Novel Experiences: On Page, In Ear, On Screen

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Abstract

This study examines the experience of literary reading as an example of document work. It launches from the insight that books are mediated through technology, and all technology presents affordances. When a book is remediated, how do the affordances of the remediated technology change the reader's experience with the book? Using analytical perspectives from phenomenology and semiotics, this study examined reader reviews of *Ulysses* and *Infinite Jest* in three formats: hardcover, audiobook and Kindle. Findings suggest that, while immersive experiences occur with both novels across all formats, reviewers of the hardcover books demonstrated deeper experiences with the novels, while reviewers of other formats demonstrated sensitivity to issues in the remediation process. **Keywords**: reading; phenomenology; remediation; affordance; product reviews doi: 10.9776/16124

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The object we call a book is not the real book, but its potential, like a musical score or seed. It exists fully only in the act of being read; and its real home is inside the head of the reader, where the symphony resounds, the seed germinates.

- Rebecca Solnit, *The Faraway Nearby*, 2014

1 Introduction

Literary reading is increasingly of interest to information science researchers. Perhaps first, Ross (1999) described pleasure reading as a way of encountering information. More recently, Colatrella (2015) described the novel as a form of socio-historical information system, and Lundh and Dolatkhah established the act of reading as a dialogic, meaning-making act of document work rather than one of cognitive reception. This reflects findings regarding the community practices that emerge around literature—for example, the networked Harry Potter fandom documented by Dresang (2008) as evidence of the "connectivity" of modern literature.¹ Information experience (Bruce, et al., 2014) has recently emerged as an analytical lens in information science, thus motivating the exploration of the information experience of readers. This paper presents a phenomenological study of reader experiences with two novels—*Ulysses* and *Infinite Jest*—across hardcover, audiobook and Kindle formats, examined through the thematic analysis of online bookstore product reviews.

2 Exploring the Affordances of (Remediated) Books

We generally think of a book as textual information in codex (bound paper) form, but new technologies are forcing us to reconsider this definition (Velagić, 2014). Such reflection is typical of technological turning points (Heim, 1987), and has occurred many times throughout history (Maciá, 2000). Indeed, even a quick look at today's information landscape suggests a plentiful grove, ripe for reflective harvest.

2.1 Books Are Text... And Tech, Too

The prevailing view equates text with information, suggesting that the information in a book is determined by the content alone (Velagić, 2014). However, the visual aspects of printed language also contribute to readers' sense-making (Levenston, 1992). Thus a book is better understood as a *document*, which denotes information manifest in a particular format (Lund, 2010). Skare (2009) argues for holistic analysis in the study of documents, recognizing that the informational, material and social aspects of documents are interwoven and inter-reliant. With such a perspective, it can be appreciated that the content of a book

¹ In a similar vein, literary scholar Christopher Hager remarked on the volume of emails he received since posting online his BA thesis, the first ever study of *Infinite Jest*. To this end, he observes: "I don't think anyone imagined, even fifteen years ago, that the first thing turn-of-the-millennium readers would do after they put down a moving and mind-blowing book is walk to the nearest computer, do a Google search on the title, and try to read what other people have to say about it" (Hager, 2009).

must be recorded with a particular information technology; the book outside its technological manifestation does not exist. Thus, a book is entangled with the technology in which it is represented.

All technology, when perceived, has affordances. Introduced by Gibson (1979/1986), affordances are the possibilities that arise from a person's perception of the use of a particular object in their environment. Because books are manifestly technological, they have affordances. The affordances of a book are not static; rather, they depend "on how people perceive the affordances of the object in a particular physical, social, and historical situation" (Lundh & Johnson, 2015, p. 56). Because a book can exist in multiple technologies, a given work may engender different affordances in its different technological manifestations. How does this affect a reader's experience?

2.2 Remediation and Affordances

Part of the reason that we have traditionally separated information from its format seems to be that the "same" information can be presented in different formats. To speak of books, hardcover editions are regularly re-typeset and republished as mass-market paperbacks. Some books are read aloud and recorded, then distributed as audiobooks. Many books that were published in print before the advent of computers have since been republished as e-books, which can be read on a variety of devices. This process of refashioning content using new media is known as remediation (Bolter & Grusin, 2000). Discussed by Dalbello (2013), remediated content allows access to new publics, who may create new information practices for using that content (and have different information experiences with it).

Today, many new books are simultaneously published in multiple formats. However, some authors take advantage of expected affordances when they create works for a specific medium. Remediating such works may not be a straightforward process, and it may raise issues regarding the experience of the reader.² Some books, for example, rely on formatting to visually and paratextually convey information that is relevant to the story. *The Neverending Story* is one such book; the text is printed in two different colors, relating to different strands of the narrative. Nørgaard (2009) demonstrates how editions of the book that ignore this distinction are inefficacious and confusing to readers. *Tristram Shandy*, first published in the 18th century, is similarly aware of itself as a physical artifact. The book "includes a completely black page, a marbled page, a couple of missing chapters and a skip in the page numbers" (Rowberry, 2015, p. 9), all of which contribute to the story. Rowberry surveys how various e-book manifestations of *Tristram Shandy* have resolved difficulties in remediating this book, demonstrating how the traditional view of what comprises a book (i.e., merely its text) has led to misrepresentation.

