

**THE PRINT ARTIFACT IN THE AGE OF THE DIGITAL:
THE WRITINGS OF MARK Z. DANIELEWSKI AND STEVE
TOMASULA**

KENT ALEXANDER AARDSE
Bachelor of Arts, University of Lethbridge, 2009

A Thesis
Submitted to the School of Graduate Studies
of the University of Lethbridge
in Partial Fulfillment of the
Requirements for the Degree

MASTER OF ARTS

English Department
University of Lethbridge
LETHBRIDGE, ALBERTA, CANADA

© Kent Alexander Aardse, 2011

DEDICATION

To Kasia Sosnowski, who has listened, encouraged, and supported me.

ABSTRACT

The primacy of the print novel as the main mode for knowledge dissemination and communication is being challenged today by the vast influx and pervasiveness of digital media. Print literature, then, is at potential risk for obsolescence, as digital technology creates new modes of narrative distribution. The novel, therefore, is in the midst of a metamorphosis, having to adapt in order to properly situate itself within the new media ecology.

Somewhat paradoxically, the same digital technology that challenges print literature's primacy is responsible for the novel's adaption. The changing face of the page creates new novels that reflect the digital in print, through changes in typography, layout, and design. These changes illuminate the need for a material-specific methodology in literary theory, and brings about the death of postmodernism in the new, digital environment.

ACKNOWLEDGEMENTS

I wish to express my gratitude and appreciation to everyone who helped me throughout the writing process of my thesis. I would especially like to thank Dr. Benzon, Dr. Ng, Dr. Taylor, Dr. O'Donnell, Dr. Carter, and Dr. McAdam for various conversations, encouragements, and insightful comments and criticisms, all of which played a role in the completion of my thesis.

I wish to thank my supervisor in particular, Dr. Kiki Benzon, who devoted countless hours as a mentor, helped me work my way through ideas and thoughts, read numerous drafts, and provided direction and support to help me achieve my goals.

TABLE OF CONTENTS

INTRODUCTION	1
CHAPTER ONE - MATERIALITY: THE PAGE AND THE SCREEN	12
CHAPTER TWO - LABYRINTHS	22
CHAPTER THREE - THE NETWORKED NOVEL	56
CHAPTER FOUR - LITERARY MOVEMENT, OR POSTMODERN NECESSITY	75
CONCLUSIONS	84
BIBLIOGRAPHY	86

INTRODUCTION

“What I undertook to discuss as the ‘death of literature’ is finally so much more than that. The phrase can be considered as a shorthand tag for the progressive atrophy of all that defines us as creatures of spirit.”

Sven Birkerts, *The Gutenberg Elegies*

With the advent and proliferation of digital media, scholars and critics alike are finding new territory for theorizing the state of literature and communication in the contemporary world. Digital media is pervasive, infringing on almost all aspects of life in the twenty-first century. The massive influx of digital technology has led to a discussion about the established hierarchies of information and communication, most notably in the discussion of print literature’s status in the new media ecology. As we shall see, media theory has been a prevalent field of communication studies for quite some time, but the rise of digital media, the internet, and e-book readers has amplified the discussion in recent years.

The main claim of this thesis is that the discussion of the “death of print” needs to be put to bed, as it is evident that print literature is standing strong in the digital age¹. Thus, print literature’s material *transformation* at the hands of the digital must be examined, to show how the physical artifact remains an essential component of the new media ecology. I will use Mark Z. Danielewski’s *House of Leaves* (2000) to illustrate how the print novel may stay viable within an ever-changing digital landscape; my interpretation of the text focuses on its unique typographical innovations and its

¹ Especially when considering the publishing figures of new titles per year. From Robert Darnton’s *The Case for Books* (2009): “700,000 new titles appeared worldwide in 1998; 859,000 in 2003; and 976,000 in 2007. . . The staying power of the old-fashioned codex illustrates a general principle in the history of communication: one medium does not displace another, at least not in the short run” (xiv).

intentional blurring of form and content. I assert that *House of Leaves* is the epilogue to the postmodern movement in literature². Danielewski's treatment of typical characteristics of postmodern literature--such as meta-narratives, self-reflexivity, and the manipulation of form and structure--moves postmodernism into a digital, networked environment. Furthermore, Danielewski's willingness to release his work on the internet, and the companion musical CD to *House of Leaves*, emphasize a need for print literature to expand into other media; thus, Danielewski creates multiple points of entry into the fictional world. In my research I assert that the networked novel is an economic necessity in the networked digital marketplace, as print resolves to compete with digital media forms. The networked novel will keep further generations reading print literature, as it is situated within the greater media environment.

I will also be using the writing of Steve Tomasula to show how print literature is affected by digital technology. Steve Tomasula's *VAS: An Opera in Flatland* (2002) is a highly visual print novel that incorporates diagrams, comic book visuals, magazine scans, and words to form a unique text. *VAS* is indicative of the changing nature of print in the digital age, illustrating how the physical body of a codex may be altered with technological modifications. I will also examine Tomasula's multimedia *TOC: a new media novel* (2009) in order to understand the formal and thematic negotiations involved in an author's transition from print to electronic literature. The blurb on the back of its case states that *TOC* is a "new-media hybrid" that "re-imagines what the book is, and

² Postmodern literature is a difficult movement to define. For my purposes, it is best to understand postmodernism as an intensely self-reflexive movement, noted for its typical use of metafiction, intertextuality, and general playfulness. Notable authors include Vonnegut, Pynchon, Auster, Barthelme, Pamuk, and DeLillo.

what it can be.” *TOC* is actually a program that is found on the DVD inside the package; this program must be run on the computer in order to read the work. Through an analysis of *TOC*, I will challenge the claim that it can even be called a “book,” by analyzing certain formal aspects and reading practices that the new-media nature of the work demands.

In the early days of digital culture, beginning in the late 1960s, many critics anticipated the death of the book. In *The Micro Millennium* (1979), Christopher Evans proposes that, “the 1980s will see the book as we know it, and as our ancestors created and cherished it, begin a slow but steady slide into oblivion . . . there are a number of reasons this is imminent” (114-5)³. Digital technology was sweeping in fast, and with the seemingly instantaneous appearance of the internet into the homes of millions of people worldwide, the ways in which we engage with information has also experienced a revolution. Print literature’s monopoly on the dissemination of narrative has all but dissolved because of the rise of various “new” media, and a discussion for print’s primacy is no longer needed. Rather, I wish to focus on the discourse that develops from this discussion of the war on print. In an era where most, if not all of our information is a simple mouse-click away, it seems too easy to write about the print artifact and its eternal struggle with its speculative foe, the computer terminal. In *The Anxiety of Obsolescence: The American Novel in the Age of Television*, Kathleen Fitzpatrick sums up the trend of buzz-inducing “death of the novel” pieces:

³ See also John Barth’s “Literature of Exhaustion” (1967), and Robert Coover’s “The End of Books” (1992).

This endless—and ostensibly meaningless—circulation and recirculation of the tale of the novel’s demise, like the similar omnipresence of the narrative that connects technological advance with cultural decline, suggests the underlying import of such articles: rather than shedding light on the status of the book on the contemporary scene, these obituaries and rebirth announcements might serve different cultural purposes, whether merely filling column space for tired literary editors or providing ammunition in more strenuously fought culture wars. (11)

The death of the novel becomes an easy way for critics and journalists to cause a quick stir, simply by focusing on the death of one of the oldest media forms. Joseph Tabbi writes in *Cognitive Fictions* (2002) that “front-page predictions of the death of the printed book were perhaps inevitable—and undeterred by the fact they appeared *in print*” (x, italics in original). I wish to build upon Fitzpatrick’s assertion that it is not the actual war between print and digital literature that matters, but the discourse that has been developing about this war in current literary and cultural theory⁴.

In “The Future of Literature: Complex Surfaces of Electronic Texts and Print Books,” N. Katherine Hayles writes that “the novel itself as a form is undergoing the traumatic experience of having its traditional territory taken over by the colonizing incursions of other media” (85). If true, it follows that the novel must be in the midst of some sort of metamorphosis. Authors may now find new ways of experimenting with print form and content, in order to show how flexible and malleable the codex can be. Furthermore, many literary theorists believe that in the transformation from the analog to the digital something crucial to our understanding and analysis of the text is lost, and therefore the ways in which we approach this literature must also change. For example,

⁴ I focus on the death of the novel as form brought about by the incursions of digital technology; I will stay away from the more philosophical topic that is the death of literature or, in other words, the death of “good” writing. See Fitzpatrick, pg. 17-18 for a more detailed discussion of the death of literature, brought about by the perceived lack of meaningful writers and the rise of the literary critic in the latter half of the twentieth century.

both Christian Vandendorpe (2007) and John Lavagnino (2007) believe that reading is fundamentally altered when texts move from the page to the screen.

Since the creation of Gutenberg's printing press, the codex form has been the dominant medium for the dissemination and retrieval of information. The spread of Christianity was popularized by the printing press, as it made pamphlets and books easier to produce and placed into the hands of civilians, rather than locked up in monasteries and churches. Digital media, then, can be seen as the next step in this evolution of communication technology, as the digital infringes upon the book's esteemed position in the hierarchy of media and communication.

Canadian scholar Harold Innis has examined the influence of communication technology and its partial influence on the rise and fall of different empires throughout history. Innis's grand opus *Empire and Communications* (1950) takes an exhaustive look at several empires throughout history, including Egypt, Babylonia, Ancient Greece, and the Roman Empire. Innis considers the technologies that these empires were founded upon, and how these technologies were used as communication media to propagate the beliefs and ideas of those in positions of power. Although it was written in the 1940s, Innis's work still holds sway in our contemporary world, and his discussion of time and space in media is a prophetic assertion that pertains as much to the digital world as to the analog world that existed when it was written:

The concepts of time and space reflect the significance of media to civilization. Media that emphasize time are those that are durable in character, such as parchment, clay, and stone. The heavy materials are suited to the development of architecture and sculpture. Media that emphasize space are apt to be less durable and light in character, such as papyrus and paper. The latter are suited to wide areas in administration and trade. The conquest of Egypt by Rome gave access to

supplies of papyrus, which became the basis of a large administration empire. Materials that emphasize time favour decentralization and hierarchical types of institutions, while those that emphasize space favour centralization and systems of government less hierarchical in character. Large-scale political organizations such as empires must be considered from the standpoint of two dimensions, those of space and time, and persist by overcoming the bias of media which over-emphasize either dimension. They have tended to flourish under conditions in which civilization reflects the influence of more than one medium and in which the bias of one medium towards decentralization is offset by the bias of another medium towards centralization. (26-27)

Innis posits that a medium deployed at a certain time will modify the composition of social systems and government, depending on their varying tendencies towards the bias of time or space. It is not hard to transfer Innis's work on time and space into the present situation and digital landscape. The literary artifact, in its analog, physical state, has a tendency toward the bias of time; once a book is printed, it is a physical object in the material world, and it is able to be kept in a state of use for a long period of time. On the other hand, digital media, best thought of as information disseminated through the ambiguous network known as cyberspace, leans towards the bias of space; once a piece of text is released onto the internet it is effectively considered everywhere at once, capable of being accessed from any terminal that is 'logged in.' Of course, it should be noted that those media favouring a space bias are also vulnerable to disappearing as fast as they appeared because of the non-physicality of their existence. As Innis notes, most civilizations tend to be successful after it has been acknowledged that two media must work symbiotically as a means of offsetting each other's respective biases towards either time or space⁵. This is a key idea in the discussion of the future of the print novel in the

⁵ One historical example Innis provides traces the development of ancient Egypt, noting the use of stone, hieroglyphics, and papyrus as instrumental in creating a working society.

age of digital media. As mentioned, many theorists discuss the death of the novel as a means of discussing the world's state of utter despair; the rise of new media such as television and film, and the subsequent decline in popularity of the book for today's younger generations are creating a world in which our future leaders might be unable to form complete, grammatically-correct sentences⁶. For many cultural critics, we are creating a culture of spectacle rather than intellect and thought. Although Innis writes well before the advent of digital media and the internet, his position of civilization's success in absolving two different media forms still rings true in the digital age.

Moving Innis's discussion of media and technology into the postmodern world, Sven Birkerts published *The Gutenberg Elegies: The Fate of Reading in an Electronic Age* in 1994. *The Gutenberg Elegies* is a nice bridge between the pre-networked world of *Empire and Communications* and our current hyper-networked postmodern world. Carrying on with Innis's concepts of time and space, Birkerts highlights the inherent differences between knowledge in a book and knowledge disseminated through an electronic medium. In his essay "Close Listening", Birkerts discusses the idea of books on tape and the relationship this form of 'reading' has on our understanding of time, especially the perception of pace. Birkerts asserts that as "life gets more complex, people are likely to read less and listen more. The medium shapes the message and the message bears directly on who we are; it forms us. Listening is not reading, but what *is* it?" (145, italics in original). Birkerts acknowledges that the origins of literature are oral, but holds

⁶ In 2007, the National Endowment for the Arts (NEA) announced the findings of their comprehensive analysis of reading patterns in the United States, *To Read or Not to Read: A Question of National Consequence*. They concluded, among other things, that American teens and young adults are reading less, Americans are reading less well, and the declines in reading have civic, social, and economic implications.

that the writing process sparked the evolution of complexity in storytelling. For Birkerts, the act of reading is one that affords us control over the pace and rhythm of the writing, and we forego this control when we turn to electronic media such as radio or television:

Reading, because we control it, is adaptable to our needs and rhythms. We are free to indulge our selective associative impulse; the term I coin for this is *deep reading*: the slow and meditative possession of a book. We don't just read the words, we dream our lives in their vicinity. The printed page becomes a kind of wrought-iron fence we crawl through, returning, once we have wandered, to the very place we started. Deep listening to words is rarely an option. Our ear, and with it our whole imaginative apparatus, marches in lockstep to the speaker's baton. (146, italics in original)

For Birkerts (ever the Luddite), we are essentially giving away our control as readers when we move away from a personal reading experience to one of electronic transmission. In other words, there is something inherent in digital media that obscures meaning more than in print. As literature moves into an electronic environment, then, both the form *and* the content are transformed. It is necessary to examine this change in order to fully understand the status of literature and text in a digital age.

Taking into account the historical perspective provided by Innis and Birkerts, N. Katherine Hayles focuses on the notion of media transformation, specifically the need for change in literary criticism. In "Print is Flat, Code is Deep: The Importance of Media-Specific Analysis," Hayles argues for a revolution in literary analysis, in which critics take into account the medium that they are working with and how these distinct media affect the very notion of text. Hayles asserts that because print literature's hundreds of years as the dominant communication medium has led to an artificial privileging of form, a fundamental flaw exists in which literary critics fail to acknowledge the materiality of the work. Hayles writes that "the long reign of print made it easy for literary criticism to

ignore the specificities of the codex book when discussing literary texts. With significant exceptions, print literature was widely regarded as not having a body, only a speaking mind” (70)⁷. As literature moves to digital formats, materiality comes to the forefront of our understanding of the work. Form, then, becomes as important to the work as content, often working symbiotically in the new digital environment. Hayles again: “Materiality should be understood as existing in complex dynamic interplay with content, coming into focus or fading into the background, depending on what performances the work enacts” (71). For Hayles, literature’s shift into a digital environment creates a new ecology in which new media helps us to gain a better understanding of traditional forms of communication. Hayles states:

The crucial move is to reconceptualize materiality as *the interplay between a text’s physical characteristics and its signifying strategies*. This definition opens the possibility of considering texts as embodied entities while still maintaining a central focus on interpretation. In this view of materiality, it is not merely an inert collection of physical properties but a dynamic quality that emerges from the interplay between the text as a physical artifact, its conceptual content, and the interpretive activities of readers and writers. Materiality thus cannot be specified in advance; rather, it occupies a borderland—or better, performs as a connective tissue—joining the physical and mental, the artifact and the user. (72, italics in original)

A discussion of the new digital media environment benefits from this media-specific analysis, as the physical properties of the medium work symbiotically with the content to create meaning. Furthermore, developments in electronic text open up new possibilities for print literature. Just as much electronic literature seeks to define itself by highlighting

⁷ The “significant exceptions” mentioned by Hayles most likely refer to the large body of criticism that is interested in the emergence of the new forms of print, from dime novels to the emergence of paperbacks. These new forms of print illustrated the early malleability of the codex, spurred on by the printing press.

the unique characters of a text born out of a digital environment, so too does the print novel need to present itself as a uniquely analog device capable of certain features the digital screen cannot replicate.

