World of Anime and Manga* (2006), accessed 22 October 2014, http://www.jstor.org/stable/41510879, 81.
[37] Schenold, 120.
[38] Wolf, "Assessing Interactivity in Video Game Design,"81-82.
[39] Schenold, 128.

such a low level of skill, the higher-level enemies will stop the player by virtue of being too difficult to overcome, ending in the player's death nearly every time.[40] The player must reach New Vegas in a roundabout way, discovering other settlements and performing other tasks unrelated to the main narrative in order to gain skill strengths and knowledge about the various factions the player will encounter once they finally do re-join the main narrative.[41] Those extra hours of gameplay contribute to "the player's work of interpreting, synthesizing, and reflecting on their experience of diegetic information [which] relates to diegetic understanding of the simulated world and provides context for ergodic action."[42] Where Aarseth and other ludologists would argue that ergodic agency consists purely of the reader-player's kinaesthetic actions and Janet Murray would argue that ergodic agency involves a complete freedom to navigate the world however one so chooses, virtual role-playing games such as *Fallout: New Vegas* (and *Skyrim*, as will be seen later in the chapter) depend just as heavily on *limiting* reader-player agency (to some extent) in order to develop the reader-player's mental processes as well as the physical, both of which contribute to achieving a sense of immersion (especially that of challenge-driven immersion) in the game experience itself.[43]

Cardoso and Carvalhais argue in their paper, "Breaking the Game: The Traversal of the Emergent Narrative in Video Games," that ergodic agency could be better understood in terms of how a reader-player traverses the game-text. Traversal, in this context, refers to how the

[40] With the exception of player modifications and hacks which are briefly discussed on pg 166.
[41] Obsidian Entertainment. *Fallout: New Vegas.* Maryland: Bethesda Softworks, 2010.
[42] Schenold, 129.
[43] Schenold, 131.

reader-player's actions and the system work together to create the ludonarrative experience.[44] What makes traversal in video games different than in print-based texts is that "traversal in ergodic media such as video games tends to not be easily re-experienceable, as the conditions that created a specific event or behaviour may not be recreated with exactness."[45] Where *Pale Fire* will always hold the same textual symbols in the same order no matter how many times the book is opened and the text fragment of a hypertext fiction will be the same no matter the order in which it is accessed, a virtual role-playing game can almost never be entered from the same place twice as reader-player actions leading to that point tend to create different event conditions.

These unique experiences are created through different methods of navigation built into the game itself. Cardoso and Carvalhais propose four categories of traversal in virtual role-playing games related to the ergodic actions they encourage: branching paths, bending knowledge, modulating relationships, and exploiting the system. The first two forms of ergodic traversal—branching and bending—can be found throughout all types of ergodic media. *Pale Fire* could be said to contain a branching narrative because Kinbote tells the reader at the start to "choose between mutually exclusive paths"[46]—the Shadean or Kinbotean readings; hypertext fictions are often written so as to allow a branching of narrative paths, depending on reader choices of clicked links. Where virtual role-playing games differ is that the reader-player is almost constantly reminded of the paths not chosen or closed due to previous choices,[47]

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[44] Pedro Cardoso & Miguel Carvalhais, "Breaking the Game: The Traversal of the Emergent Narrative in Video Games," *Journal of Science and Technology Of The Arts,* 5, no. 1 (20 December 2013), accessed 25 October 2016, http://dx.doi.org/10.7559/citarj.v5i1.87, 25.
[45] Cardoso and Carvalhais, 26.
[46] Cardoso and Carvalhais, 26.
[47] Cardoso and Carvalhais, 26.

something which, following Pope's empirical research, I identify in the previous chapter as a problem to sustain reader immersion whilst reading hypertext fictions.

These closures can be explicitly stated through on-screen notifications ("Goodsprings has been attacked. You have failed."[48]) or through moral compassing. Although reader-players can act as inconsistently as they desire, branching through moral compassing, when used properly, can guide players by rewarding consistent choices through both narrative exposition and challenge-driven gameplay.[49] Bioware's *Mass Effect* series is a prime example of consistent moral choices opening up narrative possibilities; in the second instalment, the characters the reader-player can use in the final assault depends on how Paragon (altruistic/ethical) or Renegade (selfish/antagonistic) one has been throughout the game. Jack, for example, will only become loyal to those reader-players she deems sufficiently Renegade, while Jacob will only offer his loyalty quest to Paragon reader-players.[50] Not only are these quests important to the narrative but also directly impact on the gameplay through the opening up of skills accessible only through the loyalty of these characters.

Bending, or the accessing of multiple layers of information,[51] is also present in print ergodic texts and digital ones alike. The multiple layers in *Pale Fire* can be seen most clearly through a Nabokovean or hypertextual reading of the text, focusing on how each note in the commentary and index relate to the poem, each other or some outside source. Those hypertext fictions which follow a networked structure and provide a narrative map for the reader to access whilst reading could also be said to 'bend' in this way. Virtual role-playing games,

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[48] Bethesda Game Studios. *Fallout 4 (*Maryland: Bethesda Softworks, 2015).
[49] Steve Breslin, "Interactive Storytelling: Meaningful Player Choice," accessed 24 March 2016. http://www.breslinstudios.com/breslin%20-%20meaningful%20choice.pdf, 6.
[50] Bioware, *Mass Effect 2* (Redwood City, California: Electronic Arts: 2010).
[51] Cardoso and Carvalhais, 26.

though, increase the reader-player's sense of bending the game by using the extra layers to possibly lengthen the game experience through exploring parallel or non-mutually exclusive narrative paths. When used together, branching and bending can make for a more completely immersive game—as long as the multicursal paths lead to a centre or closure of some sort.[52] Losing one's self in the labyrinth of a virtual role-playing game with no goals to accomplish or ending in sight (known in the videogame community as "grinding") can lead to the game experience feeling more like work than fun. These ergodic actions must have a purpose or the reader-player will question the point in performing them.[53]

Modulating, or the ability "to craft relationships and to regulate the disposition of characters or actors in the game,"[54] is arguably unique to the virtual role-playing game medium than it is to other forms of ergodic texts. A reader of *Pale Fire* cannot control how Shade feels about Kinbote, nor does Kinbote ever change how he feels toward the reader, regardless of how the reader feels about his skills as an editor of Shade's poem. The same could be said of hypertext fictions as those text fragments are pre-written and pre-organised, and can only be altered if the reader chooses the *right link path*. However, in a virtual role-playing game, much of the narrative is often based around how the reader-player interacts with both essential and nonessential NPCs. In the example of *Skyrim*, angering one faction over the other could impact which quests are available to the reader-player later in the game. This is also known as "meaningful choice [which] always implies *intended consequences*, and further, intended consequences should generally be borne out by the unfolding story, lest the entire choice-

[52] Another problem to immersion in hypertext fictions, as identified in the previous chapter.
[53] Cardoso and Carvalhais, 27.
[54] Cardoso and Carvalhais, 27.

structure of the game begin to feel trivial and contrived."[55] By creating consequences both ergodically and socially, reader-players feel a sense of agency in the game where in other ergodic media they may not.

In a video game, the physical artefact, as perceived by the reader-player, is the game world itself and the rules for accessing are two-fold: the rules of the virtual world (the social, cultural, and geographical constructs) as well as those of the computer programme (the controls, game parameters, points required to progress, etc). This means that the affordances of the game must not only be balanced virtually but also technically. The reader-player feels a sense of ergodic agency when they perform an action (such as travelling to an enemy-controlled portion of the map) and receiving the expected result of that action (being attacked by enemies). If nothing happens, the reader-player will feel a loss to their sense of agency since their *non-trivial* choice had no *meaning* to the game experience. In that same vein, the reader-player is also bound against performing any actions to which the game or machine cannot respond (such as visiting an area not yet accessible or attacking a friendly character/player). As long as these affordances are in balance, the reader-player feels a sense of ergodic agency and immersion is maintained.

Recognising the limitations that the computer programme imposes on the reader-player of a virtual role-playing game is important in acknowledging another aspect of agency only recently gaining more traction: the out-of-game input from the reader-player in the form of modifying code ("modding") or manipulating errors in the programming ("hacking"). This is the final type of ergodic traversal Cardoso and Carvalhais propose: exploiting, or experiencing the

[55] Breslin, 2, emphasis mine.

game through "a way that is unbound (or not exclusively bound) to the side of the system that was intentionally designed but to the side that is dysfunctional, emergent, and untested."[56] Any system with a feedback loop could arguably have a built-in error system; even *Pale Fire* could be viewed as containing 'glitches' in Kinbote's commentary (such as those moments when he acknowledges his insanity and/or his imminent suicide);[57] however, these are still 'scripted' glitches in that Nabokov intended for readers to incorporate these moments in their interpretations of the text.

Video games, by virtue of their digital nature, make taking advantage of those inadvertent aporias in the game's code literally possible, changing the game experience in a way not intended by the game designers or programmers. Although this could be argued as increasing the 'free will' of the human reader-player on the system, the reader-player's agency is still limited by the affordances of the rest of the system. Hacks and mods only work in small chunks; wholesale hijacking of a virtual role-playing game is not possible, if only because of the sheer size and complexity of the game as a whole.

Ergodic agency in a video game could better be defined as a reader-player's freedom "to explore, configure, experience, and react with the *guided* environment of the game system [as well as] subvert this environment by using external tools (additions or modifications to the game's code) or by exploiting latent possibilities in the game's code or logic ('cheats')".[58] The reader-player sees their choices as *non-trivial* and *meaningful* while the game just sees input

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[56] Cardoso and Carvalhais, 27.
[57] Andrew Ferguson, "Mirror World, Minus World: Glitching Nabokov's *Pale Fire," Textual Cultures: Texts, Contexts, Interpretation*, Vol. 8, 1 (Spring 2013), accessed 22 Dec 2015, http://muse.jhu.edu/journals/txc/summary/v008/8.1.ferguson.html, 103-105.
[58] Mukherjee, 152, emphasis mine.

and responds in kind with new output.[59] Immersion develops from the reader-player's deepening sense of ergodic agency, regardless of whether said agency is in line with or subverting the machinic affordances provided by the game.

Imaginative Immersion in *Skyrim*: Narratives Gallore!

Arguably, part of what creates the imaginative immersion in *Skyrim* lies in the sheer number of narratives that can be pursued. The game boasts over twenty chapters in the main questline alone, with almost 500 additional side quests (if including quests from downloadable content), equaling a possibility of over 300 hours of gameplay without repeating a single quest.[60] Similarly to how sensory immersion in *Skyrim* is created by depicting a world replete with natural sights and sounds, *Skyrim* immediately creates what suspense[61] through a more player-controlled narrative opening.

The game opens with the reader-player waking on a wagon creaking along to the executioner's block in the village of Helgen. The reader-player, at this point, has no idea why they are on this wagon or who they even are. Some of the context of the narrative is expressed in conversations by other prisoners on the wagon with the reader-player, and the reader-player can manoeuvre the controls to look around and marvel at the extremely crisp and well-rendered graphics. Although arguably more sensory immersion than imaginative, not jumping straight into a character creation scene allows the reader-player time to decide what kind of role they would want to play should they want to progress through the narrative in a particular

[59] Mukherjee, 155.
[60] Simkins, Dikkers and Owen, 17.
[61] See the glossary for a definition.

manner. Although subtle, these first thirty to forty-five seconds of the game introduce reader-players to their first ergodic choice between two branches of the narrative—Imperial or Stormcloak—and once the reader-player has decided on a side (consciously or not), all other choices following will inevitably be affected.[62]

After watching another character be executed, the reader-player is prompted through conversation to create a character. Designing the character is another ergodic choice that involves more than just creating a vehicle, as James Newman argues; the race and skills a reader-player chooses at this point determines the role, or alterbiography[63], the reader-player may wish to inhabit. The first step is to choose one of the ten races of *Skyrim*: High Elf (Altmer), Argonian, Wood Elf (Bosmer), Breton, Dark Elf (Dunmer), Imperial, Khajit, Nord, Orc (Orsimer), and Redguard. Each race has its own bonuses and weaknesses to certain skills and attributes as related to their racial history and homeland: for example, because the Nords are native to Skyrim, they have a resistance to cold spells and potions while Argonians are lizard-people native to another area called the Black Marshes and so have the ability to breathe underwater and have a resistance to poison. These skill bonuses, while providing depth to the alterbiography through narrative exposition, also impact the kind of gameplay a reader-player may wish to have: if wanting to play as a soldier, then a reader-player would probably pick a Nord or Redguard as both races have bonuses to sword-fighting and armour skills; a reader-player who wants to use magic would more likely pick a Breton or Imperial as both have bonuses to conjuring and alchemy skills; while a reader-player who wants to play a thief would

[62] Simkins, Dikkers, and Owen, 15-16.
[63] Calleja, 114-119, defines alterbiography as the player-created characterization, developed from the player's subjective interpretations of the avatar's actions within and in response to the game environment. (see a fuller explanation of this term on pgs. 69-71 of chapter II)

do best to choose an Argonian or Khajit because of their high sneaking skills (Khajits are a cat-like people with cat-like reflexes).

The reader-player can then choose to manipulate the character's appearance in even the most minute of ways. The image below is what the reader-player starts with as a baseline avatar, but as can be seen from the menu titles at the top of the image, reader-players can change the body and the head, which include more specifically changing the gender, skin tone, build, height, jawline, eye colour, hair colour and length, even cheekbone and brow placements. These are cosmetic elements as only the chosen race has any impact on the gameplay but they could help the reader-player more easily inhabit the character as a dual identity.

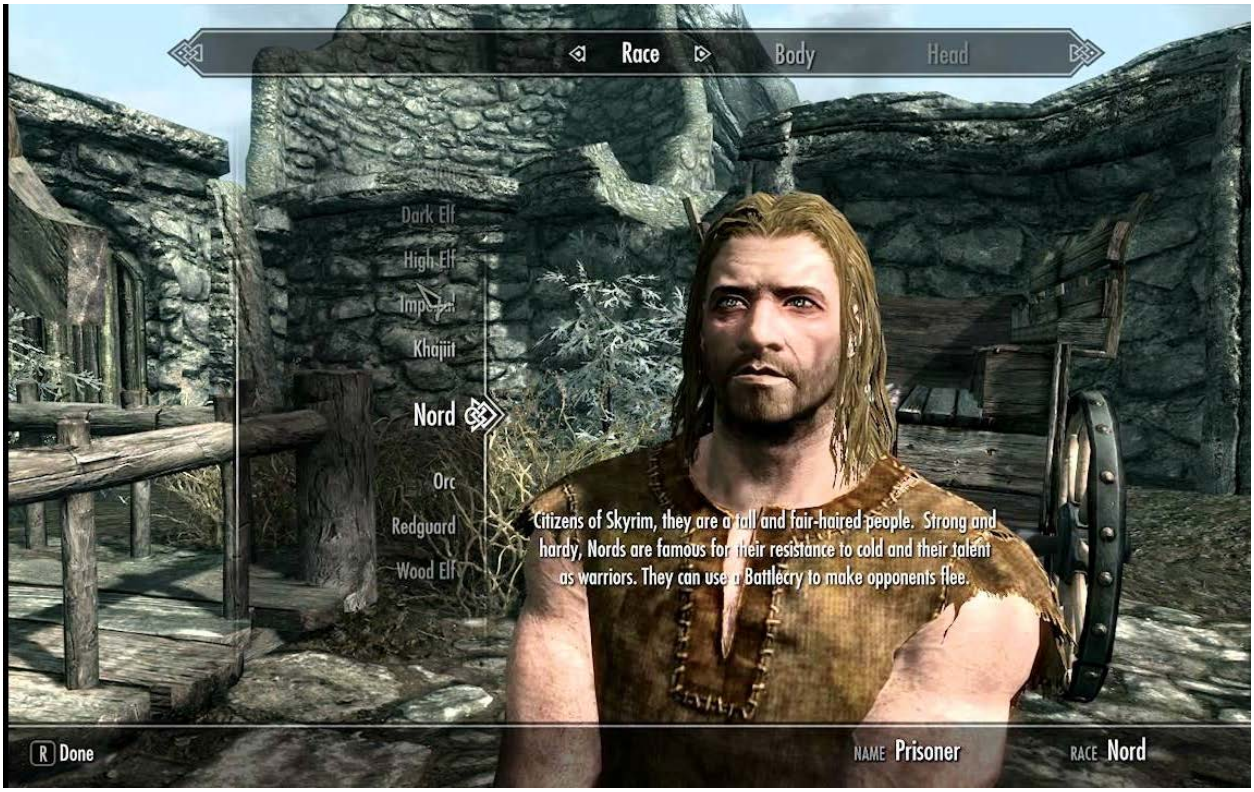

Figure 5.5: Screenshot of Character Creation Screen in *Elder Scrolls V: Skyrim* (2011)

After character creation, the game immediately launches into the main narrative—the Dragon Crisis—when the dragon Alduin attacks the village. Rather than have a tutorial for reader-players to learn how to move their character, it is through the ensuing timed and determined events that the reader-player must navigate through, which teaches them simple actions like jumping, sprinting, and crouching, as well as more advanced skills like lockpicking, looting, and equipping weapons and armour. It is important to note that at no point beyond some minor notifications is the imaginative immersion broken. If reader-players move too slowly or go in the wrong direction, they are met by natural impasses such as burning buildings or collapsed structures. This determined route is necessary as it leads to the first factional choice of the game—follow to safety the fellow Stormcloak prisoner or the Imperial guard. Although this decision does not immediately impact the gameplay or narrative, it does determine which of the factions the reader-player is most likely to align themselves with, simply because finding the relevant quests for the chosen faction will be more apparent.[64]

If the reader-player follows the partner, they are led passed three standing stones—*Mage*, *Thief*, and *Warrior*—the closest *Skyrim* comes to assigning a character class. Each stone promises a boost in the skill set associated with which stone is chosen, an ergodic choice again determining not only how the reader-player might play the game, but also which other factional storylines—College of Winterhold for *Mage*, the Thieves Guild for *Thief*, and the Companions for *Warrior*—could be more immediately available and successful for the reader-player to complete.[65]

[64] Simkins, Dikkers and Owen, 16-17.
[65] Simkins, Dikkers and Owen, 17.

Figure 5.6: Screenshot of the Standing Stones in *Elder Scrolls V: Skyrim* (2011)

Continuing on with the guide will bring the reader-player to the first named village of the game—Riverwood—and through overheard conversations between NPCs, the reader-player will become exposed to more nuanced information about the civil war and the reasons behind it. This more natural method of introducing narrative information again encourages the reader-player to choose a side rather than go out on their own. Not that the game deliberately limits the reader-player in any way—at any time, the reader-player can leave the village without penalty and explore the vast map of more than 350 discoverable locations. However, if choosing to become involved with the villagers of Riverwood, the reader-player is again subtly urged to continue on the main narrative questline through requests by the villagers to travel to the nearby village of Whiterun and request assistance from the Jarl there. Considering Whiterun is a Stormcloak held area, the reader-player may well be encouraged by soldiers and

villagers met along the way to join them instead of the Imperials, again attempting to channel—to some extent—which narrative the reader-player will follow.[66]

Regardless of whether the reader-player chooses to continue to Whiterun here or not does not remove a sense of progression from the reader-player's chosen narrative; there are still factions to choose and quests to perform for those factions. With regards to the ever present civil war, the more the reader-player explores, the more soldiers from both sides they will meet and consistently request the reader-player join their particular side. Such entreaties from rival armies are natural, and heavily imply (to the imaginatively immersed reader-player, at least) that a side *should* be chosen, which would then determine what quests become available and how the reader-player interacts with other characters, of both sides, throughout the game.

In terms of maintaining narrative coherence and imaginative immersion, such closing of branches is necessary to both the realism of the game and the suspense necessary to maintain such immersion.[67] Choosing a side in a real war would bring consequences in terms of a person's relationships with the opposing sides. Knowing that each decision the reader-player makes, regarding the civil war, impacts other major and minor events increases the feeling for a reader-player that they are actually IN another world rather than just playing around within one.

Once the reader-player and their companion emerge, *Skyrim* offers two choices for the reader-player: choose the more open agency method by attempting to complete as many quest trees as possible (one could never complete them *all*) or choose the more progressive method

[66] Simkins, Dikkers and Owen, 17-18.
[67] See pg. 64 in chapter 2 of this paper for a fuller discussion of Marie-Laure Ryan's definitions of suspense.

by playing to a role and choosing only those faction or class quests which align with the reader-player's accepted alterbiography. The open agency choice, while immersive on a strategic and completionist level, runs the risk of pulling the reader-player out of their role and breaking the imaginative immersion of the narrative by creating a sense of ludonarrative dissonance through a lack of temporal tension and suspense.[68]

A specific example of this dissonance is the 'Eye of Magnus' quest in the College of Winterhold faction quest line. The Eye of Magnus is a powerful magical item which has, at this point in the game, been obtained by an evil character, Ancano. The reader-player must obtain a different item, the Staff of Magnus, to counteract Ancano's casting or risk bringing destruction down upon the world (in a different way than the main storyline). However, if the reader-player decides to leave after Ancano has begun conjuring with the Eye, then the quest all but stops in anticipation for the reader-player's return. There is no sense of urgency in completing the quest because Ancano will never actually tap into the power of the Eye; he simply stands there, conjuring until the reader-player returns to stop him. Without a sense of pressure and tension, such narrative determinism (in that the quest will only complete when the reader-player kills Ancano) risks reminding the reader-player they are playing a game and removing them from their imaginatively immersive state.[69]

Even more upsetting to imaginative immersion is the lack of affective involvement inherent to *Skyrim*'s overarching narrative. The large number of side quests provides no emotional connection to the Dragon Crisis or civil war; why should the reader-player help a Jarl

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[68] Philip Johnston, "The Shortcomings of Narrative in Sandbox Games," paper presented at the 2nd Global Conference for the *Making Sense of: Play Project*, Mansfield College, Oxford, United Kingdom (22-24 July 2013), accessed 23 March 2016, https://www.inter-disciplinary.net/probing-the-boundaries/wp-content/uploads/2013/05/johnstonplaypaper.pdf, 4.
[69] Johnston, 4.

with their city's unrest when the outcome has no effect on how the country or reader-player fares in either of the two main narratives? Even the character the reader-player creates provides no sense of presence in the narrative: the character has no voice of their own throughout the game, responding only through mute conversation menus; and further, the character's importance (or lack thereof) in the Dragon Crisis storyline negates any emotional significance to the reader-player's actions prior: instead of being the ultimate hero as destroyer of the last dragon, the reader-player is resorted to retrieving previous Dragonborn from the afterlife so that they can destroy the dragons terrorising *Skyrim*.[70]

While all of these are appropriate criticisms for most heavily-narrative virtual role-playing games, *Skyrim* overwhelms the reader-player with quests in order to provide a sense of choice instead of a checklist.[71] It is unlikely that, realistically, one person would be able to choose to complete all things all the time without impacting their relationships with the other factions and villages.[72] If choosing to become imaginatively immersed in the game, rather than just challenge-driven, then the reader-player must commit to the dual-identity by thinking *as* the character, choosing only those narratives the character would realistically take. Playing as a thief means only following the Thieve's Guild questline, if only for a while. Wanting to side with the Nords in the civil war means ignoring the Imperial Army's quest aims, if only on this playing; the reader-player can always reload a previous save point and play a different option, but that would make it a different *reading* altogether.[73] *Skyrim* allows for reader-players to become as

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[70] Jonathan McCalmont, "*Skyrim* and the Quest for Meaning," *Futurismic* (7 December 2011), accessed 20 October 2016, http://futurismic.com/2011/12/07/skyrim-and-the-quest-for-meaning/, para.
[71] Simkins, Dikkers and Owen, 22-23.
[72] Johnston, 5.
[73] Simkins, Dikkers, and Owen, 22-23.

deeply imaginatively immersed as they choose, and ties their challenge-driven immersion to those choices, as well.

