



Print Culture



History of Information, July 16, 2010

Agenda

- ▶ **Administrivia**
 - ▶ Paper
 - ▶ Blog/Presentation
- ▶ **Print Culture**



Elements of Print Culture

- ▶ **Technologies**

- ▶ woodblock printing
- ▶ printing press
- ▶ moveable type

- ▶ **Institutions**

- ▶ Church
- ▶ nation-state
- ▶ scientific institutions
- ▶ Humanism
- ▶ civil society



Manuscript Culture in Brief

- ▶ **Scribe vs Author**
 - ▶ St. Bonaventura's 4 ways of making books
- ▶ **Vellum/Parchment vs. Paper**
 - ▶ Calfskin used in higher-quality manuscript production
- ▶ **Problems with textual drift, damage, disappearance**
 - ▶ **Palimpsest**
 - ▶ Often text was added over existing versions
 - ▶ “modern scholars smile at the notion of an abbot instructing his monks to copy printed books so that texts would not perish.” (



Woodblock Printing

- ▶ Time-consuming
- ▶ Fragile
- ▶ Non-standard

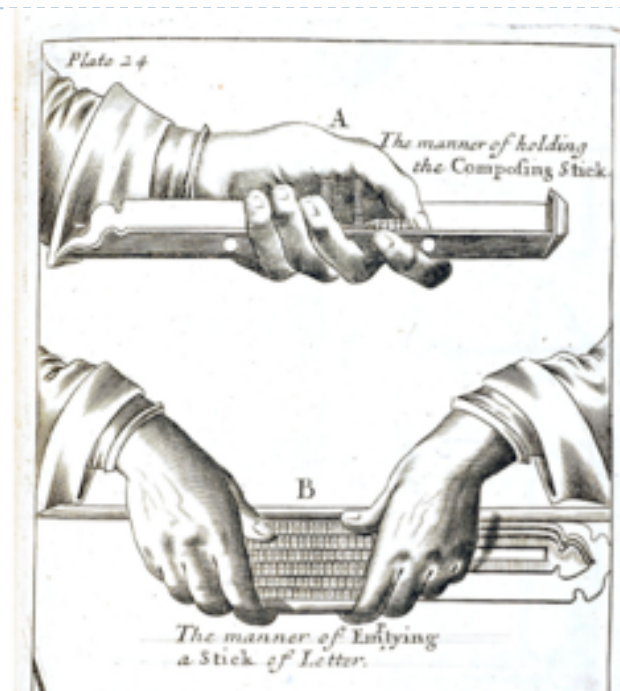
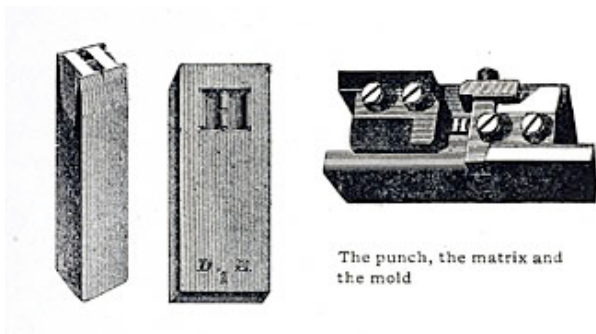


Gutenberg's Invention

- ▶ Credited with movable type, allowing a press to be used in the creation of any text rather than a single, specific one



Technologies



Printing's Spread Across Europe, 1450-1500



“Beauty and Economy”

Gutenberg's Bible, 1455



Src: [http://www.hrc.utexas.edu/educator/modules/gutenberg/invention/familiar/images/Gutenberg_Familiar_\[1\]\[2\].pdf](http://www.hrc.utexas.edu/educator/modules/gutenberg/invention/familiar/images/Gutenberg_Familiar_[1][2].pdf)

Eisenstein's “unacknowledged revolution”

- ▶ A “knowledge explosion”
 - ▶ Print culture's effect on human society as well as broad historical trends



The Print Shop

- ▶ “a significant, albeit neglected function by bringing together intellectual and commercial activities which reinforced each other and thus created an especially powerful, almost irresistible drive” (p. 68)



The Printer's Role

- ▶ “Press Agent”
- ▶ Publisher
- ▶ Bookseller
- ▶ Indexer
- ▶ Abridger
- ▶ Translator
- ▶ Lexicographer
- ▶ Chronicler



Standardization

- ▶ “Concepts pertaining to uniformity and to diversity – to the typical and to the unique – are interdependent. They represent two sides of the same coin. In this regard one might consider the emergence of a new sense of individualism as a by-product of the new forms of standardization. The more standardized the type, indeed, the more compelling the sense of an idiosyncratic personal self.”



Standardization

- ▶ Some increase in boilerplate
- ▶ Greater ability to detect the idiosyncratic resulted in broader world view
 - ▶ trends, patterns
- ▶ Diversity accompanied standardization
 - ▶ costumes



Standardization and Homeostasis

- ▶ “printers did not only compete with rivals and improve upon their predecessors. They were also able to improve upon themselves. The succession of Latin Bibles turned out by Robert Estienne and the succession of atlases turned out by Ortelius suggest how the immemorial drift of scribal culture had not been merely arrested but actually reversed.” (p.73)



Corruption

- ▶ **Typographical**
- ▶ **Factual**
- ▶ **Provenance/Authenticity**
 - ▶ compilations of ancient texts poorly dated/sourced
 - ▶ piracy
- ▶ **Printing *accelerated* corruption**
 - ▶ Yet this made the process more conspicuous and, finally, easier to detect
 - ▶ “Wicked Bible”, 1631



Fixity

- ▶ What was so important about fixity?



