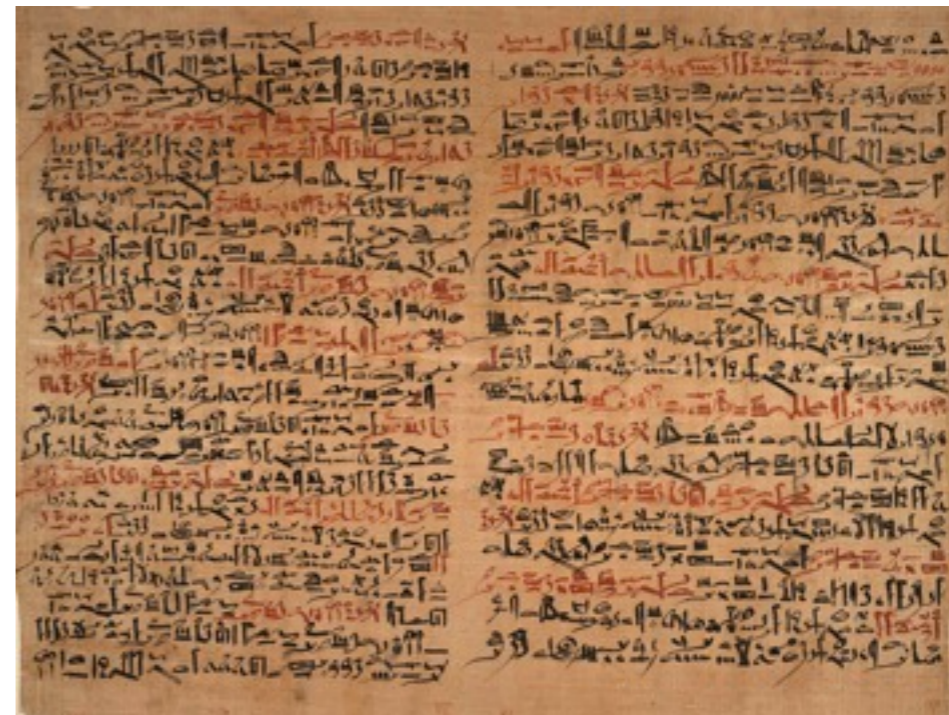


manuscript culture

back to the books

history of information
February 2, 2012



Week 4

7 Feb: Print Revolution

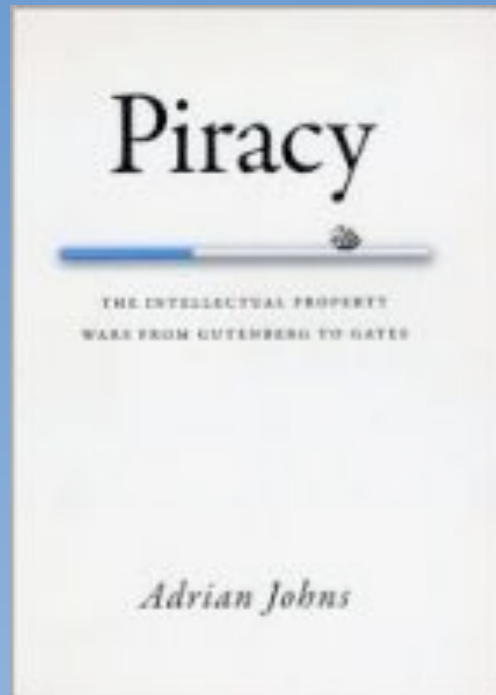
Required reading:

- Elizabeth Eisenstein, "The Emergence of Print Culture in the West," *Journal of Communication*, Winter (1980): 99-106.
- Adrian Johns' "Personal Note" in "Historical Perspectives on the Circulation of Information," *American Historical Review* 116(5) (December 2012): 1392-1435, **you are only required to read the comments by Johns on pp 1394-6.**

Additional material:

- [Grafton, Johns, Einstein], "AHR Forum: How Revolutionary was the Print Revolution?" *American Historical Review*, 107 (1, February 2002).
- Watch: Fry, Stephen. 2008. *Stephen Fry and the Gutenberg Press*. From the series *The Machine that Made Us*. BBC.

aob



Adrian Johns

"On Media Piracy"

Center for New Media

370 Dwinelle

Thurs Feb 9, 5 pm.

Goody's transformative lists?

updated 8:33 PM EST, Wed February 1, 2012



Facebook filing values Zuckerberg stake at \$16 billion

In its IPO paperwork, Facebook said its founder and CEO owns more than a quarter of the company. Mark Zuckerberg, 27, holds roughly 534 million shares. [FULL STORY](#)

- [Explain it to me: IPOs](#) | [Timeline](#)
- [What scares Facebook](#) | [Users react](#)
- [\\$5 billion IPO filed](#) | [Zuckerberg letter](#)

Lists

[Basics](#) » [Manage Your Account](#) » [Friends](#)

List Basics

▼ What are lists?

