

# Examining Paratextual Theory and its Applications in Digital Culture

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## Chapter 16

# Post–Book Paratext: Designing for Haptic Harmony

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### ABSTRACT

*The earliest artifacts of expression, represented by cave art and carved statuettes, had a paratext of their own that surrounded and supported their significance. However, there is a fundamental difference between the way these artifacts operated in society and the way writing and print operate. Writing and print are associated with a “print culture” centered on fixity, social isolation, and authority. This opposes a preceding emphasis on orality, fluidity, and social communication. However, the hegemony of print culture has been challenged by the binary revolution. The widespread success of e-readers, apps, the Web, and electronic reading in general indicates a nascent post-book era. The essential difference between a paper book and its electronic analog is the stripping of the former’s paratextual elements. This chapter suggests that we should be deliberate about designing the paratext of our digital post-book experiences. We have the opportunity to reintroduce elements of pre-print orality, continuing what scholars have noted as the development of a “secondary orality” instigated by radio and television. An entire profession already exists whose mission is to design and implement platform-specific elements that attend to the delivery of content: interaction designers. These professionals can help us design the future of reading.*

### INTRODUCTION

*Watch out for the paratext!* (Genette, 1997, p. 410)

*What is more meaningful: the book or the text it contains?* (Carrión, 1975)

A book as it is understood today (or was in the 20th century) is a very specific artifact. Most specifi-

cally, it is a printed codex—a paper technology hinged, strung, and stitched into being. This sort of book delivers static and authored content. In this conception, it is this physicality that makes something a book. Books are manufactured, not authored. As book theorist Roger Chartier (1994) indicates, quoting historian Roger E. Stoddard, “Whatever they may do, authors do not write books. Books are not written at all. They are

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## Post-Book Paratext

manufactured by scribes and artisans, by mechanics and other engineers, and by printing presses and other machines” (p. 9).

As I will demonstrate below, the physical book is not a mere container for the author’s content. Rather, a book’s cover, paper, typography and other elements play a significant role in the meaning and reception of the text. This will be demonstrated by analyzing the shifts in meaning that occurred as the present book form evolved from pre-book written artifacts. I will also analyze existing paper books and the effects of their thingness on their reception. I will trace this assertion through the nascent binary revolution and the disruptions presently experienced in this moment when books are trading this physicality for something altogether new.

A historical approach will provide exciting findings and insights from the history of reading that may be applied to new ways of reading. However, this historical approach is not merely a feature-mining mission. It takes into account the words of Chartier (1995), who succinctly summarizes the wider role of historical analysis in this moment of book evolution:

*The historian’s analysis is neither prophetic nor nostalgic: It has a dual task of pleading for the preservation and protection of the evidence of a written culture that for five centuries has been identified with the circulation of printed matter, and of making the revolution of the present moment more intelligible—a revolution as radical as the one that, seventeen or eighteen centuries ago, imposed a new form on the book.* (p. 5)

As the founder of Exprima Media, a software strategy and design company, I have first-hand experience with the importance (and challenges) of crafting effective paratext for digital products and services. Exprima’s work with a number of publishers and other content providers has provided practical evidence of both the existence and importance of digital paratext. This perspective

will help guide my observations and recommendations for the way ahead vis-à-vis the design and implementation of the digital reading experience.

“A way ahead” is a common discussion in the digital reading business. Reading digital book content displayed on electronic devices has been possible for decades; however, not until the past four years or so has there been a plethora of competing devices, software products, and business models attending to book content. Goliath corporations like Apple, Amazon, and Adobe, robust code standards like ePub (IDPF, 2013), HTML 5, iOS, and Android, and a variety of software startups like Readmill<sup>1</sup> (Berggren, et al., 2011) and Beneath the Ink (Hawkins, 2013) populate a crowded ecosystem of hopeful monsters, all vying for survival and reproduction. None have proven fit enough to dominate.

This stalemate may be attributable to the skeuomorphic approach to paratext that is the common denominator of all these hardware, software, and business solutions. By cleaving to backwards-facing object and book metaphors, the current slew of solutions avoids an opportunity. Digital deployment can provide so much more than an electronic version of the accustomed book and book market. Instead, we have an opportunity to solidly innovate storytelling and information delivery. With digital technology, we can craft experiences that incorporate a variety of sensual elements, creating a situation more akin to pre-literate story and information practices than to the book as we know it. An iPad, for example, can deliver visual and audible content, haptic feedback in the form of vibration, and response to device geolocation and 360-degree positioning.

This opportunity has been imagined and discussed since well before computers became a viable means of content delivery. Works of theorists like Walter Ong (2012) and Marshall McLuhan (1962) indicated an electrically powered return to the pre-literate multisensual transfer of information, albeit in innovative containers and experiences. Both saw this as a logical and

welcome progression. Such an innovation would represent a watershed moment, aligning time-honored methods with contemporary technology to forge a new form of information delivery and reception. However, none of the currently existing solutions fully attend to this opportunity. And this may prove to be the difference that makes a difference.