2.3 Affordances and Experience

A remediated book has different affordances and presents a different sum of information than its progenitor, yet all instantiations of a particular work are seen as the "same" book. Velagić (2014) suggests this is because books are directed toward individual readers. As such, to understand how remediation affects a book's informativeness, the perspective of the reader must be considered.

Mangen (2008) describes reading as a multimodal experience, in which our perceptual, cognitive and motor processes work in concert in order to create the sensation of immersion. She points out the vital role that the body plays in creating these experiences (echoed by Sanford & Emmott, 2012). Because of this, Mangen suggests that the haptic affordances of physical books may aid in immersion; thus the phenomenological experience of reading digital text may be different from print text. She also points out that humans approach digital texts differently than print texts, and that these practices are changing, possibly from increasing exposure to digital texts. Moreover, it is clear that the type of text, the device used and the background and mental state of the reader all influence the reading experience in a complex way, which begs careful investigation (Mangen & Kuiken, 2014).

A number of studies have explored the affordances and experiences of books. Noy (2008) explores how a print visitor book at a tourist site in Jerusalem functions as a dynamic medium of communication; the material aspects of the book, including its physical affordances and the spatial and institutional environment in which it is located, affect readers' capacity to create and mediate social meaning. Dresang (2008) similarly explores the practices around literature, particularly focusing on hypertext-inspired books for children. She argues that the aspects of connectivity, interactivity and access interplay to cultivate engagement—both reader-to-book and reader-to-reader. Lundh and Johnson (2015) review a number of studies on the affordances of talking books,³ arguing that the affordances of different

² Those who prefer reading digitally may start off on the wrong foot with Joshua Cohen's (2015) novel *Book of Numbers*, which begins: "If you're reading this on a screen, fuck off" (p. 5).

³ Talking books differ from audiobooks. Talking books are designed for readers with print disabilities and must be read using specialized software. Talking books allow readers to navigate a book in a number of ways, all through audio.

book formats change the way a person interacts with (and can interact with) the book. Wittkower (2011) presents a phenomenological account of his experience with audiobooks, describing that the time-fixed, spoken nature of audiobooks mirrors some, but not all, of the affordances of speech, and offers unique affordances of its own. He emphasizes that different audiobook listening devices may present different affordances; he also considers how doing other activities while listening affects the reading experience.

Studies that compare remediated books with their progenitors are scarce. Baron (2014) synthesizes the research comparing print and digitized text, arguing that digital text generally discourages deep reading, rereading and strong emotional involvement. Studies conducted since Baron's review similarly support these findings (Mangen & Kuiken, 2014; Mangen, in press). Still, Baron recognizes that, though her conclusions reflect general consensus, not all researchers are in agreement on these findings.

2.4 Addressing the Gaps in the Literature

Most of the previous research in this area has taken a quantitative, deductive approach, which may be seen as a limitation to fully understanding the phenomenon. Another shortcoming of the extant research is that it has exclusively been based on quick encounters with short works (Baron, 2014). "What we don't have—and sorely need—are data on what happens when people are asked to do close readings of continuous text. In short, we need studies comparing deep reading onscreen versus in print" (Baron, p. 171). To this end, Mangen (in press) calls for interdisciplinary approaches to the study of reading.

Two traditions of inquiry that may support research in literary reading across formats are phenomenology and semiotics. Phenomenology is an interpretative, philosophical perspective that has been used to explore the complexities of human experiences of numerous phenomena. Latham (2014) outlines a phenomenological methodology for document analysis from the perspective of human experience. Semiotics studies how entities take on multiple layers of meaning in their multimodal contexts and is another useful perspective in information research (Wells, 2015). Though semiotics has been critiqued for the opacity of its methods, van Leeuwen (2005, p. 3) outlines a concrete methodology:

- 1. Select a semiotic resource, and study its history. How did it come to exist in this particular form?
- 2. Investigate how the resource is used in specific cultural contexts. Has this changed throughout history? How do people talk about the semiotic resource in this context?
- 3. Based on the above, consider the semiotic resource "in action," and create a model of that action.

2.5 Research Questions

It is understood that books have affordances, that books can be remediated and that such remediation can present different affordances. It seems to be the case that the information experience of print is different from that of digital text, but more research is needed. Particularly, this area would benefit from inductive, qualitative research focusing on the reader's perspective and examining deep reading. With these points in mind, the present study was designed to address the following questions:

- How does the information experience of reading a novel change with remediation?
- What is the relationship between information experience and format?
- What design implications can be drawn for remediating novels?

3 Ulysses and Infinite Jest

This study examines reader responses to two novels, *Infinite Jest* and *Ulysses*, across three formats: print, audiobook and e-book. In the spirit of van Leeuwen's (2005) semiotic methodology outlined above, these novels will first be considered in their design and historical contexts.

