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Materializing Hypertexts: Bridging the 'Gap' Between Digital and Analog

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Materializing Hypertexts: Bridging the 'Gap' Between Digital and Analog

Session Type

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Abstract

One of the challenges of teaching digital humanities or digital based scholarship is overcoming the seeming disconnect between digital and analog. This is especially evident when students struggle to transfer their scholarly work into a hypertext environment. In part, their struggle is due to a lack of awareness concerning the structure and mechanics of all texts, whether they are analog or digital. Their other hurdle seems to be the false notion that the move from analog to digital is a discontinuous leap. In my presentation I will address this seeming analog/digital gap and how teaching students about the history of the book, in particular the history of the page, may help to bridge it.

My discussion will first address the connection between medieval manuscripts, early modern texts and hypertexts. During this time I will illustrate how the page of the codex went from being a plain sheet of parchment with a block of handwritten text to a dynamic matrix of ornamentation, illustration and punctuation. I then will discuss how these textual elements function similarly too and sometimes the same way as information architecture and wayfinding techniques used in hypertexts today. The latter half of my discussion will address the way in which I have presented this information to classes, most notably in The Digital Eighteenth Century, a Fall 2014 English course, during which I conducted instruction in Loyola Marymount University's Department of Archives and Special Collections.

It is my belief that through an understanding of the mechanics and structure of medieval manuscripts and early printed books, one can gain a greater understanding of hypertexts. Equally so, as one sees the similarity between these various formats, one can see how there is in fact continuity between the material text and the seemingly ethereal digital text.

Location

KIPJ EF

Materializing Hypertexts: Bridging the “Gap” Between Digital and Analog

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June 2015

Incipit

As a digital scholarship librarian with a special collections background, I am fascinated by the correlation between hypertexts, as they appear on the Internet, and early texts, in particular medieval manuscripts. For me it has become clear that these texts share similar information architecture and interface design techniques, likenesses that will be made clear below. It is not just what I see as literal parallels that strike me, however. As an academic librarian who does digital scholarship instruction, I have seen how teaching students about these connections “materializes” digital. That is to say, it helps students see digital texts as not being ethereal abstract “objects” or as being a discontinuous leap from analog books, but instead as another step in the long history of text making. In my experience teaching this topic opens up students’ minds to what constitutes a text, provides them with a literal link between early texts and hypertexts and gives them an analogy for thinking about hypertext design and structure. In order to delve into the pedagogical benefits of bridging this “gap,” it is necessary to first address some aspects of book history, in particular the history of the page, which will bring greater light to the parallels between manuscripts and hypertexts.

Throughout the Middle Ages the page of the codex (the book, as we know it today) made great technological leaps. What was once a plain sheet of parchment with a block of handwritten text—no spaces between words, no guiding marks—slowly became a dynamic matrix of ornamentation, illustration and punctuation. The emergence of the codex, as with the advent of the Internet, shifted the paradigm of humanity’s conception of the text. While from today’s vantage point it may seem like a rudimentary format, the codex significantly diverged from its scroll predecessor. Through its structuring—a gathering of individual leaves—the codex provided a new, faster, non-linear way of accessing information. In response the text had to rise to the needs of its users. It had to enable them to navigate through vast amounts of information from one page to the other, and when accessing that information, like when navigating the Internet, it had to clue them into their textual location through the use of visual cues or, as we may refer to them today, *wayfinding* elements¹. Such elements include pilcrows, rubrication and headers created with ornamental initials, historiated initials and miniatures. These signs created divisions, noted textual significance and provided “memorial hooks” (Carruthers, 2008, p. 274) that enabled readers to mentally mark and memorize text as well as recall the location of specific information (Carruthers & Ziolkowski, 2002, p. 4)².

The page began to make significant changes in the eleventh century. In part this shift was due to the diversification of textual content, which had started to include more secular and vernacular works (Parkes, 2008, p. 55). The changes that occurred led to more

¹ In short, *wayfinding*, a term coined by Kevin Lynch in his work *Image of the City* (1960), means the use of markers (e.g. landmarks) and mapping (e.g. cognitive maps or physical maps) to find one’s way from one point to another.

