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Hyperprint: Book Objects that Revitalize Print in the Digital Age

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HYPERPRINT: BOOK OBJECTS THAT REVITALIZE PRINT IN THE DIGITAL AGE

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As readers move further and further into the digital frontier, they are also bound to look back at what is being left behind—Hyperprint is the embodiment of that reflection. I argue that within mainstream fiction these print books with non-traditional physical formats have an opportunity to highlight the different affordances of print and digital literatures. Hyperprint texts both utilize and reject the digital by embracing the use of reading strategies and habits that form due to interactions with electronic media, while simultaneously exploring print materiality. I argue that these texts have feature six key elements: foster hyper reading, embrace print and material inconvenience, require conspicuous manipulation, link material and textual interactions, resist e-reader digitization, explore themes of communication and medium. Furthermore, I argue that highlighting these differences in very concrete ways will be increasingly important, not only for the Humanities but also for the general public, when we consider what is gained and sacrificed between the two mediums.

It is important to note that hyperprint texts have roots in other experimental genres, I distinguish hyperprint texts from these predecessors because hyperprint texts interrogate what a *print* book can be in the *Digital Age*—foregrounding material experiences that can highlight the possibilities and limitations afforded by print and digital texts, respectively.

I examine numerous hyperprint exemplars through thematic chapters in order to explore how hyperprint texts can be used to reflect on our shifting relationships to the world around us. Specifically, I explore modern formations of place through the story-map collection *Where You*

Are and Chris Ware's *Building Stories*; connections to people via correspondence through *S.* by J. J. Abrams and Doug Dorst and *The Griffin & Sabine Trilogy* by Nick Bantock; and concerns of preservation through Jonathan Safran Foer's *Tree of Codes* and Zachary Thomas Dodson's *Bats of the Republic.*

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CHAPTER ONE

INTRODUCTION

"There is nothing like a sense of demise to spur our attention."

Andrew Piper

With the increasing rise of electronic devices since the turn of the millennia, there has been a shift in daily reading habits from the page to the screen. Early on, many argued that the death of the print book was inevitable, a fate that seems much less likely as the initial panic has subsided. What has become increasingly clear, however, is that new kinds of reading skills and habits are emerging as more and more readers engage with electronic works. Rather than decry the onslaught of literature mediated by screens or spurn the dusty volumes weighing down shelves, modern writers are faced with a new opportunity within print literature to embrace the facets of digital literature and electronic reading that engage modern readers, but to do so in ways that are especially suited to print media.

Although the field of Digital Humanities is growing, constantly in flux, and much has already been written about how interactions with and criticism of electronic texts fundamentally differ from how traditional print texts are approached, with a few notable exceptions, not many scholars have flipped the critical lens and examined print texts through digital criticism. As readers are increasingly imbued with digital reading sensibilities, it seems like a logical step to flip this critical lens for both reader-reception perspectives and for opening new avenues of creative expression; my purpose here is to do exactly that and to explore what I see as an emerging practice or stance within mainstream fiction.

I argue that when certain print texts are examined through a digital lens, an interesting mode within mainstream fiction emerges—one that I am calling hyperprint. Hyperprint texts, as I

define them, both utilize and reject digital sensibilities by employing reading strategies and habits that formed through interactions with electronic media, while simultaneously pushing against the perceived disembodied nature of e-readers to emphasize their print materiality. I argue that these texts feature six key elements: use of digital reading habits is fostered; printed, often inconvenient, material forms; required, significant material manipulation (beyond the flipping of folio pages); physical interactions that highlight the aesthetic or symbolic concerns; resistance of digitization onto e-readers; central thematic concerns of communication and medium. Each of these characteristics will be discussed in greater detail below.

Defining Hyperprint

"Hyperprint" is an apt name for this form because it represents the merging of hypertexts and traditional print texts, while also implying that these works are "hyper-" printed, or have a physicality that insists on a more tactile interaction with the reader than either digital or traditional print texts call for—a physicality that calls attention to itself as a central thematic and aesthetic concern. Additionally, while "hypertext" was first coined by Ted Nelson in 1963 and the "hyper-" prefix was popularized by the internet nomenclature of the 1990s (hypertext, hypermedia, etc.), Digital Humanists might criticize "hyperprint" as an already outdated term for what I am arguing is a *recent* expression; however, the choice is a deliberate one as it carries with it the connotation of the public's embrace of the internet and coincides with the same time period that reading habits began to shift in meaningful ways. Establishing this term and perspective will provide a new critical lens through which to examine Digital Humanities, traditional literature, and readers' vacillations between the two worlds.

Indeed, a new term is needed to identify this coalescing practice within mainstream fiction because, although some critics have coined terms that address some of the hyperprint

elements, current terms each leave important aspects of this mode outside of their terms' parameters. For example, in *Picture Theory: Essays on Verbal and Visual Representation*, W. J. Thomas Mitchell examines how text and image interact with each other and the power structures that emerge through those interactions; the terms that Mitchell establishes include "metapicture" and "image/text," neither of which are analogous to "hyperprint," but they do each address issues and relationships that are central to hyperprint projects. Mitchell defines metapictures as "pictures that refer to themselves or to other pictures, pictures that are used to show what a picture is" (35). While hyperprint texts are certainly concerned with exploring what they are as book objects, and thus may stand as '*books* that are used to show what a *book* is'—or perhaps *can* be, the term "metapicutre" captures only a small portion of a hyperprint text's project and of course applies solely to images.

Mitchell's term "image/text," on the other hand, stands as an example of how a word or concept can be used less as a descriptor and more as a tool, similar to my goals for "hyperprint." Mitchell first clarifies the use of the backslash in the term, stating that it is used to "designate 'image/text' as a problematic gap, cleavage, or rupture in representation," but he also goes on to describe the term as "neither a method nor a guarantee of historical discovery; it is more like an aperture or cleavage in representation, a place where history might slip through the cracks" (89, 104). Mitchell was writing specifically about the impact of television and film on modern culture, "the increasing mediatization of reality in postmodernism, and the phenomenon [Mitchell] called 'the pictorial turn,' with its regimes of spectacle and surveillance," and how that was affecting people's interactions with texts (106). This is certainly a parallel position to hyperprint's exploration of how readers and writers are affected by digital interactions, but each

of these terms address distinct and separate historical moments, making hyperprint a more specific and appropriate term for the shift from the print to the digital era.

N. Katherine Hayles also suggests a useful term that connects to hyperprint projects but does not fully encompass them. In *Writing Machines*, Hayles discusses her term "technotext":

> Literary works that strengthen, foreground, and thematize the connections between themselves as material artifacts and the imaginative realm of verbal/semiotic signifiers they instantiate open a window on the larger connections that unite literature as a verbal art to its material forms. To such works, I propose "technotexts," a term that connects the technology that produces texts to the texts' verbal constructions. Technotexts play a special role in transforming literary criticism into a material practice, for they make vividly clear that the issue at stake is nothing less than a full-bodied understanding of literature. (25-26)

Thus, in a way, hyperprint texts may be seen as technotexts that specifically interrogate both print and digital texts. I would only stress that while a technotext seems to explore only the medium in which it is produced, hyperprint projects go beyond this one-directional analysis and instead throw both print and digital media into question. This two-fold media perspective is central to hyperprint projects and will be discussed in more depth through an examination of hyperprint's six distinct features.

The need for new theoretical models and terms for analyses arises out of the current shift from a print-dominant media ecology to one blended with and increasingly superseded by digital communications. In "Literature as Product and Medium of Ecological Communication," Michael Giesecke builds on the work of German communication and media theorist Friedrich Kittler and argues that media cannot be examined in isolation from their cultural moments, noting

that during our current media shift "the basic terms of industrial societies—such as land, labor, energy, and capital—will be supplemented by concepts deriving from the domains of information and communication," due largely to the information and media-dense environments around us (11). He also argues that "literature is understood as a cultural form of gaining, processing, and representing experience that is fundamentally interconnected," and as such, "it draws on all the human media and sensory organs and increasingly functions as a social cooperation—frequently, with immediate feedback loops—between humans and their communities" (11-12). This suggests that media, and literature in particular, serves "as the articulation of interactive channels as well as of authors, readers, publishers, and other communicators" (15). Giesecke insightfully argues, then, for a reexamination of literature as a nexus for the complex interactions and reflections between readers and various media, a task that hyperprint explicitly foregrounds in both its form and content.

The Six Elements of Hyperprint Exemplars

The boundaries of what constitutes a hyperprint text and what does not are important to consider when trying to establish that a distinct mainstream fiction form is indeed coalescing. While there are certainly predecessors, which will be discussed, the common characteristics of hyperprint texts are that they foster hyper reading; printed, often inconvenient, material medium; required, significant material manipulation (beyond the flipping of pages); physical interactions that highlight the aesthetic or symbolic concerns; resistance of digitization onto e-readers; central thematic concerns of communication and medium.

Although criticism has already been written about individual digital/print hybrid texts, about the importance of medium and materiality, and about the differences and overlap between print and digital texts, there has never been an established critical framework or effective

vocabulary to discuss the possibility of an emerging form within mainstream fiction that lives in and comments on both the digital and print worlds—which is exactly what I seek to create. While I do not argue that hyperprint texts are distinct enough to form an entirely new genre, I do suggest that the formal features of these texts capitalize on readers' modern sensibilities and skills to bring particularly timely discussions to the forefront in ways that were not previously possible within mainstream fiction.

That said, I hope that these conventions serve as a critical lens to open the conversation both about hyperprint exemplars and texts that many not fit every criterion but when viewed through that lens offer the reader a different or deeper perspective.

Foster Hyper Reading

Modern readers have seemingly inexhaustible information opportunities before them ready at the press of a button or swipe of a fingertip. It is not unusual for someone to be seated at a computer with numerous programs running, while simultaneously checking social media or email on a smartphone, all while a TV plays nearby. Not only do each of those separate screens vie for attention, but oftentimes windows within those screens compete for that increasingly limited commodity as well. Regardless of how focused or productive someone may wish to be, most computers are just a click away from the Internet with all the possibilities and pitfalls it offers. Smartphone apps are littered with ads and opportunities to post, share, or notify across multiple platforms. Television shows are sliced through with tickers and crawls sharing updates on everything from severe weather warnings and financial news to celebrity gossip and social media tie-ins. Contrast that with the mainstream printed book that we have been reading for the past four-hundred years—folio pages bound between two covers in a set sequence, perhaps with a table of contents or index to facilitate navigation. Our increasing interactions with digital media

are so pervasive that the bulk of our media consumption is now done through screens rather than across pages, and this shift is beginning to shape how we interact with texts across media platforms—both digital and print.

In *How We Think: Digital Media and Contemporary Technogenesis*, N. Katherine Hayles argues that we currently live in an "information-intensive environment" that is prompting some epigenetic adaptions (12). She notes that such changes occur "through the environment rather than through the genetic code" and points to the concept of technogensis, the "proposition that humans coevolved with the development and transport of tools," to argue that we are currently undergoing such adaptations in response to our digital media consumption (10). Hayles specifically argues that when our world is so full of information and distraction, attention becomes a limited resource that must be conserved through the adaptation of "hyper attention," which "aim[s] to conserve attention by quickly identifying relevant information, so that only relatively few portions of a given text are actually read" (12). Futhermore, she notes that hyper attention "has a low threshold for boredom, alternates flexibility between different information streams, and prefers a high level of stimulation" (12). Such epigenetic changes are obviously well tailored to modern readers utilizing the Internet, but these same adaptations are gradually changing what it means to read.

Hayles argues that in response to the need for hyper attention "hyper reading" skills have emerged which enable readers to cover a wider range of texts by quickly identifying key points or elements while also facilitating connections among, or even beyond, multiple texts simultaneously. Hayles builds on the work of James Sosnoski and his 1999 essay "Hyper-Readers and Their Reading-Engines," in which Sosnoski identified eight key hyper reading strategies that included "filtering," "skimming," "pecking," "imposing," "filming,"

"trespassing," "de-authorizing," and "fragmenting" (163). Hayles adds two more reading strategies to the list, "scanning" and "juxtaposing" (*How We Think* 12). Filtering, skimming, pecking, and scanning are all strategies that help readers identify what portions of a text are relevant to their interests; while it is important to note that many of these strategies originated in print, they are all adaptations that are particularly suited to handling the glut of text online. "Imposing," on the other hand, is less about what or how much is being read and more about how readers *contextualize* it for themselves: "By framing texts, readers assimilate them to their interests and hence render them significant in the context of their concerns. The significance of the text, in this sense, is more important than its 'meaning' (Sosnoski 169). Hyperprint texts, in contrast, already carry with them specific contexts that they are interested in exploring—namely print-digital ambivalences—and thus resist such radical recontextualization. Lastly, "trespassing" and "de-authorizing" both deemphasize the original author when the text is placed into new contexts by the reader, oftentimes these uses constitute plagiarism; these strategies are also less problematic with hyperprint texts as their publishing information typically follows the more rigid print tradition and electronic cut and paste functions are obviously unavailable making authorship boundaries less ambiguous (Sosnoski 163). For the purposes of exploring hyperprint texts, then, I would like to focus specifically on filming, fragmenting, and juxtaposing, as these strategies are less about the quantity that is being read or the fluidity of context and authorship and more about how a modern reader makes meaning of a text.

Sosnoski's notion of "filming" as a hyper reading strategy emphasizes how graphics and design elements can affect meaning for readers. Indeed, he goes so far as to argue that "significant meaning is derived more from graphical elements as from verbal elements of the text" (163). The fact that images, layout, and design can affect the experience of a text is by no

means new, obviously, but it is also undeniable that modern readers are inundated with hypermedia works and images have become an indispensable feature of most online texts. Hyperprint texts utilize this increasing awareness of visuals and design by employing them in unexpected ways within print literature. While it would not be uncommon to find illustrations within a traditional print fiction, hyperprint texts go beyond the common and employ visual elements in conspicuous ways that enhance the narrative. Zachary Thomas Dodson's *Bats of the Republic* is an excellent example of how this reading strategy can be utilized through hyperprint texts.

Bats of the Republic is set simultaneously in 1843 and 2143 and is told through various writings and ephemera. In the year 1843 journals, books, and letters are combined to relate events; in 2143, transcriptions of recorded conversations, illustrations of hand signals, handwritten notes, and maps work in tandem with the main narrative. With so many different types of communications, the reader has to rely on visual cues from the design and "filming" to help keep the context of each section clear. For example, on the book's only fold-out spread, the coloring of the pages, the specific cursive handwriting, and the style of the illustrations are all used to make it apparent to the reader which pages are from Zadock Thomas during the 1843 period of the narrative even without having to look at the heading, "The Drawings of Zadock Thomas" (360-61). The reverse of this map, however, is immediately placed as part of the 2143 narrative by using the distinctive green ink, the geometric style, and the less polished handwriting (362-63). The more a reader progresses through the text the more these design choices reveal their significance. Having grown accustomed to the "filming" reading strategy online, modern readers are better able to approach such a text and make meaning from both the text and visuals.

Fragmenting is another such reading strategy popularized by online reading that hyperprint lends itself to. Sosnoski describes fragmenting as "breaking texts into notes rather than regarding them as essays, articles, or books" (163). This connects back to the need for hyper attention in general and speaks to online readers' likely preference of shorter individual sections of texts over "lengthy linear ones," which would also give readers the ability to break texts apart and reorganize them into "patterns relevant to their own concerns" (171, 172). Fragmenting, then, allows readers to first select which portions of a text interest them and then to organize those fragments to better reflect their own meaning-making. Again, hyperprint texts foster the use of this reading strategy in ways that more traditional print texts have not.

Chris Ware's *Building Stories* is a prime example of a how a hyperprint text can be effectively explored through fragmenting. On the back of its box, *Building Stories* is described as "14 distinctively discrete Books, Booklets, Magazines, Newspapers, and Pamphlets." As such, the collection itself is already broken into separate parts with no apparent order, so the decision of how to organize and read the parts is left completely to the reader. The overarching narrative of *Building Stories* follows the unnamed protagonist through her life as she "wonder[s] if she'll ever move from the rented close quarters of lonely young adulthood to the mortgaged expanse of love and marriage" (Ware, back of box). Interspersed with her story, however, are other texts only tangentially related. The reader has to decide in what order to read, ignore, or revisit both specific texts and sections within those texts—the sequence is undetermined.

The last major hyper reading strategy utilized with hyperprint texts is "juxtaposing." Hayles briefly defines juxtaposing "as when several open windows allow one to read across several texts" (*How* 61). I suspect that it is a rare thing for the average online reader to only have one window or application open at any given time; instead, we habitually jump from window to

window, program to program, and even from screen to screen. This high level of stimulation, or distraction, has become a habit that necessitates a nimbleness across simultaneous interactions with multiple texts. Juxtaposing works particularly well with *Building Stories*, which is already broken into sections, but it is also critical to navigating hyperprint texts that have a more set sequence, such as *S.* by J. J. Abrams and Doug Dorst.

At first *S.* appears to be a traditional print book, *Ship of Theseus* by V. M. Straka, but both the book and the fictitious author were created by Abrams and Dorst, and it is the additions to *Ship of Theseus*, scrawled across the margins and tucked within its pages, that turn it into a hyperprint text that requires the use of juxtaposition. Throughout this supposed stolen library book are marginalia notes between two graduate students annotating the book and studying the mysteries surrounding it. The notes from the two students, Jen and Eric, also take place across a total of five different time periods, distinguishable by context clues and different colors of ink. Additionally, there are twenty-two inserts in the book including newspaper articles, postcards, scribbled notes on napkins, handwritten letters, and a decoder compass. Therefore, on any given spread within the book readers may encounter the text of *Ship of Theseus*, marginalia notes from Jen and Eric from numerous time periods that may stand alone or may be in response to each other, and any number of inserted objects. With all of these "open windows" in the text, the reader needs to make decisions about how to approach each element; juxtapositioning is a key hyper reading strategy to help navigate those decisions.

While I have broken down the hyper reading strategies utilized by hyperprint texts by discussing them separately and providing distinct examples in turn, it is important to note that each of these strategies are utilized with all hyperprint texts, though perhaps with greater or lesser frequency than others. These hyper reading strategies are epigenetic changes that are

appearing due to our increasing interactions with online media, and by using them consciously readers, writer, and educators can all make more positive decisions about our media consumption. That said, there may also by some negative effects of these reading adaptations.

In *The Shallows: How the Internet Is Changing the Way We Think, Read, and Remember*, Nicholas Carr argues how the experience of reading online presents a tradeoff between more instantaneous information and less sustained attention. Carr argues that our sustained online reading habits are essentially rewriting our synaptic pathways and consequentially making reading offline in deep and concentrated ways more difficult; he also posits that the same hypermedia elements that draw us to the Web are also what makes it so difficult to sustain concentration:

> The need to evaluate links and make related navigational choices, while also processing a multiplicity of fleeting sensory stimuli, requires constant mental coordination and decision making, distracting the brain from the work of interpreting text or other information. Whenever we, as readers, come upon a link, we have to pause, for at least a split second, to allow our prefrontal cortex to evaluate whether or not we should click on it. The redirection of our mental resources, from reading words to making judgements, may be imperceptible to us—our brains are quick—but it's been shown to impede comprehension and retention, particularly when it's repeated frequently. As the executive functions of the prefrontal cortex kick in, our brains become not only exercised but overtaxed. In a very real way, the Web returns us to the time of *scriptura continua*, when reading was a cognitively strenuous act. (122)

The end result is what Carr describes as a "juggler's brain," which is lauded for its ability to multitask and process numerous information streams, albeit with dubious success, but that has

difficulty in reading longer texts, concentrating deeply on a single task, or engaging in critical thinking. Ultimately, Carr warns that "[t]he Net's cacophony of stimuli short-circuits both conscious and unconscious thought, preventing our minds from thinking either deeply or creatively. Our brains turn into simple signal-processing units, quickly shepherding information into consciousness and then back out again" (119). In short, "the Net seizes our attention only to scatter it" (118).

Carr also notes, however, that the same neuroplasticity that results in "juggler's brains" can also allow us to regain the deeper reading/thinking skills that have become weakened (35). I feel that this is one area where hyperprint texts can present a significant opportunity. By drawing on the hyper reading strategies that online readers already utilize, but doing so in a more sustained and conscious manner, these texts could help provide a bridge between the close reading and deep attention of traditional print texts and the hyper reading and hyper attention of online texts. Perhaps then, by utilizing reading strategies that were gradually developed by reading online, we may be able to become stronger readers across mediums.

Embrace Print and Material Inconvenience

Another key element of hyperprint texts, and one way that they demand attention and deeper reading, is that they are deliberately somewhat cumbersome. One of the main benefits of using e-readers is that they are much more portable than traditional print books, particularly when one can carry around multiple volumes on a single electronic device. Entire libraries can even be accessed via different devices from different locations, shared with friends or collaborators, and instantly checked out from libraries around the world. Most e-readers also include annotation tools that allow readers to mark-up, comment on, and search the text with ease.

By comparison, traditional print texts have different portability issues. Obviously, tucking one novel in a bag is easy, as is annotating by highlighting, writing in the margins, or including organizational tabs. Print texts also have some advantages over e-readers in that they never need a power source, they are easier to read in direct sunlight than many e-reader devices, and the loss of a single text is far less expensive than a lost or damaged e-reader. That said, carrying more than a couple print books at a time quickly becomes a burden when compared to the storage potential on an e-reader.

Thus, while some readers may miss the physical experience of traditional print texts, there is a slowly growing shift to the convenience of e-reader devices. In his article "Book Reading 2016" for the Pew Research Center, Andrew Perrin shares that in a "nationally representative telephone survey of 1,520 American adults conducted March 7-April 4, 2016," it was found that "E-book readership increased by 11-percentage points between 2011 and 2014 (from 17% to 28%) but has seen no change in the last two years." Perrin also notes that the percentage of people who have read a print book in the last two years (2014-2016) has declined by 4 percentage points, from 69% in 2014 to 65% in 2016. It may also be interesting to point out that while sales of dedicated e-reader devices remain relatively stable,

> tablet computer and smartphone ownership have each increased dramatically in recent years, and a growing share of Americans are using these multipurpose mobile devices – rather than dedicated e-readers – to read books. Between 2011 and 2016, the number of Americans who read books on tablet computers has increased nearly fourfold (from 4% to 15%), while the share who read books on smartphones has more than doubled (from 5% to 13%). The share of Americans who read books on desktop or laptop computers has

also increased, although by a more modest amount: 11% of Americans now do this, up from 7% in 2011.

By contrast, 8% of Americans now report that they read books using dedicated e-reader devices – nearly identical to the 7% who reported doing so in 2011.

What this shows is that while print reading is slightly in decline, overall reading on electronic devices is steadily growing, regardless of whether a dedicated e-reader or a multipurpose device is being used. One plausible reason for this increase is convenience. In her article "Technology Device Ownership: 2015," Monica Anderson notes that in 2015, a Pew Research Center study found that "68% of U.S. adults have a smartphone" and 45% of adults owned a tablet computer. With the increased popularity of these devices, it is likely that readers have them readily at hand wherever they go—the same cannot be said for print books.

Hyperprint texts play with this difference in convenience and portability by frequently embracing cumbersome formats that require their own space beyond the typical requirements of traditional print texts. Chris Ware's *Building Stories*, for example, consists of fourteen different texts, including the box that contains them all, and measures 11.7 inches wide, 1.9 inches deep, and 16.7 inches long. Reading and interacting with the collection is most easily facilitated by having a large table or open floor space on which to spread out the various items. In fact, a diagram on the back of the box itself suggests a particular pattern for dispersing *Building Stories* across the entire expanse "of an average well-appointed home." Thus, *Building Stories* is not a convenient choice for a reader's daily commute or lunch break; it is a text that resists reading a page or two in between the day's obligations. Unlike texts on an e-reader or even traditional print texts, it requires the reader to set aside a significant amount of space and time to enjoy. It is not

convenient and, almost literally, cannot fit easily into readers' lives without them first making a conscious decision to make time and room for it.

In addition to *Building Stories,* other hyperprint texts are equally inconvenient in numerous ways. The story-map collection *Where You Are* includes sixteen different texts that each unfold in different ways, so that if the reader is too hasty, the maps can easily tear. The reader has to learn how to read each map individually, and a single unfolded story-map may have additional elements to manipulate or unfold further still. *S.* by J. J. Abrams and Doug Dorst, on the other hand, is a typical size and shape for a mainstream fiction text, but numerous items and ephemera are tucked into the pages, and once removed from its outer sleeve, these can all quickly fall out unless the reader constantly holds pressure on the pages. The placements of these inserts are crucial to the plot of *S.*, and there is no index or key provided to readers for their placement if they should ever become disordered. As a final example of this element of hyperprint texts, Jonathan Safran Foer's *Tree of Codes* is riddled with physical die-cut holes, and while the shape and size of the text is portable enough, this material element forces the reader to make a decision about how the text should be read. One option is to simply read the words that appear on the page currently before the reader, progressing through the text one page at a time. The other option, however, is to look through the holes to the words on subsequent pages and include them in the syntax of the page in front of the reader. Really, it is a choice between reading two-dimensionally or three-dimensionally. While this may be less physically cumbersome than *Building Stories,* for example, it is still an inconvenience that requires more from readers than either an e-reader or a traditional print text.

In this way, hyperprint texts push back against e-readers *specifically* and technology *in general* to comment upon the perceived convenience of the Digital Age. Hyperprint texts require

a commitment, however brief, from readers that physical space and significant time will be set aside and devoted to interacting with the text. They do not lend themselves well to filling stolen minutes between other activities, and they seem to stall multitasking, which is a staple in most modern readers' days.

Require Conspicuous Manipulation

The term "interactive" seems to be increasingly vague within the Digital Humanities, simply because it is such a difficult concept to define with any certainty or useful scale of degree. Texts or games that tout themselves as interactive raise the question of what kinds of interactions qualify as significant and which do not. Is moving a mouse more interactive than turning a page? Is clicking on a hyperlink more interactive than turning to an index or glossary? Is inserting and typing a comment more interactive that making a marginal note? For readers with modern digital sensibilities, I would say that each of these activities are equal since they are each equally expected for their respective mediums—there is nothing surprising or unusual about the kinds of interactions they call for when compared to readers' expectations. However, just as Digital Literature plays with readers' (or perhaps "users" would be a more fitting term) expectations and interactions within the Digital Humanities, hyperprint texts subvert and play with material expectations within the print tradition.

Traditionally, the primary physical interaction a reader has with a print text within mainstream fiction is the simple flipping of folio pages. On rare occasions, perhaps the pages are not bound, as with Marc Sapporta's *Composition No. 1*, which allows the reader to shuffle the pages and proceed in a random order. At other times, the reader may be offered options for progressing through a text, a technique popularized by the *Choose Your Own Adventure* series. A text may also require the reader to shift the page's orientation in order to read it, as Mark Z.

Danielewski does in *Only Revolutions*, which includes text that needs to be read from two different directions from two different characters on the same page. In all of these instances, however, the only physical manipulation required by a reader is that of flipping or turning pages.

Hyperprint texts, by contrast, offer a much wider array of physical experiences and can require manipulation beyond the simple actions used to navigate traditional print texts. This additional requirement, in turn, pushes against reader expectations and deepens engagement. Here it may be useful to employ Charles Bernstein's notions of absorptive and anitabsorptive elements of texts. In his essay "Artifice of Absorption," Bernstein discusses how a writer can use artifice towards "absorptive" ends, which Bernstein describes as getting readers to temporarily forget their own worlds and instead engage in the fictional world the writer created—the goal of most mainstream fiction texts. At the same time, however, he notes:

> For many readers
> & writers, the limits on what
> can be conveyed absorptively are too
> great, & the products of such
> approaches are too misleading. For such
> writers, the project is to wake
> us from the hypnosis of absorption. (54)

In these instances, "antiabsorptive" elements may be used to draw attention to the artifice of the writer's craft, to make the reader more aware of the fiction and the art than they are of the truths or meaning that may be explicitly on the page:

> The 'mark' is the visible sign of writing.
> However, reading, insofar as it consumes &

absorbs the mark, erases it—the words disappear
(the transparency effect) & are replaced by
that which they depict, their 'meaning'. Thus
absorption is the 'aura of listening' destroyed
in this writing: Antiabsorptive
writing recuperates the mark by making it opaque,
that is, by maintaining its visibility
& undermining its 'meaning', where 'meaning' is
understood in the narrower, utilitarian sense
of a restricted economy. (64)

These antiabsorptive elements, however, do not necessarily disengage the reader from the text; rather they have the ability to pull the reader further into the text by presenting challenges beyond those of description and representation. In other words, it does not push the reader's attention away from the text but instead provides a "shift in attentional focus" (76). As Bernstein notes:

the power of
making aware, which necessarily involves a
disruption of a single plane of attention or
belief, results in a hyperattentiveness
that has its own economy of engagement.
Defamiliarization, through an antiabsorptive
technique, registers a failure of response to the familiar &
the need to be shocked in re-cognition: that the

> familiar & the expected cannot command
> attention, do not absorb the faculties. This is
> to say that the experience of everyday life
> can be diffuse, uncompelling, slack, & that an alternative
> is desired. (83)

This notion of antiabsorptive elements used to simultaneously highlight artifice and create deepened engagement is a key function of the physical manipulations required of hyperprint texts. Readers are so accustomed to flipping folio pages from right to left in their set sequence and reading text from the top left of the page to the bottom right, that they do so unthinkingly when reading a mainstream fiction text. Hyperprint texts, much like many digital texts, however, require readers to make decisions about how to navigate them. Furthermore, these interactions are not arbitrary, but rather deliberate features used to highlight the narrative elements.

As a very brief example, near the end of Dodson's *Bats of the Republic* there is a conspicuous envelope labeled "Do Not Open." Although this envelope appears near the end of the novel, it is thick enough that the reader likely knows of its presence right away. This, then, presents the dilemma of whether or not—or when—to open the envelope; clearly this is artifice, but most readers would also have their attention captured by the temptation of doing something they have been explicitly told not to do. This is a decision and a physical interaction not typically encountered within mainstream fiction, and it serves to pull the reader further into its concerns. Furthermore, once the reader opens the envelop they are given diagrammatic instructions on how to assemble its contents into a twisted circle. The reader is prompted to read this letter "in an endless loop"—which reflects the narrative itself as the two characters from different times collide within the story as time and place collapse. The physical actions required of the reader

are antiabsorptive in that they are conspicuous, but they are employed towards absorptive ends to create a hyper attentiveness on the reader's part.

Link Material and Textual Interactions

Nor are these physical manipulations mere ploys to tout the texts' interactivity with readers, but rather they serve to heighten or underscore the concerns of the text itself. The medium shapes more than just the material, as Marshall McLuhan would no doubt agree, and hyperprint texts bring that dynamic relationship to the surface.

In the now classic *The Medium Is the Massage: An Inventory of Effects*, McLuhan spiritedly argues that the format and medium of a text, meant in the broadest sense, shape readers' experiences in significant and often unseen ways—both with the text itself and beyond it. Although *The Medium Is the Massage* was published in 1967 and focusses much more on the electronic age of television and radio, McLuhan's prescient statement that "[t]he medium, or process, of our time—electric technology—is reshaping and restructuring patterns of social interdependence and every aspect of our personal life" is perhaps even more true today than it was then (8). By examining the cognitive and cultural changes that arose from technologies ranging from the phonetic alphabet to Western easel paintings to television commercials, McLuhan argues convincingly that "[s]ocieties have always been shaped more by the nature of the media by which men communicate than by the content of the communication" (8). In a particularly striking passage, McLuhan explores how a culture's use of art to depict the world can in turn affect how that world is experienced:

> Art, or the graphic translation of a culture, is shaped by the way space is perceived. Since the Renaissance the Western artist perceived his environment primarily in terms of the visuals. Everything was dominated by the eye of the beholder. His conception of space

> was in terms of a perspective projection upon a plane surface consisting of formal units of spatial measurement. He accepted the dominance of the vertical and the horizontal—of symmetry—as an absolute condition of order. The view is deeply embedded in the consciousness of Western art.
>
> Primitive and pre-alphabet people integrate time and space as one and live in an acoustic, horizonless, boundless, olfactory space, rather than in a visual space. Their graphic presentation is like an x-ray. They put in everything they know, rather than only what they see. [...] The primitive artist twists and tilts the various possible visual aspects until they fully explain what he wishes to represent. (56-57)

In this way, McLuhan is an excellent reminder that the Internet is not the first medium to alter people's interactions with each other and the world around them. Rather, is it simply the most recent and, perhaps, the swiftest.

One growing concern amongst some media scholars, however, is that as we rush headlong into the digital realm the interfaces we use to access our technologies are actually obscuring how they "work us over," to use McLuhan's phrase, in the name of user-friendliness (26). In *Reading Writing Interfaces: From the Digital to the Bookbound,* Lori Emerson criticizes this trend and highlights the potential for media poetics to "highlight the fact that while interface does grant access, it also inevitably acts as a kind of magician's cape, continually revealing (mediatic layers, bits of information, etc.) through concealing and concealing as it reveals" (x). Emerson is particularly wary of the computer industry's "invisible" graphical user interfaces (GUIs), the points of contact between human users and software: "Again, all of the foregoing interface designs imply a belief in the value of an interface that recedes from view, ideally to the point of invisibility, which now also implies inaccessibility. We need not know how it works, or

how it works on us rather than us on it" (6). This ultimately results in "all computing devices [turning] into appliances for the consumption of content instead of multifunctional, generative devices for reading as well as writing or producing content" (xi-xii). Emerson goes on to explore the potential hazards of such GUIs by examining earlier media with a goal towards "demystifying devices—especially writerly demystification—by opening up how exactly interfaces limit and create certain creative possibilities" (ix). Extending Emerson's line of argument that digital literature pieces that "[court] difficulty, defamiliarization, and glitch" can make invisible GUIs visible once more, just as concrete poetry functioned "as a way to experiment with the limits and the possibilities of the typewriter," I propose that hyperprint texts carry the same potential to complicate the interface between print books and readers with digital sensibilities, particularly through their unexpected physical interactions—which makes the book interface highly visible (xviii, xix).

Jonathan Safran Foer's *Tree of Codes* is one such text. The first time I opened *Tree of Codes* I was immediately taken aback—it was destroyed. Or at least that was my first impression, as it was full of die-cut holes (see fig. 1).

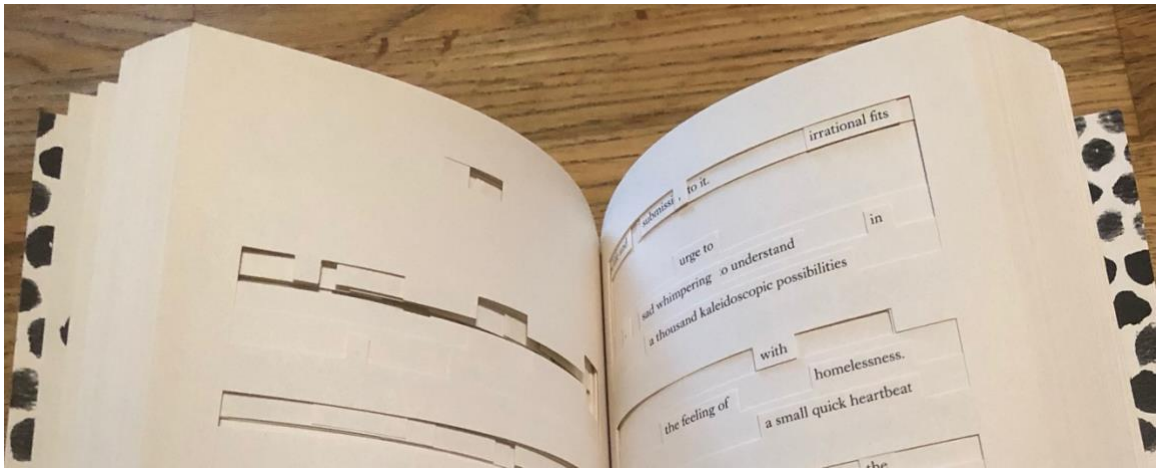


Fig. 1. *Tree of Codes* is the die-cut text of Bruno Schulz's *The Street of Crocodiles*. Reprinted with permission from Visual Editions. Jonathan Safran Foer, Tree of Codes, Visual Editions, 2010, p. 64.

Of course, I knew that it would be; I had ordered it knowing what it was ahead of time, but holding a book in my hands that was almost as much *not there* as it was *there* was still a little shocking. This was, no doubt, Foer's intent. The text of Jonathan Safran Foer's 2010 *Tree of Codes* is taken wholly from Bruno Schulz's 1934 *The Street of Crocodiles*, but Foer excised Schulz's work by die-cutting the pages into a new configuration, a new text. Much of Schulz's creative work, and any further work he may have produced, was lost during the Holocaust when Schulz was killed in the Drohobych ghetto by a Gestapo officer. As such, Foer, who sought to exhume a new work from another text, chose Schulz's book as representative of what had already been erased, lost, and forgotten. In this way, as readers navigate a text filled with holes and still try to make meaning from it, the absence weighs down their hands just as much as the presence of the physical book. With every turn of the page, Foer makes it impossible to forget the loss of Schulz and the corpus of his work.

The printed book may be considered far more commonplace than the latest smartphone or digital device with a sleek GUI, but this is exactly why modern readers can now rediscover books *as a medium* through hyperprint techniques. As Emerson notes, "The point at which a technology saturates a culture is the point at which writers and artists, whose craft is utterly informed by a sensitivity to their tools, begin to break apart that same technology to once again draw attention to the way in which it offers certain limits and possibilities to thought and expression" (50). Unexpected physical interactions are just one way that hyperprint texts make books visible as dynamic interfaces rather than as neutral carriers of content—and they strongly resist being experienced through e-readers.

Resist E-Reader Digitization

Because of the last three elements discussed, hyperprint texts resist digitization onto e-readers; here I am making no distinction between reading mainstream fiction on smartphones, tablets, or dedicated e-reader devices, and am solely concerned with the experience of reading a text's words stripped of design elements and formatting or even of reading a PDF of the text. Without their physical formats and designs, hyperprint texts lose much of their meaning and readers' experiences of them would be greatly flattened, both figuratively and literally.

To clarify this element, it actually may be useful to contrast traditional print texts that have interesting designs with truer hyperprint exemplars. Texts with innovative layouts, such as Mark Z. Danielewski's *Only Revolutions* and *House of Leaves*, Steve Tomasula's *VAS: An Opera in Flatland: A Novel*, and Tom Phillips's *A Humument*, were crucial in my conceptualization of hyperprint texts, however, I am excluding them from a more rigidly defined hyperprint exemplar category because each of these titles could be digitally reproduced onto an e-reader without significant loss of meaning, whereas hyperprint texts are integrally tied to their physical, material experience.

House of Leaves, for example, is a fascinating novel that plays with space and text design. The plot centers around a spatial impossibility within a house—it is larger on the inside than it is on the outside. A door suddenly appears in the house that opens into what may be an infinitely large space. The text itself claims to be based on the video documentary of that space, as told through notes of Zampanò (who seems to have gone insane while apparently conducting an academic study of the documentary and its events), as told through the main narrator—Johnny Truant—who discovered Zampanò's notes in a chest, as mitigated by unknown editors with copious footnotes. Clearly the text fulfils some of the elements of a hyperprint text—specifically

interrogating what a text actually is and utilizing hyper reading skills. That said, if an e-reader displayed PDF pages of *House of Leaves* it would not alter a reader's experience of the text in any crucial way, or rather in any way that would interfere with the overall aesthetic or symbolic goals of the text. Because it does not require any physical manipulation from the reader beyond the turning of folio pages and the reading experience highlights aesthetic concerns through the use of footnotes and indices, *House of Leaves* still operates within the basic paradigm of traditional print texts, and therefore it can also be easily experienced through an e-reader.

Hyperprint texts, on the other hand, resist this digital experience by insisting on their physical objecthood. Their cumbersome nature, the physical manipulation required to interact with them, and their imbrications of physical experience with aesthetic concerns all necessitate their printed medium. As such, asking whether a printed text can be easily digitized onto an e-reader may be a useful step in determining to what extent it may be considered a hyperprint exemplar.

I should also clarify that I am not denying that digital texts involve their own physicality; both print and digital texts have their own specific sensory experiences that would be impossible for the other to replicate. Carr discusses how a transfer of content from one medium to the next still constitutes a significant change in the text as we experience it:

> A page of online text viewed through a computer screen may seem similar to a page of printed text. But scrolling or clicking through a Web document involves physical actions and sensory stimuli very different from those involved in holding and turning the pages of a books or a magazine. Research has shown that the cognitive act of reading draws not just on our sense of sight but also on our sense of touch. It's tactile as well as visual. […] The shift from paper to screen doesn't just change the way we navigate a piece of

> writing. It also influences the degree of attention we devote to it and the depth of our immersion in it. (90)

In some cases, particularly when the goal for reading is more the retrieval of information than the immersion into literature, this change in sensory experience may not matter to the reader. Hyperprint texts, however, seek to *make* it matter to both their readers and their contents.

Explore Themes of Communication and Medium

One way hyperprint texts accomplish this is by making such issues—reading, writing, communication, medium—explicit concerns or themes within their narratives. Self-referentiality is, of course, a common literary trait, most notably with postmodern work, but for hyperprint such a strategy is less an aesthetic component and more a compelling impetus. In "Reveal Codes: Hypertext and Performance," Rita Raley argues that it is much the same for hypertexts: "It is not simply that hypertext is inherently about itself in a postmodern or metafictional mode, however, but that *it has constituted itself around the problem of its difference*; self-referentiality is not just another or exchangeable move in the game, but a necessary move" (emphasis added). This self-referentiality underscores the *raison d'être* of hypertexts by deliberately drawing the readers' attentions to their experiences with texts as they unfold. Indeed it is this interaction between the reader and the program that leads Riley to state that the difference between digital and analog literatures, at least in terms of hypertexts, is the moment of "performance": "We can say, then, that the *experience* of digital textuality is different from that of analog. In that it bears a certain similarity to the temporal and empirical structures of performance art, digital textuality is itself a 'happening.'" Perhaps another way to put it might be that hypertexts work through what they are by having the reader work them, and I would argue that what electronic literature, including such hypertexts, does for *digital* texts, hyperprint does for *printed* texts.

Hyperprint texts do this and get the reader to think about print literacy in the modern digital context by holding communication and medium as core themes. This is evident from some of the hyperprint texts already discussed: *Bats of the Republic* is composed primarily of various communication forms carried across time; *Tree of Codes* explores textual permanence; *Building Stories* is told across numerous printed mediums, each with different connotations for the reader; *S.* is a mystery about an author and his book that is unraveled in the margins of that same book. Perhaps the most striking example of self-referential themes, however, is *The Griffin & Sabine Trilogy* by Nick Bantock.

The Griffin & Sabine Trilogy records the correspondence of two fictional lovers through postcards and letters tucked away inside actual envelopes, recreating for the reader the nostalgia of receiving actual personal correspondence via mail. What is more, Griffin is a postcard artist and Sabine designs stamps. For many people today, our most frequent forms of communication are texts, emails, and posts on social media—immediate, brief, and largely impersonal. Griffin and Sabine, however, only ever communicate through their carefully designed and written print media. As their story unfolds, there are hints that Griffin is writing back and forth to himself, and that Sabine never existed; even if that is the case, however, it is still achingly poignant that Griffin reaches out for human communication by literally crafting it through his art.

A Brief Note on Historical Context and Parameters

While I do assert that hyperprint texts are innovative because they employ these six general strategies— fostering the use of digital reading habits; printed, often inconvenient, material medium; required, significant material manipulation; physical interactions that highlight the aesthetic or symbolic concerns; resistance of digitization onto e-readers; central thematic concerns of communication and medium—I am not arguing that hyperprint is entirely without

precedent or ancestor. Although I believe that hyperprint texts are coalescing at this particular point in time because readers and writers are able to experience these texts in fundamentally different ways since they are now imbued with digital reading habits, other mediums have previously engaged in similar projects, though specific to their own contexts and materials.

Artists' books in particular are a prime example of a material antecedent to hyperprint texts. In *The Century of Artists' Books,* Drucker makes an argument for artists' books as "the quintessential 20th-centruy artform," and she sketches out a "zone of activity" that artists' books engage in, rather than setting up an overly strict definition that would crumble under exceptions (1). She notes that at its core the artist's book "is a book created as an original work of art" and that it "integrates the formal means of its realization and production with its thematic or aesthetic issues" (2). Drucker then goes on to problematize even these seemingly simple criteria, but states that "ultimately an artist's book has to have some conviction, some soul, some reason **to be** and **to be a book** in order to succeed" (10-11; emphasis in original). I would argue, then, that hyperprint texts have roots of materiality in artists' books and share their interrogations of the print format, but then go a step further by evolving to reach readers with digital sensibilities, skills, and aesthetics. Ultimately, while it is important to note that hyperprint texts have roots in other experimental genres such as artists' books, typewriter poetry, and some indie-publishing works, I am distinguishing hyperprint texts from these predecessors because hyperprint texts interrogate how mainstream fiction print books can respond to the Digital Age—foregrounding material experiences that highlight the possibilities and limitations afforded by print and digital texts, respectively.

Additionally, because hyperprint texts emerge from the specific context of the analog/digital shift, the primary texts I focus on were published exclusively after 1990, and most

were published after 2000; however, I am not placing a date of publication restriction on hyperprint texts. There were certainly texts appearing before 1990 that explored some of the hyperprint elements outlined above, William Blake's illuminated books and Bob Brown's concept of "Readies" for example, but that from a reception perspective were not able to capitalize on and interrogate readers' digital sensibilities in the same way that current hyperprint texts are able to do. Thus, while hyperprint may be a useful critical lens through which to examine these earlier examples, and those similar, I choose to focus my research on texts published after 1990 simply because that is when they occur most clearly and coherently within mainstream fiction.

I am also focused specifically on mainstream fiction. This is important to note as there have been numerous experiments from independent publishers producing small runs of texts and many visual poets play with form and content in similarly interesting ways. I feel, however, that hyperprint's emergence specifically within mainstream fiction is significant in that it reflects a similar shift in mainstream readers and the current modes of cultural production. Also, as Sven Birkerts discusses in his essay "Reading in a Digital Age: Notes on Why the Novel and the Internet Are Opposities, and Why the Latter Both Undermines the Former and Makes It More Necessary," fictional novels seem to be losing ground in the battle for digital readers' attention, and if that is indeed the case, we will need novels more than ever. After reading Carr's work, Birkerts notes that he is "fixated on the idea that contemplative thought is endangered" and he comes to the conclusion that "the Internet and the novel are opposites" in terms of the type of thinking that they trigger within us (32). Birkerts worries that the type of thinking we do online, "transitive thought, [which treats] information as a means," weakens readers' abilities to engage in "the contemplative thought-world—where reflection is itself the end, a means of testing and

refining the relation to the world, a way of pursuing connection toward more affectively satisfying kinds of illumination, or *insight*…" (32). He goes on to suggests that the fictional novel is undervalued as a key tool for engaging in this type of thinking:

> But we have been ignoring the deeper nature of fiction. That it is inwardly experiential, intransitive, a mode of contemplation, its purpose to create for the author and reader a terrain, an arena of liberation, where mind can be different, where mind and imagination can freely combine, where memory and sensation can be deployed, intensified through the specific constraints that any imagined situation allows. (33)

Thus, by focusing specifically on fictional narratives, it is my hope that hyperprint texts will not only compete for digital readers' attentions but also help bring these greater discussions about reading's ramifications to the surface.

Towards that end, Drucker also provides a useful model for discussing a nebulous literary form in order to foster critical reflection. Drucker describes her project by noting that "If all the elements or activities which contribute to artists' books as a field are described what emerges is a space made by their intersection, one which is a zone of activity, rather than a category into which to place work by evaluating whether they meet or fail to meet certain rigid criteria" (2). I essentially seek to do the same thing with hyperprint, but in reverse. Rather than clarifying what it means to be part of an identified literary form by looking at what is being done under that banner, I am identifying a group of texts that seem to coalesce around similar creative questions, activities, and strategic elements and then giving that cluster of texts a name, all so that it can serve as a critical lens to better understand the current moment in the print/digital relationship. "Hyperprint" as a literary term is intended to be a tool for inquiry and exploration rather than a boundary to demark or restrict. It may be more useful to consider how hyperprint elements can

add to our understanding of our current culture than to ask whether or not a text should be considered a true hyperprint text.

Critical Approach: Comparative Media Studies and Media-Specific Analysis

In order to establish hyperprint as a literary project within mainstream print fiction, I will be participating in Comparative Media Studies (CMS) and utilizing media-specific analysis to foreground how materiality affects texts and readers' experiences both within and across mediums. In both *How We Think: Digital Media and Contemporary Technogenesis* and *Writing Machines*, N. Katherine Hayles explores how CMS can be used to reflect on materiality and medium "so that print is no longer the default mode into which one falls without much thought about alternatives but rather an informed choice made with full awareness of possibilities and limitations" (*How We Think* 9). Obviously, however, CMS can also be used to think about the digitization of print texts and digitally native texts in order to better understand how their media, or remediation, affects readers' experiences of them. In fact, Hayles goes on to argue convincingly for why adopting a Comparative Media Studies approach is particularly useful in helping to illuminate the often murky boundary between print and digital literatures:

> As the vibrant new field of electronic textuality flexes it muscle, it is becoming overwhelming clear that we can no longer afford to ignore the material basis of literary production. Materiality of the artifact can no longer be positioned as a subspecialty within literary studies; it must be central, for without it we have little hope of forging a robust and nuanced account of how literature is changing under the impact of information technologies. (*Writing Machines* 19)

This is precisely the approach I will be using to examine texts that I identify as hyperprint as they are concerned with both their own materiality and how that materiality has different effects than

either traditional print or digital texts alone. Furthermore, by engaging in media-specific analysis (as Hayles defines it "a mode of critical interrogation alert to the ways in which the medium constructs the work and the work constructs the medium"), I will highlight how hyperprint texts are fundamentally different from their more traditional print and digital literature counterparts (*Writing Machines* 6).

That said, rather than hyperprint texts emerging as an entirely new medium, they serve as a remediation of both print and digital literatures. In *Remediation: Understanding New Media*, Jay David Bolter and Richard Grusin use the concept of remediation to explore how content is utilized and shifted across different media, often in reciprocal loops that operate outside the cultural narrative of one-directional technological progress. Indeed, an awareness of remediation reveals the fact media rarely die but are instead constantly informed by and informing other media. Bolter and Grusin suggest that "Our culture wants both to multiply its media and to erase all traces of mediation: ideally, it wants to erase its media in the very act of multiplying them"; Bolter and Grusin label these seemingly conflicting desires as those of "immediacy" and "hypermediacy" (5). The authors argue that while "immediacy dictates that the medium itself should disappear and leave us in the presence of the thing represented…," hypermediacy draws attention to the method of representation and "makes us aware of the medium or media and (in sometimes subtle and sometimes obvious ways) reminds us of our desire for immediacy" (6, 34). Hyperprint texts fully embrace hypermediacy and even within their printed medium carry with them the remediated traces of digital reading in order to crystallize this particular moment in the shift from the Age of Print to the Digital Era. Bolter and Grusin note this use of hypermediacy to capture complex experience:

> Where immediacy suggests a unified visual space, contemporary hypermediacy offers a heterogeneous space, in which representation is conceived of not as a window on to the world, but rather as 'windowed' itself—with windows that open on to other representations or other media. The logic of hypermediacy multiplies the signs of mediation and in this way tries to reproduce the rich sensorium of human experience. (34)

Parallels can be drawn between Bernstein's absorptive techniques and Bolter and Grusin's immediacy, as well as hypermediacy and antiabsorptive techniques used towards absorptive ends, though Bolter and Grusin seem to be more engaged with media specific analysis than Bernstein. With such critical approaches in place, taken from both traditional literary practices and new media perspectives, hyperprint can become visible from the fissures and overlaps between print and digital media.