In this thesis I will make the argument that print literature is not on the verge of death but, in order to remain an important form of communication in the current digital environment, print must showcase its own inherent power as a platform for innovation. As Joseph Tabbi writes in *Reading Matters: Narrative in the New Media Ecology*, “the current media ecology should at least reveal the novel for what its always been: a powerful instrument for representing its own media multiplicity, and a discursive practice that can help us to locate ourselves within the changing media environment” (24). By adapting in stride with innovations of digital technology, print literature can remain a unique and vital communication tool in the twenty-first century. Mark Z. Danielewski’s *House of Leaves* and Steve Tomasula’s *VAS: An Opera in Flatland* provide examples of how print literature, by employing unique typographical layouts and innovations in structure, can match the formal potential of digital works that are hypertextual and visually complex. A novel of multiple narratives and paths to traverse, *House of Leaves* demonstrates print’s ability to replicate—and exceed—new media and adapt to new technological innovations, while *VAS* showcases how digital media affects the body of a textual narrative.

This thesis is in five parts:

- *Materiality: The Page and the Screen* will explore the rise of the digital terminal, focusing on how this threatens the established hierarchy of literature as a communication

medium. This chapter explores the essential question: Is there something fundamental in our ability to comprehend a text that is lost in the translation from the page to the screen?

- *Labyrinths* examines the physically impossible “house” of *House of Leaves*, whose shifting and seemingly infinite interior will be seen as a physicalization of the labyrinthine real-world of digital media.

- *The Networked Novel* is an exploration of how print literature is affected by, and can utilize, digital innovations. How *House of Leaves* mimics the aesthetics of digital media, and embraces cross-media narration, will be considered.

- *Literary movement, or Postmodern Necessity* posits *House of Leaves* as the apex of the postmodern movement in literature, moving the print novel into a digital marketplace.

Whether this is an artistic choice or an economic necessity will be dissected.

- *Conclusions* is a summation of the results of the thesis, providing closure to my argument.

CHAPTER I - MATERIALITY: THE PAGE AND THE SCREEN

Hayles' call for media-specific analysis was spurred on by the rise of digital media and literature's early forays into the electronic realm. Digital media begs us to reconsider previous notions of what constitutes text, technology, medium, and message. Hayles is right to argue that print literature's long reign as the supreme communication medium has rendered any discussion of materiality effectively non-existent⁸. Digital media, then, changes the user's interactions with text, as words displayed on a screen are fundamentally different from words laid out on a physical page. In "Translating Media: Why We Should Rethink Textuality," Hayles writes that "the largely unexamined assumption here is that ideas about textuality forged in a print environment can be carried over wholesale to the screen without rethinking how things change with electronic text, as if 'text' were an inert, non-reactive substance" (267). Materiality, then, ultimately works with the words to develop into the complete notion of text.

Marshall McLuhan's *Understanding Media: The Extensions of Man* (1964) introduced the author's now famous dictum, "the medium is the message" (8). In *Understanding Media*, McLuhan maintains that every new communication technology can be viewed as a new form of medium, and it is the form, rather than the content, that dictates the message. Furthermore, McLuhan argues that it is the medium itself that brings about the most social change, and therefore it is technology that deserves close analysis, rather than the content that is carried by the medium. McLuhan writes that "the 'message' of any medium or technology is the change of scale or pace or pattern that it

⁸ Save for a few mid-twentieth-century reader-response theorists, such as H.R. Jauss and Wolfgang Iser.

introduces into human affairs” (7). This idea of apparatus over content is crucial to understanding the implication of *Understanding Media* for the field of media studies, as it iconoclastically shook up the classical idea that *what* is being said is more important than *how* it is being said. McLuhan uses the example of an electric light to illustrate his argument that “the medium is the message”:

Whether the light is being used for brain surgery or night baseball is a matter of indifference. It could be argued that these activities are in some way the “content” of the electric light. This fact merely underlines the point that “the medium is the message” because it is the medium that shapes and controls the scale and form of human association and action. The content or uses of such media are as diverse as they are ineffectual in shaping the form of human association. Indeed, it is only too typical that the “content” of any medium blinds us to the character of the medium. (9)

McLuhan posits that it does not matter what the lightbulb is being used for, but rather that it is the technology itself that shapes human interaction, therein forging a shift in how we perceive the world. Every communication technology has unique characteristics that shape exactly how we interact with it, and for McLuhan these differing means of interaction are more important than the content that is mediated. Although he wrote well before the advent of personal computing and the internet, McLuhan’s ideas still ring profoundly true in today’s networked world. Hayles’ plea for media-specific analysis harkens back to McLuhan’s idea that the medium is key to the understanding of the work.

Neil Postman’s *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* (1985) explores the rise of television in the American home, asserting that new technology affects human cognition and behavior. For Postman, the speed and easy-access to information by newer technology means that we are not engaging critically with knowledge, but rather being inundated with too much information to process thoroughly.

Again, although not dealing directly with digital media and literature, Postman's idea seem oddly prescient when thinking about the future of print in the digital era.

Expounding on McLuhan's "the medium is the message," Postman articulates what he believes to be the difference between the technology and the medium:

We might say that a technology is to a medium as the brain is to the mind. Like the brain, a technology is a physical apparatus. Like the mind, a medium is a use to which a physical apparatus is put. A technology becomes a medium as it employs a particular symbolic code, as it finds its place in a particular social setting, as it insinuates itself into economic and political contexts. A technology, in other words, is merely a machine. A medium is the social and intellectual environment a machine creates. (84)

Postman is aware of the similarity between his argument and McLuhan's but, for

Postman, newer technology creates a particular difference between the two critics.

Postman argues that the nature of current technology--that is, the reliance upon visual imagery and the symbols used in the transferring of ideas--denotes a metaphor rather than a message (10). Therefore, the medium is not the message, but the metaphor: a special definition of reality held by different technology as a means of symbolizing the real world (10). This definition is quite poignant when applied to the current media in existence today; the internet, although made up of text and images, is highly symbolic, and is thus essentially different from print literature.

Espen J. Aarseth's *Cybertext: Perspectives on Ergodic Literature* (1997) focuses on various textual and literary forms and the ways in which varying media relay different forms of narrative. For Aarseth, the "concept of cybertext focuses on the mechanical organization of the text, by positing the intricacies of the medium as an integral part of the literary exchange" (1). Aarseth believes that the actual organization and manipulation

of the medium itself creates a work of cybertext, and this term is not necessarily reserved for only literature of an electronic nature. Cybertext is closely related to Aarseth's construction of ergodic literature, wherein cognitive reasoning is required by the reader to traverse a text consisting of multiple paths rather than a straightforward linear progression. Here it is useful to quote Aarseth in length:

During the cybertextual process, the user will have effectuated a semiotic sequence, and this selective movement is a work of physical construction that the various concepts of "reading" do not account for. This phenomenon I call *ergodic*, using a term appropriated from physics that derives from the Greek words *ergon* and *hodos*, meaning "work" and "path." In ergodic literature, nontrivial effort is required to allow the reader to traverse the text. If ergodic literature is to make sense as a concept, there must also be nonergodic literature, where the effort to traverse the text is trivial, with no extranoematic responsibilities placed on the reader except (for example) eye movement and the periodic or arbitrary turning of pages. (1-2)

In other words, cybertext demands a certain level of interaction between the user and the work; this interaction requires more cognitive work from the user than the traditional idea of 'reading' requires. Hypertext, on the other hand, is a term coined by Theodore H. Nelson in 1965, and refers to a computer system that could implement the notion of linked lexias. George Landow and Paul Delany, in *Hypertext and Literary Studies* (1991), write that hypertext "as a term refers almost exclusively to computerized hypertext programs, and to the textual structures that can be composed with their aid" (4)⁹. Cybertext and hypertext, therefore, are much more interactive than traditional forms of narrative, as the user must forge her own path through the text to construct the narrative, rather than traverse through the narrative by flipping pages. Referencing the works of B.

⁹ A codex book comprised of lexias, such as a *Choose Your Own Adventure* book, would qualify as a non-digital cybertext. The early computer role-playing game *Adventure*, by contrast, qualifies as a hypertext.

S. Johnson and Milorad Pavic, Aarseth claims that “paper can hold its own against the computer as a technology of ergodic texts” (10). Although cybertext, hypertext, and electronic literature all seem to be heavily reliant upon the computer terminal, the print novel has held its own among these new forms as ergodic literature. Even pioneering hypertext theorist George Landow gets it wrong when he states that “[u]nlike the static form of the book, a hypertext can be composed, and read, non-sequentially” (3). Texts such as Danielewski’s *House of Leaves* and Tomasula’s *VAS* undermine Landow’s view, as they illustrate the flexibility inherent in the codex form. Mark Z. Danielewski’s *House of Leaves*--which I will explore in-depth in the coming chapters--is a contemporary example of ergodic literature in which the author has clearly decided to publish the work in print rather than solely on the internet. *House of Leaves* is highly hypertextual¹⁰, forcing the reader to traverse through multiple footnotes (sometimes lying adjacent to one another on the same page) as well as constantly flipping the physical book around in order to read the words printed in divergent directions on the page. This would have been a book perfectly suited to the burgeoning ‘electronic literature’ genre, but Danielewski insisted the work be published in print, even self-publishing the first run of copies. This is because Danielewski, like many other contemporary authors, knows the potential in the physical artifact; it is not merely the words on the page that matters, but the intricacies of the medium itself: the margins, the binding, the physical weight of the object in the hands of its reader.

¹⁰ This is to say *House of Leaves* is hypertextual in form, but the novel is not a work of hypertext. Hypertext is generally used to refer to literature made with and meant to be read off of a computer screen. *House of Leaves*, then, is a cybertext that features prominent hypertextual and ergodic characteristics.

As literature moves away from the printed page and onto the digital screen, so too is there a shift in our approach: how we understand and analyze the work itself. Again Marshall McLuhan's famous dictum "the medium is the message" is key; as writing moves into another medium, the message and how we perceive its content also experience a change. Current theories of textuality, including those of hypertext and cybertext, are dismantling classical notions of what constitutes a text. The theorists mentioned above recognized that specific advancements in communication technology greatly affected human beings' conception of knowledge, and the ways in which the world was seen also experienced a transformation. Current literary theory holds that in the transformation from the analog to the digital something crucial to our understanding and analysis of the text is lost. The importance of digital media to the ever-changing literary landscape lies in the vast nature of its scope; indeed, in his review of *A Companion to Digital Literary Studies*, Scott Hermanson notes that digital media "blurs, if not completely erases, defining lines between text, speech, pictures, video and film" (np). The rise of the digital terminal and the networked characteristic of our contemporary world has created a revolution in communication technology, amalgamating almost all previous forms of communication and blurring the line between these forms. As these lines erode, so too does the notion of content and form associated with classical ideas of literature. What is key to the work is no longer the writing on the page, as it is no longer a standard analog page that we are looking at. In "Digital and Analog Texts," John Lavignino notes that meaning in a work hinges on "how texts are appropriately *presented* and not merely *worded*" (np, italics in original). In the

transformation from analog to digital, what is being transferred are the words themselves. The content is heightened at the expense of the form. Scott Hermanson explores this transformation:

[A]chieving the quick, exact copy and the minute storage space has meant that what remains as literature may only contain that which can be coded - namely the letters, numbers, and symbols of the printing press. We've lost the form in favor of the content. . . . Digital literature decrees that only those elements codified (or that can be codified) count as significant. . . . Features such as margins, weight, texture, and blank space mean something to a book. With them we lose sense. (np)

Therefore, the act of flipping the pages, feeling the book, recognizing the margins and weight, is lost when we are reading digital text. Form affects the user's interaction with the artifact; reading the print form of *Moby Dick* is different than encountering the novel in a digitized format. The codex's fonts and margins are not vital to our understanding of the work, but are vital to the experience of encountering the work.

In his essay, "Reading on Screen: the New Media Sphere," Christian Vandendorpe states that the main asset of digital media is its ubiquity; the ease of mass data storage and transmission allows for greater access to the literature. However, Vandendorpe is also aware of the distinction that lies between reading a codex and reading words printed in a digital sense of the word:

The main advantages of the codex were lost when text was converted to the screen. The main drawback of the screen lies in the fact that it is a two-dimensional object. As such, it can only show one "page" at a time. This is far different from the book whose structure allows the reader to leaf through the pages and, in doing so, gain some visual control over the content of the book, and be able to compare pages in one section with those in another one. ("Handling the Flow of Text," np)

In the transfer of the word from the page to the screen, the materiality is missing because of the constraints inherent in digital media. It is possible to jump from one area of a text to another when reading on the digital screen, but this requires the use of a mouse and the action of scrolling through the work in order to accomplish this feat. The physicality of the printed artifact allows the user to control it as a material object; comparing two pages from the same work is easy in the analog form, as opposed to the digital, which requires more elaborate knowledge of the software being used to accomplish this feat.

The advent of hypertext has severely limited the focus and direction of narrative, thus changing any approach to the work. The seemingly borderless construct of electronic literature has produced an atmosphere of incompleteness. In some cases, such as the World Wide Web, it is impossible to tell where the work begins and where it ends (some theorists have claimed that the internet is the most obvious and prevalent example of hypertext, but this further disrupts our notions of text and narrative). In a book, context is clear as the work is seen as a whole; on the other hand, hypertext links create an atmosphere of context-less information, as websites can be brought up and taken away with the simple click of a mouse. Vandendorpe writes that “[w]ith the web, pages accessed by the user are generally just fragments whose meaning depends on the context within which they are grasped. . . it detracts the reader from following a single thread of thought” (“The Advent of Hypertext,” np). Traversing text on the internet has played an inevitable factor in the lexicon of digital speech; the user exploring the internet is not said to be ‘reading’ the internet, but rather ‘browsing.’ This implies that reading text on the internet does not require the level of concentration that reading a book requires. Indeed,

as Carolyn Guertin writes in her essay “Handholding, Remixing, and the Instant Replay: New Narratives in a Postnarrative World,” “[i]nstead of emulating the act of reading, what we perform in these spaces is a visual task of browsing” (np). Narrative and text are drastically changing, as the majority of the text we encounter now on a day-to-day basis is out-of-context, almost randomized. Furthermore, the ways in which we approach the text in our everyday existence is undergoing a transformation from the cognitive-heavy task of reading and analyzing, to the grazing, visual recognition form of browsing.

Marshall McLuhan was aware of the fundamental difference between the act of *experiencing* and *understanding*. McLuhan posits that the abundance of information from mass media, particularly television, has led to a culture in which the average person does not have the time to fully understand all the information they encounter, and instead finds complacency in the simple act of experience:

It is thus that the student of media, like the psychiatrist, gets more data from his informants than they themselves have perceived. Everybody experiences far more than he understands. Yet it is experience, rather than understanding, that influences behavior, especially in collective matters of media and technology, where the individual is almost inevitably unaware of their effect upon him. (*Understanding Media*, 318)

McLuhan’s words are still pertinent to today’s media landscape, maybe even resonating more now than the time in which he wrote. The internet has created a medium in which more data being delivered daily than at any other time in history. The problem, as McLuhan observes, is that this information is encountered superficially; we are not critically engaging with the material that mass media delivers to us. Although the internet is more participatory than TV, the medium to which McLuhan spoke to, browsing rather than reading information reflects our lack in cognitive interaction with the computer

terminal. Reading a book, on the other hand, requires much more work: the user has to engage with the narrative that is presented for them, finding only true satisfaction with the work if she is prepared to cognitively interact with the narrative to discern meaning and context¹¹. McLuhan's concept of the bias towards space takes center stage again, as digital media clearly leans towards the characteristics of speed and ubiquity. However, it is precisely this speed that becomes an issue in the comprehension and absorption of data received in the digital form. The problem with digital text is both in its ubiquity and volatile existence. Where meaning was once found in the pages of a book, the margins and the paper, that meaning is lost in the seemingly unending, ubiquitous stream of data flowing between networked terminals. Furthermore, as we encounter new forms of literature, we must relearn how to 'read.' For in the new digital world, it is not the analyzing of the text that is key, but rather the manipulation of the digital program that will allow us access into the meaning behind the work.

¹¹ This is not to say that this same level of cognitive interaction is not required when reading works of electronic literature, but merely that browsing the internet and watching TV are generally more passive acts than reading a book.