Such innovation would require more than just codified book mimicry and a few supplemental videos. Rather, the designers of the new reading need to work at the edges of content. They need to craft a new container, a new way across the threshold between us and the story. They need to be the artisans and producers of paratext.

## **PARATEXT**

Every expressive artifact is an interweaving of 1) the creator's intended message manifested in 2) a physical means of expression that is experienced in 3) sociocultural context. All three strands of the braid impart significance to the expression and experience of the whole. This is true of all human artifacts of expression; cave paintings of Lascaux, Beatles songs, Harry Potter, and my Twitter feed all benefit from this triple thread of meaning.

G rard Genette's work provides a thorough analysis and theory of these threads as they pertain to paper books—what he calls "literary works," an appellation that is perhaps too narrow in our post-book era (1997). While Genette is solely discussing paper-based artifacts, what he finds and outlines is equally true of the paper book's digital progeny.

Genette (1997) speaks of paratext as those elements which reinforce and accompany a text, which "surround and extend it, precisely in order to present it" (p. 1). A work's paratextual elements are its medium, the substrate on which the content manifests. This approach recognizes that the role of paratext is not merely as mute container. Instead, the physical and social context of a work

constitutes an active "threshold" (p. 2), a zone of transaction that stands between the reader and the content. This zone influences the reader's access to, experience of, and interpretations of the content.

This basic concept has often been expressed by anthropologists, philosophers, and other media theorists. McLuhan's famous slogan, "The medium is the message" (McLuhan, McLuhan, & Zigrone, 1995, p. 151), has greatly popularized the idea when applied to all media. Chartier (1994) regularly writes on the fact that "[t]here is no comprehension of any written piece that does not at least in part depend upon the forms in which it reaches its reader" (p. 5). He also gives appropriate weight to the sociocultural context of a work. He points to the "community of interpretation" that imparts meaning to texts by defining genres, conventions, and forms (p. 1).

G rard Genette's focus on literary works and his rather detailed theory of paratext, however, provide us with a useful vocabulary with which to discuss this phenomenology of books. In so doing, we can extrapolate from his well-honed thesis to the wider context of what Chartier (1995) calls "the changes that are revolutionizing our relations with written culture" (p. 5).

Following the "threads" metaphor, paratext often consists of those threads which are not the authored content—the physical and sociocultural contexts of the message. Genette applies the term peritext for the former and epitext for the latter. Examples of peritext include book covers, publishers' blurbs, footnotes, and prologues. A book's epitext may include interviews with the author, the genre, or the publisher's promotional material.

## **ARTIFACTS OF EXPRESSION**

Inasmuch as analyzing prior media revolutions provides clarity, it may be helpful to contextualize Chartier's "revolution of the present moment" (1995) within the matrix of similar revolutions typical of our species since its inception. These

include Paleolithic stone tools, Magdalenian cave art, and early chirographic writing.

It all began with stones. Not just any stones, but rather stones intentionally modified. They were modified in a very simple fashion—simply banged on a hard surface to remove crude flakes, sharpening the otherwise rounded object. These simple tools, called Oldowan tools by archaeologists (Hovers & Braun, 2008), were not just modified stones. They were portable. The makers of these earliest artifacts carried them for days, weeks, and miles. This indicates a heretofore unknown concept of the future and preparedness. And it represents the beginning of our genus' bargain with technology.

This hand-held mobile technology had an enormous effect on those responsible for its invention and distribution. And on us. While Oldowan tools may date as far back as 3.5 million years, there is consensus among anthropologists that this toolkit was widely used by the ancient and now extinct hominid species *Homo habilis*. Oldowan tools in hand, this bipedal primate, with upright gait, long arms, and a brain capacity roughly half that of ours, expanded. These simple portable tools set up a dynamic that is still unfolding. *Homo habilis*' reliance on culture and artifacts allowed the creature to live beyond its biology. Buffeted by their technology, habilines expanded into ecological niches previously unavailable to them. Creatures in the genus *Homo* live in their ideas and technology, and their ideas and technology mediate between them and the natural world (Rasmussen, 1993).

This is a golden thread that runs through the whole story. *Homo erectus* and fire (Wrangham, 2009), early *Homo sapiens* with their complex tools, and us with our Wi-Fi are all replicating the human/technology dynamic established millions of years ago. Our conception, crafting, and communication of technology is interwoven with our species' whole strategy for living in the world. Transformations in and innovations of technologies, then, should be observed for their significance.

The advent of symbolic artifacts provides a good case in point. The archaeological record indicates that technologies remained relatively utilitarian from the Oldowan tools of the Lower Paleolithic until approximately 30,000 years ago, when anatomically modern *Homo sapiens* inhabit much of the ice-age world. The descendants of the Oldowan makers are using a variety of tools, living in a variety of regions, environments, and cultures. And suddenly there is art; cave paintings, bone carvings, and clay sculptures all appear here in the Upper Paleolithic.