Lists are an optional way to you organize your friends on Facebook so you can filter the stories you see in News Feed or post an update for specific people from one part of your life, like your coworkers or friends who live near you.

To help you get started, you have lists for:



Close Friends: You can add your best friends to this list to see more of them in your News Feed and get notified each time they post. You also have the option to turn these extra notifications off.



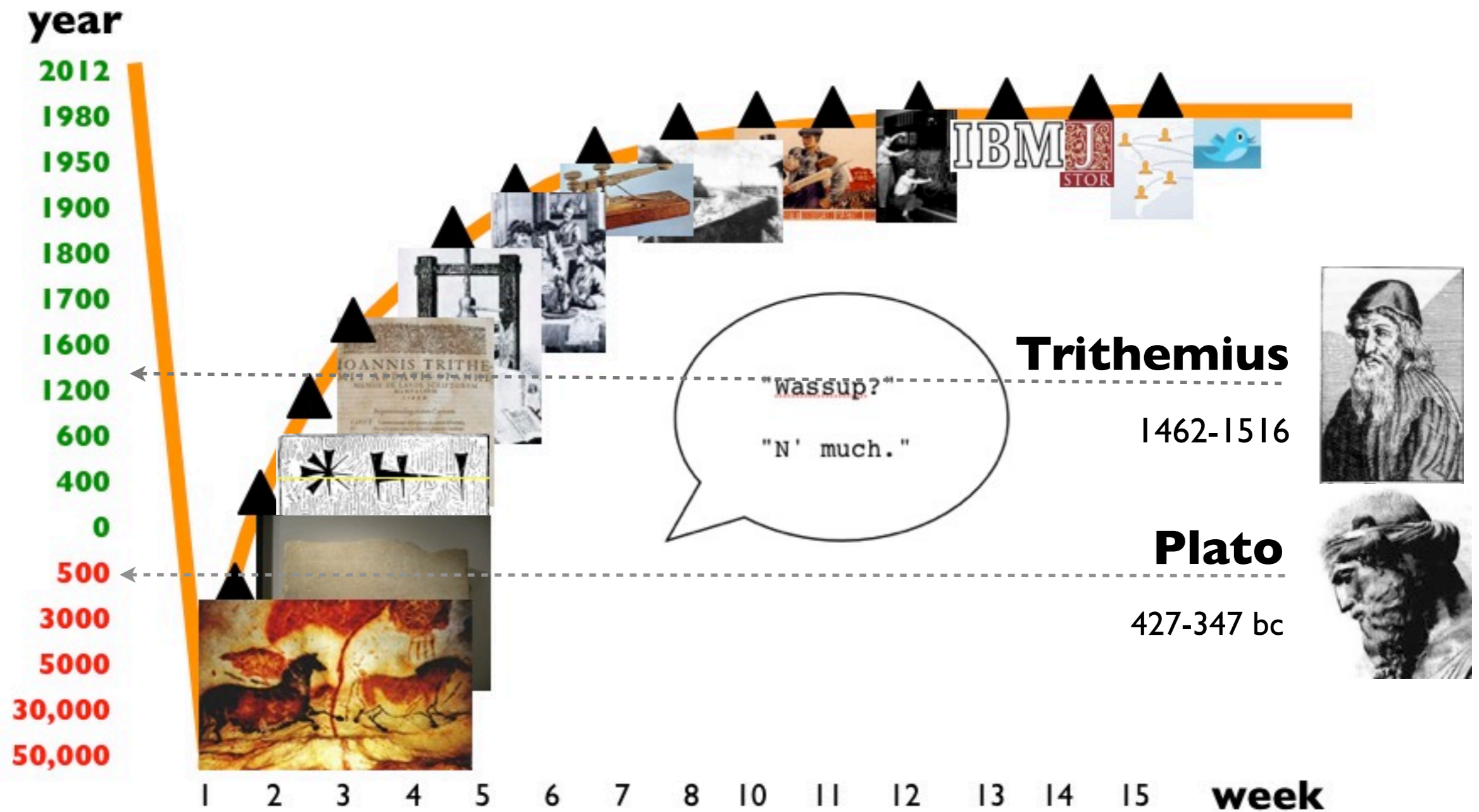
Acquaintances: This list is for friends you don't need to stay in close touch with. People on your acquaintances list will rarely show up in your News Feed. You can also choose to exclude these people when you post something, by choosing Friends except Acquaintances in the [audience selector](#).



Restricted: This list is for people you've added as a friend but just don't want to share with, like your boss. When you add someone to your Restricted list, they will only be able to see your [Public content](#) or posts of yours that you tag them in.