² In medieval culture memory was considered central to the intellectual process. To read more on this topic, I suggest Mary Carruthers’ *The Book of Memory* (2008). For the purposes of my focus, I found the introduction and chapter 7, “Memory and the book,” to be most helpful.

sophisticated textual formatting, i.e. the variation of script styles and font sizes, and led to what M.B. Parkes (2008) calls the use of “signposts,” meaning visual markers that indicate where something begins and ends (p. 70).

¶ One such signpost is the **pilcrow**, which often looks like ¶. Pilcrows were widely used beginning in the second half of the twelfth century when students were expected to “assess the understanding embodied in a text (*textus intelligentia*) by analyzing its structural organization” (Parkes, 2008, p.65). Pilcrows divided texts into more manageable units. As *wayfinding* elements, they created a logical point to which a reader could move, be it through a chronological reading or by entering the text non-linearly.

✎ Pilcrow [example](#)³.

¶ **Rubrication**, meaning to color red⁴, was used for titles, to create divisions and to indicate significance. While rubrication can be used sporadically, a text is considered rubricated when headings, paragraph marks and initial capitals are colored red. Moreover, rubrication is often used in the writing of the *Incipit* (“it begins”) and *Explicit* (“it unfolds”), words in Latin manuscripts that denote the opening and closing of the text. *Incipit* and *Explicit* played a crucial role in framing the manuscript for often more than one work existed in a codex.

✎ Rubrication and ornamental initial [example](#)⁵.

¶ **Ornamental initials** (large decorative initials), **historiated initials** (initials containing illustrations), and **miniatures** (illustrations without textual elements), were used to create headings, chapter-like divisions and more substantial breaks in the text. Philippe Codognet describes historiated initials and miniatures as being “indexible images” for their illustrations often reference other text or other images (1999, p.1). In other words, they have a hypertextual or hyperlink like quality.

✎ Ornamental and historiated initial [example](#)⁶ & miniature and historiated and ornamental initials [example](#)⁷.

³ Pilcrow: https://commons.wikimedia.org/wiki/File:Pied_de_mouche_Summa_2_1477.jpg

⁴ Rubrication sometimes appears in other colors.

⁵ Rubrication and ornamental Initial: <http://www.getty.edu/art/collection/objects/103552/master-michael-decorated-initial-l-austrian-about-1420-1430/>

⁶ Ornamental and Historiated initial: http://commons.wikimedia.org/wiki/Category:Drawings_of_Saint_Benedict_of_Nurcia#/media/File:Initial_C-Saint_Benedict_Blessing_Maurus_-_Google_Art_Project.jpg

⁷ Miniature and historiated and ornamental initials: [http://commons.wikimedia.org/wiki/File:Master_of_the_Brussels_Initials_\(Italian,_active_about_1389_-_1410\)_-_The_Calling_of_Saints_Peter_and_Andrew;_Initial_D-_Saint_Andrew;_Initial_Q-_Saint_Peter_-_Google_Art_Project.jpg](http://commons.wikimedia.org/wiki/File:Master_of_the_Brussels_Initials_(Italian,_active_about_1389_-_1410)_-_The_Calling_of_Saints_Peter_and_Andrew;_Initial_D-_Saint_Andrew;_Initial_Q-_Saint_Peter_-_Google_Art_Project.jpg)

Over time initials and miniatures were used to signify a textual hierarchy, the largest most decorative initial or miniature being at the top and the smallest plainest initial being at the bottom (Parkes, 2008, p. 65). The order may appear something like:

Large historiated initial
Medium ornamental initial
Smaller ornamental initial

 Manuscript hierarchy [example](#)⁸.