Dubbed “non-utilitarian artifacts,” these developments mark a watershed moment in our cultural evolution. The precise meaning and function of cave art, or “parietal art” as archaeologists call it, is debated (Leroi-Gourhan, 2012). However, one thing is certain—this is a new order of technology. Non-utilitarian artifacts indicate what anthropologists call “symbolic behavior”—behavior that indicates rich symbolic cognitive functions. The existence of non-utilitarian artifacts does seem to predate *Homo sapiens*. Evidence exists that Neanderthals and *Homo erectus*, two hominid species that predate our own, collected, carried, and sometimes modified “extraordinary items” like rare stones, fossils, and anthropomorphic objects (Moncel, et al., 2012).

However, it is with *Homo sapiens* that we see the initial (and unceasing, escalating) florescence of these artifacts of expression. Stone tools, spears, structures—these artifacts emulate and extend our physiology. Hammers strengthen hands, spears lengthen arms. What of so-called Venus figurines and cave paintings? These extend the mind into the technological sphere. And so begins our current “expression era” and the long history of content, container, and paratext.

As previously stated, Genette's conception of paratext is observable outside of the spectrum of literary works for which he fashioned the term. Indeed, parietal works possessed a paratextual dimension. The mere fact that these works were encountered in remote, dark, and potentially

dangerous caves provides significance. Bulges in cave walls were selected to add character to certain drawings. Glimmering lights from fat lamps provided a specific and potentially psychedelic epitext (Lewis-Williams & Dowson, 1988).

In *The Gutenberg Galaxy* (1962), Marshall McLuhan reports S. Giedion's discussion of the direct experience of cave art:

*Nothing is more destructive of the true values of primeval art than the glare of electric light in this realm of eternal night. Flares or small stone lamps burning animal fat, of which examples have been found, permit one to obtain only fragmentary glimpses of the colors and lines of the objects depicted. In such a soft, flickering light these take on an almost magical movement.* (p. 75)

S. J. Waller (1993) describes how the physical context of cave art may affect both a visual and audible experience:

*It has been previously observed that the shape of the cave exerted some general influence on the placement of species (on the walls). Indeed, shape is one major determinant of cave acoustics. However, the highly sound-reflecting axial gallery decorated with ungulates and the acoustically dead chamber of felines in the same cave of Lascaux are both narrow dead-end tunnels, suggesting that the cave shape was influential only to the extent that it does affect the acoustics.* (p. 501)

It seems that parietal peritext provides a multimedia experience. One could imagine the experience of parietal art to be a fully sensual experience, an immersive and interactive event incorporating the smell of fire, the echo of ritual, the dancing light.

This may have been the first paratext. At least it was an Upper Paleolithic proto-paratext that surrounded and supported an initial narrative form of expression. This paratext was novel, platform-specific, intentional, and essential. The physicality of caves and the behaviors required

to view the work provided the "airlock that helps the reader pass...from one world to the other" (Genette, 1997, p. 408). The situating of parietal art indicates that crafting these "airlocks" is as old as crafting expression. As such, paratext deserves the respect and attention that Genette theorizes it does. This is especially true when crafting new means of expression.

## WRITING, PRINT, AND ORALITY

Another later technology was emphatically less multisensual than cave art, but no less significant a human development. The independent advent and expansion of alphabetic, chirographic writing proved very disruptive. Much has been written about the psychosocial effects of the transition from orality to writing. Some of these effects will prove significant when we discuss digital paratext.

For the vast majority of our species' tenure, some 150,000 years, oral communication was the primary form of information transfer and storytelling. This "orality" required and reinforced specific psychological and sociological elements. Relying exclusively (or predominantly) on oral means of transmitting information and storytelling created a unique set of psychosocial expectations and predispositions.

Communication systems dominated by what McLuhan (1962) calls "that aboriginal mass medium, the vernacular tongue" (p. 302) are more fluid, less fixed than writing-based communication systems. Oral communication provides less emphasis on exact replication of information. Instead, the exact form of the signal varies with each telling of a tale or tutorial. Essentials may change little or slowly, but tellers may vary the tale in a number of ways. This fluidity contrasts with the fixity of information associated with our written texts. The fixed and durable nature of the printed word benefits from what Eisenstein calls "typographic fixity" (Eisenstein, 1979, p. 116). This inevitable artifact of peritext fixes information and stories in a way not possible before print.

In this arrangement, exact authorship of information or of a story is not emphasized and celebrated as it is in our print-based culture. “In oral tradition the idea of an original is illogical,” observes Albert Bates Lord while studying Slavic oral traditions (1960, p. 101). The fixity of print, however, allows for information and stories to have a certain authority. Catalyzed by the evolution of copyright in the 18th century and fossilized by the Romantic ideals of the 19th century, this authority is central to the contemporary conception of not just the book, but information and stories in general. Genette (1997) situates the author’s name (or lack thereof) as an important piece of peritext. He observes that “[t]he author’s name fulfills a contractual function” with the reader (p. 41). Similarly, an author’s activities and reputation comprise a layer of authorial epitext.