CHAPTER II: LABYRINTHS

Umberto Eco, in *Semiotics and the Philosophy of Language* (1984), appropriates the labyrinth as a means of understanding the ambiguities in textuality. Eco finds three disparate forms of labyrinth in his study: the linear, the maze, and the net. This net seems to draw upon the philosophical concept of the rhizome, developed by Gilles Deleuze and Félix Guattari in their *Capitalism and Schizophrenia* (1972-1980) project. In the second volume of this project, *A Thousand Plateaus* (1980), the authors use the rhizome to explore knowledge culture, describing a theory of multiple paths and non-hierarchical structures. Eco claims that in the net, “every point can be connected with every other point” (81). As a model for literary theory, the labyrinth represented semantic ambiguities found in challenging works. It allowed for multiple entry-points into the meaning of the text, and thus became a staple of literary criticism, particularly in works of formal experimentation. Unfortunately, texts labeled as labyrinthine due to their ambiguities are somewhat of a misnomer. Complexities in meaning do not equate to a work being labyrinthine; rather, the formal aspects of the text, such as footnotes and multiple pathways through the text, make the work labyrinthine. This misappropriation, however, has led to the ubiquitous use of the labyrinth in literary theory. Fortunately, with the rise of literature born out of a digital environment, the concept of the labyrinth has found new relevance in literary theory. The proliferation of electronically enabled hyperlinking, and the networked nature of our world, further extends the applicability of the labyrinthine textual model.

Dating back to Greek mythology, the labyrinth was a structure designed by Daedalus at the request of King Minos. Built to imprison the Minotaur (a half-man, half-bull entity), the labyrinth served the dual purpose of protecting the Greek people from the creature, and vice versa. In contemporary language, the word labyrinth is often used synonymously with the word maze; however, as I will show, this is misleading nomenclature. In *The Idea of the Labyrinth, From Classical Antiquity Through the Middle Ages* (1990), Penelope Reed Doob outlines two unique forms of the labyrinthine structure: the unicursal and the multicursal. The unicursal consists of one path that usually leads to the center of the structure--this would correspond to Deleuze and Guattari's linear labyrinth mentioned above. The multicursal, on the other hand, consists of a series of branching paths, with no specified center: Deleuze and Guattari's maze. Espen Aarseth discerns that although these models are contradictory, they were "subsumed in a single category, signifying complex design, artistic order and chaos (depending on point of view), inextricability or impenetrability, the difficult progress from confusion to perception . . . there was no great need to distinguish between the two" (6). Unfortunately, in the Renaissance, this dualism faded away and the labyrinth was seen as a purely multicursal form. This created a strong opposition between the concepts of the labyrinth and linearity. Ultimately, the dual meaning of the labyrinth needs to be reinstated, as it is better suited for taking into consideration the changing nature of literature in the digital age. Aarseth again: "[T]his might be the place for suggesting the reinstatement of the old dual meaning of *labyrinth*, so that both unicursal and multicursal text might be examined within the same theoretical framework" (8, italics

in original). This duality highlights the multitude of differences and experimentation in form that only the unicursal and multicursal theories of textuality are capable of thoroughly examining.

Digital literature is apt for the literary theory of the rhizomatic, labyrinthine study of text. With its focus on hypertext and the ergodic nature of linked lexias, the digital world lends itself to the metaphorical structure of the labyrinth. Of course, the labyrinth as textual metaphor is pertinent to a number of novels written before the advent of the personal computer as well. Indeed, one of the eldest examples of cybertext is the *I Ching*, also known as the *Book of Changes* or the *Zhouyi*. The *I Ching* is much too dense to fully explore in this paper, nor is it my objective. However, this text does showcase the inherent powers of the codex as a means of ergodic literature. The *I Ching* is a set of oracular statements composed of sixty-four sets of six lines, called hexagrams. Different methods exist for how the user manipulates the work for the purpose of finding an answer to a question, traditionally related to success in life (eg., “Will my crops be successful this year?”). This structure allows for multiple pathways through the text, varied by the questions asked and the answers received.

Laurence Stern’s *The Life and Opinions of Tristram Shandy, Gentleman*, published in nine volumes between 1759 and 1769, is an early forerunner of formal experimentation in popular narrative. The novel plays with the traditional linear structure of narrative at the time, and is one of the earliest examples of stream-of-consciousness style. The novel is a unicursal narrative; although the narrative makes significant jumps in fictional time, the reader is not required to make any choices about how to maneuver

through the text. A prototypical example of a multicursal narrative is Julio Cortázar's *Rayuela* (1963), originally published in Spanish and later published in English under the name *Hopscotch* (1966). The novel is multicursal, as it forces the reader to make judgments on how to read the 155 chapters, either sequentially or according to a table that the author provides for the reader (hopscotching through the narrative). The novel also provides an early example of multiple endings, which occur due to the chosen path of the reader.

Vladimir Nabokov's *Pale Fire* (1962) is both unicursal and multicursal. In the novel, "Pale Fire" is the name of a poem by John Shade, and commentary is provided by Shade's self-appointed narrator Charles Kinbote. Kinbote's notes quickly become far more elaborate and detailed than the eponymous poem itself. The reader has the choice of reading the poem first, then the commentary, or flipping back and forth between the two narratives. Espen Aarseth discusses *Pale Fire* and its use of the footnote, highlighting the duality of both:

The footnote is a typical example of a structure that can be seen as both uni- and multicursal. It creates a bivium, or choice of expansion, but should we decide to take this path (reading the footnote), the footnote itself returns us to the main track immediately afterward. Perhaps a footnoted text can be described as multicursal on the micro level and unicursal on the macro level. Nabokov's *Pale Fire*, however, leaves the mode of cursality up to the reader; consisting of a foreword, a 999-line poem, a long commentary of notes addressing individual lines (but really telling the commentator's story), and an index, it can be read either unicursally, straight through, or multicursally, by jumping between the comments and the poem. (8)

Although digital media calls for a revisiting of the labyrinth as a model for textuality, the book is also a site of formal experimentation. In fact, Aarseth continues by stating that "the codex format is one of the most flexible and powerful information tools yet invented,

with a capacity for change that is probably not exhausted yet, and I (for one) do not expect it to go out of style any time soon” (8). As I move my discussion into a more in-depth analysis of *House of Leaves*, it must be remembered that Danielewski is not the first author to experiment with cursality and form. In fact, as Dirk Van Hulle remarks in “Hypertext and Avant-texte in Twentieth-Century and Contemporary Literature,” “the experiments of the modernists prefigure literary aesthetics in the digital age” (np). Although the formal experimentation of modern authors serve as antecedents to the work, *House of Leaves* illustrates digital media’s impact on print literature, in both form and content.

Mark Z. Danielewski’s fiction bridges the gaps between analog and digital fictions. Somewhat paradoxically, by embracing the visual nature of the digital Danielewski’s work highlights the analog power of the physical book. *House of Leaves* and *Only Revolutions* (2006) are examples of Aarseth’s ergodic literature, because they require nontrivial effort to traverse through the narrative. The user--and I choose the term user rather than reader--is forced to physically turn the physical books in her hands, in order to follow the multiple narrative paths that often lie next to one another on the same page. As one progresses through Danielewski’s writing, it becomes more evident that form and content are one and the same. Danielewski employs many unique techniques--such as amount of words on a page, multiple pathways through the use of footnotes, and different fonts for different narrators, to name a few--in order to control the flow of the work, which is often working symbiotically with the action described. *House of Leaves*, in particular, mimics the visual aesthetics and linked lexias of digital fiction, but does so

in physical book form. Danielewski strongly believes in the power of the analog during the era of the digital, and has discussed this in a large number of interviews; from the web-based literary magazine *Bold Type*, associated with publishing company Random House:

[B]ooks don't have to be so limited. They can intensify informational content and experience. Multiple stories can lie side by side on the page. Search engines--in the case of *House of Leaves* a word index--will allow for easy cross-referencing. Passages may be found, studied, revisited, or even skimmed. And that's just the beginning. Words can also be colored and those colors can have meaning. How quickly pages are turned or not turned can be addressed. Hell pages can be tilted, turned upside down, even read backwards. I'd love to see that. Someone on the subway spinning a book as they're reading it. But here's the joke. Books have had this capacity all along. . . . But somehow the analogue [sic] powers of these wonderful bundles of paper have been forgotten. Somewhere along the way, all its possibilities were denied. I'd like to see that perception change. I'd like to see the book reintroduced for all it really is. (np)

Danielewski's writing is evidence of this strong belief in print literature; both *House of Leaves* and *Only Revolutions* feature characteristics that only print literature can manage. Danielewski plays with the form and conventions of the book, focalizing the physical aspects of the codex to engage issues such as pacing, physical space, and the visual potential of the print medium¹².

House of Leaves, Danielewski's first novel, is a multi-layered, typographically diverse text which borrows heavily from the world of electronic literature, specifically hypertext. At the core of the novel is story of a physically impossible house, whose internal measurements are greater than its external structure could allow, but the

¹² I would be remiss not to acknowledge the role of comic books and graphic novels as a site of formal experimentation. In many ways, Danielewski's novels continue formal and reading strategies that have been central to comics and other forms of graphic narrative for many decades.

complexities of the work make it much more than a simple haunted house tale. *House of Leaves* is a heteroglossia, containing three (one could argue four) core narratives, all working together and sometimes even appearing side-by-side on the same page. The main narrative comes from the mind of a blind, recently diseased recluse named Zampanó. Zampanó's manuscript, found by Los Angeles-based hipster Johnny Truant, is an in-depth academic analysis of a documentary titled *The Navidson Record*¹³. Johnny Truant interjects his own paratextual narrative into Zampanó's writing through an elaborate series of rambling footnotes, often spanning several pages themselves. Truant's writing consists of small personal anecdotes, concerning his job as a tattoo apprentice, his self-imposed task of organizing Zampanó's manuscript, and his fascination with a stripper named Thumper. As Truant progresses further in his dissecting of Zampanó's "The Navidson Record," his footnotes take a more sinister and anxious tone; Zampanó's writing affects Truant and plunges him into a state of apparent madness. A third narrative ends the novel with an epistolary section; these are letters sent from Pelafina H. Lièvre to her son, Johnny Truant, during the time she was institutionalized in The Three Attic Whalestoe Institute, a psychiatric facility. These letters provide a glimpse into Johnny Truant's early life, and also provide some cryptic notes for the enthusiastic reader to decode. These letters were first published as a companion piece to *House of Leaves*, appearing as *The Whalestoe Letters* in 2000. They were added to *House of Leaves* for the second edition of the novel. Finally, a minor fourth narrative comes from the fictional "Editors," whose sparse footnotes provide details on how all these narratives came

¹³ In the interest of clarity, Zampanó's manuscript will be labelled "The Navidson Record," while the documentary that the manuscript is based on will be italicized as such, *The Navidson Record*.

together to create *House of Leaves*. The Editors also provide English translations for the many notes Zampanó included that were not in English¹⁴.

In creating this multi-layered narrative, Danielewski tackles the idea of authenticity; specifically, by including the Editors and details about how they received the book from Johnny Truant, Danielewski creates a book that feels as though it is not a work of fiction. Even the title page reads *House of Leaves*, by Zampanó, with introduction and notes by Johnny Truant. Mark Z. Danielewski's name lies covertly on the adjacent page, creating the illusion that this is a work of non-fiction. The question of authenticity is raised in the actual content of the book as well; Johnny comments on the authenticity of the documentary, the source text of Zampanó's writing: "See, the irony is it makes no difference that the documentary at the heart of this book is fiction. Zampanó knew from the get go that what's real or isn't real doesn't matter here. The consequences are the same" (xx). Even Zampanó, in his first few sentences, tackles the question of authenticity, stating that "skeptics call the whole effort a hoax but grudgingly admit *The Navidson Record* is a hoax of exceptional quality" (3). Thus, even though Zampanó writes of a fictitious documentary, he still takes the time to explain that people argue over the documentary's authenticity, making the narrative seem more credible in his writing. Johnny notes that no matter how hard he searches, he can find no one who has ever seen or heard of *The Navidson Record*, yet throughout the book Zampanó includes a number of footnotes attributed to great minds and thinkers of our time, including Anne Rice, Stanley Kubrick, and Harold Bloom. Zampanó has gone to great lengths to authenticate

¹⁴ From this point, any reference I make to the editors is a reference to the fictional editors that Danielewski has created.

The Davidson Record, just as Danielewski attempts to create the illusion that *House of Leaves* is not his narrative.

Danielewski uses the quasi-non-fiction form to address the issue of the author, both in postmodern literary theory and in digital media. Theorists suggest that the rise of digital literature will erode the primacy of the “author.” Accordingly, Scott Hermanson notes that “the author as a controlling figure parceling out information will be subsumed by ubiquitous access to vast terabytes of information” (np). In *The End of Books - Or Books Without End?* (2000), J. Yellowlees Douglas states that “[s]ome critics are excited at the possibilities of harnessing fiction to the power of a computer, realizing, perhaps, a reader-centered text, elevating the reader’s historically humble role to something approximating the creative energies of its author” (2). In a somewhat hyperbolic manner, in *Open Source Democracy: How Online Communication is Changing Offline Politics* (2003), Douglas Rushkoff states that the computer and the internet are this generation’s answer to the printing press:

Finally, our renaissance’s answer to the printing press is the computer and its ability to network. Just as the printing press gave everyone access to readership, the computer and internet give everyone access to authorship. The first Renaissance took us from the position of passive recipient to active interpreter. Our current renaissance brings us from the role of interpreter to the role of author. We are the creators. (37)

Quite obviously, the computer, internet, and world wide network are cause to reiterate the death of the author, as access to vast amounts of data and information erode distinctions of authorship and authority. By creating multiple narratives and going to great lengths to setup *House of Leaves* as though these Editors actually did combine all the different writings into one work, Danielewski mimics the digital world and its lack of distinct

authority in authorship. However, even Danielewski cannot remove himself completely from the text, and finds cryptic ways of asserting his control and dominance over the work, once again establishing the author as God paradigm commonly found in literary studies; by taking the first letter of each footnote from 27 to 42, Mark Z. Danielewski's name is spelled out in full. In keeping with this same style of code-breaking, the author's surname is once again spelled out in full from footnotes 46 to 53. It is interesting to note that Danielewski has taken to hiding his name cryptically amongst his footnotes, particular when we consider Espen Aarseth's take on digital media and authorship, from *Cybertext*:

[I]f the difference between author and reader has vanished or diminished (cf. some of the claims for hypertext), then the real author must be hiding somewhere else. Even if we can no longer use the word author in a meaningful way (after all, today's complex media productions are seldom, if ever, run by a single "man behind the curtain"), it would be irresponsible to assume that this position has simply gone away, leaving a vacuum to be filled by the audience. (165)

Danielewski covertly asserts his control over the work by hiding his name in his footnotes. Danielewski holds complete control over the various narratives and pathways found in his writing (unlike the world of digital media, particular the anonymity associated with the World Wide Web.)

As Danielewski blends the line between reality and fiction via multiple narrative and hidden codes, he further crosses boundaries with the character of Zampanó. Zampanó is modeled on the Argentinian writer Jorge Luis Borges: he creates a labyrinthine work, and just like Borges in his later life, he is a blind writer. *Labyrinths* (1962) is an English-language collection of short stories and essay by Borges. In the short story "The Garden of Forking Paths," included in *Labyrinths*, Borges creates an elaborate, fantastical work

about a recluse who set out to create a book, and to build a labyrinth. However, as it is later noted, “[e]very one imagined two works; to no one did it occur that the book and the maze were one and the same thing” (25). These similarities between Zampanó and Borges are not coincidental; Danielewski creates both a book and a labyrinth in *House of Leaves*. The labyrinthine nature of *House of Leaves* is achieved by subtle mimicry of digital aesthetics, particularly the use of footnotes (already established as a form of hypertext), as well as focalizing the visual power of the written word. *House of Leaves*, described by Hansen as a novel “obsessed with technical mediation and the new media ecology” (598), is an exercise in remediation, a term used by Jay David Bolter and Richard Grusin in *Remediation: Understanding New Media* (1999). Although a somewhat convoluted and repetitive text, *Remediation* explores the nature of media, particularly its genealogy; the text posits that all media seek to improve upon older forms, thus all media participate in remediation. *House of Leaves* is indicative of remediation; not only does the work mimic the aesthetics of the new media ecology, but also Zampanó’s manuscript is an attempt to remediate a documentary film. In “Saving the Subject: Remediation in *House of Leaves*,” N. Katherine Hayles sums up the importance of remediation in *House of Leaves*:

As if learning about omnivorous appetite from the computer, *House of Leaves*, in a frenzy of remediation, attempts to eat all the other media. This bingeing, however, leaves traces on the text’s body, resulting in a transformed physical and narrative corpus. In a sense, *House of Leaves* recuperates the traditions of the print book—particularly the novel as a literary form—but the price it pays is a metamorphosis so profound that it becomes a new kind of form and artifact. (781)

Through the process of remediation, the novelist adapts to reflect aesthetics or ideals found in other media, and the form itself is transformed into something new. Bolter and Grusin discuss how remediation occurs in both newer and older media: “What is new about new media comes from the particular ways in which they refashion older media and the ways in which older media refashion themselves to answer the challenges of new media” (15). As *House of Leaves* remediates new media, its form is affected and transformed, leaving a novel unique in its typography and layout.

