History of Information
September 17, 2007
overview

codex coda

Eisenstein vs Trithemius

Gutenberg & print

European exceptionalism?

a matter of timing?

problems of inheritance
The late medieval book differs more from its early medieval predecessors than it does from the printed books of our own day. The scholarly apparatus which we take for granted --analytical tables of contents, text disposed into books, chapters, and paragraphs, and accompanied by footnotes and index-- originated in the application of notions of *ordinatio* and *compilatio* by writers, scribes, and rubricators of the thirteenth, fourteenth, and fifteenth centuries.

Morning overtook Shahrazad, and she lapsed into silence. Then her sister Dinzarad said to her, "Sister, what an entertaining story!" Shahrazad replied, "What is this compared with what I shall tell you tomorrow night if I stay alive!?"
early 16th century

Front page to *Amadis of Gaul* (early 16th c. example of gothic font associated with novels of chivalry, the look of the page clearly references the look of a page in a manuscript)
Aldus & humanist script

Front page to the *Hypnerotomachia polyphilii* (Aldine edition, early 16th century; example of classical/humanist script; font likely designed with references to Roman letter cutting in stone)
I wanted only to offer it to you plain and bare, unadorned by a prologue or the endless catalogue of sonnets, epigrams, and laudatory poems that are usually placed at the beginnings of books. For I can tell you that although it cost me some effort to compose, none seemed greater than composing the preface you are now reading. I picked up my pen many times to write it, and many times I put it down again because I did not know what to write; and once, when I was baffled, with the paper in front of me, the pen behind my ear, my elbow propped on the writing table, and my cheek resting in my hand, pondering what I would say, a friend of mine, a man who is witty and wise, unexpectedly came in and seeing me so perplexed asked the reason, and I hid nothing from him and said I was thinking about the prologue I had to write for the history of Don Quixote, and the problem was that I did not want to write it yet did not want to bring to light the deeds of so noble a knight without one.

Miguel de Cervantes, trans. Edith Grossman
"To conceive this right--call for pen and ink--here's paper ready to your hand.----Sit down, Sir, paint her to your own mind--as you like your mistress as you can--as unlike your wife as your conscience will let you--'tis all one to me--please but your own fancy in it."

CHAP. XXXVIII.

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from the patron saint of Wired

McLuhan
*The Gutenberg Galaxy*

Eisenstein
"an unacknowledged revolution"
Trithemius vs Eisenstein

scriptorium to printing shop

"Trithemius somewhat illogically compare the written word on parchment which would last one thousand years with the printed word on paper which would have a shorter life span. The possible use of paper ... by copyists, or of skin for a special printed version went unmentioned.... Whether he was genuinely worried about an increased use of paper ... is an open question. ... He used one Mainz Print shop so frequently that"it could almost be called the Sponheim Abbey Press".

--Eisenstein

Hofl Introduction - 10
'the shift from script to print'

"different texts ... were also being brought closer together for individual readers"

"the clerk['s] richer, more varied literary diet than had been provided by the scribe"

"sedentary scholars less apt to be engrossed by a single text"

"knowledge explosion"

"combinatorial intellectual activity"
'the shift from script to print'

"a purification of Christian sources"

"the more standardized the type ... the more compelling the sense of an idiosyncratic personal self"

"the printer seems to have taken over where the clerical scribe left off. But in doing so he greatly amplified and augmented older themes"

"rationalizing, codifying, and cataloguing data"

"from the corrupted copy to the improved edition"

"fixity and cumulative change"
Eisenstein concludes

"classical revival"

"Christendom disrupted"

"nature transformed"
taking sides
recurring questions

1. what happened?
2. what came before?
3. what came after?
4. who was involved?
Johannes Gutenberg

born Mainz

1438: exile, Strasbourg
partners: Riffe, Dritzehn, Helman

1438, December: Dritzehn dies
"4 pieces to be destroyed"

1439: Dritzehn's heirs sue

1450: back in Mainz
creditor Johannes Fust
employee Peter Schöffer
ally Cardinal Nicholas of Cusa
complete works

1454: Cyprus Indulgence

1455: 42-line bible
the Cardinal's connections?

1455: Fust sues, wins
new partnership of Fust & Schöffer
Mainz psalter
Hofl Introduction - complete works

1454: Cyprus Indulgence

1455: 42-line bible
the Cardinal's connections?

1455: Fust sues, wins
new partnership of Fust & Schöffer
Mainz psalter
1454: Cyprus Indulgence

1455: 42-line bible
the Cardinal's connections?

1455: Fust sues, wins
new partnership of Fust & Schöffer
Mainz psalter
complete works

1454: Cyprus Indulgence

1455: 42-line bible
the Cardinal's connections?

1455: Fust sues, wins
new partnership of Fust & Schöffer
Mainz psalter
spread of print

1455: Mainz

1465: Subiaco, Italy


1476: London

1480: Budapest, Krakow, Prague, Brussels
cause and cure?

Luther and the indulgences of Mainz, 1517

Gutenberg and the indulgence, 1455

Letterae indulgentiarum, 1455
questions of timing?