Face to face oral communication is very situated—the source and audience coexist in time and space. As Walter Ong (2012) observes, “the word in its natural oral habitat is part of a real existential present” (p. 100). Speakers can see to whom they are speaking; listeners are present with the precise source of the signal. Oral communication benefits from what Wallace Chafe (1994) defines as “situatedness” (p. 44). Written language, as he describes, “is usually desituated, the environment and circumstances of its production...having minimal influence” (pp. 44–45). Essentially, it’s the peritext that carries the text to the reader over time and space that takes on significance. As Ong (2012) points out, “[w]riting is a solipsistic operation” (p. 100) that is written and consumed in solitude. The author and reader may be isolated, but the paratextual cell wall binds them.

Many scholars have noted the sensual distinction between oral and written communication (Ong, 2012; McLuhan et al., 1995; Goody, 1987; Eisenstein, 2011; Tannen, 2012). Orality is associated with aurality, of course, in contrast to the vision-centric status of reading. And sound operates differently than sight. It is a more involuntary and immersive sense. Furthermore, receiving an oral communication is often mul-

tisensual. All one’s senses come to play as one listens—the situatedness of speech includes the whole situation, including interpersonal dynamics, social interaction, and sensual surroundings. Contemporary paper book reading is a more mono-sensual, isolated, and internal pursuit. McLuhan (McLuhan et al., 1995) associates this sort of behavior (akin to watching TV) with hypnosis. The dominance of visual and silent reading in solitude, what he calls “the instressed concern with a single sense” (p. 13), lulls and isolates the reader. He contrasts this with the “interplay of all the senses in haptic harmony” (p. 13), which he associates with the more holistic and primal experience of everyday life, an experience that includes ubiquitous oral communication.

One is reminded here of Pablo Neruda’s “Ode to the Book” (Neruda, 2000), the opening lines of which read like a position paper in favor of haptic harmony over reading:

*When I close a book  
I open life.*

Toward the end of the poem, Neruda unabashedly celebrates the sensual un-print world of orality, aurality, and experience:

*Book, let me go.  
I won’t go clothed  
in volumes,  
I don’t come out  
of collected works,  
my poems  
have not eaten poems--  
they devour  
exciting happenings,  
feed on rough weather,  
and dig their food  
out of earth and men.  
(p. 72)*

The full effects of the transition from oral to print did not come into play until some time after

the invention of moveable type in the West. Prior to this, the hand-made scrolls and codices of the Scribal Era existed in a world still orally oriented. Hearing still dominated in these centuries, and oration was still prized above the written word. In fact, texts were generally read aloud until after the incunabula period (Ong, 2012). The documents from this era are markedly “producer oriented” (Ong, 2012), with a bevy of abbreviations, illustrations, and a lack of conventions to ease reading, such as standardized wayfinding and punctuation. In essence, the written artifacts of the Scribal Era were a powerful “version 1.0” technology that provided the architecture for an even more significant information storage and distribution platform—print.

The evolution of the book, print culture, and book economy unfolded over several hundred years from the earliest gestation of print technology in the West to a recognizably modern codex (Lienhard, 2006). The incunabula period, spanning from Gutenberg’s Bible to more modern codices, generated the development of sustainable platform-specific interaction design protocols for a new information interface. Early books were explicitly skeuomorphic—they looked remarkably like their manuscript ancestors. Some even included hand-painted illuminations along with the print. Early incunabula appear quite frustrating to our modern sense of what a book should do for us. These texts still emphasized a read-out-loud orientation. The text was wild; title pages sported layouts and line breaks emphasizing visual aesthetics over practicality (Ong, 2012).

By the late Renaissance, however, a recognizable book emerges. What’s recognizable about it, of course, is its form, its surrounding and supporting elements, its paratext. Indeed, the incunabula period can be seen as the framework for the evolution and successful establishment of Genette’s “literary work” paratext. As indicated in the essays of *Renaissance Paratexts* (Smith &

Wilson, 2011), experimentation and innovation continued through much of the 16th century. This was the evolution of today’s peritext. And without this, our present book universe would not be what it is.

Digital storage and delivery of data places us in a new, electric incunabula period. This time, however, we are not “simply” transitioning from orality to print or from manuscripts to print books. Instead, our latest hand-held, mobile technology affords us an opportunity to craft a wholly new “third way” of informing and storytelling. And, as we have seen with cave art and print, such innovations have significant cognitive and sociological dimensions. Stone-based Oldowan technology offered hominids new geographic potential; silicon-based server, smartphone and tablet technologies are doing the same for the story.

This time, we are engaged in this endeavor fully aware of our place in the history of expression and media. What’s more, we are doing so in a time when entire design professions exist whose very mission is to craft effective paratexts. These elements—our awareness of history and our design professionals—can guide us through the electric incunabula period and into what I will call the “post-book era.”