Challenge-driven Immersion: Intended Consequences and Meaningful Choices

Understanding the ergodic agency of *Skyrim* in terms of how it contributes to challenge-driven immersion requires breaking down how the game applies Sweester's and Wyeth's GameFlow criteria[74] to the gameplay. As shown in Murray's and Aarseth's definitions above, ergodic agency (in its simplest form) implies a sense of control on the part of the reader-player, providing them with near complete freedom over their own gameplay experience, "not simply discovering actions and strategies planned by the game developers."[75] Where this is more easily accomplished in a hypothetical holodeck (as in Murray's conceptualisation) or in a simulation game (such as *The Sims*), virtual role-playing games require a bit more direction.

In order for a game to be a 'game,' the system must contain goals for reader-players to accomplish.[76] In virtual role-playing games these are often set out as overarching and side quest directives; in *Skyrim*, for example, the main goals are to solve the dragon crisis and help bring about an end to the civil war between the Imperials and Stormcloaks, with minor quest directives provided along the way which help toward accomplishing those goals. Where ergodic agency comes into play is in how many and in what order the reader-player can choose to accomplish these goals.

[74] As detailed on pgs. 71-77 in chapter 2 of this study, GameFlow consists of: clear goals, control, feedback, concentration, challenge, skills and immersion
[75] Sweester and Wyeth, 5.
[76] See the definition of *game* on pgs. 12-13 in chapter 1.

Because virtual role-playing games work on the level of semiotic representation (as opposed to the abstraction of other games like chess), reader-players must consider how their choices affect not only the narrative but also their relation to other representational elements in the game (the racial tensions, civilisations, and history of Skyrim itself).[77] Although choosing which side to support in *Skyrim* is not concrete (the reader-player can choose to change sides at almost any time), some quests available in certain cities are determined by the level of support and quests completed in service of one side or another. In the city of Markarth, for example, the Jarl issues many of the quests available in that city but supports the Imperials; if the reader-player supports the Stormcloaks and progresses in that questline to the point where the Jarl must be deposed and replaced, then those quests become unavailable, determining the reader-player's experience in that city and what rewards and achievements the reader-player can obtain.

These rewards and achievements obtained are examples of another important element, feedback, which provides reader-players with their progress in accomplishing those goals; upon completion of a task, a notification appears on the screen to inform the reader-player of whether or not they were successful. As discussed in the previous chapter with regard to the problems of immersion in hypertext fictions, without feedback working in tandem with the goals presented, the game would become overwhelmingly frustrating as the reader-player would not understand what they were meant to do or how well they were doing, leading to the

[77] Eric Hayot and Edward Wesp, "Style: Strategy and Mimesis in Ergodic Literature," *Comparative Literature Studies* 41, no. 3 (2004), accessed 22 October 2014, http://www.jstor.org/stable/40247420, 409-410.

reader-player eventually giving up the game altogether, as Pope found many readers of hypertext fictions did, possibly without ever finishing it.[78]

In *Skyrim*, feedback is also provided in the form of a quest log, which keeps track of both completed and active quests. Active quest locations are also marked on the reader-player's compass by a symbol ( ), combining the sensory immersive connector element with the challenge-driven action required. Unless reader-players have activated too many quests at once (a common problem, and one which I personally suffered on many occasions), reader-players never need to break their sense of presence in the virtual world in order to identify the direction of their ergodic progress.

Figure 5.6: Screenshot of quest journal in *Elder Scrolls V: Skyrim* (2011)

Although many virtual role-playing games incorporate control, goals and feedback into a narrative, they usually do so through an *illusion* of ergodic agency through random or arbitrary

[78] Sweester and Wyeth, 5.

choices that have no impact on the game as a whole. Such practices often negatively impact another important element of the GameFlow model: concentration, or the ability to provide "a high workload, while still being appropriate for the reader-players' perceptual, cognitive, and memory limits [without] being distracted from tasks that they want or need to concentrate on."[79] In order to accomplish this level of concentration and avoid reader-players feeling like they are pixel-hunting or random button pushing, reader-players need to know what and why they should choose certain actions.

Skyrim is often criticised on this very aspect due to the high level of menial, work-like tasks needed to complete some of the quests: many city quests require the reader-player to retrieve varying numbers of items (bear pelts, metal ores, healing potions, etc.) for the Jarls or members of their cabinet. An argument could be made that such tedious tasks create a more realistic feeling to the game in that people would actually need and ask for these things. However, when the fate of the world is at risk, would it really be likely that the only person capable of saving it, the first Dragonborn in two eras, would waste time running errands for shopkeepers instead of focusing on destroying Alduin, the prophesized dragon terrorizing the land?[80]

Skyrim gets around this question in a couple of ways: the first, by connecting the Dragon Crisis quest to the civil war dilemma (which further connects to the city quests related to each faction) and also by connecting those menial tasks to the development of the reader-player's skill set. Where most other virtual role-playing games increase a reader-player's experience points in bulk during combat and crafting, allowing the reader-player to assign perks and skill

[79] Sweester and Wyeth, 5.
[80] Johnston, 5.

points as and when they wish, a reader-player in *Skyrim* only gains skill points for those skills used successfully. When an arrow hits an intended target, archery skills are increased. When a reader-player successfully sneaks behind another character, stealth is increased. When a reader-player hits an opponent with a sword, combat skills are increased. This skill-specific advancement is more realistic than wholesale experience points and also determines the kind of character the reader-player can assume, thus increasing imaginative immersion; early advancement of one skill may pre-dispose the reader-player to continue using that skill simply because the reader-player's attacks are more successful.

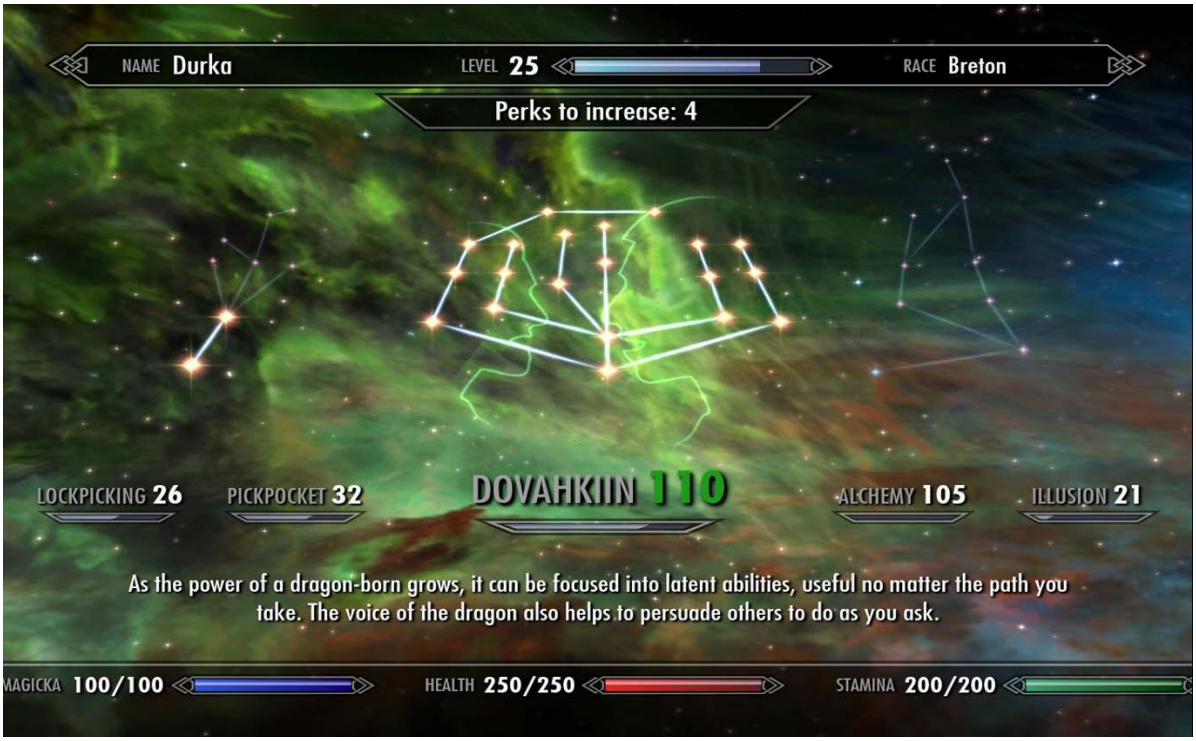

Figure 5.7: Screenshot of Skills Menu in *Elder Scroll V: Skyrim* (2011). In this image, the player has chosen to advance the Dovahkiin and Alchemy skills more than the lockpicking, pickpocketing, and illusion skills.

What makes *Skyrim* different, and adds to the challenge-driven immersion, is that even menial skills like crafting and persuasion are also levelled *only when those skills are used*. And not just in the active sense; light, medium, and heavy armour skill points are only assigned

when the reader-player wears and *is protected by* that particular armour over time. What kind of armour the character consistently wears and weapon the character consistently uses also determines what kind of armour and weapons can be crafted at blacksmith forges, which then impacts the reader-player's crafting skills. This contributes to the reader-player's fighting style and form of gameplay; if wanting to play as an archer, the reader-player will have to use arrows from the start and wear a particular kind of armour and craft only bows and arrows at the blacksmith forges. If the reader-player wants to be a mage, then they have to use mostly magic, wear light robes, and craft mage staffs and various potions. If the reader-player wants to be successful as a dual-wielding warrior (which is often my chosen form of gameplay), then they must use and forge mostly one-handed swords and wear heavier armour.

Advancing skills in this way also predetermines what perks the reader-player will be able to obtain once they have reached a certain experience level. Each skill—smithing, conjuring, two-handed, heavy armour, etc.—has its own skill tree; level up enough in a particular skill, and the reader-player can choose a perk to add to that skill, making it even more powerful. But, only by consistently gaining skill points and perks in a particular tree will further better perks become available. Dabbling in multiple skill trees, while making the reader-player more versatile, is not only unrealistic but also limits how far the reader-player will advance in any particular skill tree. A reader-player must choose one and commit (for the most part) in order to receive any real benefit from the offered skill trees.[81]

Challenge-driven immersion, then, is dependent on the strategies reader-players develop in response to the "training, personal temperament, or response to the game situation

[81] Simkins, Dikkers and Owen, 23-24.

itself"[82] rather than as a secession of quick reaction choices. Through reflective, noematic decision-making, reader-players are urged to create and adopt different strategies during play rather than allow for outside consideration, tying their ergodic choices directly to how the narrative progresses. Reader-players become responsible for their own participation with *Skyrim* as both reader-player and character of a game*text* rather than as just another game. [83]

As I show in the next chapter, the importance of meaningful choice regarding the ergodicity of a text is particularly relevant in analysing those contemporary ergodic texts that critics such as Jessica Pressman and N. Katherine Hayles refer to as *hybrid* or *bookish* texts. Because these texts seem to be highlighting the materiality of the printed text through using contemporary digital means, understanding how digital narratives are influencing the narrative structure (and thus these texts' overall ergodicity) is important to highlighting the ways in which video games are being remediated.

[82] Hayot and Wesp, 407.
[83] Hayot and Wesp, 407-408.

Chapter 6:

Multimodal Literature and Ergodic Agency: The Immersion of *S.*

In this chapter, I bring together the threads of inquiry and research from the previous chapters to analyse those contemporary ergodic texts in print. By examining a specific subsection of these contemporary texts—the so-called hybrid or bookish texts printed since the turn of the new millennium—I show how many of these hybrid texts are not ergodic—neither in spirit nor in practice—even though their narratives utilise more semiotic modes than just verbal text. I also show, by comparing *S* directly with the acclaimed and academically studied ergodic text, *House of Leaves*, where the video game has begun to be remediated through the use of training spaces, as well as the sensory elements of colour, varying narrative perspectives and vantage points.

While the use of the term *ergodic*[1] is related to Espen Aarseth and other ludologists following him,[2] a corresponding word in literary and aesthetic theories could be *multimodal* literature. Gibbons defines *multimodal literature* as:

> A body of literary texts that feature a multitude of semiotic modes[3] in the communication and progression of their narratives […]; they experiment with the possibilities of book form, playing with the graphic dimension of text,

[1] Defined as those texts that require nontrivial actions, beyond periodic or arbitrary page turning and eye movement, in order to produce meaning.
[2] Most notably Markku Eskelinen in his *Cybertext Poetics* (2007)
[3] Defined as: any method, medium or signifier by which we communicate an idea, e.g. "family photographs and snapshots, maps and hand-drawn sketches, typography and layout, and even color, graphic frames and margins," as well as the more straight-forward methods such as verbal (written and spoken) language; Wolfgang Hallet, "The Rise of the Multimodal Novel: Generic Change and Its Narratological Implications," in *Storyworlds Across Media: Toward a Media-Conscious Narratology*, ed. by Marie-Laure Ryan and Jan-Noel Thon (University of Nebraska Press: London, 2014), 151.

> incorporating images, and testing the limits of the book as a physical and tactile object.[4]

On the surface, the two are very similar: examples of both textual categories can be traced back to the beginnings of the book itself (even further in the case of the ergodic *I Ching)*, and both found new forms in the experimental literature of the late nineteenth and early twentieth centuries.[5] I find both terms equally important in terms of comparing virtual role-playing games with traditional print texts because, due to the sensory and kinaesthetic nature inherent to the video game, it is both multimodal AND ergodic.

However, where an analysis of ergodic literature is more focused on the physical interactivity of the reader, multimodal literature includes those works which contain non-verbal elements as a method of furthering the narrative (whether the reader interacts nontrivially with the text or not). So, while Laurence Sterne's meta-fictive 1760s text *The Life and Opinion of Tristram Shandy, Gentleman*[6] could be considered both ergodic and multimodal, Lewis Carroll's 1865 *Alice's Adventures in Wonderland* would not be considered ergodic but would be multimodal as the illustrations contain narrative elements not mentioned in the verbal text (as many Victorian illustrated texts did).[7]

In the modernist period, multimodality in the form of font-size manipulation and the use of onomatopoeia was deployed as a method of aesthetic experimentation, particularly in the Symbolist, Cubist and Futurist movements. Paul van Ostaijen's *Bezette Stad* (1921)[8] is a

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[4] Alison Gibbons, "Multimodal Literature and Experimentation," in *The Routledge Companion to Experimental Literature*, ed. by Joe Bray, Alison Gibbons, and Brian McHale (Routledge: London, 2012), 421.
[5] Such as I have discussed in chapter III of this study with reference to ergodic texts and will mention later in this chapter with regards to multimodal texts.
[6] Hereafter referred to as *Tristram Shandy*
[7] See figure 6.2 in this chapter
[8] Translated into English as *Occupied City*

particularly noteworthy example in his use of words not just as verbal signifiers but as visual ones, as well. As seen in Figure 6.1, Ostaijen uses the word z*eppelin* in this way, placing it at the top of the page to visually represent a zeppelin hovering above the words beneath. Through creating pictures with the word (which are also used verbally in the poems themselves), *Bezette Stad* is considered an experiment in multimodal literature through manipulating text on the printed page.[9]

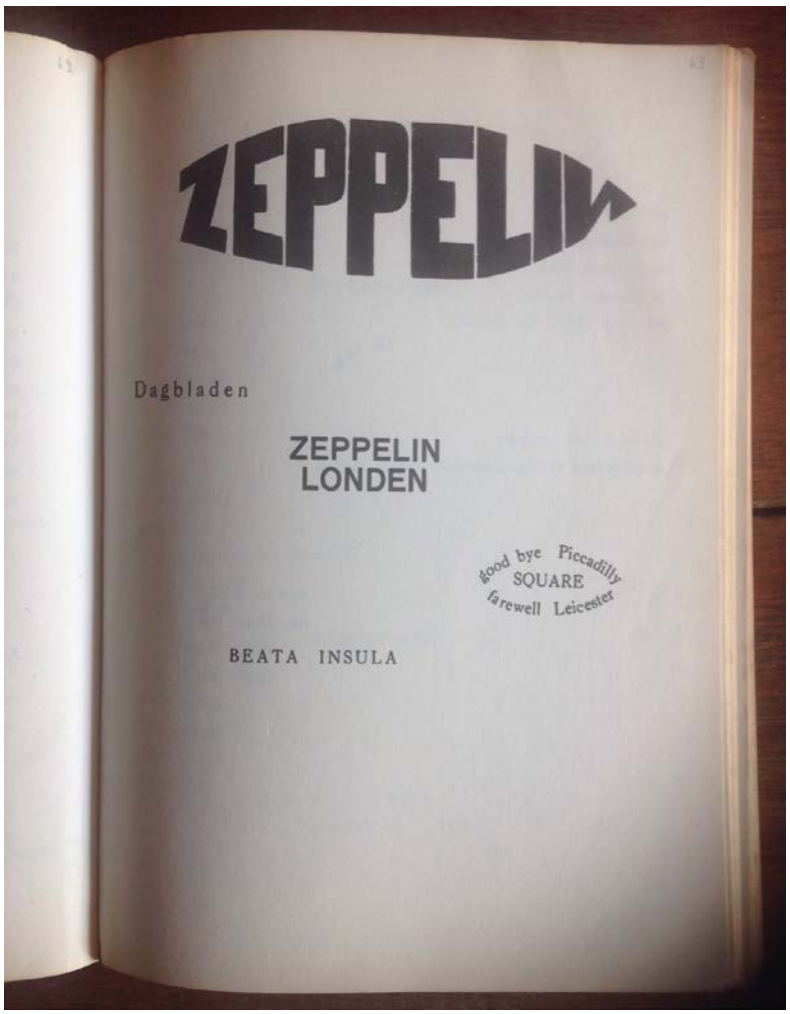

Figure 6.1: Paul van Ostaijen, *Bezette Stad*, 63.

[9] Gibbons, 424.

Postmodern multimodal texts continue the experimental methods of these writers while also manipulating the narrative as a way of playing with the book as a dynamic vessel.[10] It is during this period that many examples of ergodic and multimodal literature overlap: B.S. Johnson's *The Unfortunates* (1969) falls into both categories in that it requires nontrivial kinaesthetic effort by the reader to manipulate the individual chapters to create a cohesive narrative.[11]

While multimodal works exist outside of the novel form and have for at least the last two centuries,[12] I wish to focus on those contemporary multimodal novels (published since the turn of the twenty-first century) which capitalise as well as challenge the dominance of digital technology. As Gibbons points out, "the fact that images and word-image combinations can now be produced cheaply and more easily has resulted in an increase of multi-modal works into the mainstream market."[13] It has even be argued that the worlds of digital and print-based publishing are now so intermingled that books themselves could be viewed as an *output* of digital texts rather than as a separate medium altogether.[14] In short, where digital texts once experimented with the traditional methods of print in an effort to create a new type of text on digital platforms,[15] print books are now remediating digital techniques for their own experimental works; remediation has, in a sense, come full circle.

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[10] Gibbons, 424.
[11] See pg. 92 in chapter 3.
[12] As detailed in Gibbons, 422-423: other examples can be found in experimental poetry; avant-garde theatre, such as *The Red Horse Animation* (1970); biographical writing, such as Lauren Redniss' *Century Girl* (2006) and *Radioactive* (2011); and critical nonfiction, such as Avital Ronell's *The Telephone Book* (1989) which deconstructs Heidegger, Derrida, and Alexander Graham Bell through a Yellow Pages metaphor.
[13] Gibbons, 421.
[14] N. Katherine Hayles, "Combining Close and Distant Reading: Jonathan Safran Foer's *Tree of Codes* and the Aesthetic of Bookishness," in *PMLA* 128.1 (2013), 226.
[15] Such as the hypertext fictions discussed in chapter IV of this study.

Some literary critics, such as Jessica Pressman and N. Katherine Hayles, argue that these experimental print texts are an attempt at highlighting an "aesthetic of bookishness"[16] in an age of e-readers and e-literature. Pressman, in particular, argues that these texts are not just "the fetishized focus on textuality and the book-bound reading object" nor are they playing at "another form of postmodern reflexivity in which the author toys with the reader in a layered process of simulacra"[17]; these texts are specifically using the book less as a vessel for delivering narrative and more as a necessary element to the narrative itself. As such, these works represent the continued nature of print literature to remediate other media of the time period, including cinema, digital literature, and, as I argue, video games.