*Ulysses*⁴ (Joyce, 1922/1992) and *Infinite Jest* (Wallace, 1996) are two popular novels from the 20th century. The works are similar in many ways: They are encyclopedic, straddling the fiction/non-fiction divide and experimentally challenging the genre of the literary novel. Both are firmly, but to differing extents, entangled in the print book format. Both appear in lists of the top literary works of the 20th century, are very long and notoriously difficult to read (evidenced by a proliferation of reader's guides and commentaries) and have been the topics of thousands of academic papers and even college courses. Finally, both have spawned online communities similar to those described by Dresang (2008).

Both Joyce and Wallace sought to create fictional but verosimile representations of their eras. Joyce said that *Ulysses* was meant to present "a picture of Dublin so complete that if the city one day suddenly disappeared from the earth it could be reconstructed out of my book" (Budgen, 1972, p. 69). Regarding *Infinite Jest*, Wallace said in an interview, "I wanted to do something real American, about

⁴ Interested conference attendees should consider visiting the Rosenbach Museum & Library in Philadelphia, which owns the manuscript of *Ulysses*. Rotating excerpts are always on display, and the entire manuscript can be seen by appointment.

what it's like to live in America around the millennium" (Miller, 1996). Tresco (2010) observes that the unboundedness of *Infinite Jest* mirrors the ever-expanding nature of today's Wikipedia:

At any moment, the encyclopedia may become the anti-encyclopedia, an infinite procession, similar, I would argue, to the "infinite"-ness of *Infinite Jest.* ...When one reaches the end... one asks ... "Could it have continued for another thousand pages?" (Tresco, 2010, pp. 121–122)

Through their all-encompassing natures, both works speak to wider themes. The mundane activities in *Ulysses* are said to "reflect the trials, tribulations, infidelities, missed opportunities, unfulfilled promises, odd coincidences, small satisfactions and pleasant joys we all aspire to" (Della Contrada, 2004). Hager (2009) echoes this, saying, "*Infinite Jest* may come as close as any work of literature has to representing human consciousness without doing it the dishonor of pretending to be wholly able to represent it."

Both novels are firmly entangled with their mediums. Both were created as novels, with the authors' full investment in exploring what a novel is and can be, pushing the genre to its limits and taking advantage of the affordances of print (Burns, 2012). In the case of *Ulysses*, for example, Joyce was exacting in his usage of punctuation, articulating that punctuation (and, sometimes, the lack thereof) was crucial to his work (Levenston, 1992). Throughout *Ulysses*, Joyce modulates more than just punctuation: One chapter, for example, is interrupted by all-caps newspaper-style headlines. Another chapter is written as a play, and another as a Socratic dialog. The final chapter is a 40-page stream of consciousness.

Infinite Jest exhibits similar peculiarities of formatting, but the most salient and commented-on are the 100 pages of endnotes. "The notes can provide useless information, essential information, extra but nonessential narrative, or even, at times, narrative that is more important to the ongoing novel than the passage to which the note is attached" (Boswell, 2003, p. 120). Letzler (2012) argues that most of the endnotes can be characterized as "cruft"—that is, nigh-superfluous—but that they perform a variety of important functions in the narrative, including forcing the reader to modulate their reading practice, simulating the experience of information overload, and "help[ing] depict the main characters' inability to navigate between addiction and recovery" (Letzler, 2012, pp. 317–318), which is a main theme of the novel. Velagić (2014) observes that hyperlinks may be welcome in some texts, but may be distracting where they "make it difficult to focus on the development of argument" or narrative. It is certainly intentional that Wallace uses endnotes, a device that would seem generally unwelcome in literature.

As described by Mangen and Kuiken (2014), the goal of literary reading is immersion—that is, losing oneself in the narrative—which is only possible when the technology used to convey the narrative does not draw attention to itself. *Ulysses* and *Infinite Jest*, then, would seem to preclude such immersion because of their unconventionality. Moreover, though both novels present a narrative, the narrative itself does not seem to be the main focus of either book. What, then, might be the "purpose" of these novels? Based on the discussion above, it may entail generating a particular experience for the reader.

Because both novels were designed for presentation in print by their authors and because they both take advantage of the particularities of the medium of the printed book, it can be surmised that these works were intended to be experienced as print. And yet, both have been remediated as audiobooks and e-books. If the main value of these books is the experience they are meant to engender, it is important to ask: To what extent is the reader's experience of the original work preserved in these remediations?

4 Studying the Information Experience of Remediated Novels

Customer reviews on bookstore websites can offer insight into readers' experiences. This study interpreted such reviews as phenomenological accounts of the reading experience. Samples of product reviews for three different editions each (hardcover print, audiobook and e-book) of *Ulysses* and *Infinite Jest* were collected. Reviews for the hardcover and Kindle editions were drawn from Amazon.com, and reviews for the audiobook editions from Audible.com (owned by Amazon) (see Table 1).