## **E-READING TODAY**

Since 2007, publishers and readers have been embracing digital reading on e-book readers, tablets, smartphones, and home computers. In the first quarter of 2013, the Association of American Publishers reported figures indicating that e-book sales accounted for upwards of 25% of book sales across the Adult Fiction/Non-Fiction, Children’s/Young Adult, and Religious categories (Hofelder, 2013). Certainly, in just a few short years, e-book readers have gone from being toys for the

high-tech crowd to a staple of the morning commute on public transit.

Of course, there were digital formats for text long before Jeff Bezos and the Kindle effectively started the e-book revolution. Indeed, MOBI, the format that Amazon purchased in 2005 and used on the early generations of Kindle readers, dates from 2000, and other e-book formats are older still. For most people in the pre-Kindle era, though, reading electronic versions of print documents was done in one format: Portable Document Format (PDF).

The PDF was developed by Adobe as a way for people to exchange electronic documents and retain the typesetting, design, and other information from the original version. According to Adobe founder John Warnock, PDF was intended to address “our ability to communicate visual material between different computer applications and systems [because] there is no universal way to communicate and view this printed information electronically” (Warnock, 1991).

PDF files port as much of a document’s peritext as possible into the digital experience. Despite navigational enhancements such as notes, searchability, hyperlinks, and the possibility of embedding a table of contents, PDFs remain flat print replicas with attending chrome; their layout is essentially a fixed image of a source document. In essence, a PDF is a replica of a print book rather than an example of a new medium (Leurs, 2013).

The two main formats that people mean when they talk about e-books today are mobi/KF8 and ePub. Both are essentially collections of HTML documents and related assets (images, fonts, and so on) and XML documents that organize the HTML files (Garrish & Gylling, 2013, p. 1). In this way, e-books are essentially a manifestation of book content as web page. One of the main strengths that they bring to reading is the reflowable nature of text on the web—suddenly, text is not locked rigidly in place as it is on the printed page or in a PDF. Instead, margins and font sizes, even typeface choices, can be adjusted in the course of

reading, and the text can flow across the page to accommodate spacing requirements.

Not all books are well-suited to a reflowable format, however. Porting the highly designed visual experience associated with such genres as children’s books and graphic novels requires fine control over layout. In order to support these sorts of source documents, both KF8 and ePub now offer fixed layout e-books. These are slight code modifications that still render HTML files, but do not reflow. The introduction of these subformats raises an interesting question: Is a fixed layout file really any different than a PDF? Is it still an e-book, or is it once again just a picture of a book? There are arguments to be made about why a PDF is not an e-book while a fixed layout file is, but the most telling one involves the epitext that is the digital book market: One can’t buy PDFs at most of the major e-book marketplaces, while one can buy fixed layout files.

The experience of e-books is mediated by a variety of software and hardware contexts. The former include e-book reading computer application platforms (platform apps) like iBooks, the Kindle app, and Readmill. The latter are dedicated e-book reading appliances, typified by devices like the Kindle and Nook. These mediating programs and machines serve the coded book to the user; they are the matrix of the phenotype to the HTML’s genotype. In essence, they provide much of an e-book’s peritext. True, some of this is determined by the HTML and XML, which code for a variety of features like a table of contents, image inclusion, and footnotes. But ultimately, the book reading application or device surrounds and supports the text.

Aside from e-books, there is a second (albeit nascent) digital means of delivering book content—specific apps. Apps are custom-built software experiences that contain both the content being displayed and the code that displays that content. Because they are self-contained, there is much more flexibility in an app. Apps are not limited in the way that e-books are limited by

e-book code. App designers and developers can take advantage of robust code languages and rich device environments. A well-made app can incorporate all of a device's capabilities, including geo-location, video, audio, social media integration, user-generated content, time-based notifications, and innovative navigation of content.

Apps can be great for more complex projects, but they come with limitations: They are often device-specific, design and development are far more expensive than e-book conversion, and they require much more maintenance once deployed. They are also not available for sale through the customary e-book marketplaces such as Amazon or the iBooks store, but instead through app marketplaces like iTunes and Google Play.

In this progression from PDF to e-book to app, we see more and more of the print book paratext falling away. PDF, as a mere digital simulacrum, retains much of the book's peritext. E-books erode print peritext somewhat; in reflowing e-texts, the concept of "pages" ceases to be relevant, and the organization of the front matter and back matter becomes more fluid. Content remains linear, however, and is clearly an intentional translation of print to digital. E-reading platform apps and e-reading devices provide an explicitly skeuomorphic reading experience, including skeuomorphs like page curl, animated flipping pages, simulated dog-earing, and pen-mimicking colored highlighting. App development offers the most potential for innovation. Apps hold the key to a truly new digital media, but for the moment they are restricted to particularly ambitious projects.

Each step along this PDF to app continuum requires more work for publishers. PDFs are created as a matter of course when a print book is sent to the printer; creating them is simple. E-book conversion at this point is still a task that requires human intervention; there is no pushbutton solution for any but the simplest of manuscripts. Apps, even platform apps, require much more work.