Taxonomy of Multimodal Literature

Multimodal literature, like ergodic literature, functions more as a spectrum than a simple duality, incorporating texts that are minimally multimodal to extensively; in reality, when considering the formal features associated with multimodal works[18], *all* texts are multimodal to some extent. Alison Gibbon's taxonomy of multimodal literature explores those multimodal works published since the start of the new millennium, and so by using her structure to analyse the ergodicity and depth of immersion each category on her taxonomy may have, I more adequately identify where video games may have had an influence across the challenge-driven, imaginary AND sensory areas in contemporary print ergodic literature.

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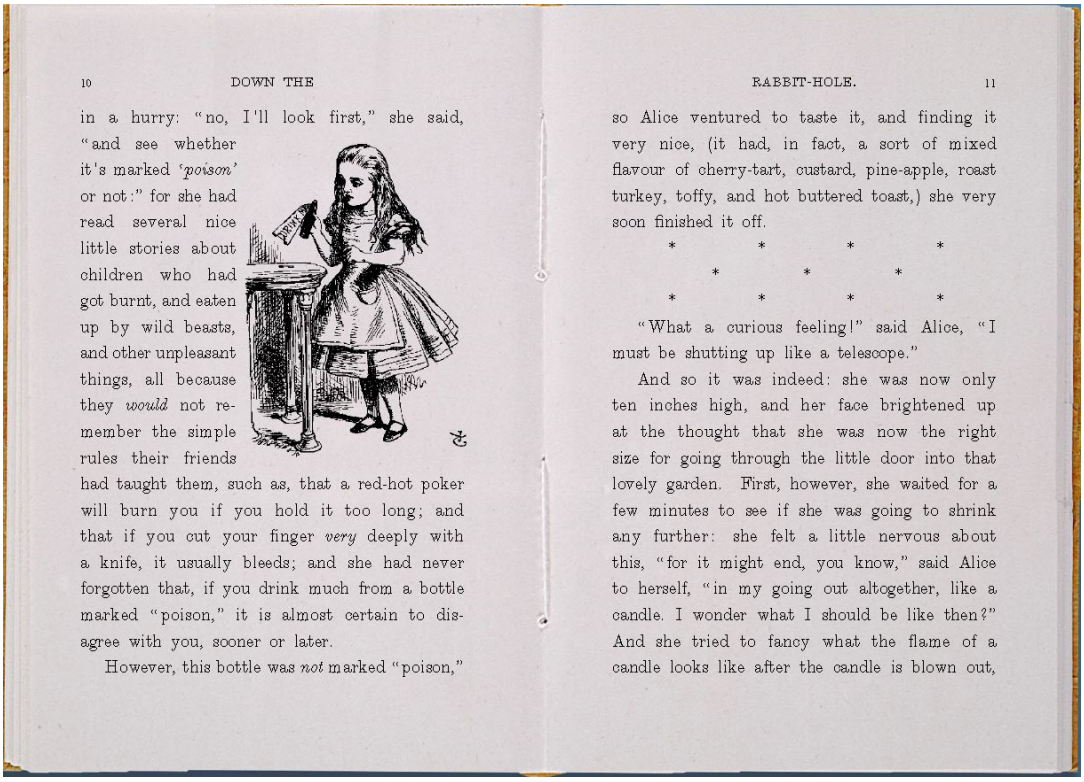
[16] Jessica Pressman, "The Aesthetic of Bookishness in Twenty-First-Century Literature," *Michigan Quarterly Review* 48.4 (2009): 465-82, 465.
[17] Pressman, 465.
[18] Defined in Gibbons, 420 as: different fonts and font sizes; unconventional page layouts of both text and visual elements such as pictures, photographs, graphs, or even copies of documents; manipulation of the different elements of the codex, possibly with physical elements missing, added, or separated from the main text altogether; critical paratexts such as footnotes and in-narrative criticisms.

Illustrated works are those texts that include pictures woven into the narrative as supplemental paratexts rather than produced *during* the narrative development. Carroll's *Alice's Adventures in Wonderland* is a Victorian example through the use and placement of John Tenniel's illustrations. As shown in figure 6.2, not only are illustrations used to visualise an important event but snowflake-like stars are used to signify the passing of time. While Tenniel's illustrations are not *part* of the narrative, they depict narrative events in non-verbal ways.


10 DOWN THE

in a hurry: "no, I'll look first," she said, "and see whether it's marked '*poison*' or not:" for she had read several nice little stories about children who had got burnt, and eaten up by wild beasts, and other unpleasant things, all because they *would* not remember the simple rules their friends had taught them, such as, that a red-hot poker will burn you if you hold it too long; and that if you cut your finger *very* deeply with a knife, it usually bleeds; and she had never forgotten that, if you drink much from a bottle marked "poison," it is almost certain to disagree with you, sooner or later.

However, this bottle was *not* marked "poison,"

RABBIT-HOLE. 11

so Alice ventured to taste it, and finding it very nice, (it had, in fact, a sort of mixed flavour of cherry-tart, custard, pine-apple, roast turkey, toffy, and hot buttered toast,) she very soon finished it off.

* * * *
* * *
* * * *

"What a curious feeling!" said Alice, "I must be shutting up like a telescope."

And so it was indeed: she was now only ten inches high, and her face brightened up at the thought that she was now the right size for going through the little door into that lovely garden. First, however, she waited for a few minutes to see if she was going to shrink any further: she felt a little nervous about this, "for it might end, you know," said Alice to herself, "in my going out altogether, like a candle. I wonder what I should be like then?" And she tried to fancy what the flame of a candle looks like after the candle is blown out,

Figure 6.2: Sample pages from Lewis Carroll, *Alice's Adventures in Wonderland* (1895; repr., Bristol: Pook Press, 2013), 10-11.

A more recent example is Lance Olsen's *Girl Imagined by Chance* (2002), a story about a couple who lose themselves in creating a make-believe child to please family members. Whereas the illustrations for *Alice's Adventures in Wonderland* were drawn after the narrative was written, Olsen uses the included snapshots as starting points for the second-person

narratives which follow them, pointing out how photography and digital technology can be manipulated to show whatever the creator wishes. Even though each of the seventeen narratives seems to be connected to the photographs preceding them, the photos are not *created* by characters *during* the narrative events but function as narrative 'memories' associated with them,[19] thus placing it as a very limited/minimal multimodal text.

The next category on Gibbons' multimodal spectrum are multimodal (re)visions, or pre-existing texts which have had pictures and other artefacts added to make reading them a more interactive experience, often through changing meta-textual elements into more ergodic, performative ones. Visual Editions, a London-based publishing company, have been praised for their multimodal (re)visions of *Don Quixote*, in which new landscape pictures and colours are added to reinterpret Quixote's quest, and *Tristram Shandy*, in which side bars and different colours were inserted to provide a new, more visually captivating take on the narrative.

In direct relation to this study, Gingko Press' (re)vision of *Pale Fire* brings together multimodality and ergodic agency in its publication of the text as a box of artefacts derived from the narrative, including Shade's poem as a separate pamphlet (as suggested by Kinbote in the Foreword) and the 'original' note cards meant to be drafted by Shade.[20] More than just fun paratexts, readers of this version are able to touch the very items mentioned by Kinbote and interpret, for themselves, how such elements factor into the story as a whole. However, as none of these texts were first produced in these formats, their multimodality is not inherent, only manufactured by third parties, and so still lay at the more minimal end of the multimodal spectrum.

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[19] Hallet, 156.
[20] Gingko Press, "Pale Fire," accessed 24 March 2016, http://gingkopress.com/shop/pale-fire/.

Figure 6.3: Gingko Press *Pale Fire* Box Set

The next multimodal text type are tactile fictions, those "books that play with form in a way that both emphasizes their materiality and makes readers engage with them in notably physical ways,"[21] or in other words, texts that encourage a kinaesthetically ergodic reading. Two books-in-a-box previously mentioned in this study—Marc Saporta's *Composition No. 1* (1963) and B.S. Johnson's *The Unfortunates* (1969)—are tactile fictions in their need for the reader to physically manipulate the text before beginning the narrative. Other examples would be epistolary fictions in which the letters are placed in envelopes to be removed and read (rather than simply printed and bound sequentially), as well as die-cut novels such as Jonathan Safran Foer's *Tree of Codes* (2010). Arguably, even the Gingko Press box set mentioned above could be considered an attempt at making *Pale Fire* even more tactile by adding external artefacts for readers to flip-through whenever Kinbote mentions or references the poem or note cards in his Commentary. Because tactile fictions encourage the reader to explore the book as a material object, they remind the reader that books can be seen as art forms in and of themselves.[22]

[21] Gibbons, 428.
[22] Gibbons, 428-429.

The slightly more multimodal text included in Gibbons' taxonomy of multimodal literature are altered fictions and collage books, or books which have had some physical change to their text in order to produce an entirely new text. While similar to the multimodal (re)visions discussed earlier in that they begin as mostly verbal, pre-existing texts, altered books are considered more multimodal in that they change the physical text *and* the narrative within.[23] An example of this can be found through no better text than Tom Phillips 30-year project *A Humument*. Begun in 1966 as a dare, Phillips has used W.H. Mallock's 1892 novel, *A Human Document*, to criticise its original author and narrative, make comments on events relevant at the time of each edition, or even expose the faults in our own reading practices (in that they are influenced more and more by television and now the Internet). Phillips has published six different editions of this altered text, each progressively become more and more digitised, even resulting in an iPad app of the text in 2010.[24]

While *A Humument* is arguably more of an artist's book than a multimodal novel,[25] those altered texts relevant to this study differ in their unwavering devotion to the act of "long narrative fiction"[26] over a visual aesthetic. While *Tree of Codes* is mentioned above as an exemplar of tactile fiction, it is so due to Foer's method of altering Bruno Schultz's collection of short stories, *The Street of Crocodiles* (1934), which he somewhat adopted from Phillips' work with *A Humument*. In order to analyse just how and what effect Foer's alterations had—both on the narrative and the act of reading it—N. Katherine Hayles had to digitally render them both,

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[23] Gibbons, 429.
[24] Tom Phillips, "Introduction to the sixth Edition 2016," accessed 5 Sept 2017, http://www.tomphillips.co.uk/humument/introduction.
[25] Due to its dependence on more of a visual aesthetic than a narrative in Phillips' method of hand-painting each page.
[26] Hayles, "Combining Close and Distant Reading," 227.

an interesting feat considering the delicate and seemingly 'undigitizable' physical nature of the die-cuts Foer used in altering the text.[27]

Using the same English translation as Foer (Celina Wieniewska's 1977 Penguin Classics version), Hayles compares the number of total words in each text: where Wieniewska's translation contains 37,483 words, Foer's die-cuts leave only 3,815 intact. Although this might seem like an inordinate large percent of a text to remove (in order to maintain any sense of narrative cohesion), it is through looking at *which* words are removed that highlights *why*. Gone are all minor characters or any mention of animality or sexuality. Gone are any implications of the father figure's increasing psychosis or self-imposed exile. Ironically, what's left from the many holes created by Foer is a narrative which creates a 'whole' family by reconnecting the mother and father figure. *Tree of Codes* becomes a tree itself—of family, of life, of the different codes we may use to traverse it or even simply understand it.

While the omitted elements in both *A Humument* and *Tree of Codes* create new narratives from existing ones, *Tree of Codes* goes a step further—both multimodally and ergodically—in its tactile nature. Because the book contains so many holes, reading it becomes an act of preservation as well as decision-making. Since traditional scanning is not an option (due to the fragility of the die-cut pages and exposed text showing through), the reader must decide how to approach reading the text—do they ignore the words exposed by the holes (as Hayles did) or include them as they read each line? How does that choice change how the narrative plays out? Does it matter?[28]

[27] Hayles, "Combining Close and Distant Reading," 227.
[28] Hayles, "Combining Close and Distant Reading," 230.

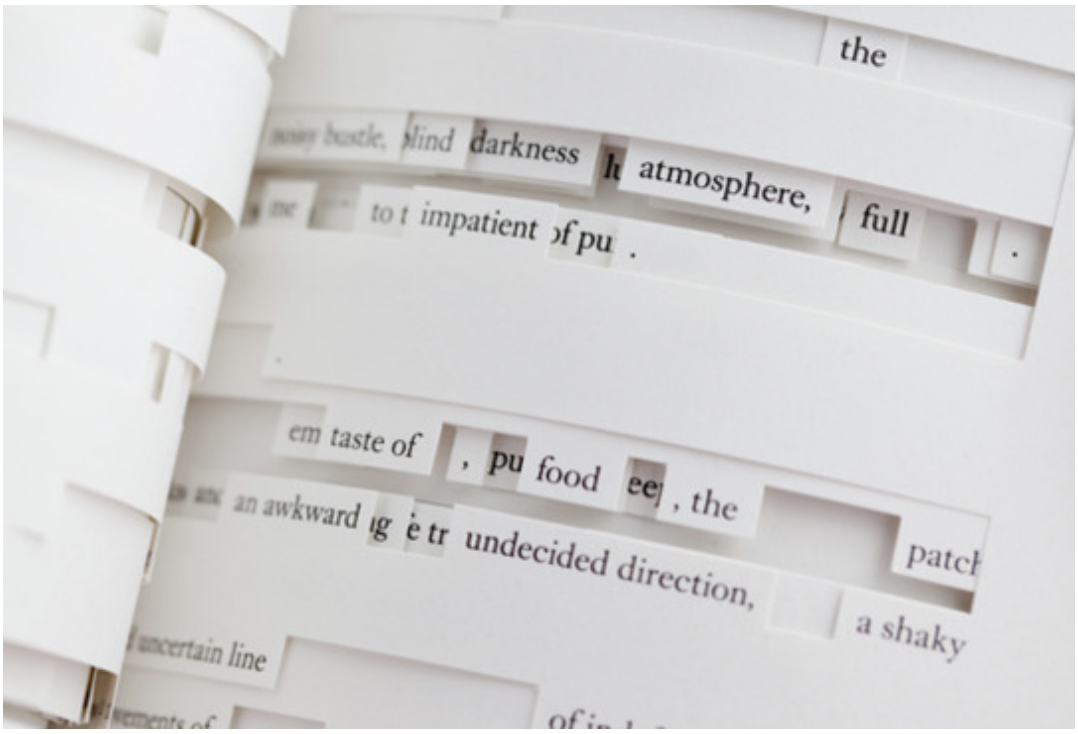

Figure 6.4: promotional image for *Tree of Codes*, accessed 4 January 2018, http://2005.visual-editions.com/our-books/tree-of-codes.

Foer's text is a prime example of how multimodality (and the level of ergodic involvement it contains) can mix across taxonomies, and yet, for all of its altered and tactile nature, *Tree of Codes* is still not considered as multimodal as the next group on Gibbons' spectrum: concrete and typographical fictions, or those fictions which exploit both the white space of the page and the varying font types and colours available. Three contemporary titles stand out as exemplars of concrete and typographical fictions, if only for their supposed resistance to and use of digitization: Anne Carson's *Nox* (2010), Steven Hall's *The Raw Shark Texts* (2007), and Mark Danielewski's *House of Leaves* (2000). However, as I will show, each of these texts is arguably no more ergodic than their printed postmodern ancestors, for all their digitally influenced and bookish natures.

Anne Carson's *Nox* (2010) began as a handmade scrapbook Carson created to deal with her brother's unexpected death. It contains photos, scraps of handwritten notes, etched messages, and typed narrative prose explaining (or at least connecting) the artefacts to each other. Arranged in a concertina-style scroll of 27 folded pages, *Nox* is not bound like most books but rather contained freely within a plain, grey cardboard box. Because of this method of packaging, *Nox* can be read traditionally by turning each page or unrolled to its full 25 metre length to be read in continuous form.[29]

However, this method of printing does not make *Nox* a more tactile text. Even though the images are so well-rendered as to trick the reader into thinking they can feel the glossiness of the photos or the tape used to attach each artefact to the page, all of *Nox* has been Xeroxed from the original,[30] negating many critics' argument that it personifies the nondigitizable text. While that may be true for some of its material aesthetics (i.e. the ability to unroll it like a scroll or the scrapbook-in-a-box pretence), the very digital process used to copy the pages could conceivably be used to render it for digital reading. The reader may lose the 'feeling' of reading a unique artist's book but they lose nothing in terms of the narrative structure.

Hall's *The Raw Shark Texts* (2007) has also been lauded by critics as an example, both in narrative and construction, of the printed book's response—both narratively and constructively—to the supposed threat it faces from digital culture. The shark of the title, as the main antagonist of the novel, is often presented both literally (as a graphic representation of a shark) and textually (in the form of concrete poetry). At one point, the shark's arrival takes the

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[29] Liedeke Plate, "How to Do Things with Literature in the Digital Age: Anne Carson's Nox, Multimodality, and the Ethics of Bookishness," *Contemporary Women's Writing,* 9:1 (March 2015), accessed 24 May 2017, https://doig.org/10.1093/cwwrit/vpu038, 98.
[30] Liedeke Plate, 98.

form of a flipbook spreading over forty pages, with the final page depicting an open-mouthed text-shark, ready to devour the reader as it did the protagonist prior to the start of the novel's events.[31] While these children's books methods allow "the novel [to be] graphic and cinematic, visual and tangible […] a physical object readers can manipulate,"[32] they do nothing to change the nature of the book as an object, nor do they provide any sense of readerly control on the narrative's development.

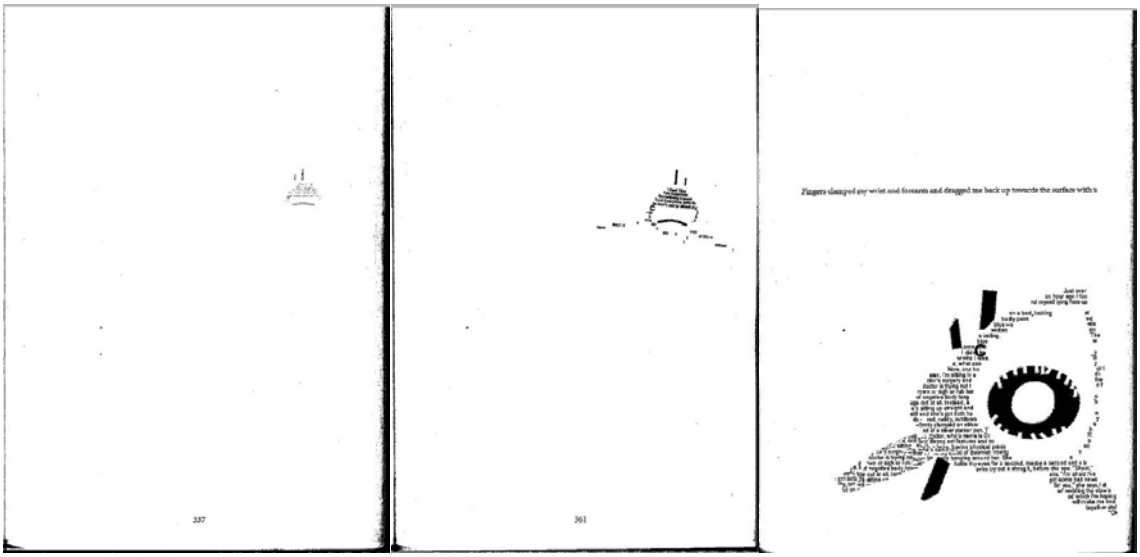


Figure 6.5: First (p337), Middle (p361), and Last (p375) pages of the flipbook shark in *The Raw Shark Texts*

In my view, *The Raw Shark Texts* is another example of how the ergodicity of a work can be considered multicursal in its multimodal efforts but still highly unicursal in narrative. Labyrinths do make an appearance, but they too function as unicursal mazes (i.e. books as protection puzzles and bookstores as mazes to shark-free safe spaces) meant to highlight the book's physical body as dominant over the digital realms.[33] The only real reason *The Raw Shark Texts* is classed as a 'typographical novel' rather than the less multimodal 'illustrated text' is

[31] Pressman, 469-471.
[32] Pressman, 471.
[33] Pressman, 479.

that the images included are meant to have been created within the narrative world—either by the protagonist himself or in response to his actions—thus projecting the narrative through more than verbal semiotic modes.

The most multimodal text type of Gibbons' taxonomy are ontological fictions, or those works which use multimodality to present themselves as authentic critical works when they are actually complete works of fiction. Two notable examples are William Boyd's *Nat Tate: An American Artist, 1928-1960* (1998) and Greg Boyd's *The Nambuli Papers* (2004) due to how both texts pretend to be critical biographies of forgotten artists (who never existed), complete with maps, handwritten or drawn notes and drafts, and snapshot photos (all of which have been fabricated) to support that claim and give themselves an air of authenticity.[34]

Arguably the most critically-acclaimed pseudo-ontological hoax, which also uses varied typology to comment upon non-print technologies, is Mark Danielewski's *House of Leaves* (2000). Until just recently, *House of Leaves* was considered unique in that "it uses familiar techniques [of print literature] to accomplish two goals"[35]: (1) illustrate what print can look like post-digital revolution and (2) use remediation to reclaim the narrative for the book.[36] Where the computer is thought to be the ultimate medium due to its ability to remediate all other media, *House of Leaves* inverts that mentality and seems to envelop all other media into itself—both narratively and structurally. It becomes a palimpsest in which the subject is created

[34] Gibbons, 432.
[35] N. Katherine Hayles, "Saving the Subject: Remediation in *House of Leaves*," *American Literature*, Vol. 74 (4), Dec 2002, 781.
[36] Hayles, "Saving the Subject," 781.

through the very layers of media that cover it rather than simply peeking through from underneath.[37]

While such grandiose statements may have been true for *House of Leaves* at the time of its publication (and, to some degree, the decade or so since), J.J. Abrams' and Doug Dorst's *S.*, published in 2013, takes that remediation a step further to incorporate the technologies developed in the temporal gap between the two texts. To that effect, I will show, through a systematic comparison of the immersive elements in both texts, how *S.* addresses the rise of social networking and those elements unique to virtual games.