Chapter Outlines

I feel that it is important to note that in seeking to establish hyperprint as a critical lens, I am not privileging print over digital nor digital over print; additionally, I think it is misguided to suggest that there is a strict division between the two media—the digital is not replacing print wholesale, but rather there is a constant remediation taking place. Technology is not a panacea, just as traditional print methodologies were not the pinnacle of our cultural production. What is clear, however, is that modern readers have a lot of thoughts, questions, and feelings about this perceived shift from the so-called Print Era to the Digital Era. By discussing numerous texts in the subsequent chapters through specific themes and concerns, I hope to illustrate how hyperprint texts can help to unearth and explore some of those anxieties.

Chapter Two, "Navigating Space and Conceptualizing Place"

In the first thematic chapter, I focus on issues of place and use Chris Ware's *Building Stories* and Visual Editions' *Where You Are* as my primary texts. Both of these texts deal with place as story, *Building Stories* through a graphic novel format that spans thirteen different yet interconnected texts contained in one large box, and *Where You Are* through sixteen separate story-maps of both real and fictional worlds.

I feel that place is an excellent theme to start with because physical maps have been all but replaced by Google Maps and GPS enabled smart-phones, yet while very few of us are ever geographically lost anymore, our relationships to our surroundings have only grown more complicated. Exploring hyperprint texts that take up the conceptions of space and place as central concerns will help to tease out how technology is impacting our interactions with our surroundings and how hyperprint can help us reflect on these significant shifts.

Chapter Three, "Print as Social Media"

For the second thematic chapter, I focus on issues of people and correspondence and use J. J. Abrams and Doug Dorst's *S.* and Nick Bantock's *The Griffin & Sabine Trilogy* as my primary texts to explore how print-based books and ephemera can utilize their physical objecthood to build personal connections that are significantly different, in both positive and negative ways, from electronic communications.

S., by Abrams and Dorst, explores, in part, the personal, archival aspect of books as objects that are passed down from one person to the next, often with marginalia and personal items pressed between pages, through a fictional correspondence between two characters within the pages of a library book. Simultaneously, these characters are researching the true identity of an author and what connections there are between him and his fictional character. Ultimately, *S.*

displays the numerous social and cultural communication processes between authors, readers, texts, and society.

In a similar fashion, *The Griffin & Sabine Trilogy* records the correspondence of two fictional lovers through postcards and letters tucked away inside actual envelopes, recreating for the reader the nostalgia of receiving actual personal correspondence via mail but also highlighting the temporal gaps and complications of such communications, contrasted with the seeming instantaneousness of the Digital Age.

Chapter Four, "Saving: Constructing History"

For the final thematic chapter, I focus on issues of preservation and the use of physical documents in our processes of constructing and recording history by using Jonathan Safran Foer's *Tree of Codes* and Zachary Thomas Dodson's *Bats of the Republic* as my primary texts.

The concerns over preservation and loss are growing cultural questions within the Digital Age. On the one hand, digitization allows us to save traditional print texts that are in danger of being lost, explore manuscripts that are otherwise inaccessible to the average reader, and collaborate quickly with others, no matter their physical location. On the other hand, it feels as though the more our culture shifts to online or digital interactions the less tangible our communications and texts become—and this sense of loss is not insignificant. Hyperprint texts explore this complexity and give voice to both the challenges and opportunities presented to modern readers.

Jonathan Safran Foer's die-cut erasure book *Tree of Codes* uses Bruno Schulz's *The Street of Crocodiles* as its base and literally cuts away words to create a new text. Significant portions of Schulz's work were lost during the Holocaust and Foer's project is both an exhumation and revisioning of one of his first published piece.

Zachary Thomas Dodson's *Bats of the Republic* blurs the past and future in a post-apocalyptic world that has taken print archiving to the extreme; conversations are recorded and stored, and all documents are overseen and kept in "threads" through generations. This novel examines some of the fears held about digital records of social interactions but transfers them to the print medium to analyze what core issues are at stake.

Afterword

Finally, in the afterword I revisit what I see as the central project of hyperprint texts and how they can help clarify our positions within the current media ecology. Establishing the critical lens of hyperprint will open up new avenues for criticism and creativity as we continue to shift further into digital realms and allow us to reflect on how our reading habits, cognitive processes, and cultural connections (including those to place, people, and the past) are all shifting as well. It is also important to note some of hyperprint's limitations as well as some of the potential gaps in my framing of it.

Additional Thoughts

As readers move further and further into the digital frontier, they are also bound to look back at what is being left behind—hyperprint is the embodiment of that reflection. I will argue that these print books with non-traditional physical formats have an opportunity to highlight the strengths and weakness of both print and digital literature. Furthermore, I argue that highlighting these differences in very concrete ways will be increasingly important, not only for the Humanities but also for the general public, when we consider what is gained and sacrificed between the two mediums.

By identifying and exploring hyperprint texts, I hope to provide a new critical lens with which to examine literature on the boundary between the print and digital worlds. I feel that

doing so will provide a useful perspective for analyzing changes in literature, which reflect changes in readers and cultures, as we continue to move into a digital world yet simultaneously cling to physical materiality. This is important to the general field of Humanities as Digital Humanities continues to grow within, and sometimes beyond, departments that have digital natives as students and late adopters, or even self-proclaimed luddites, as professors. Hyperprint can provide a bridge between these two perspectives, highlighting core characteristics of either medium but also providing new, hybrid avenues for creation, reflection, and criticism—regardless of whether that work is done on a printed page or a digital screen. And so, rather than approaching the Digital Age with pessimism or a nihilistic pronouncement that "Books are dead!" hyperprint looks forward with the same perspective as Hayles:

> Many critics see the electronic age as heralding the end of books. I think this view is mistaken. Print books are far too hardy, reliable, long-lived, and versatile to be rendered obsolete by digital media. Rather, digital media have given us an opportunity we have not had for the last several hundred years: the chance to see print with new eyes, and with it, the possibility of understanding how deeply literary theory and criticism have been imbued with assumptions specific to print. As we work toward critical practices and theories appropriate for electronic literature, we may come to renewed appreciation for the specificity of print. In the tangled web of medial ecology, change anywhere in the system stimulate changes everywhere in the system. Books are not going the way of the dinosaur but the way of the human, changing as we change, mutating and evolving in ways that will continue…to teach and delight. (*Writing Machines* 33)

Perhaps, then, hyperprint stands as a step in the evolution of literature that also remembers its past —a mutated advancement flaunting its vestigial tail.

CHAPTER TWO

NAVIGATING SPACE AND CONCEPTUALIZING PLACE

"Mapping is a process of understanding: in order to be able to act fully and decisively in the world, we must render it legible, because only by reading the world are we capable of writing into it."

James Bridle

I am old enough to have navigated my first solo road trip by relying on a printed map retrieved from the depths of my glove box; the map had been highlighted, annotated, and refolded so many times that the creases had worn thin, and it was illegible in spots. I got lost occasionally, but each time that happened I gained the knowledge of one more route to rule out, and I always found my way eventually. Later I began using my computer to pull up and print out MapQuest directions for specific destinations. I did not get lost as often, but when I did I had a harder time getting back on track. Today I use GPS, either on my dedicated navigation device or through an app on my smartphone; I listen to the turn-by-turn directions given to me by the device's computer voice, which is increasingly realistic, and I always get to where I want to go, usually with very little thinking involved on my part.

My experience seems to reflect a rather typical progression for most drivers outside of the digital native demographic, and according to the Pew Research Center more people are turning to their GPS-enabled smartphones for navigation purposes. In a 2015 survey the center found that "67% of smartphone owners use their phone at least occasionally to get turn-by-turn navigation while driving, with 31% doing so frequently…" (Anderson and Smith). This trend is even more striking for younger Americans in that "[s]ome 80% of 18- to 29-year-old smartphone owners use their phone for real-time directions while at the wheel at least occasionally, and just

7% indicate that they never do so" (Anderson and Smith). When the activity is broadened from accessing turn-by-turn directions to utilizing "location based information" the number jumps to "[n]ine-in-ten smartphone owners…up from 74% in 2013" (Anderson). Perhaps most telling, however, is that accessing "location-based information is the one activity measured that is common across all age groups" (Anderson). This suggests that regardless of whether one is a digital native or digital immigrant, people are increasingly navigating through space by using electronic devices and the Global Positioning System (GPS). We are abandoning our creased and crumpled printed maps and taking up sleek, continuously updated navigation apps—but what are the larger effects of this shift in how we move through our environments? Does this shift away from the use of material objects to digital representations impact our understandings of location, and if so, how can these ambiguities be brought to the surface by utilizing a hyperprint perspective?

To clarify how navigation through our environment can impact how we conceptualize that location, it may be useful to discuss the distinction between "space" and "place." In his influential *Space and Place: The Perspective of Experience*, geographer Yi-Fu Tuan argues, "What begins as undifferentiated space becomes place as we get to know it better and endow it with value" (6). In other words, space has potential, but it is only what we move *through* in order to *arrive* somewhere else, until we gain an understanding of it or an expectation for it, at which point it then becomes a *place* in its own right. Tuan further notes that both terms rely on the other to help define their boundaries in that "[f]rom the security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa. Furthermore, if we think of space as that which allows movement, then place is pause; each pause in movement makes it possible for location to be transformed into place" (6). Steve Harrison and Paul Dourish, authors of "Re-

place-ing Space: The Roles of Place and Space in Collaborative Systems," succinctly contrast the two terms by stating that "Space is the opportunity; place is the understood reality" (67). Harrison and Dourish go on to note, "Physically, a place is a space which is invested with understandings of behavioral appropriateness, cultural expectations, and so forth….Furthermore, 'places' are spaces that are valued. The distinction is rather like that between a 'house' and a 'home'; a house might keep out the wind and the rain, but a home is where we live" (69). Thus "space" is undefined and in some ways it could be viewed simply as the gaps, or negative space, between the "places" in our lives, which are specific and known. Now that we can navigate more efficiently via GPS-enabled devices, our movement through space is less encumbered, and we can locate ourselves more easily—perhaps too easily to facilitate the shift from *space* to *place*. After all, the process of getting lost and having to reorient ourselves within our surroundings helps to gain an understanding of location and context, which actually aids in the formation of place. In other words, the better we are at navigating *space* the less we may know about *place.*

In their 2008 study "In-Car GPS Navigation: Engagement with and Disengagement from the Environment," Gilly Leshed et al. "carried out observations with ten in-car GPS navigation device users" as they made their way to specific locations. "In particular," Leshed et al. noted, "we want to explore questions of how the practice of driving and navigating with this technology changes the ways that people feel, think about, and engage with the physical and social spaces they traverse through and places they encounter" (1675). Despite the small study size, the authors observed some interesting trends:

> We found evidence for loss of environmental engagement: with the GPS you no longer need to know where you are and where your destination is, attend to physical landmarks

> along the way, or get assistance from other people in the car and outside of it. The reduced need to feel oriented, keep track of locations, and maintain social interactions regarding navigation issues inhibit the process of experiencing the physical world by navigation through it. As such, the process of interpreting the world, adding value to it, and turning space into place is reduced to a certain extent and drivers remain detached from the indifferent environments that surround them. (1680)

Thus, while GPS is an incredibly useful tool, removing the challenges of navigation shifts how we conceptualize our environment, keeping "space" undifferentiated between our specified destinations. The study goes on to suggest, however, that navigating via GPS also "has the opportunity to enrich engagement with the physical environment," but this can only be done by building an awareness of the issue and shapeing design features and functions accordingly (Leshed et al. 1680). In order to accomplish this, John Wright's notion of "Geosophy" may prove useful.

Wright's "Terrae Incognitae: The Place of the Imagination in Geography" defines the field of geosophy as "the study of geographical knowledge from any or all points of view" (12). To clarify, Wright uses the analogy that geosophy is to "geography what historiography is to history," and therefore our subjective perceptions and understandings of our environments, accurate or inaccurate, are of more *geosophical* interest than "scientific geographical knowledge or of geographical knowledge as otherwise systematized by geographers" (12). The Global Positioning System is an amazing tool for providing the latter, but geosophy is needed to understand the former and to "reckon with human desires, motives, and prejudices" as we increasingly rely on GPS to locate ourselves (12). In other words, geosophy helps us parse out

what we *feel* and *understand to be true* about our environments—geography lets us navigate space, but geosophy reveals the intricacies of place.

Wright also defined a subfield he called "aesthetic geosophy," or "the study of the expression of geographical conceptions *in literature and in art*" (15; emphasis added). This subfield concerns itself with how we express our understandings of place within the creative realm, which is increasingly important to consider during such a shift in navigational practices. While traditional print and digital texts can certainly reveal attitudes about and conceptions of place, I propose that hyperprint texts are uniquely poised to contribute to aesthetic geosophy through their exploration of medium. Hyperprint exemplars like Chris Ware's *Building Stories* and the collection *Where You Are* from Visual Editions explore what it means to conceptualize place and navigate space during this shift between print and digital cultures, and they do so by, respectively, reflecting on how we use media and memories to understand our environments and how physical, printed maps and GPS provide different opportunities for navigation and place building. In other words, hyperprint texts focused on place engage in aesthetic geosophy through both content and form.

Building Stories as a Hyperprint Exemplar

In her fascinating article "The Secrets of the Wave Pilots," Kim Tingley followed "potentially the world's last-ever apprentice in the ancient art of wave-piloting," who navigate just by examining and feeling the current and wave patterns of the water, with a group of scientists to try to understand how such complicated navigational calculations are possible without the aid of modern technology (27). The group was particularly interested in the voyage due to the "context of growing concerns about the neurological effects of navigation-by-smartphone" and hoped that it "would yield hints about how our orienteering skills influence our

sense of place, our sense of home, even our sense of self" (27). Astoundingly, even in a rough storm the apprentice *ri-meto,* "a person of the sea in Marshallese" with traditional wave-piloting training, was able to navigate through the dangerous reefs in the Marshall Islands to arrive safely at their destination (28). The *ri-meto* accomplished this by riding a specific wave called the *di lep*, "or backbone, the foundation of wave piloting, which (in *ri-meto* lore) ran between atolls like a road," a wave which was previously unidentified through scientific means (34). As a result of the voyage, the team of scientists were able to compare the wave pilot's path to a map of sea conditions, and they realized that the *di lep* corresponded to a path "perpendicular to a dominant eastern swell"; the *ri-meto* was able to stay on this path, even in the severe weather conditions, by feeling the rocking of the boat and keeping it symmetrical on both sides of the vessel (41).

Understandably, the Marshallese community celebrated the achievement and hoped that it would spur others to learn not only the traditional wave-piloting skills but regain other cultural knowledge and memories that are slowly being lost in the advance of technology. Tingley also noted that memory and navigation are neurologically linked:

> The cognitive map is now understood to have its own physical location, as a collection of electrochemical firings in the brain. In 1971, John O'Keefe, a neuroscientist at University College London, and a colleague reported that it had been pinpointed in the limbic system, an evolutionarily primitive region largely responsible for our emotional lives — specifically, within the hippocampus, an area where memories form. (31)

In this way, our sense of place and location is inextricably connected to emotions and memories; we essentially create place from space by feeling and remembering connections to that location. This further clarifies how GPS-enabled devices can help us navigate to and from locations, but

their basic functions do nothing to reflect the larger meaning-making processes involved in locating ourselves.

Perhaps it is fitting, then, to begin with a hyperprint text that builds place out of memories and emotional attachments, but does not directly engage with the use of GPS. After all, we rarely use navigational tools to make sense of our immediate communities and personal places, but the shift from print to digital still seeps into perhaps unexpected areas of our lives.

Building Stories by Chris Ware is a graphic novel that contains fourteen separate texts of various formats within a large box. There is no prescribed sequence for readers to adhere to when progressing through the work and choosing which piece to read next, and within each piece the timeline jumps back and forth, fluctuating with the characters' memories. Read as a whole, *Building Stories* relies on readers to assemble the narrative and plot on their own from the fourteen fragmented but interconnected pieces. The back of the box provides the following description:

> With the increasing electronic incorporeality of existence, sometimes it's reassuring — perhaps even necessary—to have something to hold on to. Thus within this colorful keepsake box the purchaser will find a fully-apportioned variety of reading material ready to address virtually any imaginable artistic or poetic taste, from the corrosive sarcasm of youth to the sickening earnestness of maturity—while discovering a protagonist wondering if she'll ever move from the rented close quarters of lonely young adulthood to the mortgaged expanse of love and marriage.

The aptly titled work, then, is about more than the lives of the characters who share an address, or *stories of the building*, as it continuously circles around the thematic question of how people construct the narratives for their lives—how they *build stories*.

Thus, the title works on numerous levels. Beyond drawing attention to how the characters within the story make sense of their lives, the title also highlights how the reader assembles those narratives, both metaphorically and physically. For the former, this complicated text calls on readers to recall and build connections between the different characters and events within the work, across numerous timelines, to construct meaning and story, a process similar to any non-linear text regardless of whether it is print or digital. For the later, however, readers have to *physically* manipulate the separate pieces within the box, providing a parallel material experience between the content and the form of *Building Stories*. This, in turn, may prompt readers to think about their own experiences with pieces such as game boards, comics, or Little Golden Books, and consider how their own personal narratives and memories were shaped or impacted by such media—or how *stories* helped to *build* or construct their own senses of space and self.

In this light, it is also interesting to note that the first sentence of Ware's back-of-box description specifically frames *Building Stories* as a material response to the current culture of technology, which is the exact stance of a hyperprint text. He suggests that the printed objects within the box provide something tangible to hold in the face of the "increasing electronic incorporeality of existence." As we continue to shift from a print culture into a digital culture, the role of more traditional, material artefacts in our lives is thrown into high relief and ready for fresh examination. Hyperprint provides a specific lens for that analysis, and *Building Stories* specifically helps to tease out how such printed texts reflect the connections between memory and place.

The narratives within *Building Stories* focus largely on a single brownstone building in Chicago and the people who live there. The elderly landlady lives on the first floor, as she has all her life, and Branford the bee frequents the basement window and front stoop. The second floor

is occupied by a young couple who are not quite as in love as they used to be, and the top floor is inhabited by the main protagonist—an unnamed woman who has finished art school but works in a flower shop around the corner. She has not had a particularly happy life, and she seems to live largely in her memories, trying to bring meaning to her life, or shape a narrative about herself. Some of the pieces in *Building Stories* also focus on earlier episodes in her life—growing up in her childhood home, adjusting to the loss of her one leg in a boating accident, being at art school, having an abortion—and later episodes in her life—as a wife and mother in the suburbs. Because the text has so many separate yet interconnected pieces, before delving into how *Building Stories* stands as a hyperprint example it may be useful to first provide a brief list and description of each item in the box. These works within *Building Stories* are listed in no particular order, but each notation includes a descriptive opening image or quote to serve as a title of sorts, the dimensions, physical format, and a very brief summary:

- "The Daily Bee" newspaper is a single sheet of large paper folded in half to form four 12.5 x 18.5-inch pages and is folded again, horizontally, further imitating a broadsheet. In content, however, "The Daily Bee" resembles a graphic novel more than a newspaper. The headline on the front page, "Humorous Events as the Males Emerge—Our Colony in Pictures Revealed," provides an initial justification for an atypical newspaper layout, but the content focuses specifically on how the bees Betty and Branford, both social outcasts in their hive, meet and get married.
- "Branford the Best Bee in the World" is a 5.5 x 7.25-inch comic book with thirty-two pages that follows the adventures of the titular character and is organized into five chapters. The booklet focusses on Branford's married life, work, existential crises, death, and reincarnation as "Branford the Benevolent Bacterium."

- The exterior of the apartment building is featured as the first panel of the 8.25 x 11-inch, sixteen-page comic book, which focuses primarily on the second-floor couple and their crumbling relationship. There is also an interesting 150-year jump into the future where passersby can "read" the memories of a place, including the moment that the second-floor woman decided to show interest in a different man.
- "Disconnect" stands as a title on the top of the 9 x 12-inch booklet with twenty pages, broken into three sections: "Disconnect," "Repetition," and "Browsing." This piece focusses on the day-to-day stresses and concerns of married life from the protagonist's perspective: the balance of domestic duties, work-life balance, finances, worries about the future, etc. It is revealed that the protagonist's father had an affair that her mother did not know about until after he passed; the protagonist thinks her mother shares this with her because she fears her daughter's husband is also having an affair. The protagonist also discusses the pressures of raising a child of her own.
- A red phone is the opening image of the sixteen page 8.25 x 11-inch booklet. This is told from the perspective of the elderly woman who lives on the first floor and presumably inherited the apartment building. She thinks about her childhood. She loved her father but had a complicated relationship with her mother, particularly since she had to care for her through a prolonged illness while also taking a job to help pay down the family's debts. She thinks back on past relationships or would-be relationships, but also slips back and forth through different times in her life, which seems to indicate, at worst, possible dementia, or at best, simply wandering recollections.
- "Her laugh is like a flock of tiny birds," is the first text on the 28 x 3.5-inch strip of paper that is accordion-folded into four seven-inch sections and printed on both front and back.

This piece features the protagonist's daughter, Lucy, as a young child. She seems introspective, and her mother loves and cares for her, but she also seems to worry about Lucy playing alone so much—or being too much like the protagonist herself.

- The snowy front stoop is the opening image of the other 28 x 3.5-inch strip of paper that is accordion-folded into four seven-inch sections and printed on both front and back. This piece focusses on one moment—the protagonist walking away from the apartment building through the snow and expressing her depression. She does not want to return and states that she will just keep walking until she freezes, but she returns home just the same. The ambiguity of which side is the beginning, though, creates a coming and going that emphasizes the protagonist's feelings of being trapped.
- The protagonist shares her bed with her cat in the opening image of the 3 x 9.75-inch booklet with fifty-two pages. There is no text in the piece, but it essentially chronicles the protagonist's life by showing the numerous beds in which she's slept, including her bed in the apartment building, the hospital bed on which she gave birth to her daughter, and her childhood bed. The very last frame is empty, preceded by the silhouette of a man walking out of the bedroom door, which underscores the loneliness or melancholy that pervades the rest of the piece.
- "As a kid" is the first text to appear in the 13 x 18-inch single sheet of paper that is folded in half and printed on both sides. This piece explores how the protagonist saw herself as a woman growing up and touches on her first college boyfriend. The back details reconnecting with a boyfriend from high school whom she broke up with on prom night.
- "It all happened so fast," is featured on the large sheet of paper folded in half to form four 16 x 22-inch pages; the interior unfolds into a single spread. This piece focusses on the death of

the protagonist's father and how her mother handled both it and the birth of her granddaughter. It also discusses the aftermath of the protagonist losing her leg and readjusting at school as a child.

- "god…" is the only text on the front page of the 16 x 22-inch broadsheet with twenty pages. The events within this piece occur after the protagonist's time in the apartment building and focus largely on moving to the suburbs, the death and funeral of her friend, and the simultaneous death of the protagonist's cat, Miss Kitty.
- The Little Golden Book is mimicked in the 8.5 x 9.5-inch hard back book with thirty-two pages, which illustrates the hour-by-hour events within the apartment building on September 23, 2000. The first three pages are told from the building's perspective, but from there each hour shifts to a different tenant. This also seems to be the first time that the protagonist went out with Phil, whom she eventually marries. The hourly episodes conclude at 11:00pm, and the next scene is from five years later, when the protagonist visits the building as it is being demolished. The back cover shows the building being torn down in the center, surrounded by panels of the previous tenants; the owner and the married couple have their backs turned, and only the protagonist is facing forward, as if she is the only witness to the building's end.
- "I just want to fall asleep" is the central text in the opening spread of the 9 x 12.25-inch hardback book with fifty-two pages. This piece seems to take place just after the protagonist moved into the apartment building and explores her life between graduating from art school and living there, and includes her first college boyfriend (Lance), an abortion, working as a house sitter and nanny for a family, and taking writing classes. There are also sections told from the building's perspective interspersed near the beginning, middle, and end.

- The game board piece is an accordion-folded board that stretches out to the total dimensions of 42 x 16 inches, but its content is broken into four distinct 10.5 x 16-inch panels. The exterior that is shown when it is folded is navy and features a different floor of the apartment building outlined in white on each panel, running vertically. Some of the inhabitants' belongings are visible, but the outlines are empty of the people themselves. The interior side of the panels runs horizontally and features four separate illustrations of the front exterior of the building; each panel is set during a different season (but not in chronological order) and typically focusses on the residents of a different floor. The first panel takes place in winter and shows the progression of the protagonist listing a personal ad in the paper and being stood up. The second panel seems to happen in summer and features the second-floor couple having a fight. The third panel is set in fall and focuses on the elderly landlady, who lives on the first floor, as she remembers a would-be suitor and her life ultimately spent alone. The final panel takes place in spring, and features Branford the bee, but it also connects each of the tenants as their actions directly or indirectly impact the building's smallest resident.

Even with all of these numerous pieces, *Building Stories* connects most immediately to the context of graphic novels and comics, so I would be remiss if I did not at least briefly mention approaches to it through that critical lens before analyzing it as a hyperprint exemplar.

In this regard, Scott McCloud's *Understanding Comics: The Invisible Art* proves incredibly insightful as it engages in its own metamedial project as a book-length, non-fiction comic that discusses the form of graphic novels and comics. McCloud provides a useful discussion of comics' history, a vocabulary for analyzing its features and uses, and a formal definition of comics as "Juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer" (9). *Understanding*

Comics also explores the question of why comics have traditionally been seen as a more popular, less refined or respected form than either fine-art or literature, even though comics rely on the interplay between both visuals and text. Of particular interest to my project here is McCloud's discussion of "closure" and how it is used to engage readers: "Comics panels fracture both time and space offering a jagged, staccato rhythm of unconnected moments. But closure allows us to connect these moments and mentally construct a continuous, unified reality…If visual iconography is the vocabulary of comics, closure is its grammar" (67; panels 2-3). Closure is the mental process that allows readers to connect separate panels into a continuous story or progression of images, rather than as separate distinct moments. By drawing on this, "the audience is a willing and conscious collaborator and closure is the agent of change, time and motion"; in other words, readers are required to draw on particular reading strategies to enable the text (65). Additionally, closure could be seen as a particular form of juxtaposition, as discussed below. McCloud provides a very useful framework for analyzing *Building Stories* specifically as a comic, but for my project here, I am more interested in looking at it in terms of the wider media ecology currently at play, and I will analyze it through the six key hyperprint elements.

Foster Hyper Reading

Building Stories relies on the three previously discussed reading strategies adopted and popularized by digital reading: filming, fragmenting, and juxtaposing. As a brief reminder, James Sosnoski defines filming as using "graphical elements" to make meaning from a text more than "verbal elements," and he defines fragmenting as "breaking texts into notes rather than regarding them as essays, articles, or books" (161, 163). N. Katherine Hayles adds "juxtaposing" to Sosnoski's list of digital reading strategies to describe instances where "several open windows

allow one to read across several texts" (*How* 61). "In other words," Sosnoski notes, "many hyper-readers may be more comfortable selecting textual details," especially graphical elements, "and reassembling them in their own virtual frameworks than using the frameworks imposed upon them" (171). Navigating *Building Stories* encourages readers to draw on each of these reading strategies, often simultaneously.

As a graphic novel, *Building Stories* relies heavily on readers' abilities to draw meaning from images and to pick up on subtle visual cues in order to make important connections across multiple—sometimes wordless—pieces. This can be seen even by following the developments with the text's smallest character, Branford the bee. The game board piece highlights how Branford fits into the social ecosystem of the apartment building. The first panel takes place in winter and shows the protagonist from the top floor listing a personal ad in the paper, preparing for her date, and then being stood-up; she goes to bed alone as it snows outside. The second panel happens in summer and features the second-floor couple having a fight about money. The woman storms out and goes to the flower shop where the protagonist works, while the man breaks a framed photo, drinks, and imagines having sex with the protagonist. The third panel is set during fall and focuses on the elderly owner, who lives on the first floor. She thinks about when she was supposed to go on a date, but she had to stay home to take care of her mother instead.

It is the final panel, however, that forces readers to draw on their visual literacy and juxtaposing skills in really interesting ways. The final panel takes place in spring, "on the first warm day of our New Year," and features Branford the bee. There are two other pieces within *Building Stories* that heavily feature Branford, "The Daily Bee" newspaper and the booklet "Branford the Best Bee in the World." It is important to note that depending on the order in

which readers choose to progress through these texts, they may have had no previous introduction to Branford or they may already know all about his life—and death.

The top of the panel shows the protagonist letting Branford out of the basement, and a calendar hanging up says "Last year." This is also the final event in "The Daily Bee" newspaper and the opening episode for "Branford the Best Bee in the World." Even if the reader encountered either of these two pieces before the game board, it would still be a revelation that the protagonist was his rescuer, as she was previously just described as a "pink land whale"; it would also clarify that Branford was trapped in the apartment building's basement, rather than that of a completely different building. Once Branford escapes, the board shows that he licks the red and white flowers at the base of the window, and subsequently starts a family with his wife, Betty. This courtship was detailed in "The Daily Bee" newspaper, where it is also revealed that Branford collects pollen, a job typically done by the female worker bees, in part because Betty is unwell; again, however, depending on the order in which the pieces are encountered, the reader may not know this.

From there, the panel seems to follow each of the other tenants in turn. The left edge of the panel shows that "Long ago" the owner planted red flowers to the left of the basement window, perhaps the same type of flowers that her date brought her and left on her stoop in the third panel. The right side of the panel shows the second-floor woman hanging a framed photo of the vacation the couple took together two years ago; it is the same photo that the man smashes in the second panel set in summer. Below this on the right edge of the panel, the man is shaking out the same blanket they were laying on in their vacation photo. As he shakes it out, seeds from the white flowers that had been on their beach blanket in the photo fall to the right side of the

basement window. Finally, the protagonist picks a pink flower that grows by the middle of the window.

The bottom of the panel brings these seemingly disconnected elements and events together and makes it clear that the entire panel, if not the entire piece, is actually about Branford. A simple illustration in the bottom section of the panel reveals that Branford cross pollinated the red flowers that the owner planted with the white flowers from the couple's vacation, which resulted in the pink flower that the protagonist picked just before Branford could lick it. This is the same day that the couple sits on the stoop, and the man spills his soda because he is imagining having sex with the protagonist. This is the sucrose puddle that draws Branford's attention, as detailed in "Branford the Best Bee in the World," and leads the man to stomp on him. The final image of the panel, and of the whole game board piece, is of Betty and the two children, Bradley and Brandy, staring at a photo of Branford and wondering what happened to him.

In order to really make meaning out of this piece, the reader has to use each of the digital reading strategies discussed. Without filming, the chain of events that led to the cross pollinated pink flower that resulted in Branford's death and its subsequent impact on his family, which will now likely die, would be completely lost. There is no text to explain all of these connections for readers; they instead must pick up on the, sometimes subtle, visual cues to make their own meaning. What is more, readers must juxtapose the various pieces within the fragmented *Building Stories* text to piece together the relevant elements of even Branford's brief story. Branford appears in five of the fourteen pieces, but his story is not told in full in any single text. All of the pieces have to be combined in order to see the full picture, and as the reader progresses

through the work she has to constantly make connections to previous references and events, checking back through different pieces to make comparisons.

In this way, practiced digital readers may have an easier time engaging with this text, and hyperprint texts in general, even though it is in a perhaps unfamiliar printed medium, than readers who expect a more traditional or linear narrative from the printed text. While it is true that *Building Stories* certainly has a number of avant-garde predecessors, including most notably Marcel Duchamp's 1934 *The Green Box* and Marc Saporta's 1961 *Composition No. 1,* they were exactly that—*avant-garde,* art texts ahead of their time. Hyperprint texts, I argue, are specifically *of their time* and reflect the reading habits, expectations, and concerns of current mainstream fiction readers that routinely straddle the line between print and digital media. Hyperprint reading differs from that of pre-digital, avant-garde texts because modern readers already use a lot of the same reading strategies online, and therefore is a familiar process that is simply employed with a different medium; they differ from traditional print texts because there is no linear narrative to cling to and much of the meaning-making is done through *reading* the design and visual cues, as we do online; they also differ from digital literature pieces because they explore the boundaries of two separate mediums. Thus, while hyperprint texts have avant-garde roots, their main project is to engage in the current, mainstream shift between the print and digital realms by recombining familiar reading processes with material forms in unexpected ways.

As a specific example of how a reader might experience this text, I first read "Branford the Best Bee in the World," and his death was slightly confusing because it was told from his limited perspective and described "pink land whales" and "fresh sucrose" spills. Also, I was not overly concerned with his death because he was immediately reincarnated as "Branford the

Benevolent Bacterium." That said, I still wanted to know the details, and the subtle visual cues in the opening panel of the 8.25 x 11 inch sixteen-page booklet that first features the exterior of apartment building provided further clues. The first panel contains numerous hints that the booklet begins just after Branford has been stepped on. The protagonist is walking towards the right edge of the frame with a pink flower in her hand, likely the same flower that was plucked by a "pink land whale" before Branford could lick it. The second-floor couple sit on the stoop and are wearing the same colors and are in roughly the same positions as the blurred figures shown in "Branford the Best Bee in the World." The male figure is holding a soda, which is probably the source of the sugary spill that so tempted Branford, and he is scraping something off his shoe with disgust—most likely Branford himself. As a reader, I was excited to juxtapose these two pieces and make these important connections. I also found it interesting that Branford's death had no meaning for the other characters in the panel, just as it would have no meaning for any reader that started with this piece.

In other words, the depth of understanding relied completely on the reader's ability to utilize filming, fragmenting, and juxtaposing successfully—skills which Katherine Hayles and James Sosnoski have noted are hyper reading strategies that arise out of the increasing demand on readers' attentions due to the abundance of information and media online. Modern readers are accustomed to utilizing these strategies online as a habit, probably even without thinking, but when they are unexpectedly called upon to use these strategies in a print text, their use is more likely to become conspicuous and prompt reflection.

Embrace Print and Material Inconvenience

One of *Building Stories'* most noticeable characteristics, for better or worse, is how inconvenient it is. It is not a text to tuck in bag and read on a commute, nor can it even be

conveniently carried to a library or coffee shop where a reader is more situated and is in a space more conducive to reading. The text weighs roughly six pounds, and with fourteen different pieces that unfolded and stretch in various ways, the reader is almost limited to the confines of their home when reading *Building Stories*, or at the very least to some place with ample tablespace or room on the floor and peaceful enough that other people will not interrupt or ask the reader to move or condense the sprawl of the text.

In a very real way, *Building Stories* not only demands its own space of readers, but it also *creates* a space *for readers*. While progressing through the text, there are subtle references across multiple pieces, which prompt the reader to have numerous open elements at the same time—juxtaposing them—in order to follow through-lines throughout the entire collection. These connections include narrative elements such as the repeated phrase "And so, thus," across multiple pieces, and visual elements like the rose pin that the landlady gave her mother out of spite (she was bedridden and had nowhere to wear it to), which is identical to the pin that the protagonist buys decades later in an antique shop. Following these connections from one text to the next and then back again results in multiple pieces open in front of the reader, centering her in the space of the text itself—which then becomes a defined place as the reader builds connections and meanings. The game board piece, for example, draws on readers' prior experiences with game boards and invites them to participate in the world created by Ware, creating a space for engagement and place making. Laid out, this piece encourages the reader to envision themselves within the building, moving as one of the characters or as an outside "player," eliciting sense memories of moving game pieces across the board—another way of metaphorically locating oneself within a fictional place. Alternatively, the piece can also be viewed by standing it up on a tabletop—becoming a physical border between the reader and the

rest of his or her immediate surroundings and creating a more secluded environment for exploring the text. *Building Stories* is a perfect example of an inconvenient hyperprint text that forcefully resists being carried out into the world but that simultaneously entreats the reader to retreat into a space that can be created between them.

Require Conspicuous Manipulation

As has already been mentioned, *Building Stories* has fourteen separate pieces that all need to be unboxed and physically handled in different ways according to their particular physical formats. The reader cannot simply flip unthinkingly through pages and allow the medium of the text to slip into the background of its content, rather the reader is continuously reminded each time a new element is chosen, shuffled from beneath the rest of the pieces, set next to another piece for comparison, examined for which way is the "right way up," etc., that they have physical work to do in order to engage with this text. This is important to hyperprint texts because it again thwarts reader expectations of manual passivity and thus utilizes Bernstein's notion of antiabsorptive techniques to deepen engagement and critical thought.

Perhaps the greatest decision that the reader has to make in *Building Stories* is in what order to progress through the text. One could simply start from the piece on top and work to the bottom of the box, or read by size of the pieces (largest to smallest or vice versa). Alternatively, one might be drawn to a particular format and read all of newspapers first, then move onto the booklets, and save the harder to categorize pieces for last. There are numerous ways to read through all of the different pieces, and it will likely involve returning to specific texts multiple times—the experience will be different for each reader and that experience is shaped by his or her own decisions about how to manipulate *Building Stories* and make meaning out of it. This non-linear structure is common in digital literature pieces, and even avant-garde print

predecessors, but it takes on new significance in the print format because it undermines the perceived stability or even static nature of the medium and questions how it can be played with to adapt to modern readers with digital skillsets and expectations.

Link Material and Textual Interactions

Simultaneously while the reader is trying to make connections and assemble a narrative through *Building Stories*, the characters themselves are undergoing similar processes and struggling with how to make coherent meaning in their lives. All of the characters in the book are limited in some way by with their memories: The landlady spent her life in the building taking care of her elderly mother until she herself became an elderly woman who needs care; the second-floor couple remember their happy beginning and worry over their increasing dissatisfaction; the top-floor protagonist feels rudderless and alone, having had numerous false starts in life that inhibit her from moving forward; and even Branford the bee is haunted by the taunts and torments of the rest of the hive and is fearful that they know him better than he knows himself. Each of the characters slip into a recursive memory loop—which mirrors the reader's own experience of progressing through the text and remembering elements from across all of the different pieces. Jacob Brogan discusses Ware's use of this parallel reader/character experience in his essay "From Comics History to Personal Memory":

> Ware organizes many of the book's most formally compelling spreads around particular images, images that his individual panels circle like spokes on a wheel. These organizing emblems seem to be nothing so much as occasions for memory, sites around which otherwise distinct reflections cohere. Ordinarily, one strives to connect the diverse panels that make up a comics page by working through their temporal relationships to one another. By contrast, Building Stories often forces us to instead consider the thematic

> relations between the various sequences that make up each of these spreads, as well as their mutual bond to the central image that holds them together. Instead of making historicity visible as comics typically do, these sequences model something more like the contingencies of mnemenic reflection, wherein a particular experience or idea will summon up unbidden a host of others that came before.

A great example of this wheel-spoke layout being used to cluster related memories and events can be found at the middle of the 9 x 12-inch booklet titled "Disconnect."

Right at the center of this booklet, the pages fall open to the stapled crease and the interior of a plastic mask is displayed in the center of the layout; the protagonist's mother is in profile to the left and Lucy (the protagonist's daughter) is in profile on the right, both facing the center of the page. Around the left border of the layout is a scene at the park where the mother reveals that the protagonist's father had an affair when she was a child, and around the right border the protagonist is back at her mother's, preparing Lucy for bed and talking to her husband as she realizes that her mother shared this with her now because she believes that the protagonist's husband, Phil, is also having an affair. This layout is made all the more impactful because of the previous layout, which featured the front of the plastic mask, a bond-haired woman with vivid blue eye shadow and red lipstick. This mask is in the protagonist's mind because she and her mother are watching Lucy swing at the park in the princess dress that the protagonist made for her, and she fusses to her mother that she shouldn't be letting Lucy wear it because she worked hard on making it: "I just didn't want to get her one of those cheap store-bought costumes like they used to make…y'know, with the thin plastic masks you'd get your tongue stuck in? God, I'm sure those things were toxic.…" She adds mentally "And when are you gonna *compliment* me for it, by the way?" but her mother instead replies, "We did what we

could with the money we had." The front of the mask on the previous page was obviously prompted by this memory, but placing the interior of it at the center of this layout almost invites the reader to put their face up to the mask, at least figuratively, and calls to the reader's own mind tactile memories of their own childhood masks. At the same time, however, positioning the empty mask between the images of the protagonist's mother and daughter also serves as a place marker for her identity, positioned between her mother and daughter, sharing similar experiences and events, but distanced and removed from herself enough to be unsure of who she is apart from these roles of daughter, wife, and mother—a central theme throughout *Building Stories.*

What is more, just as the protagonist is navigating between these different memories and roles in her life, the reader is also prompted to recall previous connections, perhaps the clearest example of this within this particular layout is Lucy's princess dress. The clearest connection within this same layout is to the protagonist's pink outfit within the family photo, which she notices anew because of the shift in her perception of her father. She is roughly the same age as Lucy in this photo, and this further highlights her role as daughter. The dress also harkens back to images from other pieces within the collection. The protagonist had her own princess costume as a child before the boating accident, which prompts both memories and speculations about what her life may have been like if she had not lost her leg. There is a more complicated connection, however, to the dress of the woman for whom she served as a house-sitter and then nanny. While she house sat, the protagonist eventually began to go through the owners' things and even tried on some of the woman's clothes. She was impressed by their wealth and finery, and she drew conclusions about the family in general and the wife in particular based on their belongings:

> The wife seems a much more obvious and readable character to me…She was probably a very nice person who just got scared in college, saw an opportunity in her law student boyfriend, and jumped. Who could blame her? What girl, deep down, wouldn't want to live like a princess for the rest of her life? Even so, it must've been its own lonely sort of hell…I wondered if she still had many friends…At least she could lose herself in her son… (Ware)

Even as the protagonist is dressing in the wife's clothes, however, she is projecting her own story onto the unknown woman—it is the protagonist who has no prospects after college, who wants to live like a princess instead of "eating rice and beans," who does not have many friends, and who just recently had an abortion. The luster of a princess crown has lost its appeal, and the realities of adulthood reflect back at her through the mirror despite her ball gown. Regardless of the order in which the reader progresses through *Building Stories*, eventually these associations will be built, and the complicated entanglement of past, present, and future selves is aptly symbolized through the center layout featuring the mask's interior. The physical interaction between the text and the reader highlight how the protagonist and the reader are both stuck in recursive loops sparked by memory and visual associations.

Ware spoke about this parallel remembering experience between the characters and the reader in an interview with Calvin Reid for *Publishers Weekly Online*. Ware stated that "the idea behind the book is to try to get at the way we remember things, the way we put our lives together in our memories and kind of rewrite our own memories sometimes to suit ourselves." Ware further elucidated how the juxtaposition of pieces within his text mimics the process of remembering:

> Also to get at a sense of how when you are remembering something that's happened to you, sometimes you can almost lose yourself in that memory to the point where you lose the sense of the world around you, maybe just for a few seconds or something like that.
>
> I had hoped that with this book, that if say you start reading one story and interpret it as the present and then move on to another part of the book and realize that it wasn't actually the present you were reading about, it was actually the character's past, that that that might get at a little tiny bit of that feeling. (Reid)

In this way, in addition to the numerous connections across pieces through narrative and visual cues, even the lack of a set sequence or order to the volume draws on the reader's physical interactions with the work in order to highlight its central symbolic concern.

Resist E-Reader Digitization

Another central characteristic of hyperprint texts is that experiencing them on an e-reader would fundamentally alter the reader's experience of the text. *Building Stories*, in many ways, is *about* print media. The text's fourteen different pieces come in various shapes, sizes, formats, and textures that would all be lost and made uniform if digitized onto an e-reader. Andrew Piper, in *Book Was There: Reading in Electronic Times,* points to this issue as a key difference between print and digital archives: "Where the paper archive affirmed the material differences of writing, the digital archive flattens everything into identical objects. In the digital archive, everything is reduced to the status of a document" (78-79). In other words, a printed book no longer retains its *bookishness* once it is experienced through a digital mediation; for some texts this may not matter, but for hyperprint texts it undermines the larger project of physically exploring the medium and its relationship to meaning making.

As a brief example, when I originally included images of the text within this chapter to help illustrate the central texts' dynamic elements, they were rightly criticized as "flatter than [my] description of the variety of objects lead [the reader] to anticipate" (Sherwood). The printed text itself, however, is sprawling and crammed with pieces of different composition, construction, and dimension that cannot be adequately reflected here. For example, an image of *Building Stories* entire content, splayed out in an attempt to display its scope and richness, in actual fact, simply looks like a jumbled collage, despite my best photographic efforts. Additionally, the reader cannot get the feeling of the heft and weight of the pieces, nor hear the creaks as the folds expand, nor wrangle it into the chosen reading configuration preferred by the reader. These experiences are all central to the themes within *Building Stories* of nostalgia, memory, and the creation of art, and they are all experiences that would be lost by reading the text on an e-reader.

Another element that is lost when experiencing a hyperprint text in a digital format is the embodied sense of time within the book as an object. With a printed text, readers can feel the weight of the book, locate bookmarks, assess how much time has been spent reading and how much still remains; we can estimate time through a physical awareness. Piper notes that books also stand for the time that the reader has spent within them and states that "To hold on to books is to hold on to time" (13). Although e-reading devices include tools such as page counts, progress bars, and even data on the time spent reading, the average minutes spent per page, and estimates to the time remaining, the physical evidence of that temporal progress has yet to be replicated. Again, for some texts this may not be important, but for hyperprint texts it is a difference that can be utilized to enhance the meaning-making process.

Within *Building Stories,* the protagonist is caught within her memories and struggles to come up with a cohesive narrative for the difficulties in her life. Across pieces, and sometimes within individual pieces, time shifts in dramatic ways, often prompted by specific memories tied to physical artifacts. In a sense, rummaging around in the box that contains the numerous pieces—spreading them out, selecting a text, putting it back, comparing it with another—mirrors what the protagonist does with her memories and past experiences and what we do with our own keepsakes and mementos. It is another physical interaction prompted by the text that enhances the larger concerns of the work and deepens readers' experiences of the text in ways that would not be possible in a digitized edition. As Piper notes, physical components can lead to the cognitive consequences:

> Things ask us to do certain things with them. Things are not unconditional. We may do what we please with books or screens (use them as doorstops, drop them in sinks), but they still shape our access to what we read and how we construct our mental universes through them. Whether it is the soft graininess of the page or the resistant slickness of the screen, the kinetic activities of swiping instead of turning, the postural differences of sitting back versus up, tilting our heads down or forward, grasping with our hands or resting our hands on, the shape of folded sheets versus the roamable, zoomable, or clickable surfaces of the electronic screen—all of these features (and many more) contribute to a different relationship to reading, and thus thinking. Things help us think and thereby contribute to the shape of our thoughts. (x)

Piper points out that digital texts also shape our experiences through physical interactions, which is important to remember, and many digital literature pieces center on making explicit use of physical manipulations in surprising, enlightening ways. But just as such born-digital texts would

be diminished by trying to experience them by printing them out, so too would hyperprint texts, such as *Building Stories*, be weakened by digital migration onto an e-reader.

This reflects a very deliberate choice by Ware. In an interview for the *Los Angeles Review of Books*, Casey Burchby asked Ware "To what extent is Building Stories an attempt to revive an interest in the possibilities of the printed book? Are you leery of e-books, Kindles, and the rush to hop on the digital bandwagon?" Ware responded:

> Yes, very much so, though I don't mean to dismiss them, as I think they're great for news and transitory information. I do think that when it comes to art, books offer a sort of reassuring physical certainty for the ineffable uncertainties of life.… I find it very telling that the regular selling point of this or that new version of technology is that it's "higher resolution." What does that mean, exactly? It's like admitting the inherent superiority of life while still trying to sell some sort of living death instead.

Even with this slightly hyperbolic response, what speaks loudest to Ware's views on the value of print is perhaps that there is no electronic version of *Building Stories*, but there is a signed limited edition addendum, "Multi-story Building Model." The publisher, Drawn & Quarterly, playfully describe the title as "an absolutely unnecessary addendum to the already-unmanageable 'Building Stories,'" which "offers to the discriminating and unsocialized reader the promise of a complete 11" x 16" x 18" reference model of the multi-unit apartment building imagined therein," also noting that "[It's sure] to one day be a collector's item when flammable tinder is at a premium, be prepared to start your post-apocalyptic campfire now with this 13 sheet collection of dry technical drawings, paper thin walls and cramped psychological spaces" (dq_admin). The style of this model connects back to the landlady's love of paper dolls and plays on yet another

connotation of *Building Stories*'s title, but it also highlights the fact that it cannot be experienced to the same depth electronically.

As a graphic novelist and cartoonist, Ware is perhaps particularly suited to matching a text's form to its content and approaching the page as space for visual, textual, and physical exploration—a connection that for many authors has been severed. Keith Smith, author of *Text in the Book Format*, suggests that the "technology of publishing is responsible for the tradition of divorcing the content from the format," as authors surrender their words to publishers who turn them into an object. Smith argues, "The futility of the spirit denying the body stems from the schizophrenic hierarchy of publishing. The writer composes the text, relinquishing most of the control over the format to the typesetter, designer, and publisher. Each attach their particular ideas to the composition of the book, and therefore, indirectly, to the text" (28). For artists like Ware, however, form and content can be conceived of and crafted in coordination to make a whole that is greater than the parts. "Downplaying the book with the fantasy that nothing should stand between the writer's thoughts and the reader, is just that," notes Smith, "The book does stand between—not as an obstacle, but a bridge" (28). Hyperprint texts, such as Ware's seek to function as that bridge in a very real and immediately tangible way. They clarify for us that "[r]eading a text and reading a book are not necessarily synonymous. If the book is conceived as part of the statement, pages speak," and certainly the volume of that speech would be at the very least dialed down and at worst muted altogether if played electronically (Smith 178).

Explore Themes of Communication and Medium

The final hyperprint element of *Building Stories* to consider is its treatment of communication and medium as central themes. As already discussed, the text's overall multi-piece format places the print medium at the forefront of the work from the moment the reader

opens the box, and each of the characters wrestle with memories and how to make meaning in their lives. There is, however, a subtle and yet central connection between these two themes of medium and communication that the reader can easily miss. One clue to this overarching plot point can be found by juxtaposing opposite sides of the same page within the 9 x 12.25-inch hardback book, which begins with the central text "I just want to fall asleep…." The protagonist graduates from art school and takes writing classes, and four consecutive pages roughly mid-way through the piece align the building's perspective with memory and the protagonist's writing from her class. The first and third of these four pages use the building's perspective—a position well established in *Building Stories* by the combination of front exterior shots of the building, a looping cursive font, and a limited omniscient relationship towards the tenants. On the first page, the building is remembering a time from the first-floor landlady's childhood; as the milkman passes her window with his horse and carriage, she "is awakened by the jostling of closely-packed milk bottles, a gentle sound she's loved all her life." On the next page, the protagonist is working in the flower shop and thinking about how she helps people write the messages on their cards that accompany the flowers. After helping a customer come up with the right wording, the reader is privy to only the protagonist's response: "A *writer?* Haha… *hardly*… Thanks, though." The following page switches back to the building's perspective but now during the protagonist's time there. She is on the top floor wondering about the initial purpose of a hook above her bed, or as the building narrates it, "A young woman, her mind gone idle over the overwhelming reality of her loneliness, muses as to the original use of a hook worming its way out of the ceiling directly above her head." The rest of the top of the page illustrates the different scenarios that the protagonist imagines. The bottom of the page, however, shows the landlady in bed dreaming of the clinking milk bottles of her youth and conflating the sound with "the klinktink of a bottle,

smashing on the pavement below" as it is thrown out of the window of a passing car. Finally, in the fourth page of this section, the protagonist is at her writing class and while workshopping a piece she wrote, a classmate asks her "So are the bottles supposed to mean something? I feel like they're very arbitrary as symbols…and with the stiff style the overall effect is very pedantic…I mean, who *are* these people—doesn't the old/young woman have a name?" Taken together, these four episodes suggest that the protagonist writes through the perspective of the building to tell stories about her neighbors and herself as a creative project. Also, her skills as an art student would aide her in illustrating these stories. The scenes from the flower shop and the writing class remind the reader that the protagonist sees herself as a writer, the two scenes from the building's perspective serve as fodder for material in her writing class, and as was seen in the daydreaming about the function of the hook, the protagonist wonders about the building and has great imagination in creating stories that may be based in reality or completely fictitious. Finally, the comment from the protagonist's writing classmate harkens back to the landlady's memory of the milk bottles as well as to the bottle thrown out of the car window; there is also the pointed barb about the "young/old woman" not having a name, which refers most immediately to the landlady, but also to the protagonist of *Building Stories* herself.