## **POST-BOOK PARATEXT**

Whether fixed or reflowing, app or e-book, the very fact that the content is stored as code presents an opportunity of great enormity. Adhering to Chartier's definition of the book as manufactured artifact immediately calls into question the "bookness" of our e-books and apps. An e-book (or any digital experience such as a webpage or app, for that matter) is essentially different from a paper book. Digital content is autonomous content. Rendered in code and stored as electrons, it is as detached from an expressive interface as is primary thought. This is the most significant feature of digital—a piece of content is stored in a non-expressive medium and can be expressed or manifested through a variety of interfaces. Up until the advent of binary, the storage and information delivery of expressive artifacts were always one and the same. This is true of all of those analog expressions like cave art, novels, and film. Digitized written content has a new and enormous potential. To simply manifest digitized book content as "e-books" with page curl and bookmarks is as skeuomorphic as simulated wood grain. These skeuomorphs belie the fact that digital technology has already moved us post-book. Paper's hegemony is over, at least in theory. This is not to say that paper books are extinct or on the path to extinction. Nor is such prognostication within the scope of this chapter. Rather, we have the opportunity to craft new means of expression. These post-book artifacts can (and do) exist in parallel to paper books.

Envisioning, designing, and implementing engaging and sustainable post-book artifacts need not be a chaotic or painstaking process. The organic and hodgepodge evolution of a recognizable printed book from the chirographic codex took about 2,000 years (Howard, 2005). This time around, we have several advantages. One is our historic vantage. Our place in history affords us a fruitful analysis of prior media transformations and periods of invention.

## **Post-Book Paratext**

A second advantage is the profession and discipline of interaction design. Genette (1997) points out that “the text” is immutable, “incapable of adapting to changes in its public space and over time” (p. 408). Paratext, on the other hand, is more pliable, an “instrument of adaptation” (p. 408). The digital transformation at hand provides ample opportunity for innovations in the elements and authoring of content. In this light, “the text” is not so immutable after all. However, this only reinforces, if not heightens, the role of paratext in the digital context. Now, the “zone of transition,” the interface, must facilitate the presentation of a whole new type of text. New paratexts must evolve to adapt a new text to a new context.

And they must do so quietly. “Like all relays,” Genette (1997) reminds us, the paratext can impede if poorly designed (p. 410). It does not always function well—that is, it does not always allow access to the content, or the significance it imparts alters the content adversely. Genette also points out that effects and messages of paratext are subconscious, and must remain so in order to be optimally effective (1997, p. 409). This makes it even more important that paratext be treated consciously and with care.

Interaction designers are already in the paratext business. The entire profession is focused on devising effective interfaces. The Interaction Design Association defines the interaction designer as one who works “to create meaningful relationships between people and the products and services that they use, from computers to mobile devices to appliances and beyond” (IxDA, 2013). In effect, these designers are the craftspeople of the transitory zone, the social scientists who observe our relationship with the interface, the artists forming effective experiences via the informed arrangement of digital peritext. As artists, these professionals conform to McLuhan’s (McLuhan et al., 1995) definition of the term: “The artist is the person who invents the means to bridge between biological inheritance and the environments created by technological innovation” (p. 378).

The steady ubiquity gained by digital experiences in the daily lives of billions of people is as much an accomplishment of the interaction design community as it is of hardware geniuses and startup entrepreneurs. In fact, both of the latter would be lost without the former. In the 20th century, computers and software came with instructions. Now people with very little or no computer experience can access and interact with digital content with little or no behavioral learning curve. Exprima Media experienced this first-hand while introducing the iPad and an iPad app we designed to computer illiterate coffee farmers in the Peruvian Andes (Exprima, 2011). This development is due in large part to the pervasive philosophy among software designers that, in the words of software design guru Steve Krug, “[i]nstructions must die... [The designer’s] objective should be to eliminate instructions entirely by making everything self-explanatory” to users (2005, p. 46).

The third advantage we have to aid this transition is Genette’s theory of paratext. Genette’s paratext is a unifying theory; it allows us to 1) view prior media revolutions through this lens and 2) engage with interaction designers with the awareness, themes, and lexicon that Genette’s work provides. The former allows us to learn how and why paratextual elements support and transform their media. The latter provides a framework and strategy for the way ahead.

And the way ahead is a significant path. The post-book potential goes beyond crafting new widgets and markets. I contend that post-book objects and experiences are at the epicenter of a seismic shift akin to the advent of writing and print. The new means of information sharing and storytelling glimpsed at in contemporary e-books and apps indicate something important afoot. These new experiences, if designed well, can align post-books with an arc initiated by radio and TV (Pressman, 2013).

The transformation that occurred during the incunabula period was, of course, the most significant paratextual development since the

advent of the Paleolithic proto-paratext, until now. The print book was enabled by and reinforced the development of our print-based culture and consciousness. As orality was slowly eclipsed by print, a growing sight-dominance and the familiar tightly-controlled print style came into being. Mnemonics and orality eventually gave way to sight-centric wayfinding and standardized patterns of presentation.