House of Leaves presents itself as a 2nd edition critical commentary on a (fictional) controversial documentary film, *The Navidson Record*, created by famed photographer Will Navidson. Originally meant as a mundane chronicle of Navidson's city-risen family moving to the suburbs, *The Navidson Record* quickly becomes a haunted house film upon the discovering of a door that leads to an impossible alternate labyrinthine dimension. The original commentator, the unseen-to-the-reader Zampanó, dies before his text can be completed and Johnny Truant, the reader's guide and second commentator to the text, inherits Zampanó's notes and completes the work for him, even after discovering that the film and many referenced sources related to it do not exist within the narrative universe. Much like Kinbote in *Pale Fire*, Truant and Zampanó both are under-educated and ill-equipped for this work but do so with some unexplainable drive that affects their lives in strange ways.

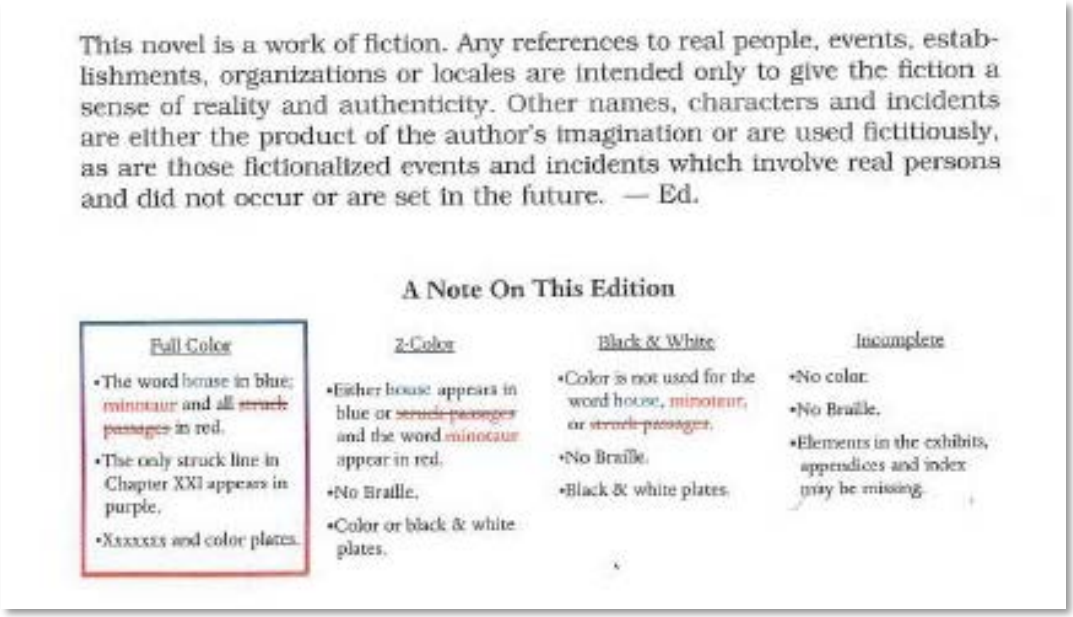
S. seems very similar to *House of Leaves* upon a first glance: both contain a base text with accompanying footnotes which have then been commented upon further by additional

[37] Hayles, "Saving the Subject," 779-781.

authors. However, what differentiates *S.* from *House of Leaves* narratively is that its base work is a novel, V.M. Straka's *Ship of Theseus*, which has been commented upon in footnotes by Straka's editor F.X. Caldeira, which is then commented upon in margin notes by two university literature students—Jen and Eric. Where Zampanó, and even Will Navidson, are known to exist in the *House of Leaves* universe (Truant admits to seeing the old man's apartment and meeting people who knew him personally), Straka has never been seen in public and is thought, in a classic Shakespearean controversy-style, to be the pen name of a variety of other authors surrounding him. Jen's and Eric's narrative, then, is not so much about the base work itself, or even Caldeira's footnotes, but on the debate surrounding Straka's identity.

Like *Pale Fire*, both texts admit to being a real author's work of fiction masquerading as a critical work; however, both *House of Leaves* and *S.* go a step further than *Pale Fire* by including multi-modal fictional elements in their non-narrative paratexts. While only two editions of *House of Leaves* were ever published in 2000/2001—a two-colour (blue-and-black and later, red-and-black) hardcover and a black-and-white paperback—the copyright pages of both list four editions: the previous two plus a "Full-color" and "incomplete" editions, neither of which existed until 2006 when the "Full Color Remaster Edition" (now the only colour edition as the other two have been phased out) was published. Additionally, the title page of all editions states that this is the second edition of the work published when a first is not known to have ever been released.[38]

[38] Alexander Starre, *Metamedia: American Book Fictions and Literary Print Culture after Digitization* (Iowa City, Iowa: University of Iowa Press, 2015), 131.



This novel is a work of fiction. Any references to real people, events, establishments, organizations or locales are intended only to give the fiction a sense of reality and authenticity. Other names, characters and incidents are either the product of the author's imagination or are used fictitiously, as are those fictionalized events and incidents which involve real persons and did not occur or are set in the future. — Ed.

A Note On This Edition

Full Color	2-Color	Black & White	Incomplete
•The word house in blue; minotaur and all ~~struck passages~~ in red.	•Either house appears in blue or ~~struck passages~~ and the word minotaur appear in red.	•Color is not used for the word house, minotaur, or ~~struck passages~~.	•No color.
•The only struck line in Chapter XXI appears in purple.	•No Braille.	•No Braille.	•No Braille.
•Xxxxxxx and color plates.	•Color or black & white plates.	•Black & white plates.	•Elements in the exhibits, appendices and index may be missing.

Figure 6.6: Bottom of the copyright page in the current hardback edition of *House of Leaves* (2001)

S. establishes its real-world base through its packaging only: a black sleeve stamped with the name of the book and back cover information common to contemporary texts. Abrams' and Dorst's names appear as the authors only in this back-cover information and on a sticker securing the hardback book inside the sleeve. Yet, once that sticker has been broken and the hardback book removed, the fictional world is entered as the book's cover bears only the name of the base work's title and author. It is also marked with a catalogue number as would be found on a library book. Opening the text shows further signs of being in the fictional universe as, unlike *House of Leaves* where Danielewski's name appears on the alternate page to the base narrative's title page, neither Abrams' nor Dorst's names appear anywhere in the text and stamps signifying the book as a "Book for Loan" and "Property of Laguna Verde H.S. Library" appear on the blank introductory page and the title page, respectively.

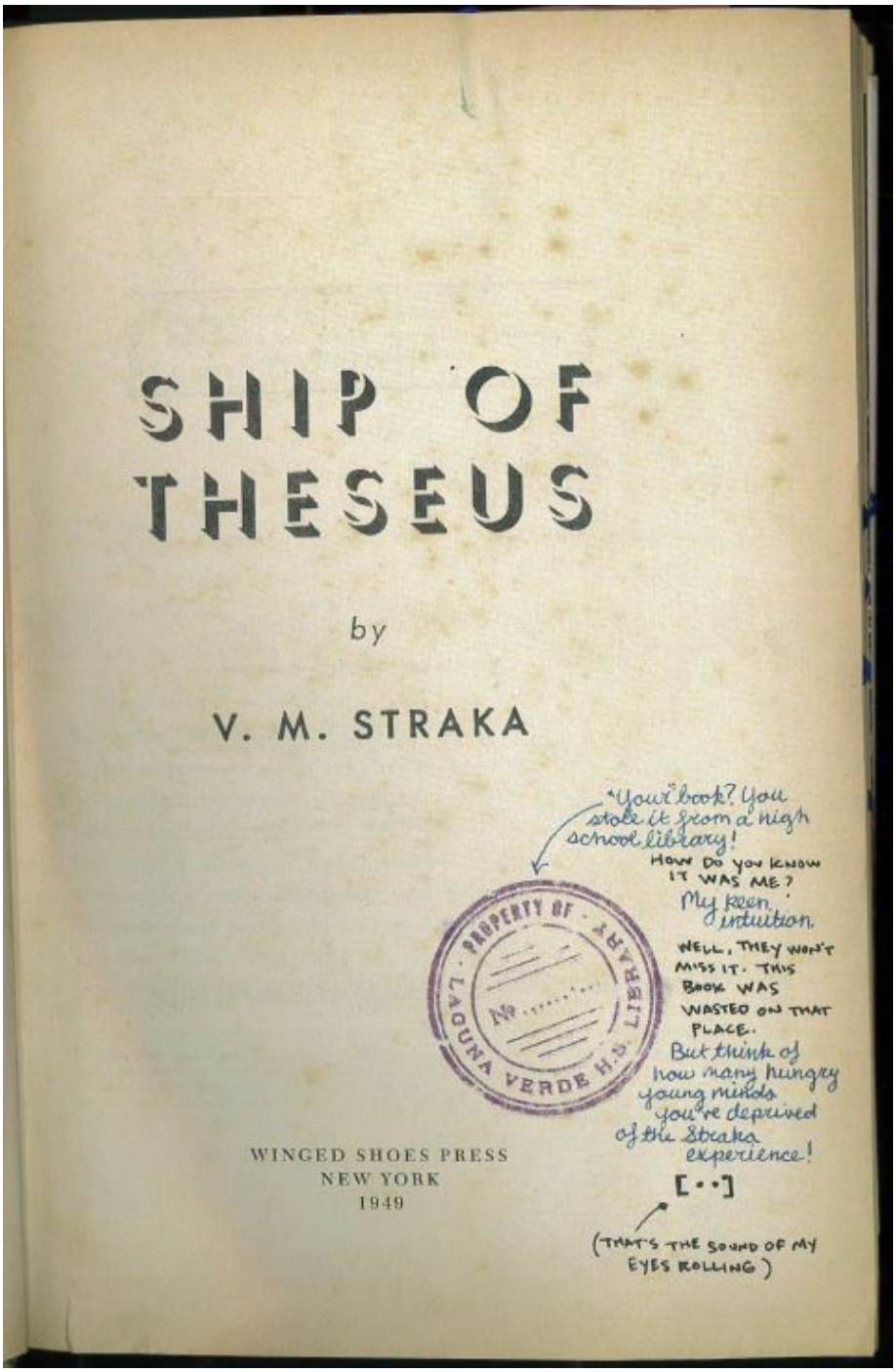


Figure 6.7: Title page of *S.* (2013)

This sets *S.* apart from *House of Leaves* in its development, from the very beginning, of the reader's alterbiography. Where *House of Leaves* presents itself as a book published for purchase by any number of readers, *S.* presents itself as if the reader has stumbled upon (or

possibly stolen) the text on their own.[39] This alterbiography of the 'discovered reader' affects every other aspect of the reading experience for *S.;* while both require their readers to consider how to approach the text before beginning it, *S.* places the reader in the centre of the narrative action, almost as a co-author along with Jen and Eric. These elements will be explored further as I break down how each text achieves imaginative, challenge-driven and sensory immersion. To this end, I intend to show how *House of Leaves* is less a post-digital wunderkind and actually a print reimagining of hypertext, whilst some of the same elements in *S.* that Sara Tanderup (in her 2017 article "A scrapbook of you+me") attributes to a remediation of social networking are also remediated elements from video games.

Imaginative Immersion in *House of Leaves*: *Haunted* Cinematic Suspense

I previously referred to *House of Leaves* as a palimpsest by which the 'original' subject becomes known only through the layers that overlay it; the depth of that statement is the core of what makes *House of Leaves* so imaginatively engaging. Textually, there are four layers (in reverse order of their chronological additions): the fictional editors' comments and additions, Johnny Truant's footnotes and additions, Zampanó's original commentary and footnotes, and Will Navidson's film, the so-called subject of the layers before it.[40] However, the focus on subjectifying the digital increases those layers another four-fold as every interpretation of Zampanó's must be traced back through the edited cinematic representation by Navidson to the original event that was recorded. Add to that Truant's interpretation of Zampanó and each

[39] Sara Tanderup, "'A scrapbook of you + me': Intermediately and Bookish Nostalgia in J.J. Abrams' and Doug Dorst's *S.*," *Orbis Litterarum* 72:2 (2017), 158-159.
[40] Hayles, "Saving the Subject," 780.

layer becomes a prism of the previous one's perspective. This über-palimpsest creates an intense sense of what-suspense[41] on the part of the implied reader in an effort to discover the *real* story beneath all the commented and edited ones.

This suspense becomes even more engaging when the subject of Navidson's film is revealed to be a physics-defying haunted house. The tension builds up slowly, like the haunted house films it remediates, with the first noticeable changes not mentioned until chapter IV of Zampanó's work. In fact, much of the first chapter of Zampanó's text also follows haunted house film tropes in setting up the family as 'city folk' seeking peace and quiet and reconnection in the suburbs, a la *The Amityville Horror* (1979). The first signs of something changing, of some *unheimlich* feeling (a Heidegger term both Zampanó and Truant spend a lot of space explaining)[42] are not the classic creepy unexplained sounds or the young child's invisible friend of those films but the appearance of a simple door leading to a previously non-existent crawl space. The depths to which Navidson and his wife go through to discover how such a space came to be also echo haunted house films, with no manner of logical investigation explaining how a house could suddenly be bigger on the inside than out.[43]

Layered within these 'haunted house' chapters are the equally haunted footnotes of Truant, describing the weird and unexplained circumstances around Zampanó's death, as well as the strange, unexplained *unheimlich* Truant begins to feel after locating a translation of Heidegger's term into English, which he discovers to mean uncomfortable or, literally, the

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[41] As defined by Marie-Laure Ryan (and discussed in depth on pgs 65-66 of this thesis), w*hat suspense* is the most common suspense, where the reader constantly wonders what will happen next in the narrative.
[42] Important to note is that Truant found a translation via Heidegger rather than Freud, even though Freud is more commonly associated with this concept; this could possibly be a Nabakovian-type hint to get readers to go outside the text to discover why Heidegger is mentioned instead. From my research, I believe Heidegger's concept of language as the 'house of being' (so to keep a connection with the term *house*) is why he, and not Freud, is used.
[43] Mark Z. Danielewski, *House of Leaves* (New York: Pantheon Books, 2000), 24-30.

feeling of being not at home. [44] In both cases, the reader has the added suspense of wondering whether whatever evil exists in the house has leaked into Zampanó's and Truant's world and whether, by reading *House of Leaves*, the reader will experience it too.

As the narrative progresses, more subtle elements in both the main text and footnotes begin to add to that tension of how and what this unseen evil is: bits of Zampanó's text and footnotes are apparently burnt or blacked out, often cut off at pivotal points (i.e. "Fred de Staberath purportedly exclaimed this right before he was ki[xxxxxxxxxxpart missingxxxxxxxxxxxxxxx]"[45]) which aim to make the reader wonder why these parts in particular are missing in relation to the source of his text.

This tension culminates in chapters IX and X, which depict the exploration of the mysterious labyrinth and the escape from the evils that lie within, respectively. But where the imaginatively immersed reader would want to flip through chapter IX to find out what the exploring party finds and whether they survive, the sheer mountain of text within prevents that, forcing the reader to slow down and muddle through the varying text types, fonts and positions to determine where exactly the story is taking place. Where all footnotes in previous chapters seem to add something relevant to the overall narrative (either of *The Navidson Record*, Zampanó, or Truant), the addition of footnotes listing all the elements not in the labyrinth, or all the architectural styles not evoked by it, or even all photographers who could have but did not create the film, creates that same sense of overwhelming confusion the characters feel inside the labyrinth.[46]

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[44] Danielewski, 25.
[45] Danielewski, 38n44.
[46] Hayles, "Saving the Subject," 791.

Contrary to that, chapter X contains the fewest number of words spreading over nearly 100 pages, all at varying positions on the page—some at the top, the bottom, the centre. While the purpose of this could be argued as just mimicking the party's position and movement within the labyrinth, the inclusion of very few sentences on each page (with the exception of Truant's tangent footnote narrative spanning pages 179-181) are equivalent to a filmmaker varying the frame speed to elicit a particular emotion in the viewer. In *House of Leaves*, that emotion in chapter X is an edge-of-your-seat, intense *what* suspense as the rescue party works to rescue the original exploring party from the confusing and dangerous depths of the previous chapter's ruminations.[47]

The final chapter of *House of Leaves* that uses multimodality to both remediate cinematic and digital elements whilst creating what-suspense in the reader is chapter XX, in which, again following haunted house tradition, the main character feels drawn to discover the origins of the *unheimlich* created by the impossible labyrinth. While the film is described as never providing that explanation, Zampanó's text does provide an ending—in which Navidson is saved by his wife and the labyrinth mysteriously evaporates—through chapters describing supposed post-production interviews (again, *supposed* because Truant claims such interviews do not exist) and Zampanó's own interpretations. What does remain unresolved for the reader is chapter XXI, Truant's addition, detailing, in non-chronological order, Truant's diary entries following his finishing of the book. It is this chapter which aims to lead the reader to the appendices in an effort to resolve that narrative thread, one which unfortunately never pans out, unless the reader goes hunting for answers within and outside the text—changing from

[47] *Ibid*, 796.

imaginative immersion to a challenge-driven one. This differs from virtual game immersion in that the challenge-driven immersion is embedded in the imaginative; the player seeks to solve the thread in-game by literally and physically navigating the fictional world.

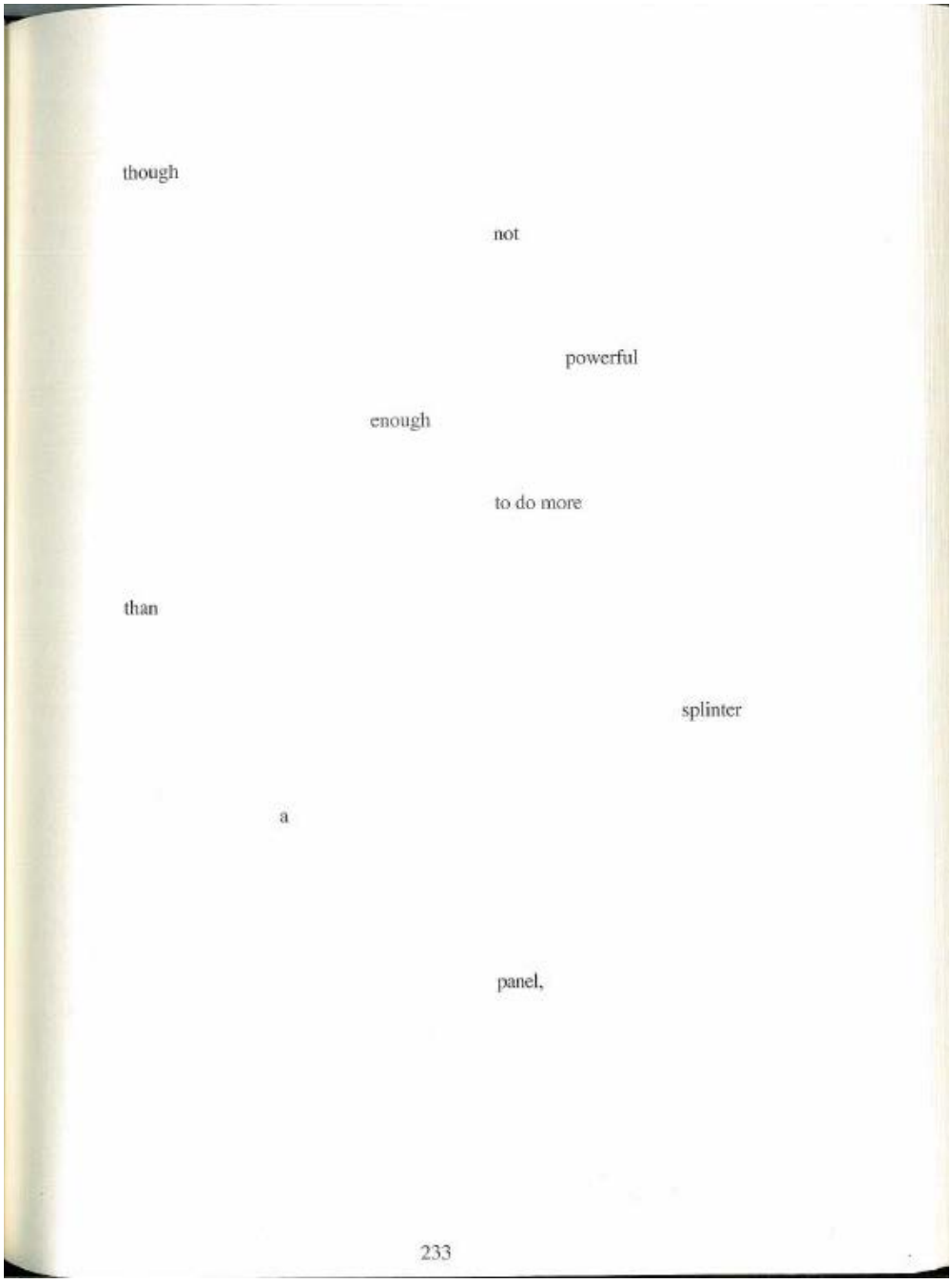


Figure 6.8: Multimodal representation of gunshot referenced in main narrative of *House of Leaves* at this point, 232-233.

Imaginative Immersion in *S.*: Forking Paths and Parallel Lines

The imaginative immersion in *S.* is two-fold and depends entirely on the very first decision the reader must make: to become a Shadean reader by reading *Ship of Theseus* first followed by the margin notes, or to become a Kinbotean reader, reading everything at once and making connections along the way. [48] If approached as a Shadean reader, *Ship of Theseus* creates imaginative immersion on its own through the suspense of discovering whether the main character (known only as S) will recover his memory and what that will mean for his identity. It is a confusing and time-bending story, with strange characters whose mouths have been sewn shut and a female figure who may or may not age throughout the narrative while the main character seems not to do so.