House of Leaves exhibits a remarkably strong connection between form and content, most notably in the manuscript of Zampanó’s, which describes the documentary film *The Navidson Record*. As Will Navidson and his family move into their new house on Ash Tree Lane, the house begins to transform in supernatural ways. After a short trip away, the family discovers a new door in their house, which leads to nowhere. Furthermore, after extensive measuring and analyzing, Will Navidson discovers a very unsettling fact: “The width of the house inside would appear to exceed the wide of the house as measure from the outside by 1/4 [inch]” (30). This is just the first odd discovery made in the Navidson’s house, but it is the first example of form and content converging in *House of Leaves*. As the novel’s centerpiece--the house on Ash Tree Lane--measures larger on the inside than the outside, so too does the actual physical book replicate these measurements. Though not exactly a 1/4 inch difference, the cover of the remastered full-color edition of the novel is smaller in size than the pages contained within, replicating the structure of the house. Although it is a small detail, this shows the novel’s self-reflexivity, and Danielewski’s replication of content with form. The house’s inconsistent

measurements are only discovered after a book--a novel--has fallen of a shelf, an instrument of change for the print form.

The eponymous house of the novel is the vehicle for Danielewski's formal experimentation; as the house is further explored and revealed to be concealing an immense, physically impossible labyrinth, Danielewski uses the disorientation of the characters to manipulate the ways in which the book must be held and moved around in order to read the words on the page. In "The Digital Topography in Mark Z. Danielewski's *House of Leaves*," Mark B. N. Hansen writes that the house must be "fundamentally viewed as a figure for the otherness of the digital, both as it enters thematically into the world of the novel and also as it punctures the surfaces of its textuality" (607-8). As the novel is clearly obsessed with remediation, with the place of various media in our networked world, reading the house as representative of the digital is by no means a stretch. A particular passage from *House of Leaves* describing the destruction of the house indicates this connection:

The whole place keeps shuddering and shaking, walls cracking only to melt back together again, floors fragmenting and buckling, the ceiling suddenly rent by invisible claws, causing molding to splinter, water pipes to rupture, electrical wires to spit and short out. Worse, the black ash of below, spreads like printer's ink over everything, transforming each corner, closet, and corridor into that awful dark. (345)

The house as representative of digital technology, it seems as though the disembodied monster that can only be heard in the labyrinth represents physical books and ink, with the ceiling "rent by invisible claws," and the "black ash of below" spreading like "printer's ink." The monster of analog writing seems to be seeking revenge on the digital, reasserting its dominance and control. The digital world, particularly the internet, is so

expansive that no one can have a clear conception of its composition. The house in *House of Leaves* would defy a blueprint that correctly traces its labyrinth, just as the digital world defies a clear architectural structure. As Navidson and his team of explorers find themselves trapped within the labyrinthine corridors that await beyond the enigmatic door, so does the networked user find herself trapped within an ostensibly endless stream of data and information.

The mark of the digital is apparent in *House of Leaves* in the ways in which Danielewski embraces various navigational strategies. N. Katherine Hayles writes in “Translating Media: Why We Should Rethink Textuality,” that “one of the insights electronic textuality makes inescapably clear is that navigation functionalities are not merely ways to access the work but of a work’s signifying structure” (264). Electronic literature, specifically its use of hyperlinked lexias, makes apparent that the navigation of a work is not merely a bonus feature, but commensurate with the content of the text. Danielewski replicates this idea with his footnotes, which often span several pages, and can themselves spawn subsequent footnotes. For example, two pages in Chapter V feature Zampanó’s narrative, a tirade by Truant which is the result of expanding on one of Zampanó’s footnotes, a footnote courtesy of the Editors, and three footnotes that are marked by different symbols, providing English translations for various passages found in Zampanó’s main narrative (42-3). Again, the navigational strategies play into the construction of meaning in the text, and it is up to the reader to determine how to approach the text. The text can be read by switching back and forth between the narratives simultaneously, or by reading one narrative straight through, returning to the

start, and following another narrative to the end. Form meets content once again as the reader chooses what paths to take in order to traverse through the text, just as the explorers of the house must deliberately choose their way through the labyrinth.

Danielewski's *House of Leaves* challenges the traditional idea of the printed page, and what can be accomplished there. Electronic literature advocates condemn the physical page for its finite nature, while digital media is lauded for its versatility and malleability. Birkerts discusses this dichotomy in *The Gutenberg Elegies*:

What difference can there be between signs on a screen and signs on a page? Anyone who asks this seriously has yet to grasp the nature of the revolution taking place around us. Because of the triumph of the screen and the digital program, the printed page is now a diminished thing. We see it as opaque, finite, not connected to what we postulate to be the near-transcendental totality of the data bank. The book dead-ends us in ourselves, whereas the screen is a sluice into the collective stratum, the place where all facts are known and all lore is encoded. (188)

Footnote 144 in *House of Leaves* seems to speak directly to Birkerts' conception of the opaque, finite page. This footnote appears first on page 119, and is encased in a small "window" within the text, outlined by a blue border. When page 119 is flipped over, the "window" appears on the backside, showing the exact same text as if it was being viewed from behind. This "window" is exactly that: a transparent square that allows for the text to be viewed from either direction, front or back. This directly challenges the opaqueness of the page; although once the words are printed they cannot be changed, Danielewski still challenges the traditional notion of how words can be printed on the page, proving again print literature's ability to remediate characteristics which digital media can accomplish with various three-dimensional modeling and video programs.

Sven Birkerts explores the differences in pacing and “close reading” found between different media. For Birkerts, the act of reading affords us control over the pace and rhythm of the writing, and we forego this control when we turn to electronic media such as radio or film. Danielewski is aptly aware of this idea of pacing, and *House of Leaves* illustrates this deep reading act that Birkerts promotes. Danielewski employs a number of idiosyncratic techniques, particularly with the number of words on a page. In keeping with the idea of remediation, Danielewski pays particular attention to the pacing of the text, as a filmmaker would do in order to create suspense. Arguably the zenith of *House of Leaves*, Chapter X focuses on the exploration of the labyrinth by Navidson, Reston, and Holloway. This is where Danielewski first employs the strategy of using only a few words on a page; in doing so, the reader is forced to flip through the pages faster than when reading a page full of text:

This creates a rather frenetic pacing,

adding to the suspense

of the character's

harrowing

descent

into the labyrinth
at the heart of the home.

In “Surfing the Text: The Digital Environment in Mark Z. Danielewski’s *House of Leaves*,” Brian W. Chanen argues that digital media changes the ways the reader must approach the text:

The changing surface appearance of text in various contemporary media points to deeper structural changes and possibilities for new textualities in print. . . . *House of Leaves* shows that medial concerns, and concerns with the possibilities of print fiction in the digital age, are not just thematised in contemporary literature: the hyperlinked, networked structure of the digital environment has influenced the structure of print fiction and the ways in which a reader is encouraged to approach print text. (164)

The last exploration of the hallways and corridors deep inside the house is conducted by Will Navidson alone and occurs in Chapter XX. By this point, it has been revealed that behind the strange door lies an immense white world, featuring a gigantic Spiral Staircase and interminable hallways. As Navidson enters the labyrinth alone, Zampanó writes that “[f]or the next five days Navidson covers anywhere from 240 to 300 miles at a time, though on the fifth day, in what amounts to an absurd fourteen hour marathon, Navidson logs 428 miles” (425). This almost hyperbolic statement is a testament to the sheer size of the vast labyrinth that somehow dwells beneath the house on Ash Tree Lane. This next section signifies Chanen’s ideas of changing how the “reader is encouraged to approach print text.” Words appear in every direction, mimicking Navidson’s disorientation experienced in the labyrinth. The reader is forced to physically rotate the book in order to read the words on the page, and sections with non-raised braille cryptically remind the reader of its own physical properties throughout (423-477)¹⁵. N. Katherine Hayles writes

¹⁵ Footnote 180 on page 140 appears backwards, so the reader must physically hold the book up to a mirror, or vice versa, to read the words. There is no better way to be reminded that you are reading a book than seeing your reflection in a mirror, holding up that book.

in “Saving the Subject: Remediation in *House of Leaves*,” “the text insists on its specificity as a print novel, showing a heightened self-awareness of its own materiality” (784). As literature moves into the digital realm, this physical aspect of the work is lost, as all is written on the screen and therefore intangible. In fact, the first page of Chapter XX includes a passage that is written in braille; although not physically raised on the page, this inclusion accentuates the physicality of the print codex, while at the same time serving to remind us of Zampanó’s blindness. Danielewski employs the digital aesthetic in *House of Leaves*, and in doing so creates a work of literature that is like no other. In his second full-length work, *Only Revolutions*, Danielewski’s obsession with the physicality of the codex is in full stride, and serves to further amplify his plea for the book form to remain in the digital age.

While not as typographically diverse as *House of Leaves*, Danielewski’s *Only Revolutions* is another work of print literature that could not have been developed without digital technology, and again serves to emphasize the physical nature of the codex. *Only Revolutions* is a bildungsroman tale of two perpetually young lovers, Sam and Hailey, as they embark on a road trip across both time and space. The book has no absolute front cover: both covers can act as the starting point for the story. Sam’s story starts at one end of the book while Hailey’s starts at the other, and the two meet exactly halfway through the narrative. One narrative takes up the top half of the page, while the other narrative is upside down and covers the bottom half of the page; this requires the reader to physically twist and flip the book in order to read both characters’ narratives. The inside of the dust jacket from the 2006 edition carries with it a suggestion from the editors: “The publisher

suggests alternating between Hailey & Sam, reading eight pages at a time.” This suggestion forces the reader constantly to physically interact with the narrative, which would be avoided if one narrative was read in its entirety, followed by the second narrative. The suggestion of the publisher essentially allows Sam and Hailey’s respective narratives to work in tandem, and each event is presented from one viewpoint while the other is still fresh in the reader’s mind. The narratives of Sam and Hailey are not the only narratives present on the page, however; as the young lovers journey on the open road in various sorts of conveyances, from animals to motor vehicles, they also journey through time, although they remain sixteen years old. Starting with Sam’s narrative, the marginalia presents a chronological timeline starting at November 22, 1863, and concluding on the last page of Sam’s story (the first page of Hailey’s) on November 22, 1963. Hailey’s story features the marginalia timeline starting on November 22, 1963, and concludes on her last page (Sam’s first page) with the date of January 19, 2063. This sidelined, chronological narrative includes various events in American history, from political anecdotes to high moments in pop culture. Interestingly enough, the inclusion of these bits of information ends during Hailey’s narrative, with the last day of notes being May 29, 2005; this coincides with the presumable date of completion of the writing process by Mark Z. Danielewski. *Only Revolutions* continues Danielewski’s preoccupation with the physicality of the codex, emphasizing the strength of the physical page and the multiplicity that the form can have.

If *House of Leaves* showcases the freedom and malleability of the printed page, then *Only Revolutions* seems to take a step in the opposite direction, by imposing strict

guidelines to the layout of the work. The novel itself (if it can even be called a novel) conveys an obsession with circles, both in visual aesthetic and content. As mentioned before, the novel does not have a front and back cover, with both covers acting as starting points to the dual narratives. This means that the novel does not end in the traditional sense, but rather forms an ostensibly endless string of narrative that loops back into itself. Of course, the title *Only Revolutions* is indicative of this circular preoccupation as well, as a revolution is the single completion of an orbit or rotation. Again, as in *House of Leaves*, form and content become one; the revolution is brought about by the physical rotation of the book to explore narrative paths, but also in the codependent nature of Sam and Hailey's relationship. The two characters seem to exist only to each other; it seems as though if one character's narrative were to disappear, the other character would cease to exist in turn. The two are so intertwined that each section (or "chapter") of Sam's writing--demarcated by the eight pages suggested--begins with a larger and bold letter. Putting these single letters together forms the sentence, "Hailey and Sam and Hailey and Sam . . ."; doing the same for Hailey's story creates, "Sam and Hailey and Sam and Hailey . . ." The two characters are in an orbit around each other, again emphasizing the circular revolution that exists throughout the text. While not integral to the understanding of the story, these little discoveries illustrate the sheer complexity that can be created with the printed page, something Danielewski clearly strives for in his writing.

Only Revolutions is 360 pages, mirroring the 360 degrees of a complete circle. Furthermore, each character's half page story consists of exactly 90 words, and these words combined equals 180 words. Thus, when the book is lying open with both pages

viewable, there are exactly 360 words in the full count¹⁶. With *House of Leaves*, Danielewski used digital typography and technology to create a narrative that seems open: the novel seems to change with each reading/viewing. Conversely, with *Only Revolutions*, Danielewski followed the tradition of constrained writing, creating a work that is entirely bound within itself. However, this constrained writing still relies heavily on digital technology, as the book itself arguably only exists due to the digitized nature of publishing in the contemporary world. Just as *House of Leaves* ironically used a decidedly digital aesthetic to emphasize the analog power of the physical codes, *Only Revolutions* uses constrained writing to showcase the multitude of styles and layout that the physical book is capable of. *Only Revolutions* further relies on digital technology with its employment of different fonts and colors, again similar to design elements in *House of Leaves*. In the remastered full-color edition of *House of Leaves*¹⁷, the word house is printed in blue throughout the entire novel. This can be seen as both a reference to the blue hyperlinks that pervade the World Wide Web, as well as a reference to the blue screen often used in filmmaking; this is yet another example of Danielewski's preoccupation with media multiplicity and remediation. *Only Revolutions* also features this color-coding of different words and letters. Every instance of the letter "o" in Hailey's narrative is gold, while every letter "o" in Sam's story is green. Furthermore, the page numbers are bordered by a circle that is colored gold or green depending on whose

¹⁶ As evidenced by Jim Dwyer in his review of the novel, some critics find this constrained writing gimmicky and ultimately meaningless. Dwyer writes, "This review is exactly 180 words, too. So what?"

¹⁷ My edition of *House of Leaves* features, "The Remastered Full-Color Edition" printed on the cover. Inside, located on the copyright page, "A Note On This Edition" references four distinct editions: Full Color, 2-Color, Black & White, and Incomplete. To my knowledge, the only two editions that actually exist are the Full Color and Black & White Versions.

story you are reading and which way the book is orientated. However, at exactly the 180 page mark (halfway), both characters sporadically use the other character's color for a few pages, before going back to their respective gold or green. Again this is a development only made possible by the use of digital printing techniques.

House of Leaves and *Only Revolutions* are examples of ergodic literature, one in which the reader is not able to progress linearly through the text. Danielewski uses the physicality of the book in order to emphasize the ergodic nature of reading his texts, as the reader must twist, turn, and rotate the codex in order to read every word of the text. In a review of *Only Revolutions*, Joanne Wilkinson writes that “[t]he book’s design is a marvel, and as a feat of Pynchonesque puzzlebookdom, it’s magnificent. The book’s difficulty, though, carries a self-consciousness that Joyce & Co. decidedly lack, and the jury will be out on whether the tricks are of the for-art’s-sake variety or more like a terrific video game” (51). Considering the amount of fandom and cult status that *House of Leaves* garnered, Danielewski’s “tricks” appear to be well-received by the “jury.” The next section of my thesis will explore Danielewski’s willingness to explore the digital world for other reasons than the primarily aesthetic; Danielewski embraces the social aspect of the networked world to elaborate his story, to branch out into a multitude of media forms, and to allow multiple entry points into the world he creates. By using the digital world, Danielewski expects a high level of engagement and interaction with the fans of his networked novels.

Like Danielewski’s *House of Leaves*, Tomasula’s *VAS: An Opera in Flatland* is a multi-layered narrative that very much defies a typical, linear reading experience. Set in

Flatland, a two-dimensional world created by Edwin A. Abbott in his satirical novella *Flatland: A Romance in Many Dimensions* (1884), *VAS* traces the story of Square as he contemplates getting a vasectomy to prevent any more complicated, painful pregnancies for his wife, Circle. The two already have a daughter, Oval, but have had many unsuccessful conceptions in the past. Square's mother-in-law, the aptly named Mother, wishes for another grandchild, and believes that a trip to the opera will re-ignite Square and Circle's romance, thus spurring on procreation. As Square deals with his impending decision, he becomes somewhat obsessed with eugenics. Because of this, *VAS* is filled with multiple passages dealing with the history of forced sterilization, exploring the relationship between science, technology, and the corporeal body. Not by coincidence, the physical artifact that is *VAS* also reflects these issues, as it illustrates how the physical body of the text is altered and changed by advances in technology.