By the early 20th century, the fixity and isolation associated with print communication, coupled with growing populations and escalating urbanization and migration, had created a sociological scene ripe for media transformation. The advent of radio, and then TV, provided this. In essence, these media mark the beginning of a third communication era to follow orality and print culture. Ong (2012) describes this new situation as one of “secondary orality” (p. 133). The 20th century media of radio and television introduced this new orality—a new surfeit of aurality and social, multisensual communication reintroducing central elements of pre-print communication.

Indeed, there was much contemporary excitement about the return of the relationships and effects of orality that radio brought. In her book *Talk Fiction: Literature and the Talk Explosion*, Irene Kacendes quotes 1920s commentators effusing over the secondary orality, the social effects of radio: “How fine is the texture of the web that radio is...spinning! It is achieving the task of making us feel together, think together, live together” (2001, p.12). This observation is an on-the-ground assessment that predicts the musings of media historians who would look back some 45 years later. By the mid 20th century, McLuhan (McLuhan et al., 1995) summarized the situation well: “The new electronic interdependence recreates the world in the image of a global village” (p. 126). And this was almost forty years before a popular and social Internet.

That radio and television caused so much public and academic excitement underscores the significance of such transitions on our species.

The binary transition is an extension of, if not the apotheosis of, the secondary orality age initiated by radio. Inasmuch as secondary orality integrates meaningful elements of pre-writing oral culture, digital interfaces have the potential to do so more thoroughly than radio or television. McLuhan did live among computers, albeit primitive ones, and did recognize their eventual role as a medium on the continuum of secondary orality:

*The next medium, whatever it is—it may be the extension of consciousness—will include television as its content, not as its environment, and will transform television into an art form. A computer as a research and communication instrument could enhance retrieval, obsolesce mass library organization, retrieve the individual’s encyclopedic function and flip into a private line to speedily tailored data of a saleable kind.* (McLuhan et al., p. 221)

By ingesting and (re)presenting all other media, computer-mediated communication and storytelling become the hot molten core of secondary orality.

Digital media enable the elements of orality: aurality, multisensual communication, social communication, spontaneous communication and group formation, and immediate and situated communication. Ong (2012), however, points out that “[s]econdary orality is both remarkably like and remarkably unlike primary orality” (p. 134). That is because secondary orality is a novel syncretism. It is occurring in a print culture; these elements of orality coexist and blend with aspects of print culture like fixity, asynchronous communication, and authorial presence. Also, this new orality is occurring on a scale that dwarfs the small human groups that created cave art and told stories over Mesolithic fires. As of the second quarter of 2012, there were an estimated 2.4 billion people accessing the Internet (Miniwatts, 2012). In *Talk Fiction*, Kacendes (2001) quotes a 1920s radio critic lauding radio listeners as the “greatest audience ever

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assembled by any means for any purpose in the history of the world” (p. 12). And radio, it turns out, was the thin part of the wedge. The blend of print and oral culture, and the scale of the whole endeavor, distinguish secondary orality from just a return to some primal oral past.

The contours of this new orality are still shaping up. As of this writing, Twitter is only seven years old, the iPad launched approximately 1,200 days ago. Compare these to the several hundred years of book evolution and it is clear this is only the very beginning of something. Still, the wide use of personal computers, the Internet, Wi-Fi, smart phones, and tablets have all placed us squarely in a “new age of secondary orality” (Ong, 2012, p. 133).

Even before digital technology would openly challenge the materiality of books (van der Weel, 2011, p. 18), the genre of “artists’ books” called attention to the essential division between text and paratext (Drucker, 2004; Carrión, 1975). Author and artist Ulises Carrión anticipates the digital transformation of the book in his manifesto *The New Art of Making Books* (1975). A book, he explains, is in essence a “space-time sequence” of experiences—experiences that happen to be words. What’s more, these words, the text, are the domain of the author. All else, in the “old art” of books, is created by “the artisans, the workers, the others” (Carrión, 1975). In the “new art” of books, an author may have more control over the form, over the peritext. Put another way, in new forms of reading, the authorial role is extended to the digital paratext designers as well.

For example, *Our Choice* is a tablet app produced by Al Gore, the “storytelling company” Melcher Media (*Melcher Media*, n.d.) and the production shop Push Pop Press. The app is meant to be a book experience, albeit a new one. The promotional website touts *Our Choice* as “[t]he next generation of digital books.” It goes on:

*Our Choice will change the way we read books.... Our Choice melds...narrative with photography, interactive graphics, animations, and more than an hour of engrossing documentary footage. A new, groundbreaking multi-touch interface allows you to experience that content seamlessly. Pick up and explore anything you see in the book; zoom out to the visual table of contents and quickly browse though [sic] the chapters; reach in and explore data-rich interactive graphics.* (Matas & Tsinteris, 2013)

The pitch is clear—the value of this “new art” is not in the text alone, but also in the experiential features. It includes the digital paratexts of the “multi-touch interface,” a structure and context that generate new-reading verbs such as experience, explore, zoom, and reach in. Also, there is the promise of a seamless experience. The seam in question, the one that we hope not to experience, is the learning curve associated with a new peritext, the speed bump that may cause us to realize this is not a “book.”