Even more telling, however, is the back page of the 9 x 12-inch booklet titled "Disconnect." The page has "Browsing" at the top, and it focusses on the protagonist sharing a dream with her now grown daughter, Lucy. The protagonist says that in the dream she "was browsing…but not on the internet, in one of those big chain bookstores that don't exist anymore…" and she finds a book that is her book with all of her writing, from journals and from her classes, and illustrations "so precise and clean it was like an architect had drawn them." Additionally, the overall format "wasn't really a *book*, either…It was in…pieces, like, books

falling apart out of a carton." The book that she seems to be describing, the book that she worked on in her writing class, that centers on memories or reimagined events, the text that she wrote and illustrated that is not really a book but an assemblage of pieces, is *Building Stories* itself.

Here, then, is the connection between communication and medium, the protagonist is sharing her fractured and recursive memories through writing as a fragmented but interconnected collection of texts. Ware himself confirms this in his interview with Reid:

> I don't want to give too much away, but the idea behind that is supposed to be that the main character is doing these stories for a creative writing class and those stories are part of the stories she's written for the class. She's used the building as a character itself and its sort of this self-conscious way for her to get inside of it. I left it very vague. I didn't make it super explicit, which is probably a mistake. (Reid)

As Ware notes, this is an easily missed element of the text, but if the reader does, literally and metaphorically, piece it together, it really heightens the experience of this hyperprint exemplar. Ultimately, *Building Stories* explores how place is created out of undifferentiated space through emotion and memory, and it exemplifies Tuan's notion that "Place is a special kind of object. It is a concretion of value, though not a valued thing that can be handled or carried about easily; it is an object in which one can dwell," only in this instance the essence of a dwelling *is* easily carried and contained in a boxed hyperprint text (12).

While *Building Stories* explores how we build place, *Where You Are* more explicitly investigates how we navigate space, and how that shifting process may be changing us in larger ways.

Where You Are as a Hyperprint Exemplar

To return to the earlier study "In-Car GPS Navigation: Engagement with and Disengagement from the Environment" by Gilly Leshed et al., drivers utilizing turn-by-turn navigation devices were found to have less engagement with their environments. Additionally, however, participants in the study also noted that they were more reliant on the GPS than they were at times comfortable with:

> H described this in terms of the control the GPS has over him in areas he is not familiar with. By that, the GPS disconnects the drivers from the external environment, as they no longer need to find out where they are in order to avoid getting lost or for getting oriented when already lost. This issue is intensified when the GPS automatically and quietly recalculates a new route when its directions are not followed unintentionally (e.g. because of a mistake) or intentionally (e.g. because of road constructions and detours): the practice of re-orienting and consciously re-routing oneself is not necessary anymore. (1679)

This means that in addition to never beings lost, utilizing GPS also eliminates the need to reorient oneself; oftentimes, the driver may not even realize that he or she has even gone off track and that the device has recalculated directions. While this may seem ideal for traveling from point A to point B, Tingley notes "that people who use GPS, when given a pen and paper, draw less-precise maps of the areas they travel through and remember fewer details about the landmarks they pass; paradoxically, this seems to be because they make fewer mistakes getting to where they're going (33). In other words, we travel more efficiently but end up knowing less about our surroundings because we use technological devices to handle the navigational and reorientation tasks. "Being lost — assuming, of course, that you are eventually found," Tingley

points out, “has one obvious benefit: the chance to learn about the wider world and reframe your perspective. From that standpoint, the greatest threat posed by GPS might be that we never do not know exactly where we are” (33). Additionally, because the driver needs to be attentive to the GPS, rather than to other people in the car, the study from Leshed et al. pointed to “a few instances of de-skilling, not only of navigation and orientation skills, *but also of social skills* (1682; emphasis added). In this way, GPS serves as a wonderful tool for traveling efficiently, but it may also be isolating users from both their environments and from each other.

Cultural geographer Yi-Fu Tuan explores this dichotomy with technology—the ways in which it both expands and contracts our experiences—by approaching it from the perspective of physical embodiment. Tuan argues:

> A tool or machine enlarges a person’s world when he feels it to be a direct extension of his corporeal powers. A bicycle enlarges the human sense of space, and likewise the sports car. They are machines at man’s command. A perky sports car responds to the driver’s slightest wish. It opens up a world of speed, air, and movement. Accelerating over a straight road or swerving over a curve, momentum and gravity—these dry terms out of a physics book—become the felt qualities of motion. (53)

In this way, when humans are actively engaged, machines and technology can help us be both more efficient and more connected to our surroundings. There can come a shift in the experience, however, that places humans in a more passive mode that does not require significant engagement, and at this point we become disconnected from the processes at hand and from our own “corporeal powers” (53). Tuan uses the example of the jetliner passengers, who have no control over their movement through the air and instead are “transported passively from point to point” (54). The speed and motion that could give rise to a sense of freedom and power as one

hurtles across a continent are no longer felt as an extension of the body. "When transportation is a passive experience," Tuan argues "conquest of space can mean its diminishment" (53-54). The question to consider, then, is does the general shift from print to digital or the specific use of GPS increase passivity in navigation. How do our previous and current tools for navigation affect our experiences of space and our conceptions of place? The hyperprint collection *Where You Are* explores these questions and the ambivalence of being lost through a series of maps—both literal and metaphorical.

Much like *Building Stories*, *Where You Are* is a collection of separate pieces contained within a box, but rather than including one fragmented but continuous text across numerous components, *Where You Are* consists of sixteen independent works by various authors. What unites these pieces, however, is that each author is exploring location and place through the medium of a print map. With the exception of Denis Wood, none of the contributors are professional cartographers, geographers, or use maps as their typical form of artistic expression; instead, most of the authors describe themselves as novelists, literary critics, essayists, artists, poets, journalists, graphic novelists, or a combination thereof, and these artistic stances are reflected in their maps. As Will Gompertz describes it in the introduction, "*Where You Are* plants the flag at an amazing map-shifting point: from one kind of map — the geographical kind that gets you get from a to b — to another kind of map altogether — a life map that tells human stories about our everyday. Here is a book of maps that will leave you feeling completely lost." Each map is folded into a 5 x 8.25-inch text to fit neatly in the box, but their internal structures and contents are a surprise form piece to piece. As the sixteen maps have widely varying focuses, modes, and formats, I will discuss just a few in terms of their function as hyperprint texts. In

order to provide a brief overview of the entire work, however, the author, title, physical description, and narrative concern for each follows below (in alphabetical order by author):

- Chloe Aridjis's "Map of a Lost Soul" is a twenty-page booklet with front- and back-cover flaps that each fold out once. The booklet features satellite images of Mexico City and a smaller neighborhood therein, photographs of specific landmarks within that neighborhood, and text with numbered cross-references to the photographs. The narrative and pictures follow a day in the life of "Margaret Aberlin, a 65-year-old German woman who has been living on the streets of Mexico City for the past four years" (9).
- Lila Azam Zanganeh's "A Map of Six Impossible Things" is a sixteen-page booklet with front- and back-cover flaps that each fold out once. The booklet begins with the *Through the Looking-Glass* quote from the Red Queen to Alice about "believ[ing] six impossible things before breakfast," and then proceeds with six short vignettes or descriptions—a title page of sorts on the verso followed by the text on the recto for each. The six pieces are titled, in order, "Map of an Impossible City," "Map of an Impossible Garden," "Map of an Impossible Love," "Map of an Impossible Creature," "Map of an Impossible Multiverse," and "Map of an Impossible Future."
- Alain de Botton's "On the Pleasure of Maps" includes a four-page booklet inside the traditional front cover and an accordion-folded back cover that expands to reveal four additional full-size panels. The booklet contains text that discusses the appeal of outdated maps, while the accordion-folded section displays Map 1—The Tabula Rogeriana by the Arab Scholar Al-Idrisi, 1154—on the interior and Map 2—Planisphere by Giovanni Contarini, 1506—on the reverse.

- James Bridle's "You Are Here" essentially maps the mappers by exploring the development of the Global Positioning System (GPS) and diagramming the general placement of satellites which enables the mapping of the globe. The text itself consists of front- and back-cover flaps that each fold out once and a single, smaller sheet stapled into the text's center crease to create an additional four-page booklet. When the cover flaps are fully opened, the two verso panels display text detailing the development of GPS, the center booklet displays figures of the GPS satellite positions as they developed over time, and the two recto panels continue these figures.
- Joe Dunthorne's "Ghost Pots" is a traditionally folded map illustrating Joe Dunthorne's "A Literary Landscape," with an introductory text provided at the top of the page. Dunthorne notes in this introduction that his aim was "to try and illustrate the mess of influences, anxieties, past failures, hopes, enemies, distractions and stimulants that make up the map of each writing day."
- Geoff Dyer's "The Boy Out of Cheltenham" has front- and back-cover flaps that each fold out once and contain an opening ten-page booklet and a fifteen-inch square traditionally folded map. The booklet is organized into thirteen categories including "Homes," "Schools," "Friends," "Sex (See Girlfriends)," and "Deaths." Within each category places are noted by a specific map reference, the name of the location, and a narrative description of its significance to Dyer's youth. The satellite map notes these locations along with an icon for the category to which they belong; it also includes a legend in the upper right corner that includes the category names and icons along with a numbered list of the location names.
- Olafur Eliasson's "Subtle Nows" has front- and back-cover flaps that each fold out once to reveal brief lists of colors, "blue, grey, yellow," "blue, orange, grey to purple," "yellow, blue,

orange," and "light red, blue, purple, green," which are actually references to the titles of artwork found within the 10 x 16.5-inch, eight-page booklet that folds out and up from the covers. The front and back pages of the booklet display the title "Subtle Nows," but the title on the back is in reverse. Each page of the booklet interior is dominated by photograph of an artwork by Eliasson with text at the bottom that almost seems to walk the reader through a meditative exercise; the first page for example, reads in full: "Take a deep breath. / Submerge. / Fall into vertical groundedness. / Check in with your feelings and resurface to a series of subtle nows." The final two pages of the booklet then detail the artwork information.

- Sheila Heti and Ted Mineo's "How to be Good When You're Lost" is a thirty-two-page booklet with front- and back-cover flaps that each fold out once; it also features two die-cut center pages. The contents include an introduction from Heti, in which she describes her experiences with the *I Ching* and working with Mineo to create an adaptation. Following the introduction is "Some of Ted's Notes to Sheila," which provides a more detailed glimpse of the partners' process and ends with a completed example of a reimagined yin-yang symbol (15-17). In the final section, "Mini Ching," Mineo's illustrations are partnered with Heti's text to provide completed examples of six hexagrams, of the total 64-hexagram *I Ching*.
- Tao Lin's "The Lunar Hamsters of 8G-932" unfolds into a 24.5 x 16.5-inch single sheet with a small eight-page booklet stapled into place near the upper left corner. The booklet informs the reader that the focus of this text is the "silly non-discovery" of "antisocial, hermetic 'lunar hamsters'" (3, 2). The bottom half of the large sheet is a diagram of the hamsters' tunnels, and the top half provides text detailing points of interest. As the booklet describes it, it is a "fascinating and horrible map, telling a moving and, some maintain, blackly comic

story of 3 hamsters who each wanted simply to be alone, with decent wi-fi, but couldn't, because—among other reasons—they lacked the perspective of a simple, color-coded, 2D map" (3).

- Valeria Luiselli's "Swings of Harlem" is a fifty-page booklet wrapped in a folded 17.5 x 24.5-inch aerial map. The surface of the map is faded except for fourteen featured parks which are framed by white boxes (resembling Polaroid borders) that also display the location names and the cross-reference numbers used in the booklet for those locations. The booklet follows the same pattern throughout: the number of a location from the map and one Polaroid photo (sometimes two) from the location both appear on the verso, and the recto is titled with the name of the park and its address at the top of the page, followed by a brief narrative about the park or the author's thoughts while there, typically about childhood or her young daughter.
- Leanne Shapton's "Tablescapes" is folded completely in half initially, but unfolds into a 10 x 8.25-inch booklet with twenty-four pages. The booklet begins with an introduction of sorts that explains that the author and her friend sometimes end emails to each other by describing the items on their desk; they refer to these as "desk still-lifes" or "tablescapes." Shapton goes on to note that "they give us each an incidental picture of where the other is, what they are reading, or what they just ate. I began to photograph and paint these tablescapes when I realized I navigated my week and work based on the topography of my desk or tabletop." The rest of the booklet displays eleven of these paintings and ends with a spread of all of the paintings in miniature with lists of the items depicted in each.
- John Simpson's "Nature's Valley" is a twelve-page booklet with front- and back-cover flaps that each fold out once. Within the booklet, each verso displays a map of Simpson's route

from South Africa's capital, Bloemfontein, "to a quiet seaside village on the south coast of the Western Cape called Nature's Valley," while each recto provides Simpson's reflections as he makes the nearly nine-hour drive with the aid of his GPS. Within the text, numbered icons display the directions given by the GPS and correspond to the numbered icons on the verso maps where those changes in direction would occur.

- Adam Thirlwell's "Places I've Nearly Been to But Have Not" is a traditionally folded map of the world that records the places that Thirlwell "would like to go to, or nearly went to, but [has] not." Thematic connections between these places are represented with color coded lines—light blue for food, pink for ancient sites, lime green for "investigating the Caucasus"—and Thirlwell describes these connections and the overall project in text at the top of the map.
- Peter Turchi's "Roads Not Taken" has front- and back-cover flaps that each fold out once and at first appears to contain a sixteen-page booklet; the center pages, however, unfold to reveal a 20 x 16.5-inch flow chart. The text of the booklet proposes making a "Map of Roads Not Taken" in one's life: "Ideally, The Map of Roads Not Taken would be four-dimensional, moving through time and space, with still pictures as well as audio and video clips of what might have happened alongside clips of what did" (6). Turchi reflects on what choices would have to be represented in such a map of his own life, and the flow chart depicts important decisions about college, careers, marriage, and children.
- Will Wiles's "My Atlases" is a twenty-four-page booklet with front- and back-cover flaps that each fold out once. Pages three through ten of the booklet contain text with decorative elements in the margin taken from *The Nelson Universal Hand-Atlas*; the remaining booklet

pages display photographs of the atlas opened to specific maps, and in three of the photographs someone's hand can be seen holding the pages.

- Denis Wood's "The Paper Route Empire" has front- and back-cover flaps that each fold out once and, much like "Roads Not Taken," appears to contain a twenty-eight-page booklet but the center pages unfold to reveal a 20 x 16.5-inch map. The center pages of the booklet display seven different hand-drawn maps of the *remembered* paper routes held by Wood and his friends and brothers in their childhood neighborhood. The folded, larger map shows a satellite image of the same neighborhood modified and color-coded into a map of another friend's paper route. The outermost pages of the booklet, the beginning four pages and the final eight pages, explain Wood's original project of mapping his childhood paper routes for a different publication, and the discrepancies found when he sent those maps to his group of paper carriers. The resulting differences in maps returns to Wood's discussion of J. K. Wright's concept of "geosophy."

Unlike *Building Stories*, which was one author's exploration of a character's connections to and memories of a specific place, *Where You Are* is a collection of how sixteen different authors responded to the questions of place and mapping in general. As Gompertz notes in the introduction, "The maps contained within this publication start with the same intention—to explore subjects in a topographical manner—but differ wildly when it comes to the journey they take, the terrain they cover and the destination they reach." The reader is presented with these vastly different texts contained in a single box but could read them in isolation from each other; when read as a collection, however, certain themes and issues start to coalesce that enrich the entire project. Utilizing the hyperprint critical lens and its six characteristics can help tease out

some of the intricacies provided by different reading paths through individual texts and across the collection as a whole.

Foster Hyper Reading

Again, the three digital reading strategies utilized by hyperprint texts are filming (using visuals and design elements as a central focus of meaning making), fragmenting (breaking a text into shorter, discrete notes), and juxtaposing (reading several texts at once and jumping back and forth between them). Each of the pieces within *Where You Are* can be read separately or they can be examined in coordination with other texts in the collection to further problematize what a map is or can do within the digital age. To examine how these strategies enhance the reading experience in more detail, however, I will discuss both how one specific text uses all three modes as well as how three different texts emphasize one particular mode.

Geoff Dyer's "The Boy Out of Cheltenham" is a prime example of how filming, fragmenting, and juxtaposing work together within hyperprint texts. At first glance, Dyer's piece appears closer to what readers may expect when opening a traditional map: it contains a large fold-out aerial map of a British town and the surrounding countryside and includes a legend in the upper-right-hand corner with specific place names and category icons. Upon further inspection, however, the piece maps a *life within a location* rather than the location itself. By this I mean, there are no consistent road numbers, no location names, no major landmarks labeled to situate a reader in terms of the geographical context. Instead, Dyer has mapped out important or formative episodes in his life by plotting their locations; these notes are organized by sixteen different categories: Homes, Schools, Relatives, Friends, Girlfriends, Sports, Beer, Sex, Shops, Venues, Employment, Drugs, Trouble, Death, Cycling, and Roads (which is only used once).

Most maps utilize filming to convey meaning, and "The Boy out of Cheltenham" is no different, except that it plays with the ways one would typically read a map. As mentioned previously there is really no locating information for the reader—one could never navigate by this map. Although there is a grid for internal reference, instead of landmarks and location names that would indicate position for traditional maps, there are simply icons that correspond to Dyer's categories and numbered references that lead the reader to notes in the preceding booklet. Just looking at the icons and how they are grouped can tell the reader a lot about Dyer's life. For example, the grid coordinate E8 seems to show an important place for Dyer in a number of ways (see fig. 2)

Fig. 2. Grid coordinate E8 from Geoff Dyer's "The Boy out of Cheltenham" showing icons of personal importance. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

This grid shows three different location numbers: 45 and 17, both labeled as "St Michaels Rd." and 2, "Woodlands Road." More interestingly, however, are the icons. Six different icons are placed at the Woodlands Road location and indicate to the reader that this was one of Dyer's homes and where he played a sport, had sex, did drugs, had some sort of "Trouble" (indicated by the police helmet icon), and experienced a death. Within the same grid and along the same road,

there are additional icons for “Trouble” and “Girlfriends.” Even without knowing the details of the events, it is clear just from the icons that this location was of significant personal importance. This is especially clear when contrasted with somewhere like the grid coordinate G5 (see fig. 3).

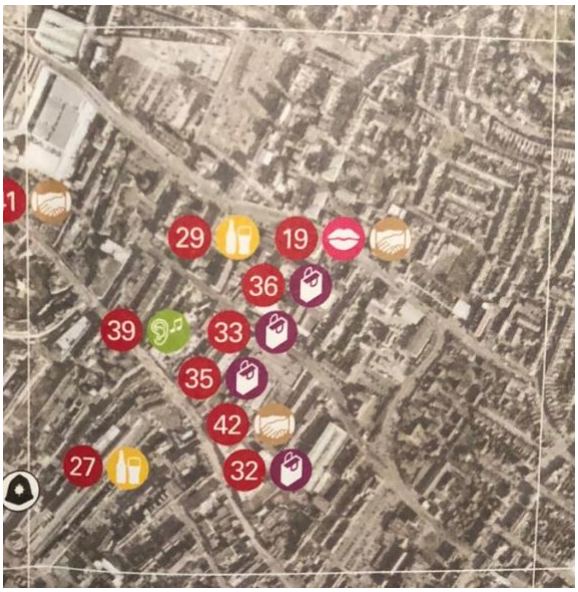


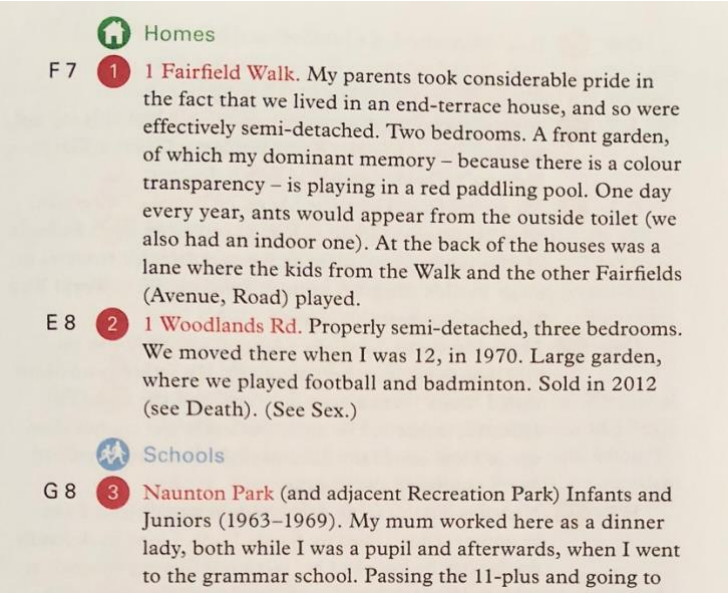
Fig. 3. Grid coordinate G5 from “The Boy out of Cheltenham” showing fewer personal icons. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

Here there are nine different locations shown with ten different icons, but this appears to be more of a downtown area with shopping, bars, and music venues. That said the icons for “Girlfriends” and “Employment” both appear at the same location, which prompts the assumption that Dyer may have dated a co-worker.

Thus, even without the narrative components found in the booklet, readers can combine the iconography and proximity to locations to get a sense of Dyer’s life in this town. In other words, filming, using the visual elements, is a central focus of meaning making in this text, especially when utilizing the map portion.

When the reader turns to the booklet, however, fragmenting moves to the forefront of the reading experience. Here Dyer provides brief descriptions of each location’s significance, again broken down by the different categories. The reader can examine these notes in various orders,

however, rather than proceeding linearly from the first page to the last. Individual sections seem to be ordered chronologically, but this quickly beaks down in moving from one section to the next. As such, the reader may choose to read all the notes in one linear path, or jump around by following cross-references mentioned in the notes (see fig. 4).



Homes

F 7 1 1 Fairfield Walk. My parents took considerable pride in the fact that we lived in an end-terrace house, and so were effectively semi-detached. Two bedrooms. A front garden, of which my dominant memory – because there is a colour transparency – is playing in a red paddling pool. One day every year, ants would appear from the outside toilet (we also had an indoor one). At the back of the houses was a lane where the kids from the Walk and the other Fairfields (Avenue, Road) played.

E 8 2 1 Woodlands Rd. Properly semi-detached, three bedrooms. We moved there when I was 12, in 1970. Large garden, where we played football and badminton. Sold in 2012 (see Death). (See Sex.)

Schools

G 8 3 Naunton Park (and adjacent Recreation Park) Infants and Juniors (1963–1969). My mum worked here as a dinner lady, both while I was a pupil and afterwards, when I went to the grammar school. Passing the 11-plus and going to

Fig. 4. "Homes" section of "The Boy out of Cheltenham" showing chronology and cross-references. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

Here, for example, after reading the entry for "1 Woodlands Rd." the reader could continue on to the "Schools" section or decide to see the "Death" entry or the "Sex" entry for the same location. From there the reader could decide to proceed through all of the deaths or all of the sexual encounters or follow any of the cross-references found there. Yet another path would be to go through the booklet reading each entry for a single location, reading all of the entries marked with the location number 2 for "1 Woodlands Rd.," for example. In this way, Dyer's experiences are fragmented into discrete notes that allow readers to determine their own paths for meaning making and provide the freedom to follow whatever thematic concerns or structures that most interest them.

Juxtaposing the map with the booklet provides even more options for readers. “The Boy out of Cheltenham” is designed so that the reader can open the map and still refer to the booklet at the same time (see fig. 5)

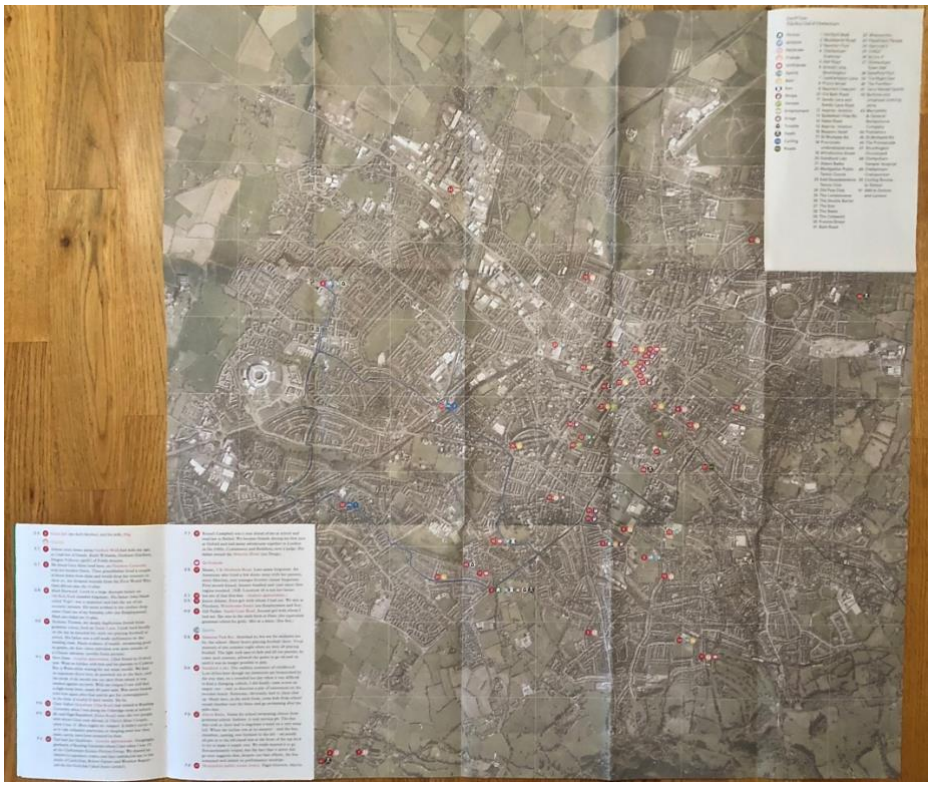


Fig. 5. “The Boy out of Cheltenham” opened to display the full map and booklet simultaneously. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

Doing this would allow readers to progress through the text with a greater spatial awareness. For example, one could follow Dyer’s bike route on the map and then turn to the booklet to see what descriptions and details are provided for that particular path. In fact, pairing the locations on the map with the booklet notes, jumping back and forth between geographical location and associations made there, may provide the most analogous experience to Dyer walking through his hometown, or readers walking through their respective communities. Our internal maps are made largely of memories and connections—they are what helps us construct a sense of place—and that is what is emphasized in a juxtaposed reading of Dyer’s text.

It is also important to remember, however, that "The Boy out of Cheltenham" is part of a larger collection, and it can also be juxtaposed with other texts within *Where You Are*; I think a reading in combination with Denis Wood's "The Paper Route Empire" works particularly well, for example. Although Dyer explored a range of experiences within his hometown, and Wood was simply trying to reconstruct the single aspect of his paper route, both mapping projects explored how memories shape our constructions of place. Wood compares his map to those of fellow paper carriers and depending on their map-making technique different elements and experiences rose to the surface—even with something as routine as a paper route, the relationship between memory and mapping is a complicated one. As Wood notes on the last page of his booklet, "The paper routes got entangled in our lives, in the *emotional* lives of who were, after all, almost invariably teenage boys, teenage boys growing up in the 1960s, if that matters. I think it does—it must—but how much of any of this can I squeeze onto a map?"

Reading Wood and Dyer together, then, may prompt the questions "What would Wood's map have looked like if done in Dyer's model?" and "What would maps of Cheltenham look like if they were created by Dyer's friends and neighbors?" Juxtaposing these texts are a good reminder that even when a map feels definite, it still exists as the product of creative choices—choices that can change, altering the map and our reading of it along with them.

Before moving on to the next hyperprint element, I would like to briefly explore how these digital reading strategies of filming, fragmenting, and juxtaposing are also called on in *Where You Are*'s other texts. Valeria Luiselli's "Swings of Harlem" is another great example of how readers need to employ filming to understand the full scope of a hyperprint text. The first thing the reader may notice about this text is how its cover differs from every other piece within *Where You Are.* While every other cover in the collection includes minimal design elements on a

solid background and displays the title in a large font and the author's name in a much smaller font, "Swings of Harlem," at first glance, seems to go against all of these conventions (see fig. 6).

Fig. 6. The covers of "Roads Not Taken" and "A Map of Six Impossible Things" contrasted with the outer cover of "Swings of Harlem." Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

Its cover consists of a whitewashed aerial map of the city overlaid with what appear to be Polaroid-style frames revealing the area below in sharper black and white detail. These frames also include crosshairs centered in the image, a number, and the name of the apparent park shown. When the booklet is opened, the impression of Polaroids is reinforced with outlines inside the cover, but by using filming to pick up on visual cues and juxtaposing this cover with others in the collection to see that it is clearly different, the reader can also realize that the flap on the inside cover is meant to be unfolded—the outside cover is actually a folded map working like a dust jacket, surrounding the booklet and its actual cover that does conform to the pattern established by other pieces within *Where You Are* (see fig. 7).

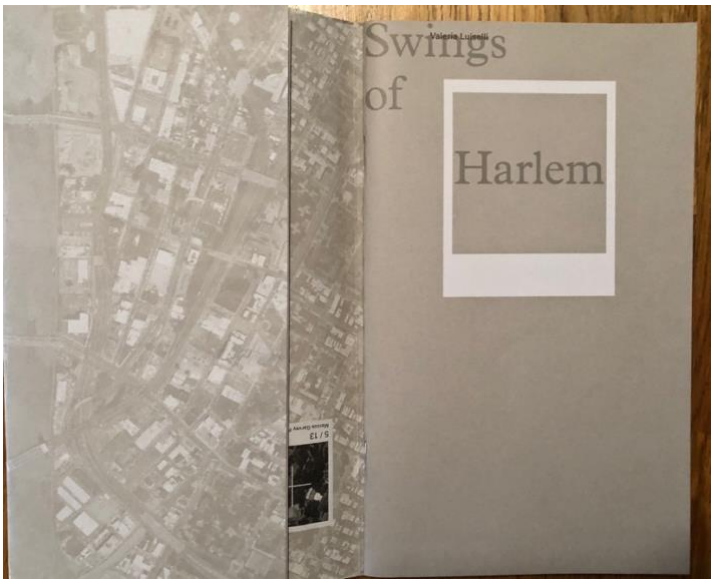


Fig. 7. The inside cover of "Swings of Harlem," which conforms to the established design pattern throughout *Where You Are.* Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

As I discuss it, this additional folded cover may seem like an obvious detail, but it is actually quite subtle and took me multiple readings before I realized that the outer cover was meant to be removed; I think this was added to by each text's different material structure and my reluctance to manipulate them in any way that would damage them.

As the reader unfolds the larger map and progresses through "Swings of Harlem" filming adds a coherence to the whole text. The Polaroid-style frames on the outer map are reinforced on the inside cover and throughout the body of the booklet itself. The booklet progress with one or two Polaroid photos on the verso and text on the recto. The first layout clarifies Luiselli's project and functions as a sort of introduction. It reads in full:

The Things Maia and I Need

for Our Map-Walks

1. New Shoes
2. Real map (foldable)
3. Polaroid (borrow?)

4. Two notebooks and two pens
5. Cloth to cover snapshots
6. Jackets with large pockets

From there the booklet proceeds with the same verso-recto pattern, but each spread focusses on a specific park, numbered and named both on the larger map and within the booklet. The Polaroids are often blurred or out of focus but largely feature Luiselli's daughter, Maia, on park swings, and the recto texts are brief notes or vignettes about Luiselli's thoughts there. The overall effect is that the reader is invited along on Luiselli and Maia's park outings, exploring Harlem through swings and reflection—without a ubiquitous GPS enabled smartphone with a built-in camera and immediate postings to social media.

"Swings of Harlem" thus shows how filming, drawing on visual cues and design elements as part of the reading process, is central to hyperprint texts. At the same time, however, it can also been seen how fragmenting, approaching each of the recto passages as specific moments and notes rather than as one linear narrative, and juxtaposing, reading the map and the booklet together, are also necessary.

The digital reading strategy of fragmenting can be further seen in one of *Where You Are*'s more whimsical, though ultimately tragic, texts— Tao Lin's "The Lunar Hamsters of 8G-932." Tao's piece explores the lives and deaths of hermetic hamsters that sought only to live in solitude with reliable wi-fi on the moon; their tunnels became their tombs, however, whenever they could not place themselves within reliable signal range but without the threat of social interaction. The three separate sections of the text provide multiple, fragmented reading paths for readers to choose from (see fig. 8).

Fig. 8. The full layout of "The Lunar Hamsters of 8G-932," showing the three separate sections of the booklet, notations, and cutaway map. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

The booklet in the upper-left-hand corner provides the background of the lunar hamsters, each named after a famous hermit, and brief biographies of them. The upper portion of the map displays notations and descriptions connected to portions of the lower map and includes details about the tunnels' creations, the strength of wi-fi signals, and speculations about the hamsters' frames of mind. One notation on an area, for example, reads "Where an extremely awkward interaction (probably brief and non-verbal, with excessive grinning) may have occurred between 2 or all of the following: Emily Dickinson, Gautama Buddha, Ryōkan." The map itself is color-coded to show different hamsters' routes, air pockets, and areas of "Metastasized Toxic Mass or MTM (human output including pesticides, growth hormones, shampoo, dipping sauces, flavorings, perfluorooctanoic acid, etc.)." The reader can navigate across these different sections in various ways, accumulating an understanding of the lunar hamsters without being limited to a

single, linear narrative and perhaps learn from their tragic example that personal interactions should not be wholly shunned for better wi-fi. Again, filming, fragmenting, and juxtaposing are all necessary to fully explore this hyperprint text.

Lastly, the digital reading strategy of juxtaposing is particularly useful with Chloe Aridjis's "Map of a Lost Soul." The booklet opens to a satellite image of Mexico City and has a white square labeled 1-9 over a portion of the bottom left-hand quadrant. The subsequent spread is a closer satellite image of that particular area, and the verso has nine white squares, each numbered, at various locations on the map. The recto of the following spread includes two color photographs, one of a green park bench and one of a wider shot of the bench's location on a pedestrian median. The only caption to the photographs is "1 Avenida Alvaro Obregón." The fourth spread includes more numbered photographs on the verso and text on the recto with numbered references that make it clear that the text refers to a particular neighborhood within Mexico City and each of the nine white squares represents the location of the corresponding photographs and references in the text itself.

This text follows "Margaret Aberlin, a 65-year-old German woman who has been living on the streets of Mexico City for the past four years" as she goes about her routine (9). It is easy to follow Margaret's daily trek as the reader turns the pages and follows the text to the overlaying photograph cues which then lead to photographs of the same sights that she must have seen herself: her green metal bench on Avenida Alvaro Obregón, Plaza Río de Janeiro with a statue of Michalengelo's David surrounded by fountains, La Bella Italia ice cream parlor where she drinks her daily espresso with two sugars, her favorite bookstore, her green metal bench on Avenida Alvaro Obregón once again. Those in the neighborhood know her story:

> Some days she doesn't speak at all, on others she asks the time, saying that any day now they'll be coming to fetch her. Who is coming, they ask. My husband and daughter, Margaret replies, they will arrive on a private plane from Germany and from here we will fly to Buenos Aires and from there to Hawaii. They abandoned her whilst on holiday in Mexico, she explains, but will be back any day now.

Even though the reader comes to know Margaret, and her location is easily traced by comparing the specific landmarks in the text with the larger maps, she is still lost—to her family who abandoned her, to most of the neighborhood in which she lives because of her status, and perhaps even to herself since she is so far removed from the life she once led.

One day a nearby shopkeeper's son watches as two men forcibly place Margaret in a car while she resists by "clasping a side of the bench with both arms." After a newspaper article about Margaret caught the attention of the German Embassy, a consul researched the story and managed to contact her family: "Most of her story, it turned out, was true: four years ago, Margaret Aberlin had been abandoned by her husband and daughter whilst on holiday in Tepotzlán." She had a short stay at the migratory detention center but was then flown back to Germany and into the care of her brother.

Using juxtaposition to compare the specifics of Margaret's day to the larger images of the neighborhood and the whole city emphasize that physical location means very little without context and connections. In a single city as large as this, how many other people are as lost as Margaret even when their location never changes? How many people are in *space* but without a *place*?

Each of the pieces within *Where You Are* illustrate how the digital reading strategies of filming, fragmenting, and juxtaposing all combine to draw in readers and engage them on

numerous levels, as they have grown accustomed to in their online reading but perhaps do not expect in print texts.

Embrace Print and Material Inconvenience

Although all sixteen pieces of *Where You Are* fit neatly into its box, that is where the convenience ends, though even this convenience is relative since it is roughly the dimensions of a wide brick. Like all hyperprint texts, this collection insists on its own space to be fully enjoyed. Unlike an e-reader device, it does not fit easily into a bag to pulled out during a daily commute or while waiting between the day's tasks. It pushes back against both traditional print and digital convenience by forcing the reader to set aside time and space to let the pieces unfurl for exploration. I would also argue that this collection demands more extended attention and space than printed maps used for practical navigation, simply because in that situation the map is a tool for movement, a preparatory step in a journey to somewhere else. *Where You Are,* however, uses maps as a journey in and of itself, one in which readers must sit still and reflect in order to get anywhere.

Much like *Building Stories,* the numerous works within *Where You Are* are collected in a box but are not bound together in any other way, and when reading the collection as a whole this quickly becomes unwieldy. Once the sixteen different pieces are out of the box, there is no set order and readers can proceed however they like; this provides freedom in choosing a reading path, but it also makes organization difficult. Separating the pieces read from the pieces not read, jumping between different works, trying to turn to a specific text, etc., is all complicated by the lack of a table of contents and a bound order found in more traditional collections and anthologies. This may seem like a minor concern, but it is a noticeable element of the reading

experience as one quickly becomes surrounded by the sixteen separate pieces—an experience not encountered when reading digitally.

While some works within *Where You Are* could be convenient on their own—more traditional booklets such as Chloe Aridjis's "Map of a Lost Soul," Lila Azam Zanganeh's "A Map of Six Impossible Things," Sheila Heti and Ted Mineo's "How to be Good When You're Lost," John Simpson's "Nature's Valley" and Will Wiles's "My Atlases"—the reader never knows what to expect until the lid of the box is lifted and the chosen text is opened. A reader may just as likely grab the sprawling "The Boy Out of Cheltenham" as the compact "A Map of Six Impossible Things," and even this variation thwarts convenience by not allowing the reader to predict the material structure of the next piece and plan accordingly.

What is more, the range of material structures within *Where You Are* and the rather delicate paper (delicate at least compared to an e-reader screen) means that readers have to proceed slowly and with care in order to avoid damaging them. For example, the first time that I opened "The Boy Out of Cheltenham" I had expected the map to unfold by pulling the front flap of the map to the right; it actually needs to be expanded from the back flap first, however, and I ended up tearing the map where it is attached to the booklet. Here even my expectation of a more traditional codex structure that precedes from the left to the right was forestalled, and it reminded me that this hyperprint text was providing an opportunity to reexamine the possibilities of the print medium without preconceived limitations. This collection is cumbersome, but it is this inconvenience that opens space for discovery and surprise.

Require Conspicuous Manipulation

The thwarting of expectations mentioned above again connects to Charles Bernstein's notion of using antiabsorptive techniques, elements that are conspicuous on the author's part,

towards absorptive ends to create a hyperattentiveness on the reader's part. The material manipulations required throughout *Where You Are* further foster this hyperattentiveness by pushing back against what readers typically expect to do when reading print—namely turning folio pages sequentially from right to left.

The reader is called on to do far more in this collection: expand accordion folded maps (Botton), open maps within booklets (Dyer), open booklets within maps (Lin), unfold maps within maps (Bridle, Wood), unfold an entire booklet before being able to open it (Shapton), remove a map from covering a booklet (Luiselli), peer through die-cut pages to images underneath (Heti and Mineo), hold maps up to the light to reveal connections on the other side (Thirlwell), unfold pages within a booklet to their full size (Eliasson), unfold and follow a flowchart within a booklet (Turchi). When readers are called on to perform such unexpected actions, encountering a traditional booklet (like those mentioned in the previous section) and simply flipping folio pages becomes unexpected *because it is no longer the default*.

Link Material and Textual Interactions

These unexpected physical interactions are also utilized throughout *Where You Are* to emphasize thematic concerns within specific texts; Adam Thirlwell's "Places I've Nearly Been to But Have Not," stands as perhaps the simplest and most striking example of this. Thirlwell's piece unfolds to a single 28.5 x 25-inch sheet, with a global map silhouetted on the bottom two-thirds of the sheet and introductory or explanatory text at the top of the sheet (see fig. 9).

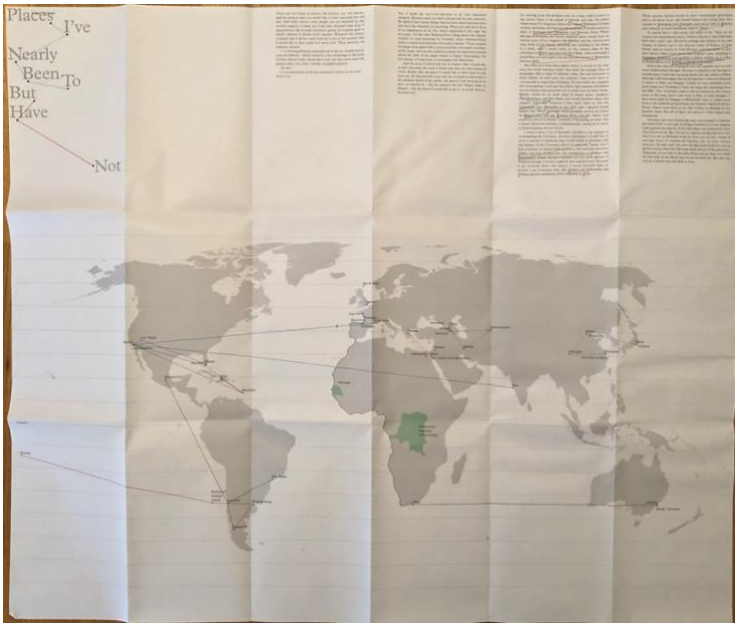


Fig. 9. The full layout of "Places I've Nearly Been to But Have Not," showing the map and text with cross-referenced locations and color-coded connections. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

The map shows only land mass, the names of cities mentioned within the text, and color-coded connections between these locations. The text describes Thirlwell's thought process for the project and reveals that he is "haunted" by unfinished projects and carries around a list of them out of "maybe guilt or maybe tidiness or maybe both together." The more he reflects, however, he realizes that many of these projects relate to travel, "places I would like to go, or nearly went to, but have not," and more specifically they relate to some kind of fantasy. Thirlwell then connects the location names in the text with color-code lines reflecting these fantasies, which include (among others) Malibu, Mustique, Key West, Calanques, Marseille, and Goa for the "beach house category"; Santiago, Mexica City, Buenos Aires, and São Paolo for the "South American novelist" fantasy; and Yerevan, Tbilisi, Isfahan, and Samarqand as part of "one giant fantasy of world knowledge." The categories include not just such grand goals, but also the desire to eat good food and to surf.

Ultimately, the places and fantasies are as diverse as Thirlwell's hopes, ambitions, and daydreams are for his potential selves—they reflect the contour of who he is as much as they reflect who he is not. Thirlwell's reflection ends with:

> And sure sure sure: I know the tone you're meant to take for this kind of list [of projects "begun and abandoned"] is very sad, or at least I think it is. I can imagine some general description of this list under the melancholy title: The Unlived Life. But I'm not so convinced that the lives you don't live are so different from the lives you do live: I kind of envisage them all stacked up together, like in some outsize armoury. So why can't the tone for this kind of list be just as gleeful as any other? It's like some basic theory of the silhouette. Definitely, if you want to describe where you are then you could do that with all the detail you can see around you. But also you can do it *inside-out, and back to front* (emphasis added).

It is this final clue, "inside-out, and back to front," that prompted me as a reader to hold the map up to the light and try to make sense of the seemingly chaotic and decorative lines on the back of the sheet (see fig. 10).

Fig. 10. “Places I’ve Nearly…” held up to light to reveal the color-coded lines on the back of the map connecting locations in the text with the map on the front. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

When the reader does this, it becomes clear that the lines on the back link the front place names in the text to their corresponding locations on the map using the same color-coded lines to indicate particular categories or fantasies. Thirlwell uses this unexpected physical interaction to highlight his concept of locating or defining oneself through silhouette—through where one is not.

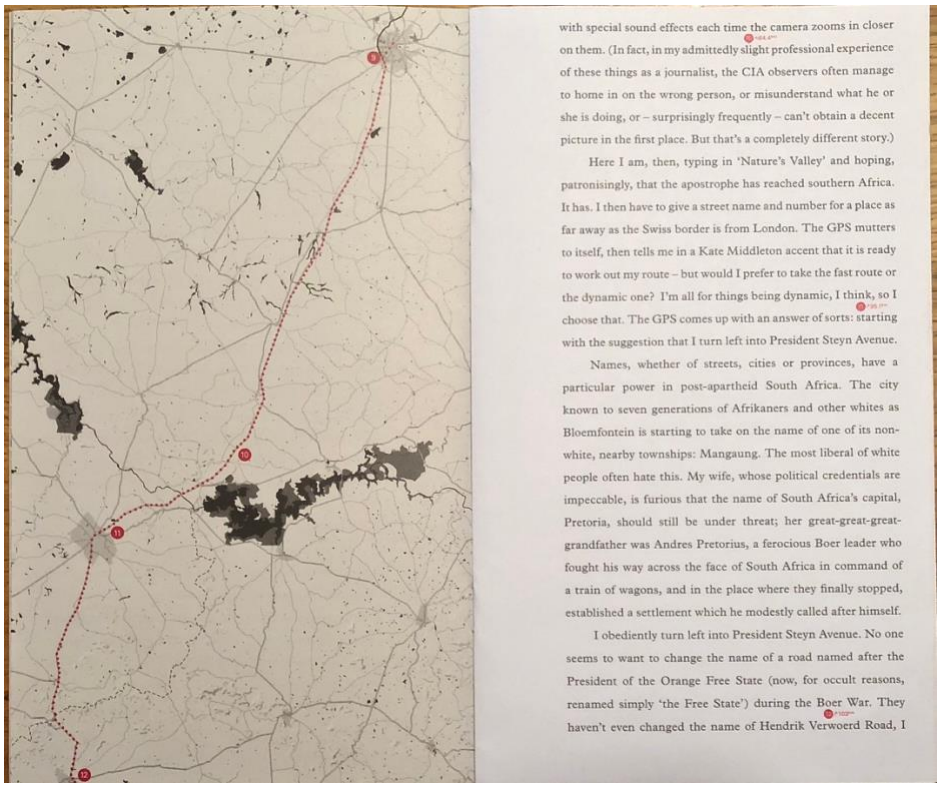
Of course, *Where You Are* as a whole also includes physical interactions that emphasize its project—namely unfolding and exploring printed maps. For digital natives this may be a completely novel experience, but for readers who grew up navigating by relying on crumpled maps stuffed into their gloveboxes, it is an experience of nostalgia. GPS enables us to get from

one place to another via the most efficient routes, but it also seems to obscure what we are losing in this kind of single-minded traveling.

In "Nature's Valley" John Simpson reflects on this very issue as he uses a GPS device, with a voice like Kate Middleton's, to travel a thousand miles across South Africa. As he is stopped in a small village along the way Simpson notes,

> This is the moment when I should get out my map, to see how far I've come and how much farther I have to go. Before I left I would have memorized the remaining route, checked the places where other roads crossed, looked up places of interest along the way, tried to visualize the lie of the land and the pattern of the mountains, imagined what the little towns along the way might be like….
>
> Not now. Somehow, everything has changed.

What has changed, at least in the material sense, is that Simpson is using a GPS device instead of a printed map. Because of this, there is no need to actually orient himself within the landscape; all he needs to know are the turns to make in order to get him to his destination, and that is exactly what the GPS provides—nothing more. Indeed, the maps shown in "Nature's Valley" include only the turn number provided by the GPS along Simpson's route (see fig. 11).



with special sound effects each time the camera zooms in closer on them. (In fact, in my admittedly slight professional experience of these things as a journalist, the CIA observers often manage to home in on the wrong person, or misunderstand what he or she is doing, or – surprisingly frequently – can't obtain a decent picture in the first place. But that's a completely different story.)

Here I am, then, typing in 'Nature's Valley' and hoping, patronisingly, that the apostrophe has reached southern Africa. It has. I then have to give a street name and number for a place as far away as the Swiss border is from London. The GPS mutters to itself, then tells me in a Kate Middleton accent that it is ready to work out my route – but would I prefer to take the fast route or the dynamic one? I'm all for things being dynamic, I think, so I choose that. The GPS comes up with an answer of sorts: starting with the suggestion that I turn left into President Steyn Avenue.

Names, whether of streets, cities or provinces, have a particular power in post-apartheid South Africa. The city known to seven generations of Afrikaners and other whites as Bloemfontein is starting to take on the name of one of its non-white, nearby townships: Mangaung. The most liberal of white people often hate this. My wife, whose political credentials are impeccable, is furious that the name of South Africa's capital, Pretoria, should still be under threat; her great-great-great-grandfather was Andres Pretorius, a ferocious Boer leader who fought his way across the face of South Africa in command of a train of wagons, and in the place where they finally stopped, established a settlement which he modestly called after himself.

I obediently turn left into President Steyn Avenue. No one seems to want to change the name of a road named after the President of the Orange Free State (now, for occult reasons, renamed simply 'the Free State') during the Boer War. They haven't even changed the name of Hendrik Verwoerd Road, I

Fig. 11. A "Nature's Valley" spread showing a map with only topographical texture and GPS turns opposite text with the cross-referenced GPS directions. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

These numbered directions on the verso are then cross-referenced in the text on the recto. The maps do not include any other place, street, or landmark names and because of their sparsity they almost look abstract, barely recognizable as actual locations. This highlights the ambivalence that Simpson has about his situation:

> I don't have the faintest idea where I am. I understand, of course, that I'm continuing along the N6 for another hundred kilòmmetres; but where I have reached, what I am passing, what mountains these are, what the little settlements along the way are called, I simply have no idea. If it weren't for the help of the sun, I wouldn't even know I am heading south-south-west. Were Kate Middleton to give up on me now, I won't have the vaguest idea here I'm going. I'd be as lost as if a gang of kidnappers blindfolded me and drove me to some unidentified spot and dumped me by the side of the road.

> I have been taken hostage by a little GPS machine the size of my mobile phone. Only it knows where we are going. Only it will tell me when we get there. I may have paid for the thing, but it is my master.

Simpson underscores his ambivalence with GPS by stating that "Global positioning by satellite is magical, wonderful, a miracle of its kind, but there is more to geography than just going from one place to another." More than anything else, *Where You Are* has readers ask that titular question and consider their own position in terms of the current digital landscape and its relation to our physical contexts.

Resist E-Reader Digitization

Where You Are provides a particularly useful opportunity to explore how digitization of a hyperprint text affects the reading experience because it actually has its own website version provided for free by the publisher, Visual Editions. The existence of both the print and web versions highlights an important aspect of hyperprint texts in general—hyperprint texts do not stand in *opposition* to digital work but reveal how our material interactions with texts affect our experience and understanding of their content, specifically within the print medium. To clarify through an analogy, digital literature does not stand against or replace traditional literature; it explores the opportunities that a digital environment can provide literature. In a parallel path, hyperprint texts do not seek to replace electronic works but instead explore the opportunities that print can provide for readers accustomed to a digital environment. However, converting a hyperprint text to be experienced on an e-reader results in a significant loss in the depth of experience born out of the integral interplay between content and medium—just as printing a digital literature piece would result in the same estrangement from form and loss of meaning.