Fixity

- ▶ **What was so important about fixity?**
 - ▶ Data Preservation
 - ▶ Intellectual Property
 - ▶ Textual/Linguistic Drift



Fixity and Data Preservation

- ▶ “How many of the precious works of antiquity were lost while they existed only in manuscript? Has there ever been one lost since the art of printing has rendered it practicable to multiply and disperse copies? This leads us then to the only means of preserving those remains of our laws now under consideration, that is, a multiplication of printed copies.”

-Thomas Jefferson

- ▶ Is this still an issue?



Fixity in the Digital Age

- ▶ Data media obsolescence
- ▶ Data format obsolescence
- ▶ Similar multi-copy strategies seen by today's technological giants (cloud-computing data availability strategies)



▶ Src: http://en.wikipedia.org/wiki/File:Floppy_disk_2009_G1.jpg

Effects on Scholarly Work

- ▶ Reduction in itinerant scholars – less wandering yet more cross-cultural interchange
- ▶ Increase in available knowledge encouraged development of “new intellectual combinations and permutations” (p.44)
- ▶ Increased interest in the ancient, the mythic, the mystic
- ▶ “Crowdsourcing”?
 - ▶ publishers/editors solicited criticism with the promise of public mention of contributors
 - ▶ “individual access to diverse texts is a different matter from bringing many minds to bear on one text” (p.51)
- ▶ **Cyclical feedback mechanism**
 - ▶ Surveys created so much new knowledge that new surveys were required to address new questions



Effects on Law

- ▶ Concept of legal history
 - ▶ **Precedent**
- ▶ But printing also rendered the spirit of some codes obsolete
 - ▶ Ancient codes such as *Corpus Juris* lost relevance
- ▶ **“forced a legal definition of what remained in the public domain”**
 - ▶ Plagiarism, copyright only exist with the concept of author
 - ▶ Modern U.S. copyright law still refers to being “fixed in a tangible medium of expression” as a necessary condition for protection



Effects on Art/Architecture

- ▶ Sharper distinctions between fresh/original and repeatable/unoriginal
- ▶ Disappearance of varied manuscript styles results in polarization between Gothic and Roman print styles, reflected in art/architecture



Effects on Social Stratification

- ▶ “Democratizing” effects of proliferation of knowledge
- ▶ The royal (and thus divine) becomes more common
 - ▶ Paper money and Louis XVI’s identification (p. 59)



Effects on Religion/Politics

- ▶ Increased emphasis on the practical contributed to advance of secular humanism
 - ▶ “How to go to heaven” vs. “How the heavens go” (p. 50)
 - ▶ And yet production of religious tracts explodes as well
- ▶ Resulted in permanent fragmentation of Latin Christendom
 - ▶ Local presses furthered agenda of national royalty, clergy
- ▶ Standardized vernaculars led to privileging of some, marginalization/disappearance of others (p. 82)



Effects on Information Organization

- ▶ **Economic incentive for booksellers to provide**
 - ▶ clear, coherently arranged booklists
 - ▶ well arranged/indexed editions
 - ▶ “New and improved”
- ▶ **No incentive toward standardization in Med. Libraries**
 - ▶ **Alphabetization atypical:**
 - ▶ “‘amo’ comes before ‘bibo’ because ‘a’ is the first letter of the former and ‘b’ is the first letter of the latter and ‘a’ comes before ‘b’...by the grace of God working in me, I have devised this order.” (p. 65)



Effects on Cognition

- ▶ “Basic changes in book format might well lead to changes in thought patterns” (p. 64)
- ▶ “the new kind of brainwork fostered by the silent scanning of maps, tables, charts, diagrams, dictionaries, and grammars” (p.64)
- ▶ “Increasing familiarity with regularly numbered pages, punctuation marks, section breaks, running heads, indexes, and so forth helped to reorder the thought of *all* readers, whatever their profession or craft.” (p.73)



Reactions to Eisenstein

- ▶ **Adrian Johns**

- ▶ “constructivist view requires that one define ‘society’”
- ▶ Concept of “Europe” barely existed, so how can Eisenstein make claims of geopolitical effects on it?



A Complicated Provenance

- ▶ Some claims exist that **Gutenberg** created the type **mold**
 - ▶ Others contend that the type mold was a Korean invention
 - ▶ Still others argue that Gutenberg used molds of sand as done previously in Asia
 - ▶ (cf. http://www.open2.net/historyandthearts/discover_science/gberg_synopsis.html)
- ▶ **What about China?**
 - ▶ Scholarly belief: printing in 8th C., typography in 11th C.
- ▶ **Japan?**
 - ▶ Xylographic printing around 770
- ▶ **How does this change our assessment of Eisenstein?**
- ▶ **Is this only relevant in a Western context?**
 - ▶ "Europe reckons the date of the invention of printing from the time when typography was invented, and considers block printing as merely an important step in preparation. The far East reckons the invention of printing from the time when block printing began and considers movable type as rather an unimportant later addition." Carter, *The Invention of Printing in China*