Note: Your friends won't get notified when you add them to these lists.

where we're going



overview

unintended consequences

authority of the book

trust matters

technologies of the book

determinism (again)

eyewitnesses

"what people felt about it
when it was happening" -
George Young

overview

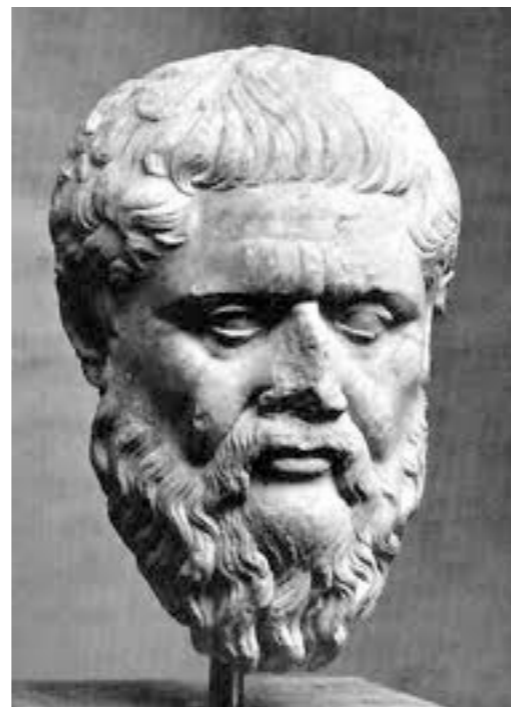
unintended consequences

authority of the book

technologies of the book

eyewitnesses

Plato
Phaedrus, ?360bc



Johannes Trithemius,
In Praise of Scribes
1492

6-Hof112-MS 7



Plato's perspective

Socrates

Phaedrus

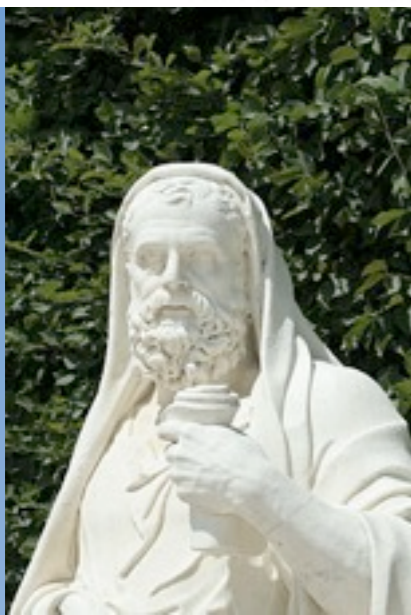
Lysias

"on the propriety and impropriety of writing and the conditions which determine them."

Thamus

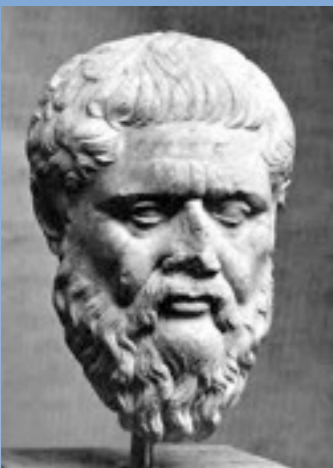
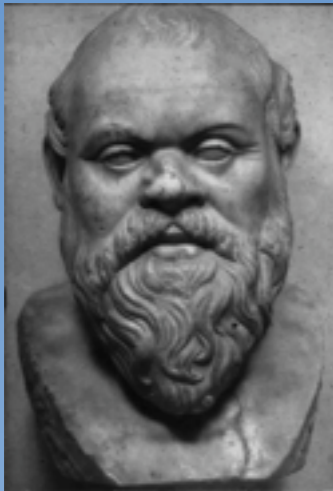
Theuth

Thebes



Socrates didn't like books?

the standard view



"I am a lover of learning ... Men lead hungry animals by waving a branch or some vegetables before their noses, and it looks as if you will lead me all over Attica and anywhere else you please ... by waving the leaves of a speech in front of me"