That said, Visual Editions did do some interesting things with the online version of *Where You Are.* One of the simplest but most useful tools provided was a link to each author's website (or Wikipedia page); this gives the reader the opportunity to quickly learn more about the artists, discover their other work, or read more about their aesthetics. Another practical element is the use of GoogleMaps, which provides a likely familiar interface for users and allows the reader to zoom in and out, to a certain degree, for greater detail or perspective. Lastly, the online version does seem to provide some interesting interactions for the reader, opposed to simply scrolling through text. On the page for Tao Lin's "The Lunar Hamsters of 8G-932," for example, the top of the page contains the same content as the hardcopy's booklet stapled inside the map, but the bottom of the page provides the cutaway map of the tunnels with location markers on it. When the reader clicks on one of these location markers, the information included at the top of the hardcopy version appears in a pop-up window. Also, for any of the pieces in the *Where You Are* collection that have cross-referenced maps or images in their texts, the reader just has to click on the hyperlinked text reference to have the visual displayed. Overall, it is an interesting companion to *Where You Are*, but it does not explore the online realm in the same way that a more nuanced digital literature piece would, and it loses much of its impact once it is removed from its original printed medium.

To examine this transition from print to digital more closely, it is logical to start with accessibility. With the print edition, the collection needs to be purchased and likely shipped, and then the reader has access to it; the interface and the work itself are one and the same. It is not as simple as that for the online version, particularly considering that it is now five years old. While the digital version is free and can be accessed instantly, there are many potential issues that can arise with the website. For one, the first link to it provided on Visual Editions's website no

longer works, and if readers click on it they are sent to a page that reads “Internal Server Error” (“Where You Are by 16 Writers”). In fact, of the four links to the digital version on this webpage only two are operational. Once the reader accesses the digital version, how well it runs depends upon the browser being used; if users do not have the preferred browser they have to download it or use a computer that does have it. Otherwise, many of the images will not load, the different scrolling and hyperlink functions may not work properly, or the browser may crash altogether. These may seem like common or insignificant issues when reading online, but they are a part of the reading experience and therefore are important to consider when exploring medium.

Once the reader has reached the full web version of *Where You Are*, other choices have been made about the display and navigation that alter the experience of the texts as compared to the print version (“Where You Are”). The title page of the collection, for example, establishes an order for the whole collection (see fig. 12).

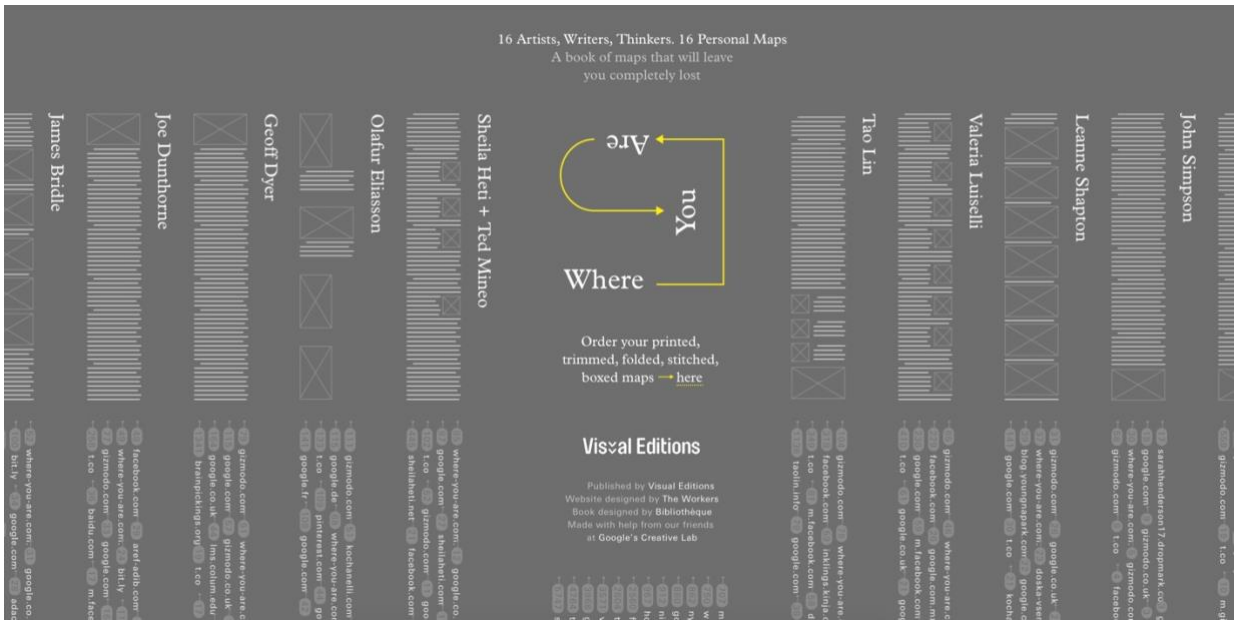


Fig. 12. A screenshot of the online *Where You Are* collection’s title page. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

The design matches that of the hardcopy box, but here individual pieces are organized alphabetically by authors' last names; the title appears in the center of the screen, and then there are links to the first eight texts on the left and links to the second eight texts to the right. While the printed version had an original order in which the separate texts were packed into the box, unless the reader was meticulous about maintaining that order, it is unlikely that the sequence survived beyond the first reading. This frees the reader of the printed edition to organize, reorganize, jumble, distribute, and generally navigate the collection according to their own purposes or whims. The reading path is open for exploration. The online version, has one set order, and while users can click on the texts in whatever sequence they choose, the collection itself will never physically reflect those choices—its displayed order is the permanent order.

Another major difference between the printed and online versions of *Where You Are* is the shift in balance between text and image. In the original version, text and image seemed rather even overall; in many instances the verso of a page would contain an image and the recto would contain text that referred to that image—the layout was balanced. Even in instances where the text consisted largely of a map, the text that accompanied it in booklet form or in annotations elaborated on the images and gave them context and greater meaning. In the online version, however, much more emphasis is placed on the visuals and the text feels more ancillary to images. This is most noticeable in the basic layout for many of the pieces, including the first text in the collection, Chloe Aridjis's "Map of a Lost Soul" (see fig. 13).

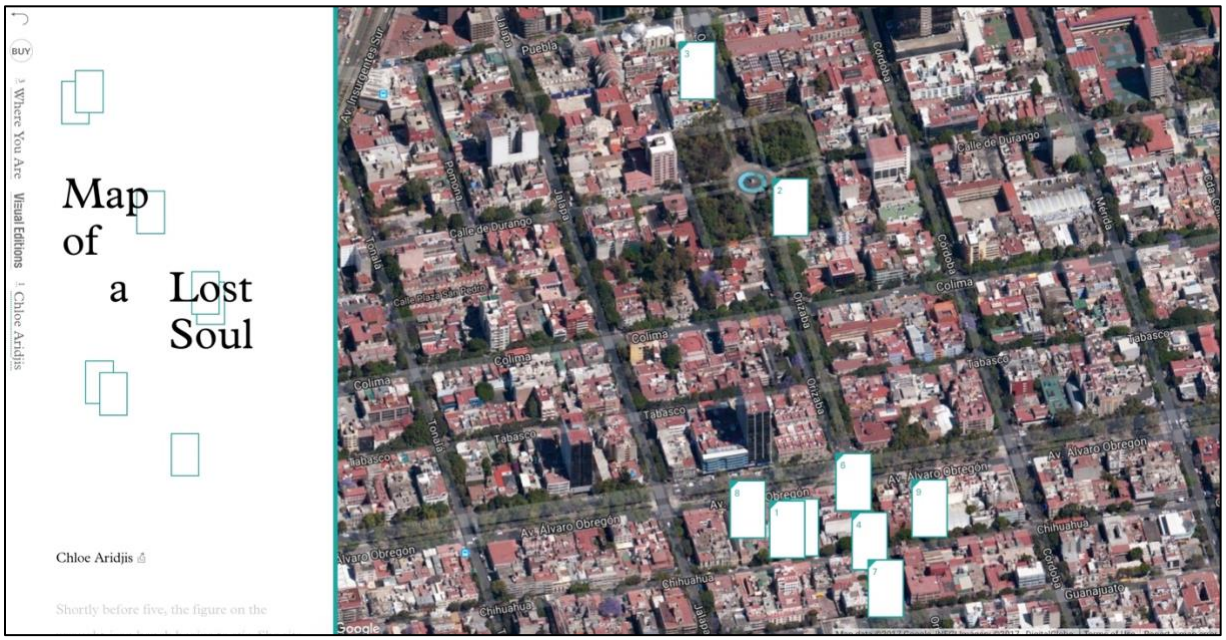


Fig. 13. A screenshot of the online *Where You Are* collection's opening screen for "Map of a Lost Soul" by Chloe Aridjis. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

In the opening screen of the website version of "Map of a Lost Soul," the text that took up one half of the printed layout is relegated to less than a third of the screen online. This version treats the text more like a sidebar and the reader is immediately drawn into manipulating the map; without the text, however, the map has no context and little clear relevance. Even once the reader begins to scroll down in the text panel to read the narrative, only the top half of the text window is clearly visible because the bottom text is faded (see fig. 14).

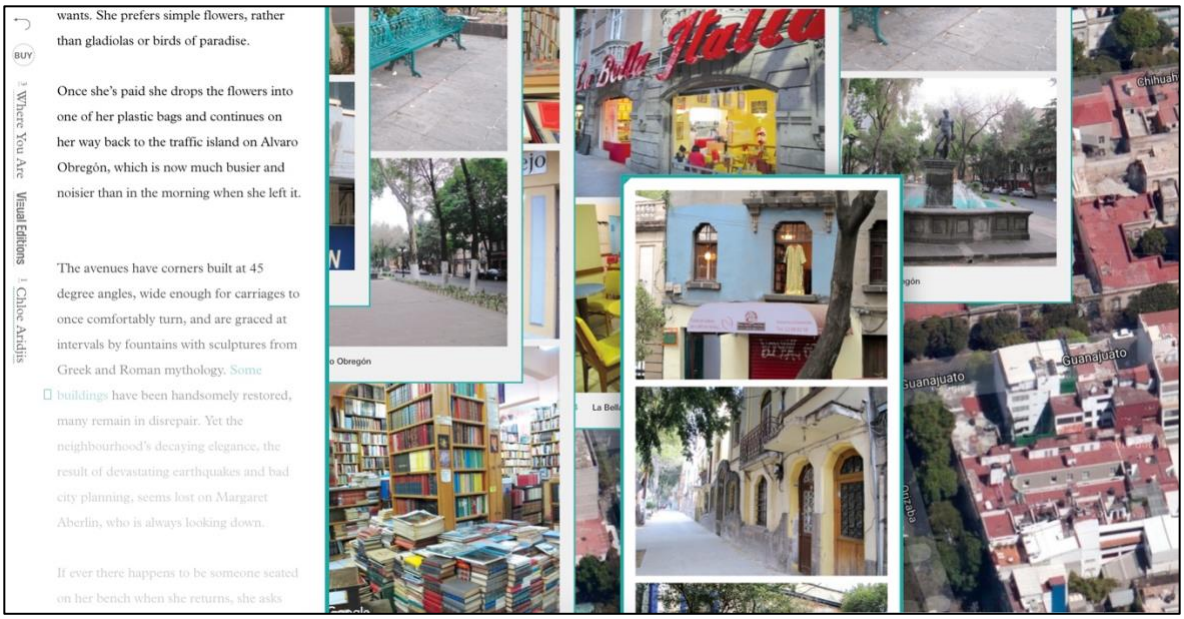


Fig. 14. A screenshot of the online "Map of a Lost Soul" showing faded text in the left panel's lower half and overlapping photographs on the right. Reprinted with permission from Visual Editions, editors. *Where You Are*. Visual Editions, 2013.

This means that the text that was displayed over half of the printed version is now easily legible in less than one-eighth of the space online. The right side of figure 14 also reveals an issue with how images are handled. Whereas the printed version spaced out photographs of specific places in the neighborhood as they appeared in the text, which allowed the reader to pause and give both the text and image consideration, the online version has the images placed on the map according to their location and once the reference in the text panel is clicked on, that particular image moves to the front. The issue is that many of the photographs are from the same very small area, so they are clustered together on the map, which creates a collage effect that makes it more difficult to focus on the individual images. Overall, this shift in balance between text and image reflects how readers interact with texts online rather than in print—relying largely on visual information, skimming or scanning text, and demonstrating a higher need for stimulation to maintain attention. This type of reading, however, is not conducive to the type of contemplative reading required of texts like *Where You Are,* and as a result the experience of the online version is not as rewarding.

The greater appeal of the printed version also seems to be reflected by the publisher. Most obviously, the core content of the entire collection is accessible for free online via Visual Editions's own website. They give access to the words and images away for free, however, because the original, tangible experience is only offered in the printed medium—which readers must purchase. In this way, some may consider *Where You Are* to be a "differential text," to use Marjorie Perloff's term, or a "[text] that exist[s] in different material forms, with no single version being the definitive one" (146). I would hesitate in employing this label here, however, because the printed version does *feel* more "definitive" than the online version. This is even reflected on the title screen of the website edition, which just below the title encourages readers to "Order your trimmed, folded, stitched, boxed maps here" (see fig. 12 above). Even though nothing is actually "stitched" in the printed version, Visual Editions is emphasizing that the material nature of this collection is really where its ultimate meaning can be found, and this is lost when it is translated into the digital realm. This is also indicative of wider trends within publishing, as more companies provide some content for free online to help draw in audiences while also assuming that readers will want to own printed copies of their favorite books. By emphasizing the material, tactile nature of printed texts and exploring the different artistic opportunities they afford, hyperprint provides a potential strategy for print's survival alongside digital outlets.

Explore Themes of Communication and Medium

To revisit Rita Raley's argument in "Reveal Codes: Hypertext and Performance," hypertext is self-referential because "it has constituted itself around the problem of its difference," and I argue that hyperprint texts take the same stance by exploring through medium how changes in communication habits affect both individual readers and society as a whole.

Where You Are centers on mapping and how we locate ourselves, but many of the pieces are also explicitly about GPS and how its ubiquitous use impacts our relationships to our surroundings; as such, it may be useful to examine the wide range of positions that the collection's authors take on the topic.

James Bridle's "You Are Here" is particularly interesting in this regard because it maps the Global Positioning System itself. Bridle describes the thirty orbiting satellites as "a celestial superstructure that we are all living inside" and goes on to consider the collection's thematic question with the greater implications of GPS:

> To ask "Where You Are" invites a series of responses: cartographic, historical, social spiritual, situational; discursive or prescriptive. The GPS system is a monumental network that provides a permanent 'You Are Here' sign hanging in the sky, its signal a constant, synchronized timecode. It suggests the possibility that one may never need be lost again; that future generations will grow up not knowing what it means to be truly lost.

Bridle thus describes the impact of GPS in purely positive terms, and it is a technological marvel in its ability to pinpoint geographical locations. If *Where You Are* asks of its authors and readers "Where are you?," then Bridle uses GPS to reply with his title "You are here." This possible invocation of definitive data to foreclose discussions of what it *means* to us to be in a space and how our representations of geographic information reflect those experiences highlights the potential dangers of relying solely on GPS.

There is, after all, more than one way to be "lost." In fact, even the blurb from Maria Popova on the back of *Where You Are*'s box describes the collection almost as an antidote to GPS's certainty: "In the age of GPS and sterile, data-driven cartographic precision, how

delightful to consider mapping the human experience based on disposition rather than position, on the subjective rather than the capital-O Objective, on the symbolic, metaphysical, and abstract rather than the literal, physical, and concrete." This problematizing of "Where are you?" is taken up in various ways by the collection's authors: Aridjis reveals how a woman can be easily located but still lost, Dunthorne explores his internal literary landscape by drafting a map of influences, Dyer overlays an aerial map of his hometown with its personal significance, Eliasson encourages the reader to locate themselves within the moment through poetry and art, Lin uses dark humor to emphasize how mapping can be used to isolate as well as locate, Luiselli uses low-tech strategies to explore her neighborhood with her daughter, Shapton maps her day through objects, Simpson discuss how GPS delivers him to his destination but without giving any sense of place, Thirlwell suggests that our fantasies can create the negative space that defines our borders, Turchi examines his life through choices that would have led to alternate paths, Wiles appreciates maps as art objects as much as functional tools, Wood and his friends use maps to locate memories, and Zanganeh imagines impossible places that are described in vivid detail but could never be mapped. Thus, each of the texts in the collection focus on meaningful location; however, Sheila Heti and Ted Mineo's "How to be Good When You're Lost" and Alain de Botton's "On the Pleasures of Maps" each warrant brief discussions about how they explore mapping.

Heti and Mineo work together to create an adaptation of the *I Ching*, a three-thousand-year-old Chinese text used for divination and self-reflection. "How to be Good When You're Lost" seeks to connect to current audiences by modernizing the text and illustrations. Of particular interest from Heti's introduction is her explanation of this piece within a book of maps:

> I could turn on my phone right now and use the GPS to learn where I am—to discover my latitude and longitude, but why? I already know how to get to anywhere I could possibly want to go in my city. What I really need is a map for navigating the ineffable. How do I get to a place of peace or how can I be "good" in this moment of turmoil and indecision and conflicting desires? (4)

Here Heti contrasts GPS's ability to locate a person with its inability to provide guidance with any larger context or meaning, directly complicating Bridle's assumption or hope that no one would ever be "lost" in the future. Obviously, the authors are looking at different aspects of mapping and locating readers, but their points do raise the question of how always being able to assume our locations physically may affect how we position ourselves in more metaphorical ways.

Alain de Botton further highlights how the certainty of GPS is a significant departure from previous methods of mapping. While examining two maps created, respectively, in 1154 and 1506, Botton notes that "The map comes to seem an instrument of humiliation, in command of a landscape which we cannot comprehend through our senses. What can therefore be most charming about looking at old maps is the way they get everything wrong." With GPS, however, that is no longer the case; although our GPS devices occasionally make mistakes, it is unlikely that a hundred years from now a new cartography device will uncover many glaring mistakes in our GPS maps. Botton points out that this perceived infallibility carries some larger consequences with it:

> To have something "all mapped out" can be both a positive and a negative achievement, the former because the unknown can be a terrifying spectre, the latter because the unknown also gives us room for our fantasies of improvement.

> The development of maps might seem one of unambiguous progress from ignorance to essential truth, as the continents were eventually put in their correct place. But any picture of the world is based on historical and relative assumptions about what should be depicted, and so it would be hasty to call certain maps "false" simply because they don't look like the world we recognise.
>
> The pleasure of contemplating the world on a map might be likened to that of reading certain novels. In both cases, we are placed in a privileged position vis a vis a reality which we usually only glimpse from a limited perspective. With a world map, we rise above the constraints of our segment of land so as to hold the globe in our gaze, much as with novels, we may be granted intimate access to minds beyond our own.

Botton is explicitly discussing previous printed maps, but the points he raises apply equally to the digital age and our use of GPS. First, he notes how having the correct and complete data may forestall any further wonder about our environment or its potential. Second, he points out that previous maps have been representations of only what the people of that period felt it was important to depict, which raises that question of what important environmental elements we omit when we navigate by GPS. Similarly, his last point uses the metaphor of the novel to remind readers that maps, including GPS images, only provide one limited perspective through which to view the world—a perspective which may obscure or overlook contexts of value while helping us reach our stated destinations.

Overall, *Where You Are* and *Building Stories* stand as hyperprint exemplars with multifaceted approaches to what it means to navigate space and create place on the shifting border between the print and digital landscapes. These investigations will become increasingly important, not just in how we travel, but also in how we relate to our surrounding environments.

In tracing the history of neurological explorations into humans' navigational skills, Tingley recounts the work of Edward Tolman, who in 1948 discovered that rats create cognitive maps of environment, rather than being "mere slaves to behavioral reinforcement or punishment" (30). What is more, however,

> Tolman hypothesized that humans have cognitive maps, too, and that they are not just spatial but social. 'Broad cognitive maps,' he posited, lead to empathy, while narrow ones lead to 'dangerous hates of outsiders,' ranging from 'discrimination against minorities to world conflagrations.' Indeed, anthropologists today, especially those working in the Western Pacific, are increasingly aware of the potential ways in which people's physical environment — and how they habitually move through it — may shape their social relationships and how those ties may in turn influence their orienteering. (Tingley 30-31)

While technology can bring the world together through increasingly easy communication and travel, it may also make us less engaged and foster unhealthy relationships to our environments and to people we consider 'others.' Through increased awareness about both the benefits and potential downsides of our shifting navigational habits we can make smarter choices for more engaged and equitable experiences, and literature—particularly hyperprint texts—can help us build such awareness. "All maps are but representations of reality: They render the physical world in symbols and highlight important relationships…." Tingley suggests, "If storytelling, the way we structure and make meaning from the events of our lives, arose from navigating, so, too, is the practice of navigation inherently bound up with storytelling, in all its subjectivity" (40).

CHAPTER THREE

PRINT AS SOCIAL MEDIA

"The telephone is a great knee-jerk machine, but if you really want to tell someone how you feel, you need the slowness of the letter. In a society where everything is fast, it's like going out in the country and looking up at the stars."

Nick Bantock

I recently returned from a month-long fellowship on the other side of the country—separated from all of my friends and family—but I never really felt out-of-touch with anyone. Multiple times a day, I sent Snapchats to my husband and my best friend, just to let them know that I was okay or to show them pictures of what I was doing. I used group texts, emails, and Google Docs to communicate with co-workers in my absence. In the evening, I Skyped with my husband and parents, or sent my parents an email with picture attachments if they grew frustrated with Skype. I also connected with new people I met while I was there, and we stay in touch using a Facebook group, a Twitter hashtag, and Google Drive. But while all of these communications were convenient and engaging, I do not feel the need to save or treasure them in the same way that I do the handwritten card my husband hid in my suitcase before I left or the thoughtful letter from a former student that was waiting for me when I got home. I also suspect that the dozen postcards I sent are still hanging on refrigerators or tucked away into books or drawers but none of my Snaps are. There is something *different* about seeing the personal handwriting of a loved one, receiving a letter or card that was also held in their hands, and knowing that you are the recipient of something that took time and care—particularly when there are so many other, more convenient ways of corresponding online. However, from whence does this perceived difference originate? Is it merely a nostalgia for previous forms, the typical reaction to new technologies? Is

it a rejection of the ease and immediacy of digital communication? Is it an example of typical reception conventions or does the physicality truly matter?

In this chapter I argue that hyperprint texts include formal features that signal to readers that the text and book object work in tandem with one another to offer a different reading experience and locus for media reflection than is typically found in traditional mainstream fiction. Such features also encourage readers to interact with the text and book in ways that are both digital, namely through hyper reading strategies and allowing for multiple reading paths, and very bookish, especially through haptic nostalgia with ephemera and handwriting. Examined alongside the chapter theme of correspondence, these hyperprint texts foster reflection about how our own written social exchanges are shifting as a result of their media.

The migration of correspondence into the digital realm is borne out by an annual survey conducted by the United States Postal Service (USPS) titled "The Household Diary Study." One facet that the "The Household Diary Study" (HDS) examines is the mail sent between households, as opposed to mail from or to a business; this type of mail accounts for only 2% of total mail and is classified as correspondence (*Household Diary Study* 1). This category of mail is seeing a significant decline, which the USPS attributes directly to the development of faster technologies:

> …compared to the prior ten years, correspondence volume experienced a significant runoff as it fell 23 percent from 2007. In part, the decline in correspondence is a continuation of long-term trends, but it is also strongly related to changing demographics and new technologies. Younger households traditionally send and receive fewer pieces of correspondence mail; they also tend to be early adopters of new and faster

> communication technologies, such as those that grew out of the Internet age, like email and social media. (1-2)

In other words, while younger people have always mailed less correspondence than older cohorts, as they increasingly communicate electronically this gap is widening even further. The survey further breaks household-to-household correspondence into five different categories: personal letters, holiday greeting cards, non-holiday greeting cards, invitations/announcements, and other personal correspondence (20). Between 2015 and 2017, there were significant declines in personal letters (-12.3%), non-holiday greeting cards (-5%), and invitations/announcements (-14.7%) (20). In 2017, the average American household received .1 personal letters each week, or one letter every seventy days, compared to 1987, the first year that the HDS was conducted, when .46 personal letters per week were received, or roughly one letter every fifteen days (20; "Appendix A" Table A2-1). Overall, the survey points out that "In 1987, households reported receiving 1.6 pieces of personal correspondence each week. By 2017, personal correspondence received declined 69 percent…" (*Household Diary Study* 17). This does not necessarily mean that people are no longer writing to each other, it simply indicates that they are doing so via other media, specifically social media platforms.

According to a Pew Research Center survey focused on American social media habits, social media use has become the norm. The study noted that "88% of 18- to 29-year-olds indicate that they use any form of social media," but adds that there is a gradual decline in use as the demographic's age increases, "78% among those ages 30 to 49," "64% among those ages 50 to 64," and "37% among Americans 65 and older" (Smith and Anderson). This means that the vast majority of Americans are now active on social media. Not only are more Americans using social media but they are using a greater variety of platforms as well:

> Roughly three-quarters of the public (73%) use more than one of the eight platforms measured in this survey [Facebook, YouTube, Pinterest, Instagram, Snapchat, LinkedIn, Twitter, and WhatsApp], and the typical (median) American uses three of these sites. As might be expected, younger adults tend to use a greater variety of social media platforms. The median 18- to 29-year-old uses four of these platforms, but that figure drops to three among 30- to 49-year-olds, to two among 50- to 64-year-olds and to one among those 65 and older. (Smith and Anderson)

There are also some interesting trends in the preferred apps of different groups—younger users gravitate towards Twitter, Instagram, and Snapchat; women are far more likely to use Pinterest than men; LinkedIn is more popular with those with higher levels of education or income; and WhatsApp is much more popular with the Hispanic population (Smith and Anderson). Not only are more Americans using social media and discovering specific communities online, but they are also spending more time there. The majority of Facebook, Instagram, and Snapchat users reported visiting the respective sites at least once a day, with roughly half of Facebook and Snapchat users checking in "several times a day." Despite all of this, however, the survey also reported that "just 3% of social media users indicate that they have a lot of trust in the information they find on these sites. And relatively few have confidence in these platforms to keep their personal information safe from bad actors." In comparison, I would be curious to see data on how many people worry about "bad actors" or trusting personal information with someone they are in correspondence with via mailed personal letters; I admit at the same time, however, that during my trip away, the card from my mother and niece never reached me—both issues of reliability.

As we continue this shift in correspondence, we need to consider our social communications within the contexts of their mediums and their distinct affordances. In the last chapter, I argued that hyperprint texts, including *Building Stories* and *Where You Are*, provided an opportunity to explore how we relate to space and place in the Digital Age, and in this chapter I suggest a similar opportunity for hyperprint to interrogate social media practices by framing the print book as its own social space. Handwriting, sharing, and paratextual elements will also enter into the conversation as I consider what is gained and lost as we migrate our correspondences online. In order to parse out these concerns, I will utilize *S.* by J.J. Abrams and Doug Dorst as a hyperprint exemplar and *The Griffin & Sabine Trilogy* from Nick Bantock.

S. as a Hyperprint Exemplar

S. was conceived of by J. J. Abrams, better known for producing Sci-Fi and thriller movies and television series than for publishing, and written by Doug Dorst, author of the novel *Alive in Necropolis* and the short story collection *The Surf Guru.* Anyone familiar with the intricate, conspiracy laden series *Lost,* which Abrams co-created, will notice similar trends in *S.*, particularly with time conflation, episodic reveals of hidden pasts, and threats from unknown, shadowy figures. At its core, *S.* is presented as a stolen library book titled *Ship of Theseus* written by the mysterious V. M. Straka, but the additions of handwritten marginalia between two graduate students, a variety of inserts and ephemera tucked into the pages, and the translator's footnotes for *Ship of Theseus* (which are revealed to have hidden depths) transform *S.* into a new work in and of itself.

Ship of Theseus follows a nameless man just after he wakes on a shore without a memory; he wanders into a tavern and is drawn to a dark-haired woman reading a large book, *The Archer's Tales*. He feels like she might know something about him, but before he can learn

anything, he is drugged and forced onto a decrepit ship. The apparent captain of the ship calls the nameless man "S." and seems to have kidnapped him for a reason. However, he refuses to give S. any further information, and, as he is the only other person aboard the ship whose mouth is not literally stitched shut, S. has no alternative than to wait for events to unfold. Eventually it becomes clear that the men aboard the ship stand in opposition to an evil force headed by Edvar Vévoda V. While S. convinces himself that he is devoted to finding out who he is and learning more about the dark-haired woman's connections to him, he is inadvertently drawn into action against Vévoda and his agents, and he eventually becomes a skilled assassin for the cause. Folded into this plot is the question of identity—Are you always who you are regardless of events? Or are you a changing collection of your experiences and actions? Is identity continuous or "multitudinal" (205)?

These question also connect to the title of *Ship of Theseus,* which is a reference to a thought experiment of the same name. The scenario dates back to Plutarch but has also been taken up and complicated by others, including perhaps most notably Thomas Hobbes. It presents the question that if the ship that Theseus sailed on was preserved in a harbor as a historical artifact and pieces of the ship were periodically replaced as they decayed, could it still be called the ship of Theseus once all of the pieces had been replaced. Hobbes pushed the scenario even further and asked that if as the decayed pieces were removed and somehow healed of rot and reassembled, could that ship be called the ship of Theseus? Could both ships, or neither? It is a thought experiment that applies to identity, but also, particularly in the context of *S.* to medium and texts. What do we really mean when we say "book," for example? Is it the text that Dorst and Abrams came up with, the published edition, my particular copy with my own notes and marginalia, the one that has never been opened or read? The use of the title in this way helps to

tune readers into these larger questions of mutability, materiality, and identity and hints at a much more complicated textual puzzle than readers may be accustomed to.

The preface and footnotes to *Ship of Theseus* are from the translator F. X. Caldeira, whose own identity is thrown into question even as *she*—her gender was always incorrectly assumed as male by supposed Straka scholars—and simultaneously raise and deflect the questions and controversies surrounding the identity of *Ship of Theseus*'s author, V. M. Straka. Caldeira's notes reveal that Straka is rather notorious, both for supposedly participating in rebellions, riots, assassinations, and general socially-minded havoc and for having successfully concealed his real identity long after reports of his death. Caldeira also highlights that there are numerous events and characters within Straka's novels that appear to mirror those in his real life (his 'real life' within the fictional framework of *S.* as an actual author and *provocateur*).

It is this mystery of Straka's identity that ensnares Eric and Jen, two graduate students communicating through handwritten notes in the margins of *Ship of Theseus,* and sets them on their own path of intrigue. Eric stole the book from a public library in his youth and later went to graduate school to study Straka and his work. Eric uncovered an important audiotape of a man confessing to being Straka just before his death, but Eric's advisor took both the tape and the credit for its discovery. After Eric is subsequently kicked out of his program, he accidentally leaves his copy of *Ship of Theseus* behind in the college library, where Jen finds it and begins writing to him in the blank spaces of the book. They begin trading the book back and forth to each other as they write different notes, and through their collaboration and research they begin to uncover the true identities of Straka and Caldeira, the existence of a secret organization called the S, and a string of S members' deaths through defenestration. More than this, however, Jen and Eric trade confidences and form a personal connection through the pages of the book.

As their intrigues and relationship deepens, Jen and Eric also tuck items inside the pages of *Ship of Theseus* for each other. It begins as a way to share research and articles about Straka and his work, but eventually the margins no longer provide enough space for the two to say everything they want to say to each other, and they begin to leave each other longer letters. There are a total of twenty-two such inserts, which include a wide range of materials and compositions: postcards, newspaper articles, a map drawn on a café napkin, obituaries, a prayer card, telegram copies, photographs, a decoder ring, and handwritten letters on yellow legal paper, personal stationary, and official letterhead. The overall effect is almost one of a scrapbook within a novel—an echo of manuscript traditions within this celebration of print and personal ephemera. This exploration of the print medium was an explicit goal for *S.*'s creation. In an interview with Gina McIntire for *Los Angeles Times,* Abrams said, "The whole point of this project was to create this novel…. This is a story about how a book is used as a means of communication and sort of a catalyst for a great investigation that is also a love affair. It is sort of a celebration of 'the book,' that physical, analog thing." *S.* was specifically conceived of as both the content and the medium through which parallel love stories are told through print. Abrams claims that the idea initially occurred to him when he found a novel in an airport with a handwritten inscription inside that read, "To whomever finds this book—please read it, take it somewhere, and leave it for someone else to find it" (qtd. in Rothman). "It reminded me of being in college, and seeing the notes that people would leave in the margins of the books they'd checked out of the library," Abrams said, "And then, I started to think: what if there were a very cool book that was completely annotated—just covered in marginalia and notes between two people? And—what if a conversation, or a relationship, began inside a book?" (qtd. in Rothman). What is interesting about this insight into *S.*'s creation is that it began by finding a book left by a stranger and

immediately sparked memories of experiences within a library—another place where we share books with total strangers—but those handwritten notes provide a bridge to a more intimate and personal sharing experience. At the same time, however, I doubt that many mainstream fiction readers have ever been faced with a text so completely inundated with marginalia and ephemera. Thus even while Abrams frames the text as an exploration of print, many readers will need to draw on digital reading strategies to parse the flood of information provided. In this way, and by drawing on the six actions of a hyperprint text (foster hyper reading, embrace print and material inconvenience, require conspicuous manipulation, link material and textual interactions, resist e-reader digitization, explore themes of communication and medium), *S.* provides an opportunity to explore what it means to share our books and ourselves with others outside of the digital realm—an offline social media experience.

Foster Hyper Reading

As modern readers continue to turn from print to digital texts and communication platforms, reading strategies and habits are also undergoing a shift. Because of the overwhelming access to information, attention has become a limited and fleeting resource that readers seek to conserve and publishers try to capture. As a consequence, reading strategies beyond the close-reading skills prized by the traditional Humanities are increasingly common (Hayles, *How We Think*). Online readers can infer meaning from visuals and design components as well as text, a technique called "filming," and longer texts may be broken up into smaller components through "fragmenting" and then combined and compared with other such texts through "juxtaposition" (Sosnoski 163; Hayles, *How We Think* 12). Hyperprint works such as *S.* anticipate these digital hyper reading strategies and shape their texts' formal features to encourage and even require such readings. This allows them to both hold reader attention and to contrast it with the type of

deep attention typically drawn on to immerse readers within traditional print novels. Together filming, fragmenting, and juxtaposition as reading strategies essentially allow for an ebb and flow of attention among different structural elements all within the same whirlpool of a single hyperprint text.

Perhaps the clearest example of the need for "filming" within *S.* is in deciphering the chronology of the marginalia between Eric and Jen. The first handwritten note appears on the title page of *Ship of Theseus*; it seems to be written in pencil, in all caps, and reads "If found, please return to workroom B19, Main Library, Pollard State University." Although neither the reader nor Jen know his name at this point, this note is in Eric's handwriting. On the same page Jen replies using what looks like a blue ballpoint pen and a cursive hand to say that she found his book and is returning it after she read a few chapters. Eric replies, this time using a black felt-tip pen, and so an initially acerbic correspondence begins. This page introduces the reader to the marginalia and establishes the use of design elements—the different handwriting styles and ink colors—as integral components of the narrative and chronology. The title page reveals two different time periods for the notes; however, there are a total of five such shifts throughout the book, each denoted by a change in ink color and typically corresponding to a trip for one of the characters. These time periods are, in chronological order:

1. Pencil from Eric, dating from his teens to the beginning of his college studies
2. Blue ballpoint pen from Jen and black felt-tip pen from Eric, used for their initial correspondence until just after Eric's trip to NY
3. Yellow pen from Jen and green pen from Eric, used until Eric's trip to Brazil
4. Purple pen from Jen and red pen from Eric, used until Eric and Jen's move to Prague

5. Jen and Eric both using a black felt-tip pen, perhaps sharing the same pen since they live together

The reader, however, is never given such a key to these time periods, and instead has to rely on filming, or deriving significant meaning from the visuals, and context clues to build the narrative timeline for herself. For example, the verso of the title page includes notes from the fourth and fifth time periods as successive replies, which allows the reader to infer three things: the correspondence will continue for some time, different colors of ink stand for different time periods within their communication, and that the sequence of inks on this page is parallel to that chronology. This page almost serves as a kind of Rosetta Stone for figuring out the chronology of the marginalia throughout the book, but when progressing through the text itself, it does not feel so simple. Readers have to constantly check and adjust their internal timelines of Eric and Jen's discoveries, challenges, and growing intimacies—all based on the visual cues provided and by utilizing filming as a reading strategy.

Fragmenting is also encouraged as a reader choice throughout *S.* by containing numerous sections of text that can be broken into smaller components and allow for multiple reading paths. Of course, some readers could progress through *Ship of Theseus* without reading any of the marginalia or inserts; they could also decide whether or not to consult Caldeira's preface and footnotes or to skip them altogether—as many readers might with a traditional novel. This path would sidestep using the digital hyper reading habits altogether and instead rely on the deep attention normally stressed with traditional literature. Such a path would put a priority on Straka's writing, but it would also miss many of the controversies surrounding the author and the parallels he crafted within *Ship of Theseus* to comment on those questions and events. The reader would get a sense of the character S.'s story but would have no idea how it relates to the fictional

author's own story. Perhaps this could be seen as a cautionary tale about ignoring paratextual elements and using linear reading in isolation from other reading strategies, focusing so much on a text through a single perspective that the whole picture, with all of its complications and contexts, are missed completely.

Other reading paths through *S.*, however, could include innumerable vacillations from the body text of *Ship of Theseus,* to the marginalia (following sequentially on the page or chronologically through the color-coded time periods), to the footnotes, to any inserts. What is important to note is that if a reader's attention flags in one area of the page, it may be drawn to another component, which will invariably lead the reader on to another connection somewhere in the text. Nearly any spread in the text provides opportunities for this pullulating use of fragmentation. On pages 332-333, for example, the text of *Ship of Theseus* continues along with two footnotes and marginal notes from three different time periods. In my own reading, I typically begin with the *Ship of Theseus* text but then let my own whims and attention decide if I follow a footnote at its appearance in that text or wait until I have read the full spread. I make the same kind of decision for the marginalia when it is specifically connected to the text, as it is here with the circle around "coffee-brown." What is more, on this verso the notes commenting on the first footnote point out that there does not seem to be a coded message in this particular footnote, only to continue in a different time period with Jen adding, "It's a rail-fence cipher—look it up" (332). Subsequent notes on the page reveal that 19 is the key to the cipher, but how to solve the cipher or what the message actually is are not provided. This presents readers with another choice—go online to look up what a "rail-fence" cipher is and solve it themselves, look up the solution via the considerable online *S.* community (of which more will be said later), or continue on with the book and see if the message is subsequently revealed by Jen or Eric (it is not). The

text itself essentially toys with readers by presenting the puzzle without any solution; this taunt is further emphasized when Jen and Eric solve the cipher, but fail to include the reader in the solution. By excluding readers in this way, the text encourages them to mirror Jen and Eric's effort in solving the puzzle for themselves. Unlike a more traditional fiction text, here the reader has many more choices in how to interact with story, but this also means that if the challenge is not taken up there will also be fewer rewards.

The recto of this spread offers further reading paths. Notes from the fourth time period hint at an important meeting for Jen at the library, where she works, which could have severe consequences for her, but what the meeting is about is unclear. Readers could, again, decide to wait to see if progressing through the notes sequentially will clarify what is happening or if they would prefer to jump ahead and read them chronologically. This spread of *Ship of Theseus* also provides an opportunity for association and potential fragmenting—even though readers might be less inclined to utilize this reading strategy if it appeared as a traditional text on its own. The passage discusses the "Territory," the tropical base of the sinister Vévoda. Little is known about this area, but S. believes that Vévoda would not go to such extremes to conceal it if he had nothing to hide:

> So when S. imagines the Territory, he does not imagine a picturesque idyll full of the varied greens of dense jungle, the coffee-brown of a turbid river, the bright blues and greens of tropical birds flickering through the air. He sees instead hills slathered in a blue-black paste. He sees a jungle floor where foul-smelling and sticky blue-black webs dangle from the canopy, ensnaring creatures that will eventually die struggling in their grip. He sees a river that is an annelid ooze of blue-black pulsing toward the sea—not flowing but *pulsing*—slowly, incrementally, but relentlessly forward. (333)

This "blue-black" description makes several appearances in *S.*, both for this corrosive and deadly weapon harnessed by Vévoda and to the ink used in trance-like writing sessions held by S. and the stitched-mouthed sailors aboard their timeless ship. As a reader, if I had been progressing through a volume of *Ship of Theseus* as a more traditional mainstream fiction text, without any of the marginalia or inserts that transform it into *S.*, I would have simply stored this additional reference away in my memory and continued on with the narrative. However, because I was reading this passage as part of *S.*, and I had grown accustomed to jumping back and forth within the text, I felt the urge to flip back through the book and find those other references to the blue-black substances. In other words, because I was reading a *hyperprint* text, I found myself interacting with discrete passages that could otherwise easily appear as a traditional print text by using the hyper reading strategies associated with digital and hyperprint texts. Although I am one reader and this could be representative of only my own reading path, I do not think that my choices and inclinations as a reader are particularly unique, and I believe that other readers might feel compelled to interact with this passage just as I had.

Judging by the various blogs and online discussions focused on *S.*, this seems like a well-founded assumption. For example, in the comments section of the *S. Files 22* blog, readers have compiled and shared lists of references that they are each tracking during their readings. In this single comments section readers trace: ink colors, inserts, underlined words, circled words, Jen's favorite words, appearances of the monkey, "S" symbols, ciphers, *Lost* references, birds, Eötvös wheel codes, and Straka candidates. While I cannot say for certain that these readers tracked down references and through-lines as they read, as I had, it does seem to suggest that fragmenting was a part of how they made sense of the text as a whole, flagging each of these topics within the narrative and reassembling them into new patterns during their own meaning

making. In fact, near the very bottom of the comments section, user "Mystimus" even explores the blue-black substance discussed above that had intrigued me, commenting that he was "looking for clues to understanding the substance" and noting that it makes appearances as "the black vine, the black wine, Vevoda's weapon, [and] the orlop ink." While many of the references listed above may have been followed and compiled as part of the puzzle aspect of *S.*, this substance seems much more like a traditional literary symbol within mainstream fiction, but here readers appear to interact with it differently due to its appearance within a hyperprint text. This suggests, then, that even a longer text within a hyperprint work can lend itself to fragmentation—and juxtaposition, as evidenced above and discussed in further detail below. I should also note, however, that this type of search through a text for a specific keyword would be instantly executable within an e-book and with the aid of machine reading—a reading strategy that is impossible with, if not rather antithetical to, hyperprint texts.

The simplest way to visualize juxtaposition as a reading strategy is to picture a computer screen with numerous windows, apps, and tabs open at once—or alternatively, as multiple open books on a desk. A reader's attention may be focused on any one element at a given moment, but there is always the potential to quickly shift to another, and the other windows may help to clarify or deepen understanding of the current subject or they may spin the reader off into entirely different directions. Through its inclusion of *Ship of Theseus*, Caldeira's footnotes, Eric and Jen's five different time periods of marginalia, and inserted objects, *S.* has a lot of open windows. As seen above, even the most linear component, the text of *Ship of Theseus*, can draw the reader into juxtaposing it with itself based upon its use within a hyperprint text, but the reader is also expressly encouraged to flip through the book, read non-sequentially, and make comparisons and connections among the book's numerous elements. In one of the earliest

examples of this potential, Jen confronts Eric about misrepresenting his identity to her. When Eric would not tell Jen his name, she used her access as a library employee to lookup the workroom assignment that he provided at the very beginning of the title page, and Eric lets her assume that she has "found [him] out" (2). Here, however, Jen confronts him with the knowledge that the student assigned to that workroom is a geology major, and Eric has been describing himself as a literature student (5). Eric admits that he let her assume incorrectly, and after she initially refuses to write back to him, she responds "Dear Mr. Not-Chadwick, See p. 10 for my response" (5). The reader can then also flip to that page to see her response, which is really a non-response of a sketched empty square (10). This does prompt the confession from Eric, however, that he simply found and used Chadwick's ID for access to the library because he himself had been "expunged" from the university because of an incident that was reported on in the school newspaper, *The Daily Pronghorn* (10). A copy of this article is also tucked between pages 32 and 33, so depending on how a reader progresses through the text, the reader may already know about the flooding and vandalism of the English department but not know that Eric was responsible for it, or Jen's summary of the event—"The flood in Standefer Hall?"—might suffice in place of the details until the reader reaches that insert in the book (10). Finally, once readers make it back to the page that started them down this path, Jen's specific direction on page 5, Eric's note from his earliest, lone time period in reference to Straka takes on new meaning; he has underlined text from *Ship of Theseus*, "(This is what happens, of course, men get lost, men vanish, men are erased and reborn.)," and Eric has written beside it "Poss. a ref. to VMS [Straka] himself—fluid identity. Also: erasable" (5). The similarity between the words "erasable" and "expunged" emphasize the parallel issues of identity that Eric, Straka, and the character of S. all have in common, and juxtaposition helps to reveal and emphasize these links

which may be otherwise obscured. If a reader choses to ignore the marginalia or look at it in isolation from *Ship of Theseus*, as if it were a traditional novel, none of these connections would form and the gradual layering of relationships among author, characters, and reader that are so integral to *S.* would remain hidden by the surface of *Ship of Theseus.* As such, Dorst and Abrams have created a layered text that rewards experimenting with different reading strategies and fosters a playfulness in approaching the book object—there is no one "right" way to read the book, but some paths may lead to more satisfying conclusions than others.

Embrace Print and Material Inconvenience

Unlike *Building Stories* and *Where You Are, S.* is roughly the size of a mainstream fiction book. It also functions as a traditional codex, with bound pages that turn from right to left in an ordered sequence (which readers may choose to bypass in favor of other reading paths). Also, the physical book leaves themselves hold no surprises in that they do not unfold or ask to be manipulated in any irregular manner. Lastly, the entire text is contained neatly in the outer sleeve to keep everything tidy and in place.

The inconvenience occurs once the book is opened, the first pages are turned, and any of the twenty-two inserts begin to spill out. As previously noted, *S.* contains a variety of papers and ephemera tucked between its pages; these objects do not appear in regular intervals, and there is no key or index provided for the reader to consult if they become disordered. At times an insert may correspond directly to something mentioned in its surrounding pages, but at other times their placement seems more like either a tangential reminder of something that happened previously or a foreshadowing of events yet to unfold within the marginalia.

Depending on when readers decide to investigate the inserts, they can also reveal a lot about Jen and Eric's relationship. For example, one of the most interesting objects tucked into

the pages is a hand-drawn map on a paper napkin from Pronghorn Java, presumably the campus coffee shop (306-307). The map is labeled "North Campus Tunnels," and as its title suggests, it details the main landmarks on campus and the steam tunnels that connect everything. If the reader starts by examining the inserts first, the relevance of this map would be unclear; if the reader then turns to the front of the book and reads sequentially, however, they would learn by page 6 that Eric does not initially trust Jen. When she asks in the marginalia, "You've heard the rumors about steam tunnels under the campus, right?" he responds that they are "just rumors," even though he himself uses them to sneak on and off campus (6). The napkin seems to be included where it is, three hundred pages later, as both a sign of earned trust between the two, and as Eric's response to Jen's increasing sense of danger and the fear that she is being followed. In other words, it appears where it does to illustrate the growth in their relationship.

The problem, however, is that if the reader is careless or inattentive in handling the book, the inserts can fall out and the initial order is lost. While some may argue that because of the numerous ways to read and progress through *S.* that this does not really matter, despite my argument above, this continuous effort to contain all of the unbound elements highlights the material properties of the text. The overall effect is one of 'a mess of papers' stuffed into a book, an artifact not uncommon in the past but perhaps a rarer sight today as we increasingly digitize our notes, correspondences, and mementos with the help of apps and thus simply have less physical ephemera to tuck inside our books. Furthermore, Katia Grubisic faults e-books themselves for a similar tidiness: "E-books are neat, functional. They can be consumed without heft or clutter. But the heft and clutter are the point. The physical suggestion of the possible is a large part of my allegedly outdated attachment" (163). It may not be practical or convenient, but such "heft and clutter" reminds the reader the book is an *object* in and of itself, and the

interactions required by the reader highlight the materiality that is central to the *bookishness* of a book about two people falling in love *with* and *through* that very medium.

Require Conspicuous Manipulation

As mentioned above, the reader has to maintain constant pressure on the pages to keep the inserts from falling out, but this is not to merely inconvenience readers; it serves the larger goal of keeping readers aware of the medium itself—an act of hypermediacy. In their book *Remediation: Understanding New Media*, Jay Bolter and Richard Grusin explore the historical precedents and current processes of what they call remediation—or "the formal logic by which new media refashion prior media forms" (273). Bolter and Grusin argue that remediation is achieved by employing both immediacy, the sense that you are in front of the thing itself, and hypermediacy, the awareness of the representation's medium (19). Immediacy is aligned with the "transparency" of the interface that allows readers to experience the content, while hypermediacy demonstrates an "opacity" of the interface that specifically draws attention to the medium (19). In other words, if a reader has a traditional print or e-reader novel, and she is so immersed within the content that she pictures the story as it unfolds as if she were there, while also unthinkingly turning the paper or digital pages, then a sense of immediacy has been achieved—her focus is on the thing represented and not the representation itself.

Hyperprint texts such as *S.*, however, utilize hypermediacy to emphasize medium, pulling it to the forefront for readers' consideration. Even though *S.* is experienced fully within the general print medium, as opposed to a digital piece that could include pictures, video, sound, etc., it does so in a way that draws readers' attention to the object in their hands:

> If the logic of immediacy leads one either to erase or to render automatic the act of representation, the logic of hypermediacy acknowledges multiple acts of representation

> and makes them visible. Where immediacy suggests a unified visual space, contemporary hypermediacy offers a heterogeneous space, in which representation is conceived of not as a window on to the world, but rather as 'windowed' itself—with windows that open on to other representations or other media. The logic of hypermediacy multiplies the signs of mediation and in this way tries to reproduce the rich sensorium of human experience. (33-34)

The *Ship of Theseus* library book, the text's footnotes from Caldeira, the marginalia from Jen and Eric, and the numerous inserts all function as such windows within *S.*, and the constant shuffling and manipulation required while navigating through all of them specifically emphasizes the "rich sensorium of human experience" of holding a print book (34).

The elements of the library book, for example, are only uncovered if the reader examines parts of the book that are largely ignored while interacting with a more traditional print text that seeks to obscure its medium. First, on the spine there is a call number of 813.54, which correctly corresponds to the Dewey Decimal system's designation for a fictional literary work published in the United States in the latter half of the twentieth century; this is not printed on the binding itself but rather on a white sticker like those typically found on library books. "Book for Loan" also appears in red ink on the front flyleaf, slightly askew as if stamped there hastily by a librarian. On the title page, there is another apparent stamp, a dark blue and slightly smudged seal that reads "Property of Laguna Verde H.S. Library." Finally, on the back endsheet is a red stamp that admonishes the borrower to "Keep this book clean." Just below this, as part of the same stamp, is the rather ironic pronouncement that "Borrowers finding this book pencil-marked, written upon, mutilated or unwarrantably defaced, are expected to report it to the librarian." This endsheet also features a record of due dates for patrons that checked out *Ship of Theseus*. The last stamp is for

"Oct 14 2000," presumably the last due date before Eric stole the book from the high school library. These various stamps, while undoubtedly created through a computer design program, conjure the illusion of other hands leaving physical marks as traces of interactions with the very same object held by the reader, again highlighting the social nature of such books. It is also important to note, however, that just when the seeming immediacy of the library book is established, it is undercut by the copyright information for *S.* at the bottom of the same page, which reminds the readers that they are not looking at a library book but at the *representation* of a library book. Ultimately, each of these elements combine to create the illusion of a library book—a specific kind of text with different rules and procedures attached to it, which most readers will have their own memories of and experiences with. However, when checking out a mainstream fiction book from a library such marks and are typically incidental, separate from the text and story itself, but here Abrams and Dorst include it as part of the story—collapsing the divide between book and text. Thus, if a reader approaches this text differently from a traditional print novel and actually examines the spine, title page, and endsheets, another "window" of the hypermediacy within *S.* is opened which might otherwise be missed.