Book	Format	Reviewed Edition	Total Reviews	First Review On
Ulysses	Hardcover	Modern Library; 1992	48	October 23, 1996
Ulysses	Audiobook	Naxos AudioBooks; 2008	99	September 12, 2008
Ulysses	Kindle	Public Domain Books; 2009	75	December 27, 2009
Infinite Jest	Hardcover	Little, Brown; 1996	158	May 16, 1996
Infinite Jest	Audiobook	Hachette Audio; 2012	65	April 11, 2012
Infinite Jest	Kindle	Back Bay Books; 2009	183	April 14, 2010

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Reviews were sampled on August 12, 2015, as follows: On the page showing all product reviews, the results were filtered to only include the particular edition under study (*e.g.*, hardcover edition). Amazon.com offers this functionality on-page. The reviews were sorted by recency. A random number generator was used to aid the selection of 25 random reviews for each edition, which were copied into a text file. In sum, six text files were created, representing both novels in three different formats each. Anomalous data (*e.g.*, reviews discussing Amazon's service rather than the experience of reading the novel) was removed in the first reading during the analysis.

The data was analyzed using thematic analysis (Braun & Clarke, 2006). Each document was first examined individually in this way: The data document was first read several times. During initial readings, informal notes were made of recurring themes, functioning as a tentative, open list for codes. The concepts of affordance (Gibson, 1986) and document experience (Latham, 2014) were used as an analytical lens, guiding the determination of tentative codes; the analysis was also aided by the researcher's familiarity with both novels. During a subsequent reading, these tentative codes were applied. In further readings, the coding scheme was refined and abstracted, resulting in themes. Once each document was analyzed in this way, it was possible to compare and contrast the phenomenological themes between different formats of the same novel and between both novels in the same format.

5 Findings

Table 2 describes the final sample size for each investigated edition, as well as the average word count per review and the average customer rating for each edition.

Book	Edition	Number of Reviews	Avg Words/Review	Avg Rating (of 5)
Ulysses	Hardcover	23	175	3.7
Ulysses	Audiobook	25	155	3.6
Ulysses	Kindle	24	66	2.9
Infinite Jest	Hardcover	25	212	4.1
Infinite Jest	Audiobook	24	185	3.7
Infinite Jest	Kindle	22	131	3.5

Table 2. Descriptions of the Final Samples

Findings from the qualitative analysis revealed many similarities in the information experience across all formats of both novels, as well as idiosyncrasies. Identified themes are summarized in Table 3 and are described in more detail below.

	Both Novels	Ulysses	Infinite Jest
All Formats	Plot and themes* Cruft Immersive experiences Rereading* Worthwhileness* Major undertaking Using supplementary sources	Scholarly undertaking	Daunting undertaking Worthwhile endeavor Identified themes
Hardcover	Referencing other writers Reflecting on novel as medium Mimicking author's style	Identified themes Worthwhile endeavor	Personal connections Personal transformation
Audiobook	Making the text approachable Narrator's performance Sense of remediation Orality of the text	Sense of obligation *Rereading not mentioned	Frustrations re: endnotes
Kindle	Sense of remediation	Incompleteness Sense of obligation *Not worthwhile	*Least mention of themes

Table 3. Summary of Novel-, Format- and Edition-Specific Themes. Those marked with asterisks (*) reflect exceptions to themes otherwise found in both novels and all formats.

Reviewers of both novels almost universally mentioned literary themes and discussed the issue of plot (least so in the Kindle edition of *Infinite Jest*). Many reviewers had trouble identifying the "story" in these novels, which was frustrating because novels are "supposed to" present stories in a clear way. To this end, some reviewers recognized that this was the "point." As one reviewer wrote of *Infinite Jest*, "The plot is largely nonexistent, and it's more about the book's lack of plot wherein the plot truly resides."

Many reviews centered on the author's writing style; both authors were seen as geniuses of language, but these books were considered too long and unrefined. Other references to the authors mentioned aspects of their lives (*e.g.*, Wallace's suicide and Joyce's alcoholism), particularly if the reviewer did not like the book. By and large, both books in all formats seem to have enabled immersive experiences, and reviewers who enjoyed the books savored these experiences. Another major theme was worthwhileness; supporters affirmed the book was worthwhile, while detractors affirmed the opposite.

Finally, nearly every reviewer described reading these books as a major undertaking. To aid in the mammoth task, many mentioned that using supplementary sources (such as Wikipedia, dictionaries and reader's guides) could improve the experience and ease the burden. Despite the considerable length of both novels, there were numerous mentions of rereading the book (in both practice and plan).

5.1 Ulysses

As mentioned, reading both books was seen as a major undertaking, but reading *Ulysses* was seen as a particularly scholarly experience, whereas readers of *Infinite Jest* did not make that implication.

5.1.1 Hardcover

Many readers of the hardcover edition of *Ulysses* characterized the experience as something to be savored, citing a deep sense of immersion. As one reviewer wrote, "This richly rendered piece proves that virtual reality existed long before computers." Related to this sense of immersion, about one-fourth of reviewers seemed to mimic Joyce's style in their writing, whereas this did not occur in other editions.