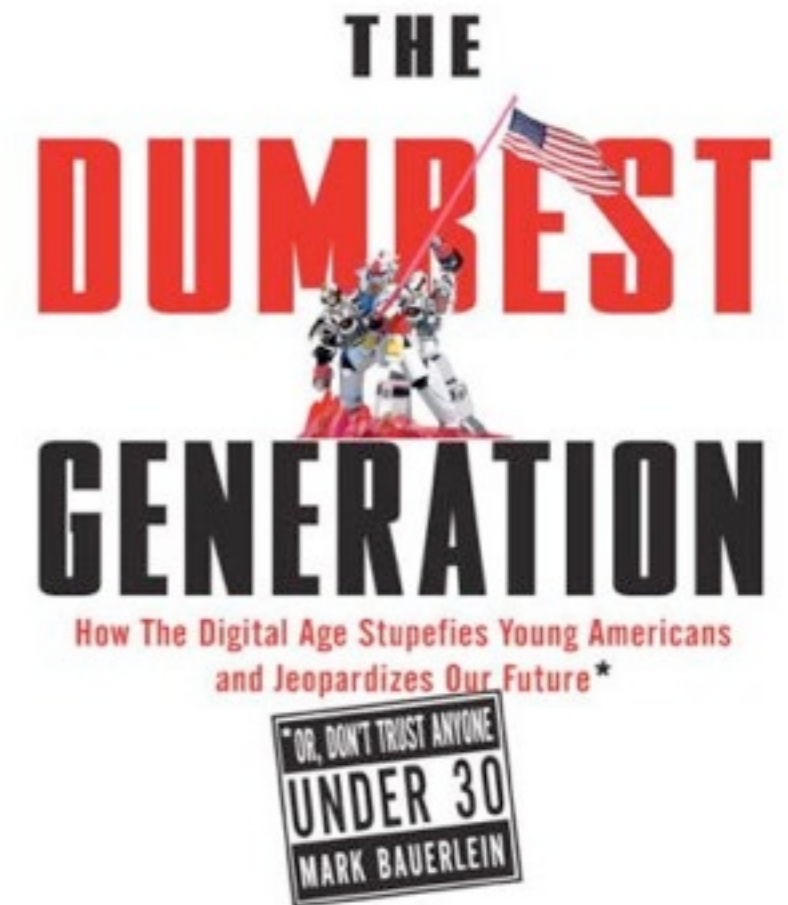
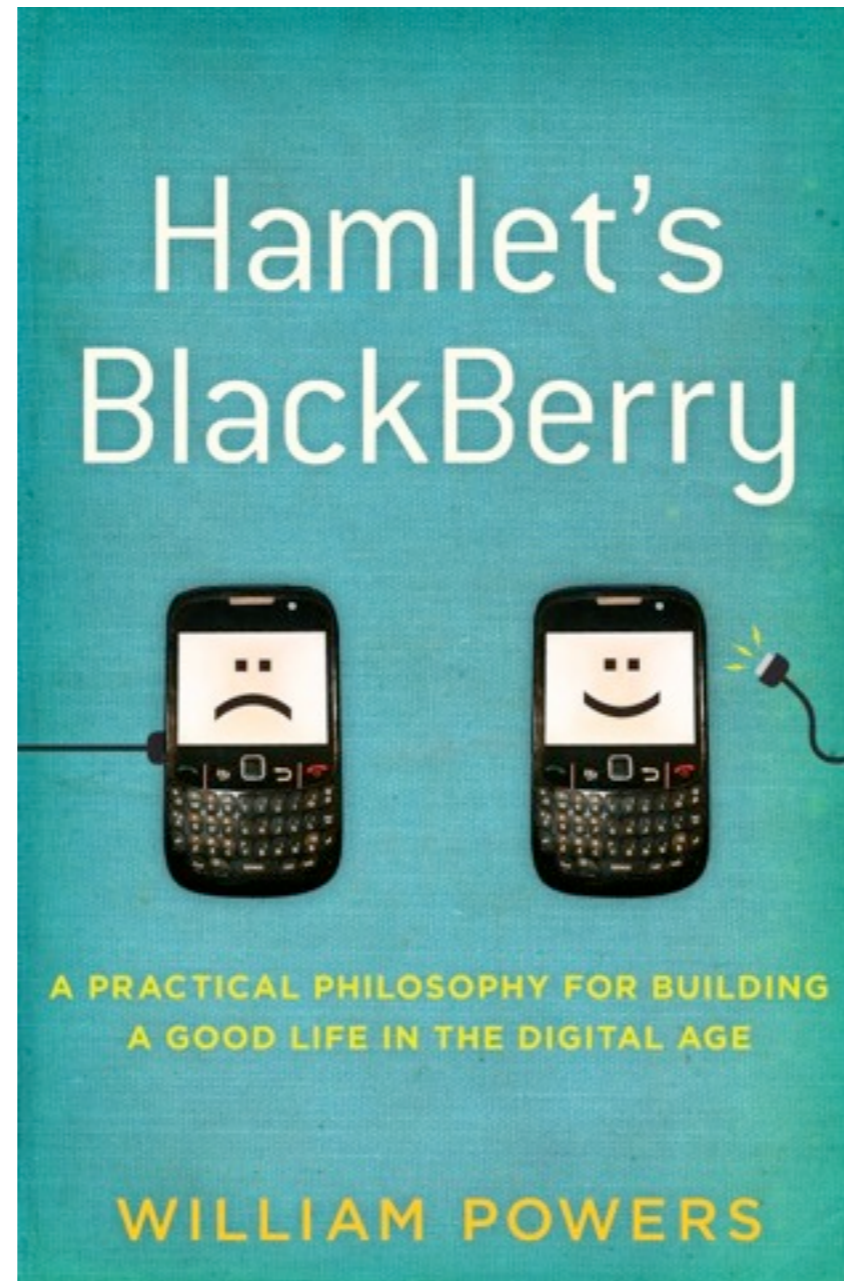
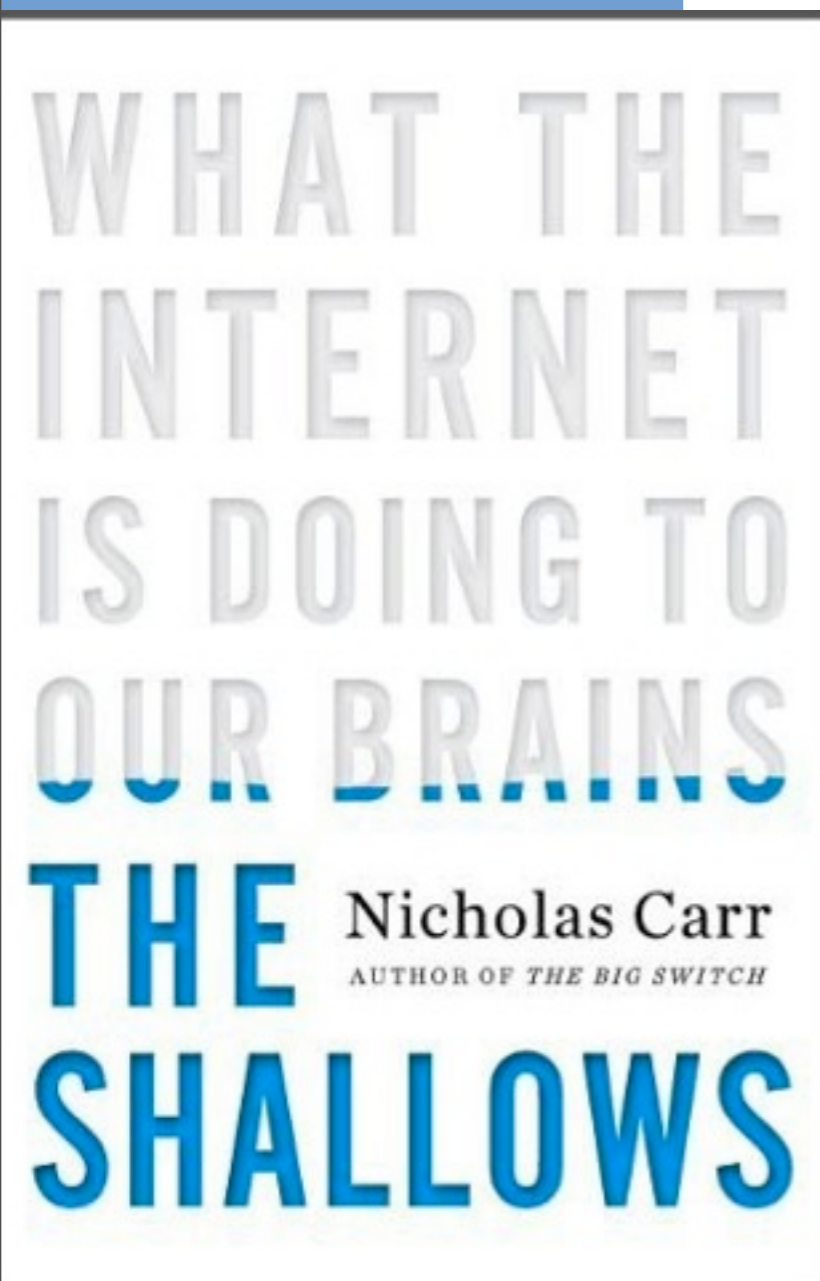
"Plato ...had such a love of books that he bought three books ... at the price of 10,000 *denarii*. Aristotle ... acquired a few books for three Attic talents which amounts to 72,000 *nummi*."