This is similar to the way in which one may create a hierarchy in a Word document, which appears something like:

Header 1
Header 2
Header 3

Or in an HTML document, which creates a hierarchy using header tags:

```
<h1>Header</h1>
<h2>Header</h2>
<h3>Header </h3>
```

In manuscripts, the distinctiveness and attractiveness of each initial or miniature made them more memorable and, therefore, the section of text and where it fell within a hierarchy could be recalled more easily (Watson, 2003, p. 22). Today there are elements in hypertexts that serve a similar function, i.e. the use of breadcrumbs to display the hierarchy of a user's path.

Following the advent of modern printing in the 1450s and the industrialization of bookmaking, medieval manuscript *wayfinding* elements became increasingly utilitarian, non-decorative and relatively unmemorable. Consider a modern analog book and its medieval predecessor. The difference is striking and yet you could not have the former without the latter. Hypertexts, on the other hand, seem to have nearly brought us full circle. They, like medieval manuscripts, use markers, headers and ornamentation to act as anchor points within a text or to signify a link to another text. When done right, these markers guide users as well as enable them to find and mark their own *wayfinding* paths.

I have taught about the correlation between medieval manuscripts and hypertexts in a variety of instruction sessions and in varying degrees of depth. This past spring when struggling to get students to understand the value of Tumblr's many formatting options, in

⁸ Manuscript hierarchy: http://commons.wikimedia.org/wiki/File:Folio_188r_-_Christ_Blessing_the_World.jpg

particular headers, bullet points and block quotes, I googled “medieval manuscripts” and used the results to briefly explained how manuscript formatting not only made them more attractive but also made them more readable. Taking this slight detour improved the students’ understanding and raised the quality of their work. For LMU’s Summer Undergraduate Research Program, I led a workshop that addressed ways in which we communicate digitally, e.g. websites and Powerpoint presentations. I began by giving an overview of the history of the page, much like what I wrote above. Students were then asked to deconstruct and comment on a series of websites and Powerpoint presentations using the basic principles they had learned. My most in depth manuscript/hypertext instruction has been given to digital humanities related courses and has taken place in LMU’s Department of Archives and Special Collections. For such classes I lay out a history of the book timeline that includes scrolls, manuscript leaves and a book of hours, relief type, a Guttenberg Bible leaf and other early printed books. I create a second timeline of printed book leaves to show the change in the appearance of print from the 1500s to the early 1900s. To broaden the discussion on format and information presentation, I also display oversized coral sheet music, serial published literature and a variety of bookbindings. I am further growing and developing this type of instruction, as I am also further exploring the links between medieval manuscripts and hypertexts.

Teaching the similarities or, arguably, direct correlations between medieval manuscripts and hypertexts has numerous pedagogical benefits. It helps students understand that hypertexts are not an anomaly but instead another step in the long history of text making. When students learn how information architecture and interface design works in manuscripts, they are more incline to understand how to apply such techniques when creating hypertexts. Finally, as many librarians are well aware, students are not as digitally adept as they are often given credit for. They tend to struggle and stress over technology based assignments, even when the work they are doing is not that dissimilar from work they have done in the past. For this reason teaching students about the manuscript/hypertext connection will give them more than a better understanding of book history; it will help them bridge the seeming gap between digital and analog.

Explicit

References

Carruthers, M. J., (2008). *The book of memory: A study of memory in medieval culture*. Cambridge, NY: Cambridge University Press.

Carruthers, M. J., & Ziolkowski, J. M. (2002). Introduction. *The medieval craft of memory: An anthology of texts and pictures* (pp. 1-31). Philadelphia, PA: University of Pennsylvania Press.

Codognet, P. P. (1999). An historical account of indexical images: from ancient art to the Web.104. doi:10.1109/VL.1999.795881

Parkes, M. (2008). Layout and presentation of the text. In *The Cambridge history of the book in Britain* (pp. 55-73). Cambridge, England: Cambridge University Press.

Watson, P. (2003). *Illuminated manuscripts and their makers*. London, England: V&A Publications.