Several reviewers mentioned using outside sources to enrich their understanding of the text and their appreciation of its subtle nuances and obscure references. And yet, these same reviewers (as did others) recognized that such intellectual appreciation was not necessarily the main value of the work. Rather, "That you may never totally unravel *Ulysses* is unimportant. The pleasure comes from experiencing not completing it." Indeed, some reviewers asserted that seeking outside sources for further cognitive understanding might diminish some of the inherent confusion and overwhelm that the author seems to have intended. One reviewer wrote: "[Using outside sources] in itself is a betrayal of Joyce—we are supposed to be jolted, confused, lost. Such is the nature of modern life Joyce wanted us to taste."

Rereading *Ulysses* also was a recurring theme in reviews of the hardcover edition. One reviewer wrote, "As I grew older, I realized that I had had more experiences, read more books, and thought more thoughts. That meant that I found new layers of meaning in *Ulysses*."

5.1.2 Audiobook

Reviews of the *Ulysses* audiobook were pervaded with comparisons to the print edition. There was some ambivalence toward the successful remediation of *Ulysses* as an audiobook. On one hand, many reviewers mentioned the book's poetic language, but said that its complicated words and sentence structures made it too hard to focus on the plot while listening. "Maybe it is poetry but it would be better to be reading the words on the page rather than trying to understand the plot by listening." To this end, one reviewer warned, "For a first time reader/listener, read the book first. This is a well done recording, but the book itself is too hard to follow for the first time without the text in front of you." On the other hand, some people swore by the audiobook version, even saying the work was "meant to be read aloud." Seemingly as a compromise, some users found it helpful to listen to the audiobook while reading the print version. One reviewer said, "I could never have done one without the other."

Most reviewers described that consuming *Ulysses* as an audiobook made the undertaking more approachable. One reviewer wrote that its "stream-of-conscious format and rambling plot make for very difficult reading. Fortunately, the audio format removes some of that confusion." And another endorsed it even more strongly: "One of the most incredible books of all time. ... I thought nothing could make it better. I was wrong. This reading brought the novel to life in no way I could have imagined."

5.1.3 Kindle

In this edition, only two reviewers referenced the plot, and none mentioned themes. Above all, this edition was seen as incomplete. Reviewers found several sections of dialog missing throughout the book, "which ruins even the first chapter." *Ulysses* is now in the public domain, and many reviewers expressed that this free e-book was "prepared by amateurs." Reviewers expressed that this was unacceptable: "to read

Tarzan of the Apes for free, with some typos, is one thing; to tackle *Ulysses* without the benefit of the full text seems somewhat pointless." Many reviewers seemed to have come to the Kindle edition of *Ulysses* out of a sense of obligation, likely abetted by its being free. As one reviewer said, "I was reading it because it is on the list of books you should read." Finally, there was a consensus that, though Kindle books are conveniently read on smartphones, this particular book should not be. "Just try not to read this on an iPhone. You'll get bored pretty soon and this book won't get the attention that it truly deserves."

5.2 Infinite Jest

Whereas reading *Ulysses* was seen as scholarly and serious, reading *Infinite Jest* was predominantly seen as daunting. Still, comments on the book's daunting nature were almost always coupled with the sense that reading it was tremendously worthwhile—even transformative. (Notably, reviewers who gave it a low rating and called it daunting did not mention it being worthwhile.) One reviewer said,

Read it for an hour and you begin speaking in long, parenthetical sentences. It will make you think that it's changing the way you think and look at the world. ... I loved it, and feel like if DFW were to decide to start the church of *Infinite Jest* I would join. Isn't that stupid?

5.2.1 Hardcover

Reviewers of this edition in particular discussed having personal connections to the novel, in the sense that it reminded them of or made them notice aspects of their lives. They also empathized with the characters, who they felt they came to know over the course of reading. About half the reviewers referenced other authors and works as comparisons and recommendations. Several reviewers mimicked Wallace's long, subordinating and parenthetical sentence structure. Several reviewers mentioned feeling addicted to the book and experiencing deep sadness after they finished it. One said,

It took me months to finish, but now that it's over, I am genuinely sad. The entire time I was reading it, I felt like my life had another dimension that was going on [alongside my normal life].

On that note, many reviewers mentioned rereading Infinite Jest. Most poignantly, one reviewer said:

Then, as I sat looking dully at the last page of the book, it occurred to me. This is the last page, but not the end of the story. ... I went back and started reading again, and my jaw dropped open in awe of the true genius of this book. Sentences that had seemed insignificant ... when I first began reading were infused with new meaning ... I kept reading for maybe fifty or a hundred more pages and continued to find these "buried treasures" that ... were so much more entertaining now, and I knew then that if I didn't just put the book down and stop right then, that I never would.

Even a reviewer who found the book mediocre said, "Maybe if I get a month off work I'll read it again."

Finally, this edition inspired comments on what a novel is and could or should be. Generally, these reviewers felt *Infinite Jest* was not good as a novel. For example, "I think a novel is to be enjoyed. A novel should captivate, make you hang on every word, not bore you into submission." However, one reviewer noted that *Infinite Jest* reaffirmed their belief in the efficacy of the novel in the digital age.