Gutenberg, d. 1468

Bacon, 1561-1626

Galileo, 1564-1642

Descartes, 1596-1650

Newton, 1642-1727
“for three-and-a-half centuries, the Almanack has been the most popular book in the English language”

1492–1600, probably 600 published


400,000 a year

William St Clair, *The Reading Nation*, 2005

--diary, encyclopedia, calendar

Mother Shipton

Nostradamus
RAND, "printing & the internet"

"The idea of reducing 'printing and publishing' to the Western case alone is not upheld by anyone. On the other hand there are differences between xylography and letter press printing (as there are between alphabetic and ideographic languages). ... two quite different duplicative technologies."

--Eisenstein, RAND 2000
Chinese printing

700 CE: Xylography, earliest printed scrolls

972: 130,000 page Tripitaka

1041-1049: clay type playing cards on the Silk Road
Chinese printing

northern Fujian

"three families of publishers (Liu, Yu, and Xiong) of Jianyang ... wrote, edited, printed, and sold books for over six hundred years ... (mid-eleventh through late seventeenth centuries")... The area was already noted for its flourishing paper trade"

"in the Northern Song in the eleventh century ... there were some thirty printing centers ... and some two hundred in the Southern Song" (twelfth century)"

Lucille Chia, *Printing for Profit* 2002
Hof Introduction -

Korean printing

700 ce: xylography

918-1392: Koryo Dynasty
three methods of publishing
transcription, xylography, typography

transcription: Royal library; practice
xylography: Buddhist temples
typography: civil service

1087: Tripitaka Koreana (xylography)

Steven Wonsuk Kang, "The printing press in Korea", 2000
Hofl Introduction - 26
Korean printing

"demand side"
949-975: King Kwangjong
Guagou competitive civil service exams

"supply side"
1231: Mongol invasion
destruction of archives

moveable type
Korean printing

1241: Yi Munsun Chip

1337: Jijki

1392: Kyosugam (dept. of publishing)

1403: Jujaso (type foundry)
Korean printing

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1403: Jujaso (type foundry)
"There is a material explanation for the fact that printing developed in Europe in the 15th century rather than in the Far East, even though the principle on which it is based had been known in the Orient long before. European writing was based on an alphabet composed of a limited number of abstract symbols. This simplifies the problems involved in developing techniques for the use of movable type manufactured in series. Chinese handwriting, with its vast number of ideograms requiring some 80,000 symbols, lends itself only poorly to the requirements of a typography. Partly for this reason, the unquestionably advanced Oriental civilization, of which the richness of their writing was evidence, underwent a slowing down of its evolution in comparison with the formerly more backward Western civilizations."

--- Encyclopedia Britannica
1446: King Sejong establishes Jungeumchung for Hangul alphabet

Hangul used to publish ancestral poems, pronunciation guides, Confucian morals, ....

"Printing in the Chosun dynasty was developed by the government because the government was the only institution that could afford to develop printing technology."

-- Steve Wonsuk Kang.
"[E]ither the Germanes borrowed this Invention from the Chineses, or at leastwise the Chineses had the practise & use of it long before them.

George Hakewill, *An Apology of the Power*, 1627

"Whether the Germans first borrowed this Invention from the Chineses, or whether amongst the Germans (who undoubtedly lay best claim to it) Iohn Gutenberg the Knight of Mentz, or Iohn Fust a Moguntine, was the first Inventor thereof, it matters not."

Robert Heath, *Paradoxical Assertions*, 1659
problems of inheritance

the search for copy

"Book-sellers follow their owne judgment in printing the antient Authors according to such Text as they found extant ... Errors repeate & multiply in every Edition".

-- John Evelyn, 1666
problems of authenticity

piracy and plagiarism

"Martin Luther's German translation of scripture was actually beaten into print by its first piracy."

"[Shakespeare's] first folio [1623] ... boasted some six hundred different typefaces along with nonuniform spelling and punctuation, erratic divisions and arrangements, mispacing, and irregular proofreading. No two copies were identical."

--Johns
the search for truth

"donations of Constantine"

"false decretales"

"Historical criticism became a Protestant weapon, and documents were used as missiles."

James Thompson, "The Age of Mabillon", 1942
"a certain band of fellows existed, some centuries ago, who had undertaken the task of concocting ancient history as we now have it, there being at that time none in existence; ... they had as aids the works of Cicero, Pliny, the Georgics of Vergil, the Satires and Epistles of Horace. These alone ... [are] the genuine monuments out of the whole of Latin antiquity"

Grafton, "The Antiquary as Pariah", 1999
detective work

back to the monastery

"the Reformation era ... bringing to light thousands of documents ... hitherto inaccessible and unknown. ... France pioneered in this new historical research ... Mabillon .... Montfaucon".

--Thompson
Jean Mabillon (1632-1707)

*De Re Diplomatica*, 1681

opposing

**Paperbroche**

*Acta Sanctorum* 1675

"The Benedictine order ... regarded Paperbroche's work as ... an attack on their property rights"

--Thompson
"Mabillon frankly admitted that the authenticity of a charter could not be proved by any metaphysical or *a priori* argument; a decision could be reached only after the expert had examined a whole series of different indications -- the material used, the seal, the signature, the grammar and orthography, the modes of address, the plausibility of the dating, the intrinsic consistency of the whole document".

David Knowles
a guide to forgery

the charter of La Tour d'Auvergne

"skilfully forged [using Mabillon's principles] by a sublibrarian who ended his days in the Bastille"

--David Knowles
summary

revolution(s)?
what did & did not come before?
what happened?
what came after?
technology, practices, & institutions
(un)reliability