memory and forgetfulness

"An accomplishment ... which will improve both the wisdom and the memory of the Egyptians ...

"The discoverer of an art is not the best judge of the good or harm which will accrue to those who practice it. ...Those who acquire it will cease to exercise their memory and become forgetful; they will rely on writing to bring things to their remembrance by external signs instead of on their own internal resources."

not so ancient ...





Socratic concerns

speeches

rhetoric

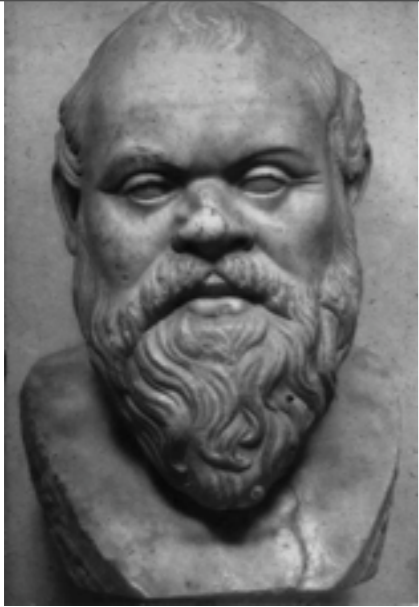
sophists

writing

truth

wisdom

dialectic



writing, wisdom, & truth

"**Writing** circulates equally among those who understand the subject and those who have no business with it."

"for **wisdom**, your pupils will have the reputation for it without the reality; they will receive a quantity of information without proper instruction, and in consequence be thought very knowledgeable when they are for the most part quite ignorant."

"**Truth** is not enough for you; you think it matters who the speaker is and where he comes from."

dialectic

"**Writing** involves a similar disadvantage to painting ... if you ask [words] what they mean ... they simply return the same answer over and over ... writing cannot distinguish between suitable and unsuitable readers ...