The suspense of the margin notes is entirely divorced from the suspense of the novel in that its two main characters— librarian assistant Jen and doctoral candidate Eric—do not interact with the actual narrative of the *Ship of Theseus* as a *narrative* but more as a reference for conversations on various topics. Like the virtual games discussed in the previous chapter, the base narrative becomes the "staging ground" for Jen's and Eric's story due to their comments relating to it and its author, while literally being the "mise-en-scene" in which their story is written. Yet, even their base narrative soon evolves into something more imaginatively immersive as their histories, experiences, and epiphanies develop throughout the text.
The reader experiences no less than three different forms of suspense in reading the margin notes, beginning with the suspense of *why* Jen and Eric are writing to each other in the first

[48] As defined in chapter 3: a Shadean reader would read the text in the order it was created (in *Pale Fire*, that was to read the introduction followed by the poem followed then by the commentary and index); a Kinbotean reader would read the text and its notes concurrently (in *Pale Fire*, this is Kinbote's suggestion: to read his notes alongside the poem lines it references)

place. The two characters seem completely separated from one another both socially and academically: Eric is a doctoral candidate attempting his dissertation on discovering the identity of the enigmatic V.M. Straka, while undergraduate literature major Jen, in accidently finding Eric's book in the library (much like the reader is made to feel upon opening the text), becomes involved originally to prove her academic worth in response to Eric's condescending comments. After Jen tells Eric not to leave the book for her again because of his rudeness, Eric apologises and the narrative between the two is born.

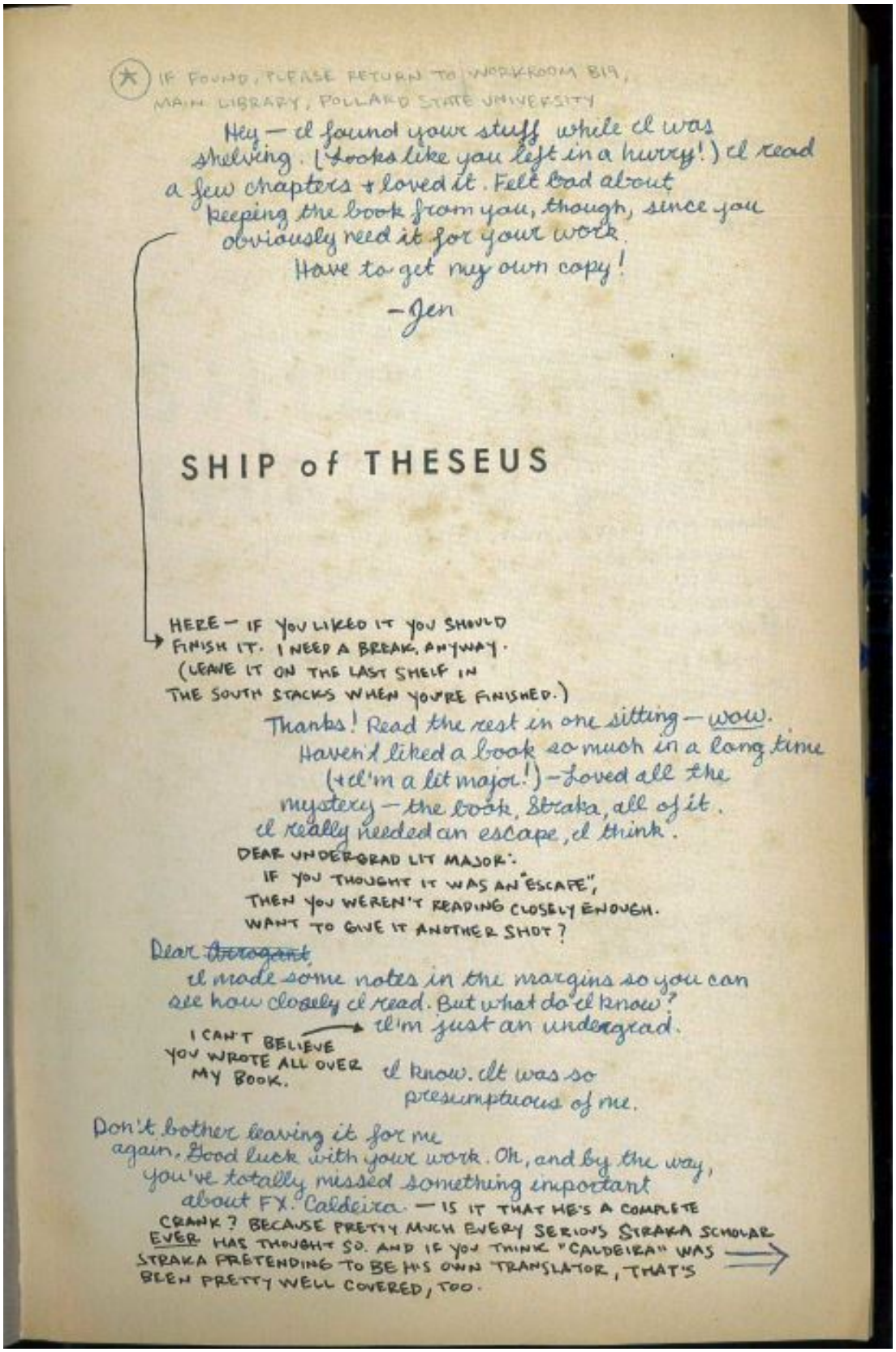


Figure 6.9: The Initial conversation between Jen and Eric in *S.*

But why book margins? As the other side of the why-suspense created at the beginning of the book, Eric's explanation in a black margin note on page 5 could be viewed as an intertextual comment upon digital technology in general: Eric prefers paper-based communication because digital technology can be too easily 'hacked' by malicious outsiders looking to gain personal or beneficial information without the owner's consent. In short, email or instant messaging cannot be contained; once something is on the Internet, it can be accessed by anybody willing to look for it. This should make the reader consider their own role in reading *S*, as the very nature of the text with all its personalised artefacts (i.e. letters, postcards, hand-drawn maps) and handwritten margin notes aim to make the reader feel as if they are intruding on a private conversation.

Another explanation for the margin notes could arguably be found in Calderia's introduction to *Ship of Theseus*. Like Jen and Eric, Calderia, as Straka's editor for his last thirteen books, claims never to have met Straka face-to-face but to have held long, intimate conversations with him in the margin notes of the edited manuscripts he sent her for translating. She waxes on about how well she knew him only through these notes and how, ultimately, it was the only way she could have known him so well. As Jen's and Eric's narrative unfolds, it becomes clear that they, too, begin to have a stronger, more co-author relationship in terms of uncovering the basis for the what-suspense of the margin notes: the identities of Straka and Caldeira, as well as the true nature of their relationship.

This what-suspense makes up the bulk of Jen's and Eric's margin notes in that, much like Truant in *House of Leaves*, they use outside research and code-breaking in an attempt to solve the Straka-mystery. In noticing the randomness and irrelevance of Caldeira's footnotes in

chapter 1, Jen breaks the 'code' to identify a secret message hidden among the first and last letters of each note: "AR GO SY EV ER Y19th 1900H RS,"[49] or, as Jen discovers through further research, F.X. Caldeira was actually Filomena Xabregas Caldeira who believed Straka still lived and was asking him—via code—to meet her at the Argosy Hotel in New York on the 19th of every month at 7pm, leading Jen and Eric to wonder if Caldeira and Straka were more than just partners on his books.[50] Jen discovers more messages in further footnotes using various methods (one using the RÖTVÖS wheel that comes packaged with the text[51]), adding more and more to the who-suspense[52] in the discovery of Straka's identity.

While the blue-and-black messages tend to focus on the identities and relationship of Straka and Caldeira, the yellow and green messages highlight the discovery of a secret society (named only S) and a list of its possible members (who also happen to be possible identities for Straka). These margin notes also see the beginning of a deeper relationship developing between Jen and Eric as they continuously change their individual pronouns to collective to acknowledge that they both are working on this project, at the detriment to everything else.

The purple-and-red margin notes add to the spy-story suspense in the addition of Jen becoming Eric's agent at the university, sneaking into offices and homes to root out what the 'bad guys' (Eric's ex-supervisor Moody and his assistant Isla) have stolen from Eric's research. However, like traditional spy stories, the suspense takes a turn in the discovery that Jen is being followed and threatened: after Jen's family's barn burns down, Jen discovers an S etched where

[49] J.J. Abrams and Doug Dorst, *S.* (Mulholland Books: New York, 2013), 27.
[50] Abrams and Dorst, 27 & 29
[51] Image in Appendix.
[52] As defined by Marie-Laure Ryan (and discussed in further detail on pg. 66 of this study) *who* suspense is the 'who-dunnit' suspense commonly used in detective fictions; the reader's aim is to gather clues to discover the hidden identity of somebody introduced at the beginning of the narrative, which in the case of *S.,* is the identity of Straka (and also Valdeira).

the barn stood, almost as a calling card for whoever committed the arson. The purple-and-red notes also hint at a more romantic relationship between Jen and Eric developing as there are mentions of the two of them meeting in person, staying at one another's place and culminating in Eric's profession on love on page 423 (see above).

What makes *S* truly different from *House of Leaves* and other hybrid novels, and unique, is that this imaginative immersion takes place due to the challenge-driven immersion created by the multimodal sensory elements presented. As discussed in the sections below, the challenge-driven immersion of *House of Leaves* echoes the challenges of the hypertextual fictions discussed in chapter IV of this study whilst *S.* capitalises on its printing as a multi-coloured, multimodal and multisensory experience to create a kinaesthetically challenge-driven experience in the vein of video games, taking on the role of a Nabokovian reader[53] to discover what *S* is *really* all about, not just as a narrative but as a whole readerly experience—novel, footnotes, margin notes and all.

[53] Defined in chapter 3 as a reader who uses extra-textual information to 'solve the mystery' presented by the narrative structure (i.e. In *Pale Fire*, a Nabokovian reader would discover Kinbote's 'true' identity—whatever that may be to the reader—in identifying the underlying meaning of some of the motifs presented through seeking out the references to Shakespeare and the Vanessa butterfly)

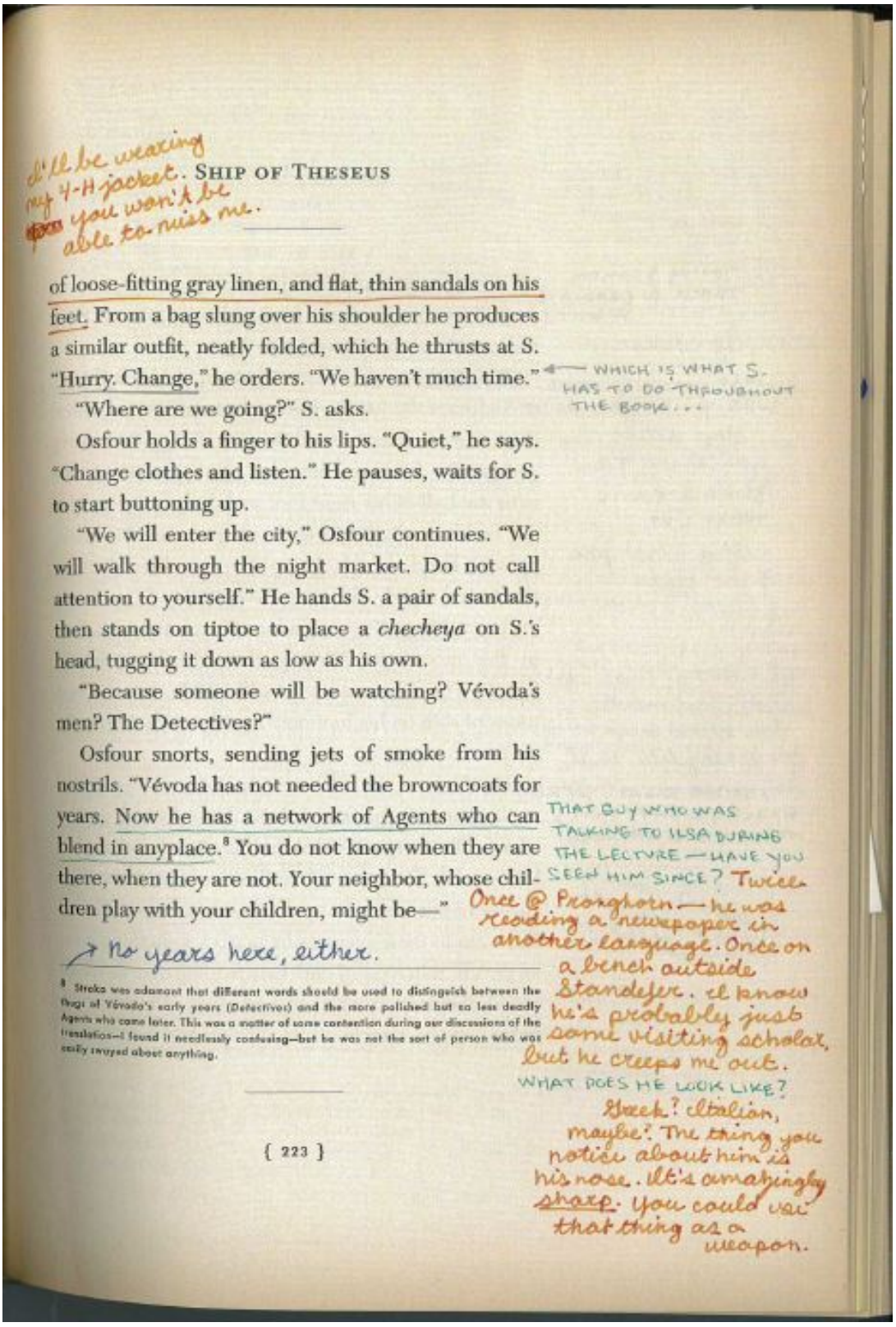


Figure 6.10: yellow-and green writing in *S.*

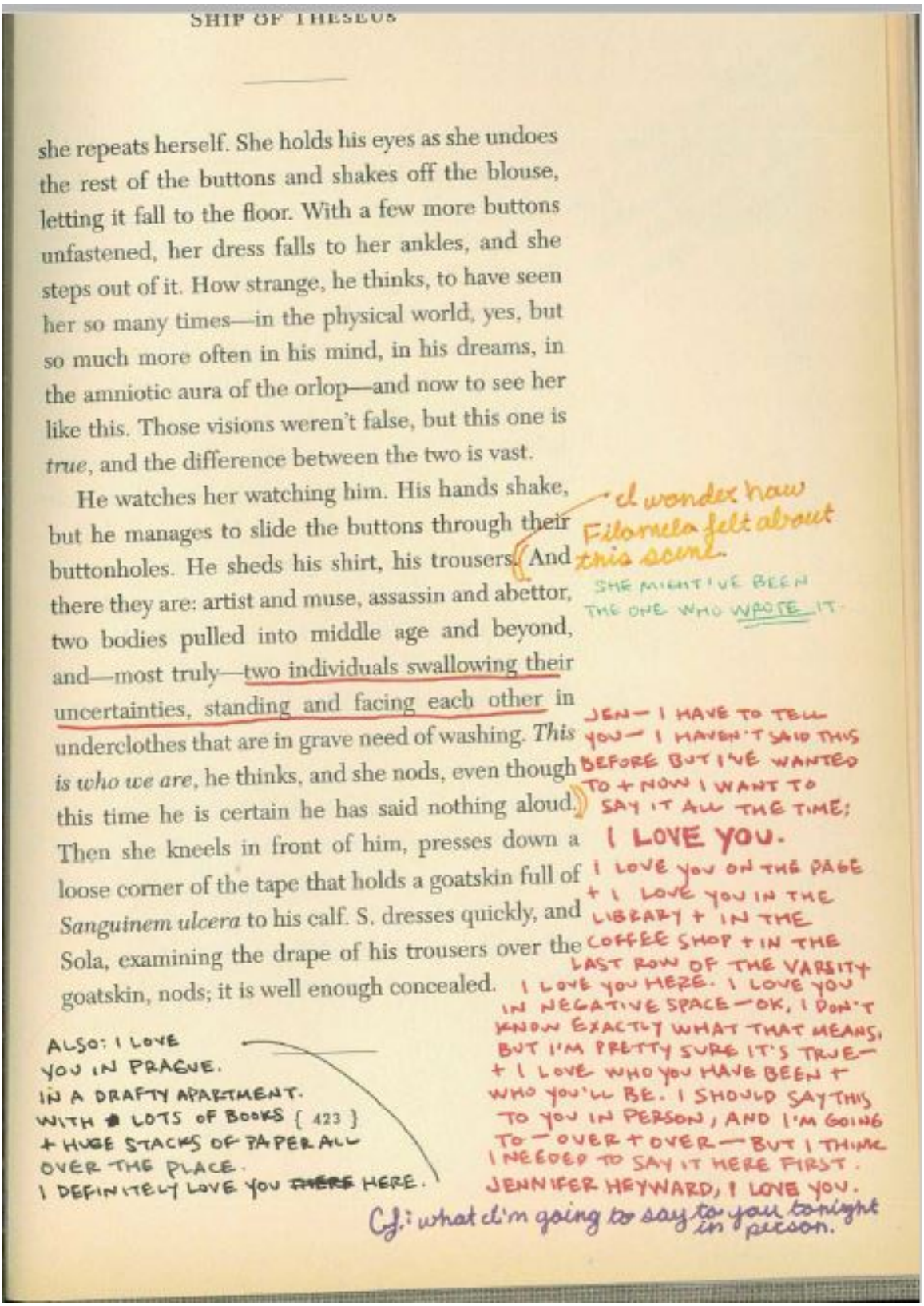


Figure 6.11: Purple and red writing in *S*.

Challenge-driven Immersion through Limited Sensory Means: *House of Leaves* as a Print Hypertext

While the narrative of *House of Leaves* remediates those narrative tropes common to haunted house films, the structure remediates the hypertextual fictions popular in the decade preceding *House of Leaves'* publication. It could be argued that *House of Leaves* really remediates the proto-hypertext elements found in *Pale Fire*, but through the use of visually multimodal elements (i.e. text placement and the use of colour), *House of Leaves* highlights its physical materiality through remediating elements of the digital hypertext in an "interplay between physical attributes and semiotic components."[54]

The ergodic structure of *House of Leaves* is created through a variety of methods: the most obvious is its layered footnote commentary. Like *S.,* and *Pale Fire* before it, the question of how to read the text must first be resolved. Do we read Zampanó's core text through first, followed by Truant's additions, or do we read everything at once, attempting to make sense of how the footnotes—both Zampanó's and Truant's—relate to the core narrative?[55] Unfortunately, Truant does not give us an answer as Kinbote does in *Pale Fire*. He does explain how he came to possess Zampanó's text, written as it was on varying sheets of paper and other surfaces. He also outs Zampanó as a sort of Kinbote himself, who made up entire sources to support his personal interpretation of the film. Also like *Pale Fire*, Truant admits that neither he nor Zampanó are the most qualified in compiling and commenting upon such a work, doing so through clear conviction alone. However, unlike *Pale Fire*, Truant does tell the reader not to take the work too seriously for fear of the reader's life becoming controlled by its machinations.

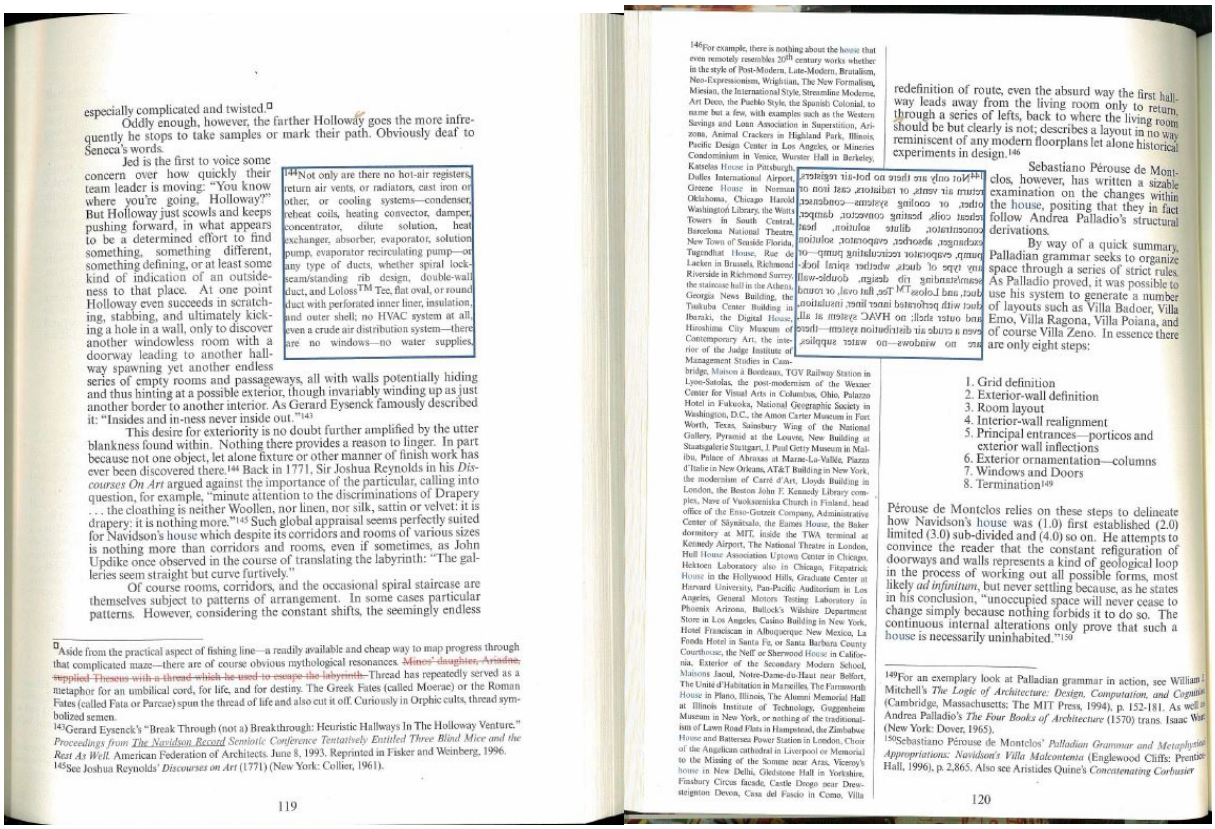
[54] Hayles, "Saving the Subject," 790.
[55] *Ibid*, 784.