Link Material and Textual Interactions

Interacting with the inserts and handwritten marginal notes provides readers with a parallel experience to the characters themselves as they progress from mistrustful strangers to collaborative intimates. Throughout *S.*, Jen and Eric serve as unknowing guides, via their inserts and marginalia, for the reader to the clandestine world of V. M. Straka. As the characters explicitly try to figure out the mysteries surrounding the author, the greater implicit question to be answered—by both the reader and the characters—is *Who are the people writing in the margins and what are they to each other?*

A key way for the reader to get to know Jen and Eric, and for the characters to get to know each other, was through the handwriting itself. Eric's handwriting is in printed, angular all-caps throughout the book, and it gives the impression of someone rigid, perhaps even uptight. Jen's more feminine handwriting, on the other hand, is in slightly looping cursive with rounded letters that might suggest some immaturity. As a reader, however, it is hard to separate out impressions of the characters' personalities based upon the content of their words from the actual appearance of their words, another example of the content and form working hand in hand within hyperprint texts.

This handwritten nature of the notes feels more revealing or private than if they had typed or emailed their communications—presumably like the majority of readers type their own correspondences. In an interview with Dorst for *The New Yorker*, Joshua Rothman observed that, "One of the most arresting aspects of 'S' is the handwriting. I can't remember when I last read so much of someone's handwriting….You feel like you're snooping on something intimate." This feeling of intrusion or spying on the characters is worth exploring because they are, after all, fictional characters within a book that expressly exists to be read. There is no trespassing here, any more than there is in reading any other novel that details the thoughts and feelings of its characters, but the almost epistolary nature of the text creates an illusion that the reader is not the intended audience of these confidences.

It is the handwritten nature of these notes that allows the reader to feel a closeness with and between the characters. In *Figuring the Word: Essays on Books, Writing, and Visual Poetics*, Johanna Drucker highlights the combined communicative concept and physical practice inherent in "writing." She notes that "the word is ambiguous in its dual identity as a verb and a noun, an act and a product, a visual and a verbal form, the composition of a text and trace of the hand....

At its most fundamental writing is inscription, a physical act which is the foundation of literary and symbolic activity" (3). While Drucker goes on to focus more specifically on "text as image" within typography and visual arts, her emphasis here on the "trace of the hand" and the "physical act" of writing, call to mind the process of putting pen to paper, forming letters, moving one's hand across the page. It is a tactile experience familiar to the vast majority of readers, and the written content of the page forms a bridge with the reader both cognitively, through the meaning, and physically, through the ink and inscription surface. At the risk of being overly saccharine, receiving a handwritten letter seems only one step removed from touching the sender's hand. What is more, handwriting's intimacy seems to feel even more personal as it contrasts with our everyday typed communications. Novelist Philip Hensher was inspired to write *The Missing Ink: The Lost Art of Handwriting* after he realized that he could not picture his close friend's handwriting, and throughout his book he examines how handwriting is tied to a sense of ritual, identity, and aspirations. Hensher's concern is that

> handwriting seems to be about to vanish from our lives altogether. At some point in recent years, it has stopped being a necessary and inevitable intermediary between people – a means by which individuals communicate with each other, putting a little bit of their personality into the form of their message as they press the ink-bearing point on to the paper. It has started to become just one of many options, and often an unattractive, elaborate one.

E-mails and texts are certainly less time-consuming to compose (at least for most people) and definitely faster to arrive than handwritten letters or notes; one does not need to worry about their legibility, and word processing tools help mitigate embarrassing grammar mistakes. In comparison, handwriting takes more time, effort, and care—which is part of its virtue. Consider,

for instance, that social conventions dictate that our most intimate communications still be handwritten and mailed—personal congratulations, condolences, thank-you notes, love letters. It is the effort spent on these communications that testifies to their thoughtfulness, and the time spent writing or reading them is spent within the intimate space of the letter with the other person.

As such, I would also argue that if the messages within *S.* were typed, this sense of intrusion upon intimate privacy would not be as felt. A. S. Byatt's novel *Possession,* serves as a particularly apt contrast in that it focusses on two modern-day academics uncovering and researching a mystery between two Victorian writers, a rather parallel situation to that of Eric and Jen's. *Possession* also includes collections of other texts including letters, poems, excerpts, and diary entries, again very similar to *S.* The key difference in the reading experience, however, is that *Possession* uses one consistent typeface throughout. This results in the constant reminder that even though the text reveals the supposedly private correspondences between two characters it is still a book that is meant to be read. Looking at it in comparison to *S.* it could almost be felt as if the initial transgression on the characters' privacy was committed by Byatt and then sanctioned by the publisher who presented it in a standard font—obviously an exaggerated perspective on the rights of fictional characters, but an illustrative one in that *S.* seemingly presents the characters' intimations *without any mediation*. Indeed, in response to Rothman's observation about this feeling of "snooping," Dorst replied "That's exactly the illusion that we wanted to create. We had been talking about the intimacies of books and about the intimacies that might come from sharing a book; these are two people who are building intimacy, and handwriting is another way that that intimacy can be developed and expressed."

Beyond creating illusions of personality and privacy, handwriting can reflect something else that typed text usually does not—change. Traditional fonts used in publishing are useful largely because they are standard and stable; a lowercase, Times New Roman "g" is always going to look the same regardless of the typist's mood or mental state. Handwriting, however, can reflect fluctuations in the writer. Within *S.*, Jen's and Eric's shifts in mood and emotion can be detected in the quality of their handwriting. For example, when Jen mentions Prof. Moody, Eric's former dissertation advisor, he writes "I hope you ignored every goddamn word he said," and while the underlining can be easily represented here in type, the slightly larger letters and spacing, which might reflect haste or even anger, cannot be as easily reproduced (viii). Dorst and Abrams have also both noted that the handwriting of the characters changes over time to illustrate their personal growth; Abrams reveals that "the writing's not actually the same all the way through—it changes as the characters change," and Dorst adds in an interview with Jennifer Vineyard, "…we talked about how the handwriting should be able to convey emotional content, like when one's getting agitated and pressing down harder, and there are little evolutions in the handwriting as the story goes on. It was important that it look like what our sense of the characters was" (Rothman; Vineyard). Without the reader putting in the work to identify each character's hand, place each note in the time period during which it was written, and observe the quality of the handwriting as it reflects changes within the characters, much of *S.*'s nuance would be lost.

In effect, the handwriting and the shifts it undergoes throughout Jen and Eric's correspondence help to solidify their identities and their growth—much like our own handwriting. In the book, Eric's earliest writing is small, cramped, and all straight lines, which seems to fit with that time in his life when he was isolated and depressed. By the end of the

novel, however, while still writing in all caps, the strict lines and evident pressure seems to have lessened, letters are less constricted, and he is sharing a pen with Jen. His growth is so apparent that it is almost as if a different person is writing, but it is simply the result of his character arc as evidenced by handwriting. Reading *S.* as a hyperprint text and utilizing filming and juxtaposition to reveal this growth draws readers' attention to how integral our handwriting is, or perhaps was, to our expressions of identity. As Hensher points out, "[Handwriting] opens our personality out to the world, and gives us a means of reading other people," and while handwriting analysis as an objective science has largely been debunked, we still feel as if we can get to know something about a person through their handwriting alone. That potential insight or personal connection is lost, however, as we communicate through type. In fact, Hensher goes on to argue, somewhat hyperbolically,

> Handwriting is what registers our individuality, and the mark which our culture has made on us. It has been seen as the unknowing key to our souls and our innermost nature. It has been regarded as a sign of our health as a society, of our intelligence, and as an object of simplicity, grace, fantasy and beauty in its own right. Yet at some point, the ordinary pleasures and dignity of handwriting are going to be replaced permanently.

Hensher worries that with the relative ease of typing to communicate, handwriting will largely become a relic of a bygone era, a lost form of expression. While, I am not sure that I am entirely convinced by Hensher, if readers approach *S.* without a sensitivity to the shifts in the handwriting and view it as they would typed text, looking only for the meaning of the words that are formed by the letters and not for the meaning that can be inferred from the form of the letters themselves, then much of the context of their correspondence would be lost. It would be as if all of Jen and Eric's notes were typed in two stable fonts to distinguish the writer, but without any

indication of *when* they were written or what the *affective tenor* of their comments was. Typed dialogue uses other conventions, such as attribution tags, descriptive phrases, and tense shifts, to convey such information, but within this hyperprint text these are all indicated solely through the intricacies of the handwriting.

Perusing the physical inserts in the book carries all of these same challenges and opportunities but to an even further degree. These ephemera tucked into the pages of *S.* show another link between Eric and Jen during their correspondences and research, and the impact of the inserts can perhaps be seen best in examining those that relate to Straka's translator, F. X. Caldeira. The enigmatic Straka wrote in a number of different languages, to help throw off speculation about his true identity, but he always used Caldeira as his translator, and even though the two had worked together for decades, they never met in person. Their only communication with each other was through letters, which Straka always asked Caldeira to burn after reading, and marginal notes on the manuscripts; in this way, their relationship mirrors that of Eric and Jen, at least in the initial stages. However, even while Caldeira discusses the question of Straka's identity in the preface, Eric and Jen's notes reveal that there is also some uncertainty about Caldeira's own identity. When Jen asks, "What does the 'F. X.' stand for in Caldeira's name, Eric replies that the middle name is Xabregas, and the first name is either Francisco or Filip, "depends on [the] source," but everyone agrees that Caldeira is a man (vii). Jen, however, senses that Caldeira put up with Straka's frustrating process and the "tremendous sacrifices," "grave risk," and "foul attentions" that came with being associated with him out of love rather than professional duty (xiv). This prompts Jen to do more research, and she eventually uncovers that "F" stands for *Filomela,* and from there they are able to track the female translator to Brazil,

where she faked her own death (29). Eric travels to Brazil to find Filomela and sends coded postcards back to Jen to update her.

If a reader approaches *S.* as a traditional codex and reads sequentially from front to back, the first postcard from Eric appears before it is actually clear that he has even left. The postcard looks like any other one might receive in the mail, complete with a colorful photo collage and the message "Greetings from Brazil" on the front and postage stamps and a seemingly handwritten message on the back. Eric intimates to Jen that the locals remember Filomela, but suggest that she moved to the northeast. Perhaps more interesting, however, is the postscript included: "P.S. Best to destroy this [and] the cards to follow…But I hope you keep it [and] think of me. If you do, [please] take precautions" (112-13). The postcards' inclusion within *S.* reveals that Jen did not burn them (though the recipient name and address are inked out). Both Eric's postscript and Jen's refusal to dispose of the artifacts speak to the emotional component of such mementos, which serve as physical embodiments of a personal connection. This is carried over into the other four postcards from Eric but is even stronger with the items from Filomela herself: an old-fashioned photograph of her as a young woman, a greeting card that contains a newspaper clipping and translation of the obituary for F. X. Caldeira from 1964 when she faked his/her death, and finally, a letter (that accompanied a packet of other documents not included in *S.*) that essentially passes the torch of Straka's mission to Eric and Jen and says goodbye just before Filomela's death. She writes this last letter under the name Ermelinda Pega, and her hand is a somewhat shaky cursive; she writes, in part,

> Please remember, though, not every question must be answered. Matters of the past may be allowed to remain in the past; matters of the present and future may be allowed to go unexplored. The world will not end in any case.

> I will tell you what matters most (although you must know this already, as you know my story): it is love. When you fall in love, friends, let yourself fall. (416-17)

Filomela is referring to the unfulfilled love between herself and Straka, whom she never met in person, and is using it as a cautionary tale for Jen and Eric, who have begun a relationship in somewhat similar circumstances. By interacting with the inserts in the book, however, readers get a sense that they have met all of the central characters and have been brought into an inner circle of confidences; the physical objects serve as a material bridge to suspending disbelief and creating a sense of intimacy among the characters and with the reader.

Resist E-Reader Digitization

Although *S.* was also published as an e-book edition that tried to replicate the experience of manipulating the inserts and enhance the reader's exploration of the marginalia, these material bridges between the physical book, the characters, and the reader are lost—a loss so significant it may be best evidenced in the difficulty of currently obtaining an e-book version. While an English e-book version existed at some point in time, the only e-editions currently available seem to be a French version that can be found in Apple's iBooks store or French and Italian translations via Amazon's Kindle (Hill). Unfortunately, I can find no other information about the English edition, so I will not speculate as to why it is no longer available. As such, my following exploration of the French e-book edition is limited to that version alone; however, I do not think that it would be unreasonable to assume that the English version may have included the same design elements and display options.

While the Apple iBook edition tries to replicate some of the material interactions that can be had with the print version, it is not always successful. When the reader first opens the e-book, the front of the slipcover is shown, and there is a pulsating dot on the same band that seals the

printed book within the slipcover. Once the reader clicks on this pulsating dot over the monkey illustration, a short animation plays of the band moving in a slight arc off of the right side of the screen and the slipcover moving directly off the top of the screen, revealing the textured cover of *Ship of Theseus*. This is an interesting interaction that mimics cracking open the seal and delving into the book for the first time; however, this experience is undermined to some degree because it is repeated every time the reader visits this page, which reminds the reader that there are no physical repercussions in breaking the band—a remediation that shifts into hypermediacy as the illusion of interacting with a physical, print book is replaced by an awareness of the digital interface representation.

The design of the marginalia in the e-book edition also affects the reader's experience of the immediacy of the text, or at least the illusion of immediacy. While the feature of using color-coded inks for different time periods is still used, rather than the marginal notes appearing as handwritten comments between Eric and Jen, as part of the characters' progressions and the reader's sense of intimacy, the marginalia are typed. Eric's all caps style is carried over from the print version, and a script font is used for Jen's comments, but this imitation of actual handwriting makes the affectation all the more noticeable. Much like Byatt's *Possession*, this simple use of standardized font draws attention to the mediation of the text and breaks the spell of immediacy that was created in the print version.

The e-book also provides readers with the option of revealing or hiding the marginalia. In the default display, only the text of *Ship of Theseus*, along with Caldeira's footnotes, and the inserts are visible. If a reader clicks on a small icon near the gutter of each page, however, the marginalia gradually appears. While this does provide the reader with an additional tool for navigating the work, it seems to place a primacy on *Ship of Theseus*. It also deemphasizes the

differences in the time periods, as the marginal notes all appear and disappear in unison, which suggests that they be read as a unit, rather than jumping back and forth in time. Perhaps a more interesting tool would have been to allow the reader to hide or display marginalia according to the time period; this may have been able to provide insights or connections not readily apparent in the print version.

Lastly, while readers are given ways to manipulate the e-book inserts, interacting with them as two-dimensional objects is not as satisfying or engaging as handling their printed counterparts. In the e-book, once the reader opens a spread in which an insert is placed, the item appears automatically, unlike the marginalia. Shadowing around the inserts suggests that they hover just over the right-hand page, and they are displayed slightly askew to add to the illusion that they are additional objects that have been haphazardly tucked between pages. The reader cannot rotate or straighten an insert, but if clicked on, the document will flip over to reveal the contents on the back of the page. Also, readers can move inserts around the screen if they click and drag them; however, the mediated interface becomes apparent once the border of the page, either the gutter or the outside edges, is reached and the insert fails to cross it. This may go without saying, but there are no hands directly turning, flipping, moving—touching—the pages. Yes, the reader's hands touch the mouse, trackpad, or screen to complete specific interactions with the text, but the illusion of handling the same postcards, napkins, and letters that Jen and Eric held in their own hands is broken. While it is refreshing to see an e-book offer such interactions, they only remind the reader of the digital interface that is standing in for a very bookish text, resulting in "haptic dissonance."

In "Investigating the Acceptance of Electronic Books: The Impact of Haptic Dissonance on Innovation Adoption," Jin Gerlach and Peter Buxmann examine the importance of how

readers imagine books *feel* in their acceptance or rejection of e-readers. Garlach and Buxmann found that haptics were particularly important to leisure reading, "since the use of technology could disturb immersion into the book, especially when relaxation is an important factor." They utilized Cognitive Dissonance Theory (CDT), which "basically states that individuals perceive inconsistency between dissonant cognitions as unpleasant and strive for reduction of those dissonances," meaning that if people expect one thing based on previous experience but receive something different, they are likely to have a negative perception of that difference and try to avoid it. Garlach and Buxmann apply CTD "to the domain of ebook adoption" and

> hypothesize that unfamiliar haptics of digital books are potentially irritating to readers and may be a source of aversion to digital reading. Based on past reading experiences with physical books, an individual may hold certain beliefs about how reading a book should feel like. Different haptic experiences of reading an ebook might conflict with those existing beliefs and create uncomfortable tension. We refer to this constellation as "*haptic dissonance.*"

I would argue that this haptic dissonance could perhaps be overcome if a reader is fully immersed within the text of a project, but when that text emphasizes bookish materiality as one of its primary concerns, the haptic dissonance would be more jarring. In *S.* for example, even if readers can become comfortable with flipping electronic pages through a smooth, glass interface, the inserts are presented with even less material fidelity, or perhaps *haptic resonance*, than is achieved in the printed book.

Here the hypermediacy of the e-book edition undermines a core theme of the text itself—books, and other print ephemera, are communicative objects that can serves as bridges between people. In "Hypertext Fiction Reading: Haptics and Immersion," Anne Mangen emphasizes how

physical the act of reading can be, noting, "Of particular importance, and at the same time remarkably neglected in theories of reading, is the extent to which reading is an activity involving and requiring manual dexterity—that is, skillful handling by our fingers and hands" (405). Of course, readers' hands and fingers are still engaged when reading on e-readers—scrolling, swiping, flicking—but Mangen argues that these manipulations are a step further removed from the text: "When reading digital texts, our haptic interaction with the text is experienced as taking place at an indeterminate distance from the actual text, whereas when reading print text we are physically and phenomenologically (and literally) in touch with the material substrate of the text itself" (405). For books like *S.*, this also means that, at least within the story world, readers are also in touch with the characters that held that same objects themselves. Experiencing the book object through the remediated digital interface tactilely feels like it has been placed behind a glass literally and figuratively—on the other side of the smooth screen to be observed but not really felt.

That is not to say that the digital realm has nothing to offer to enhance *S.*; both the publishers and a spontaneous online community have created extras and resources to deepen engagement with the book. There are numerous blogs, including most notably Brain Shipman's Wordpress blog *Who Is Straka* and the Blogger site *S. Files 22* run by "MJCarp" and "Zort70," where readers can go to discuss their experiences with the book, seek help in deciphering the coded footnotes, and compare theories with other fans. Ironically enough, these interactions take place online but rely on the close reading strategies more typically associated with traditional print—almost the hyperprint project in reverse. There are also Twitter accounts for Straka (@KMVastra), Jen (@JentheUndergrad), and Eric (@EricHusch); a Tumblr account for Jen, under the screenname "jenheyward"; and a YouTube video of the "Summersby Confession." The

mystery about whether these are all marketing tools from the publisher, fan-created, or some combination thereof adds to the aura of intrigue surrounding the book. When asked directly if he was responsible for the characters' Twitter accounts, Dorst replied:

> So there are some extra things living on the web that I have composed. There are things on the web that I did not compose, but I have no idea who did. So all I can say is this particular thing I did not do, but I don't know [who did]. It could be a fan, it could be someone at the publisher, it could be someone at Bad Robot. I remain willfully ignorant. But it's still too early in the game to say which ones [I've handled]. (Vineyard)

These online extensions of the book utilize their own mediums to enhance the experience of the print book, unlike the e-book edition itself, which merely imitates the experience of the print book and results in a significant change in engagement. It would be equally unrewarding to try to imitate the discussion boards, tweets, and Tumblr posts within the bound and printed page.

Explore Themes of Communication and Medium

Perhaps more than any of my other hyperprint exemplars, *S.* is about the book as a physical object and the social connections that it facilitates. Much of the plot, or one of the numerous plots, focusses on an author's relationships with collaborators, readers, scholars, and the political world in which he is writing—but all of this could just as easily be explored in a *text* rather than a *book.* The relationship between Jen and Eric, however, could not have unfolded were it not for the physical book as an object and medium of communication.

As previously mentioned, *S.* exists first and foremost as a stolen library book, so even before Eric shares the book with Jen, it is already established as a physical object with a history of being shared among strangers. In "Books on the Move," Leah Price visits a Mobile Library in London that serves the homeless population, and she discusses the historical attitudes regarding

libraries and the sharing of books among disparate communities. She notes that even with the first public libraries there were anxieties about the types of people, the types of hands, sharing books with other patrons; Price includes a "rant" from the late-Victorian writer and mystic Marie Corelli arguing that "to borrow one's mental fare from Free Libraries is a dirty habit…. The true lover of books will never want to peruse volumes that are *thumbed and soiled* by hundreds of other *hands*… messy *knockabout volumes*, which many of our medical men assure us carry disease-germs in their too-frequently *fingered* pages" (692). While disease *via* library book seems like less of a concern today, there are ongoing debates about the role of libraries in an increasingly digital world, and announcements of deaccession quickly reveal how strongly some patrons feel about public access to printed texts, even while many librarians argue that "weeding" is a necessary process for an effective institution. What these anxieties and debates reveal is that there are strongly held beliefs about sharing books and the intimacy that it can create; as Price notes, "Bookhandling becomes an act of communion, like breaking bread…" (693).

Jen and Eric engage in this intimacy of a shared object, a shared internal space, to develop an actual relationship that then reaches beyond the margins of the text. As already discussed, the reader is privy to this growth and sense of intimacy through the handwritten notes and inserts, but if the conceit is followed through to its conclusion, the reader is now the caretaker of their correspondence as it has seemingly been lost, or perhaps let go, by Jen and Eric. This highlights another component of the printed book that is less tangible with a digital text—sharing is predicated on sacrifice.

In *Book Was There: Reading in Electronic Times,* Andrew Piper devotes a chapter to what it means to share a traditional, printed text and what it means to do the same with a digital

piece. He begins by clarifying that with physical objects, sharing involves both giving and withholding:

> Sharing is not purely synonymous with giving, but it does belong to the same family. Like a gift, there is a sense of sacrifice about sharing, as when a child learns to share a toy by giving it up temporarily. But unlike a gift, when I share something with you I also retain something else, something more ethereal like a bond of friendship or an idea that I hold on to….In being given, something is also withheld. It is a part of me, but only a part. (87)

Thus, while Jen and Eric cannot access their shared book at the same time, one of them has to give it up in order for the other to receive it, they also maintain a connection to the book and, by extension, to each other. There is a similar experience when we share a book of our own with someone we think might enjoy it; we maintain a connection to the book (through ownership) but also to the other person to whom we are extending a bit of ourselves—our tastes, ideas, a sense of what we value, or our perceptions of the other person might value. This was certainly the case for Eric. *Ship of Theseus* was the most important book in his life, and while he was at first flippant about lending it to Jen, when she started engaging with the text on a deeper level, his view of her shifted as well. The book they share used to serve a wider public, through the library, then became Eric's sole possession, until he decided to share it with Jen, who then gave it back to him anew. Essentially, Eric's perspective of the text was changed by seeing it freshly through Jen's marginalia. Thus the notes between the two students serve as a material metaphor for the act of *creating* a text by reading, sharing, and discussing it with other people. Here the physical object of the book in the reader's hands is a concretized emblem of an otherwise intangible process.

Of course, sharing and discussing a text can happen with digital content as well, but Piper argues that the dynamic of sacrifice and withholding is off-balance when sharing an e-text. In many ways, sharing is much easier with electronic media; we can instantly post articles and videos to our social media feeds, email PDFs, or provide links to content that our friends and colleagues might be interested in. Piper notes, however, that "Copying is not the same as sharing. Having a file in common that we can both access at the same time overlooks any sense of personal investment in the process, that which makes sharedness possible. In order to share something, I must give something up" (102). Piper argues that because there is no sacrifice involved when copying a piece to pass on to someone else, there is also less of a sense of shared connection to both the item and the person with whom it is shared.

I agree that there is a difference in trusting someone with your only physical copy of a text versus emailing a copied PDF, but I would add that simply because the internet has a created an entirely *different* environment of sharing, perhaps one that is much more complex and not fully understood at present, does not necessarily mean that it is lesser than. Instead, it is an opportunity to reflect on how it differs from previous models and shape our use of it to better reflect its unique affordances. Piper suggests that users actually "embrace" "a more layered notion of DRM [Digital Rights Management]" towards this end (102, 104). His thinking is that

> Instead of making it a crime to share, we should be making it easier to share when it is conditioned upon loss. Just as when I give a material object to someone, we should be able to transfer rights more easily from one person to another. Only then will the two of us feel what it means to impart and part with something as the beginning of our mutual understanding. (102-103)

While digital texts are certainly developing more sophisticated ways to share—and limit sharing—Piper's ultimate argument is that by sacrificing when we share we add a deeper engagement with the other person: "Only in this way can we make it our own and thus give something of ourselves away when we share it" (104). I am uncertain if using a DRM system to recreate the loss inherent in sharing physical objects would in fact result in stronger connections with texts and with each other or if it would simply be mimicking the inherent limitations of print environment. What is clear, however, is that hyperprint texts, such as *S.*, that explicitly explore issues of communication and medium through physical formats will help us better understand the similarities and differences between the information environments in which we find ourselves and inform our decisions to more deliberately shape our interactions within them. Essentially, they help us explore the question of how are our media social and how do their different affordances affect our relationships with one another.

For Jen and Eric, a print book became the medium through which they communicated and shared ephemera; they created their social space *through* a book to facilitate the growth of their relationship. In the *Griffin & Sabine Trilogy*, however, the correspondence between the two characters *becomes* a book in and of itself. Despite this and other key differences between the two texts, both help to retrospectively examine the types of social correspondences and spaces that can and have been built outside of the digital arena and what affordances those spaces have to offer.

The Griffin & Sabine Trilogy as a Hyperprint Exemplar

The reported inspiration for Nick Bantock's 1991 book *Griffin & Sabine: An Extraordinary Correspondence,* was "a bout of postal envy" (Jones). In his *Newsweek* review of the trilogy's first two books, Malcom Jones Jr. writes,

> One day, after withdrawing his mail from his post-office box, the Vancouver artist was grumbling over the usual assortment of bills and circulars when a man nearby extracted from his box a "really nice looking letter from overseas." Walking home, Bantock found himself craving exotic mail. "Then it occurred to me, if you want a letter, write it yourself."

Since the nascent Internet had barely reached even one percent of the American population in 1991, Bantock was responding not to the prevalence of email but to the general decline of mailed personal correspondence, and there is a nostalgia to these books that plays with the traditional codex form in interesting ways ("Individuals"). Jones specifically noted this dynamic, "Reminiscent of antique oddities like stereopticons, they hark back to a time before telephones. They demand to be handled, rifled, used. His creations ably scratch Bantock's itch to 'push at the edges and boundaries of what is perceived as a book,' but they do it by looking backward to the hands-on era of letter writing and the centuries-old paraphernalia of pop-ups." Thus, while this is the earliest hyperprint exemplar discussed, written and published well before the ubiquity of digital communications, it is also arguably the most widely known text or set of texts within the scope of my research, as they collectively spent over one hundred weeks on *The New York Times* bestseller list (Medley). As such, I feel it needs to be acknowledged as evidence that mainstream fiction was already starting to play with readers' expectations and experiment with form even before the dawn of the digital age. That said, though important to discuss, *The Griffin & Sabine Trilogy* does not always utilize the six elements of a hyperprint text as fully as other exemplars which had initial readers with different skill sets and expectations as a result of their habitual electronic interactions. *The Griffin & Sabine Trilogy*, then, stands as a good example of how the

hyperprint lens can be used to discuss elements of texts that were published before the print/digital divide.

At its core, *The Griffin & Sabine Trilogy* is a fictional epistolary novel, which utilizes magic realism, and spans three volumes, *Griffin & Sabine: An Extraordinary Correspondence* (1991), *Sabine's Notebook: In Which the Extraordinary Correspondence of Griffin & Sabine Continues* (1992), and *The Golden Mean: In Which the Extraordinary Correspondence of Griffin & Sabine Concludes* (1993). Bantock later followed up the trilogy with four other books: another trilogy called *The Morning Star Trilogy*, which consists of *The Gryphon* (2001), *Alexandria* (2002), and *The Morning Star* (2003); and *The Pharaoh's Gate* (2016) which connects the two trilogies. However, because Bantock has implied that the story of Griffin and Sabine was originally conceived of as a trilogy and because I feel that the first trilogy on its own is conceptually stronger, I limit my discussion here to those first three texts.

As for the general plot, Griffin Moss is a London-based artist that makes cards, and one day he receives a postcard from Sabine Strohem, a stamp designer from the fictional Sicmon Islands in the South Pacific. She asks him for a postcard that she intimates she has seen earlier drafts of, and Griffin does not understand how that would be possible. Gradually Sabine reveals that she has some sort of visual telepathy with Griffin, and she can see whatever he draws. As the two playfully get to know each other through their writing and their art, they begin to fall in love but find their way blocked by specters of insanity, the physical boundaries of parallel universes, and the intrusive villain Victor Frolatti. Again, although *The Griffin & Sabine Trilogy* was published before readers would have had their reading strategies shaped by online habits, Bantock's interesting perspective as an artist still necessitated the use of skills that would later become central for such digital texts.

Foster Hyper Reading

As previously mentioned, the key digital reading strategies used in navigating hyperprint texts include filming, fragmenting, and juxtaposition. Fragmenting, or breaking a longer text into smaller, discrete segments, is relied on most obviously throughout *The Griffin & Sabine Trilogy*, simply because it is an epistolary text told through separate letters and postcards. The longest of these sections is the front and back of a single sheet of paper so they are all rather short, which allows the reader to digest it in small portions. This allows the reader to dip in and out of the text with short bursts of attention, as opposed to longer, more traditional novels that might require deeper, sustained attention. Although this is a central component of reading *The Griffin & Sabine Trilogy* and a skill that is increasingly important with digital reading, this text does not really do anything more complicated with this particular element to warrant further discussion, with the one exception of how it handles time between the fragments, which will be discussed below.

For Bantock, the explicit goal for this text was to make the images as important to meaning making as the words; as a consequence, readers are required to utilize "filming" in their experience of the text. In an interview with Carl Steadman for *Wired*, Bantock discussed his vision for this balance between text and visuals:

> What publishers saw was a book with envelopes in it that you could take letters out of. Basically they saw it as a three-dimensional book for adults that was also a love story. But I think it's about something else. My push has been to try and develop a language, an ongoing narrative, that relies on both word and image. So if you take the image out, you're not taking away the illustrations. You're taking away a section of the story.

Thus while the most immediately noticeable feature of the trilogy is the novelty of removing the letters from their envelopes, for Bantock what the text really pivots on is this dynamic between

the words of Griffin and Sabine and their art. This makes sense within the story as well, since both characters are artists and express themselves primarily through visual mediums. By using filming to pick up on the subtleties of their correspondence designs, readers get a clearer picture of their relationship.

The necessity of filming begins as soon as the reader opens the cover to reveal the endsheets of *Griffin & Sabine*. Even in this section of paratext that most readers skip over, Bantock has used the visuals to hint at the relationship between the two characters. For both the front and back of the book, the endsheets and flyleaves show two interspliced maps: one of the London Underground metro system and the other of the Marshall Islands in the central Pacific. The map of the Tube represents Griffin and his life in London, while the Marshall Islands is given as an approximate location for Sabine's fictional Sicmon Islands. Here their two worlds are spliced together into one, symbolizing their connection to each other and their role as each other's "equal opposite" (*Golden Mean* letter 13). The trilogy focusses on the pair figuring out this balance, so it is particularly fitting to start with this image; if readers utilize the filming strategy, from the very beginning, they can begin to get a sense for the crux of the book before the first text even appears.

To further highlight the importance of image in relation to text, Bantock emphasizes that Sabine can only see what Griffin draws; she cannot see what he writes. When Griffin questions her about this aspect of their connection, she replies, "Why do I see only your images and not your writing? Because we dream in pictures, not in words?" (*Griffin & Sabine* letter 11). Here Bantock seems to be pointing to a difference in how images communicate, sometimes more subtlety but also perhaps more powerfully. In *The Rhetorical Act: Thinking, Speaking and Writing Critically*, Karlyn Kohrs Campbell and Suszn Schultz Huxman seem to agree: "Visual

rhetoric is pervasive, in part, because it is powerful. Visual messages are volatile, eliciting positive and negative responses simultaneously. The familiar expressions 'seeing is believing' and 'a picture is worth a thousand words' capture their high ethos appeal" (263). While the authors largely discuss photography, what they refer to as the "enthymematic power of visual rhetoric," or allowing the viewer to fill in connections on her own, would certainly apply to other visual medias. Kohrs Campbell and Schultz Huxman argue, "Images invite viewers to draw their own persuasive conclusions; they do not argue explicitly. As such, they can create associations in ways that would be too audacious or laborious to say or write" (265). Not only does this speak to the hyper-reading strategy of filming, but also to making connections and filling in links between multiple images to arrive at a more impactful conclusion. It is a perspective that is explored throughout the trilogy, and it comes into focus by using another hyperprint reading strategy—juxtaposition.

While today we most commonly use juxtaposition while jumping back and forth between different web browsers and texts online, Bantock also asks readers to utilize juxtaposition while progressing through a single, sequential text, most typically while examining the use of art within the trilogy. There are several instances throughout the trilogy where one of the characters will introduce a visual, then the other character will take the image, manipulate it in some way, and send it back, starting the whole cycle over again. This was done very early on in their correspondence as a kind of visual play that highlighted the flirtatious tone of their letters. For example, on the seventh card, Sabine uses a stamp with the illustration of a man with elephant-like features, including a trunk nose that stretches to his chin. On the back of the same card she has another humanoid figure that has a head of a fish. In response, the eighth card, from Griffin, has a man with a very long nose being bitten by a fish. On the back of the same card he has a

figure with the body of a fish but the head of a man—the reverse of Sabine's humanoid fish figure. Griffin took two of Sabine's images, the man with the long nose and the fish, and created a new story with them on the front of his card, and then on the back be provided the mirror image of Sabine's, which is particularly fitting given the "equal opposite" nature to their relationship.

A similar, though darker, sequence occurs over the twelfth and thirteenth letters, when Griffin discusses Paolo Uccello's painting "George and the Dragon" and ends his correspondence with a drawing of Uccello's green dragon; the image on Sabine's responding postcard seems to be inspired by Griffin's description of the "infinite sky filled with violent spirals of silver clouds" and filled with shadowy dragons. Here rather than responding to the actual image that Griffin has drawn, she takes her inspiration from his words that described the image from someone else and how it made him *feel.* Through juxtaposition, then, the reader can see how images, words, and emotions are all tied together within Griffin and Sabine's ephemeral relationship, but juxtaposition can also be used to help clarify ambiguous plot points.

Although the end of the trilogy leaves some questions, by looking closely at a detail used throughout the series, the reader can infer several possibilities for the ending. Griffin owns Gryphon Cards, and his postcards always include the Gryphon Cards logo. The logo depicts a gryphon, eagle head and lion tail both pointed upward, lying on a circle flanked by two wings in the displayed posture. Within the circle, there are always two other, smaller circles at roughly the twelve- and four-o'clock positions. Typically, but not always, the topmost of these two circles is black and the other is only outlined; taken together the larger circle and the two smaller circles seem to depict some kind of celestial map, but this is pure conjecture.

What is clear, however, is that on the very last of the postcards in the trilogy, there is an additional smaller circle. This could simply be a change in the celestial map do to the time difference, but it could also signal a change in or addition to the relationship between Griffin and Sabine. This postcard appears at the end of *The Golden Mean*; after Griffin and Sabine had planned to meet in Alexandria, where they hoped they would finally be able to be together, there is a white page with only the following text: "For some years nothing was heard from either Griffin or Sabine, until a young doctor in Kenya received an unusual postcard from a stranger" (letter 17). The reader then turns the page to reveal the final postcard's front image—a rendering of a baby. The back of the postcard is in Sabine's hand, but it also includes the Gryphon Cards logo, implying that Griffin and Sabine are together. The text of the postcard reads,

> Dear Matthew
>
> It's good to get in touch with you at last. We are very impressed with your general diagnostic abilities. However we are not convinced you should be considering prescribing penicillin for the Atubi's youngest son.
>
> Write soon—Sabine M. Stohem

The tone of this postcard, out-of-the-blue, from a stranger addressing specifics that she has no way of knowing, is very similar to the first postcard Sabine sent Griffin. This suggests, perhaps, that either Sabine or Griffin or both, can see what Matthew, the doctor from Kenya, writes, just as Sabine was able to see what Griffin drew. Is he, then, represented by the third dot within the Gryphon logo? Another body connected through telepathy to the other two. Or perhaps, does the image of the baby suggest that Griffin and Sabine used the third circle to represent a possible child they have had together? While either conclusion, or both, is equally supported, the seemingly minor detail of the Gryphon logo is revealed only through juxtaposition to hint at

these larger possibilities. I should also mention that in *The Gryphon*, the first book of the additional Griffin and Sabine trilogy, it is revealed that the baby is actually the recipient, Matthew, as an infant and the Gryphon Cards logo returns to the original two-dot configuration (letter 4). While this would seem to negate my interpretations above, since the text was originally envisioned as a single trilogy and other details seem to have been changed in order to accommodate this additional series, it seems more prudent to examine the first three books as a standalone trilogy.

Again, while *The Griffin & Sabine Trilogy* predates the specific context of the shift from print to digital reading, it still fosters hyper reading strategies such as fragmenting, filming, and juxtaposition. Additionally, while not necessarily anticipated by Bantock, applying the critical lens of hyperprint and having a vocabulary to discuss these texts allows us to reflect on our current communication habits and conventions.

Embrace Print and Material Inconvenience

As Previously mentioned, *The Griffin & Sabine Trilogy* does not fully utilize all of the elements of a hyperprint text, and the ease with which it can be read is one instance which reflects that. Hyperprint responds to the perceived convenience of electronic texts and e-reading devices by being *deliberately inconvenient.* Such works potentially fold out, fall apart, require assembly, and sprawl across surfaces in contrast to the countless books, apps, and websites that we can instantly access on smartphones and then tuck away neatly into our pockets. Bantock, however, was not writing in response to this specific historical context, and the shape and structure of *The Griffin & Sabine Trilogy* is more informed by his work as a visual artist and pop-up book author.

According to the author's webpage, Bantock started out in the book world by designing covers for other authors, but he transitioned into writing and illustrating his own books in 1990. His first book was *There Was an Old Lady*, a pop-up, rhyming book that was published in August of 1990. This was followed by another pop-up book in January of 1991, *Wings: A Pop-Up Book of Things that Fly*. In April of 1991, however, he moved away from children's books and began to explore the possibilities of mailed correspondence with *The Missing Nose Flute & Other Mysteries of Life*, which was a book of postcards (intended for use) which took antique postcard images and combined them with Bantock's own witty, often risqué captions. This was also Bantock's first foray into writing for an adult audience, and it seems to be the creative link between his earlier pop-up books and *Griffin & Sabine*, which came out later the same year.

The context in which Bantock wrote the trilogy, then, is not the dawning of the digital age and its convenience, but rather an artistic exploration of books for adults that simultaneously capture the sense of play with interactive books and the more adult conceptions of correspondence. Because of this, the hyperprint element of deliberately cumbersome texts does not really apply, since there was no idea of electronic convenience for Bantock to push against or for readers to contrast the text with. Instead, *The Griffin & Sabine Trilogy* is only as inconvenient as traditional children's book, with wider dimensions that require two hands to hold, and some minor manipulation required, which will be discussed below. As a reader, however, the formal features of the text shape the reader's reception within our current context, and folded letters within envelopes contrast significantly with texts and emails, prompting reader reflections about their own personal correspondence.

Require Conspicuous Manipulation

Hyperprint texts play with reader expectations and thwart the convention of operating a book by merely turning folio pages in a sequential order. This connects back to Charles Bernstein's notion of the role of artifice in holding readers' attention or deepening engagement with a text. Similar to Bolter and Grusin's notions of immediacy and hypermediacy, Bernstein argued that artifice can be used towards absorptive ends, which allows readers to temporarily forget their surroundings and instead engage with the world the author has created—as when a scene or description within a novel is so engrossing that we can clearly hear the characters' fictional conversation but not notice the actual person standing beside us who wants our attention. Hyperprint interactions that require more manipulation than the turning of folio pages are an act of hypermediacy that draws our attention to the medium itself in order to bring it to our attention: "Defamiliarization, through an antiabsorptive technique, registers a failure of response to the familiar & the need to be shocked in re-cognition… the familiar & the expected cannot command attention" (Bernstein 83). Bantock certainly defamiliarizes the traditional love story found in typical mainstream fiction through the use of antiabsorptive material interactions.

The Griffin & Sabine Trilogy goes beyond the familiar manipulation of a codex in one significant way—the use of enveloped letters. As was previously noted, Bantock felt that this was the publisher's main perception of the book, as an interactive love-story for adults (Steadman). In each of the trilogy's books there are four unsealed envelopes that contain letters from Griffin and Sabine. The recto of each spread shows the front of the postcard or envelope, while the verso displays either the message on the back of the postcard or an open envelope glued to the center of the page. The reader then has to pull the letter, typically printed on both sides of a single sheet of paper, from the envelop and unfold it in order to read it. This obviously

mimics the experience of receiving mailed correspondence, something most readers would have sense memories of and be able to connect to on a physical level, but it is not an experience that is typically provided by a traditional codex.

While *Griffin & Sabine* was one of the first mainstream fiction texts to provide this type of antiabsorptive interaction, it is not realized as fully as later hyperprint texts may have treated the same type of material. For example, *S.* utilized actual postcards tucked within the codex, and this sensory experience felt much more authentic than the printed covers and backs reproduced within the trilogy. In the next chapter I will explore *Bats of the Republic* by Zachary Thomas Dodson, which includes a *sealed* envelope that provides a very different experience to the reader; it perhaps would have been more satisfying and true to the narrative to have the envelopes within the trilogy sealed and then torn open, as if they were already received by Griffin or Sabine and then rediscovered by the reader. Additionally, the second text, *Sabine's Notebook,* includes Sabines drawings and sketches on the rectos and versos surrounding her postcards to Griffin, and it is included in the narrative itself that this was the notebook she kept while staying in London. Here, however, the material artifice works against the narrative illusion and feels disjointing—because why or how could Sabine keep a scrapbook of the postcards she has already sent to Griffin, and how could both sides of the sheet of paper be drawn on if a single three dimensional object was attached to only one side (i.e., if a postcard or letter is glued to a sheet of paper, there is only one side of that sheet of paper that would be able to both show the correspondence and have margins for sketches). The reproduction of the postcards and letters on the recto and verso as a spatial relationship of front and back only works if the marginal space is treated as liminal, but once the additional artifice of Sabine's marginal notebook sketches is created this relationship becomes untenable. Ultimately, the medium is brought to awareness through the

hypermediacy of the folded letters within the envelopes, but that same level of attention backfires because of inconsistencies within the material metaphor of the trilogy codices. Again, however, *The Griffin & Sabine Trilogy* is an important predecessor to more fully realized hyperprint texts, and the real appeal in handling these books, to quote Sabine, is that "It is such a pleasure having…images in a tangible form" (*Griffin & Sabine* letter 3).

Link Material and Textual Interactions

This simplicity of having the thing itself in hand as a reader stands in contrast to the various digital interfaces that surround readers today. As discussed in Chapter 1, Lori Emerson criticizes the trend within graphical user interfaces (GUIs) to obscure how such interfaces shape our interactions in the name of user-friendliness. She argues that by focusing so much on the ease of operation, the near invisibility of the interface also creates an inaccessibility in that users are unaware of the precarious balance between how they operate it and how it operates them. According to the Pew Research Center, "In 1990, 42% of U.S. adults said they used a computer at their workplace, at school, at home, or anywhere else, even if only occasionally," so many initial readers of *Griffin & Sabine* would have experienced GUIs (Fox and Rainie). Again, while Bantock was specifically inspired to create the trilogy as an exploration of mailed personal correspondence, it can also be examined retrospectively through a hyperprint lens to explore how it stands in contrast to the burgeoning technology of the day—and the key physical manipulation that highlights these aesthetic concerns are the enveloped letters.

Bantock wanted to recreate the feeling of receiving "exotic mail," and opening the enveloped letters are a crucial component to that illusion (Jones). As previously mentioned, each of the books within the trilogy contain four separate letters from either Griffin or Sabine tucked into unsealed envelopes. The recto of a page displays the front of the envelope including the

recipient's address, postage stamps, and artwork or notes from the sender. The verso then has an envelope glued to the center of the page, with the back flap facing the reader; it is also common for Griffin to include his return address on the back of the envelope. As for the letters themselves, Sabine's are always handwritten in the same brownish-red calligraphy pen as her postcards, and while Griffin typically handwrites his postcards in either blue or black pens, he types the longer letters. There are also smaller details in the materiality of the letters that reflect consistency within the world of the narrative; for example, in the first book, Griffin is at home and uses the same letterhead and envelopes that one would expect him to have supplies of. In the second book, his first letter is on letterhead, but as he begins to travel the materials change to reflect the necessity of buying or creating cards along the way. In the third book, he is writing from a cottage in England, and the printed texture of paper remains consistent during his time there. These are minor details but they ring true, and for many people the specific touches of the paper, pen, and envelopes used to send personal correspondences help to create an atmosphere of care and attention for the recipient; interacting with the letters and noticing these specifics mimics this same type of attention and helps to engage the reader.

Griffin's typed letters also provide another detail that hints at the labor involved in sending personal correspondence, and while it is not a task that the reader has to complete in order to read the trilogy, it does provide a sense memory that many readers would be familiar with. The reader can tell that Griffin's letters are typed on a typewriter, rather than created in a word processor and printed, because they include handwritten corrections and additions. In his first enveloped letter within *Griffin & Sabine*, he adds the date, the abbreviation "P.T.O" for "Please turn over," nearly a dozen minor edits, and a postscript to the typed sheet all by hand. Anyone who has used a typewriter knows the frustration of making a mistake that cannot be

easily undone, and here Griffin brings that experience to the forefront. Even more than that, however, is the hyperawareness that many of us have when sending a personal correspondence to be scrutinized; in the days before spell-check or autocorrect, writers had to do the best that they could on their own, and here the reader can see some of Griffin's anxiety about presenting himself well to Sabine. This is most noticeable in his postscript: "P.S. As you may have noticed I'm not the worlds greatest typest!" Even the errors included in this handwritten note draw attention to the materiality involved and the different affordances of various mediums. The corrections help to both humanize the character and to evidence the labor involved in crafting such correspondences, and while it is not a physical interaction that readers need to complete for themselves, it is one that is easily felt and that underscores the concerns of the trilogy.

The final reader interaction that I would like to briefly discuss is how the trilogy uses the page layout to mimic the temporal and spatial affordances of mailed correspondence. Like any epistolary novel, the narrative unfolds in fragments through time, one writer responding to the other. Unlike more traditional epistolary novels, however, this sense of waiting for mail is recreated by the spatial layout of *The Griffin & Sabine Trilogy.* Some novels, such as the previous example of A. S. Byatt's *Possession,* might simply run fictional letters one after the other without any conception of the page itself as a structuring element and include portions of multiple letters from different authors and time periods on a single page. Bantock, however, wrote and illustrated the trilogy with a clearer conception of the page and how it could work as an integral component to the text itself. Keith Smith has written at length about the importance of interrogating the structure of the codex and encouraging writers to utilize this awareness of form within their work, rather than as an afterthought from a distant publisher. Smith argues that page space should be considered in tandem with the composition:

> The key to constructing a manuscript as a book experience states with the writer's awareness of individually composing each word, line, paragraph/stanza, *and* the page. The best layouts are determined by the writing, by the writer.
>
> *Awareness of format* The page is another element of composition, pulling the reader from page to page, revealing the content. (108)

As both the writer and illustrator, Bantock had this freedom and forethought, and he is able to use the recto/verso relationship to recreate the spatial relations of the front and back of correspondence. While this may seem like an obvious device, he could have just as easily have chosen to display the front and back on the same page, or across a single spread (front on the left-hand verso and back on the right-hand recto). Instead, when a reader turns the page he or she is also turning the postcard, thus "revealing the content" much as one would a mailed correspondence of the same nature. There is actually a parody of *Griffin & Sabine* titled *Sheldon & Mrs. Levine: An Excruciating Correspondence*, by Sam Bobrick and Julie Stein, that breaks with this recto/verso relationship and plays much more with the spatial boundaries of spreads, but while engaging, it does make for a less serious tone that fits for Sheldon and his over-bearing mother but would not work as well for Griffin and Sabine.

Griffin & Sabine's carefully considered layout also creates a sense of temporal schism, in that the reader has to wait to turn the page to see what the other character's response will be, and thus again mimics the necessity of waiting for correspondence. While Bantock was not writing in response to nearly instantaneous email or texting communications, he did completely exclude the telephone from Griffin & Sabine's world, which seems to imply his awareness of the temporal limitations of mailed correspondence.

Indeed he plays on this delay and the spatial relations most clearly in the final postcards of *Griffin & Sabine.* Griffin's final postcard comes after Sabine encouraged him to leave his unhappy life behind in London and go to visit her, but when the reader turns the page from the rather dark and mysterious image on the front of Griffin's response to the back, it is immediately apparent that it was neither addressed nor stamped, and therefore could never have actually reached Sabine. This makes sense with the message the Griffin has written:

> Sabine,
>
> Things have become so difficult. I mustn't write again. This whole affair has gotten too intense. Too real Sabine, you don't exist. I invented you. You, the cards, the stamps, the islands, you're a figment of my imagination. I was lonely and I wanted a friend. But I'm almost out of control. I've started to think I'm in love with you. Before it takes me over it has to stop. Goodbye.

This seeming confession calls Sabine's very existence into question, and suddenly turns readers' expectations from a love-story to the recounting of an evident psychological breakdown. This shift in tone is also reflected in the final postcard's image, which is visible as part of the same spread as Griffin's disturbing message. It shows the pale musculature and skeleton of a human figure with colorful, but perhaps deteriorating butterfly wings sprouting from the back; in the first letter of *Sabine's Notebook* Griffin refers to it as a "dark angel." When the reader turns the page to the back of this postcard, it is immediately apparent that it is from Sabine, which is curious because Griffin never sent his last postcard and claimed that he invented her. She replies,

> Griffin,
>
> Foolish man. You can not turn me into a phantom because you are frightened. You do not dismiss a muse at whim.

If you will not join me—then I shall come to you.

Just like Griffin's, this card is unaddressed or stamped, and the reader is left with many more questions than answers. This confusion is further heightened by the stark white page on the recto of this spread; it is an obvious break with the pattern and aesthetics developed throughout the rest of the book and signals the absence of the characters even before its text is read: "These postcards and letters were found pinned to the ceiling of the otherwise empty studio of Griffin Moss. Griffin Moss is missing." Here Bantock uses the layout to heighten the spatial and temporal tensions established throughout the book for dramatic effect, but the interaction required from the reader is still simply that of turning pages. Again, while *The Griffin & Sabine Trilogy* does not always embody the six elements of a hyperprint text as fully as later exemplars, Bantock is certainly playing with similar ideas, which can be brought to the foreground by using a hyperprint lens.