"when a man employs the art of **dialectic**, and, fastening upon a suitable soul, plants and sows in it truths accompanied by knowledge ... such truths can defend themselves ..."



remember?

"But though books are easily procured, yet, even in this age of information, there are thousands in the lower classes that cannot read. Besides, it is a well-known truth, that the same precepts **inculcated by a living instructor, adorned by a proper oratory, enforced by a serious and authoritative manner, produce a powerful effect**, not to be experienced in solitary retirement."

Vicesimus Knox,

Essays Moral and Literary, 1778

6-Hof112-MS 16

[Hooke: "good wits have ill memories"]

Malebranche:
memory confuses
the mind]



living instructors?

"The people's University of the Air will have a greater student body than all of our universities put together." --RCA, 1932



KHANACADEMY
37,956,300 lessons delivered

Watch Videos  Do Exercises Join Us 

The Khan Academy is a not-for-profit 501(c)(3) with the mission of providing a world-class education to anyone, anywhere.


We are complementing Salman's ever-growing library with user-paced exercises—developed as an [open source project](#)—allowing the Khan Academy to become the free classroom for the World.

UDACITY

We believe university-level education can be both high quality and low cost. We are providing access to teachers to hundreds of thousands of students all over the world.



CS 101: BUILDING A SEARCH ENGINE
Taught by Professor David Evans and Professor Sebastian Thrun

LEARN MORE 

coming up:
social implications

overview

unintended consequences

authority of the book

technologies of the book

eyewitnesses

**Johannes
Trithemius,**
In Praise of Scribes 1492





the set up

Trithemius (1462-1516)

native of Trittenheim

Abbot of St Martin's, Sponheim, 1483-1505



Trithemius didn't like print?

the standard view?



"It is my greatest pleasure to own and to know all books I ever saw or which I knew to have appeared in print ... To my regret ... money was always lacking ... for the satisfaction of my passion for books."

St Martin's, Sponheim

1483: 48 books in the library **1505:** 2,000 books

IOANNIS TRITHEMI ABBATIS SPANHEMENSIS DE LAUDE SCRIPTORVM MANVALIYM LIBER.

Argumenta singulorum Capitulum.

CAPIT. Commendatur descriptores sacrorum librorum,
 II. Sacra scriptura vni et veteris testamenti laudatur.
 III. De veterum diligentia et amore erga libros.
 IV. Quantum finibus posuerit in describendis libris.
 V. Quomodo commensat monachi librorum scriptos.
 VI. Quomodo bonum et utile sit scribere.
 VII. Non debere descriptores castare ab inuentam typographiam.
 VIII. De orthographia et modo scribendi.
 IX. Quid agendum scribendis imperiis.
 X. Quales materias monachi debeant scribere.
 XI. An diebus festis licet transcribere libros vacare?
 XII. De discrimine scriptorum et episcopalium uocibus.
 XIII. De institutis scriptoribus et studio dicendo.
 XIV. Puerum sit commendabilis scriptorum multitudine?
 XV. De castitate et munditia librorum habenda.
 XVI. Exhortatio ad studium et amorem scribendorum librorum.

EPISTOLA IOHANNIS TRITHEMI ABBATIS SPANHEMENSIS AD DOMINVM GERLACVM ABBATEM TVITIENSIS CANOBII.

VENERABILI et amantissimo patri Domino Gerlaco de Trevisis Abbatii Treuicensis sancti Benedicti, frater Iohannes de Trithemio, etc.

COMMENDATIS SIMI VIRI, REVERENDIQUE IN CHRISTO PATRIS, DOMINI IOHANNIS DE TRITHEMIO ABBATIS SPANHEMENSIS, LIBER DE ECCLESIASTICIS SCRIPTORIBUS FELICITER INCIPIT.

Lemens sancte Romanae ecclesiae quartus a beato Petro (ut quibusdam placet) ordinatus episcopus, natione Romanus, vir sanctus & deo dilectus, morum quoque decore ornatus, cuius vita & passio in scripturis ecclesiasticis habentur, sedit in pontificatu nouem annis & decem diebus. In exilium pro fide Christi relegatus animo constanti. Obiit anno Traiani Caesaris tertio, domini autem ceterisimo tertio. Hic beatissimus martyr nonnullas fide & eruditione plenas seruit in persona Romanae ecclesiae scripsisse epistolas, de quibus extant praecipua Ad ecclesiam Corinthiorum Epistola vna. Ad Iacobum quoque apostolum Epistola dicitur, Clemens, Iacobo dicitur. Praeterea itinerarii vitae suae libri decem. Cum in urbe Roma. Item disputationis Petri liber vnus. Haec autem duo vltima volumina inter apocrypha computantur, ut patet, etc. Sedit Romana. Ferunt eius & alia epistola, sed apocrypha. Iohannes Ariopagita Atheniensis, philosophus insignis, per beatum Paulum apostolum conuersus ad fidem, primus (ut quibusdam placet) Atheniensis episcopus ordinatus est, vir eximie sanctitatis & incomparabilis doctrinae. Hunc post decessum apostolorum, beatus Clemens Romanae urbis episcopus cum Rustico presbytero & Eleutherio diacono ad fiduciam gentibus verbum dei misit in Fraciam, alio in eius locum ordinato episcopo. Scripsit autem graeco sermone multa praeclara opuscula. De quibus apud Latinos tantum inueni subiecta.