5.2.2 Audiobook

Just as with the audiobook of *Ulysses*, the remediated nature of the *Infinite Jest* audiobook seemed quite visible. Again, reviewers found that the audio format made this formidable book more accessible; one reviewer called this "coaching." Another reviewer described it this way:

I was hesitant about undertaking *Infinite Jest* as an audiobook. I had read half the book and was finding it difficult to pick it back up and read. I started over with the audiobook and I'm glad I did.

Relatedly, many reviewers cited Wallace's conversational writing style in saying that it "translated" very well into the audiobook format.⁵ One reviewer said, "DFW has an amazing and distinctive writing style that translates surprisingly well to audiobook." Yet, the audiobook was seen as "inferior to" the print book. Indeed, the audiobook was seen as a supplement to the print version. As one reviewer said,

I would recommend this to anyone who has already read the book, the lack of end notes takes away so much of the humor and plot nuances that I would be hard pressed to send a new reader to this audiobook, though.

⁵ Interestingly, Wallace himself might have disagreed: "Most poetry," he said, "is written to ride on the breath, and getting to hear the poet read it is kind of a revelation and makes the poetry more alive. But with certain literary narrative writers like me, we want the writing to sound like a brain voice, like the sound of the voice inside of the head, and the brain voice is faster, is absent any breath, and it holds together grammatically rather than sonically" (Newman, 2006).

Most of the perception of inferiority seems related to the lack of endnotes in the audiobook. As discussed above, *Infinite Jest* uses many endnotes, and all reviewers who mentioned them described them as a vital part of the novel. These are omitted from the audiobook; instead, a different voice says the endnote number and the listener can read the endnote in a PDF document provided along with the audio. All but one of the reviewers who mentioned endnotes described this solution as insufficient. "I cannot stop and read a PDF file in a middle of a bike ride or car trip," said one reviewer. Others were boggled by the implementation: "The woman who said the footnote number could just as well have read the footnote. CRAZY," said one reviewer. Another said, to this end, "Doing so would certainly not detract from the story organization, since the whole thing is chaotically organized anyway." Another said, "Anyone willing to listen to 56 hours of this wouldn't mind listening to another 10 in order to hear all the endnotes."

Reviewers in want of endnotes described a number of workaround practices they developed. Some used the PDF and read several endnotes in chunks so that they could listen to longer stretches of the audiobook without having to refer to the print. Some switched back and forth between the audio and print versions of the novel. Another reviewer, who listened primarily in his car, listened until he came to an endnote and then stopped until he could reference the note later. This made the book take much longer to finish: "Some days I could get no more than a few minutes in before switching off, but that was fine."

Lastly, a handful of these reviews mimicked the author's writing style, but not in the same way as hardcover reviewers. Here mimicry was limited to Wallace's penchant for beginning sentences with multiple conjunctions and the proliferation of "like" (e.g., "though and but with, like…").

5.2.3 Kindle

Reviewers of this edition were also visibly sensitive to remediation. However, opinions varied. Some reviewers particularly liked the Kindle edition; one wrote, "The book is best read on a Kindle so one can easily find definitions and get to the numerous footnotes." Another reviewer, a multi-time reader, counseled: "Kindle this one, it's just huge in print and the hyperlinks are well implemented on the e-book edition." On the other hand, another wrote, "Don't cheat yourself out of fully experiencing this amazing journey. Avoid the e-book and buy a physical copy," noting difficulty navigating the endnotes and the book in general to "decrypt the convoluted plotlines. ... Reading the e-book really does become a chore."

6 Discussion

Though the nature of *Ulysses* and *Infinite Jest* may seem to preclude immersion, as discussed above, evidence of immersion was found in reviews across all formats of both novels. Thus it may not be the case that a book's technology must be "invisible" to allow immersion, contrary to Mangen and Kuiken (2014). The technology in these novels is by no means invisible. This leads us to a more nuanced understanding of the nature of literary immersion. Up to now, literary immersion has been characterized as a flow state during reading, but this study suggests that readers can experience immersion over time, even when not reading. These novels consumed readers deeply, even though the reading experience itself was often fraught with distraction and even outright boring. As one reviewer of *Infinite Jest* wrote:

Many times the wild goose chase for meaning came up empty after weaving through many pages of very small font footnotes, I found myself reading a boatload of pages ... over and over again to comprehend what was being said (stilted), and lastly I arrived to page 1200 something or other and wanted more!!!! ... Upon crossing the finish line, I realized I was pulled into someone else's interesting and strange world for a summer. Isn't that what fiction has the potential to do anyway?

Immersion was most noticeable in hardcover. Only hardcover reviews referenced other writers and reflected on the novel as a genre (and how these works extended/challenged it). This implies that hardcover readers placed the books in their literary context more than other readers. Also, by and large, only hardcover reviewers mimicked the author's writing style in their reviews (though some reviewers of the *Infinite Jest* audiobook did this too), suggesting a deeper internalization of the books. It is immediately clear from Table 2 that the hardcover editions had the longest reviews and highest ratings, perhaps demonstrating greater engagement and appreciation of the books in hardcover. Along these lines, only reviewers of the hardcover edition of *Infinite Jest* discussed being personally transformed by the work, as well as making personal connections to the events and characters. Could it be the case that there is something important about interacting with the printed text that affords these types of transformations and connections? It is, of course, possible that readers likely to perform such analyses and make such connections are, for some reason, drawn to the hardcover edition to begin with, which is another possible explanation for the correlation seen in the findings. Future research should explore this further.