These paragraphs add to the narrative suspense but also to an investigative challenge-driven suspense in discovering how and why Truant gives such a warning at the start of a text he put so much effort into completing.

Even before reading Truant's introduction, two multimodal sensory elements stand out as worthy of note: the blue colour of the word *house* each time it appears (even when in another language) and the epigraph preceding the introduction, in Truant's typeface, stating "This is not for you."[56] Both echo similar ergodic elements in *Pale Fire*: that of the hypertextual network between narrative and commentary in the first instance and the question of true authorial identity in the second.

While N. Katherine Hayles equates the use of the colour blue to the blue backdrops used in cinema for projecting representations of non-present objects or spaces[57], reading *House of Leaves* as a remediated digital hypertext also calls forth associations of the blue hyperlink, which Hayles overlooks. This connection extends to the blue boxes found in chapter IX, which, as mentioned earlier, describes the labyrinth less in terms of what it is and more in terms of what it is not.

[56] Danielewski, ix.
[57] Hayles, "Saving the Subject," 792-793.



especially complicated and twisted.[D]

Oddly enough, however, the farther Holloway goes the more infrequently he stops to take samples or mark their path. Obviously deaf to Seneca's words.

Jed is the first to voice some concern over how quickly their team leader is moving: "You know where you're going, Holloway?" But Holloway just scowls and keeps pushing forward, in what appears to be a determined effort to find something, something different, something defining, or at least some kind of indication of an outside-ness to that place. At one point Holloway even succeeds in scratching, stabbing, and ultimately kicking a hole in a wall, only to discover another windowless room with a doorway leading to another hallway spawning yet another endless series of empty rooms and passageways, all with walls potentially hiding and thus hinting at a possible exterior, though invariably winding up as just another border to another interior. As Gerard Eysenck famously described it: "Insides and in-ness never inside out."[143]

This desire for exteriority is no doubt further amplified by the utter blankness found within. Nothing there provides a reason to linger. In part because not one object, let alone fixture or other manner of finish work has ever been discovered there.[144] Back in 1771, Sir Joshua Reynolds in his *Discourses On Art* argued against the importance of the particular, calling into question, for example, "minute attention to the discriminations of Drapery . . . the cloathing is neither Woollen, nor linen, nor silk, sattin or velvet: it is drapery: it is nothing more."[145] Such global appraisal seems perfectly suited for Navidson's house which despite its corridors and rooms of various sizes is nothing more than corridors and rooms, even if sometimes, as John Updike once observed in the course of translating the labyrinth: "The galleries seem straight but curve furtively."

Of course rooms, corridors, and the occasional spiral staircase are themselves subject to patterns of arrangement. In some cases particular patterns. However, considering the constant shifts, the seemingly endless

[144]Not only are there no hot-air registers, return air vents, or radiators, cast iron or other, or cooling systems—condenser, reheat coils, heating convector, damper, concentrator, dilute solution, heat exchanger, absorber, evaporator, solution pump, evaporator recirculating pump—or any type of ducts, whether spiral lock-seam/standing rib design, double-wall duct, and Loloss™ Tee, flat oval, or round duct with perforated inner liner, insulation, and outer shell; no HVAC system at all, even a crude air distribution system—there are no windows—no water supplies,

[D]Aside from the practical aspect of fishing line—a readily available and cheap way to map progress through that complicated maze—there are of course obvious mythological resonances. ~~Minos' daughter, Ariadne, supplied Theseus with a thread which he used to escape the labyrinth.~~ Thread has repeatedly served as a metaphor for an umbilical cord, for life, and for destiny. The Greek Fates (called Moerae) or the Roman Fates (called Fata or Parcae) spun the thread of life and also cut it off. Curiously in Orphic cults, thread symbolized semen.

[143]Gerard Eysenck's "Break Through (not a) Breakthrough: Heuristic Hallways In The Holloway Venture." *Proceedings from The Navidson Record Semiotic Conference Tentatively Entitled Three Blind Mice and the Rest As Well.* American Federation of Architects. June 8, 1993. Reprinted in Fisker and Weinberg, 1996.

[145]See Joshua Reynolds' *Discourses on Art* (1771) (New York: Collier, 1961).

119

[146]For example, there is nothing about the house that even remotely resembles 20th century works whether in the style of Post-Modern, Late-Modern, Brutalism, Neo-Expressionism, Wrightian, The New Formalism, Mission, the International Style, Streamline Moderne, Art Deco, the Pueblo Style, the Spanish Colonial, to name but a few, with examples such as the Western Savings and Loan Association in Superstition, Arizona, Animal Crackers in Highland Park, Illinois, Pacific Design Center in Los Angeles, or Mineries Condominium in Venice, Wurster Hall in Berkeley, Katselas House in Pittsburgh, Dulles International Airport, Greene House in Norman Oklahoma, Chicago Harold Washington Library, the Watts Towers in South Central, Barcelona National Theatre, New Town of Seaside Florida, Tugendhat House, Rue de Lacken in Brussels, Richmond Riverside in Richmond Surrey, the staircase hall in the Athens, Georgia News Building, the Tsukuba Center Building in Ibaraki, the Digital House, Hiroshima City Museum of Contemporary Art, the interior of the Judge Institute of Management Studies in Cambridge, Maison à Bordeaux, TGV Railway Station in Lyon-Satolas, the post-modernism of the Wexner Center for Visual Arts in Columbus, Ohio, Palazzo Hotel in Fukuoka, National Geographic Society in Washington, D.C., the Amon Carter Museum in Fort Worth, Texas, Sainsbury Wing of the National Gallery, Pyramid at the Louvre, New Building at Staatsgalerie Stuttgart, J. Paul Getty Museum in Malibu, Palace of Abraxas at Marne-La-Vallée, Piazza d'Italie in New Orleans, AT&T Building in New York, the modernism of Carré d'Art, Lloyds Building in London, the Boston John F. Kennedy Library complex, Nave of Vuoksenniska Church in Finland, head office of the Enso-Gutzeit Company, Administrative Center of Säynätsalo, the Eames House, the Baker dormitory at MIT, inside the TWA terminal at Kennedy Airport, The National Theatre in London, Hull House Association Uptown Center in Chicago, Hektoen Laboratory also in Chicago, Fitzpatrick House in the Hollywood Hills, Graduate Center at Harvard University, Pan-Pacific Auditorium in Los Angeles, General Motors Testing Laboratory in Phoenix Arizona, Bullock's Wilshire Department Store in Los Angeles, Casino Building in New York, Hotel Franciscan in Albuquerque New Mexico, La Fonda Hotel in Santa Fe, or Santa Barbara County Courthouse, the Neff or Sherwood House in California. Exterior of the Secondary Modern School, Maisons Jaoul, Notre-Dame-du-Haut near Belfort, The Unité d'Habitation in Marseilles, The Farnsworth House in Plano, Illinois, The Alonmi Memorial Hall at Illinois Institute of Technology, Guggenheim Museum in New York, or nothing of the traditionalism of Lawn Road Flats in Hampstead, the Zimbabwe House and Battersea Power Station in London, Choir of the Angelican cathedral in Liverpool or Memorial to the Missing of the Somme near Arras, Viceroy's house in New Delhi, Gledstone Hall in Yorkshire, Finsbury Circus facade, Castle Drogo near Dreusteignton Devon, Casa del Fascio in Como, Villa

redefinition of route, even the absurd way the first hallway leads away from the living room only to return, through a series of lefts, back to where the living room should be but clearly is not; describes a layout in no way reminiscent of any modern floorplans let alone historical experiments in design.[146]

Sebastiano Pèrouse de Montclos, however, has written a sizable examination on the changes within the house, positing that they in fact follow Andrea Palladio's structural derivations.

By way of a quick summary, Palladian grammar seeks to organize space through a series of strict rules. As Palladio proved, it was possible to use his system to generate a number of layouts such as Villa Badoer, Villa Emo, Villa Ragona, Villa Poiana, and of course Villa Zeno. In essence there are only eight steps:

1. Grid definition
2. Exterior-wall definition
3. Room layout
4. Interior-wall realignment
5. Principal entrances—porticos and exterior wall inflections
6. Exterior ornamentation—columns
7. Windows and Doors
8. Termination[149]

Pèrouse de Montclos relies on these steps to delineate how Navidson's house was (1.0) first established (2.0) limited (3.0) sub-divided and (4.0) so on. He attempts to convince the reader that the constant refiguration of doorways and walls represents a kind of geological loop in the process of working out all possible forms, most likely *ad infinitum*, but never settling because, as he states in his conclusion, "unoccupied space will never cease to change simply because nothing forbids it to do so. The continuous internal alterations only prove that such a house is necessarily uninhabited."[150]

[149]For an exemplary look at Palladian grammar in action, see William J. Mitchell's *The Logic of Architecture: Design, Computation, and Cognition* (Cambridge, Massachusetts: The MIT Press, 1994), p. 152-181. As well as Andrea Palladio's *The Four Books of Architecture* (1570) trans. Isaac Ware (New York: Dover, 1965).

[150]Sebastiano Pèrouse de Montclos' *Palladian Grammar and Metaphysical Appropriations: Navidson's Villa Malcontenta* (Englewood Cliffs: Prentice-Hall, 1996), p. 2,865. Also see Aristides Quine's *Concatenating Corbusier*

120

Figure 6.12: Start of blue box notes in *House of Leaves*, 119-120.

If *house* is meant to draw connections for the reader to the literal house each time it is used, the blue boxes attempt to draw connections to all the elements a reader might associate with a house in order to show just *how* alien the labyrinth seems. These boxes, spreading a single footnote over 20 pages, also draw attention to the windowless interior of the labyrinth by becoming windows in themselves; rather than continue the footnote on the flipside of the page, the previous page's words are printed in reverse, highlighting the materiality of the book as well as another object not present in the labyrinth. Since such typography is unexpected in a book (readers take for granted that each leaf in a text is independent from each other one[58]), these blue boxes and their hypertextual connection to *house* drives the reader to find meaning

[58] Hayles, "Saving the Subject," 792-793.

in its purpose, slowing down the reading pace and placing the reader in the same affective discombobulation as the characters lost within the labyrinth.

On these same pages are two other footnotes by Zampano (as well as the text being footnoted—where space is available). They do not appear in a different colour, as they do not deal with the house specifically, but their side-bar placement does mimic a webpage with different frames of additional information. The reader, again, is forced to slow down the reading pace in an attempt to discover whether the information provided therein is relevant to understanding the narrative; or to put another way, the reader must physically navigate the material maze that is *House of Leaves* to discover the mystery that is the narrative house.

Another typographical sensory element which adds to the challenge-driven immersion of *House of Leaves* is the use of red for those redactions of Zampanó's kept by Truant. Like the blue hyperlink of house, the red colour calls forth associations with a previously visited hyperlink, and in this case, contains information read and deemed not relevant to the overall narrative. If the reader 'visits' these red links through the text (they appear mostly in chapters IX and XIII), they'll notice a common theme: each note deals with some element of the mythical labyrinth and its minotaur and/or the brass bull of torture.

One explanation is that the Minotaur myth and the brass bull stand as an analogy for the creator being consumed by their creation. Navidson is tortured and consumed by the photograph which made him famous.[59] Zampanó is consumed by his project on *The Navidson Record*, which depicts a house emotionally and literally consuming the people who attempt to discover its origins. Truant is consumed by his creation of restoring and completing Zampanó's

[59] For a real-world referent, see Kevin Carter's photograph "The vulture and the little girl."

work. And in a twist meant to draw attention to the materiality of the text being read, *House of Leaves* itself is consumed in chapter XX in a random moment of metamediality[60] imbedded in its multimodalilty.

Written upside-down from the bottom right hand corner of the page and expanding upward to the left, the passage describes how Navidson, in his final trek into the labyrinth, becomes trapped on a ledge overlooking a vast pit. With no escape available, he settles in and begins to read a book he brought along, discovered to be titled *House of Leaves*. The twin titles can only make the reader wonder: is it meant to be the same book?

> The next two pages make this connection even stronger:
>
> With only 24 matches plus the matchbook cover…would burn for 36 seconds, Navidson had a total of five minutes and forty-four seconds of light. The book, however, is 736 pages long. Even if Navidson can average a page a minute, he will still come up 704 pages short (he had already read 26 pages). To overcome this obstacle, he tears out the first page, which of courses consists of two pages of text, and rolls it into a tight stick, thus creating a torch, which…will burn for two minutes and provide him with just enough light to read two pages of text.[61]

If the reader flips to the last page in their version of *House of Leaves*, the page numbers do not match up: their final page is numbered 709. But if all the paratextual and non-numbered pages are added, the total number of pages does come out the same: 736. This parallel of books sparks the challenge-driven question: "If the fictional world accounts for the entire stack of pages that form [the reader's] book, does this mean that everything about [their] copy is supposed to be part of the literary work?"[62]

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[60] A term coined by Starre to describe texts which reference the very medium in which they are printed and/or published—whether that be print, film or digital; Starre, 7-13.
[61] Danielewski, 466-467.
[62] Starre, 6.

That question carries into another challenge-driven mystery: that of the 'real author. The text contains clues that Johnny and Zampanó are possibly the same person: "Zampanó is trapped but where may surprise you. He's trapped inside me."[63] But like *Pale Fire*, reading the exhibits and appendices also provide clues which call into question the 'authority' of the narrative: was there ever a Johnny Truant, a Zampanó, a *Navidson Record* or are all these elements the work of one, possibly mentally unstable author?

While Truant is credited with including the exhibits and Appendix I section, the anonymous Editors include Appendix II and III, supposedly with Truant's permission. Appendix III contains pictorial and semiotic evidence contradicting some of Truant's claims that *The Navidson Record* did not exist while Appendix II contains elements with no obvious connection to Zampanó or *The Navidson Record* at all: the Penguin Poems, whose author is never made clear; a list of forty-three quotes and excerpts from such works as *The Epic of Gilgamesh*, Homer's *Iliad* (in five translations), and even Einstein's theory of relativity; and most curiously, "The Whalestoe Letters" written by Pelfina, Truant's mother, to Truant while she was committed to a mental hospital.

Depending on how the reader has approached reading *House of Leaves*, these letters are explained in an Editor footnote on page 72, which, in a Kinbotean fashion, tell the reader when and why the letters should be read at this point in the narrative rather than at the end. The appearance of the checkmark in the corner of page 97 also would make more sense to the reader if they had read the letters first as one of Pelfina's letters tells Truant to put a checkmark

[63] Danielewski, 338.

in the bottom right-hand corner of his letters to assure her he is receiving her letters to him.[64] But what appears in Pelfina's letter on page 615, following a paragraph on the loss of self, are a list of seemingly unconnected words which, when deciphered using a code Pelfina describes in a later letter, reads: "My dear Zampanó, who did you lose?".[65] How could Pelfina know of Zampanó before Truant did? Could it be that the whole book was written by Pelfina, masquerading as Truant because she missed him so? Or, if taken in context with Truant's last footnote on pages 515-521, which detail the death of a baby boy from a birth defect, could this be what put Pelfina in the hospital, what led her to write this whole book, as a sort of exercise in grief, a grief so overwhelming that it consumes *her* as the labyrinth of both *The Navidson Record* and *House of Leaves* consumes its users?

In all cases, the challenge-driven immersion of *House of Leaves* culminates in a negotiation of mostly verbal elements. Ergodically, the reader must negotiate the pages differently from other, more traditional texts but the mysteries are still word-based. *House of Leaves* references nearly every surface upon which a story—or even a quick note—could be written: film and photography take centre-stage (due to the nature of Zampanó's base narrative) but also tattoo art, digital computing, handwriting on napkins, telegraphed and typed messages. However, none of these artefacts are represented *as is* in the text itself (apart from some photographs in the appendices); they are merely mentioned and interpreted by Truant himself, leaving the reader to accept his interpretation as truth.

S., on the contrary, presents many of its artefacts as included artefacts. Much like virtual games allow the player to pick up books and letters which help to expand the narrative but do

[64] Danielewski, 609.
[65] Hayles, "Saving the Subject," 802.

not affect the player's role within it, the physical artefacts in *S.* add to the challenge-driven immersion behind Jen's and Eric's margin notes, making their universe arguably more navigable than that of *House of Leaves*.

Sensory Immersion in *S.*: Navigating the Digitally-Inspired Printed Text

S. takes full advantage of its place in the twenty-first century by playing off the tangibility of its medium and incorporating those colour and perspective elements made unique by the virtual game. Once the sleeve has been removed, the reading experience begins, and every element—the feel, the smell, the visual print and fake library tag—contributes to the overall sensation that this is a real book, not a novel. "As a material object, the work radiates age and bookish aura with its yellowing pages, ephemera, and handwritten annotations all over the unusually broad margins."[66] By removing it from its packaged sleeve, the reader, much like a player of a virtual game, is delving into a real situation they can help solve.

[66] Tanderup, 151.

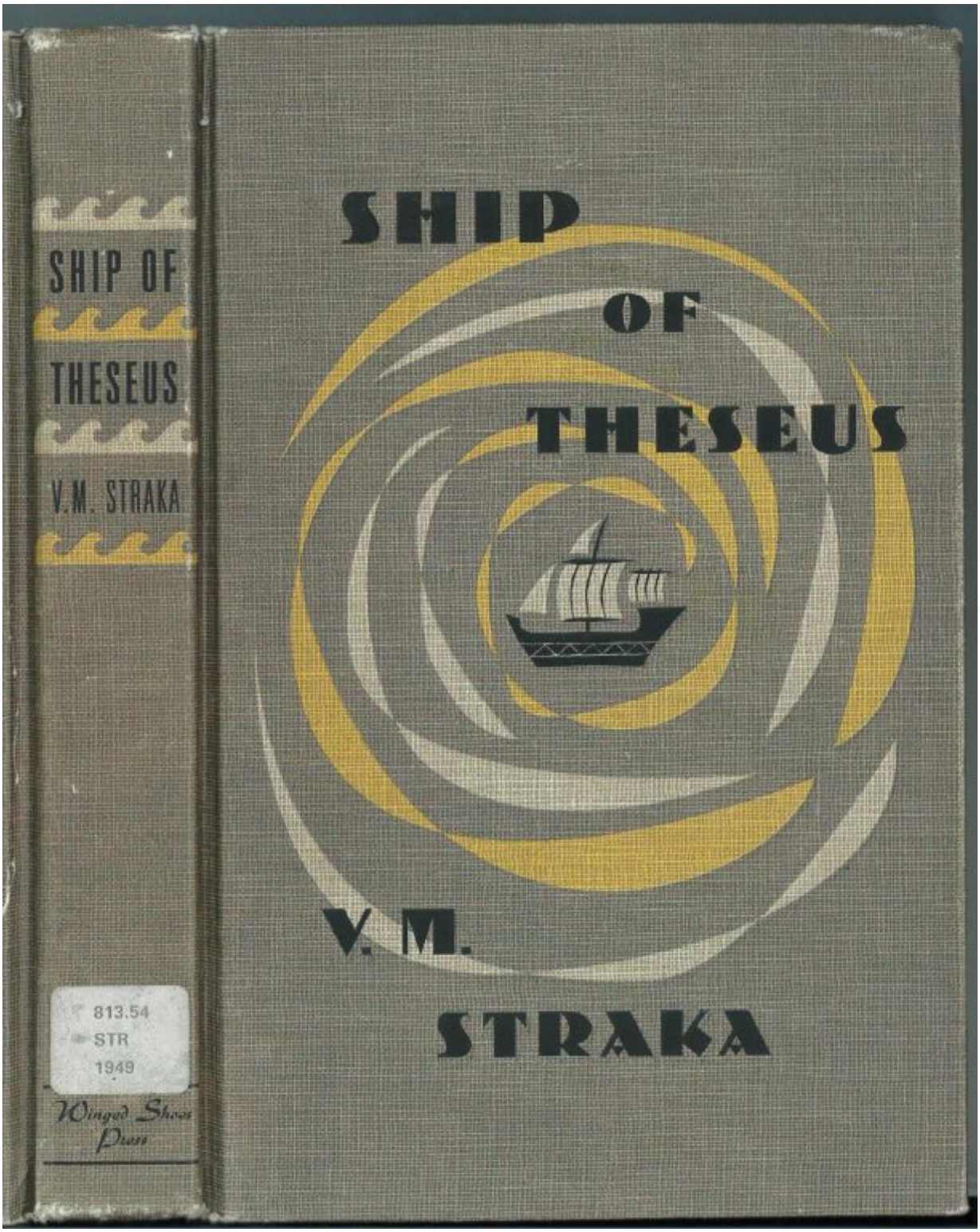

Figure 6.3: Cover and spine of *S.* (2013) with visible hardbacking and library call number

S. does this on a number of levels, most literally in its inclusion of physical artefacts which elaborate on specific margin notes. These are not "editor's notes" or meant to be from the author; these are napkins with pen-drawn maps, front-pages of university newspapers (complete with erroneous stories and photographs), vibrant postcards with coded messages. The artefacts highlight the immersive feel of the narrative by looking and feeling exactly like they would if the reader had happened upon this book in a library. Combined with the multi-layered and colour-coded narrative detailed in the margin notes, the reader must develop a strategy of incorporating the artefacts along with the margin notes in the correct order so that the narrative can play out meaningfully.

The conflict, though, is not made apparent. Similar to how virtual games acquaint a player with game controls and rule conventions, the reader opens to a neutral space, stamped "Book For Loan" page, followed by a library property stamp a couple pages later. Even though *Ship of Theseus* is a self-contained narrative, the vibrant colours and unusual width of the page margins make it very clear that the 'real' narrative exists there. And although not obvious until a few chapters into *S.*, the coloured margin notes operate under the same pretext as video games; the colours signify not only who is speaking to whom but also the chronological and emotional significance of each note, directing the eye of the reader and calling them to make connections among the same-coloured texts.