De celesti hierarchia	lib. vni. Omne datum optimi &
De ecclesiastica hierarchia.	lib. i. Sacerdotum quidem nisi.
De diuinis nominibus	lib. i. Nunciam vir dei post.
De mystica theologia	lib. i. Trinitas super substant.

2 2 De sym

Trithemius & the press

De Laude Scriptorum

Trithemius "proved particularly deft at exploiting the printing press. ... He had his book... published in Mainz by Peter von Friedberg, his favourite printer, and ... set the work not in Gothic type normally used in Germany, but in an innovative and attractive Roman font".

--Grafton & Williams, *Christianity and the Transformation of the Book*, 2006.



reading between the lines

internal battles

contemplation, manual labor, preaching

vs

scribal practice

"The dedicated and sincere scribe ... will not receive less than the preacher"

book collecting

"There are some who reproach lovers of books for having ... too many"

Monks "are so detested that it is considered bad luck if one crosses your path"

Erasmus,
In Praise of Folly,
1511

"brothers, concentrate now all your fervor on the sacred books, for the salvation of your souls and **the order**"

external battles

humanism & the university

"In the 700 years between the Fall of Rome and the 12th century, it was the monasteries which enjoyed an almost complete monopoly of book production and so of book culture. . . . from the end of the 12th century a profound transformation took place . . . **reflected in the founding of the universities and the development of learning.**"

--Febvre & Martin,

The Coming of the Book, 1984

6-Hof112-MS 23



survival

LASERMONKS.COM
COMMERCE WITH COMPASSION



LaserMonks.com
We don't just sell black powder.

We offer
Ink & Toner
& that
Changes Lives



another concern

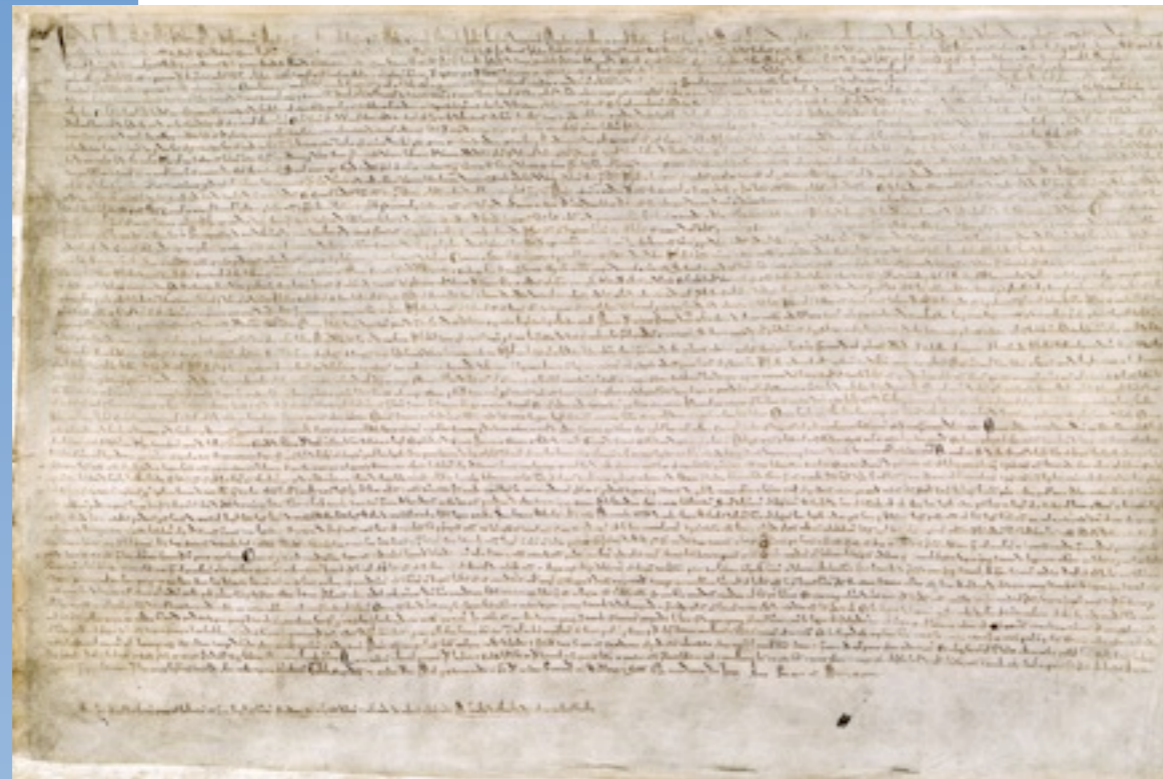
a reasonable lament?