The remediated editions did not seem to engender such profound experiences. Rather, they were seen as lacking. This suggests that, even though the different editions of each novel supposedly represent the "same" book, reader experiences of the different editions were not the same. This was most acute in the Kindle version of *Ulysses*, which is missing some text, and the audiobook version of *Infinite Jest*, which is missing the endnotes. The first issue is testament to the importance of care when remediating any work. With file-verifying processes, the mishap could have been avoided. It also speaks to the importance of being familiar with the original work when doing a remediation; if the preparer of the digital file was unfamiliar with *Ulysses*, it is no surprise that they would not have noticed the missing text.

The issue regarding endnotes in *Infinite Jest* is more complicated, but it also speaks to the importance of being familiar with the work in order to successfully remediate it. Evidenced by the preface to the audiobook describing the decision, the omission of the endnotes from the audiobook was not taken lightly. And yet, reviewers overwhelmingly found this decision to be ill-informed. The endnotes were apparently omitted in order to make the narrative easier to follow. Considering *Infinite Jest* from a phenomenological perspective helps illuminate why this was an infelicitous decision: The intended experience of the novel is not to create an easy-to-follow narrative, but rather to flood the reader with an overload of information. Including the endnotes, then, would only have enhanced the novel in this regard.⁶

This is not to say that print books are always better. Only that *these books*, which were made for print, are better in print. Designers and publishers of remediated books should consider the experience intended by the author and how that hinges on the technology for which a book was originally created.

6.1 Limitations and Opportunities for Future Research

The present study has several limitations, presenting opportunities for further research. Though it demonstrated the efficacy of using product reviews as phenomenological data and allowed for data collection from a larger number of participants than would have been otherwise possible, this type of data is limited in that it does not allow the researcher to seek clarification or use specific prompts.

Using product review data also presents peculiarities that may limit the transferability of these findings. Firstly, it may be the case that customers of Amazon and Audible are not a well-defined social group. This is suggested by strong polarization in the reviews. As one reviewer of *Infinite Jest* observed, "How is it that one novel can cause half its readers to put ZERO STARS - I HATE THIS BOOK and the other half to write I WISH I HAD 100 STARS TO GIVE?" The characteristics of the sampled population should be carefully considered before these findings are transferred to other cases.

Finally, this study considered Kindle books and audiobooks as cohesive categories, when in reality Kindle e-books may be read on a variety of devices (e.g., computer, smartphone,⁷ Kindle), and the same can be said of audiobooks. Further research should explore these differences in more detail.

7 Conclusion

Grounded in the concepts of affordance and remediation, and using analytical perspectives from phenomenology and semiotics, this study examined reader reviews of *Ulysses* and *Infinite Jest* in three formats: hardcover, audiobook and Kindle. Reviewers of the hardcover books demonstrated deeper experiences, while readers of other formats were above all sensitive to issues of the remediation process.

This reveals the importance of considering the reader's information experience when remediating a piece of information. If a certain intended or desired experience, for example, relies on affordances resulting from the physicality of a novel, how can that experience be transported as much as possible into new formats? This may require coming up with a "novel" solution, even if that means straying from the text itself. As one reviewer mentioned, it is not always necessary or beneficial to treat the text as gospel.

Finally, this study sits at a peculiar moment in time: the intersection between print and digital culture. As Heim (1987) noted, such intersections spark reflection: "For it is at the moment of such transitions that the past becomes clear as a past, as obsolescent, and the future becomes clear as a destiny, a challenge of the unknown" (p. 6). As we approach the end of print culture, it is important to document and understand how the emerging digital paradigm continues to change our experiences.

8 References

Baron, N. S. (2014). Words onscreen. Oxford, UK: Oxford University Press.

⁶ N.B.: The endnotes were released as a standalone audiobook in 2013 by Hachette Audio. A surface reading of the reviews reveals that making use of these endnotes is not a straightforward matter; this issue merits further investigation.

⁷ Maloney (2015) discusses the rise of literary reading on smartphones. Though convenient, "it's also prompting concern about whether deep, concentrated thinking is possible amid the ringing, buzzing and alerts that come with phones."

Bolter, J. D., & Grusin, R. (2000). *Remediation: Understanding new media*. Cambridge, MA: MIT Press. Boswell, M. (2003). *Understanding David Foster Wallace*. Columbia, SC: Univ. South Carolina Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. DOI: 10.1191/1478088706qp063oa

Bruce, C., Davis, K., Hughes, H., Partridge, H., & Stoodley, I. (Eds.). (2014). *Information experience: Approaches to theory and practice*. Bradford, GBR: Emerald Group Publishing Limited.