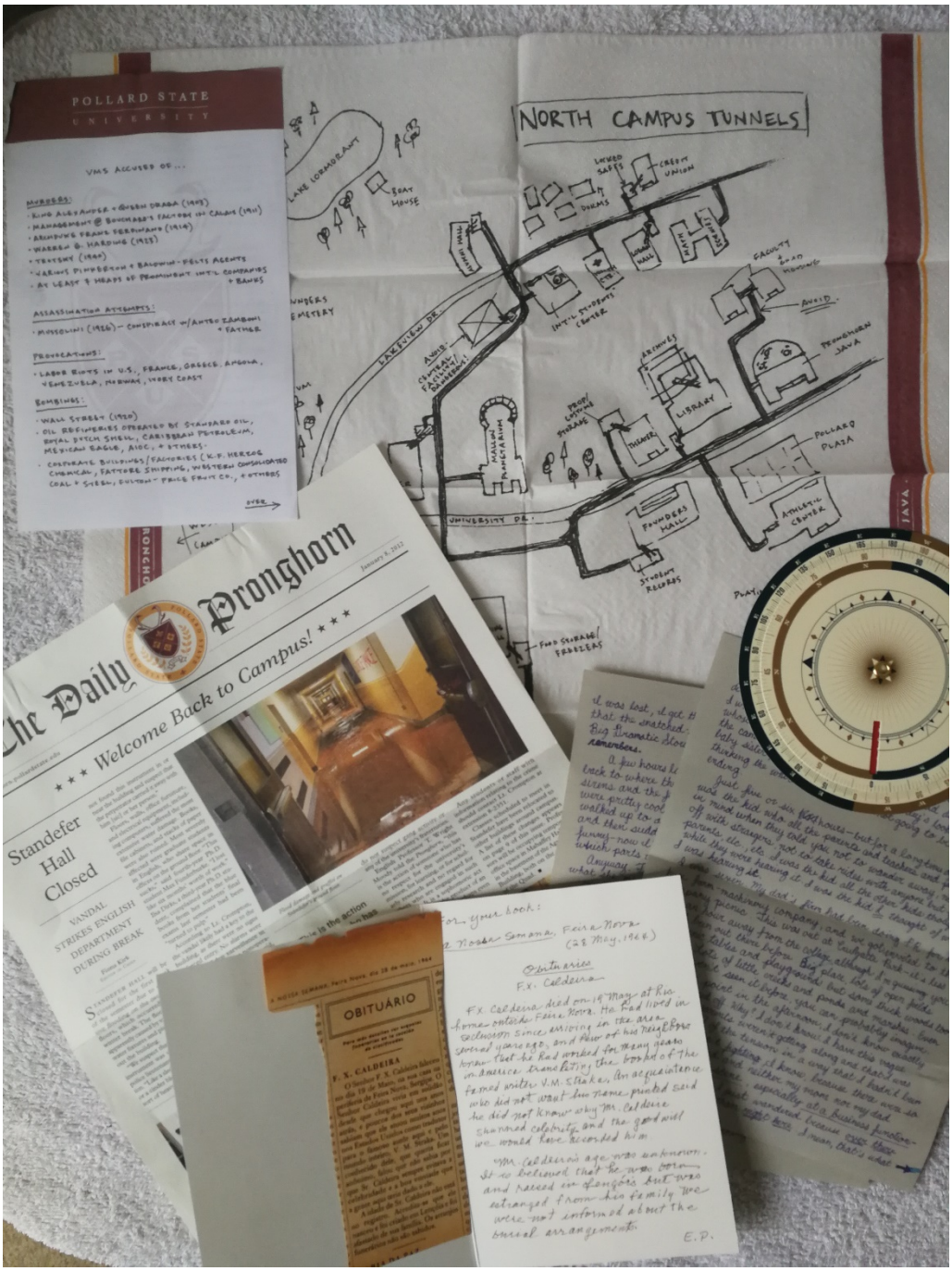

Figure 6.6: A selection of artefacts (a fictionalised university newsletter, a hand-written map drawn on a napkin, a funeral card with 'published' obituary of F.X. Caledeira, and the ROTOVS wheel) included in the hardback edition of *S.* (2013)

As discussed in the previous section on the imaginative immersion of S., pairs of colours have their own narrative dominating them. However, once the reader makes the connection between the different pairs of colours, *S.* becomes levelled, like a platform video game, where,

in order to progress to the next level, one must first solve the current one. The reader is almost encouraged to make a timeline: Eric's lighter grey notes from when he was reading the text for his dissertation, followed by Jen's blue cursive and Eric's black block letters, then Jen's yellow and Eric's green, then Jen's purple and Eric's black, ending with both writing in black (Jen still in cursive and Eric in block letters).

However, rather than attribute these colours as part of the "logics of the new digital media," as Tanderup does, I find that once the reader makes the connection between the different pairs of colours, *S.* becomes levelled, like a platform video game, where, in order to progress to the next level, one must first solve the current one. But even each of those pairs can be broken down into further timelines as each note and response corresponds to varying times within them. Jen and Eric weren't sitting next to each other writing notes; which notes were written together and which were in response? With the events happening between each set of margin notes, the narrative becomes bigger than what is written on the page.

As a comment on digital technology, the handwritten margin notes of *S.* are meant to evoke a sense of authenticity and intimacy because handwriting is thought to be so personal and unique to the individual and their physical body. Combined with the inclusion of the physical artefacts, *S i*s:

> […] intended to be a celebration of the analog, of the physical object. In this moment of emails, and texting, and everything moving into the cloud, in an intangible way, it's intentionally tangible. We wanted to include things you can actually hold in your hand: postcards, Xeroxes, legal-pad pages, pages from a school newspaper, a map on a napkin.[67]

[67] J.J. Abrams as quoted by Joshua Rothman, "The Story of 'S': Talking with J.J. Abrams and Doug Dorst," The New Yorker (November 23, 2013), accessed 24 May 2017, https://www.newyorker.com/books/page-turner/the-story-of-s-talking-with-j-j-abrams-and-doug-dorst.

The handwriting in *S.* was chosen very carefully and even changes slightly across narrative timelines to signify the characters changing as their story develops,[68] in a similar vein as the bodies of players' characters in some virtual games develop in line with the player's build-up of skills.[69] Unwittingly, Abrams and Dorst remediate from virtual games in their attempt to present narrative development visually.

Ironically, this highly intimate form of writing and unique artefacts are themselves mass-produced along with the type-face of the base novel itself. In a sort of reverse-remediation, the margin notes were first produced digitally through the Microsoft Word comment tool then handwritten afterwards. "*S.* thus produces a fantasy of the book as a privileged space for intimate communication, resisting digitality,"[70] and yet not. Jen's and Eric's handwritten margin notes, as both a production element and narrative form, show that the tangible, intimate object of the book is just as navigable and intangible as the ephemeral digital world;[71] if taken in context of the navigable space described in chapter II of this study, the handwritten margin notes and their physical artefacts become like one of the tomes found in the virtual role-playing games discussed previously.

Challenge-driven Immersion in *S.*: Socially Constructed Feedback Loops

Where much of the challenge-driven immersion of *House of Leaves* and *Pale Fire* comes from the reader connecting hypertextual nodes—both inter- and extratextually—in an effort to

[68] Tanderup, 155-156.
[69] A specific example of this can be found in the virtual game *Fable II* produced by the now defunct LionGate Studios. As the player develops their character's skills in strength or magic, the character can be seen with bigger muscles and height (with more strength development) or a purple aura surrounding the character's body (with more magic skills developed)
[70] Tanderup, 157.
[71] Tanderup, 157-158.

discover the 'true' author/s of each respective work, the margin notes in *S.* provide the answers to many of those challenges for the reader. However, rather than view this as a lack of challenge, one could argue that Jen's and Eric's code-breaking is simply a remediation of the introductory levels of a virtual role-playing game, wherein the player is shown the necessary skills they need to progress and provided with small tasks on which to try and master them.

Since *S.* is multi-layered in both its base text and marginalia, the early chapters ease the reader into understanding how Jen's and Eric's notes should be read in relation to both the novel and the Straka author controversy. The margin notes in the foreword and early chapters are mostly in the early blue cursive and black block letters with a smattering of the other colours used only when referencing something pointed out previously in the blue and black inks.

Similar to the beginning of a video game, the reader is introduced to all the relevant 'players' in this narrative (Jen and Eric, Calderia and Straka, but also Moody and Isla—the main 'villains' of Jen's and Eric's narrative), as well as those characters' skills sets, functions, and roles in the overall reading experience. These chapters also introduce the concept of coded footnotes and how to decipher them. As already mentioned, Jen discovers the coded message in chapter 1 using the chapter title as the key, an idea hinted at by Eric's original notation that *Ship of Theseus* was the only Straka book with chapter titles. This comment, and Jen's successful use of it, highlights a challenge for the rest of the book and teaches the reader the skill needed to solve it: to use the chapter titles to decipher each of Caldeira's footnote codes.

This training continues into chapters 2 and 3 as both more codes are presented and different coloured margin notes are introduced. While the main footnote codes are solved by

Jen, some margin notes begin hinting at further points of investigation the reader may or may not find relevant to pursue: on page 37, the connection between chapter titles and Straka's other books; on page 40, the mention of the importance of bird metaphors (along with various notes regarding possible explanations for those bird references in relation to known Straka candidates); on page 45, the notation on a footnote mentioning a specific sound frequency range for no apparent reason (which, if researched extra-textually reveals the transmedial existence of Straka Radio); and the inclusion of more physical artefacts related to Straka, as well as Jen's and Eric's developing quest in discovering who he was.

However, toward the end of chapter 3/beginning of chapter 4, the blue and black related writing lessens and the next set in Jen's and Eric's timeline—the orange and green—take precedence. No longer are these about the codes in the chapters; now the reader is left to decipher what is happening in Jen's and Eric's narrative through the skills developed during the discovery of information in the earlier chapters. Although Jen and Eric solve the main code involving the footnotes (the first word following every word starting with "ex-" spells out a message to Straka to "AVOID GRAND CENTRAL KEY STOLEN ASSUME BAG GONE I FAILED"[72]), listing those same words could hint at another code. In order from first to last footnote, the "ex- words" are: expect, expressly, expatriate, extracting, exiling, explosives, explicitly, examination, experiment, exculpation, extraverts, expert, experiences. When matched up with the orange and green margin notes (and the postcards sent by Eric to Jen during the orange-green timeline), these words relate to what culminates in the final postcard at the end of chapter 5: for all the experiments and explosions and examinations committed by the secret S

[72] Abrams and Dorst, *S.*, 122.

society to hide Straka's true identity, Filomena/Caldeira is the "Agent X" that Eric finds living as an expatriate exiled in Brazil.

The chapters continue in this way, getting less straight-forward in code-breaking and more about breaking apart the narratives as the different coloured inks weave together. Yet, as with any good video game, there is an end-game that must be solved, one that uses all the skills gathered before. That boss-battle could arguably be chapter 9, titled "Bird of Negative Space." There are a few reasons that this chapter stands out as the finale to *S*.'s challenge-driven code-breaking: 1) the chapter title includes the word *bird*, which, as has been seen throughout the rest of the text, is important as a symbol for real people involved in the Straka question and the secret S society of which he was the supposed leader; 2) this chapter contains only one footnote explaining Straka's indecision as to how two important lines in the chapter would play out, with those lines translating from the Portuguese as "You are not safe" and "No one is"; 3) as with all of Caldeira's other footnoted codes, the real message is in the *negative space*, the unmentioned or conveniently left out information surrounding the narrative in *Ship of Theseus* and Caldeira's footnotes. And while it could be argued that Jen and Eric solve even this mystery by coordinating the negative space of various records (the 'bird' is Straka's daughter, Signe), the unmentioned elements of Jen's and Eric's story become clear in chapter 9, as well, via the inserts between Jen and Eric, as well as the margin notes exploring their own feelings for each other.

But the negative space as a motif is even more important as it adds to another element *S*. seems to remediate from video games: replayability. While most narratives in novels have an element of replayability because a reader can discover new information every time they reread

a text, the multiple levels of narrative—and the multiple chronological levels between and among the different coloured margin notes—make revisiting *S.* an exercise in strategy. Approaching 'how' to read *S*. in the first place is an exercise in narrative association and alterbiography of the reader; every other readthrough must be met with a particular goal in mind, as is necessary for all virtual open-world games. Maybe that goal is to "follow the monkey," as Jen's orange notation on page 352 claims to be "sound advice"? Or maybe it is to discover all mentions and explanations of the bird metaphor? Maybe it is to chart just when Jen and Eric started having feelings for each other? Or with the release by Doug Dorst of the 'official' chapter 10 as written by Straka,[73] the goal is to understand what Straka's message to Caldeira was through a contrast of the respective chapters. There are many, many more goals to read and research for, most of which have been solved through online 'walkthroughs' provided by other keen readers. However, even for those which have not been solved, the reader must decide what to look for and how to go about looking for it, much like players of virtual role-playing games must do.

While Tanderup argues that *S.* remediates more of the social networking and message board culture of the digital age, I would like to suggest that the structure of the text in terms of introductory skills-based elements, navigable negative space and reader alterbiography make those elements far more relatable to the video game than to any social networking site. *S*. is not a direct remediation of video games in the same way that *House of Leaves* is not a direct remediation of cinema, or hypertext fictions a direct remediation of *Pale Fire*. Yet, *S.* is still a game-changer because, as Tanderup argues, "Not only does [*S.*] indicate a changing medium,

[73] See Appendix for Dorst's tweeted ending

pointing to the evolving status and function of the printed book [as do the hybrid multimodal texts before it], it also reflects changing modes of production and promotion, changing ideas of authorship and changing modes of reading."[74] But more than that, after over three decades of existence, that changing mode of reading finally includes elements from video games, as well.

[74] Tanderup, 168.

Conclusion:

From Imitation to Remediation…and Beyond!

This thesis set out to answer one overarching question: have video games matured enough as a storytelling medium to be remediated by their preceding storytelling media? Since the video-game-to-film remediation is already being to be explored and well-documented,[1] I chose to focus instead on print literature. The research question then became something more akin to: in what ways have video games impacted contemporary print literature?

This new overarching question led me to engage with the wealth of academic research on video games that has been published over the past twenty years. Chapter I summarised that research as a debate between scholars from across disciplines (narratology, ludology, sociology, psychology) on whether the popularity of video games rose from their inclusion of a narrative (the hero's journey) or because they were better designed games (through world building). The main issue found through a systematic exploration of the five areas of contention surrounding this debate was that ludology and narratology could not exist within the same realm without sacrificing one for the other, to some extent: where ludology focuses on the agency inherent to the video game, which implies a freedom on the part of the player to traverse and explore a space with very few restrictions (i.e. *The Sims*), narratology signifies a focus on a mostly linear path to a pre-set, unchanging ending (such as found in novels and film). The end of chapter I

[1] See Mathias Stork's video essay "*Transmedia Synergies—Remediating Film and Video Games"* at https://vimeo.com/43326496.

concluded that because some video games are equally relevant as both story and game, the *player experience* should be more paramount to defining what a video game is than studying it as an *object*.

This led to the research question at the focus of chapter II: how exactly do video games present their narratives differently from print literature published both before and after video games were introduced to mainstream culture? The most obvious approach would seem to be through the *interactivity* of video games; where books and films seem to be consumed passively, video games often require concerted effort on the part of the player. However, as shown at the start of chapter II, interactivity was not sufficient enough for this research because of its clichéd use in the marketing of all digital fictions. This led to an exploration of the various terms associated with video game analysis and which terms were best suited for comparing video games to print literature.

Although sociological and psychological theories were not included in this research project due to the limited scope and range allowed for it, what was considered was the concept Alison McMahan refers to as 'deep play,' or the ability of the player to completely lose themselves in the kinaesthetic and narrative experience of the game. I defined 'deep play' more as the concept of immersion since this project compares across representational media. Since immersion is also often used as a buzzword for marketing interactive media, I chose to use Ermi and Mäyrä's empirically researched three-pronged approach to immersion through the imaginative (or narrative), challenge-driven (or ludic strategies), and sensory (or the visual graphics used to present the game) elements as my research methodology.

The rest of chapter II defined these three methods and explored how video games accomplish immersion across them. Sensory immersion was discussed with reference to how various representational media use perspective, colour and navigable space to create a sense of physical presence; imaginative immersion was broken down and defined as requiring suspense[2], affective involvement and an alterbiography[3] so to create a sense of affective and literary presence; and challenge-driven immersion was defined not through McMahan's concept of deep play but through Sweester's and Wyeth's theory of GameFlow, chosen because of its multifaceted approach to Csikszentmihalyi's generalised theory of flow to the video game experience.

Since literature and video games both exist on far reaching spectrums of genres and forms, chapter III focused on exploring those pre-digital print texts which function ontologically similar to video games: the ergodic[4] text. I explored the definition of an ergodic text through the structural and figurative metaphor of the labyrinth, and in doing so, argued that playful postmodern texts (such as those written by Calvino and Breton) which seemed like multicursal[5] labyrinthine texts (due to their nonlinear narratives) were not actually ergodic because their narratives were strictly unicursal,[6] requiring the reader to do nothing more than turn pages to

[2] Which, following Marie-Laure Ryan's taxonomy, is defined in terms of *what* suspense (the most common suspense, where the reader constantly wonders what will happen next in the narrative), *who* suspense (the 'who-dunnit' suspense commonly used in detective fictions), *why/how* suspense (where the conclusion is known but not how or why that conclusion took place), and *meta* suspense (when the reader is more engaged in the 'how' all the pieces and parts of the story fit together than with the narrative itself).
[3] Defined as: the player/reader-created identity, developed through subjective interpretations of the character's actions within and in response to the fictional environment
[4] Defined as: those texts that require nontrivial actions, beyond periodic or arbitrary page turning and eye movement, in order to produce meaning.
[5] Defined as: a labyrinth or maze which is multi-pathed, consisting of multiple points of entry and exit
[6] Defined as: a labyrinth or maze which is single-pathed, consisting of one entrance leading to one exit or centre

progress from cover to cover as compared to the other works I discuss: *Composition No. 1*, *The Unfortunates*, and *Pale Fire*.

Using the defined parameters for each type of immersion in chapter II, I spent the second half of chapter III analysing Nabokov's *Pale Fire*, chosen because of its history as the inspiration for Ted Nelson's hypertext protocol programme. What I found was that, although *Pale Fire* is highly immersive in its 'who-dunnit' suspense and kinaesthetic reading strategies, *Pale Fire* remains tied to its medium: a unicursal narrative with limited ergodic methods of reading and even more limited opportunities for sensory immersion.

Chapter IV explored hypertext fictions as a digital bridge —due to their hybrid nature of incorporating both ergodic interactivity and digital media—between printed postmodern ergodic texts and contemporary video games. The chapter focused first on defining hypertext fictions and how they fit within existing critical literary paradigms, then moved on to discovering what made video games such a popular storytelling medium while hypertext fictions remained fairly non-existent on the mainstream market.

Using James Pope's four problems to reader immersion in hypertext fiction and applying Ermi and Mäyrä's theories of immersion to identify where hypertext fiction fell short, I found that hypertext fictions—because of their current lack of narrative cohesion—do not allow for a reader to develop any sort of affective involvement or the *what* suspense required to become imaginatively immersed. Where challenge-driven immersion would seem to be the main concern of hypertext fictions (and so should be the one area in which they excel as compared to other narrative media), the widely varying platforms and lack of any standard navigable elements break the control and feedback elements of Sweester's and Wyeth's GameFlow

theory, often leaving readers of hypertext fictions confused and disoriented because they do not know how their choice of links to click impacts their narrative progress, or at the very least, makes their narrative unique. Sensory immersion is broken in the same vein because, rather than forgetting that the computer exists as a vehicle for the narrative being experienced, readers become too worried about navigating the hypertext fiction *as a computer programme*. What chapter IV ends on is the conclusion that the major difference between video games and hypertext fictions is that video games offer a staged training space for new players (both novice and experienced alike) to become familiar with the layout, programming, and narrative of *that particular* game without overwhelming them with breaking all conventions at once, allowing immersion to develop naturally as a flow process.

In chapter V, I explored the ergodicity of the virtual role-playing game, the video game genre I find most dependent on a sense of narrativity, as tied to its agency. Through analysing the continuously popular *The Elder Scrolls V: Skyrim*, I showed how these types of video games incorporate life-like sensory details to increase the sense of presence (as both player and character) while providing for meaningful choice to increase immersion through both imaginative and challenge-driven elements. By making every choice a reader-player makes important to both the narrative (in closing off certain narrative paths) and the game (in making certain skills more accessible to the character than others), virtual role-playing games like *Skyrim* force reader-players to develop strategies for progressing as they would in real-life situations, making these games more like narrative simulations (something akin to Janet Murray's holodeck) than video games. I also showed how video games use the beginning training ground to acclimate the player both to the game's ergodic controls as well as the

narrative choices available to them (without overwhelming players with all options at once like hypertext fictions do).

Chapter VI explored contemporary print ergodic texts, known also as multimodal hybrid texts due to their inclusion of different semiotic modes[7] and use of digital publishing methods. In a similar format to chapter III, I used Gibbon's taxonomy of multimodal literature and defined how these texts were not ergodic even though they included multiple semiotic modes. The rest of chapter VI focused on a comparison between Mark Z. Danielewski's *House of Leaves* (2000)— considered the seminal contemporary hybrid text—and *S.* by J.J. Abrams and Doug Dorst, first published in 2013 after the rise of the contemporary virtual role-playing games discussed in chapter V. The research question being answered through this comparison was how these two texts, both clearly influenced by digital media, differed and whether that difference was due to the influence of video games.