VAS does not require the same amount of participation from the reader as *House of Leaves*; *VAS* contains some footnotes, but none that require a constant flipping of the pages back and forth, or physical rotation of the physical book. However, *VAS* is typographically diverse, with many fonts, multiple narratives occurring on the same page, and a plethora of images scattered throughout its pages. In his review of *VAS*, Eugene Thacker discusses the structure, layout, and content of the novel:

VAS threads together several narrative strata in such a way that it is actually very hard to read the text in a linear fashion. Now, this is of course a shock strategy of much so-called postmodern fiction; what makes *VAS* interesting is that this tension between linear-nonlinear in terms of narrative is played out against the same tension in molecular biology and genetics. . . . At some points two or more text threads occupy a single page; at other points the narratives suddenly become a 1950s-era comic book; and at still other points the text becomes a natural history or eugenics textbook, replete with footnotes. (166)

Thacker's description of *VAS* is strikingly similar to a possible description of *House of Leaves*, sans the comic book style. Furthermore, just like *House of Leaves*, *VAS* conveys an awareness of the digital, with its layout and style nigh impossible without the embrace of these new technologies. *VAS* is another novel of remediation, replicating magazine ads, comic books, and science experiments and data. Just as Square contemplates the changes to his physical body that are asked of him by his wife, and the metal enhancements found in his mother-in-law's body, *VAS* is a novel (a textual body) that has been rendered anew by the digital. The first edition of *VAS* features front and back covers that resemble caucasian skin, complete with thick, dark veins, appearing through the transparent fleshy color of the skin.

Tomasula's novel blurs the line between textual body and corporeal body on purpose. Just as our own physical bodies are being colonized by technology on an everyday basis (cell phones, medical technology), Tomasula sees the physical body of the text as exposed to the digital and manipulated into something altogether different. In *VAS*, one of the secondary narratives that reads more like a poem contains the lines: "Body text once had body/What would it look like if it did?" (51). Form becomes content and content becomes form, as the physical artifact is dissected, operated on, and ultimately made to heal into a textual body for the twenty-first century. As *VAS* is based on Abbott's novel *Flatland*, Tomasula's novel carries with it a discussion of genealogy, of lineage, and the typography of the book reflects this preoccupation with ancestry. Throughout the novel, there is a consistent, marked indentation identified by a straight line running vertically on the page. At first serving as a borderline for the main narrative thread, this

line is eventually crossed with text from multiple sources. In “Pierre Menard with a Pipette: *VAS* and the Body of the Text,” Alex Link writes that the “line is prominent enough so as to appear akin to a continuous narrative thread, but it is actually often interrupted, scrambled (314), sutured (158, 253), or snipped (131)” (4-5). This line serve to represent genealogy, a history of ancestors and descendants, furthering the links between science, technology, and the body forged throughout *VAS*. This tracing of genealogy is crucial to *VAS* both in terms of content, and because it is a story told in Flatland, a creation by another author. Like DNA, Flatland has been passed along from parent to child, from Abbott’s original novella to Tomasula’s *VAS*.

Just as *House of Leaves* challenges authorship and authenticity, *VAS* has its own metafictional, self-reflexive moments. Square is an author trying to work out an ending to his own story, as he deals with real-world issues. Near the end of *VAS*, Square creates an ending for his own story: “*Square walked into the clinic, Square wrote, realizing that like Alice, Christopher Columbus, Dorothy, Galileo and all the rest, he was writing an ending by living it even if, like them, like everyone, he could never leave his book*” (365, italics in original). As Link writes, the “completion of his story, then, is both *VAS* and the story he writes as a character in *VAS*, just as one’s body is textual, and has, as a by-product of that text, the capacity to produce text through such evolutionary happenstances as a larynx” (17). Here, levels of authorship blend together, as Square’s story becomes an element of the narrator’s story, or rather, Square’s written story is quite possibly the story that is *VAS*, as told by Tomasula. This question of authority of the text is present in

Danielewski's work as well. In "Of 'Men and Mutations:' The Art of Reproduction in Flatland," Susan Vandenberg discusses the multitude of authorship in *VAS*:

The diverse writing techniques reproduced in *VAS* pose other issues of authority for the reader to evaluate. Square frequently thinks about the ways texts reflect the "body" and authority of the writer (51), but it's unclear what kind of verbal format, or simulated format, comes closest here to a fiction of authorial presence, even in the space of one page spread such as 258-9. (7)

Tomasula's novel uses digital technology to alter the textual body present on the page and, in so doing, explores the meaning of authorship in the contemporary novel.

As ergodic literature, *VAS* encourages multiple readings in order to fully grasp the nature of the work. Digital media, then, seems to be instrumental in the creation of ergodic literature, as the typography is directly correlated to the linearity and progression of the text. Anne-Laure Tissut directly explores the structure of the novel in "Languages of Fear in Steve Tomasula's *VAS: An Opera in Flatland*:"

Through its structures, that seem to undergo perpetual mutation, *VAS* encourages the readers to give up on a linear, consistent and complete text and find their way through the elements of an ever-shifting constellation, a most uncomfortable situation indeed, but the very condition of the reflexion that the author aims at triggering off. . . . The fear of being stifled that arose from proliferating discourses is thus countered, as *VAS* introduces breathing space between words, perpetually offering them to new interpretations; drawing from the gaps constitutive of any language form, *VAS* opens space for thinking. Readers are free to reorganize the text, call upon others or other artworks, according to the dense reference network and their own culture. (3-4)

Digital technology alters the layout of the page, which is no longer confined by the linear, left-to-right Western reading practices that have defined the codex for generations.

Tomasula's *VAS* is a textual body that has been altered by advances in the sciences, just as the bodies of Tomasula's characters are changed by technological infractions.

Furthering the connection between the novel and digital technology, Tomasula's next work, *TOC: a new media novel*, was released on a DVD-ROM and runs as a program installed onto a computer. I will use *TOC* to bridge the gap between the analog and digital, and illustrate how the text, and its user, is affected by the switch to a purely digital art form. Steve Tomasula's *TOC* is referred to on its back cover as a "new media novel." It is an ambitious piece of art, made in collaboration with visual artists, musicians, animators, programmers, and designers. *TOC* represents a moment in an artist's life, in this case Tomasula's, where a writer who has worked primarily with the print medium in the past has switched to a completely digital form. *TOC* is a program that runs on a computer, requiring its reader to point and click her way through the multitude of textual nodes. At its heart, *TOC* is an exploration of time. It explores how human beings construct and understand time. *TOC* is a narrative, but it is not a new media novel, as its publishers would lead you to believe. A new media novel cannot exist, and it is a fallacy to use language meant to describe previous forms of narrative in our understanding of new, digital breeds of text. N. Katherine Hayles, in her essay "Tech-*TOC*: Complex Temporalities in Living and Technical Beings," writes that *TOC* is a "technotext: it embodies in its material instantiation the complex temporalities that also constitute the major themes of its narrations" (27-28). To my mind, Hayles' 'technotext' is a much more suitable labelling of this burgeoning genre of digital narrative. It amalgamates the technology and materiality of the work, while at the same time highlighting that the work is indeed a text. A novel it is not, as this term is best reserved

for the traditional mode of long narrative in print form¹⁸. Unfortunately, *TOC*'s publishers do not seem to grasp this, and the blurb written on the back of its case is laden with non-sequiturs. From the back of the case: "A new-media hybrid, *TOC* re-imagines what the book is, and can be." It appears that because this DVD-ROM contains text, this constitute its labelling as a book. *TOC* is not a book, and it does not move the book into a new-media landscape; *TOC* moves a textual narrative into the digital world, and in doing so furthers a new generation of electronic text. However, we must not get caught up in this trap of using previous literary genres and terminology to describe new innovations of the digital. *TOC* is best understood as something other than a novel because an electronic work deserves its own terminology and hermeneutics. Traditional literary theory is useful as a means of first examining these works, but ultimately our own engagement with these texts will need to adapt in stride. Perhaps Hayles' "technotext" is not the term we need to migrate to, but it is important to note that textuality is in a transitional phase because of digital media, and we should not simply label it a novel in a newer medium.

What *TOC* does successfully, however, is illustrate how media-specific analysis is not only justified, but greatly needed in literary studies. *TOC* hyperbolises many of the issues found in my discussion of Danielewski's writing, as well as *VAS*, by moving the narrative into a purely digital form. Continuing many of the same themes found in *VAS*, *TOC* is acutely concerned with the relationship between technology and human life, most notably in its discussion of time. Hayles again:

¹⁸ The term novel is best tied to the codex, just as a TV show is best tied to the television. The term "webisodes" is an example of how terminology changes with the medium, and this sort of change should be welcomed in literature as well.

Concealed within its illogic, however, is a powerful insight: humans construct time through measuring devices, but these measuring devices also construct humans through their regulation of temporal processes. The resulting human-technical hybridization in effect conflates spatialized time with temporal duration. (40)

TOC further its themes and ideas through its construction as a digital artifact. *TOC* exemplifies Birkert's discussion of pacing. As the user progresses through the narrative, the duration of time that certain features stay on the screen becomes an issue (sometimes the videos or text move faster than the user can properly absorb them.) This destroys Birkert's "deep reading," as the user is only allowed cursory glances at certain elements of the text. In works such as *VAS* or *House of Leaves*, the reader is able to control the speed and pacing of their progression, even while being geared towards certain speeds, as is the case with the one-word-per-page sections of *House of Leaves*. This serves to further my claim that *TOC* and other works of electronic literature cannot be called novels, as different reading practices are called into play when confronting a new-media experience.

Unfortunately, this task of separation is more difficult than it seems on the surface. It is a difficult task to approach a work of digital literature without viewing it from the lens of the print medium, and the apparent problems with a work like *TOC* are raised by the perceived relationship between the two media. Again I will turn to Hayles, the forerunner in the push for media-specific analysis:

TOC gestures toward a new regime, then, in which artistic creation is happening under very different conditions than for print literature. It would be possible to approach the work as if it were an inferior piece of print literature, marred by its lack of unity and inconsistent artistic design. . . . The accelerating pace of technological change may indicate that traditional criteria of literary excellence are very much tied to the print medium as a mature technology that produces objects with a large degree of concretization. In newer technical milieu, changing so fast that a generation may consist of only two or three years, the provisional meta-stability of technical individuals may become even less stable, so that it is

more accurate to speak of continuous transformation than meta-stability at all. *TOC* anticipates this by revealing the inherent instability of temporal regimes, the cataclysmic breaks that occur when societies are wrenched from one regime and plunged into another, and the inability of the narratives to create any temporal regime that will be both durable and all-encompassing. (np)

Again, *TOC*'s themes and "plot" are representative of greater issues in the work. In Tomasula's embrace of the digital, the materiality of the work furthers these preoccupations with time and stability. *TOC* calls to attention the overall lack of current literary theory in accurately discussing a work of digital fiction. *TOC* illustrates how a work of digital fiction is an act of remediation, including text, video, sound, and visual art. Although text may be the centerpiece of the work, this new-media art cannot simply be explored using traditional literary theory put forth well before the rise of digital technology. By relying on current literary theory to explore a work such as *TOC*, the user will face issues with timing, pace, and even learning the particular interface of the program. In my first run-through of the program, I had to consult the user's guide that comes with the program to figure out where to click on the main menu; I could not even figure out how to "begin" the text on my own. These complexities only alienate and aggravate the user, reinforcing that *TOC* is not a traditional reading experience and should not be theorized with traditional literary theory.

CHAPTER III: THE NETWORKED NOVEL

There seems to be a fundamental difference between words on a computer screen and words on a printed page; Danielewski embraces the digital aesthetic in his print fiction, reconciling textuality between various media. But it is not only the physical aesthetic of the book that is being affected by the digital; indeed, the networked, digital world provides ways for the codex--often seen as bounded and finite--to expand beyond its borders and distribute elements of a fictional world across multiple avenues. Birkerts sums up the classical notion of the codex as such, when he discusses the codex as a bounded, finite artifact (*The Gutenberg Elegies*, 188). Birkerts clairvoyantly anticipates the power of the internet and the way it becomes a place for data and knowledge to be accessed by multiple users at any given time. His reading of the codex as “opaque” and “finite” is apt; writing during the early advent of electronic hypertextuality, the digital was lauded for its malleability, which thus puts further scrutiny on the book for being a bounded, unchanging package. Unfortunately for Birkerts, he is too busy lamenting the death of the printed page to postulate any sort of solution for this perceived early departure, failing to realize the potential for the book to find its own place in the new media ecology.

For the postmodern world of ubiquitous computing and digital connections, however, the bounded package of the codex needs to change to match networked media. Authors need to embrace the digital network as a means to reach a greater audience, using various media as entry-points into their fictional worlds. Unlike Birkerts, Joseph Tabbi, in *Cognitive Fictions*, understands what the book must do to survive in the era of

digital media. He writes that “books have been, or they have been made to seem, instances of a bounded, individual organization, but they must now link up (again) with a wider, distributed media network” (120). Just as Danielewski remarked that the book has always had the physical properties characteristic of *House of Leaves*’ digital aesthetic, so too has the codex had this networked capability of which Tabbi speaks of. Although taken to a hyperbolic level in the digital age, a codex is always networked, as it stands for a certain moment in time, contextualized by its antecedents and the works that followed it. Furthermore, the long history of academic writing has created a network of writing and authors; never do you find a work of academic literature that stands on its own, with no reference to any other criticism or source works. The book is always part of a network of books; the digital network creates new instances of storytelling through the use of distributed narrative, challenging the conception of the finite, bounded book that has long reigned supreme as the chosen form of communication for the dissemination of knowledge and ideas.

Published in 2000, the timing for *House of Leaves* seems almost too perfect; in a time when much of the world was focused on computers, worried about the ominous Y2K bug and then subsequently reeling from the aftermath (or lack thereof), *House of Leaves* embraced the new media ecology in a way that would soon be almost commonplace for most forms of new entertainment. As a standalone product, Danielewski’s book holds up on its own as a rich, scary ghost story *sans* ghosts. As one product in a narrative that spans across multiple channels, *House of Leaves* and its offshoots are exemplary of new forms of distributed media and narrative that is rather

commonplace ten years later. *House of Leaves* exemplifies Hayles' sentiments in "The Future of Literature," when she writes that the "digital leaves its mark on print in new capabilities for innovative typography, new aesthetics for book design, and in the near future, new modes of marketing" (86). By embracing the internet, with feature-robust websites and community-driven fan forms, and by carrying the narrative into other forms, such as musical albums and other books, Danielewski's *House of Leaves* is indicative of cross-media narration and participatory culture at work. Danielewski's use of this nascent form of distributed narrative illustrates his close relationship to the digital world, placing *House of Leaves* on the cusp of the movement towards the networked novel.

The networked novel, for my purposes, moves the codex into the digital realm by taking advantage of the networked capabilities of the contemporary world, spurred on by the ubiquity of the World Wide Web¹⁹. *House of Leaves* used new media technology in a way that was essentially unheard of for its time. Danielewski first released *House of Leaves* on the internet. Jessica Pressman, in an interview that can no longer be found online, quotes Danielewski: "I didn't have the money to xerox and ship off this huge manuscript, so I got one of these terrible URLs and posted the thing as a pdf file on the internet" (119). This use of the networking capabilities of the internet is merely the smallest step in Danielewski's creation of a networked novel. *House of Leaves* is a self-contained narrative, and works as every good novel should: it has a beginning, middle,

¹⁹ This is in contrast to another leading definition of the networked novel/book, that is the collaborative means of producing a work of art or criticism, the multitude of online wikis being prime examples. The Future of the Books' *GAM3R 7H30RY* project, which has been published with contributions from online readers, as well as the Electronic Book Review's *First Person* project are other key examples of networked collaborations that have ultimately been published. Steve Tomasula's *VAS* is another example of a collaborative new media project.

and end, and the book as an artifact can be considered complete. However, Danielewski augments the narrative world created in *House of Leaves* through other media, collaborating with other artists in different disciplines to add content and elaborate on characters or events in the novel. In “Reading the Networked Novel,” Jessica Pressman succinctly illuminates on *House of Leaves*’ position in this distributed narrative:

The book reaches beyond its bindings to a network of multimedia instantiations that collectively and collaboratively produce its multilayered narrative. The book *House of Leaves* is the central node in a network of multimedia, multi-authored forms that collectively comprise its narrative: the *House of Leaves* website (www.houseofleaves.com), *The Whalrestoe Letters* (an accompanying book by Danielewski containing a section from the novel’s Appendix), and the musical album *Haunted* by the author’s sister, the recording artist Poe. (107)

All of these avenues for narrative expansion act as gateways into the world established in *House of Leaves*, always steering the wandering multimedia user back to the primary novel. One part elaborate marketing strategy, one part narrative for the digital world, *House of Leaves* is a sprawling, expansive network of information. As such, *House of Leaves* challenges Birkerts’ classically opaque page, as its narrative stretches out and exists beyond the borders of its front and back covers. Its vast network highlights elements of the new media ecology, from distributed narrative to collaborative collective intelligence.