Budgen, F. (1972). James Joyce and the making of Ulysses and other writings. London: Oxford U. Press.

Burn, S. J. (2012). David Foster Wallace's Infinite Jest: A reader's guide (2nd ed.). London: Continuum. Cohen, J. (2015). *Book of numbers: A novel.* New York: Random House.

Conen, J. (2015). Book of numbers: A novel. New York: Random House.

Colatrella, C. (2015). Information in the novel and the novel as information system: Charles Dickens's Little Dorrit and Margaret Drabble's Radiant Way trilogy. *Information & Culture, 50*(3), 339–371.

- Dalbello, M. (2013). Digitality, epistolarity and reconstituted letter archives. *Proceedings of CoLIS 8, Copenhagen, Denmark, 19-22 August, 2013. Information Research, 18*(3).
- Della Contrada, J. (2004, June 10). "Ulysses" simple to understand, Joyce scholar says. *UB Reporter*. Retrieved from http://buffalo.edu/ubreporter/archive/vol35/vol35n38/articles/SloteUlysses.html
- Dresang, E. T. (2008). Radical change revisited: Dynamic digital age books for youth. *Contemporary Issues in Technology and Teacher Education, 8*(3), 294–304.
- Gibson, J. J. (1979/1986). The theory of affordances. In *The ecological approach to perception* (pp. 127–143). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hager, C. (2009). On speculation: Infinite Jest and American fiction after postmodernism (Unpublished thesis). Retrieved from http://thehowlingfantods.com/thesisb.htm

Heim, M. (1987). *Electric language: A philosophical study of word processing*. Yale University Press.

Joyce, J. (1992). Ulysses. New York: Modern Library. (Original work published 1922)

- Latham, K. F. (2014). Experiencing documents. Journal of Documentation, 70(4), 544–561.
- Letzler, D. (2012). Encyclopedic novels and the cruft of fiction. *Studies in the Novel, 44*(3), 304–324. Levenston, E. A. (1992). *The stuff of literature: Physical aspects of texts and their relation to literary*
 - meaning. Albany, NY: State University of New York Press.

Lund, N. W. (2010). Document, text and medium. Journal of Documentation, 65(5), 734-749.

- Lundh, A. H., & Dolatkhah, M. (2016). Reading as dialogical document work: Possibilities for library and information science. *Journal of Documentation*, *72*(1).
- Lundh, A. H., & Johnson, G. M. (2015). The use of digital talking books by people with print disabilities: A literature review. *Library Hi Tech*, *33*(1), 54–64.

Maciá, M. (2000). El bálsamo de la memoria: un estudio sobre comunicación escrita. Madrid: Visor.

- Maloney, J. (2015, August 12). The rise of phone reading. *The Wall Street Journal*. Retrieved from http://www.wsj.com/articles/the-rise-of-phone-reading-1439398395
- Mangen, A. (2008). Hypertext reading fiction. *Journal of Research in Reading 31*(4), 404–19.
- Mangen, A. (in press). The digitization of literary reading. Orbis Litterarum.
- Mangen, A., & Kuiken, D. (2014). Lost in an iPad: Narrative engagement on paper and tablet. Scientific Study of Literature, 4(2), 150–177.

Miller, L. (1996, March 9). David Foster Wallace. Salon. Retrieved from http://bit.ly/1PP01xb

- Newman, A. A. (2006, January 20). How should a book sound? And what about footnotes? *The New York Times: Books*. Retrieved from http://www.nytimes.com/2006/01/20/books/20audi.html
- Nørgaard, N. (2009). The semiotics of typography in literary texts. Orbis Litterarum, 64(2), 141–160.
- Noy, C. (2008). Mediation materialized: The semiotics of a visitor book at an Israeli commemoration site. *Critical Studies in Media Communication, 25*(2), 175–195.
- Rowberry, S. P. (2015). Ebookness. Convergence. Prepub online. DOI: 10.1177/1354856515592509

Sanford, A. J., & Emmott, C. (2012). Mind, brain and narrative. Cambridge, UK: Cambridge Univ. Press.

- Skare, R. (2009). Complementarity a concept for document analysis? *Journal of Documentation, 65*(5), 834–840. DOI: 10.1108/00220410910983137
- Tresco, M. (2010). Impervious to U.S. parsing: Encyclopedism, autism, and *Infinite Jest*. In D. Hering (Ed.), *Consider David Foster Wallace: Critical essays* (pp. 113–122). Los Angeles: Sideshow.
- van Leeuwen, T. (2005). Introducing social semiotics. London: Routledge.
- Velagić, Z. (2014). The discourse on printed and electronic books. Information Research, 19(2).

Wallace, D. F. (1996). Infinite jest. New York: Little, Brown and Company.

- Wells, M. J. (2015). Social semiotics as theory and practice in library and information science. *Journal of Documentation*, 71(4), 691–708.
- Wittkower, D. (2011). A provisional phenomenology of the audiobook, In Rubery, M (Ed.), *Audiobooks, literature, and sound studies* (pp. 216–231). New York: Routledge.