Resist E-Reader Digitization

The Griffin & Sabine Trilogy provides an interesting example of remediation, because while it has never been published as an e-book, it has been released as an audiobook on cassette and a multimedia CD-ROM game; it also had a failed Kickstarter campaign from Bound Books, working with Bantock, which sought to create three interactive apps (Nichols and Wolfe). While I could not find sufficient information on the audiobook to discuss it in detail, one can only assume that it treated the trilogy as disembodied texts and simply read the correspondence aloud; this would strip the trilogy of many of its central aesthetics and thematic concerns, and essentially transform it into a more traditional epistolary novel, such as *Possession.* The CD-ROM game, *Ceremony of Innocence*, and the unfunded Kickstarted campaign, however, provide an opportunity to explore the text through the affordances of other mediums.

Ceremony of Innocence was released in 1997 by Real World Multimedia, and according to Bantock, "it's not simply a book on CD-ROM" (Steadman). While the puzzle-game did still focus on the correspondence between Griffin and Sabine and included much of the same artwork as the original postcards and letters, Bantock points out that there were many more features added: "Isabella Rosellini is Sabine, Ben Kingsley is Farati. That's just the voice-over. The music is recorded by incredible musicians. People in Prague are building claymations. We've had a taxidermist building animals. We've had somebody in the South Seas filming lion fish underwater. This thing is one hell of an extravaganza" (Steadman). Essentially, rather than simply turning the page to read the messages, the player had to interact with each front image, often triggering animations of the elements noted by Bantock, in order to access the back and "pass through" to the rest of the narrative.

The irregularity of these interactions was frequently commented on by reviewers of the game, and most seemed to have mixed opinions on it. One such reviewer noted of trying to access the text, "Sometimes you can do so simply by moving your mouse or clicking on part of the picture; sometimes you get a cursor, sometimes you don't; and sometimes it is downright puzzling to figure out what you need to do. Therein lies the only part of the software that can be called a 'game'" (Jen). Frith Breitzer, writing for *Macworld*, stated that playing through the postcards in this way could be both wearisome and engaging: "The cursor's appearance and movement, as well as the way objects react to it, change with each card—a very Zen, and often frustrating, approach (be prepared to fruitlessly bang a fish on the head before solving one of the puzzles). At other times, the experience is magical." Despite all of the multimedia elements and the somewhat mixed reactions to the gameplay, Bantock felt that it all enhanced the 'realness' of the narrative, arguing that "it's all contained within these postcards and letters. It has a sense of

great personalness in the fact that you have to interact with them. You have to work your way through to get the story, like turning it over to find out what the next part of the story is. There's a sense that it's real. You are in there, you are doing it" (Steadman). If the reader was really "there" and "doing it," however, he or she would not have such barriers to accessing the narrative; the only manipulation required of a postcard is to turn it over, the only interaction for a letter, to open it. While the multimedia components may be engaging as a game or CD-ROM project, the remediation moves the story further away from the medium through which its characters experience it, and creates an entirely new experience.

Bantock himself seemed to have difficulty classifying the experience of *Ceremony of Innocence* in light of this issue. When Steadman pointed out what was being lost by such a remediation— "But you've lost the physicality of the book in order to embody the voice"— Bantock argued that because of the medium's affordances, it is really no longer a book at all:

> There are things you must live with. That's the first thing you have to accept. You have to look at the book and say, "What are the things that are of essence? What are the things that, no matter how hard we try, we won't be able to maintain?" The tactile nature of the book. There's no way. You've got a hard screen. Let's not even talk about it being a book. Let's talk about it being the experience of receiving cards and letters. Once you let go of that, then you try to give it a life out of all the possibilities of animation, of theater. (Steadman)

I would counter, however, that if the essence of the experience is "receiving cards and letters," does that not have a tactility and simplicity of interface that is as equally important as that of the book? The gameplay of trying to access the messages also seems to push against the simulation of receiving correspondence because there are no such barriers to postcards and letters.

Ultimately, as Breitzer notes, "Bantock's tale of the mysterious correspondence of two lovers remains intact, but instead of the original's tactile intimacy, the CD-ROM offers a more complex world where art, video, and user interaction meet to tell the story," and I would argue that this added "complexity" fails to improve upon the coherency of the material metaphor of the print edition. Breitzer puts it a bit more charitably and concludes that the "story of Griffin and Sabine doesn't need a CD-ROM, but *Ceremony of Innocence* lets you explore the story using a medium that has its own rewards."

This fraught relationship between the narrative's focus on handwritten correspondence and its remediation as a multimedia text is even more pronounced with Bound Book's failed Kickstarter campaign to turn the trilogy into a series of apps, a completely different type of digital text. Launched in March of 2015, Nichols and Wolfe worked with Bantock as a "partner and co-creator" of the adaptation, which was set in Griffin Moss's studio. Users would explore and interact with Griffin's space until they discovered the stack of correspondence in a desk drawer. From there, "[each] postcard, envelope and letter is manipulated by tapping and swiping creating the illusion of a tactile experience," so there is less of a gameplay aspect to interacting with the letters than with *Ceremony of Innocence*. The premise is also a bit more coherent here than in that game in that users are exploring Moss's space, a simulation that functions as an enhancement because it cannot be easily reproduced in the real world, unlike the ease of reproducing postcards. More puzzling, however, is again the issue of the text's focus jarring with the new medium, an issue that Nichols and Wolfe specifically tried to address in their proposal:

> When is the last time you wrote a letter by hand? Or perhaps, sent a postcard from an exotic locale? There is something about putting pen to paper—it is an intimate experience. There is absolute beauty in the letterforms and the way the ink absorbs into

> the fibers of the paper. This simply cannot be replicated in an email, or a text. Even more, are the postage stamps. The art, the placement, the taste of the gum adhesive on the tip of your tongue. This type of correspondence of yesteryear involved time, commitment and thought. Perhaps now is a perfect moment to reflect on this process. Reflect on the beauty and comprehend how far things have come. Yet remember, we are all human beings, just as we've always been. We always long for the connection with another. Whether that be through a series of handwritten letters that could take months to transport to its recipient—or a three word text that is instantly received.

Here, rather than framing the adaptation as an enhancement to the print edition, Nichols and Wolfe highlight the importance of the materiality of handwritten correspondence that cannot be reproduced electronically; they then propose the project as a way to better understand the affordances of electronic communications. Indeed they note that one of the reasons that they were "extremely excited" to work on the project was "the opportunity to engage [in] an aspect of life that has been a part of the human experience for thousands of years. The art of writing—and not just writing, but the art of writing by hand. In this age we live in, with all of the wonderful technology, we gain so much, but we also lose a little along the way." Again, the creators themselves noted that there is a loss between the handwritten and the digital that they wanted to deliberately explore—a loss that I would argue would be multiplied in any form other than hyperprint. I simply wonder if the campaign had been funded if they would have followed through with this more critical approach to exploring the central themes within *The Griffin & Sabine Trilogy.*

Explore Themes of Communication and Medium

The lives of Griffin and Sabine are very connected to book culture and writing traditions; with each new detail revealed about their lives there comes another link to bookishness. Beyond Griffin and Sabine both working within fields (stationary and stamps, respectively) that facilitate personal communications, both characters have had upbringings steeped in the written and printed word. Griffin described his parents as near bibliomaniacs: "Our house was a temple to The Book. We owned thousands, nay millions of books. They lined the walls, filled the cupboards, and turned the floor into a maze far more complex than Hampton Court's. Books ruled our lives. They were our demi-gods" (Bantock, *Griffin & Sabine* letter 8). In the same letter Griffin reveals that when he was fifteen his parents were killed by a newspaper delivery van that jumped the curb; it could have been any type of van, but to specifically note that it was a *newspaper* van adds another print connection. At one point, Griffin even turns to his excessive Sci-Fi reading to try to understand the titular characters' connection (*The Golden Mean* letter 3). As for Sabine, her adoptive father was a former curator for the Natural History Museum in Paris, but he was working on what he called his "Catalogue of the Islands" in order to document every species on their fictional islands, a project that Sabine eventually takes over for him (*Griffin & Sabine* letter 7). Sabine's adoptive mother was a midwife, and although it may be a stretch to connect her to the communicative arts, there is still a minor connection there in terms of bringing new lives—babies or characters—into the world.

There are also strong connections to the visual arts, which is fitting considering Bantock's previously discussed goal of giving the images and text equal weight in terms of meaning making. Griffin went to art school, and Sabine drew illustrations for her father from a very early age. Additionally, Vereker, Griffin's guardian after he was orphaned, was a potter and

took him on as an apprentice (*Griffin & Sabine* letter 8). In isolation all of these details may seem minor, but looked at as a whole they paint a world that is centered on medium and communication. In total, they set a backdrop for the correspondence that revels in writing, art, and communication in the pre-digital age.

As previously discussed, Bantock created *The Griffin & Sabine Trilogy* well before the ubiquity of email, texting, and social media platforms, but reading it now, in light of all of these technologies, helps to highlight how our communicative social spaces have shifted—both in print and digital formats. In 2016, Bantock published *The Pharaoh's Gate: Griffin & Sabine's Lost Correspondence,* the seventh and final book for Griffin and Sabine which serves as a bridge between the first and second trilogies. In her review of *The Pharaoh's Gate*, Amal El-Mohtar examined the series within the context of her own "first medium for intimate communication": "One of my dearest friendships today is fifteen years old, born of roleplaying online…The letters we wrote to each other were thousands of words long, but they were in email—Hotmail accounts now defunct, full of confessional teenage fervor in which we built our understanding of ourselves and the world." Many people who were teens during the mainstream adoption of the internet have similar memories of meeting strangers online and sharing stories with them using email, chatrooms, or direct messaging until they felt like personal friends. The ubiquitous social media platforms of today did not yet exist, and this type of communication still had an aura of special intimacy surrounding it. While there are certainly similarities in getting to know someone this way during the early days of email and via handwritten letters like Griffin and Sabine, El-Mohtar was more struck by the difference she felt as a teen:

> I remember first noticing Nick Bantock's Griffin and Sabine books while working in a small independent bookstore around the same time, and I had little interest in them. They

> were beautiful — anyone could see they were beautiful — but the wonder of them fell aslant the wonder of my own life: that my best friend in the world should live 3,000 miles away; that I should be able to speak instantly and regularly with her, and with people who saw the sun setting while it was still high in my sky. Who had the time or the patience for letters when there was so much contact, so much sorcerously swift communication to be had through my portal to the Otherworld?

So for El-Mohtar, and presumably for others, the tedious nature of handwritten communication stood at odds with the ease and instantaneity of email. However, as the digital age began to mature and sharing through social media became pervasive, it also came to feel, at least at times, rather inane—which in turn revealed the time and care required in letter writing as a potential positive rather than a negative. In her reflection on this gradual transition El-Mohtar notes that "in losing that internet to social media—to electronic communication becoming the banal default instead of the miraculous exception—I gained appreciation for the slow, the hand-written, the gift of extra effort expended on my behalf. I met people In Real Life, or on the internet, but became closer to them through something I've come to call Letter-Space." *The Griffin & Sabine Trilogy* may have begun with Bantock's vision of creating a book in which the text and images are equally important, but within our current context it is experienced as a love letter to Letter-Space.

Ultimately, Piper argues that "The more screenish our world becomes, the more we try to reinsert tactility back into it," and I wonder if that same is true for effort and sharing—the more instantaneous our communications become, the more we want to reinsert care back into them (16). If Facebook alerts all of your "friends" that it is your birthday and even prompts them to send you a greeting, does it mean as much to you as when someone handwrites you a letter or

card and mails it in time for it to arrive on or before the actual date? Social media can be a convenient and engaging way to share day-to-day events, stay in touch with people, and form or strengthen bonds, but it can also be used to put up a façade and keep people at a distance. Ultimately, Letter-Space and cyberspace are neither inherently beneficial or detrimental, but we should be conscious of the type and quality of interactions that we gain through them—and this awareness can be built and explored through hyperprint texts such as *S.* and *The Griffin & Sabine Trilogy*.

CHAPTER FOUR

SAVING: CONSTRUCTING HISTORY

"What remains of people is what media can store and communicate."

Friedrich A. Kittler

All of the women in my family use food to show love; it is not a particularly unique family tradition, but it is central to many of our relationships and much of our history. Gram, my maternal-great-grandmother, was known for her prowess and creativity in the kitchen, and the year she served a chicken stuffed inside of a duck stuffed inside of a goose—a Gooducken— has become a sort of family Christmas legend. However, she was also notorious for rarely relying on a recipe and for 'forgetting' certain crucial ingredients or steps when writing down one of her recipes to share with others, even her own family members. When she passed away, my mother was gifted the dark blue, heavy cardboard box, originally used to package a Jim Beam whiskey decanter, which now holds all of Gram's recipes. Anytime she went to a potluck and tried something she liked, she would get the recipe and the name of the cook or baker—four generations later, we still make "Sylvia's Pizzelles." My mom continued the same process of adding recipes once was the box was in her hands, but she has not changed anything else about it. There is no tidy organization or indexing of recipes into separate categories; it is a beautiful jumble of paper scraps and handwriting.

Even so, my mother can quickly rummage through the pile and find what she is looking for. Gram's chocolate-chip drop cookies are on the back of an envelope. Cousin Diane's banana cake recipe is on the back of a manila sheet of construction paper that I drew a crayon pine tree on. Aunt Elaine's no-bakes can be found on the back cover of a purple stenography pad, and an

Italian ricotta "Love Cake" is on a mimeographed inspection form from the factory my mother worked in. The particular materiality of each recipe functions as the index.

My mother once started to make photocopies of all of this ephemera for her siblings on a black and white photocopier, but she never completed the project. It seemed too tedious a process for such an inferior result. She likes the mess: the different textures of paper, the different colors, the different bits of evidence of the other hands that had held the same recipes, made the same food.

I, on the other hand, am an inveterate Pinterest user. All of my recipes can be found on categorized digital 'boards.' I can find a recipe from someone on the other side of the globe, pin it, make notes to it, upload a photo of my own attempt, and share it instantly with any of my followers, from complete strangers to my mother. I have a toolbar that allows me to easily capture any recipe I find on the web, but occasionally, I will get a 404 error when I click on one of my recipe links. I have discovered dishes from a much wider range of cultures than I would ever have been exposed to by swapping recipes at potlucks, but I also have no idea who these people are. When I make coconut curry soup, I have a really tasty bowl of soup, but when I make potato soup, I remember my Grandma Lily teaching me how to make the Pennsylvania Dutch rivels for the first time, and this nourishes me in a different way.

For my family, and many others I assume, our food is our history, and I have started to wonder if it matters *how* we build and pass on this history. Someday in the distant future, I will be responsible for the blue recipe box; I will need to figure out how to save or preserve its contents, to decide if it all should be kept or if it should be more carefully curated, to scan and digitize items or to transcribe fading text by hand, to add my printed webpages or adhere to a more narrow material scope. I also wonder if our future generations will be able to access my

Pinterest recipes, if the links will still work, if they will be able to feel close to me through my digital collection the same way I feel close to my family when I explore the blue box.

One way to help parse the medial complications of these questions is to consider the proximity of the media to both the sender and the receiver. In *Metamedia: American Book Fictions and Literary Print Culture After Digitization*, Alexander Starre draws on the work of media scholar Harry Pross, and separates media into three different levels depending on their proximity to the communicatee: primary media is bodily communication (speech and facial expressions), they "originate in the body of the sender and can be directly decoded by the sensorium of the receiver"; secondary media require additional production tools for their creation, "such as scrolls, printed books, newspapers, magazines, flyers and other printed ephemera," but the recipient can decode the media without any other technological assistance" (14). My grandmother teaching me how to make quick dumplings in her tiny kitchen, was primary communication, just the two of us speaking and using our hands to mix ingredients with no technological assistance in either the sending or receiving of the information—beyond language, which is perhaps itself the greatest of all technology. The blue recipe box, on the other hand, is filled with secondary media, recipes cards that were handwritten, typed, and mimeographed; technological tools were required by the sender to create them, but now they are stable artefacts ready to be decoded by future family members without any further interventions.

However, we are now in a media environment dominated by tertiary media. This third level of communication requires technological interventions at both the production and reception stages, and "[t]his class of more recent media consists of communication and reproduction technologies like the telegraph, the telephone, radio, and TV, as well as new encoded storage or recording media such as phonographic records, audio cassettes, VHS tapes, CDs and DVDs"

(14). Starre makes this distinction to set boundaries on his own exploration of metamedia, but it also provides a useful perspective on what the key differences are between reading print and digital editions:

> [T]he fundamental categorical difference between printed text and text on a screen rests on much deeper divergences than just visual quality. Fixity, permanence, and embodied spatiality are the medial properties that characterize the book as a secondary medium. Flexibility, mutability, but also the precarious reliance on complex machineries and coding operations typify the electronic text as a tertiary medium. (51)

Our family recipe cards are fixed; their storage medium and interface are one and the same, and future generations will be able to read them for as long as their ink is visible. My Pinterest boards, however, are tertiary, flexible yet dependent on additional tools to both send and receive them. Any future family members would have to have a device that could still access and display the saved information, and while our recipe cards from thirty years ago are still perfectly useable, I am less confident in the capabilities of thirty-year-old websites or programs. I am also concerned about the shift in the affective connection between one media level and the next—can tertiary media achieve the same sense of personal closeness that secondary media can?

I am not the only one questioning how our personal and cultural histories will be recorded in the digital age. For some, digitization represents the realization of the universal library—all of the tertiary texts for all of the people—but in actuality this is less achievable, and perhaps less desirable, than we might expect.

In "Scarcity or Abundance? Preserving the Past in the Digital Future," Roy Rosenzweig enumerates the conflicting challenges inherent in archiving digital material by pointing to the interesting example of *Bert Is Evil*. In 1996, San Francisco artist and early web-comic fan, Dino

Ignacio made a satirical site that focused on Bert, from the *Sesame Street* duo of Bert and Ernie, and argued, "We have reason to believe that Bert of *Sesame Street* is evil and you should keep your children away from him. Here in these pages are collected incriminating images and documents that prove that Bert is not the lovable harmless geek he so successfully makes us think he is" (Ignacio). Ignacio's "evidence" was photoshopped images of Bert committing heinous acts or accompanying notorious figures; it quickly caught on and won a Webby for "Best Weird Site" in 1998 (Rosenzweig 310). Popularity bred imitators, and several other sites popped up making the same satirical attack on Bert; eventually he could be found in a photo behind Osama Bin Laden. Children's Television Workshop, the producers of *Sesame Street*, seemed to turn a blind eye until the fallout of September 11, 2001, when news coverage of an anti-American protest in Bangladesh showed protest signs including Bert in a photo collage celebrating Osama Bin Laden (310-11). Apparently, the sign printer used a Google image search to find Bin Laden images; the image with Bert was among the top results, and *Sesame Street* characters are not very recognizable in Bangladesh, so he did not think twice about using it (311). Once Children's Television Workshop became involved, Ignacio 'pulled the plug' on the site, but its proliferation and persistence reveals how it is no longer really that simple to get rid of digital texts.

Even though the original site is no longer live, it can still be accessed in several different ways. A quick Google search will bring up a different host of a nearly identical site. The Internet Archive's "Wayback Machine" allowed me to access Ignacio's site as it appeared on August 1, 2001 (Ignacio). And another webpage archive, *Archive.Today*, has a snapshot of Ignacio's final post "Good Bye Bert," posted on October 11, 2001, which begins "I have taken down the 'Bert is Evil!' site from my server. I would like to thank Sesame Workshop for their patience and

restraint all these years. I implore all fans and mirror site hosts of 'Bert is Evil' to stop the spread of this site too." Ignacio also highlights that the site "and its following has always been contained and distanced from big media," which allowed it to operate somewhat below the radar, but that the coverage of the Osama Bin Laden poster exposed them to more scrutiny, legal and perhaps ethical, than they could withstand ("Good Bye Bert"). Essentially, once information or a text is on the Web, there really is no telling where it will go and no definite way of calling it back.

At the same time, however, this does not mean that our digital texts and ephemera are stable or safely preserved. After all, as Rosenzweig notes "If Ignacio had published his satire in a book or magazine, it would sit on thousands of library shelves rather than having a more fugitive existence as magnetic impulses on a web server" (312). Add to this what Rosenzweig characterizes as "the absolute nature of digital corrosion," or the fact that when an electronic text is damaged, the reader is not faced with just some faded ink or a dog-eared page; instead, "digital records fail completely—a single damaged bit can render an entire document unreadable" (316). While this may be true for the casual user, it should be clarified that there are ways to recover such lost data; it just may be cost prohibitive. In the preface to *Mechanisms: New Media and the Forensic Imagination*, Matthew Kirschenbaum details how hard drives are built to be resilient due to necessity because "in the nanoscale interval between the drive's floating read/write head and the surface of the platter even a dust particle would loom as large as a boulder and a collision with a foreign object would send the head careening across the surface of the disk like a meteor gouging terra firma with its scorching impact" (xi). As catastrophic as this may sound, even the most damaged-looking drives could still have their data recovered. Kirschenbaum points to a German firm, Convar, that was able to use "experimental laser scanning techniques" to recover data from the hard drives found at Ground Zero after September 11, 2001 (xi). The firm was

extremely successful, reportedly salvaging "100 percent of the data on most of the drives" that were given to them—but the cost to restore a single drive had a price tag up to $30,000 (xii). Thus while it is certainly possible to recover most data given one has enough resources, for many people this option would be inaccessible.

Rosenzweig goes on the note that even if the program or data remains intact over time, there also has to be hardware available that can still access it:

> The most vexing problems of digital media are the flipside of their greatest virtues. Because digital data are in the simple lingua franca of bits, of ones and zeros, they can be embodied in magnetic impulses that require almost no physical space, be transmitted over long distances, and represent very different objects (for instance, words, pictures, or sounds as well as text). But the ones and zeros lack intrinsic meaning without software and hardware, which constantly change because of technological innovation and competitive market forces. Thus this lingua franca requires translators in every computer application, which, in turn, operate only on specific hardware platforms. Compounding the difficulty is that the languages being translated keep changing every few years. (317)

Rosenzweig labels this dichotomy between the lack of control and the difficulty of stable preservation as the "simultaneous fragility and promiscuity of digital data" (313). This may seem like a somewhat trivial matter when we examine Muppet satires or curry recipes, but when we consider the role of digital documents within the construction of history, the scope and scale of the issue becomes much clearer.

What is more, even if all of the technology works perfectly, there may be additional issues in *curating* the flood of documents without the same systems and structures in place that gradually evolved for print media. "Digital documents—precisely because they are in a new

medium—have disrupted long-evolved systems of trust and authenticity, ownership, and preservation," argues Rosenzweig, "Reestablishing those systems or inventing new ones is more difficult than coming up with a long-lived storage mechanism" (318). Scholars, historians, and librarians have of course been creating such systems for many years, but their efforts are challenged by the sheer scope of the issue and the temporal fragility of such documents may potentially result in the loss of important texts.

Such a loss, however, could also be viewed as a positive consequence, at least on the personal level. In *Delete: The Virtue of Forgetting in the Digital Age*, Viktor Mayer-Schönberger comments on the growing prevalence of digital tools as external memory devices and their numerous consequences. He ultimately argues in favor of forgetting and suggests creating digital expiration dates for some types of information stored online. "Forgetting plays a central role in human decision-making," Mayer-Schönberger notes, "It lets us act in time, cognizant of, but not shackled by, past events. Through perfect memory we may lose a fundamental human capacity—to live and act firmly in the present" (12). He points out that people can no longer escape or outrun their pasts; it is much more difficult to have a fresh start when so much of our lives and personal information is accessible online, no matter where we are. In the past, when information "stayed local," someone could move to a new community to have a clean slate (99). While Mayer-Schönberger seems less concerned with what the negative consequences of such easily shed histories might be, for example the equal ability of predators or dangers to a community to reestablish anonymity, I was more convinced by his argument for how this issue could impact power dynamics within society:

> Because of the accessibility and durability of digital memory, information power not only shifts from the individual to some known transactional party, but to unknown others as

> well. This solidifies and deepens existing power differentials between the information rich and the information poor and may even deny the latter their own conception of this past. Equally problematic, it creates a climate of self-censorship through the perception of panoptic control that constrains robust and open debate—the hallmarks of democratic government—not simply in the present but long into the future. (112)

Which is it then—Will digital texts prove so fragile that we will have too few to preserve our cultural ephemera and reflect on our history, as Rosenzweig might argue? Or will we be so burdened by the weight of our digital corpuses that it will stifle personal growth and democratic ideals, as Mayer-Schönberger suggests? What should we be archiving, and who should be in charge of it? Should citizens have a say in how our data is stored and who has access to it? What legacy will we leave if our texts are lost or altered or compromised?

This chapter will not provide answers to any of those questions; it will, however, examine two hyperprint texts and model how such texts can help us think through some of the issues facing us as much of our history becomes a digital one. First, Jonathan Safran Foer explores how loss can be mirrored through a defamiliarized common object with *Tree of Codes*, and then Zachary Thomas Dodson explores the boundaries between preservation and surveillance in *Bats of the Republic.* These texts are examined in this chapter themed around preservation because they both explore how our texts get carried into the future and how certain intricacies in the conversation may be shifting between the print and digital realms. While neither text gives the reader easy answers, their hyperprint natures help us to think through how our media ecology is shifting and the challenges that may lie ahead in terms of saving what is important.

Tree of Codes as a Hyperprint Exemplar

Jonathan Safran Foer's first novel, *Everything Is Illuminated* (2002), was a critical and commercial success, but he is perhaps best known—or most notorious—for the final pages of *Extremely Loud and Incredibly Close* (2005). The novel focusses on the aftermath of September 11th and follows the nine-year-old protagonist as he faces the resulting death of his father. The book ends with a fourteen-page flipbook inspired by the shocking and now iconic "Falling Man" photographs taken by Richard Drew, but rather than the man plummeting from the Towers, *Extremely Loud and Incredibly Close* has him rise from the bottom of the page to the top—ascending instead of falling. While this artistic remediation or revisioning earned Foer both praise and criticism, it also cemented his reputation as an author who liked to experiment with mainstream conventions, at least graphically. He also seems to be a rather divisive author; some, like Harry Siegel, see him as more concerned with schtick and gimmick than substance, while others, such as Michiko Kakutani, praise him for "moments of shattering emotion and stunning virtuosity." Overall, there seems to be a similar critical atmosphere surrounding his hyperprint text *Tree of Codes.*

Published in 2010 by Visual Editions, who also published *Where You Are* discussed in chapter two, *Tree of Codes* is a die-cut erasure book. Foer took the text of Bruno Schulz's *The Street of Crocodiles* and physically removed words, phrases, sentences, and whole paragraphs to create a new text and a book that physicalizes absence and loss. In his afterword, Foer discusses his impetus for creating the book and the beginning of his creative process:

> For years I had wanted to create a die-cut book by erasure, a book whose meaning was exhumed from another book. I had thought of trying the technique with the dictionary, the encyclopedia, the phone book, various works in fiction and non-fiction, and with my

> own novels. But any of those options would have merely spoken to the process. The book would have been an exercise. I was in search of a text whose erasure would somehow be a continuation of its creation. (138)

In other words, without a significant text, he knew he would be manipulating a text without adding anything through the subtraction—and be guilty of the previous criticisms of relying on empty gimmicks. Ultimately, Foer chose Schulz's *The Street of Crocodiles* not only because it is his own favorite book but because the history that surrounds it makes it a particularly fitting text to explore loss through the material metaphor of the book.

Bruno Schulz was born in the town of Drohobycz (also spelled Drohobych), then part of the "Austro-Hungarian province of Galicia" but now part of Ukraine, in 1892 and lived there his entire life. Celina Wieniewska, in the first English translation of *The Street of Crocodiles*, notes that it was not until "the age of forty, having received an introduction through friends to Zofia Nalkowska, a distinguished novelist in Warsaw," that Schulz showed his work to anyone (Schulz 7). The stories that he sent Nalkowska "were published in 1934 under the title of *Cinnamon Shops*—and the name of Bruno Schulz was made" (7). This first collection was followed up three years later by *Sanatorium Under the Sign of the Hourglass*, a collection of short stories and illustrations described by Wieniewska as "the poetic recreation of Schulz's biography: the memories of a child blessed with an extraordinary sensitivity projected with the eye of an artist; his pilgrimage into a lost and happier past (ix). Schulz also wrote a novella, *The Comet*, a co-translation of Kafka's *The Trial*, and "he was working on a novel, entitled *The Messiah*, but nothing has remained of it," as Wieniewska notes in the preface, adding, "This is the sum total of his literary output" (Schulz 7).

Schulz is often referred to as the "Polish Kafka," even though his "combined output was slim," and George Gasyna argues that he was "a prime candidate for the title of Poland's most important twentieth-century writer" (760). Gasyna specifically notes Schulz's use of the Polish concept of *tandeta* as one of his defining characteristics, what Gasyna refers to as "the poetics of provincial trash and cast-offs" (763). Tandeta is defined more fully as "Occurring—indeed thriving—on the margins of real time and space as a kind of imaginary supplement, tandeta can function as both an exultation and an epithet (referring to 'inferior quality, artificiality, tawdriness, or poor manufacture,' as well as second-handedness…)" (763-64). This viewpoint shows itself in stories like the titular "The Street of Crocodiles" in which an entire district has sprung up through sudden prosperity but is ultimately made of nothing more substantial than "sawdust" (Schulz 99). Even so, however, the seemingly trashy is disappointingly virtuous, and elsewhere in *The Street of Crocodiles* the bizarre and castoff are depicted, if not with beauty, then certainly with care. I dwell on this concept of *tandeta* and Schulz's elevating of the marginalized because I feel it helps to inform Foer's project with the text, particularly given the historical context in which Schulz found himself as well as his eventual death.

Schulz's literary career was cut short in 1941, when German Nazis took control of Drohobycz from Soviet forces, and thousands of Jews were confined to the Drohobycz ghetto, as Schulz was, or killed outright. Schulz, however, had started to build a reputation as an artist, and the Gestapo officer in charge of labor assignments, Felix Landau, admired his work (Schulz 7). Landau ordered Schulz "to decorate a riding school and his children's nursery" with fairytale murals in return for his protection (Bronner). However, while Schulz was temporarily protected from the mass murders, this same protection ultimately led to his death. "Landau did save Schulz for more than a year, until November 1942, by providing him with work and the means for

minimal sustenance," Bronner notes, but just when Schulz "had obtained false Aryan papers and was about to escape…another Gestapo sergeant, Karl Günter, angry that Landau had killed his Jewish dentist, put a bullet in Schulz's head. He is said to have told Landau: 'You killed my Jew. Now I've killed yours.'" Obviously, we can never know what the fate of Schulz would have been had he not encountered Günter, or been 'protected' by Landau, or had left Drohobycz before the war, nor can we know how else his work would have grown, what other contributions he could have made to the world.

This forestalling of life and potential, however, also makes *The Street of Crocodiles* a particularly apt choice for Foer's die-cut text. In "Bruno Schulz, the Messiah, and Ghost/writing the Past," Emily Miller Budick argues that "… Schulz also represents the Jewish art that was also lost in the Holocaust, as well as the texts never written because of the murder of the artists who would have produced those works" (129). As Foer himself notes, "Like the Wailing wall, Schulz's surviving work evokes all that was destroyed in the War: Schulz's lost books, drawings and paintings; those that he would have made had he survived; the millions of other victims, and within them the infinite expressions of infinite thoughts and feelings taking infinite forms" (*Tree* 138). Thus, in *Tree of Codes* Schulz stands in for the innumerable, irreparable absences caused by the atrocities of the Holocaust, and this sense of loss is explored in both the form and content of the book, as will be discussed through the six hyperprint elements below.

Although Foer did not add any text to *Tree of Codes* and all of the words used came from *The Street of Crocodiles*, often with the most striking phrases directly from Schulz, Foer argues that this is an entirely new work. Almost anticipating critics' objections, Foer states unequivocally in the afterword, "This is in no way a book like *The Street of Crocodiles.* It is a small response to that great book. It is a story in its own right, but it is not exactly a work of

fiction. It is yet another note left in the cracks of the wall" (139). In terms of a distinct plot, however, it is difficult to pin down; Budick suggests that "Like *The Street of Crocodiles,* [*Tree of Codes*] is not a narrative per se. It does not tell a story. Rather, it is a text of vignettes about the narrator's mother and father and the ghostly, haunted world they inhabit as perceived by their son, the narrator" (133). This is not dissimilar to Schulz's collection, which was told through the perspective of a young son and focused on the events of his bizarre household and neighborhood, most notably his father's seeming decent into fixation and madness. Budick, however, takes any similarities between the texts and makes the argument that because "Schulz's *Street of Crocodiles* is Foer's 'favorite book,' to which he returns again and again….the book he writes becomes something of an idol, idols being very much a recurring motif in Schulz's own writings. *Tree of Codes* is a physical resurrection or replication of another text, and what is an idol if not that?" (134). If that is true, *Tree of Codes* is an idol that is meant to be reverenced but also touched, not unlike how touching a mezuzah in the Jewish faith serves to remind one of both the text it contains and its larger context and importance. I thus argue that the hyperprint elements within *Tree of Codes* help to elevate a book-project beyond schtick to a create a truly moving experience for the engaged reader.

By progressing through the six hyperprint elements and discussing their use within *Tree of Codes* in relation to the chapter theme of preservation, I hope to, in general, further clarify how such texts explore and problematize the digital shift via mainstream print fiction and, more specifically, reveal how *Tree of Codes* in particular investigates the book object and its relationship to our conceptions of permanence and impermanence. Hyper reading strategies draw attention to the dimensionality of the book and emphasize the relationship to Foer's absent source material, while the fragility of the text is somewhat cumbersome and can reveal further

insights when the materiality and content of the text are examined in tandem, as espoused by Jerome McGann. This fragility makes the reader more hesitant in interacting with the book, and this shift in expectation of the codex's resiliency heightens the book's function as a material metaphor, to draw again on Hayles, reflecting on the loss of Schulz and other Holocaust victims. Additionally, while there is no e-reader edition of *Tree of Codes*, perhaps because the die-cut holes could only be represented rather than recreated, it has inspired other works of art that emphasize an embodied communication. Lastly, both Schulz's and Foer's use of the book as a metaphor will be examined to explore the central hyperprint concerns of media and communication and to further problematize the affordances on print with regards to permanence and preservation.

Foster Hyper Reading

To begin then, close-reading of the digital reading strategies employed by readers may help to further make sense of this book full of holes. As discussed in previous chapters, we habitually use a number of reading strategies online, including skimming, scanning, filtering, and, perhaps of interest in this context, de-authorizing, but I would again like to focus on the strategies utilized most clearly by hyperprint texts: filming, fragmenting, and juxtaposing.

Filming, or using graphic elements to aid the meaning-making process, is utilized most notably in the obvious die-cuts. As a reminder, Sosnoski defines "filming" as a reading strategy through which "significant meaning is derived more from graphical elements [than] from verbal elements of the text," and this can apply not only to typographical design elements, but also to physical components of a book—such as gaping holes (163). As the defining feature of the text, it is no surprise that the voids in the page contribute to the text's meaning as much, if not more, than the actual words contained around them.

In fact, before the reader can even reach the text, she has to figure out how to read *Tree of Codes*; in my experience I found three different options, each providing a different experience and some more successful than others. I am somewhat embarrassed to admit that the first time I read it, I assumed that I was intended to read *through* the holes, combining the text found on the different visible depths and flattening them into a single layer for reading (see fig. 15).

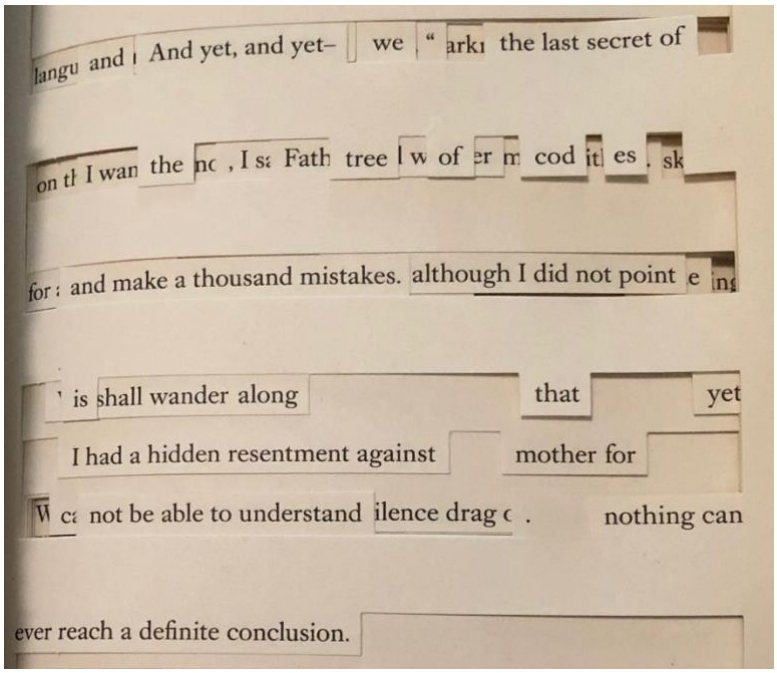


Fig. 15. *Tree of Codes* in the typical flat position. Reprinted with permission from Visual Editions. Jonathan Safran Foer, *Tree of Codes*, Visual Editions, 2010, p. 95

My notes from this experience yielded no coherent plot points, but in retrospect the experience itself did highlight some of the themes that are apparent in the more linear text of *Tree of Codes*, as reflected in my initial reading notes:

- As the reader progresses there is repetition and gradual change from page to page, almost providing the sense of nearly imperceptible change over time.
- There is a desire to flip to the page of a partially obscured word, to see if the reader is right in the assumption or what the original context is of a particularly striking word.

- Reader desire/ability to complete word fragments and trust judgment on the correct reading, only to be undermined later when the obscured word is revealed, possibly to be something very different that may change the rest of the reading in retrospect.
- Reminds me of replaying events or conversations in my head throughout the day, shifting with each retelling.
- Reader has to fill in literal gaps in the plot, essentially assuming or shaping the plot. Really what is conveyed is merely an impression of a story.

The themes of the fluidity of time, uncertainty, thwarted expectations, and playfulness that are found throughout *Tree of Codes* are also hinted at in the experience of this reading. Even though, in retrospect, I see that this is not the most coherent way to read the text, I doubt that I am a wholly unique reader and assume that others approached the book in a similar way, at least initially. I think this approach also points to an anxiety about wanting to trust the author when we approach an unconventional text—*I cannot make sense of this plot, but the problem has to be that I am just not getting it,* rather than, *This is unreadable; what was the author thinking?!* This tension works particularly well for authors like both Schulz and Foer who like to experiment with reader expectations.

After researching other readers' experiences of *Tree of Codes*, I realized that the majority of readers approached it page-by-page like a traditional codex, and this opened up two additional reading approaches. Even if a reader wants to focus on the text only on the top page, this can be quite a challenge (see fig. 15). The pages and words from further on in the book show through all of the die-cut holes and make it difficult to focus on the topmost layer. To aid their reading, some people insert a blank sheet of paper behind the page being read so that only the words on that page are visible (see fig. 16).

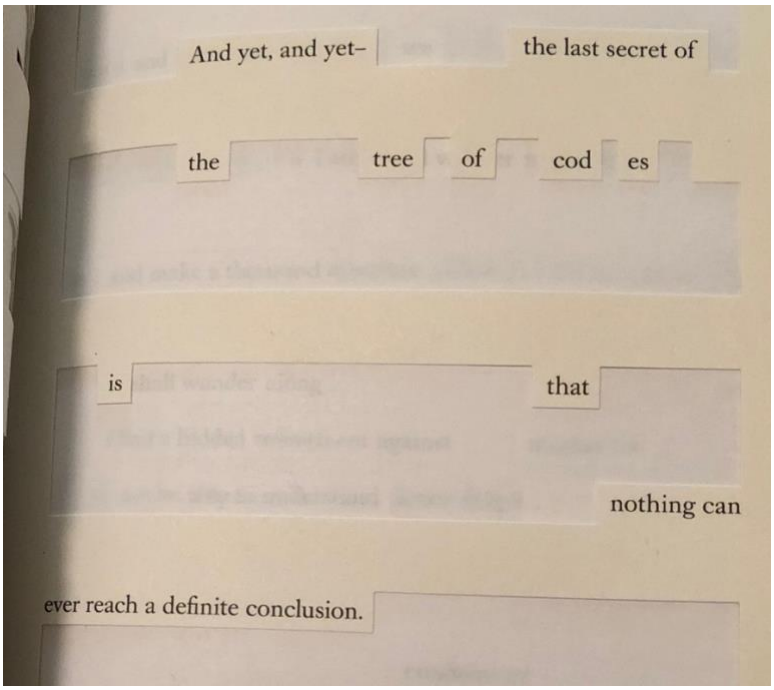


Fig. 16. *Tree of Codes* with a blank sheet inserted between pages. Reprinted with permission from Visual Editions. Jonathan Safran Foer, *Tree of Codes*, Visual Editions, 2010, p. 95.

This may be effective in one sense, but in "Cut and Dry: Jonathan Safran Foer's *Tree of Codes*," Kevin Nguyen notes that this removes something larger from view as well: "Some readers have taken to inserting a blank sheet of paper behind each page, but doing that feels like a denial of the book's design. There's something haunting about seeing what lays ahead, just out of focus." Without seeing *through* the book, the voids are lost and it becomes a book with sparse words on each page—the *text* may be more visible, but the *book* is hidden.

The third, and I would argue most effective, approach is to create a little bit of space between the page being reading and those behind it. If one slips a finger between the top two pages, there is enough difference in depth to have the first page's text come into focus and be read, but the pages behind it are still visible as a, slightly distracting, backdrop (see fig. 17).

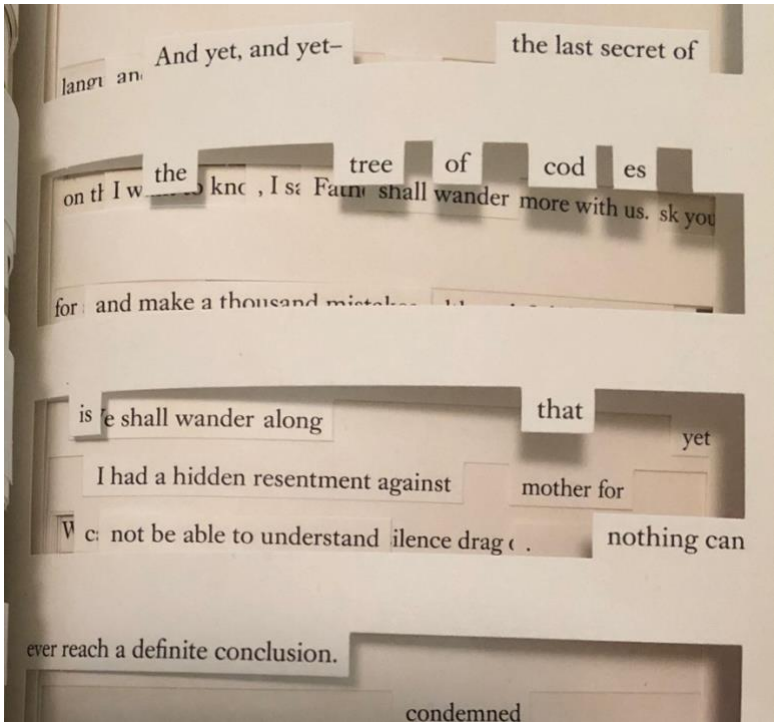


Fig. 17. *Tree of Codes* with a finger space inserted between pages. Reprinted with permission from Visual Editions. Jonathan Safran Foer, *Tree of Codes,* Visual Editions, 2010, p. 95.

This allows the text to be read, but the full depth of the book, both metaphorically and literally, is still apparent. Thus, while there are no images or graphics within *Tree of Codes*, readers who utilize the reading strategy of filming are rewarded with a fuller perspective of the text. The first approach has too many visuals to be coherent, and the second approach has too little to be impactful, but the third approach seems to strike the optimum balance between the visual appearance of the book and the legibility of the text in that

that

tree of cod es shone with the empty

unexplored . (Foer 88)

Even though it is one continuous text, fragmenting is perhaps the most obvious reading strategy needed for *Tree of Codes*. While *The Street of Crocodiles* was a collection of sixteen short stories, all centered on the same family and neighborhood, *Tree of Codes* appears to be a

single narrative since Foer cut out all of the section titles. Because Foer has removed the visual divisions between the separate stories and created instead one whole text, this may at first glance seem to be a less segmented text, and therefore less amenable to readers' use of fragmenting, or "breaking texts into notes rather than regarding them as essays, articles, or books" (Sosnoski 163). However, because Foer cut out words and phrases from Schulz's text to create a new text from the pieces left behind, it is difficult to experience *Tree of Code* as anything but a collection of fragments. As previously noted, *Tree of Codes* is more a set of impressions and descriptions than a traditional narrative with a cohesive plot, which allows readers to instead focus on the words and phrases before them and the process that created them. For example, each passage reveals both surviving fragments from Schulz and the new uses and combinations that Foer created through erasure. On any page, the reader can see where Foer chose words within the original text to create a wholly new sentence structure and where he took phrases directly from Schulz. To further illustrate, one particular sections reads:

the

farthest ultimate

beyond which one could see no farther.

desperately knocking

against the blind

little world

, i

loosened one of its planks

, opening a window to

a new, wider world

. There, spread out , was a

profusion

of

geography ,

of atmosphere,

of full

empty air

. (Foer 68-69)

In addition to commenting on its own structure and reading experience, this passage is made of fragments that point to the process that ordered them. This section consists of nine original word groupings (ranging from two to seven consecutive words) from Schulz and thirteen single-word fragments left by Foer, and this origin—whether it was an original wording by Schulz or a new combination by Foer—is readily apparent on the page itself. Thus even if a reader progresses consecutively through the novel, fragmenting is still continuously utilized as the text itself is already broken into smaller discrete notes that testify to a larger process at work.

Finally, because *Tree of Codes* is derived from *The Street of Crocodiles*, juxtaposition allows the reader to put these two texts in conversation with each other, which is arguably the most meaningful experience in the text. As I previously admitted, my first reading of *Tree of Codes* was not very coherent, and I was not able to good a get sense of the text initially. After that reading, I turned to *The Street of Crocodiles* to see what the original text was like, and considering the Amazon page for *Tree of Codes* suggests editions of Schulz's work in the top two "Customers who bought this item also bought" list, I suspect that many readers have this

same inclination. I knew a little about Schulz's history from the afterword in *Tree of Codes*, but the image I had of the man was as a tragic victim of the Holocaust, and it did not match the author of such dream-like, haunting, yet playful prose. His turn of phrase and odd images stuck with me as a reader, and when I returned to *Tree of Codes* I could now clearly see Schulz behind the phrases left intact and even in a shifted form within Foer's larger text as a whole.

While there are no alternative texts or 'windows' within *Tree of Codes* itself, this oscillation between Foer's book, Schulz's text, and the history that surrounds both authors, is *the* key feature of the text and requires the use of juxtaposition as a reading strategy. As previously mentioned, in *How We Think: Digital Media and Contemporary Technogenesis*, Hayles uses the term juxtaposing to describe the hyper-reading strategy of reading "across several texts" (61). Hayles argues that such hyper reading "has become a necessity" within our current media ecology because "[it] enables a reader quickly to construct landscapes of associated research fields and subfields; it shows ranges of possibilities; it identifies texts and passages (62). While Hayles is referring primarily to the reading that is done every day through digital interfaces, I argue that our interactions and habits there can also be utilized with hyperprint texts. In the particular instance of *Tree of Codes*, I feel that juxtaposition can be used to "read across" the book in readers' hands, the book that served as the original source material, and the glaring absences between the two.

While these last two contexts may not be *physically* before the reader engaged with *Tree of Codes*, I feel that they can still be very present in readers' minds. Northrop Frye once said that "there's nothing new in literature that isn't the old reshaped," and while that is rarely so literal as it is with *Tree of Codes*, Frye's larger point was that

> in literature you don't just read one poem or novel after another, but enter into a complete world of which every work of literature forms a part. This affects the writer as much as it does the reader. Many people think that the original writer is always directly inspired by life, and that only commonplace or derivative writers get inspired by books. That's nonsense: the only inspiration worth having is an inspiration that clarifies the form of what's being written, and that's more likely to come from something that already has a literary form. (69-70)

Here Frye pushes against the trope of the inspired genius whose creativity is strictly the result of self-reflection, and he highlights that fact that writers get inspired by other writers—by seeing what they can do with a poem, short story, novel, etc. This can spur inventiveness in authors by fostering a desire to try new techniques and strategies, just as readers who have more extensive mental libraries may have richer experiences of a single text by placing it in relation to others. So one layer to consider within *Tree of Codes* is how Schulz affected and inspired Foer, and another is the complicated legacy of writers in general.

Authors' works can speak for them long after they are dead, but only if the texts themselves manage to survive for future readers, a theme found in both Schulz and Foer. In fact it is the focus of the very same section from both authors (meaning both the original passage from Schulz and the reworking of it from Foer), though in the later passage the author gets conflated with the work itself.

To being with Schulz, in "Tailors' Dummies" the manic father is described as an "incorrigible improviser" and a "fencing-master of imagination" who has led a "colourful and splendid counter-offensive[s] of fantasy…against the trenches and defence-works of a sterile and empty winter" (40). After a debacle of collecting and breeding rare birds, however, he was

vanquished by the maid and shunned into distant corners of the house. One evening, tempted by the presence of two sewing girls and inspired by their tailors' dummy, he reemerges and charms them, at least initially, with "lectures" about his new "cosmogony" of matter and creation (50). He calls these lectures the "Treatise on Tailor's Dummies or The Second Book of Genesis," and argues that "Matter has been given infinite fertility, inexhaustible vitality and…a seductive power of temptation which invites us to create…" (48). He goes on to state that humans "have lived for too long under the terror of the matchless perfection of the Demiurge" and proposes that we begin to create beings for our own purposes that reflect our own aesthetics. In Schulz's translation, the text reads:

> …'we are not concerned,' he said, 'with long-winded creations, with long-term beings. Our creatures will not be heroes of romances in many volumes. Their roles will be short, concise; their characters without a background. Sometimes for one gesture, for one word alone, we shall make the effort to bring them to life. We openly admit: we shall not insist either on durability or solidity of workmanship; our creations will be temporary, to serve for a single occasion.' (51)

Here, the manic father is expounding on man's desire to mimic God, or the "Demiurge," and create life, not through reproduction but through creative labor, even if that creation is somewhat paltry and short-lived, another example of *tandeta*. The idea of perfection or permanence can be stultifying, and here Schulz presents embracing the "sawdust" of creation as a virtue. The father goes on to note that the Demiurge "made matter invisible, made it disappear under the surface of life. We, on the contrary, love its creaking, its resistance, its clumsiness. We like to see behind each gesture, behind each move, its inertia, its heavy effort, its bear-like awkwardness" (52). This suggest that imperfection is also more forthright; it allows one to see beyond the initial

glimmer or illusion and consider instead how it works or how it was made—not unlike how hyperprint texts function antiabsorptively to draw awareness of media affordances. This also clearly reflects the author's desire to create something that rings true to life but ultimately may not last.

In Foer's excising, however, the focus shifts slightly, and both man and their creations are described as short-lived. While it can be more difficult to assemble a plot or specific context within *Tree of Codes*, here the father character wanders around the house and delivers morose monologues, seemingly more to himself than for the benefit of an audience. The Schulz excerpt from above now reads:

> "We are not ," he said, "
>
> long-term beings. not heroes of
>
> romances in many volumes.
>
> for one gesture, for
>
> one word alone, we shall make the effort . We
>
> openly admit:
>
> our creations will be temporary . ["] (51)

Unlike Schulz's character, here the father initially contemplates man's own mortality and impermanence. It is only after he uses the bookish metaphor of a person's life shared in volumes that he extends his reflection to the creations of man. To me this suggests, much like the Kittler quote at the beginning of the chapter, that he is connecting our creations to our mortality because they serve as our legacies—and they too are fleeting. While Schulz's character seemed to be invigorated by the thought of creating even paltry or temporary pieces, Foer's seems forestalled

by the knowledge of impermanence. Juxtaposing Schulz's text with Foer's in this way reveals these key similarities and differences in the authors' approaches.