This marketing language is crafted to assure potential customers that the digital paratext will be just as effective at being unseen as any other. The digital book’s interaction design must be “intuitive and immersive,” a common mantra of the interaction design community (Krug, 2005; Tan, 2013) and certainly one of Genette’s expectations for paratext.

This particular phrase was recently used by Liz Neely, Director of Digital Information and Access at the Art Institute of Chicago (Neely, 2012) to laud the *New York Times*’ interactive Peabody Award-winning article “Snow Fall: The Avalanche at Tunnel Creek Branch” (2012). In a talk given at the 2013 Books in Browsers conference, Alan Tan of the *New York Times* attempted to clarify and operationalize these popular, yet vague, signifiers. Tan’s talk provides practical insights into the planning that must go into the design of digital

peritext. He explains that a successful storytelling interface must have proper interaction “cues” and “metaphors” and that the experience must be designed with effective “rhythm” and “weight” (Tan, 2013). This is the nascent language of the new craft of the digital story.

It is clear that the reading experiences of both *Our Choice* and “*Snow Fall*” are attended to by new experimental paratext. The interactive digital container with its interaction cues, pinching, tapping, and swiping is the context for post-book content. The “text” in such a book is extra-alphabetical and “post-typographic” (Ong, 2012, p. 133); it includes multimedia and interactive assets, all of which are authored in their own right. In both of these instances, the reader is interacting with multisensual material from multiple authors. Also, “*Snow Fall*” includes a robust comments page, allowing users to publicly engage in a discussion with each other and the author(s) of the experience (Branch, 2012). This social dimension solidly places “*Snow Fall*” in the realm of secondary orality. Here is a post-book reading experience that not only delivers the sensual and interactive aspects of orality but also provides a social dimension, fostering a group sense that is central to post-print orality (Ong, 2012, pp. 125, 134).

This communal function is even more evident in the shared marginalia feature of e-reading platforms like Readmill. This Berlin-based company produced a platform agnostic reading app with the intent of providing “an open and easily shareable experience” (Berggren et al., 2011). Readmill’s digital peritext incorporates social recommendations, annotations, and geolocation services, creating a social system of shared marginalia. Inspired after borrowing a friend’s highly annotated copy of *Ulysses*, co-founder Henrik Berggren realized that “sharing annotations and recommendations was a critical component in the life of books that wasn’t getting the attention is [sic] deserved in the fragmented e-Book market” (Egert, 2012). The interaction design of apps like Readmill fully extend the “life of books” into Ong’s “new age

of secondary orality” (2012, p. 133) by designing community and dialogue directly into the paratext.

The impulse to incorporate secondary orality into the digital paratext of e-reading is even spilling over into the Web at large. For example, *hypothes.is* is a non-profit organization, funded partly through the Sloan, Shuttleworth, and Mellon Foundations, dedicated to designing and implementing a shared marginalia for the Internet itself. Its founders proclaim that with *hypothes.is*, one’s Internet browser will become an

*open platform for the collaborative evaluation of knowledge. It will combine sentence-level critique with community peer-review to provide commentary, references, and insight on top of news, blogs, scientific articles, books, terms of service, ballot initiatives, legislation and regulations, software code and more.* (Brantley et al., 2013)

This is the digital paratext of the Internet. Extending the book metaphor to the Internet may become more common as digital paratexts become more robust, more commonplace, and more “browser-ready.” Tellingly, *Our Choice* was the only digital book produced by Push Pop Press. Shortly after the app’s acclaimed release, Push Pop Press was acquired by Facebook. Their website explains, “Now we’re taking our publishing technology and everything we’ve learned and are setting off to help design the world’s largest book, Facebook” (Matas & Tsinteris, 2013).

The promise of digital is this: to provide means of creating and sharing information and stories that leverage the benefits of both orality and print in ubiquitous and fluid physical and experiential modes. And this cannot be accomplished without shaping the digital paratext. Just as there cannot be a book without (effective yet subconscious) peritext, we cannot have digital secondary orality without (effective and subconscious) interfaces.

Genette’s theory of paratext alerts us to the significant role of the threshold. His observations and nomenclature provide an effective transom

over which we may engage interaction designers, the contemporary craftspeople of the digital threshold itself. By consciously engaging such designers, we actively facilitate our journey into secondary orality. In light of the logistics of the transition from orality to print, this journey has only just begun. We are at the door; “[a] threshold exists to be crossed” (Genette, 1997, p. 410).

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## ENDNOTES

- <sup>1</sup> Since this writing, Readmill was acquired by the cloud-based storage and file-sharing company Dropbox. The logistics of this acquisition are indeed relevant to this chapter and are discussed in greater detail in a Publishing Perspectives article (Pressman 2014).