The networked, digital world provides the opportunity for authors and artists to establish intellectual property and allow access to it through a wide range of media. Integrated communication technologies, including film, television, computers, video game systems, mobile phones, and books, allow a fictional world to sprawl across several media, each enriching and adding to the world in their own specific, specialized ways. A

pioneer of transmedia storytelling theory, Henry Jenkins sums up exactly what a transmedia experience is in the contemporary world in his book *Convergence Culture* (2006):

A transmedia story unfolds across multiple media platforms, with each new text making a distinctive and valuable contribution to the whole. In the ideal form of transmedia storytelling, each medium does what it does best—so that a story might be introduced in a film, expanded through television, novels, and comics; its world might be explored through game play or experienced as an amusement park attraction. (97-98)

This extends Aarseth's ergodic literature: if a story is introduced in a book, and the reader has the opportunity to cross media boundaries and uncover more of the book's story or characters, she must exercise non-trivial effort by traversing through the transmedial.

Using *The Matrix* franchise as a case study, Jenkins explores how a fictional world can be distributed across a wide range of media, both analog and physical, to create a world with more backstory and complexities than a single medium could contain. Jenkins believes that transmedia storytelling is one characteristic of the media convergence currently being observed in the contemporary world:

By convergence, I mean the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want. Convergence is a word that manages to describe technological, industrial, cultural, and social changes depending on who's speaking and what they think they are talking about. (2-3)

It should be clear that the World Wide Web has enabled media convergence to take place, as it grants easy access to a vast, digital network. Readers, consumers, and fans have the ability to link up and forge new social connections that were not possible before the advent of digital communication.

Publishers may be hesitant to adopt transmedia storytelling, as it relies on readers to traverse various media to gain a better understanding of a fictional world. However, this is nothing new; media theorist Janet Murray correctly links distributing narrative in the digital world to the vast narratives created by many authors in the past, notably William Faulkner. In *Hamlet on the Holodeck* (1997), Murray likens encyclopedic distributed narrative to Faulkner's creation of a fictional county in which he sets many of his short stories and novels. Faulkner even included a map of Jefferson county in *Absalom! Absalom!*, an example of early transmedia storytelling, and even remediation, in literature. Murray writes:

The encyclopedic capacity of the computer allows for storytelling on the Faulknerian scale and invites writers to come up with similar contextualizing devices—color-coded paths, time lines, family trees, maps, clocks, calendars, and so on—to enable the viewer to grasp dense psychological and cultural spaces without becoming disoriented. (257)

These dense, complex, distributed narratives--which Danielewski's work is exemplary of--exist in part because of the internet and the networking capabilities of digital terminals. These vast narratives are not something publishers need to fear; in fact, as some critics point out, contemporary consumers are calling out for more complexity in their entertainment. Steven Johnson, in *Everything Bad is Good For You: How Today's Popular Culture is Actually Making Us Smarter* (2005), postulates what he calls The Sleeper Curve, which indicates that the average consumer is more intellectual than ever before, and this in turn calls for more complex works of art:

The most debased forms of mass diversion—video games and violent television dramas and juvenile sitcoms—turn out to be nutritional after all. For decades, we've worked under the assumption that mass culture follows a steadily declining path toward lowest-common-denominator standards, presumably because the

“masses” want dumb, simple pleasures and big media companies want to give the masses what they want. But in fact, the exact opposite is happening: the culture is getting more intellectually demanding, not less²⁰. (9)

If we are, in fact, getting to be more intelligent and demand more from art, *House of Leaves* provides an example of how complex storytelling and a willingness to embrace the digital creates new means of storytelling and world-building. *House of Leaves* is a networked novel, the focal point of a narrative web.

House of Leaves and its companion work (www.houseofleaves.com, *Haunted*, *The Whalestoe Letters*) were released simultaneously in 2000. *House of Leaves* serves as the main narrative, but releasing these other works in such a short timespan illustrates Danielewski’s distributed narrative vision. All three companion works serve to expand upon the world created in *House of Leaves*, each unveiling and revealing something new and, quite possibly, crucial to our understanding of the fictional world.

As Johnny Truant delves deeper into the labyrinth that is Zampanó’s “The Navidson Record,” he begins to question his own reality as well as the reality of the house of Ash Tree Lane. Truant sets off on a cross-country mission to (dis)prove the existence of the house, to determine whether or not Zampanó’s tale is a work of fiction. In a scene of postmodern metafiction, Johnny hears a band in Flagstaff, Arizona, playing a song that is far too uncanny to be coincidence. Johnny hears the singer sing the lines, “I live at the end of a Five and a Half Minute Hallway” (512). When Johnny approaches the trio of musicians who played the song, they respond to his inquiries by showing him a

²⁰ Throughout his book, Johnson uses examples of video games and television to “prove” that media is much more complex. He cites *Zelda* as being more complex than *Tetris*, and TV shows like *Hillstreet Blues* and *The Sopranos* which contain an unprecedented number of narrative threads shown simultaneously.

“big brick of tattered paper” (513), with the title page reading “House of Leaves, by Zampanó, with introduction and notes by Johnny Truant” (513). Here, Danielewski acknowledges the close reading the novel requires to fully uncover all of its mysteries:

Apparently they wondered alot [sic] about Johnny Truant. Had he made it to Virginia? Had he found the house? Did he ever get a good night’s sleep? And most of all was he seeing anyone? Did he at long last find the woman who would love his ironies? Which shocked the hell out of me. I mean it takes some pretty impressive back-on-page-117 close-reading to catch that one. (514)

Johnny truant cannot believe what he is encountering: Johnny has just left on his cross-country trip, but the musicians hold *House of Leaves* and are already aware of Johnny’s search for the house²¹. This moment of self-reflexivity becomes even more important when the dedicated reader of *House of Leaves* ventures outside its house of pages, to the companion musical CD *Haunted*. *Haunted* was released by recording artist Poe, Danielewski’s sister, in 2000; it contains the song “Five & a Half Minute Hallway.”

The reader who ventures across media uncovers new clues about Johnny Truant, specifically in relation to his mother, Pelafina H. Lièvre. Truant recalls that, as a child, his mother was taken away to a mental institution after trying to strangle him. He writes that as his mother was being taken away she was “crying out my name,” and this cry transformed into a “roar” (517). This image has stayed with Truant, “[l]ike a bad dream, the details of those five and a half minutes just went and left me to my future” (517). Here Johnny’s life uncannily intersects with Zampanó’s “The Navidson Record”: the roar heard from Johnny’s mother echoes the roar heard from the “monster” that dwells inside

²¹ Another moment of intense self-reflexivity occurs when Navidson finds himself alone in the dark labyrinth with only a book and a lighter. He lights the pages in order to read them, requiring his eyes to read faster than the flame burns. The book that he reads is *House of Leaves*. (465)

the labyrinth of the Navidson's house, and the "five and a half minutes" Johnny spent in that hallway when his mother was being taken away directly correlates to Navidson's "Five and a Half Minute Hallway." There are various instances in the novel where a connection between Zampanó, the house, and Pelafina is hinted at, but the reader who traverses artifacts uncovers more of the mystery in Poe's song, "Five & a Half Minute Hallway." Jessica Pressman has already written an in-depth analysis following her own foray into the distributed network of *House of Leaves*, which I will quote in full rather than attempt my own linkages:

Following the novel's text to the song's lyrics, the reader hears the lament of a loved one just beyond reach: "Cause there's only so far I can go / When you're living in a hallway that keeps growing." The song continues: "But there's more to this story / Than I have exposed / made of letters / Unwritten." The lyrics identify letters left unwritten, and the song's steady beat emphasizes the first syllable of each word. Poe sings "letters / Unwritten" as contiguous, placing the stanza break after "Unwritten" despite their transcribed appearance. The auditory effect implies that whoever is writing "letters" is one who has more to tell. Poe's song thus supports and identification of Pelafina as author of the letters and the narrative about a hallway that keeps growing, with means that she is also the author of both Truant and Zampanó. (115)

Pressman decodes the song's illustration of narrative expansion to *House of Leaves*. Poe's *Haunted* contains many other tracks directly related to *House of Leaves*, such as "Exploration B," "Dear Johnny," and a song called "House of Leaves." Again, the reader who traverses cross-media is rewarded with a greater understanding of the fictional world, as Poe's lyrics contain narrative clues that might help to solve some of the novel's ambiguities. As Pressman notes, there are many ties between Pelafina and the house--ties that should not exist, as Pelafina would have had no knowledge of the house, *The*

Navidson Record, or Zampanó²². But as Poe's song seems to indicate, there are "letters unwritten" that may hold more secrets.

In keeping with the distributed narrative network of *House of Leaves*, Danielewski released the epistolary novella *The Whalestoe Letters* in 2000, a collection of letters written by Pelafina while she was incarcerated in the Whalestoe Institute. For the most part, these letters were included in the Appendix II of *House of Leaves*, but *The Whalestoe Letters* contains eleven new letters from Pelafina. The collection includes a forward, written by a staff member of the Whalestoe Institute, not found in *House of Leaves*, named Walden D. Wyrhta. Walden was first made aware of the letter by his wife, Waheeda. Danielewski covertly situates his work within the greater networked media environment, as the names Walden and Waheeda Wyrhta combine to form the acronym WWW, as in World Wide Web. Furthermore, Walden refers to his career as a "Information Specialist which, though not without its formal degrees, is just a fancy title for one able to organize, catalogue, index, and cross-index" (xi). Pressman asserts that this information "immediately situates the letters within a culture of digital information and its organization" (116). With this, Danielewski appears to be classifying the reader of distributed fiction as well: to gain a better understanding of the intricacies of *House of Leaves*, the reader must "organize, catalogue, index, and cross-index" between the novel, Poe's accompanying musical CD *Haunted*, and the new letters found in *The Whalestoe Letters*.

²² See Pressman, footnote 19, page 126.

Jessica Pressman writes that *The Whalestoe Letters* “provide additional clues supporting the identification of Pelafina as the author of the various narratives; these clues are rewards that confirms the reader’s strategy of venturing outside the novel for keys to its narrative” (116). *The Whalestoe Letters* is really for the most dedicated of readers; after all, it only contains eleven new letters, and these do not add more to the plot points or story as such, but contain clues to the overall construction of the narrative-- whether this ends up adding more mystery to the narrative is up for debate. Moreover, the new letters are not explicitly marked as such in *The Whalestoe Letters* until the very last page of the novella, so the reader must cross-reference between the letters contained in *House of Leaves* and the letters in *The Whalestoe Letters* in order to find out which ones are new. *The Whalestoe Letters* does share many similarities with *House of Leaves*, from typographical manipulation, to overall themes and tones of separation and alienation. Interestingly, the new editions to Pelafina’s letters provide much more typographical innovation than any letter contained in the Appendix II to *House of Leaves*; this supports Pressman’s assertion that Pelafina is indeed the master of every narrative attached to *House of Leaves*. For example, the first letter to appear in *The Whalestoe Letters* that does not already appear in *House of Leaves* is dated March 9, 1983, and features entire sentences slanted across the page, not anchored to any deliberate alignment or page layout. In this letter, Pelafina remarks on the “hiss and ash cast on the insuperable yowl of wind” (6), with the word “ash” evoking the ashen walls of the house on Ash Tree Lane. In another letter that is new in *The Whalestoe Letters*, Pelafina writes to Johnny: “Don’t defy me anymore. Come quickly to my side” (44). In this instance, the word “side” is

written vertically, so the reader must turn the book a quarter-turn counter-clockwise; this mimics Zampanó's typographical choices as he describes the disorientation one feels inside of the labyrinth. Finally, in what is arguably the most unique page in *The Whalstoe Letters*, words run on along every edge of the page, and the bottom half mirrors the top half. This page also include references to "home" and a "haunted" home (56). Not only does the layout of the page mimic the layout of Zampanó's "The Navidson Record," but the content is cut of the same cloth: references to home, which of course is a prevalent concept in "The Navidson Record," as well as the topic of a haunted home, referencing the monster that dwells inside the labyrinth as well as the title of the real-world album by Danielewski's sister, Poe. These subtle yet uncanny links between Pelafina and Zampanó would easily go unnoticed by a casual reader of *House of Leaves*; Danielewski rewards the motivated reader by dispersing narrative clues amongst various media and artifacts, with each piece of the puzzle adding something unique to the transmedia experience of *House of Leaves*.

One final element to the transmedia experience is the website for *House of Leaves* (www.houseofleaves.com) and the fan forum associated with it. The forum began as a way for fans of the book to connect with one another, working together and asking questions to the community, to solve many of the ambiguities in *House of Leaves*. The website is still active, with a multitude of threads linking to *House of Leaves*, *Only Revolutions*, and a plethora of things related to Mark Z. Danielewski. Although the amount of new threads and posts on the forum has dwindled, the discussion of *House of Leaves* still sees a new post almost every day, as observed by me throughout the time of

my research. During its heyday, the site was a meeting place for those fans who could not simply leave the book alone after reading it, but wanted to unravel its intricacies and mysteries. Danielewski is acutely aware of the symbiotic relationship between his writing and its readers; he uses the Editor's footnotes as a means to explore this relationship in his text. In a section featuring Lude and Johnny, the Editors state that "[t]his section also elicited several emails" (263). These emails question what happened to Lude, as well as Johnny, and one female readers writes in to say that, "Lude was so much fun. Give him my new number" (263). Pressman writes that these particular footnotes "identify readers as participants in the ongoing production of the novel" (120). Danielewski seems to anticipate the response from his readers that would eventually lead to the incredible number of threads and discussions on the message boards for the novel.

The discussion forums on *House of Leaves* used the instantaneous communication of the network to allow users to discuss the ambiguities found in the novel. This networked collaboration was foreseen by Marshall McLuhan in his early works of media theory, particularly *Understanding Media* and *The Gutenberg Galaxy*. McLuhan prophesied the "Global Village," which would allow for the barriers of geography to be broken down by the speed and ease of new communication technology. While McLuhan was writing well before the advent of ubiquitous digital communication, the global village can easily be seen in the internet and World Wide Web. Expounding on McLuhan's concept, French media theorist Pierre Lévy discusses collective intelligence in his work *Collective Intelligence: Mankind's Emerging World in Cyberspace* (1994). For Lévy, collective intelligence is "a form of *universally distributed intelligence*,

constantly enhanced, coordinated in real time, and resulting in the effective mobilization of skills” (13, italics in original). Collective intelligence furthers the forward movement of the human race, because “[n]o one knows everything, everyone knows something, all knowledge resides in humanity” (13-14). This is evident in the online community dedicated to *House of Leaves*: due to the novel’s many erudite and esoteric quasi-academic references and footnotes, the community bands together and works to help answer its members’ questions. In “Fans, Bloggers, and Gamers: Exploring Participatory Culture” (2006), Henry Jenkins writes that collective intelligence “expands a community’s productive capacity because it frees individual members from the limitations of their memory and enables the group to act upon a broader range of expertise” (139). Nancy Baym writes in “Talking About Soaps: Communication Practices in a Computer-Media Culture,” that a “large group of fans can do what even the most committed single fan cannot: articulate, retain, and continually recirculate unprecedented amounts of relevant information” (115-116). Danielewski and his publishers, Random House, were aware that a collaborative initiative would most likely be needed for *House of Leaves*, and set up the website when these types of communities were still new and not quite stable. As Jenkins writes, the “technology of the net allows what might previously have been private meditations to become the basis for social interaction” (125). The fans of *House of Leaves* gathered together online, posting what were sometimes in-depth questions about different passages, or just hunches or whims, hoping for the collective intelligence of the group members to aid in solving queries.