That said, juxtaposition does not always work in Foer's favor. Often while reading *Tree of Codes*, I found myself thinking that the prose was a diluted version of Schulz's, which it essentially is. Because Schulz has such a distinctive style and turn of phrase, it inevitably shines through when starting with his words, but it also feels less effective as a result of the cutting process. In his review of *Tree of Codes* for *The Guardian*, Michel Faber notes, "Comparing the two texts paragraph by paragraph, you notice quite often that what seems like an audacious coinage is already there in the original; Foer has merely excised hunks of Schulz's luxuriant verbiage and exhibited a slimmed-down version of the master's vision" (Faber). Faber goes on to note, that while it is more difficult to locate a plot or story within Foer's work, there is still poetry in the words. Juxtaposing the two texts for himself, however, allows Faber to more closely examine the choices that were made within Foer's project:

> Poetry aside, does *Tree of Codes* function as fiction? Sort of. Schulz's own book – typically Polish – is a rich stew of metaphysical mischief and meditations, with little plot engine other than the father's slow decline into madness. *Tree of Codes*, while following the ghostly outline of this same narrative, pursues divergent agendas. The sexual dynamic is altered, for example. Schulz's terrifying account of his papa's unhealthy obsession with work becomes, in Foer's reinvention, an obsession with the all-consuming female…. It's as if Foer's scalpeling of the text is a kind of psychoanalysis, seeking to expose the unacknowledged fixations hidden within (although which author's fixations are being exposed is a moot point).

These larger insights would be impossible without juxtaposing the text with its original inspiration, and some may argue that any good scholar would examine the source material, that this is not an especially 'digital' reading strategy. I would counter argue that reading *Tree of Codes* feels like having numerous browser windows open in my attention: Schulz, his life, his sense of humor, his drawings, his self-portrait in the Gestapo officer's fairytale carriage, his death, his lost work, his legacy, Foer and his previous work. Essentially, the voids function as windows into all of these deeper layers, which are held in the reader's mind, if not physically within the book.

Thus, readers may use juxtaposition throughout *Tree of Codes* by filling its absences with connections beyond the book itself. The physical difference between this book and a traditional codex is physically felt as the book is held, the pages are turned, and words nearly float in empty space. As will be discussed below, this haptic cue reminds readers that it came from another book, from an author that was murdered. Because the weight of the original book has literally diminished, the weight of what it signifies remains figuratively heavy, so while the reader may not have a variety of texts in front of them while reading, *The Street of Crocodiles* is still very much present and in constant consideration.

Embrace Print and Material Inconvenience

While *Tree of Codes* is not as cumbersome as *Building Stories* or *Where You Are*, readers still have to take care when reading it, which again uses the hyperprint stance of pushing back against the perceived convenience of e-reader devices. In addition to first figuring out exactly how to read it, as mentioned above, *Tree of Codes* also feels delicate, as Nguyen notes, "Holding the book, you can feel an absence of weight in the middle." I enjoy showing this book to my friends and family and watching their faces the first time they open it; gasps are not uncommon.

My own first reaction, even knowing what to expect, was that this book had been destroyed, so ingrained is my tactile understanding of the codex and the sense that there is something nearly sacred about it. Faber had a similar experience and states that the hole-ridden tome, "if you share Foer's aesthetics, has 'a sculptural quality' that's 'just beautiful', or which, if you are an average reader, might make you think a wad of defenseless print has been fed through an office shredding machine." Foer has stated in interviews that the reason why *Tree of Codes* only exists in paperback is that a hardcover would make the book "collapse in on itself," but Faber points out that this adds to the delicacy of the book, arguing that "the book's lack of a tough shell makes it seem all the more vulnerable to mutilation. Just one rake of the fingers would destroy it. Those booksellers brave enough to stock it will no doubt be chewing their lower lips in stress whenever a customer leafs through its delicate web of pages." This insistence of handling with care, however, is largely the point and helps to underscore how the book functions as a *material metaphor*, discussed below in "Link Material and Textual Interactions."

This is not, however, just a gimmick. The physical makeup, or perhaps what is *missing* in the physical makeup, needs to be considered in tandem with the text. Jerome McGann, champions such a discussion of materiality alongside text, arguing that "The time has come…when we have to take greater theoretical account of the other coding network which operates at the documentary and bibliographical level of literary works" (43). For support, McGann points to authors like Williams Blake and Emily Dickinson for whom the "the physique of the 'document' has been forced to play an aesthetic function, has been made part of the 'literary work,'" and argues that such authors interrogate the mediums through what they create (43). It should be noted, however, that I would not classify Blake's or Dickinson's works as hyperprint because they were both responding to the media ecologies of their times, rather than

working within our current context between print and digital. McGann's overall argument is that scholars and critics need to move away from focusing almost solely on the language of the text:

> And even if we agree, for practical purposes, to restrict the term 'text' to this linguistic signification, we cannot fail to see that literary works typically secure their effects by other than purely linguistic means. Every literary work that descends to us operates through the deployment of a double helix of perceptual codes: the linguistic codes, on one hand, and the bibliographical codes of the other. (43)

Even though the reader is presented with a slightly less cumbersome format than other hyperprint text, *Tree of Codes* still functions as a literary work in which "the distinction between physical medium and conceptual message breaks down completely" in that even the minor inconvenience caused by its fragility interrogates the typical bibliographical codes experienced in traditional fiction (43).

Require Conspicuous Manipulation

In addition to figuring out how to approach the numerous layers of visible pages, mentioned above in "Foster Hyper Reading," the other major physical manipulation required of readers is the turning of codex pages; navigating the text with a hyperawareness of its fragility creates an entirely new experience. Unlike reading a traditional codex, which generally seeks to have its interface recede in favor of its content, the pages within *Tree of Codes* cannot be flipped and turned unthinkingly. Because so much of each page has been cut away, every layer is far more delicate than a regular book, and if a reader were to turn pages more aggressively, it is likely that the remaining paper borders would tear. This really slows down the reading pace and again makes for a more contemplative reading experience.

An additional danger in unthinkingly turning pages is that different layers can sometimes become entangled. Several times while reading, the remaining paper tabs of one page got entwined with those of the page behind it. At first I thought it was a printing error or an instance where the die-cutting machine did not completely excise what was to be removed, but it is just a fluke of how the tabs sometimes line up with one another. While I am sure that this was not an intentional design choice, it was still an instance that slowed down my reading and drew attention to the object I was interacting with. As Nguyen notes, "*Tree of Codes* is intent on distracting its audience and making them conscious of the reading experience. The pages are also fragile, and I found myself holding *Tree of Codes* with extra care.… It shows consideration to the book not as an art object, but a book as a thing you read." This fragility of the book functions on the antiabsorptive level to spark readers' attentions while simultaneously underscoring Foer's larger project. In a seemingly self-referential moment of *Tree of Codes*, it reads,

. Everything was

full

.

time passed

unevenly,

Without transition

and

full of secret silent

moments .

i

went groping into the

deep

completely unknown .

which serves as an apt description of the overall reading experience (81-82).

Link Material and Textual Interactions

In *Writing Machines*, N. Katherine Hayles examines the way that the physical structure of the codex, along with other media, shapes our interactions with it in significant ways. She argues, "To change the material artifact is to transform the context and circumstances for interacting with the words, which inevitably changes the meanings of the words as well. This transformation of meaning is especially potent when the words reflexively interact with the inscription technologies that produce them" (23-24). In other words, if you change the book, you also alter the experience and the text, and if the text itself reflects on this process, it becomes even more potent. To describe this process, Hayles uses "material metaphor," "a term that foregrounds the traffic between words and physical artifacts" (*Machines* 22). She points to how the structure of the modern codex (bound, opaque pages printed on both sides) carries with it guidelines for how we expect to interact with it, namely reading sequentially in the order that the pages are bound, continuing from the recto of a page onto the verso. When the physical form disrupts these expectations, it can offer new opportunities for reader engagement: "To change the physical form of the artifact is not merely to change the act of reading (although that too has consequences the importance of which we are only beginning to recognize) but profoundly to transform the metaphoric network structuring the relation of word to world" (*Machines* 22-23). In this light, it could be argued that all hyperprint texts are material metaphors; their physicality and text interact to heighten readers' awareness of both elements. In the case of *Tree of Codes*,

this awareness is directed both at the general structures that guide reader attention in the codex form, as all hyperprint texts do, but also to Schulz himself.

As briefly discussed in the previous two sections, *Tree of Codes* is deliberately delicate and requires care when handling; this physical interaction required of the book enhances Foer's larger theme about the fragility of human life, of human endeavors in general, and the loss of Bruno Schulz, as both a man and an artist, in particular. To return to Pross's levels of media, *Street of Crocodiles* is an example of secondary media, and yet *Tree of Codes* treats it almost as if it were a tertiary text that opens itself to mutability—Foer essentially hit the delete key throughout the text to reshape it to his own purposes. However, readers encounter it as a secondary-media codex characterized by stability, which makes its fragility and alterations all the more shocking because they are wholly unexpected and yet physically palpable.

This schism of expectation and loss embodies Foer's project of representing Schulz and Holocaust victims. In *Regions of the Great Heresy: Bruno Schulz, A Biographical Portrait*, Jerzy Ficowski shares an encounter that a fellow teacher had with Schulz. Schulz told this teacher, "They are supposed to liquidate us by November [1942]," and the teacher at first did not understand what "liquidate" meant in relation to people or that "us" referred to Jews. After Schulz explained his meaning, the teacher reflected that "at the time I either did not want to believe them or I was unable to comprehend how it could really happen—I considered it incredible, unreasonable, and I said so" (136). Schulz was in fact murdered that same November. Schulz's friend could not conceive of the danger because it was too unthinkable; he had expectations that no longer matched the reality around him. When a reader picks up a book, there are also expectations bound within it as a material metaphor, and yet when *Tree of Codes* is opened, it too thwarts all previous experience. The atrocities of the Holocaust are

incomprehensible, but *Tree of Codes* functions in at least a small way to represent and feel loss through the physical absences in the book by undermining reader expectations of secondary media.

At the same time, however, *Tree of Codes* physicalizes resiliency as much as fragility, and it functions as a material metaphor that testifies to Schulz's legacy. Faber ends his review of the book by commenting on this dichotomy:

> Yet, knowing Bruno Schulz's life story, there is poignancy in this [vulnerability of the book]. His oeuvre, which should have been large, was hacked down to modest size by tragic misfortune: his murder by the Nazis, followed by the loss of hundreds of his paintings, drawings and manuscripts. The idea of *The Street of Crocodiles* surviving in disguise, chopped to within an inch of its life but still clinging to its soul, strikes me as a bittersweet irony, an oddly fitting homage. It has also given rise to the most potent work of art that Jonathan Safran Foer has yet produced.

Despite being known as much for what is *not* in it as what *is*, it still functions as a book. It still communicates with readers on intellectual, emotional, and physical levels. It still carries forward the vision of Foer and introduces the work and life of Bruno Schulz to new readers. *Tree of Codes* thus embodies the material dichotomy of printed texts—tangible and stable, yet also vulnerable.

Resist E-Reader Digitization

In an interview for *Vanity Fair*, Foer was asked directly if he thought that *Tree of Codes* would "translate well to an iPad" (Wagner). He said no, adding "I love the notion that 'this is a book that remembers it has a body.' When a book remembers, we remember. It reminds you that you have a body. So many of the things we may think of as burdensome are actually the things

that make us more human." This is a particularly apt point for a text that stands in for the work of another author, or even for that author as a person; people and books both have physical bodies that may be susceptible to damage and change, are not easily 'saved' or reformatted.

In the quote at the beginning of this chapter, Friedrich Kittler comments on how our media reflects us or carries us into the future, but he also felt that they simultaneously obscure their relationship to us. Written at a time when new media seemed to be challenging the supremacy of the written word, *Gramophone, Film, Typewriter* explores the "very schematism of perceptibility" that allows dominant media to operate (xli). Kittler argued that peering behind interfaces to "blueprints and diagrams" of media broke the illusions that they created and could reveal traces of the human body within such media "black holes and boxes" (xl, xxxix). Kittler felt that "Whosoever is able to hear or see the circuits in the synthesized sound of CDs or in the laser storms of a disco finds happiness…. At the moment of merciless submission to laws whose cases we are, the phantasm of man as the creator of media vanishes. And it becomes possible to take stock of the situation" (xli). For Kittler, media awareness and an understanding of how interface affordances affect us, can lead to both greater enjoyment of the individual piece and a clearer understanding of the greater media ecology. I feel that the physical holes within *Tree of Codes* and the accompanying disruption of readers' interface expectations foster such reflection. The conflation of the presence of the book with that of the author is a common illusion, and here the gaping holes within the interface of the former highlight the premature absence of the later. What is more, while media, what it can "store and communicate," may be our sole testimony to the future, *Tree of Codes* also functions as a *memento mori,* and without its fragile body readers may be less likely to reflect on their own fragility. While it is undeniable that digital texts also have materiality, there is at least a mainstream perception that they are more fluid, less concrete,

or not quite on the same physical plane as books and bodies, and an e-reader edition may not call to mind the same reflections.

Perhaps this is why *Tree of Codes* has no e-book edition but has inspired a ballet and an opera—both also considered secondary media, to use Pross's terminology, when viewed in person. In 2015, director and choreographer Wayne McGregor collaborated with artist Olafur Eliasson (who also contributed to *Where You Are*, discussed in chapter two) and composer Jamie xx to create an immersive experience that combined dance, visual art, and music—a multifaceted performance that was inspired by *Tree of Codes.* Of his inspiration McGregor said,

> Jonathan Safran Foer's is an immersive sculptural work that brilliantly hovers between words and spaces, surfaces and layers, pasts and futures. Its post apocalyptic narrative and reinvention of the process of reading itself catapults your imagination into bracing liminal states. These blurred and disorientating worlds provide a powerful point of departure for our collaboration on stage – where constellations of light, shadows, bodies, objects and sound dance at the edges of darkness.

Here McGregor points to Foer's problematization of how readers experience a familiar form and expresses a desire to explore the same kind of project through ballet. While watching a clip of the performance itself, I was most struck by Eliasson's use of mirrors in fragmented segments behind the dancers; these panels not only reflected the dancers in interesting, multifaceted ways, but also the audience itself. It did remind me of the 'broken' surface of a page from *Tree of Codes* and the self-awareness it created in me as a reader. To be honest, I was a bit surprised to find such a through line from one project and medium to another.

Somewhat similarly, in 2018 director Ong Keng Sen and composer Liza Lim created an opera inspired by Foer's book. In her article about the opera's American debut, Mary Scott

Hardaway states that "Foer's *Tree of Codes* could be seen as a sort of homage to Schulz, to what he could have become. Ong's production could be seen as an homage to what, after all is said and done, we can find beneath the rubble" (Hardaway). Ong specifically points to the material inspiration from the text, saying "[Foer] did a literary cut out which was a sculpture and Liza did a kind of musical cut out from those two books, which is a sound sculpture in a way" (Hardaway). In fact the full title of the opera is *Tree of Codes: Cut-Outs in Time* (Rebhahn). Lim describes the work as "[an] opera about bloodlines and memory, time, erasure and illumination," and quotes from the text are used throughout the opera, the final act echoing, "Reality is only as thin as paper behind the screen saw dust in an empty theater" (Rebhahn). What is more, Michael Rebhahn points out that "The stage design of the Swiss artist Massimo Furlan emphasizes this moment of simultaneity and mutability by seizing upon the style of Jonathan Safran Foer's sculpted book: the stage is constructed out of transparent platforms upon which the singers, actors and musicians perform" (Rebhahn). Here again then, the voids within the book, the seemingly floating content, and the disruption of typical conventions are explored through a different medium.

While these works are obviously not the same as an e-reader edition, I find it interesting that *Tree of Codes* inspired such physical, audience-centered pieces. *Tree of Codes* could of course be easily reproduced digitally; e-literature erasure pieces such as Amaranth Borsuk's 2014 "Whispering Galleries" begin with existing text and then capture users' movements to remove text and leave behind remaining words to form new poems (Reardon and Echeverria). The technology exists to create a similar work for *Tree of Codes*, but the connection to the materiality of the original would be distanced, moving from an exploration of a secondary medium *through* a secondary medium to a *translation* of a secondary medium's take on a

secondary medium explored via *tertiary* media. It would function more as a remediation than as a disruption of readers' physical expectations of the codex, which is a central component to the book's material metaphor. When asked how he originally got the idea for a die-cut book, Foer responded, "…I started thinking about what books look like, what they will look like, how the form of the book is changing very quickly. If we don't give it a lot of thought, it won't be for the better. There is an alternative to e-books. And I just love the physicality of books" (Wagner). It seems fitting, then, that *Tree of Codes* inspired such physical artforms as dance and opera but has not been reimagined in for e-readers.

Explore Themes of Communication and Medium

Tree of Codes may be sparse in terms of text, plot, and information, but its voids provide space for both an affective connection to Schulz and victims of the Holocaust and for contemplation about our relationships to the physical book form. As a book derived from another text, *Tree of Codes* is inherently preoccupied with texts and their longevity. To begin with, Schulz's original text was already concerned with how literature and art project themselves into the future. Schulz even frequently uses the book object as a metaphor for time; in "The Comet," he writes, "Later on, the pages of days turned emptily" (137). While this seems like a prophetic description of *Tree of Codes* and its pages that are more not-there than there, the metaphor equates time with the turning of codex pages, and life is writ there in vivid detail or in barren dullness. Later in the same paragraph, Schulz returns to this metaphor with a slightly different twist in which the city itself becomes the tome and not only lived experiences but also *memories* of those experiences form the contents of its pages: "…[chimney-sweeps] dreamed that the wind would open for them for a moment the lids of roofs over the alcoves of young girls and close them again immediately on the great stormy book of the city—providing them with breathtaking

reading matter for many days and nights" (137). Combined, the metaphors suggest that we live—temporally and spatially—within books that contain the text of our lived experiences and internal thoughts. In "The Night of the Great Season," a direct metaphorical link is made between life as a book and writing or authorship:

> Ah, that old, yellowed romance of the year, that large, crumbling book of the calendar! It lies forgotten somewhere in the archives of Time, and its content continues to increase between the boards, swelling incessantly from the garrulity of months, from the quick self-perpetuation of lies, of drivel, and of dreams which multiply in it. Ah, when writing down these tales, revising the stories about my father on the used margins of its text, don't I, too, surrender to the secret hope that they will merge imperceptibly with the yellowing pages of that most splendid, mouldering book, that they will sink into the gentle rustle of its pages and become absorbed there? (121)

The hope here seems to be that writing about his father will secure his place—the father or son or both—in this larger book of time, that the recording will be able to recreate the life in some way. The trope of immortality through prose is hardly unique to Schulz, but it does take on new depth when this text is excised by Foer.

While Foer also envisioned a book of life, his was made more of language and other texts than lived experiences. When discussing the die-cutting process for *Tree of Codes*, Foer stated, "I could not help but feel that Schulz's hand must have been forced, that there must have existed some yet larger book from which *The Street of Crocodiles* was taken" (*Tree* 139). Foer describes this larger book as the "ultimate book," in which "every word ever written, spoken or thought is exhumed" (139). He goes on to say of this imagined book, "*The Book of Life* is the Temple that our lives strive to enter, but instead only conjure. *The Street of Crocodiles* is not that book—not

the Book—but it is one level of exhumation closer than any other book I know of" (139). Here the shift is that rather than our lives, memories, and experiences being recorded in the book, the book takes primacy and our lives simply seek to live up to it.

This subtle but important shift is interesting to consider in terms of the two authors' relationship to their respective books. Today Schulz is remembered most by his body of work, both what survives and what was lost; his books stand for him in the annals of time, and *Tree of Codes* stands as a memorial for them both. This aligns with Schulz's own use of the metaphor of the book as memory and life. Foer, on the other hand, describes the Book in more aspirational terms; it is a process of seeking through both living and creating. This reflects the more meta aspect of *Tree of Codes*, an example of pairing the content and form to testify to the process behind them both. In what would be the eponymous section, had all the titles not been removed, *Tree of Codes* reads

. Reality is as thin as paper

. only the small section

immediately before us

is able

to endure, behind us sawdust in

an enormous empty theater. (92-93)

Here again there is an additional association in the metaphor of the book; reality could be synonymous with life, but both the potential deterioration, "sawdust" reminiscent of pulp used in bookmaking, and audience are invoked. As discussed throughout this chapter thus far, *Tree of Codes* thwarts the expectations of codex stability in order to constantly remind readers that it existed first as another book by a man who was murdered, but tied up within that project are

complicated analogies that nearly equate man with the book in order to consider the questions of legacy and mortality. The *experience* of the book, of feeling its voids and lack of heft, keeps these associations at the forefront of readers' attentions and functioning as a material metaphor; in this way, the book has far more impact than the text alone, or rather

> The tree of cod es was
>
> better than a paper imitation
>
> . (96)

Ultimately, then, *Tree of Codes* raises more questions about how our conceptions of history and legacy are intimately tied to the book. Schulz lives on in a small way through his surviving work, but how much more, of his cultural contribution and of the man, was lost due to the Holocaust and the Nazi book-burnings? Paper codices and secondary media have their own affordances and issues in terms of preservation, their susceptibility to censorship, their material vulnerability, their finite physicality. Much like digital texts, print's greatest strengths as a medium can also be seen as its weaknesses; again, while hyperprint texts may not be able to provide definite answers, they can help us begin to see the relevant questions.

Bats of the Republic **as a Hyperprint Exemplar**

While *Tree of Codes* took one previously written text to serve as a metonym for both the work and life of the original author and for the lives and cultural objects destroyed during the Holocaust, *Bats of the Republic* takes a more general look at our daily documents, records, and personal histories and problematizes the boundaries between preservation, saturation, surveillance, and privacy.

Zachary Thomas Dodson began his career primarily as designer and co-founded the independent Featherproof Press in Chicago in 2005. In a lecture at Medea, a research group at

Malmö University, Sweden, focused on media and collaboration, Dodson stated that that was when he "became very interested in what design could do as part of the story" ("Making of"). In *Bats of the Republic*, Dodson explored this use of design as an integral component of story, and he turned to his Texan childhood and the recent passing of his grandfather for inspiration. He became interested in the fact that human DNA has not really changed that much from our ancestors:

> That [the death of Dodson's grandfather] got me thinking about what we share with our ancestors, and kind of what in us remains across different time periods across different cultures, would I recognize the thoughts and emotions of the version of me that was walking around say 5,000 maybe 10,000 years ago…so would I recognize that person's thoughts, would they recognize mine, or is that so dictated by culture and the context that we live in that we would be strangers to one another. ("Making of")

This question plays out in *Bats of the Republic* through semi-parallel characters and stories that seem to span three hundred years. In 1843, during the brief period in history in which Texas was actually its own country, the courtship of Zadock Thomas and Elswyth Gray is complicated by a cross-country errand given to Zadock by his boss and would-be father-in-law. Three hundred years later, Zeke Thomas (descendant of Zadock) and Eliza Gray (now the surname for a child without parents, and no relation to Elswyth) try to navigate the post-apocalyptic system of courtship and government in which the remaining population is separated into seven city-states across America, organized by life phases. The plot loosely fits within the sci-fi genre, but this gets complicated with the various texts included within its pages, which will be discussed below.

As both the designer and the author, Dodson typifies an emerging authorial stance made possible by the numerous desktop publishing and design programs available. In *Metamedia:*

American Book Fictions and Literary Print Culture After Digitization, Alexander Starre provides a useful term for this kind of writer—a "literary bibliographer" (168). Starre notes, "As photographers—according to the Greek etymology of the term—write with light, literary bibliographers not only write books, they write *with* books (168-69). Starre points to Mark Danielewski, and especially his most well-known book, *House of Leaves*, as a prime example of a literary bibliographer, noting that "[*House of Leaves*] is not just a book of fiction; it is a minutely calculated 'book fiction' that interweaves text, design, and paper into an embodied work of art" (6). Starre further argues that it is specifically the "[d]igital production tools combined with today's print technologies" that allow for certain authors to have such control and artistic experimentation over their texts (6). This, however, creates an interesting relationship between the realms of technology and print, the former allowing for an elevation of the later, which simultaneously prompts an interrogation of the former:

> As many of their works show, young American novelists use computers with unprecedented ease and proficiency. In their social circles, flickering displays and shiny gadgets hardly raise an eyebrow. Conversely, they approach the mass-produced commodity of the printed book with a sense of wonder. In and through their texts, American literature has begun to confront the unlikely amalgam of fixity, permanence, and aesthetic flexibility embodied in its traditional papery container. We might think of this as the literary dialectic of digitization, threatening to supersede printed artifacts while simultaneously enabling them to appear as artistic media. (Starre 7)

I agree with Starre and would actually place hyperprint within this same "literary dialectic of digitization"; after all, many of the primary texts discussed here would not be possible without the technological advancements within design and publishing. At the same time, however, the

more engaged we become with our "flickering displays and shiny gadgets" the more nostalgic we may become for the simplicity of a paper book or the more authors may feel inspired to examine the form with fresh eyes. Author/designer Dodson, who certainly uses numerous design programs and helped to market books at Featherproof using social media and other online outlets, but who is also drawn to the printed book form, seems to typify this approach of the literary bibliographer. Chris Ware, discussed in chapter two, and Nick Bantock, discussed in chapter three, might also be considered literary bibliographers due to their own dual roles as designers and authors of very bookish forms, but this reflexive loop between the digital and print realms seems most apparent in both the design and text of Dodson's *Bats of the Republic*, further enhancing its function as a hyperprint text.

Perhaps because of his role as a literary bibliographer, Dodson was particularly successful in his use of *medial metalepsis* and *mise en abyme* to heighten the reader's awareness of the material affordances of a print novel. Starre explores both devices, and adds a useful shift in terminology to help emphasize their potential to foreground mediality. Mise en abyme is used to describe an "embedded mirroring of a text within a text," such as Hamlet's play within Shakespeare's play (154-55). Starre suggests that since printed books "still have a firm place in many people's lives," their mirroring within a text may not rise to a metamedial awareness, and instead simply reinforce "narrative realism" (155). However, he goes on to argue, "A high frequency of mise-en-abymic structures may increase the likelihood that readers notice the recursive dynamics of the work. The more books we find in the diegesis and the more we read about these books, the likelier it is that we will reflect on the act of reading a book" (155). I would add that when the materiality of a book (cover, text block, vellum sheets over illustrations, etc.) is replicated within another text—as it is with the novel excerpts from *The Sisters Gray*

within *Bats of the Republic*—a metacognitive reflection on the reading process fostered by the printed book is increasingly likely.

Starre goes on to note that metalepsis can be even more effective than mise en abyme in creating medial awareness. He draws on the work of narratologist Gérard Genette and argues, "Metalepsis—the paradoxical transgression of narrative boundaries—has even more autoreferential power in that it directly addresses the division between the empirical world and the fictional diegesis" (155). A further distinction is drawn between rhetorical metalepsis, as when narrators or "[a]uthorial personae…pause to reflect on their options for continuing the plot," and ontological metalepsis, which "triggers paradoxical effects and subverts borders that were thought to be stable," as when a character transgresses the story world to converse with an author, or vice versa (155-56). The primary difference between the two is that the former draws on extradiegetic reflection "without disturbing the stability of the narrative universe," and the latter calls into question the relationship of the fictional world to the reader's world, often in ways that cannot be logically reconciled (156). Within narratology further distinctions and organizing structures can be used to parse more nuanced uses of metalepsis; Alice Bell and Jan Alber provide a useful discussion in "Ontological Metalepsis and Unnatural Narratology." For my purposes here, however, the primary distinction between rhetorical and ontological metalepsis suffices to clarify how the physical construction of the letter paired with the final page of the novel bring the paradoxical story world elements and their larger concerns to the forefront.

That said, however, *Bats of the Republic* seems to be a more effective "metamedial" text, to use Starre's term, than it is a traditional mainstream novel. For example, while Jaimie Green wrote for the book's spot in the semifinal round of *The Morning News Tournament of Books*, that

it "swings a steam-powered hammer at the very frame of what a novel is. Yet at the same time, its exquisite design, down to copyright page, down to the inside of the dust jacket, reminds us that a novel is traditionally a paper-and-ink object," she also adds that, the characters are flat, "too subservient to the machinations of structure," and the ending did not seem like an appropriate "payoff" for the buildup throughout the previous 440 pages. Such criticisms are common for *Bats of the Republic*, which seems to suggest that some readers will find the design aspects more engaging than the story they help tell.

Much like Hayles's "technotext," discussed in the introduction, Starre's concept of "metamediality" operates within the same sphere as hyperprint, with a few key differences; while Starre differentiates his term from Hayles's since Hayles's "concept is narrower in that it articulates the process solely through the lens of technology," I position hyperprint between the two terms and within the more specific context of printed texts within the dawning and ubiquity of the digital age. As previously discussed, Hayles uses the term technotext for "[l]iterary works that strengthen, foreground, and thematize the connections between themselves as material artifacts and the imaginative realm of verbal/semiotic signifiers they instantiate," and uses the term to link "the technology that produces texts to the texts' verbal constructions" (*Machines* 25-26). Starre, however, argues that such a "perspective focuses so intently on authors and their writing tools that the finalized artifact and the actual scene of reading often disappear from view," and concludes that "[u]ltimately, Haylesian media-specific analysis gives too much value to the author/technology-complex and leaves the literary work as a mere trace of the creative processes at the nexus of writer and machine" (55). As an alternative, Starre proposes the term "metamedium" to describe "a literary work" that "uses specific devices to reflexively engage with the specific material medium to which it is affixed or in which it is displayed" (8). While

this definition seems very close to "technotext," Starre emphasizes the reader's experience of a text through the physical medium in which it is presented:

> In linking discourse and medium, metamediality reduces complexity by stabilizing a specific sensory experience of a literary work. Simultaneously, it fosters an increasingly complex, embodied mode of reading, which appreciates the entire artifact as an integrated work of art. Metamedial forms of expression thus qualify as elements of an evolving semantics within contemporary literature that attempts to rationalize the hypercomplex media environment constituted by the diversified channels through which texts circulate. (64)

However, while Starre faulted Hayles for focusing too much on the technology of production to the detriment of reader experience, I would argue that Starre fails to recognize that media influence each other and that our experiences with one can inform our interactions with another. To return to the Northrop Frye quote from above, we do not read in a vacuum; we draw on other texts that we have experienced and carry them with us when we approach a new text. I would extend this to different mediums, as well, and argue that our experiences with one form can influence how we approach another—the whole premise of hyperprint as a concept applies to this feedback loop from digital to print texts, for example. Starre's perspective seems to ignore these influences across multiple media. Additionally, "metamedia" itself implies a work that reflects on its own materiality, not a work that examines the complexity of experiences within a specific media ecology, as his description above suggests. "Hyperprint" as a critical lens, however, combines Hayles's emphasis on technology's role in media and Starre's foregrounding of material experience within a specific medium and context—print texts during the shift from print to digital.

In discussing *Bats of the Republic* by analyzing its use of the six hyperprint elements and its relation to the chapter theme of preservation, my goal is again twofold—first, to clarify the specific components of hyperprint texts as they explore the media affordances of mainstream print for readers with digital sensibilities, and second, to demonstrate how such a reading can highlight further ambivalence with the digital shift, in this instance specifically with the archiving of documents. Here the use of digital reading strategies is required to parse out the glut of texts and their roles in constructing history, and the inclusion of a sealed and prohibited envelope within the codex forces the reader to confront their own senses of privacy or be complicit in surveillance. What is more, the physical construction of the envelope's contents collapses the distance between the form and content by mirroring the conflation of timelines and story worlds. Lastly, if experienced through an e-reader, the medial metalepsis and mise en abyme would be compromised, thus undermining the text's exploration of our secondary media communication affordances, specifically in terms of how we construct history.

Foster Hyper Reading

As a book solely made up of numerous texts from various characters across multiple time periods, "filming" is required to draw meaning from the visual design cues in order to place each piece within the context of the full narrative. Throughout the book there are roughly twenty-eight different types of documents:

- Family trees and character diagrams from both 1843 and 2143
- Maps: Republic of Texas from both 1843 and 2143, "Republic of the National Alliance, National Lifephase City-States," and "Asterisms and Ways of the Night" star map
- Handwritten letters from Zadock to Elswyth, frequently with accompanying typed transcriptions (also a letter from Zadock to Mr. Gray)

- Handwritten letter from Mr. Gray to Zadock, on Museum of Flying letterhead and also accompanied by a typed transcript
- *The City-State: Novelty of Future Times*, by E. Anderson, presumably Elswyth's mother
- Newspaper clippings from both time periods: the obituary of Zadock's grandfather, "Strange Beast Found in Desert and Laid Blame," "The White Sand Desert of West Texas Discovered," and "The Evensong Ritual"
- National Identification Papers for Zeke and Eliza
- Henry Bartle's typed letters to his daughter, Eliza
- Handwritten lists from Zadock: a packing list for his trip West and a "Task list for Publication of field guide"
- Animal sketches from Zadock, always with typed family and genus information and frequently with typed and/or handwritten notes (some creatures are real and some are fictional)
- Transcripts of recorded conversations from 2143, occasionally with name-stamps of people who have accessed the records and once with information redacted
- Handwritten letters from Eliza to her friend Leeya, written on city-state paper and in all caps, also one brief note to Zeke on the same style of paper
- Sketches of city-state buildings from Eliza to Leeya
- *The Sisters Gray: The Bird and Butterfly*, by L. W. Gray, presumably Elswyth's sister, Louisa Gray; this is presented physically as scans of a Victorian novel with occasional illustrations. It also has the name-stamps of Henry Bartle and Eliza Gray on it and a bullet hole has pierced the entire volume.
- What appears to be a daguerreotype of Zadock in a signed cardboard portfolio

- A ‘typowritten’ note from Henry to Eliza, sent through the steamtube
- Diagrams: “Blood/Air/Water, or How to Decide Things” game instructions, “Colored Pattern Indicative of Republic Echelon by Armband Insignia,” “Schematic of the Model 2I • 07 Handwheel,” “Schematic of the Model I8 • I6 Steamsabre,” “Seven Flags O’er Texas,” and “Diagram of the Texas Tram and Structures Surrounding”
- Image of the graffitied barrier spread across four pages
- Record of “Text Found in Dust” from 2143
- “Thomas Family Tree” and the bloodline that links the 1843 time period with the 2143, sent from Henry to Eliza
- Telegram from Elswyth to Zadock
- Three prayer cards, which have images on the front and inscriptions in Spanish on the back, given to Zadock by “the Indian”
- Example cover for Zadock’s “Bats of the Republic” field guide
- Fold out maps: a hand-drawn diagram of Zadock’s bat cave on one side and map of the city-state steammote on the other side with handwritten notes on how to escape it
- “Come & Take It” cannon flag from the rebellion taunting the city-state
- Green carbon-copied typed letter from Henry to Eliza
- Carbon record for the city-state with the notice “Convict as Falsifier”
- Sealed envelope that says “Do Not Open”
- Handwritten note, presumably from Henry to Eliza, on city-state paper

The simplest tool readers have to help differentiate all these texts from each other and to place them in the correct context are the design cues given by Dodson. As Dodson himself notes, “no

part is left undesigned," and while his first book was criticized for being "designed to death," here the visuals aid and enhance the storytelling when readers utilize filming ("Making of").

While only black, brown, and light green inks are used in *Bats of the Republic*, this three-color printing process effectively gives each discrete text within the novel a visual identity that indicates its time period and composer. The passages from *The City-State* are perhaps the best example of this; as a whole they utilize the green accent color throughout, along with crisp geometric lines. This contrasts with the brown-tones of the 1843 period, evident in Zadock's letters and sketches, as well as the passages from *The Sisters Gray*. In fact, the only text in the novel that appears neutral, in that it is black type on a white background with few other embellishments, are the letters from Henry Bartle to his daughter—which perhaps gives a clue as to the veracity and supposed origin of these documents, a detail that will be discussed later.

Within these two main temporal color schemes, there are additional visual cues that help to distinguish one writer from another. Passages from *The City-State* primarily use Zeke's perspective; these pages are identifiable by the "The City-State" tag on the outer edge of the verso and the green, bat-like icons spread throughout the text (they look roughly like /\/\ but not as tall). These green icons appear sporadically within the text between sentences and can appear alone or in a series of as many as six. There are no paragraph breaks in these passages and Dodson used these icons to provide a kind of typographical pacing, "rather than just paragraph after paragraph, having more air around words" ("Making of"). Here design elements are employed specifically as a textual tool in a simple way that also make this text instantly recognizable for readers. Eliza's handwritten texts are equally recognizable, but they also still utilize the green color and the geometric lines and shapes that connect it to the conversation transcriptions. The stationary almost appears to be the same, which makes sense because Eliza

has to steal paper from her work since all writing implements have been banned for civilian use. These visual differences allow the reader to look at a page and use filming to immediately understand the time period and character focus. In her review for *Full Stop,* Emma Schneider highlights how this helps to make sense of what may have otherwise been an overly convoluted book: "What would perhaps be too many different storytelling modes without this visual assistance becomes one of the most stimulating aspects of the novel. This graphic novel approach reminds us that we do not only read the words themselves, but also their context, style, and illustrations." Thus, the complicated design and narrative elements reinforce and clarify each other. What is more, it makes sense within the actual story that all of these different texts appear together as they do within the book.

The narrative frame itself provides the rationale for the existence and inclusion of all of these different texts, though this does not become entirely clear until the very end. Early on in the novel, Zeke is given an "inheritance bundle" after his grandfather's death; this bundle contains "[n]ewspaper clippings of successes, photos of ancestors—it contained many documents pertaining to the long history of the Thomas family bloodline"; the crucial "Do Not Open" letter was also passed on to him, albeit more surreptitiously (43). At first, readers may wonder if the bundle that Zeke receives is the same collection of 1843 texts that they hold in their own hands, but *Bats* is rife with such assemblages and mirroring of documents. Nearly a hundred pages into the book it is revealed that *The City-State* passages, while set in 2143, are actually excerpts from a novel that pre-dates the 1843 time period. For the reader, this undermines what had originally felt like the vantage point from which the rest of the story was being told. "Until that point, I'd been reading *The City-State* as our neutral ground-zero, the 'true' or 'real' narrative from which everything else spun off," Green reflects, "[s]o when I

discovered that it itself was a novel, that there was no solid ground and the whole thing was a Möbius strip of references and inventions, I felt like we were in dangerous, exciting, new territory." Lastly, the historian Henry Bartle repeatedly tells his daughter Eliza that he is putting a file together to help her, and just after the "Do Not Open" envelope towards the end of the book is the handwritten message, "Here is the file. It is all I have to give. DON'T OPEN unless it's the end" (38-43). The implication seems to be that *Bats of the Republic* is the file that Henry either successfully gave to Eliza or got caught with and was convicted for having. A paradoxical ending given that Eliza, Zeke, and Henry are all characters in pre-1843 *The City-State* novel.

In these final pages of the book, filming can be used by readers to reveal how the design further illustrates this breaking down of chronology and logic. For example, on the page that Henry wrote his final note on, the green city-state stationary that the reader has grown accustomed to now has little green stars across its surface, and the geometric lines of the typical borders extend to display "Bats of the Republic" at the top of the page (443). What had previously seemed like a stable imitation of bureaucratic stationary now has movement and the design becomes conspicuous. It is even more noticeable on the verso, where the straight green line that had previously served as the outer page border on *The City-State* passages has now come untethered and curls itself into a meandering squiggle, while the rest of the page is covered in the typographical spacing or bat symbols freed from their text blocks and flying across the page to the recto opposite (444). These bats fly behind the final page of *The Sisters Gray*, torn from its book, green bat icons visible through its bullet hole; the text of the novel provides an idyllic conclusion for Zadock and Elswyth, but then ends with, "At least, if things were as Elswyth imagined them. If only true life were a story like this…" (445). It is unclear, however, if this calls into question the veracity of just the ending or of the entire novel. All of these pages

follow the reveal of the "Do Not Open" letter and seem to acknowledge the paradoxical, ouroboros structure of the book—the breaking down of the design elements reflect the crumbling of the logical narrative structure. These design details are revealed through the utilization of filming and help to clarify the ambiguous, and for many readers frustrating, ending.

As detailed above, *Bats of the Republic* is comprised of numerous other texts; even though there are several longer texts throughout the book, they are broken up into different sections and dispersed through the entire volume. Some of these are as short as a single page, but even the longest, an excerpt from *The Sisters Gray*, is merely sixteen pages long (94-107). Such a text is built of fragments and encourages the use of fragmenting as a reading strategy to both make sense of the sequence in which events are relayed and offer multiple reading paths. For example, if a reader so chose, she could read seventy-eight pages of *The Sisters Gray* by jumping around in the novel, but it is broken up into fourteen different sections. The same could be done for *The City-State*, Zadock's letters and drawings, Eliza's letters, or Henry's records, but each of these texts is shuffled together with the others. Essentially, the reading is already fragmented and recombined into a narrative sequence; I think most readers would follow the sequence as it is laid out, but the rich design of the book also provides a temptation for flipping through, previewing what is ahead, and reading snippets at whim. It is as if a reader has been given a miniature archive of intertwining lives, and the task is to reassemble and make sense of the pieces.

In fact, this fragmented reading process is reflected to readers through Henry Bartle's character. After "The Collapse," the unexplained event that wiped out most of the world, the bulk of the country's records and history were lost; to prevent this from happening again influential people, Henry Bartle and Zeke's grandfather among them, decided to begin collecting and archiving art, books, records, and even personal correspondences. These are all stored in

"The Vault" in the Texas city-state. Henry works as a Historian, and is responsible for combing through these various documents to create "threads," which help to make sense of all of the information. Henry becomes disenchanted with this work, however, and sees that it has become a twisted version of what he and Zeke's grandfather had originally envisioned. While investigating the Thomas bloodline for Eliza he says, "I feel I am sifting through useless details. There are gaps. I cannot profess that any artifact is more important than any other. Contradictions are inevitable. The more research available, the clearer the landscape of the past becomes. But detail begets complexity. And the truth becomes obscured" (78). Here, just as the reader combs through the various texts included within *Bats of the Republic*, Henry is engaged in the same struggle, with the very same documents. In this way, the reflections of Henry provide a metacommentary that likely mirrors similar reader reflections. Henry's regret about his legacy, also points out a greater issue within this fictional system that parallels a real problem facing many modern readers: "The Vault is what I leave behind, because now that the Recorders document every single thing, my work no longer seems valuable" (35). In other words, too much information can be as much of a hindrance as too little, an issue that is increasingly relevant in the digital age.

Some worry that even though modern readers now have greater access to more texts than ever before, this actually makes it more difficult to locate useful information. In his essay "Literature as Virtual Reality," Stephen Brockmann notes, however, that such a panic over an emerging information technology is not new. There were similar warnings and criticisms in reaction to the printing press and the previous shift from an oral culture to a literate one. With each information revolution we have to learn the new medium's affordances and how to best engage with them. Brockmann even looks back to Ancient Greece, for possible approaches to

this issue; he points to Aristotle's argument in *Poetics* that "Poetry, therefore, is a more philosophical and higher thing than history, in that poetry tends rather to express the universal, history rather the particular fact," to highlight humans' need for narrative structures to help parse an influx of information and to aid understanding (qtd. in Brockmann 63). Brockmann goes on to draw a parallel to today:

> The digital world, and especially the World Wide Web, is characterized by a proliferation of information. In fact we probably have more information at our beck and call now than ever before in human history. But the problem with most of this information is that it is not structured in a meaningful way. All information on the Web exists in a more or less equal relationship to other information on the Web. Fact exists next to fiction, good exists next to bad, trivial exists next to non-trivial. The Web is not structured in a way that makes it easy for its readers—and that, of course, is what its users mostly are—to make coherent sense of the information it contains. (64-65)

Much like Henry, then, we are often faced with too much fragmented information and increasingly have to develop tools for piecing together meaning within the digital environment. "The thoroughly liberal world of the digital age is *not* characterized by a lack of information," argues Brockmann, "[b]ut it *is* characterized by a hunger for meaning, a hunger to make sense and order out of the proliferation of information" (66). Literature as a tool provides a narrative structure that helps us make sense of chaotic information and allows us to reflect on the world; what is more, hyperprint texts specifically prompt us to think about the shifting media ecology and our interactions with it. Hyper reading strategies born of this information-dense environment, strategies such as filming, fragmenting, and lastly, juxtaposition, are further tools in building meaning from a deluge of texts.

As discussed previously, Hayles defines juxtaposing "as when several open windows allow one to read across several texts" (*How We Think* 61). This permits the reader's attention to ebb and flow on any single text but still provides engagement by presenting different, yet still relevant, fragments within the whole. *Bats of the Republic* encourages juxtaposition through the unique design and each character's distinctive text appearance; as mentioned above, if a reader wanted to use fragmenting to read across the novel and examine all of the pieces from a single character scattered throughout the volume, it would be easy to do so. It would be equally possible to use juxtaposition to compare texts from *different* characters and time periods within the book to reveal further connections and insights.

There are also more specific moments within the book that call for juxtaposition in particularly interesting ways, sometimes even on the same spread or page. One of the most visually striking sections of the book is the group of eighteen black pages with white text (314-31). This section is identifiable, even when the book is closed, as a black line running through the text block. However, it is not read as a single unit. Rather, it alternates between Zeke's tunnel experiences in *The City-State* and Zadock's cave explorations in his letters; Zeke appears on the verso of each spread and Zadock speaks on the recto, and both are underground in the dark—which is obviously reflected in the design's inversion of colors. While readers could flip ahead and read only the versos or only the rectos to trace either character's story, having these two 'open windows' before them on each spread encourages juxtaposition between the two stories. On the first spread, both Zeke and Zadock have to hide and escape detection, Zeke from the Lawmen of the city-state, Zadock from an unknown group of wagons (314-15). On the second spread, the city-state verso ends with Zeke's reflection that he had always been waiting for something to come along and give his life meaning, but ultimately he concludes that, "It was up

to each person to make sense of the world and decide what mattered" (316). On the very next line, Zadock begins the recto with "This cave is the thing that matters now," highlighting the fact that while Zeke has been nearly immobile with indecision, Zadock knows what is important to him—Elswyth—and he is determined to return to her in a better position for marriage. Zeke is literally and metaphorically blundering around in the dark, but Zadock is eager to chart the unknown as his way home. The next spread has both characters reflecting on fate and their relationship to it; their thoughts so similar that one almost seems to be an echo of the other, Zadock beginning the recto with, "I heard a voice speak from beyond the cave, beyond the state of Texas, indeed, beyond time," creating the sense the he and Zeke are now travelling parallel paths, narratively, but also spatially (319). These connections continue throughout the spread, and juxtaposing Zeke's and Zadock's experiences highlights the similarities and differences in their intertwining tales.

There is also an interesting section where the reader is required to juxtapose different elements on individual pages, rather than across multiple pages or within the same section, as above. In this scene, Zeke is sitting between his friend Raisin and Eliza; they are in very dim light, whispering, and trying to be inconspicuous. As Zeke speaks, both Raisin and Eliza respond to him, but neither of them can hear the other, so Zeke carries on two simultaneous conversations. This is represented graphically with Zeke's text spanning the page and Raisin's and Eliza's responses each running in opposing columns below. There is also one line of green text at the top of each of these four pages: "Bats are able to send out bisonar signals through the mouth," "The echoed response is triangulated between two specialized ears," "Even in complete darkness they are able to identify other animals," "Bats use the extra-sensory ability of echolocation to find their way" (408-11). Finally, green arrows of different line weights and

solidity surround the different sections of texts, emphasizing the bat-like echoing and dual-listening that Zeke is engaged in. This episode occurs while Zeke is torn between two paths of action, and he is trying to "find their way" out of danger. The layout on the page helps to underscore his confusion, and as a reader, jumping around to these different elements on the page creates a visual reverberation of sorts that also echoes the notion of bat sonar. Here again, the design elements reinforce and enhance the reading experience and foster different hyper reading paths through the book.

Embrace Print and Material Inconvenience

Much like *Tree of Codes*, *Bats of the Republic* is navigated primarily as a traditional codex, with a few notable exceptions. The hardbound book is of typical dimensions for a mainstream fiction novel, and the pages are bound in a sequential order; there are not even any holes punched through the book that the reader has to navigate. There is one fold-out page that has maps on both sides, as previously discussed, but even this is not as physically inconvenient as most other hyperprint texts (360-63). The one element that may give readers pause when reading has less to do with the physical accessibility than with the sense of transgression that may come from reading it too early.

Most of the narrative centers around sealed letters (or perhaps just the same sealed letter at two different points in time): the letter that Zadock is sent to deliver and the letter the Zeke inherited from his grandfather. In 1843, Elswyth's father, Mr. Gray, disapproves of his employee Zadock courting his daughter, so he sends Zadock on an errand he insists that only he can perform—he must travel from Chicago to Texas and deliver a sealed letter to a General Irion. It is later revealed that the envelope that Zadock is to deliver contains the final four pages of *The City-State*. Zeke's letter was found in the pocket of one of his grandfather's shirts, which is

problematic because, since the seal is intact, it has clearly never been opened or had a carbon copy made of it for the governmental archive—this is illegal in 2143. Zadock never seems to be tempted to open the envelop; he knows that Mr. Gray likely set him this task to get him away from Elswyth, but he is determined to prove himself. Zeke, on the other hand, agonizes over the decision of whether he should turn the letter in to the government, as the law requires, or open it and see why it was so important to his grandfather that he, one of the main proponents of the archive, kept it secret. This decision of whether to open the sealed letter or leave it intact is also experienced by the reader.

One of the key features of *Bats of the Republic* is a sealed envelope in the back of the book, and deciding if and when to open it, can be a stressful part of the reading experience. When I first held *Bats of the Republic*, I quickly flipped through it, as I assume many other readers would, and immediately discovered the envelope. It sits just slightly back from the rest of the text block, but because of its thickness it is instantly apparent when handling the book. This envelope, like its two iterations in the narrative, has "Do Not Open," scrawled across it. Of course I wanted to open it. I also wanted to experience it within the intended narrative context, however, so I resisted. While reading, though, it was always in the back of my mind, and I kept looking for textual cues that would direct me to open it. I think its position in the back of the book increased this uncertainty, as it is a common publishing convention to put supplementary materials, which may be useful at some earlier point in the text, in the back of the book for binding ease; if the letter had appeared anywhere else in the text block I would have been more likely to assume that it should only read once that point is reached in the novel.

Dodson also seems to deliberately build this uncertainty throughout the narrative, as the characters themselves often feel the same temptation and uncertainty with regard to the letter.