The answer to that question, for each of the three areas of immersion, is unequivocally yes. Regarding sensory immersion, *S.* uses removable, full-colour artefacts and coloured margin notes to create levelled narratives. While these elements engage the literal senses, they also help to contribute to the challenge-driven immersion of discovering hidden clues and cracking codes within the main text. Imaginative immersion is maintained through the interweaving of two narratives—the main text, *Ships of Theseus,* and the margin notes of Jen and Eric—which leaves the reader in suspense of wondering what is happening and why. While I argued that *House of Leaves* operates more like a hypertext in its unicursal narrative through multicursal means, I described how *S* introduces readers to its multicursal structure through staged training

[7] Defined as any method, medium or signifier by which we communicate an idea, from pictures and maps to words and emojis

in the early chapters and keeps readers returning to (or replaying) the text to solve the many mysteries left unanswered in the text's navigable negative space, just like video games do.

Where Do We Go From Here?

Thorburn and Jenkins argue that all new media follow a three-stage process of imitation (or remediating prior media), discovery (or defining what makes it unique and exploring those elements) and remediation (or prior media incorporating those unique elements) before becoming stale and giving birth to a new technological medium.[8] If video games are being remediated by print literature, does that mean that something new is on the horizon?

The future aside, I find the most exciting area for further research lies in creative writing. Seeing how video game elements can be remediated into print literature opens up a wealth of possibilities for writers of new interactive fictions—both in print and digital forms. Whilst *S.* incorporates video game elements such as colour and training spaces, further research in both video game storytelling and publishing technology could be done to discover how to include more sensory elements (such as sureties, surprises and retainers discussed in chapters II and V) without it seeming too trite or tasteless. Further empirical research on whether adding early-stage 'training levels' and *navigable* negative space into hypertext fictions makes them more immersive might be just what hypertext fictions need to break into the mainstream.

The significance of this thesis lies in its contribution to the growing body of research recognising the impact of digital storytelling media on representational print media. While critics like Katherine Hayles and Jessica Pressman argue that these hybrid books are rebelling

[8] David Thorburn and Henry Jenkins, introduction to *Rethinking Media Change: The Aesthetic of Transition*, ed. by Brad Seawell, David Thorburn and Henry Jenkins (London: MIT Press, 2003), 7.

against the digital by honouring the printed word through digital means, my research shows that they actually have much to learn from each other. Whilst there are few examples of print texts remediating video games at the moment, *S.* does not eschew its digital origins any more than it heralds its print ones. By remediating elements of the video game, *S.* shows that there are no 'old' or 'new' media; just good stories that need telling, in whatever way that means.

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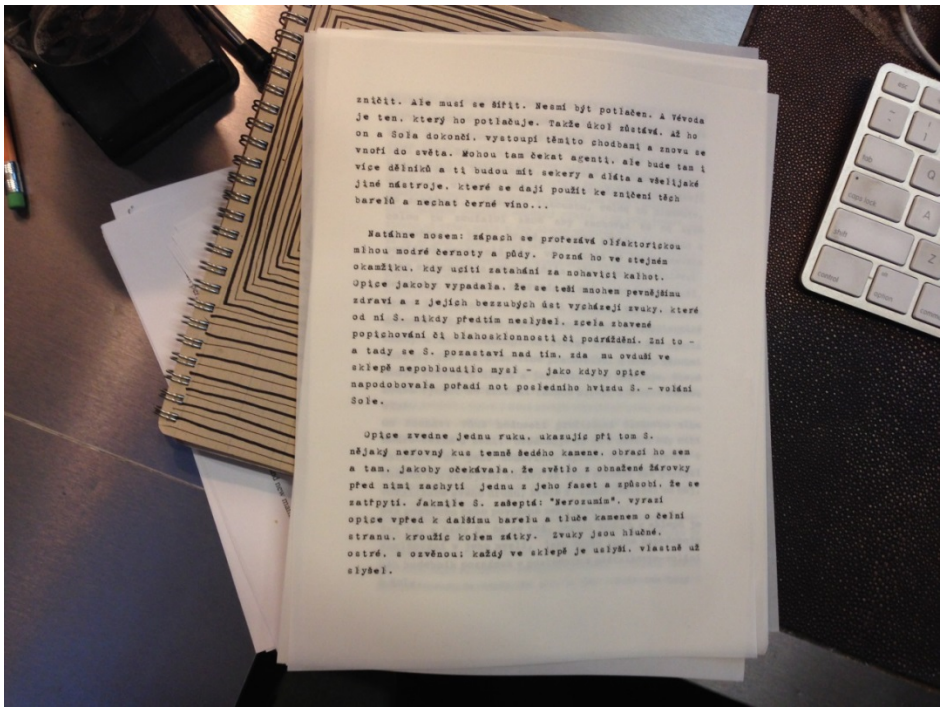
Appendix

Images of Doug Dorst's tweeted alternate ending to *Ships of Theseus*. According to the tumblr site, this is meant to replace everything in Chapter 10 from the third word on p451 to the end.



00273_Czech_final — Edited

Goudy Old Style | Regular | 16 | 1.5

VLP000023049549 88

Job: 00273
To: Heyward, J

Dear Heyward,

I am sending the translated text. I hope you find this helpful.

I look forward to hearing from you.

Best regards,

I. Svobodová

Czech/English Translation for EPH-9993 (00273)

destroyed. But it must circulate. It must not be contained. And Vévoda is the one who contains it. Thus the task remains. When he and Sola have completed it, they will ascend these corridors and reemerge into the world. There may be Agents waiting, but there will be more workers, and they will all carry axes and chisels and any other implements they can use to destroy these barrels and let the black wine —

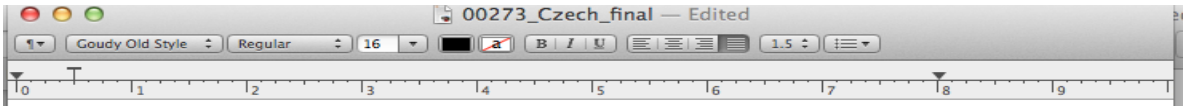
He sniffs: a rank smell cutting through the olfactory fog of blue-black and earth. He recognizes it at the very moment he feels the tug on his trouser leg. The monkey, somehow, looks to be in much more vigorous health, and from its toothless mouth comes a vocalization of a sort that S. has never heard from it, free from taunt or condescension or irritation. It sounds—and here, S. wonders if the air in the cellars is fogging his mind—as if the monkey is mimicking the run of notes in S's last whistle-call to Sola.

The monkey raises one a hand, showing S. a jagged chunk of dark-gray rock, turning it back and forth as if it expects the light from the naked bulb ahead of them to catch one of its facets and make it gleam. When S. whispers, "I don't understand," the monkey darts ahead to the next barrel and beats the rock against its face, circling the bung. The sounds are loud, sharp, and echoing; everyone in the cellars will hear, has already heard. S. lurches toward the monkey, grabs at it, but catches only a tuft of fur which comes away in his hand. Then, with surprising strength and dexterity, the monkey wrenches out the loosened bung and sets the black wine spilling, arcing out into the path where it splatters and puddles on the packed earth. The smell swirling around him is...holy. The spirit inhabits. He hears a faint, euphonious hum of voices and stills himself to listen more closely. And the blue-black sheen on the surface of the puddles—this, this is the precious thing that has caught the light. He holds out a cupped hand, to taste—

Sola's distress call, and a masculine shout. Which came first? How long has he been wavering drunkenly? How long has he been still?

This is the choice he makes: he runs forward, deeper into the cellars, toward her. He leaves behind the monkey, who darts to the next barrel. The reports of rock on oak begin anew.

He stumbles when the path suddenly dips, cracks his shoulder against a barrel chime, and sprawls, skinning the ground with knee, chin, and palm. His first thought is of Pfeifer, of being immobilized, unable to continue, unable to save himself or anyone else, but he is able to stand. From the murk of somewhere comes a cough, a gurgle. The monkey, no doubt tasting the fruit of its work. S. hobbles, walks, then runs. No broken bones. Pain and



nothing more. And the pain awakens him more fully to what he should have understood more fully a long time ago: more important than thwarting Vévoda, more important than precious story and its circulation of truth, is Sola. What is most important to him is Sola. His story.

Does she know this already? She must.

One note from her whistle, but one that he only recognizes as the first syllable of a longer call. Without the rest, its meaning is unclear.

He calls back, one note, to acknowledge. I hear you. Implied, he hopes, is: I am coming. I will be there shortly. Do whatever you must do to stay safe. He can no longer conceal his position, anyway, not with the monkey's noise, and what matters is his message, his reaching across the murky distance to her.

Deeper into the twisted descent there are voices, several male, and hers. Forward, while somewhere behind him, somewhere in the cellars where, too, this light cannot reach, the monkey destroys and, S. imagines, prances drunkenly through its destruction.

Vévoda regards his guests, deposed monarchs who with his help will reassume their rule within the year. A husband and wife. Frivolous people, but well capitalized, and they appear to be enjoying themselves amid this unexpectedly dramatic scene. They have not before experienced such a direct challenge, physical threat. Neither has he, of course, but his Agents have, which is what matters. This first impression has left him ambivalent.

The woman sips while her husband helps the Agent complete the arrangements. "You've quite a collection," she says.

"The wine attracts them," Vévoda says. They raise glasses to each other, celebrating their understanding.

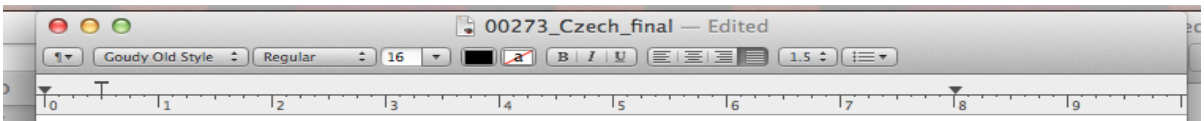
The husband rises, blots at his vest with a handkerchief. Mops his forehead. Frowns at the blue-black streak that comes away.

The Agent straightens his hat. The resistance had knocked it a degree off true. The next time the whistle blows, Vévoda nods to him, sends him off to do his work.

The voices now sound conversational. Silence would have concerned him, but to hear their calm is terrifying. The sound of an Agent approaching is merely annoying, as it requires his stillness. He crouches in the shadow of a barrel in the darkest part of the passage, midway between the light at one end and the light at the other. These are the footsteps of a man who walks unafraid, who is certain he will have the best of any opposition he encounters. S. withdraws his knife from its sheath. He wishes the Agent would quicken his pace. Sola is all that matters.

His nose fills with the rich, rank smell of unwashed fur soaked in blue-black. He turns his head and finds the monkey there, at eye level. It opens its mouth but makes no sound, as if it knows better. Its breath, despite the wine coating its mouth, is the foul smell of decay. But here in the shadows the monkey sits, and S. has little choice but to sit silently beside it and listen to those voices ahead. Where is the rage, the sound of confrontation and struggle? Or even of triumph?

The Agent strides past them, in duster and fedora. He is a young man, tall and athletic, all confidence and jutting jaw. What he lacks is care, and S. dispatches him before



the Agent even knew he was in danger.

As the man's body trembles into its last, as life slips into earth, S. does nothing but wipe his blade. In the next moment, the Agent is nothing, and S. remains—what? A fury? A purpose? A fitting end?

S. moves on.

Through the dark: a scatter of whistled notes, as if they were flung carelessly into a wind. It's not a signal he understands. It's not their language.

The rightful princess laughs quietly to herself. What fun it is, to be full of the loveliest of wines and tootling away like a canary!

But their host suddenly appears put out. He is a delightful little man, immaculate of dress, and with that perfect white Charlie—why, the tips of the mustache fairly wink at her when he offers that sly smile! He is their host, and as such his discomfiture is, to be perfectly frank about the whole thing, more than a bit inconsiderate. She hopes it will not worsen and become rude. She does want to like the man so. He will be extraordinarily helpful to them, and she would not like to feel indebted to a rude person. And now—a pretty pistol in his hand! Waving about!

"Dear me," she says quietly to her husband. "Where did he come by that?"

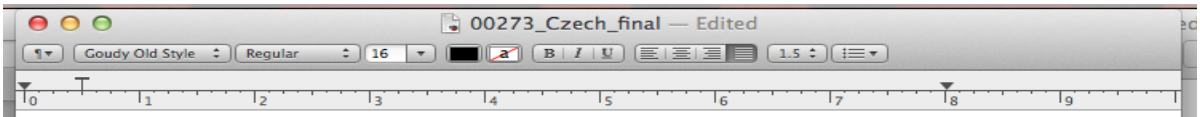
Her husband does not respond. She ought not have expected him to. He hasn't looked away from the rack since he finished helping the Agent in that most exciting business. It's understandable, she supposes, but it's still a bit rude, even for him.

Forward.

The monkey runs along with him, so closely as to be nearly underfoot, but they never tangle, never even touch. The two of them might well be one.

They make errors as they follow the voice—it's now just one voice, and S. is certain it's Vévoda's. They follow pathways that run to dead ends, hesitate at forks before choosing incorrectly and having to double back. S. resents the monkey for not having a more finely-tuned animal sense of direction. He imagines—even as he runs, even as he strains to fix the voice's location—the life he and Sola might find waiting when they return to the surface, the wine spilled, their work complete. He pictures them boarding the ship to soft-spoken expressions of admiration from the crew, paddling out through the pirate's passage, and letting the wind send them freely skimming over the seas. He stills this vision in the most perfect of settings: an orange sky, just shy of dusk; a sturdy warm breeze filling the sails; their wake whitening the water behind them, ever and always marking where they have been but need never go again. This is what awaits, if they can find her in time.

But in stilling the vision, he has corrupted it: standing on that imagined ship with her, dread swells within him. The sun, the wind, each other—none of it can beat back the dread that rises when he realizes that these waters are heavily mined. He knows this, somehow, knows that it is folly to pretend they are safe, that they are anything but doomed. It won't be long before they hit one. The deftest of pilots could not steer them through. These devices, one of which saved his life an age ago, will kill him, and it will kill him at the very moment at which he most wants to live.



Their host cocks the pistol. Such a potent but discreet little weapon! His rudeness aside, it's all quite thrilling.

The physics of sound cooperates, finally, and when the sound of the cocked hammer reaches S.'s ears, he knows precisely where the sound came from. He can see, ahead, the path splitting into a T; when he and the monkey turn the corner to the left, they will find the man holding the pistol. It is too late, and he is too close, to bother with stealth. His advantage will be in his speed, in his ferocity, in his absolute need to find her. The monkey screeches, and it sounds like a war whoop. S. tightens his damp grip on the knife, and they turn the corner.

S. sees the pistol, waving erratically as it is brandished; he notes four wine barrels arranged haphazardly in one corner, startles at how well-lit the room is, intuits that the room is a rectangle and that he and Vévoda—this white-haired and white-bearded and anxious and tiny man—are facing each other at its only point of entry or exit. He hurls himself at this man with a firearm, noting two other people in the room and a dumbwaiter on the far wall and knowing that if Vévoda manages to get off a shot, the bullet will miss him because Vévoda has no training and little nerve; he makes weapons but has never had cause to use them.

It is not until the pistol fires and pain rakes his collarbone that he realizes what his instantaneous reconnoitering did not reveal. Where is she?

The bullet sails beyond, carrying his skin and blood. It ricochets off an earthen wall, punches through a barrel, and comes to rest in the liquid inside.

The knife slides from his grip. It clatters across the floor, a surface of smooth, polished stone.

The pistol does the same.

They collapse as one, S. above and Vévoda pinned below. Close, closer as the small frame struggles beneath him, a pain rippling through his trunk and into the incandescent room. S. hears a furious growl issue from someone's throat, though he cannot tell if it is Vévoda's or his own.

The monkey appears beside them, shrieking, raising itself up with the rock in its hand. S. sees clearly the animal's face, its small proud chin extending, its simple mouth wide, all the force in its body ready to spring. Time pitches forward as the monkey brings the rock down at them. S. turns his head and hears the sounds of rock against bone, and bone giving way. Once, twice, several times more. On and on.

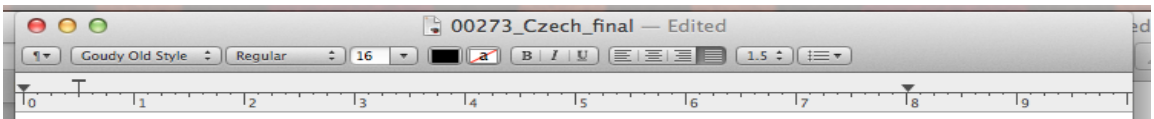
S. rolls himself aside, wipes his face, waits for his breath to return.

Sola. He has not seen her and he has not heard her because she is no longer there. They will not ascend to sunlight together, they will not board the ship together. He will never have cause to dread where mines might lurk in the water; he will never have the fortune of concern.

He stands, sways. There are paintings on the walls here. There is a low table set with a decanter and crystal. Across the room, there is a woman in a purple gown, tugging at the hand of the man beside her.

"Well," the woman says. "I hope you're not..." She does not finish.

S. stares, slow to understand what she means. She yanks the man along with her, marching him past S. and the monkey and the remains of Vévoda. She is wearing



Sola's whistle about her neck, yet S. cannot think of a reason to stop them, and so they vanish into the cellar maze. He moves himself toward the space where they had been, in front of the barrel rack, because he sees now that it is not at all empty. The rack cradles three bodies, each lying face up, each with feet to the wall and heads tilted back over the rim. Gravity arches the throats. The faces are swirled and spattered and streaked in blue-black. On the smooth stone are spatters and streams and the fine settled particles of a blue-black mist. On an adjacent wall, a spray of blue-black, patterned like a shotgun blast. He knows—without even registering the servant's costume—that the body closest to it is Sola's.

Black wine is still dripping from her mouth. Her lips are still wet.

The voices rise again, double him over, but he straightens and moves closer, one hand clamped over the wound on his shoulder. The faces are too darkly inked for him to make out the features until he stands close. Sola. Khatef-Zelh, still young, unchanged from when he met her in El-H_____. Corbeau, as she was on the wharf, in the hills, in the cave, in midair. And now, he sees, a fourth body, tiny, nestled between the girl and Corbeau: an infant. The baby from the Territory, he feverishly decides, though it's difficult to say.

Sola should not be here. None of them should be here. But they are here, and it is because he failed them. All of them.

The noise in his head: all the voices of all the cities, all the scream and static from the skies over the sea, all the thunder of bombs falling to earth. All the noise of this life of failures, a life that was never even his own to begin with.

You toss your rock away, watch it bounce and spin across the floor. You stretch your stiff limbs. The stove-in man's eyes are open, but you ignore this. You know when a thing is dead. Why would you even think to gaze into a dead eye?

Across the room, the transparent man raises his hands and presses them over his ears as the wound on his shoulder bleeds freely. He shakes. He shakes so hard you can see a thousand man-shaped outlines within him flutter and blur. He drops to one knee, to the other, to the ground.

Your senses are acute—you are made of senses—and from across the room you can hear the voices in his head. So many voices, desperate, raging, pained, hopeless, and all of them are his own.

A thousand outlines flutter, but the man is still. His clothing is blood and black wine. You call out and he does not move.

His stillness unsettles you. Why sit with the dead?

It occurs to you for the first time that this man has never known that he is transparent. But why should it have occurred to you? How could any creature fail to understand such a fundamental thing about itself? You met the transparent man long ago, and that has always been what he is.

But as you watch him, slumped, the thousand outlines fluttering, you can sense the space inside him darkening, thickening.

You are old. You have seen everything. You have not seen this.

The man now has only two wants. His scent carries them to you. He wants to pick up the knife and carve a strange shape into the stove-in man's face, or maybe into the pale, white-furred skin of his belly, but he does not want that enough to do it. His second want is to strike a match. This alarms you. You are soaked in black wine, and you

Glossary

Agency: "the satisfying power to take meaningful action and see the results of our decisions and choices."[1]

Alterbiography: the player-created characterization, developed from the player's subjective interpretations of the avatar's actions within and in response to the game environment.

Discourse Time: the time it takes to narrate a story in real time.

Ergodic: a text which requires nontrivial actions, beyond periodic or arbitrary page turning and eye movement, in order to produce meaning.

Event Time: The time it takes for the player's actions to have an effect on the flow of events in the game world.

Extranoematic: actions which take place outside of a text in order to make meaning from it; in a virtual role-playing game, this specifically refers to the configurative, textonic and explorative actions a player must make in order to 'win'.

Multicursal: multi-pathed, consisting of multiple points of entry and exit.

Multimodal: A body of literary texts that feature a multitude of semiotic modes[2] in the communication and progression of their narratives […]; they experiment with the possibilities of book form, playing with the graphic dimension of text, incorporating images, and testing the limits of the book as a physical and tactile object.

Noematic: those interpretative elements necessary to make meaning of a text; in a virtual role-playing game, this specifically refers to the player's ability to feel empathy, make inferences, and embark on reflection so to choose a kinaesthetic action.

Play Time: the time it takes for a player to commit actions.

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[1] Janet Murray, *Hamlet on the Holodeck (*London: MIT Press, 1998), 126.
[2] See definition for *semiotic modes*

Remediation: when a new medium "refashions [elements of] its predecessors and other contemporary media" in an effort to reform them "by offering a more immediate or authentic experience."[3]

Scripton: the combinations of textons as 'read' by the reader (i.e. the 10^{10} possible combinations created by the 140 phrases provided in Raymond Queneau's *Cent Mille milliards de poemes*).

Semiotic modes: any method, medium or signifier by which we communicate an idea, e.g. "family photographs and snapshots, maps and hand-drawn sketches, typography and layout, and even color, graphic frames and margins,"[4] as well as the more straight-forward methods such as verbal (written and spoken) language.

Story Time: The timeline of the events as they take place in the story itself.

Texton: string of signs as presented in the text (i.e. the 140 individual strips of sentences/phrases used in Raymond Queneau's *Cent Mille milliards de poemes*).

Unicursal: single-pathed, consisting of one entrance leading to one exit or centre.

[3] Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, Massachusetts: MIT Press, 1998), 22.
[4] Wolfgang Hallet, "The Rise of the Multimodal Novel: Generic Change and Its Narratological Implications," in *Storyworlds Across Media: Toward a Media-Conscious Narratology*, ed. by Marie-Laure Ryan and Jan-Noel Thon (London: University of Nebraska Press, 2014), 151.