The networked world opens up new possibilities for storytelling, as the narrative can be delivered across a wide variety of platforms. Thus, the idea of the novel as a singular entity will begin to erode, due to the intrusions by other media. Novels will still stand on their own as a singular product, but authors that use new media, as Danielewski did, will reach a greater number and variety of potential readers. In an interview with Larry McCaffery and Sinda Gregory, Danielewski discusses the potential of distributed narrative and its ability to attract varying groups of people:

Well, there are many ways to enter *House of Leaves*. Do you want to go by way of Johnny Truant or do you want to go by way of Johnny Truant's mother? Johnny is young and "hip" (at least to a certain degree), which means that most young readers will find his pathway the easiest, certainly easier than Pelafina's way. But her voice is equally important, and for some readers her letter will prove the better path. (111)

This statement is echoed in *House of Leaves* by the Editors. When Johnny Truant first discusses his mother, the Editors step in to provide different options available to the reader:

The reader who wishes to interpret Mr. Truant on his or her own may disregard this note. Those, however, who feel they would profit from a better understanding of his past may wish to proceed ahead and read his father's obituary in Appendix II-D as well as those letters written by his institutionalized mother in Appendix II-E. (72)

In this passage, Danielewski acknowledges ergodic literature, stating that the reader who wants a better understanding of Truant's character should go ahead and read the ramblings of his institutionalized mother. The networked novel, then, and by association transmedia storytelling, take hypertext and ergodic literature to a whole new level: as the reader of a hypertextual work must flip pages or click on different links to access new sections of text, so too must the networked user of a transmedial experience migrate back

and forth between media forms. Transmedia storytelling, then, is hypertext writ large.

This idea is discussed by Henry Jenkins in *Convergence Culture*, as it relates to the work of Manuel Castells:

In *The Internet Galaxy* (2001) Manuel Castells claims that while the public has shown limited interests in hypertexts, they have developed a hypertextual relationship to existing media content: “Our minds—not our machines—process culture. . . . If our minds have the material capability to access the whole realm of cultural expressions—select them, recombine them—we do have a hypertext: the hypertext is inside us”. Younger consumers have become informational hunters and gatherers, taking pleasure in tracking down character backgrounds and plot points and making connections between different texts within the same franchise. (133)

The forums on www.houseofleaves.com illustrate Jenkins’ idea of “informational hunters and gatherers.” The forum members used their network, their access to the wealth of information on the World Wide Web, and their own areas of expertise to fully understand and document the novel, doing so to a level that many members would not have been able to reach on their own. This is exactly the kind of “collective intelligence” that Lévy discusses in his book; the network provides a venue for humans to come together, sharing information and knowledge, thus contributing overall to the growing resource pool.

Roland Barthes discussed what he believed to be the ideal text: “this text is a galaxy of signifiers, not a structure of signifieds; it has no beginning; it is reversible; we gain access to it by several entrances, none of which can be authoritatively declared to be the main one” (Barthes *S/Z*, qtd. in Landow’s *Hypertext*). Although *House of Leaves* and transmedia storytelling do not fit into this definition perfectly, it is still useful when thinking about how the physical book can benefit and change in the current media environment, particularly the idea that the reader can “gain access to it by several

entrances.” Pressman writes that “in a digital age, wherein the information can be easily altered and updated, the book is never a discrete and complete object but always a node in an ever-changing network of information, interaction, and potential or ‘virtual’ readings” (120). *House of Leaves*, although published ten years ago from the time of my writing, is still being explored and expanded upon due to the large presence of fans on the internet and the growing corpus of knowledge and resources found online. It does not require a great stretch of the imagination to acknowledge that this is probably the territory that books are venturing into. Axel Bruns explores this idea in his book, *Blogs, Wikipedia, Second Life, and Beyond: From Production to Prodisage* (2008):

A physical product . . . is defined by its boundedness; it is ‘the complete package,’ a self-contained, unified, finished entity. By contrast, the ‘products’ of the collaborative content creation efforts . . . are the polar opposites of such products: they are inherently incomplete, always evolving, modular, networked, and never finished. (22)

House of Leaves is an interesting hybrid of these two concepts: it is both a physical, bounded book, but it also relies on the collaborative, networked environment to elaborate on its dense fictional world. The networked novel is the future of literature, as it still holds the physical form that has made it the most popular form of knowledge sharing since its inception, but moves the artifact into the digital, linked world.

Mark Z. Danielewski is acutely aware of the feedback loop created by the network, and his novels exemplify what should become the next stage for the codex as a relevant form of knowledge sharing. As Jessica Pressman accurately points out, the novel’s final page references the online world. This page contains what W.J.T. Mitchell calls an “imagetext.” This is Yggdrasil, which in Scandinavian mythology is a tree whose

branches hold together all the worlds of the universe. As Pressman points out, the tree is a subtle reference to the online world, and thus our digital culture:

The reference to an ancient myth explaining the division of the world into separate but connected entities—a network—concludes the novel. . . . This final allusion is not only metaphoric but material, for Yggdrasil was the name of an early version of the Linux Operation System. This subtle reference thus links a cultural myth explaining the universe as network to a computer operating system structuring our Internet culture. (122)

This is even more interesting considering Linux was the first example of a successful venture into open source software development, which relies on a collaborative, networked community to build its source code and keep it running (Bruns, 39-40). *House of Leaves* seems to be the tree trunk at the centre of its own universe, holding up the many worlds on its branches. The branches lead directly to the trunk of the tree, and the various companion works lead the reader to *House of Leaves*, the novel.

The last page of the novel also ends with a large O at the bottom of the page. The sides of the O are “open,” so you can actually see through the lines that compose the O. This seems to suggest an open network, yet one that is tied in with itself so that the user can never get fully lost within it. Danielewski seems to strive for this sort of open network in his writing. He creates worlds and novels so dense and complex, and elaborates upon these world through digital media, yet all of these detours carefully lead back to the source text. The open O reinforces that the reader may not ever truly be done with the text--that is, if she does not want to be. Sudha Shastri writes that the novel’s “ending leads to new beginnings without having adequately ‘made sense of’ the story it began to tell” (81). *House of Leaves* rejects beginnings and endings, thus becoming a never-ending feedback loop. This image of the open O is persistent in Danielewski’s

work: inside the front and back covers of *House of Leaves* is an open O with two perpendicular lines inside, looking much like a “Pause” button on a video recorder or player. This same O is featured on the spine of *Only Revolutions*, as well as inside its two front covers. Of course, the O means something entirely different to *Only Revolutions*, with its obsession with circles and full revolutions, but the inclusion of this symbol across Danielewski’s writing seems to indicate the novels are part of the greater network, and it takes a greater effort by readers to traverse through the networked novel. Danielewski’s novel features what Landow and Delany refer to as internal and external hypertextual functions (4), by including those links found within the novel itself and those links that are found outside of its walls.

CHAPTER IV - LITERARY MOVEMENT, OR POSTMODERN NECESSITY

Is this move into the networked media landscape a full-fledged literary movement, akin to Romanticism or Modernism, or is this merely a conscious decision that will allow the novel to compete in the globalized, capitalistic marketplace? Or, perhaps more accurately, does this move into the networked environment constitute both a necessity for economic gains and a creative movement towards embracing new technology? I propose that the works of Mark Z. Danielewski and Steve Tomasula represent the apex of the postmodern literary movement, signaling a transitional period for the novel and ushering in a new era for literature. From a brief exploration of the postmodern, I will show how these literary movements, including the networked novel, are often closely associated with the economics of the time. By responding to and using new digital technologies, Danielewski and Tomasula have, perhaps inadvertently, given birth to a new literary movement that will continue to reshape the ways we categorize and recognize literature and textuality.

The twentieth century has been characterized by two aesthetic movements in the artistic community. Firstly, modernism arrived, roughly etched in between the years 1900 and 1945. Following the aftermath of World War II, postmodernism arrived on the scene of the art world, and general consensus would posit that it is still the dominant artistic movement today. I do not have the knowledge nor the space required to provide a full analysis of these two movements. For my purposes, I will discuss postmodern literature,

specifically its falling out of favour with certain literary and cultural critics, and then move on to a discussion of what might succeed it.

Postmodern literature is a difficult subject to approach, partly because the term itself has never widely been agreed upon. Indeed, even the fact that the prefix “post” is really the only way the term distinguishes itself from its predecessor suggests that the movement itself is not a unified artistic front; rather, postmodernism only exists in a form of absence. Modernism died out, but we are not really sure exactly what replaced it. Despite this lack of cohesion, postmodernism found its place in academia, as evidenced by the sheer amount of classes offered on postmodern literature throughout the world, as well as the number of anthologies dedicated to identifying works of the movement. Many high-profile literary and cultural critics, including Jean-Francois Lyotard, Jean Baudrillard, and Fredric Jameson, have devoted much of their research to classifying and defining postmodern literature²³. I would like to point out that many of these critics are most likely responsible for the issues in defining the postmodern; Lyotard writes in “Defining the Postmodern” (1985), that his “aim is not to close the debate, but to open it, to allow it to develop by avoiding certain confusions and ambiguities” (1933), but unfortunately what follows creates more ambiguities rather than eliminating them. Arguably the most famous of the postmodern thinkers, Jameson does much more to further the discussion of postmodernism against the other dominant literary and artistic movements. In “Postmodernism and Consumer Society” (1984), Jameson defines the postmodernism through a discussion of the greater globalized marketplace. Jameson

²³ Much of what is deemed to be the most influential of postmodern literature was published in the 1980s, perhaps a sign that postmodern has died long ago.

would later go on to elaborate on his thesis in his book *Postmodernism, or, the Cultural Logic of Late Capitalism* (1991). Jameson writes that most postmodern art emerged “as specific reactions against the established forms of high modernism, against this or that dominant high modernism which conquered the university, the museum, the art gallery and the foundations” (1956). Jameson’s postmodernism is rooted in Marxist thought; he identifies postmodernism through its economic characteristics. David H. Richter writes in his *Critical Tradition* anthology that Fredric Jameson “locates postmodernism as the cultural form taken by contemporary capitalism, in which we are primarily shoppers rather than workers, defined not by what work we do but by what we choose to buy from a global marketplace” (1955). The last of the postmodern critics that I wish to discuss is Jean Baudrillard, most notable for his book *Simulacra & Simulation*, published in 1985. Baudrillard believed the postmodern condition was characterized by the ‘hyperreal.’ This hyperreality stems from the massive inundation of signs and symbols, especially in Western culture, which rather than *represent* the culture, actually *becomes* the culture: “A hyperreal henceforth sheltered from the imaginary, and from any distinction between the real and the imaginary, leaving room only for the orbital recurrence of models and the simulated generation of difference” (2-3). Postmodernism is, for Baudrillard, characterized by technological replications of real-life events, people, or places that produce the illusion of reality. This mechanical reproduction of reality is not a strictly postmodern idea, it should be noted. Walter Benjamin’s famous 1934 essay “The Work of Art in The Age of Mechanical Reproduction,” discusses the ubiquity and dilution of art to advances in reproduction technology:

Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be. This unique existence of the work of art determined the history to which it was subject throughout the time of its existence. This includes the changes which it may have suffered in physical condition over the years as well as the various changes in its ownership. The traces of the first can be revealed only by chemical or physical analyses which it is impossible to perform on a reproduction; changes of ownership are subject to a tradition which must be traced from the situation of the original. (3)

Both Baudrillard and Benjamin write well before the dawn of the internet age, yet their words still ring true in the contemporary world. Indeed, the influx of digital media and the ease of reproduction and distribution--in part due to the internet--only serve to reiterate the concerns for art as it is replicated. Digital media amplifies the concerns of Baudrillard and Benjamin, reducing art to another level of commodity in a media-saturated environment.

I will leave the theoretical background of postmodernism here, for I do not wish to contribute to an already overflowing ocean. I present this brief background so that we are aware, albeit superficially, of exactly what is being eschewed by the critics who declare that postmodernism has died. It would seem that postmodernism has run its course; an already contentious concept in academia, perhaps it is time to move beyond that which came after modernism, and make an effort to conceptualize current artistic aesthetic without simply adding another prefix. I am speaking, of course, of the concept of post-postmodernism. Seeing as how postmodernism is a name already lacking inspiration, I can think of no greater injustice than simply adding another prefix to this title. Alan Kirby has written about post-postmodernism and, just as I do, rejects the idea of this title. In "The Death of Postmodernism and Beyond" (2006), Kirby writes that postmodernism's "successor, which I call *pseudo-modernism*, makes the individual's

action the necessary condition of the cultural product” (np, emphasis in original.) Later, in his book *Digimodernism: How New Technologies Dismantle the Postmodern and Reconfigure Our Culture* (2006), Kirby replaces his term pseudo-modernism with the equally misleading ‘digimodernism,’ to describe current artistic endeavor. For Kirby, digimodernism is a “pun: it’s where digital technology meets textuality and text is (re) formulated by the fingers and thumbs (the digits) clicking and keying and pressing the positive act of partial or obscurely collective textual elaboration” (1). If any of this sounds familiar, it may be because Espen Aarseth clearly outlines this exact idea in his book from 1997, *Cybertext: Perspectives on Ergodic Literature*. For Kirby, what makes a work digimodern is its reliance on the performative action taken by the user in its construction of textuality; this is similar to Aarseth’s cybertext, which requires non-trivial work by the user to traverse through the text. While I agree that this performative operation will be in fact crucial for the future of art, I hesitate to accept Kirby’s ‘digimodernism’ as the term that will ultimately label this movement²⁴. Much like Gilles Lipovestky’s ‘hypermodernity,’ or Paul Crowther’s ‘supermodernity,’ I feel these terms ultimately degrade newer works of art by focusing on their antecedents and not their own unique merits as works of art. Perhaps it is because we are still in a transitional phase, or perhaps it is because a clear-cut definition of postmodernism has never been agreed upon, but the ways in which we are currently naming our artistic movements only serves to further confound the issues.

²⁴ Useful to note that digimodernism is eerily similar to the networked novel/book outlined above. Kirby outlines digimodern’s “dominant features” as such: onwardness, haphazardness, evanescence, reformulation and intermediation of textual roles, anonymous, multiple and social authorship, the fluid-bounded text, and electronic-digitality (56-57).

I posit that *House of Leaves* marks the death of the postmodern novel; Danielewski reclaims superiority of the text by asserting his dominance over the work via covert footnotes that spell out his name, while at the same time amplifying postmodern themes like self-reflexivity and intertextuality. By hyperbolizing these themes, Danielewski signals their demise as useful tools for the postmodern author. In “Nothing to Write Home About: Impossible Reception in Mark Z. Danielewski’s *House of Leaves*,” William G. Little argues that the novel actually signifies postmodernism’s rise from an early grave:

The phrase ‘The Wake of Postmodernism’ might be taken to suggest that, culturally speaking, postmodernism is a dead phenomenon destined to rest in peace. I wish to argue that such a destination is made wonderfully problematic by Mark Z. Danielewski’s novel *House of Leaves*, a text that one might be tempted to classify, too quickly, as a metafictional haunted-house tale. Along with its encyclopedic range and formal experimentation, its metafictional quality gives the novel the look and feel of high postmodernist literature, with the result that, if such work’s time has passed, *House of Leaves* threatens to appear dead on arrival. (169)

Little has it all wrong. Rather than exemplify a work of ‘high postmodernist literature,’ *House of Leaves* take postmodernism to the extreme. Danielewski believes that once postmodern has reached its limit, a new direction and movement must be forged, creating something entirely new and different from postmodernism. Little goes on to contradict himself, when he states that (after praising *House of Leaves* as resurrecting postmodernism from an early grave) any “ effort to situate *House of Leaves* as a postmodern novel or as something clearly other than a postmodern novel (a post-postmodern novel?) is a placement project that leads, it seems to me, to a dead end” (170). After calling it a work of ‘high postmodernist literature,’ Little then says that

classifying *House of Leaves* as a postmodern novel leads to a dead end. Thus, *House of Leaves* is not a postmodern novel, but signifies something altogether new for print literature.

As Fredric Jameson has pointed out, postmodernism is highly affected by capitalist society, and the movement as a whole may be characterized by the global marketplace and consumer-driven consumption. *House of Leaves*, then, represents exactly what a novel must be in today's media environment: it must be open, fluid, and connected into the greater media environment, in order to find success and stay relevant in the contemporary world. Thus we get the chicken and the egg situation: is the networked novel a product of the globalized marketplace, or is there a unified movement that recognizes and embraces the network as being the defining characteristic of contemporary society? Well past the days of literary manifestos, we do not have the luxury of a group of authors sitting down and writing out exactly what they wish to strive for in their particular artistic circle. *House of Leaves*, however, synecdochically represents the network novel as a literary movement, embracing new technology and communication media to provide a transmedia storytelling experience.