Zeke's first encounter with the letter illustrates a very human reaction when we are faced with something prohibited: "As he picked [the shirt] up, a letter fell from the front pocket. It was old, still sealed. 'DO NOT OPEN' was handwritten on the front. He wanted to open it" (45). As soon as Zeke is told not to do something, he immediately wants to do it. I had the same reaction as a reader, even going so far as to wonder if Dodson put "DO NOT OPEN" on the front, specifically to entice the reader into unsealing it, the more timid readers missing out. Zeke's grandmother, however, makes a good point when he questions her about it: "It says 'DO NOT OPEN,'" Zeke points out, and she replies, "Then maybe you better hadn't open it. There might be some reason someone wrote that on there" (128). While Zeke's grandmother has dementia, she also seems to know more than she lets on, so this again made me question what to do with the letter inside of the book. Just a few pages later, across a recto and a verso interrupted by a black full spread, "OPEN IT NOW" is scrawled in black on a white background. If the reader takes the edges of these two pages and slightly overlaps them, the phrase is completed on the outside of a cylinder, the center of which is black (131-134). The label on the edge of the pages reads, "The Barrier," so it seems that this constructed circle is meant to show an inverse of the barrier surrounding the city-sate; it also made me wondered, however, if the two black pages were visual cues that the obvious void provides a space to read the letter. Also the fact that the all caps and font style seem to mirror the writing on the envelope creates a sense that these pages are responding directly to that warning. This barrier section also precedes its appearance in the actual narrative, which does not occur until the page after it, again making it seem like a directive to the reader. If the reader is patient enough to make it to this next page without unsealing the letter, the decision gets even more complicated: "Someone had dipped a mop in a bucket of ink and written giant letters: 'OPEN IT NOW.' Zeke's first thought was the letter. But the message was not for him. It was

about the barrier" (135). These four sentences had me rather conflicted as a reader. At the first mention of the letter, I felt that having the character's thoughts mirror my own, in conjunction with the giant graffiti, were an obvious instruction to open the letter. This was reinforced by the third sentence; if the message was not for Zeke, then perhaps it is for the reader—metadiegetic graffiti. But finally, "It was about the barrier," completely undercuts the connection to the letter and clarifies that, in this case, graffiti is just graffiti (135). Such moments throughout the text remind the reader of the sealed envelope at the back of the book and create a continuous confusion about if and when to open it, thus mirroring the same vacillations the characters have about the same decision.

Based on his interviews, Dodson seems to have intended this internal conflict for readers. In his Medea lecture, Dodson notes that "Zadock is very tempted to open this letter, to find out what kind of mission he's on. And you, as the reader, at the same time, I hope, are tempted to open this letter as well, but you're not supposed to" ("Making of"). Clearly, the reader is meant to feel tempted, but should also perhaps try to resist the urge to read what the character cannot. On the other hand, there is also an appeal in leaving the envelope completely intact, either as an exercise of moral principles or for sheer aesthetic reasons. At one point in the lecture, Dodson again refers to the sealed envelope "[w]hich you're not supposed to open till the end, or maybe ever," hinting at the larger issues of privacy and surveillance that pervade the book itself. Much like reading the correspondence between the characters in *S.*, even though this is a fictional book intended to be read, there still exists a feeling of trespassing, which some readers may choose to heed and allow the ending to remain a mystery. Alternatively, some readers resist opening the envelope because they do not want to damage the book-object. An audience member of Dodson's lecture admitted that he did not open the envelope because it was "a pristine kind of

thing to leave it intact." He did, however, go on to Dodson's website to read the electronic version of letter, of which more will be said latter.

Ultimately, *Bats of the Republic* is a fairly conventional in terms of its physical dimensions and structure, and it is not responding to the convenience of e-readers through a cumbersome format in the same way that other hyperprint texts do. That said, the constant questioning of whether the reader is 'allowed' or 'supposed' to look at the letter creates a different kind of weight on the reading experience. One of the key components of the codex is its openness; if readers have a book in their hands, typically they can access all of it. Digital, texts, however, can have more complicated restrictions about what users are able to view, and while I would not make the argument that *Bats of the Republic* is directly responding to that dynamic, it does serve as another example of how hyperprint texts can help gain a better understanding of the differing media affordances at play.

Require Conspicuous Manipulation

When the reader eventually decides to open the envelope, the contents have to be constructed by the reader in order to literally close the loop of the paradoxical novel. It was hinted in the narrative that the envelope contains the final four pages of *The City-State*, the prophetic novel written before the 1843 time period and set in 2143, but the material format and content of these pages is rather surprising. The envelope holds a single sheet of paper, roughly 5.5 inches wide and 33.5 inches long, that is folded lengthwise into four equal sections. One side does indeed provide the conclusion to *The City-State* and details Zeke's actions during the breach of the boundary and the fall of the city-state in 2143. The other side of the sheet, however, is Zadock's last letter, from 1843, which begins, "Dearest Elswyth, All has gone wrong since I last wrote you. I have no paper left, so I write to you on the reverse of your father's letter. I have

opened the envelope. His message matters no longer." Initially this seems to mean that the 1843 time period is the real temporal setting of the book, and that *The City-State* is simply the fictional imaginings of what a world three-hundred years in the future would like, which would explain the ubiquitous steam-power, lack of electricity, and strict courting structures. However, Zadock's and Zeke's respective letters make it impossible to resolve the timelines so easily. The very next lines in Zadock's missive read, "Trying to deliver this letter, I saw someone who looks just like me. I espied him standing on the wall of the lost city, which was smoldering behind him. I held up this letter and he beckoned me forward." On the other side, Zeke's story ends with

> Zeke looked below, out into the wide expanse of open desert. A tattered sketch of a figure materialized through churning clouds of dust. The man limped toward the barrier. A flash of light brought his features forward. His face was a reflection of Zeke's, the moustache familiar. His eyes held a weary hope that could belong only to one person. It was Zadock. Shaking, in his outstretched hand, a letter.

If Zeke is a 2143 character from *The City-State*, then crossing paths with Zadock is paradoxical both temporally and narratively. This blurring of boundaries is also reflected in the design. Throughout the book, *The City-State* is always indicated by the green tone and the bat-like typographical pacing icons, and Zadock's writing is characterized by the brown undertones. As the reader progresses down the long sheet of paper, however, the colors shift—the green of 2143 turns to the brown of 1843, and vice versa. The narrative and design work together to signal a convergence.

This collapsing and merging of timelines is even more evident in the manipulation asked of the reader in handling the envelope's contents. On the inside flap of the envelope, which is actually sealed with a gummy glue dot for a temporary bond (so once a reader is bold enough to

open it, she realizes it can be unsealed and resealed without damage), are visual instructions for how to assemble the long sheet of paper. Essentially, readers are asked to hold each end of the paper in either hand, twist one end 180 degrees, and then attach the two ends of the sheet together. At the top of Zeke's side, there is half of a bird and half of a bat, both with outstretched wings as seen from above, and between them are the upside down instructions "Unfold the letter, twist end once, and fasten bat to bat and bird to bird." Zadock's side has a matching design, but here the text reads, "Once fastened, bat and bird, read the letter in an endless loop." Asking the reader to assemble the text is this way creates a physical representation of the convoluted plot, and calls into question what the actual relationship is of the sujet to the fabula, of which more will be said in a moment. Literalizing the structure in this way and having the reader physically construct it again toys with the boundary of absorptive and antiabsorptive elements to simultaneously engage the reader in the illusion of the *text* and draw their awareness to *the book form itself.*

Link Material and Textual Interactions

Assembling the letter in this fashion also highlights the larger themes hinted at and explored in the rest of the novel. Forming the letter into the "endless loop" creates a physical representation of the ouroboros, a symbol that was alluded to throughout the text and here is revealed to also serve as the primary structure for the timeline of the narrative. The reader is progressively led to believe that the 1843 timeline predates the 2143 period; then that the 2143 events are merely fictions told in *The City-State*, written before 1843; then that a character in 2143, Henry, is compiling and sharing the records from 1843, after the author of *The City-State* has died; and finally that the two time periods are actually concurrent and comingled, represented by Zeke and Zadock seeing each other. The story wraps in and around on itself in a

way that is impossible to make sense of logically. Originally the fabula, the order of events set out chronologically, seemed clearly distinct from the sujet, the order in which the events are related to the reader. By the end of the novel, however, the reader has to question if the events in 1843 and 2143 were unfolding simultaneously, meaning that the sujet and fabula were more closely aligned.

There are hints of this throughout the novel, particularly in the repetition of images, and in some cases even illustrations. Most notably, there is an illustration in a passage from *The Sisters Gray* that combines Zeke and Zadock with the folktale character Wild Zed Blackfoot (100). In the art nouveau style image, a mustachioed man stands in the center and is dressed in old-fashioned western clothes. He holds a mythical hoop snake in one hand, both another example of the ouroboros and foreshadowing of a reference to when Zed "defeated the rolling hoopsnake [sic]" (145). More to the point, however, he wears a patterned armband, a sabre slung on his back, and a vial around his neck. There is an envelope peeking out of his pocket; it might have "Do Not Open" written on the front. Both Zadock and Zeke had a sabre and the letter, but the vial seems to be the one filled with Elswyth's blood that Zadock wore around his neck, and the armband is in the same style as those worn by Zeke and other inhabitants of the city-state to denote rank. Lastly his bare feet are black, covered in some kind of substance. In Zed Blackfoot's origin story, his feet had become covered in guano, and when he was attacked by the "Black-eyed Shuck," he stuck his feet in the fire to ignite them and then defeated the beast with flaming kicks, permanently charring his feet in the process (149). In Zeke's story, he tried to escape by going over the boundary, but when Raisin fell, Zeke went to help him, and his feet got blasted by a steammoat mine, melting his boots to his feet. Here, the illustration of Zed Blackfoot combines the folktale character with both Zadock and Zeke, merging them into a

single entity when they were previously separated by three hundred years and the possibility that Zeke is a fictional character within Zadock's world. If a reader does not catch all of these details on the first read, literally constructing the ending into a single endless loop out of the envelope's contents highlights the collapsing of time and narrative, so much so that these details and references become much clearer in retrospect after the physical manipulation.

What is more, the entirety of *Bats of the Republic* is engaged with ontological metalepsis, with its numerous texts and character-authors crossing boundaries and investigating each other's lives. After the ouroboros letter, the very last page of the novel, excluding paratextual elements, is also the final page of *The Sisters Gray*, which further calls into question the ultimate result of this metalepsis. As discussed above, this final page appears to be torn from the rest of its book, and provides an idyllic conclusion to Zadock and Elswyth's story, only to undercut it by suggesting that the happy ending was nothing more than Elswyth's wishful imaginings. Just before this, however, it says that "[Elswyth and Zadock's adopted son] asked her to read *The City-State* to him every day. He never tired of the chase or the hiss of the steam weapons. Once the last four pages had been restored, Aunt Anne saw that the book found a publisher and illustrator both. More importantly, the prophecy was fulfilled" (445). Given that Zeke and Zadock crossed ontological boundaries and met on the same narrative level, it is equally plausible that Henry existed within the same diegetic universe; this is important because he was very clear that *The City-State*, the book referenced in this quote, was never published. This could inform the ending, giving credence to the implication that it is all just wishful thinking and nothing after the letter came to pass as presented, but it could equally suggest that the book readers hold in their hands, with illustrations and the restored letter, is the very same book that

Aunt Anne had published. The narrative text seems to support the former interpretation, but the material book seems to support the latter.

This brings the overall theme of material evidence—records, reports, transcripts, archives—from the level of a narrative concern into the reader's real world. *Bats of the Republic* is a book based solely on textual evidence. All we have of the characters are the documents that they have left behind, and unlike novels that provide a grounding narrative that readers can trust, we are left to make connections and assumptions based only on their paper trails. After "The Collapse," Zeke and Eliza's world became obsessed with preserving such traces, but what started out as a way to preserve culture and history quickly morphed into a corrupt system to surveil, censor, and control citizens. Ultimately, this calls into question what roles our personal and public texts have in shaping truthful legacies—a particularly timely issue given the current political climate in America. In his Medea lecture Dodson makes this an explicit parallel between the city-state and the real world: "Everybody's being watched by people who are listening in these watchtowers, they're recording all the conversation so you get transcripts… some of these conversations are blacked out…[I]t's a very kind of controlling type of government that we're familiar with from sci-fi or America at this point in time" ("Making of"). Given the suspension of certain civil liberties under the Patriot Act, Edward Snowden's whistleblowing over the National Security Agency's surveillance of citizens, and findings from the Pew Research Center that having access control over personal information is important to 93% of Americans but only 9% of the population feel that they have such control, invoking a dystopian world to comment on our current information insecurities does not seem that hyperbolic (Geiger). Additionally, as the Friedrich A. Kittler quote at the beginning of this

chapter reminds us, only our media will survive to speak for us. If it is deemed 'fake' from the very beginning, how will history be faithfully constructed?

Resist E-Reader Digitization

Medial mise en abyme and this physical exploration of metalepsis are both undermined in the e-edition of *Bats of the Republic*, as are other key elements of the overall design. Dodson, as a literary bibliographer, clearly created the text and design so that they could work together to enhance the storytelling. The e-edition of this work, however, seems to tip the scale too far in the other direction and gives the carefully considered design short shrift. The visual cues that distinguish each text from the others, crucial in aiding readers' placement of the various documents within the two story worlds and attributing them to the correct characters, are muted in the e-book. When Zadock's letters are present in print, the verso typically displays the letter on brown paper with looping cursive handwriting, and then the recto provides a typed transcription for ease of reading. The e-book, however, does not adhere to this verso/recto relationship; often the replication will appear on a recto, with the transcription starting on the following recto and continuing for three pages. Also, the replicated letter, rather than bleeding off the page, is shrunken in order to fit within the page dimensions on the screen. This makes the script too small to easily read, but the transcription font is much larger. Of course, one of the benefits of e-readers is that users can adjust the size of fonts and utilize the zoom function, but as presented, the transcription is far easier to read, and primacy is therefore given to the document that has been further mediated (at least within the structure of the narrative). The full-spread maps and images are also reduced to fit on single pages, and when reading two pages side-by-side look like minor embellishments rather than central components to the narrative. What is more, the physical interaction of constructing the envelope contents is impossible, so the contrast

between the final page of the *The Sisters Gray* and the potential of physically holding the published book discussed at the ending is lost. Just to clarify, however, these observations are based solely on the Kindle and e-pub formats; it is possible that other interfaces are more faithful to the original design.

Additionally, the medial metalepsis is obscured by another layer of remediation, significantly lessening the likelihood of sparking metamedial readings. The "embodied spatiality" of *Bats of the Republic* has already been discussed above, as have the impact of the alterations made between the spatial relationships of the page and the screen; however, a digital remediation would also push the materiality of the interface one step further away from the central concerns of the text itself. To return to Pross's three different levels of media and their respective proximity to the communicatee, *Bats of the Republic* as a printed volume is a secondary media in that it does not originate in the body, and it requires production tools, to print the book, but no additional technological assistance for reception. Due to the unspecified, cataclysmic event in the narrative, the characters themselves deal solely with primary communication, such as surveilled conversations and subversive hand signals, and secondary media, like transcripts of conversations and archives of records. Tertiary media, communications that require technological tools on both the production and reception sides no longer exist; as such, the characters and readers alike are left to question the media affordances before them—What has been lost to history? What happened between the records? What has been edited out and why? Is a text trustworthy simply because it is stable? If a reader experiences *Bats of the Republic* via an e-reader remediation, it may be more difficult to reflect on these metamedial issues of fixity and permeance, even in a text that explores them as narrative themes, when the interface being used espouses flexibility and mutability. It may create a medial dissonance

between the text and its digital container in a way that severs the carefully constructed inter-reliance of text *and* book central to the print edition. As a result, the material mirroring of a text within a text, the medial metalepsis, is sacrificed.

Ultimately, Dodson himself has admitted that the e-edition was a sort of compromise with the publisher, stating that "It wasn't meant to be an e-book, and it wasn't meant to be interactive. I'm not against those kinds of books…. But with this, I was interested in the possibilities of the print book that haven't been taken advantage of or fully explored" ("Making of"). Those central concerns of the *printed* book are lost in a digital version.

Explore Themes of Communication and Medium

The final key element of hyperprint texts is that they specifically revolve around the importance and intricacies of communication and medium. While numerous elements that bring these themes to the foreground of the *Bats of the Republic* reading experience have already been discussed, it may be useful to briefly revisit some of them and touch on a few additions just to illustrate how central reading, writing, and media affordances are in *Bats of the Republic*. The following are included, at least in part, within the book and all function as part of the traditional mise en abyme: two novels written by characters, Louisa's *The Sisters Gray* and her mother's *The City State*; handwritten letters from three characters, including Zadock, Eliza, and Henry; hand drawn sketches from two characters, Zadock and Eliza; cover image and rough drafts of illustrations for a field guide to Texas wildlife; genealogical study and family history compiled through records and various publications; telegram from Elswyth to Zadock, since she could not trust the post; hasty notes written under apparent duress from two characters, Eliza and Henry; and of course the letter with "Do Not Open" on the envelope. This is a book built of different communication media.

However, the book is also concerned with primary media, to return to Pross's hierarchy. All of the media above are classified as secondary media, in that they require a technological intervention in order to create them, with the exception of the 1843 telegraph, which requires decoding at both ends of the communication channel and is therefore considered a tertiary medium. That said, Dodson also includes multiple examples of more ephemeral primary media beyond speech, facial expressions, and typical gestures. Examining how this more embodied communication medium is treated in the novel can again throw light on the differences between primary and secondary media levels and further highlight how this hyperprint text is interrogating the printed codex.

First, there is a fascination with blood and bloodlines throughout the novel; at times they seem to have mystical properties, but I am most interested in how they point to a kind of innate, embodied communication through generations. As mentioned at the beginning of my discussion of *Bats of the Republic*, part of Dodson's inspiration for the novel was DNA and wondering if we could recognize the same kind of thinking as we experience ourselves. This seems to have played out in the story through the use of blood as a marker of identity and the carrier of information. A more explicit discussion of embodied generational communication occurs in a letter from Henry to Eliza. Between a paragraph discussing whether or not any people have been able to survive outside of the city-state boundary walls and more of Zadock's history is the following passage:

> At first frost, the wanderer butterfly (*Danaus plexippus*, of the family Nymphalidae) used to make the great journey from northern climes southward to Mexico. However, no individual made the entire journey. The migration spanned three to four generations of butterflies. The great-grandchildren of the overwinter generation returned to the exact same conifer their ancestors departed from a year prior.

They had no guide back. Their history was within them. (47)

Placed where it is, Henry seems to be making a comment on the resilience of nature, and therefore of people, but also on the difference in how our history is carried through the generations—not in anything as central to our beings as our blood or bones, but in documents, which can be lost, falsified, or simply forgotten. Nor is he the only character who expresses a wish for humans to have clearer internal guidance and knowledge. When exploring the bat cave, and facing probable death, Zadock reflects on the bats and how they always manage to emerge en masse at just the right moment: "Perhaps they are accustomed to the rhythms of the day as birds are to the rhythms of the season, some ancient knowledge carried in their bodies, one that allows them to know when it is time to go. Were I only guided by such a force" (327). Part of the appeal of this kind of embodied knowledge seems to be how infallible it feels, impossible to corrupt or obscure. When compared to many of the other communication channels in the novel, however, its ability to avoid detection from outsiders also feels relevant.

Secondly, the characters develop alternative forms of communication in an attempt to recapture some sense of privacy, since, as previously discussed, the 2143 city-state system tightly controls communication and records everything, including private face-to-face conversations. The most pertinent example of this is a system of hand signals, which were originally developed as a way to court within highly structured social conventions but then spread to serve as a general way to communicate in secret. The courting rituals of 2143 are not dissimilar to those of 1843, which is not surprising if the future world is actually a fiction created by Elswyth's mother, and would-be couples are not allowed to be too familiar without first making an official commitment. As such, young people had to develop their own secret language: "Singles stood outside on the plankways in front of saloons flashing hand signals

across the square. The signals had started as a way to evade the constant surveillance of the watchposts but had evolved into a sly form of courting. The ladies used elaborate fans to hide their flirtatious gestures" (136). This way their conversations cannot be listened in on or recorded, and even though the hand signals would be highly visible to others, they developed the use of these inconspicuous accessories to further shield themselves. While utilitarian in nature and another way to communicate through primary media, since all secondary media was illegal for civilians, the use of these hand signals develops stylistic components as well: "Hand signals were a way to avoid the listening ears of the government, but Zeke sometimes preferred the way Eliza spoke with her hands. They had a precise grace that was hypnotizing" (28). The reader is even included in the process of decoding these hand signals. Throughout the novel when a hand signal is used, an icon of the hand shape is displayed in the margin along with its meaning. When Henry and Zeke are both captured and jailed, Henry uses a string of seven such signals to tell Zeke about an escape plan, but no translation is given (434). Readers have to use filming and juxtaposition to compile and interpret the meaning from the rest of the book's marginal translations, again providing a physical interaction to highlight the larger themes in the book. Here then is a embodied primary medium created to reclaim some privacy, but not surprisingly within a surveillance state, the "subversive hand signals" quickly become "punishable by imprisonment" (297).

Lastly, Zeke, in particular, seems to feel confined by this system and tries to develop another way to express himself privately, not always even for communication purposes, sometimes simply for a reflective outlet. At first Zeke and Eliza began writing to each other as a form of intimate transgression: "When they first moved from Port-Land they left each other notes. Eliza snuck a pencil out of her job at the Vault. The small theft excited her nerves. They

used to write on scraps of paper until Eliza got paranoid and took it back to the Vault. It was illegal to keep writing instruments" (200). Once notes to each other became part of their relationship, however, it was hard to give up, even without any writing instruments. As a result, he simply used his finger as a stylus, and

> Zeke began to write the notes anywhere he could: on fogged mirrors, in the dust that coated their walls, in the steam from their power lines…. It was easier than speaking, sometimes. No one else could listen in . He enjoyed tracing out the shapes of the letters with his fingers….He watched his message disappear as the condensation evaporated. He wondered if it would reappear when Eliza took a shower. (200)

This passage highlights the ephemerality of such notes and the uncertainty of their communicative longevity; even so, just *the writing* seems to be an important action.

As such, Zeke begins to write temporary notes just for himself, as a sort of private catharsis, and these fleeting thoughts are often set off with a green font. While reading, I first thought that these green sentences were a way to indicate an internal monologue because many of them are indicated as such in the text. At other times, however, they were the result of Zeke writing in dust, dirt, or condensation, so I was a bit puzzled as to what united all of them to be formatted in the same way. Roughly mid-way through the novel, Dodson includes a flagged city-state report titled, "Text Found in Dust," which has a series of numbers down the left-hand side with a blank line beside each one, and Zeke's name-stamp at the bottom of the document. In what appears to be Eliza's handwriting, "I could not feel. I was bright blank inside" is written beside 22 on the first line (191). On my first reading, I thought this simply indicated another level of surveillance that the citizens were subjected to, particularly because the infinity symbol

ends the series of numbers which seemed to negate my first instinct that these were page numbers (see table 1).

Table 1

Compiled "Text Found in Dust" Poem

Text	Page	Character	Context
"I could not feel. I was bright blank inside."	24	Zeke	
"The truth of nothingness, that is despair."	44	Zeke	Preceded by "Zeke thought,"
"My uses for meaning have somehow died,"	65	Zeke	Followed by "he wrote with his finger, over the seam" between his wall and his neighbors'
"And I exist, with the world, without care."	185	Zeke	Followed by "Zeke thought to himself."
"Those who came before are lost to us now."	207	Zeke	Preceded by "He wrote in the dirt at his feet."
"No shadow of thought would be left behind."	200	Zeke	
"We lose all we have done and built and how."	269	Zeke	
"What is a moment in the face of time?"	280	Zadock	Preceded in his letter by "Thinking to endure what is before me, I must continue to ask myself:"
"Fight or Flight or dream: How can I be free?"	298	Zeke	Preceded by "He began to write in the dust on the panel."
"Hope diminishes in proportion to choice."	386	Zeke	Preceded by "He used his finger to write in the dust."
"Once I was as still as I was meant to be."	397	Zeke	Preceded by "He found his finger tracing out words."
"Safe holding hands. Heard, inside a voice."	404	Zeke	
"Fate is time's meaning, measured by the mind."	434	Zeke	Preceded by "There was enough condensation [on the jailcell wall] to write:"
"What has always been is hardest to find."	∞ (letter)	Zeke	

Once I reached the end of the novel and opened the envelope, however, I saw that the page number at the top of the letter had been replaced by the same symbol. Thus, upon further examination, the numbers do correspond to all of the pages that contain a green section of text for thoughts or notes. In all but one instance, these notes are from Zeke, Zadock providing the one exception. In retrospect this "Text Found in Dust" report seems to invite readers to compile each note onto this single page, in this particular order (read down the first column of table 1). If this is done, a poem emerges that takes the impermanence of human endeavors as its central topic. Considering this theme, "Text Found in Dust" seems to apply equally to thoughts, notes in dirt, personal correspondence, and history in general. This may seem like a bleak stance for a novel built of other texts, but the final line, "What has always been is hardest to find," emphasizes the collapsed temporality of the book and the human impulse to always seek out truths or what is truly important to us, regardless of the tools or media that are available at any given moment. Much like the hand signals from Henry, this requires readers to engage with the text on another level, and this unexpected interaction further heightens reader attention through antiabsorptive means and fosters a greater awareness of the book's metamediality.

Taken as a whole, *Bats of the Republic* is an exploration of the delicate balance between preserving and surveilling in the accretion of history, but it does not provide any tidy moral or advice. We need documents to know our past, for as Henry notes, "We must know where we have been. If we cannot see our own patterns then we are nothing but a mindless flock of birds flapping blindly in the night and pecking in the dust" (49). However, Henry's role as a city-state historian also illustrates how deciding what records are important to the human narrative and which are not is a particularly fraught process:

> I was lucky to be given the job of Historian. I have kept the records Tended them, pruning extraneous information, debugging biases, and training the long straight branches so that plain truth emerged, simple and strong. It is a gentle art, and one requiring patience. Once I knew how to do it well.
>
> I thought there were principles. Rules to govern which facts endure and which should dissolve into dust. But now I see my criteria were arbitrary. I chose objects or moments, and they became real. I draw worlds from crumbling stacks of paper, and they are given meaning through my careful attention. The designs of the Historian become history's lessons. (34)

As previously discussed, Henry is closely aligned with the reader's perspective, in that both are concerned with making meaning across time from a collection of disparate yet interconnected texts. Knowing which details are important to consider and which are irrelevant only becomes possible in hindsight. Thus while *Tree of Codes* reflects on the loss of texts as a synecdoche for death, *Bats of the Republic* explores the preservation of texts as a symbol for the construction of history.

Ultimately, *Bats of the Republic* functions as a hyperprint text because its design and fostered reading interactions bring our own media ecology to the forefront for reflection. Despite its criticized weaknesses as a novel, it reminds readers of the importance of writing and literature within a complex society; as Schneider notes,

> The passion and brilliance of this novel is not in its characters or its plot; it is in the form itself. Lovingly and perhaps obsessively compiled, *Bats of the Republic* revels in being a physical book. It displays the desperate importance of writing. Dodson's characters write to escape restrictive societies that are themselves threaded into the perpetually revised

storylines by which they know themselves. Through writing, we learn and share who we are.

This last point is particularly apt, in that as we continue to migrate more and more of our communications into the digital realm, *sharing* is an ever-present option, but without texts that encourage reflection and metacognition, *learning* who we are—as people, as society, as a moment in history—may become increasingly difficult.

CHAPTER FIVE

AFTERWORD

Five thousand years ago, an ancient Sumerian pressed a stylus into a soft tablet of wet clay to write out a receipt for sheep and grain; I wonder if he could have predicted that centuries later, an Egyptian would be cutting and drying delicate papyrus reeds to form long scrolls. *How could those ever last?* Or if an Egyptian librarian carefully labeling a papyrus scroll with a "sillybos" and storing it in a clay pot could have foreseen that two thousand years later Romans would utilize reusable wax tablets to record and then rub away their writing. *If it is not worth keeping, is it worth putting down in the first place—or even thinking?* At the turn of the Common Era what would readers of the first recognizable codices have made of ornate and elaborate illuminated Medieval manuscripts? *How can anyone read the words with so many distractions on the page?* I have to imagine that the monks who had labored so painstakingly over those volumes would have some opinions about books printed with moveable metal type. *Where is the divinity—or even humanity—in this?!*

Media revolutions are not a new phenomenon, nor is the wailing and gnashing of teeth that typically accompany them. Our current shift from a print dominated media ecology to a digital one is certainly no different, but we also have the benefit of hindsight and can examine our current moment within the context of this much longer history. The material book will not die in the Digital Age; its affordances make it an effective and enduring form. That said, it may be reimagined in new and interesting ways—particularly with the aid of technology, which presents new possibilities for creating and sharing work. As such, when discussing print and digital texts and their future roles in our lives, I think it is less a matter of either/or and more a question of how they will both affect each other and, ultimately, us.

These issues were at the heart of the NEH Summer Institute "The Book: Material Histories and Digital Futures," briefly mentioned at the beginning of chapter 3, led by Lisa Bickmore, Charlotte Howe, and Melissa Helquist at the Salt Lake Community College. This four-week institute included lectures by prominent scholars (including Nicole Howard, Johanna Drucker, Jonathan Senchyne, Mara Mills, and Anna Arnar,) discussions of critical readings, and the creation of numerous book forms and digital texts (including Coptic-stitched, pamphlet-stitched, case bound, and perfect bound books, zines, accordion books with Arduino programmed LEDs, audiobooks, accessible Scalar pages, and Twines). This dual pairing of the print and digital with scholarship and 'making' created a truly engaging and impactful institute. As a participant, for our final projects we each crafted a book—either print, digital, or hybrid—to reflect on some of the themes and questions we had discussed; these books then formed "The Book: Material Histories & Digital Futures" exhibit which was displayed at the Salt Lake Public Library.

For my own project, I was interested in attempting a praxis for many of the ideas that I have explored in my dissertation, pairing concepts with book history and reflecting on them in an actual metamedial form. Specifically, I wanted to explore some of the through lines from older print technologies to our current uses of digital media and doing so by utilizing some hyperprint strategies. Although I would not classify this project strictly as a hyperprint text, because it was a single iteration of an artist's book with informational text culled from other scholars, rather than a mainstream fiction text, I was still able to use many of the hyperprint elements I have discussed in the previous chapters (see fig. 18).

Fig. 18. *Handheld Devices* artist's book. Julia Galm, "Handheld Devices," *The Book: Material Histories & Digital Futures*, 12 July 2018 –13 Sept. 2018, Salt Lake City Public Library, Salt Lake City.

It was titled *Handheld Devices* to emphasize its material nature while also drawing a connection to how both printed books and smartphones or tablets are tools used for specific purposes; the title was also intended to play on "literary devices" by including numerous printing devices or constructions. It had a French door structure, opening from the middle to fold outwards on both sides; the left-hand spine was Coptic-stitched, while the right-hand spine was spiral bound to further reflect the pairing of the old with the new. Overall the tone was playful, and each spread addressed a particular topic within publishing, exploring previous iterations on the left and modern, digital uses on the right. The introduction to *Handheld Devices* began:

> Undoubtedly our worlds have been shaped by shifts in information technologies, but too often we frame these changes as revolutions that wholly replace their predecessors. This rhetoric was particularly prevalent at the dawning of the "Digital Age," which was

> heralded simultaneously as the birth of the universal library and the death of the printed book. *Handheld Devices* seeks to problematize this schism by highlighting the parallels between printed books and more modern technologies, such as smart phones, in terms of how people use them—how we hold them, steal them, fight through them. (Galm)

Topics such as text durability, security, binding options, browsing, piracy, and labor practices were explored through visuals paired with scholarly text and enhanced through material interactions. As noted in the introduction, the spreads were "meant simply as provocations for thought," rather than as a "detailed or nuanced discussion of the innumerable complexities and important contexts in which" the analog and digital technologies occurred.

As an example, perhaps my favorite visual puns of the book is with the "Scrolling" spread, in which I used Nicole Howard's description of papyrus scrolls and how the folding of the long scrolls into individual sheets was likely the beginning of the codex (see fig. 19).

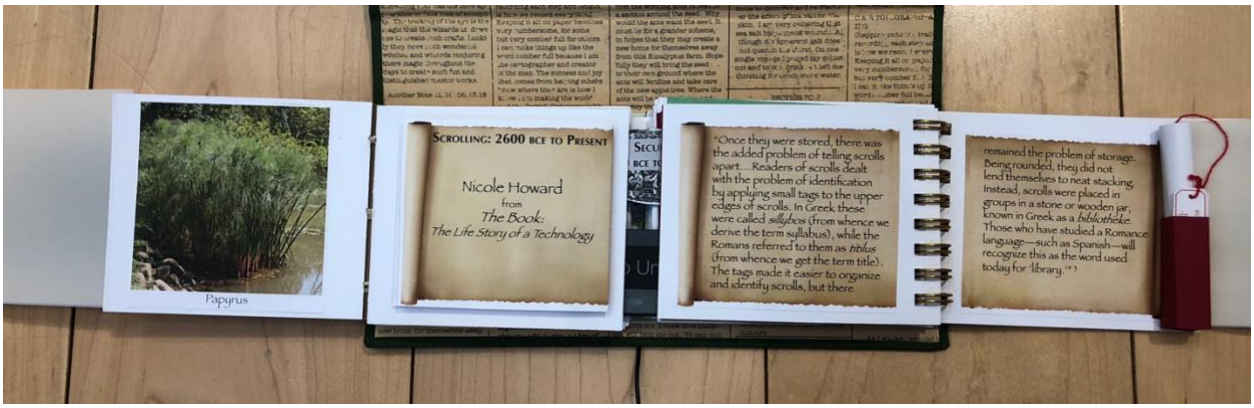


Fig. 19. "Scrolling: 2600 BCE to Present" open spread from *Handheld Devices*. Julia Galm, "Handheld Devices," *The Book: Material Histories & Digital Futures*, 12 July 2018 –13 Sept. 2018, Salt Lake City Public Library, Salt Lake City.

The recto of the left-hand side of the French door layout includes an accordion-folded section that reflects Howard's recounting of scrolls that were folded into pages (see fig. 20).

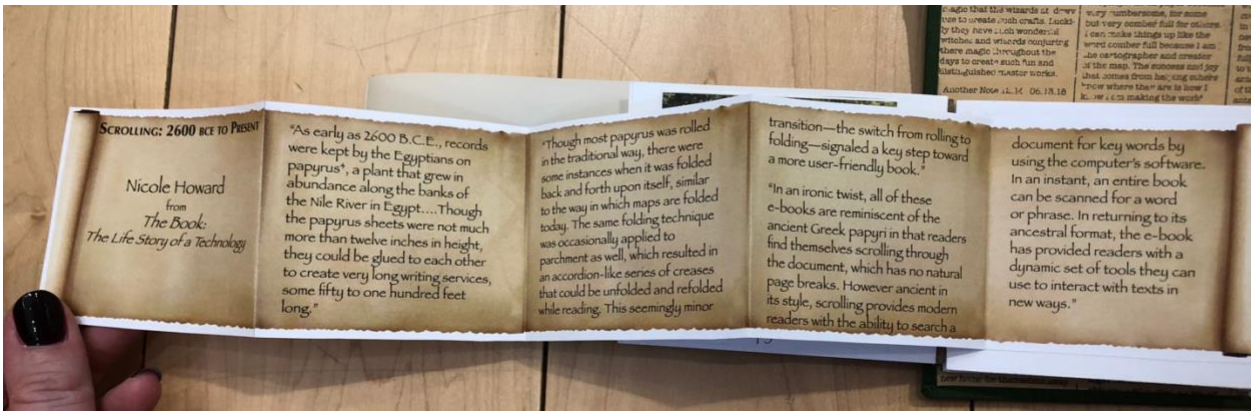


Fig. 20. Accordion-folded portion of "Scrolling: 2600 BCE to Present." Julia Galm, "Handheld Devices," *The Book: Material Histories & Digital Futures*, 12 July 2018 –13 Sept. 2018, Salt Lake City Public Library, Salt Lake City.

Also, all of the text in this spread is in the much maligned Papyrus typeface to continue the metamedial pun. On the right-hand side, I then note how we have returned to the long scroll through webpages, and I included a rolled up scroll, complete with "sillybos" tag of the Wikipedia page for "Scrolls" (see fig. 21).

Fig. 21. Scroll of Wikipedia "Scroll" from "Scrolling: 2600 BCE to Present." Julia Galm, "Handheld Devices," *The Book: Material Histories & Digital Futures*, 12 July 2018 –13 Sept. 2018, Salt Lake City Public Library, Salt Lake City.

I mention this project here because I feel that having the "hyperprint" term at my disposal made me think about how the form and content could work together to better reflect the complexities of the media ecologies that I was interested in exploring. In addition to making such texts more locatable and providing a set of elements to help analyze them, my greatest ambition for the term is that it will spark more of such endeavors and provide authors, scholars, and students a way to think *through* the printed book form. Rather than the digital quashing print, the pings and chimes of electronic notifications functioning as death knells, I feel that we have the opportunity to reimagine the possibilities of print for our current contexts. And I am not alone; in *Literature in the Digital Age*, Adam Hammond argues:

> Powerful as the urge may be to submit to digital-age literary ennui, there is ample historical evidence to suggest we are entering a golden age of literature. The grounds of our anxiety are just as plausibly grounds for enthusiasm. The contemporaneous reactions to writing and print show us that we are seldom able to see the merits of a new textual medium by the standards of the old, blind to the new possibilities it entails. The example of modernism shows us that existential threats can serve as productive spurs to literary innovation, sharpening our sense of what is special to literature, why it ought to survive, and how it can be adapted to thrive. (37)

For my part, I am particularly interested in how digital texts allow us to see the materiality of print texts with fresh eyes and make us consider what we value about our tactile interactions and what is merely nostalgia or resistance to change. I am also intrigued by augmented reality software, such as HP's Reveal app, that can be triggered by location tags or QR codes, which would allow for interactions between and enhancements of both print and digital texts within the same project. With more resources and tools available than ever before, the future of the book—

in all its forms—will present possibilities and opportunities we have yet to imagine. Hyperprint is one such example of this innovation and adaptation, and I am excited to contribute this critical lens to the field to hopefully help make such texts more visible.

In the previous chapters I have identified, defined, and explored "hyperprint" as a growing project or stance within mainstream fiction that responds to our current shifting media ecology through printed texts that simultaneously embrace and reject digital reading sensibilities. I argue that modern readers' expectations of and interactions with texts are shaped, in part, by their reading habits online, and hyperprint texts play with these differences between print and digital texts by encouraging the use of digital reading strategies within a printed text. What is more, however, these printed texts shift the idea of the traditional codex, which is largely meant to recede in favor of the content that it delivers up to readers, so that the book-object itself becomes an integral component of that content. Hyperprint texts generally exhibit six different elements: foster hyper reading; printed, often inconvenient, material medium; required, significant material manipulation (beyond the flipping of pages); physical interactions that highlight the aesthetic or symbolic concerns; resistance of digitization onto e-readers; central thematic concerns of communication and medium. Most of the hyperprint exemplars explored in these pages utilize all of these elements, but it is also important to note that texts can exhibit hyperprint qualities without necessarily fitting a more narrow definition. Consequently, "hyperprint" may be most effective as a critical lens to aid analysis of a wide range of texts, rather than as a tool to categorize and exclude works along strict boundaries.
Additionally, I feel that I should take a moment to clarify its relationship to technology as well as note some of its limitations.

First, I am not arguing for print texts *over* electronic texts; I actually feel that hyperprint and certain digital literature pieces engage in the same creative interrogations of media affordances. For instance, had I been able to expand the scope of my project here, I would have liked to have included digital literature counter pieces in each of my thematic chapters to help illustrate how both forms of texts can be used to explore our shifting media ecology. For example, J. R. Carpenter's "Entre Ville" is rather similar to Chris Ware's *Building Stories* in its exploration of a specific neighborhood through fragmented poems and interactive media collages. However, rather than serving as a metamedial exploration of how print informs our memories and conceptions of place, "Entre Ville" instead takes as its project capturing the artist's experience of a neighborhood through technology—for the former the medium is a central concern of the text, but for the latter it is simply the form that the expression takes. Jeremy Hight, Jeff Knowlton, and Naomi Spellman's "34 North 118 West" would function almost as a hybrid link between the two approaches in that as "an experimental art work utilizing digital media, computation and GPS to deliver an interactive narrative experience across a one half square mile area" the work explores two different eras in the development of technologies, revisiting the rise of the railroad through the use of modern mobile devices. Similarly, *Between Page and Screen* by Amaranth Borsuk and Brad Bouse would make an interesting addition to chapter three, as it combines the use of a webcam, Flash, and printed booklet to create an augmented reality experience that details the poetic correspondence between the star-crossed lovers P and S. This text is of particular interest to me because it foregrounds both print and digital media for the reader as the text is displayed somewhere in the middle, which raises the questions of whether this might be considered a hyperprint text or not, particularly since it is directly commenting on the relationship between the two mediums. While extremely interesting

in how it problematizes "hyperprint," however, ultimately a reader would need a computer to fully experience the text, which, I would argue, places it outside the general project of hyperprint texts. Perhaps, then, it could be viewed as a hybrid hyperprint-digital literature piece as electronic literature can explore medial relationships primarily through digital interfaces and hyperprint texts does the same through printed texts. This provides another possibility for further study.

It is also important to note that hyperprint texts would not be possible within mainstream fiction were it not for technological developments within publishing. As discussed in chapter four, Starre argues that the figure of the literary bibliographer and the collapsing of the authorial and designer roles is made increasingly possible by desktop publishing programs and their ever improving usability and sophistication. He also discusses how other digital tools impact and enhance print scholarship through his notion of "the literary dialectic of digitization":

> While consumers increasingly access media content through screens, they also have the tools on hand to become lay publishers at home. In academia, the digital humanities currently develop methods of algorithmic analysis that parse literary texts in the form of large digital corpora. At the same time, the archival branch of digital humanities has exploded the range of scanned historical material available in library repositories or online, thereby accentuating the materiality and the visual design of manuscripts, incunabula, and early modern print books. In the literary variant of this dialectic, authors and designers employ state-of-the-art digital tools to produce some of the most elaborately crafted and narratively complex book fictions in American literary history. Thanks to InDesign, Pantone matching, and extensive digital font libraries, Mark Z.

> Danielewski [and similar authors] can now submit finished print files with detailed instructions on how to manufacture the book to his publisher. (256-57)

While author-designers of course existed before the more recent ubiquity of computers and the availability of desktop publishing, these tools do seem to offer increased opportunities for such creative expressions within mainstream publishing. What is more, more people may become inspired by these tools to create texts—print, digital, hybrid—by using these tools and feeling confident in their ability to create what they envision. Thus while print, at least in some contexts, is being replaced by the digital, such technologies can also be used to benefit print by expanding avenues of expression within the medium. Another key example of this are the digital accessibility tools being developed for readers with print disabilities.

Hyperprint texts assume a certain reader, which unfortunately does not typically include those with print disabilities. I was made more aware of these issues during the NEH summer institute discussed earlier, particularly through discussions with Dr. Melissa Helquist and Dr. Mara Mills. This is another area in which digital texts and media may have the upper hand in that they can provide users with greater tools for adapting texts for their own needs. Talking books and audiobooks, for example, can be read at much higher speeds than nondisabled listeners would be able to comprehend. Text-to-speech software has made great strides, and again by using desktop publishing programs to markup documents and webpages with headings, image alt text, and careful captioning, we can help print disabled readers better navigate such texts. There are, of course, also some technologies that can help translate print documents into readable formats for print disabled readers, most notably the now defunct Optophone of the 1970s, but the general transferability of digital texts from one interface to another seems to lend themselves more easily to such adaptations.

I would also like to address the gender imbalance of the authors examined here. Chapters three and four exclusively examine the work of men, Nick Bantock, J.J. Abrams, Doug Dorst, Jonathan Safran Foer, and Zachary Thomas Dodson, and chapter three includes five female authors within *Where You Are*, namely Chloe Aridjis, Sheila Heti (working with Ted Mineo), Valeria Luiselli, Leanne Shapton, and Lila Azam, but gives equal space to Chris Ware. While I do rely on a number of female scholars and critics, chief among them N. Katherine Hayles, Johanna Drucker, Lori Emerson, Marjorie Perloff, and Celina Wieniewska, as well as utilize two texts from the publisher Visual Editions, co-founded by Anna Gerber and Britt Iverson, I do recognize the severe gender imbalance in my primary texts. Unfortunately, this seems to stem less from a blind spot within my research and more with the simple, yet regrettable, fact that more male authors are being published with these types of texts within mainstream fiction.

In *Metamedia: American Book Fictions and Literary Print Culture After Digitization*, Alexander Starre identified this pattern of male predominance within the same general field and also pointed to N. Katherine Hayles's own focus on male-authored technotexts. Starre suggests that "strangely resilient" "alignments of the high/low divide with gender categories" and the "writerly ethos of strong authorship" and design are reflected in this male-dominated group of texts (170). He also posits that while "women writers have not generated a critical mass of accounts that expose authorial involvement with book design and embodied fiction," male authors have a "long lineage" of such artists, which leads him to conclude: "For today's writers, this heritage may facilitate the construction of a confident self-image of male artistry, craft, and control" (170). Starre does note that female authors such as Geraldine Brooks, Jennifer Egan, and Nicole Krauss have utilized some metamedial elements in their writing, but they do not explore the same area that hyperprint is concerned with and therefore could not be included here.

I would also include Anne Carson and her beautifully designed poetry book *Nox* to this group of authors, but again, as poetry, her work was outside the scope of my project. I agree with Starre, however, when he notes that "there is little reason to believe that metamedial writing is intrinsically gender biased," and I would say the same of hyperprint texts. I am unsure why this gender imbalance seems to exist, but I would further add to Starre's speculations with questions exploring access to and interest in the concerned technologies, publisher bias, or simple visibility of certain authors. Additionally, it may be overly ambitious to suggest, but perhaps if "hyperprint" grew as a useful term and critical lens for texts, the added visibility of this type of project would inspire more women to create hyperprint texts that explicitly explore its concerns through female perspectives.

There is also a notable lack of texts beyond America and Britain in my project. Again, Starre and Hayles seem to have had the same limitations within their similar critical areas, but neither critic offers any explanation or speculation about this. For my part, this limited focus was partially a deliberate choice both because I am only fluent in English, and therefore would not be able to analyze untranslated texts in other languages, and because while the media ecologies in America and Britain are rather analogous and each foster the growth of hyperprint texts, the media landscapes in other countries may or may not. However, it was also partially incidental, in that during my initial searches for potential hyperprint texts, I was only able to locate British and American texts. I have to wonder if it is partially because there is no established, unifying term by which to categorize or search for such texts; this is perhaps another benefit of using hyperprint as an identifying term. Despite these limitations in my own project, I think it would be fascinating to see what other scholars might do with the hyperprint lens in examining global literatures.

Indeed I think it would be extremely interesting to see how the print and digital shift is reflected in the print literature of other traditions. For example, Guillermo Gómez-Peña, Enrique Chagoya, and Felicia Rice's *Codex Espangliensis* reinterprets the pre-Hispanic codex and opens from the left into a single accordion folded sheet of over twenty-one feet in length. In the introduction to the text, Jennifer González describes *Codex Espangliensis* as "a series of beautiful and jarring montages" which collapse time and history in order to "tell of the colonial conquests, cultural transformation, linguistic admixtures and economic interdependence that have formed the Americas" (par. 1). Many of the book's spreads are dominated by a mixture of Aztec art, American comic book or commercial characters, and text in English and Spanish. While this artist's book certainly has numerous hyperprint elements, particularly in its exploration of previous print media, it too is outside the scope of my project, and even if it were not, while from Chicano artists it was published by the San Francisco based City Lights Books, so it still falls within the American publishing system. It does, however, provide an intriguing glimpse of what could be done by putting previous cultural print mediums in conversation with the digital interfaces that are increasingly common.

Again, this is my ambition for hyperprint. Rather than setting up stark divisions between digital and print texts, we should be reflecting on their different affordances and considering how we can use them in coordination to the greatest effect. As Andrew Piper argues,

> It is time to stop worrying and start thinking. It is time to put an end to the digital utopias and print eulogies, bookish venerations and network gothic, and tired binaries like deep versus shallow, distributed versus linear, or slow versus fast. Now is the time to understand the rich history of what we have thought books have done for us and what we think digital texts might do differently. We need to remember the diversity that surrounds

> reading and the manifold, and sometimes strange, tools upon which it has historically been based. The question is not one of 'versus,' of two single antagonists squaring off in the ring; rather, the question is far more ecological in nature. How will these two very different species and their many varieties coexist within the greater ecosystem known as reading? (xi)

Hyperprint functions as one such variety within our current media ecology, and it investigates, interrogates, and celebrates the dynamic between print and digital texts, specifically in a printed format. This is not to suggest that print is *better* than digital or vice versa, but rather to clarify both how the two are simultaneously intertwined for modern readers and differentiated through their particular affordances. Hyperprint fosters a timely awareness of medium and experience, which is crucial if we want to actively shape our media ecology rather than allow it to shape us.

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Appendix A

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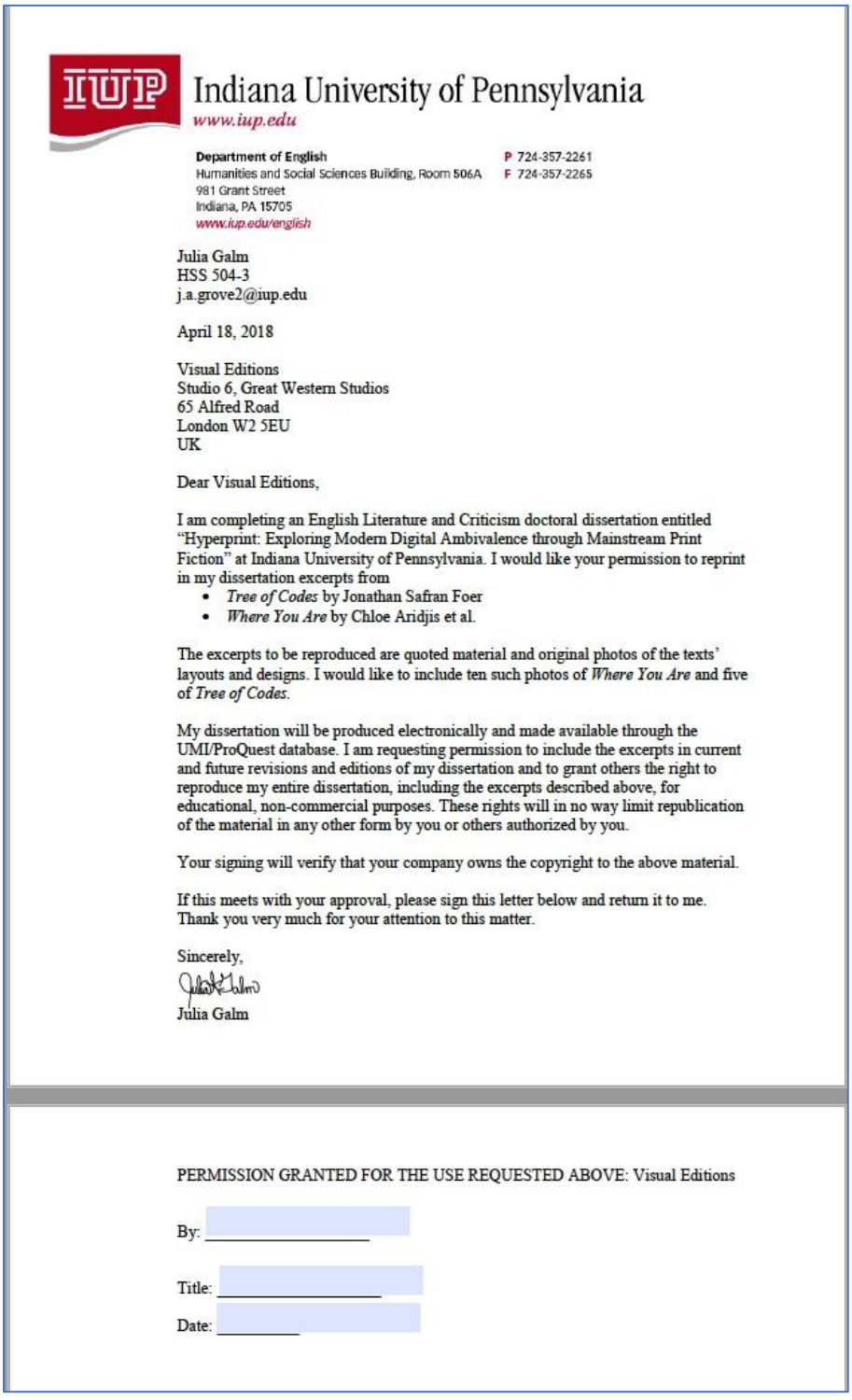

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