Raymond Federman explores the future of literature in his "Critifictional Reflections on the Pathetic Condition of the Novel in Our Time" (2004). Federman claims that literature is removed from the rest of mass media, and thus can portray the world without interference from outside sources:

In order to find its place again, and play a role in the world, literature must re-situate itself in relation to the mass media. But not by ignoring or negating television which is here to stay, but by doing what television cannot do, that is to

say present the world and history without interference from economic and commercial forces. (164)

Literature, then, is in a unique position, able to proceed without “interference from economic and commercial forces.” When we turn on a television, or when we browse the internet, we are bombarded by advertisements on every frontier. Literature, most notably novels, has the unique position of telling a story without this sort of colonization by the business sector, and it is here that Federman sees the strength of great literature.

Furthermore, Federman’s argument is strengthened as he explores what literature must do in terms of content in order to survive in the media-saturated environment:

I live in a world where most of us, who write for something other than fame and wealth, or for something other than personal distraction, have stopped reflecting on the purpose of writing, I mean explicitly in the writing itself, and consequently fail to mark the difference that literature makes in the world. Perhaps it is because literature, and especially the novel, has forgotten how to reflect on its *raison d’être*, that is to say on what it is and what it does, that it has been pronounced dead. (167)

House of Leaves seems particularly emblematic of Federman’s call for writers to reflect on what it is exactly that they do. In its obsessive detailing of remediation, editing, and the authenticity of a core text, *House of Leaves* does precisely what Federman asks for: the book reflects on exactly what literature means in the new media ecology.

From Federman’s “Critifictional Reflections on the Pathetic Condition of the Novel in Our Time” to Chris Hedges’ *Empire of Illusion: The End Of Literacy and the Triumph of Spectacle* (2009), critics have long theorized that the constant bombardment of images leads to a culture of the polymorphous spectacle, ultimately leading away from an intelligent, literature-based society. Federman believes that literature deflates the

spectacle and mitigates the influx of images and digital media that threatens to render us a society of illiterates:

What is the antidote to this un-reflexive and lazy precipitation of what still pretends to be literature? It is the kind of writing that resists that recuperation of itself into distorted or false figures and images. The kind of literature we need now is the kind that will systematically erode and dissipate the setting of the Spectacle, frustrate the expectation of its positive beginning, middle, and end, and cheap resolution. This kind of writing will be at the same time frugal and denuded, but rhetorically complex, so that it can seize the world in a new way. This kind of writing must create a space of resistance to the alienated devotion to images—to the refining and undermining of the world of images. This kind of writing should be like an ironic free tense within the opacity of the Spectacle. (169)

Danielewski's *House of Leaves* does precisely this: it resists the "devotion to images" by applying the process of remediation in literature. Indeed, the entire work is centered around a documentary film that is only ever *written* about. Danielewski favours the ability of print to replicate any scenario; Zampanó's written account of Jed's death carries with it far more weight and depth than the visual image could ever fully convey²⁵. Brian Chanen writes that "the gradual unfolding of the text differentiates it from the very filmic expression it is attempting to simulate" (167). For him, "this passage brings a depth and complexity to the representation of death that, so the novel suggests, simply cannot be achieved in a mechanical medium like film" (ibid). Thus, Danielewski's *House of Leaves* resists the society of the spectacle. Danielewski aligns his novel with Federman's views on how print can still assert itself as a dominant form of communication in the contemporary world.

²⁵ Zampano writes that one of his prime concerns is to discover "whether or not, with the advent of digital technology, image has forsaken its once unimpeachable hold on the truth" (3). Digital technology, in Danielewski's mind, affords writers the ability to accurately present varying scenarios, evidently in a more truthful manner written as words on a page.

CONCLUSIONS

Print literature will not be made extinct by digital media. Rather, digital media provides an opportunity for theorists to explore print literature's flexibility. Print's aesthetics, production, dissemination, and the methodological processes we use to analyze and engage with it are altered because of digital media. Mark Z. Danielewski's *House of Leaves* and *Only Revolutions* illustrate how malleable the aesthetics of the printed page are, with unique typography, fonts, and colors. *House of Leaves* also provides an example of the networked novel. The novel's release on the internet, as well as its reliance on a strong fan forum and multi-modal storytelling elements, shows how the novel can remain viable in the digital marketplace. Steve Tomasula's *VAS* furthers the relationship between the digital and analog, as it reflects the changes and enhancements digital media brings to the corporeal body of the physical book. Tomasula's *TOC*, by contrast, shows how the transition from the page to the screen is not as simplistic as one would think, and illustrates the collaborative nature of digital media. All of these works indicate the changing face of print today. By embracing this change, and by taking advantage of the progression afforded by digital media, print literature can remain a leading mode of communication for years to come.

The discussion of the death of print, constantly in rotation in magazines and print, will recirculate throughout the mediasphere for a long while; after all, what better way to sell more copies of print than by claiming its impending doom? Kathleen Fitzpatrick writes that the "discourse announcing the death of the novel has served throughout the twentieth century to separate the canonical from the noncanonical, the literary from the

pulp, the meritorious from the meretricious” (15). The death of print, then, somewhat paradoxically, is a way for print to stand up for itself, to stake a claim in the transforming media environment. Furthermore, the discussion of the death of print serves a critical purpose, as it helps to reinforce a firm literary canon. After all, digital media has forced scholars and critics alike to rethink what were once considered to be absolutes, such as textuality and literature. Indeed, it is really a question of semantics that lies at the heart of this issue: digital media, if nothing else, forces us to reexamine traditional standing terminology associated with literary hermeneutics. By association, digital media also questions ontological assumptions about literature: what it is and what makes a work of art literary. The death of print as a discourse for helping us locate the literary in the new media environment is welcomed, for that is the question that has lived at the heart of the study of literature for centuries.

BIBLIOGRAPHY

- Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. Baltimore: The John Hopkins University Press, 1997.
- Abbott, Edwin Abbott. *Flatland: A Romance of Many Dimensions*. Oxford: Oxford University Press, 2006.
- Barthes, Roland. "The Death of the Author." *The Critical Tradition: Classic Texts and Contemporary Trends*. Ed. David H. Richter. New York: Bedford/St. Martin's, 2007. 874-878.
- Baudrillard, Jean. *The Gulf War Did Not Take Place*. Bloomington: Indiana University Press, 1995.
- . *Simulacra and Simulation*. Trans. Shelia Faria Glaser. Ann Arbor: The University of Michigan Press, 1994.
- Baym, Nancy. "Talking About Soaps: Communication Practices in a Computer-Media Culture." *Theorizing Fandom: Fans, Subculture, and Identity*. Eds. Cheryl Harris and Alison Alexander. New York: Hampton Press, 1998.
- Birkerts, Sven. *The Gutenberg Elegies: The Fate of Reading in an Electronic Age*. Winchester, MA: Faber and Faber, Inc., 1994.
- Bolter, Jay David, and Richard Grusin. *Remediation: Understanding New Media*. Cambridge, MA: MIT Press, 1999.
- Borges, Jorge Luis. *Labyrinths*. Eds. Donald A. Yates and James E. Irby. New York: New Directions Publishing, 2007.
- Bruns, Axel. *Blogs, Wikipedia, Second Life, and Beyond: From Production to Producersage*. Bern: Peter Lang Publishing, 2008.
- Chanen, Brian. "Surfing the Text: The Digital Environment in Mark Z. Danielewski's *House of Leaves*." *European Journal of English Studies* 11.2 (2007): 163-176.
- Coover, Robert. "The End of Books." *New York Times Book Review* (21 June 1992):1, 23-25.
- Cortázar, Julio. *Hopscotch*. Trans. Gregory Rabassa. New York: Pantheon Books, 1966.

- Crowther, Paul. *Philosophy after Postmodernism: Civilized Values and the Scope of Knowledge*. London: Routledge, 2003.
- Danielewski, Mark Z. *House of Leaves*. New York: Pantheon Books, 2000.
- . Interview with Larry McCaffery and Sinda Gregory. *Critique* 44.2 (2003): 99-135.
- . Interview with Sophie Cottrell. *Bold Type*. 3 Jan. 2011.
<<http://www.randomhouse.com/boldtype/0400/danielewski/interview.html>>.
- . *Only Revolutions*. New York: Pantheon Books, 2006.
- . *The Whalestoe Letters*. New York: Pantheon Books, 2000.
- Darnton, Robert. *The Case for Books: Past, Present, and Future*. New York: Public Affairs, 2009.
- Delany, Paul and George P. Landow, eds. *Hypermedia and Literary Studies*. Cambridge: MIT Press, 1991.
- Deleuze, Gilles and Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Trans. Brian Massumi. Minneapolis: University of Minnesota Press, 1987.
- Doob, Penelope Reed. *The Idea of the Labyrinth from Classical Antiquity through the Middle Ages*. Ithaca, NY: Cornell UP, 1990.
- Douglas, J. Yellowlees. *The End of Books—Or Books without End? Reading Interactive Narratives*. Ann Arbor: University of Michigan Press, 2000.
- Dwyer, Jim. "Review of *Only Revolutions*." *Library Journal* (Sept. 2006): 135.
- Eco, Umberto. *Semiotics and the Philosophy of Language*. Bloomington: Indiana University Press, 1984.
- Evans, Christopher. *The Micro Millennium*. New York: Pocket Books, 1979.
- Faulkner, William. *Absalom! Absalom!* New York: Random House, 1986.
- Federman, Raymond. "Critifictional Reflections on the Pathetic Condition of the Novel in Our Time." *Symploke: A Journal for the Intermingling of Literacy, Cultural, and Theoretical Scholarship* 12.1-2 (2004): 155-170.

- Fitzpatrick, Kathleen. *The Anxiety of Obsolescence: The American Novel in the Age of Television*. Nashville: Vanderbilt University Press, 2006.
- Gifford, Sally. "National Endowment for the Arts Announces New Reading Study." 19 Nov. 2007. *National Endowment for the Arts*. 22 Dec. 2010. <<http://www.nea.gov/news/news07/TRNR.html>>
- Guertin, Carolyn. "Handholding, Remixing, and the Instant Replay: New Narratives in a Postnarrative World." *A Companion to Digital Literary Studies*. Eds. Ray Siemens & Susan Schreibman. Malden, MA: Blackwell Publishing, 2007. 233-249.
- Hansen, Mark B. N. "The Digital Topography of Mark Z. Danielewski's *House of Leaves*." *Contemporary Literature* 45.4 (2004): 597-636.
- Hayles, N. Katherine. "Print is Flat, Code is Deep: The Importance of Media-Specific Analysis." *Poetics Today* 25.1 (2004): 67-90.
- . "Saving the Subject: Remediation in *House of Leaves*." *American Literature* 74.4 (2002): 787-806.
- . "Tech-TOC: Complex Temporalities in Living and Technical Beings." *Electronic Book Review*. Forthcoming, 2011. <www.electronicbookreview.com>
- . "Translating Media: Why We Should Rethink Textuality." *The Yale Journal of Criticism* 16.2 (2003): 263-290.
- Hedges, Chris. *Empire of Illusion: The End of Literacy and the Triumph of Spectacle*. Toronto: Knopf Canada, 2009.
- Hermanson, Scott. "Review of *A Companion to Digital Literary Studies*." 28 Apr. 2009. *Electronic Book Review*. 18 Nov. 2010. <<http://www.electronicbookreview.com/thread/fictionspresent/authoritative>>.
- Innis, Harold A. *Empire and Communications*. Toronto: Dundurn Publishing, 2007.
- Jackson, Shelley. *Patchwork Girl*. Eastgate Systems, 1995.
- Jameson, Fredric. "Postmodernism and Consumer Society." *The Critical Tradition: Classic Texts and Contemporary Trends*. Ed. David H. Richter. New York: Bedford/St. Martin's, 2007. 1956-1966.
- . *Postmodernism or, The Cultural Logic of Late Capitalism*. Durham, Duke University Press, 1991.

- Jenkins, Henry. *Convergence Culture: Where Old and New Media Collide*. New York: NYU Press, 2008.
- . *Fans, Bloggers, and Gamers: Media Consumers in a Digital Age*. New York: NYU Press, 2006.
- Johnson, Steven. *Everything Bad is Good For You: How Today's Popular Culture is Actually Making Us Smarter*. New York: Penguin, 2005.
- Joyce, Michael. *Afternoon, a story*. Eastgate Systems, 1987.
- Kirby, Alan. "The Death of Postmodernism and Beyond." Jan/Feb 2011. *Philosophy Now*. 19 Feb. 2011.
<www.philosophynow.org/issue58/The_Death_of_Postmodernism_And_Beyond>.
- . *Digimodernism: How New Technologies Dismantle the Postmodern and Reconfigure Our Culture*. New York: Continuum, 2009.
- Landow, George P. *Hypertext: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: John Hopkins University Press, 1992.
- Link, Alex. "Pierre Menard with A Pipette: VAS and the Body of Text." *Electronic Book Review*. Forthcoming, 2011.<www.electronicbookreview.com>
- Lyotard, Jean-Francois. "Defining the Postmodern." *The Critical Tradition: Classic Texts and Contemporary Trends*. Ed. David H. Richter. New York: Bedford/St. Martin's, 2007. 1933-1936.
- Lavigno, John. "Digital and Analog Texts." *A Companion to Digital Literary Studies*. Eds. Ray Siemens & Susan Schreibman. Malden, MA: Blackwell Publishing, 2007. 402-414.
- Lévy, Pierre. *Collective Intelligence: Mankind's Emerging World in Cyberspace*. New York: Plenum Trade, 1997.
- Lipovestky, Gilles. *Hypermodern Times*. Trans. Andrew Brown. Cambridge: Polity, 2005.
- McLuhan, Marshall. *The Gutenberg Galaxy: the Making of Typographic Man*. Toronto: University of Toronto Press, 1962.
- . *Understanding Media: The Extensions of Man*. Cambridge: MIT Press, 1994.
- Murray, Janet H. *Hamlet on the Holodeck*. New York: The Free Press, 1997.

- Palmer, Martin and Jay Ramsay with Zhao Xiaomin. *I Ching: the Shamanic Oracle of Change*. San Francisco: Thorsons, 1995.
- Poe. *Haunted*. Atlantic Records, 2000.
- Postman, Neil. *Amusing Ourselves to Death*. New York: Penguin USA, 1985.
- Pressman, Jessica. ““*House of Leaves*: Reading the Networked Novel” *Studies in American Fiction* 34.1 (2006): 107-22.
- Richter, David H. *The Critical Tradition: Classic Texts and Contemporary Trends*. Boston: Bedford/St.Martin’s, 2007.
- Rushkoff, Douglas. *Open Source Democracy: How Online Communication is Changing Offline Politics*. Demos Open Access Online Publishing, 2003.
- Shastri, Sudha. “Return to the Beginning: *House of Leaves* by Mark Danielewski.” *Atenea* 26.2 (2006): 81-94.
- Sterne, Laurence. *The Life and Opinions and Tristram Shandy, Gentleman*. Oxford: Oxford University Press, 1983.
- Tabbi, Joseph. *Cognitive Fictions*. Minneapolis: University of Minnesota Press, 2002.
- Tabbi, Joseph & Michael Wutz, eds. *Reading Matters: Narrative in the New Media Ecology*. Ithaca: Cornell University Press, 1997.
- Tissut, Anne-Laure. “Languages of Fear in Steve Tomasula’s *VAS: an Opera in Flatland*.” *Electronic Book Review*. Forthcoming, 2011.
<www.electronicbookreview.com>
- Tomasula, Steven and Stephen Farrell. *TOC: A New Media Novel*. Tuscaloosa: Fiction Collective 2/University of Alabama Press, 2009.
- . *VAS: An Opera in Flatland*. Chicago: The University of Chicago Press, 2002.
- Vandendorpe, Christian. “Reading on Screen: The New Media Sphere.” *A Companion to Digital Literary Studies*. Eds. Ray Siemens & Susan Schreibman. Malden, MA: Blackwell Publishing, 2007. 203-215.
- Van Hulle, Dirk. “Hypertext and Avant-texte in Twentieth-Century and Contemporary Literature.” *A Companion to Digital Literary Studies*. Eds. Ray Siemens & Susan Schreibman. Malden, MA: Blackwell Publishing, 2007. Accessed Online.

Wilkinson, Joanne. "Review of *Only Revolutions*." *Booklist* (2006): 51.