"The written word on parchment will last a thousand years. The printed word is on paper. How long will it last? The most you can expect of a book of paper to survive is two hundred years. Only time will tell."



how long?

magna curta?



from
parchment v paper
to
parchment v bits?

Library (Copy under Revision)
Hardwicke Library

702 e8

[Magna Carta and Laws and Statutes of England]

14th C

decorated initials in blue and red, rubrication

144 vellum leaves, ms on verso and recto. Full early blind-stamped calf. Rebacked

C91.

6-Hofl12-MS 26

overview

unintended consequences

authority of the book

technologies of the book

eyewitnesses



determined technologies?



stone

clay

wood

wax

parchment/vellum

papyrus

paper

palm

silk

"immutable mobiles"
--Bruno Latour



material changes

geographical determinism?

parchment at Pergamum

papyrus at Alexandria

palm in India (*pattachitra*)

silk in China





material changes

geographical determinism?

parchment at Pergamum

papyrus at Alexandria

palm in India (*pattachitra*)

silk in China

"the parchment alone in a fine Bible, even allowing for the shorthand script of the day, represented a flock of perhaps three hundred sheep"

-- John North, *God's Clockmaker*, 2005



technological leaders?



Ts'ai Lun
62-121

paper

China, 200 bce

Korea, 3d century ce

India, 5th century

Japan, early 7th century

Islam, 8th century

Jews, 10th century

Byzantium, 9th century

Western Europe, 11 century

1145, Roger of Sicily ordered all charters on paper to be copied to parchment then destroyed

technological leaders?



Ts'ai Lun
62-121

paper

China, 200 bce

Korea, 3d century ce

India, 5th century

Japan, early 7th century

Islam, 8th century

Jews, 10th century

Byzantium, 9th century

Western Europe, 11 century

w. Europe:

Spain 1056 [?]

Italy 1255

France 1348

Germany 1390

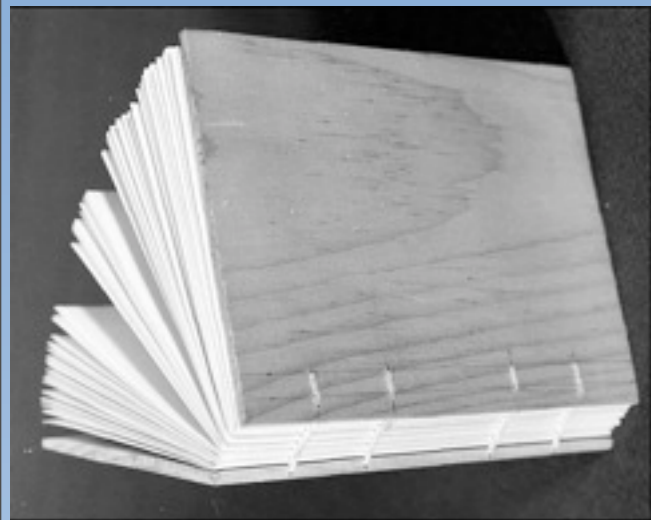
Switzerland 1411

Britain 1494

Russia 1690

USA 1690/1

"Homerus ...
Vergilius ...
Cicero ... Titus
Livy ... in
membranis...quam
brevis immensum
cepit membrana"
-Martial (c38-103)
Epigrams



missing revolution?

rolled to flat

"the revolution between the second and fourth centuries that changed the very structure of the book by substituting the **codex** for the roll"

--Roger Chartier, *Forms and Meaning*, 1995

"Gutenberg did not so much start an information revolution as introduce a second technology for the creation of the familiar **codex**."

--Jessica Brantley,

"The Prehistory of the Book," 2007

6-Hof112-MS 31

evolutionary force?

"The **need** for readily available information, which had been steadily rising, was accelerated by the advent of Christianity ..."

"The **need to find information** more rapidly than is possible in a papyrus-roll-form book initiated the development of the Greco-Roman codex in the second century ..."

-- Frederick Kilgour,
*The **Evolution** of the Book*, 1998



Pompeii, c 79 ce

superior technology?



random access

one handed

two-sided

pagination

marginalia

footnotes

indexes





trivializing the past?

handy

pages

divisions

(incipits,
explicit, colophons,
sillyboi)



random access

one handed

two-sided

pagination

marginalia

footnotes

indexes



Edwin Smith Papyrus

c. 1600 bce

NY Academy of Medicine

evolutionary doubts

"No evidence whatever to indicate whether the change of material influenced the change of form, or vice versa... . papyrus roll, the papyrus codex, the parchment roll, and the parchment codex... all perfectly adequate and acceptable forms of book."

--Colin Roberts & T.C. Skeat,
The Birth of the Codex, 1983



formal changes

parchment to paper

China, 200 bce

Korea, 3d century

India, 5th century

Japan, early 7th century

Islam, 8th century

Jews, 10th century

Byzantium, 9th century

Western Europe, 11 century

scroll to codex

Christians, 2d century

Islam, 8-9th century

Jews, 8-9th century

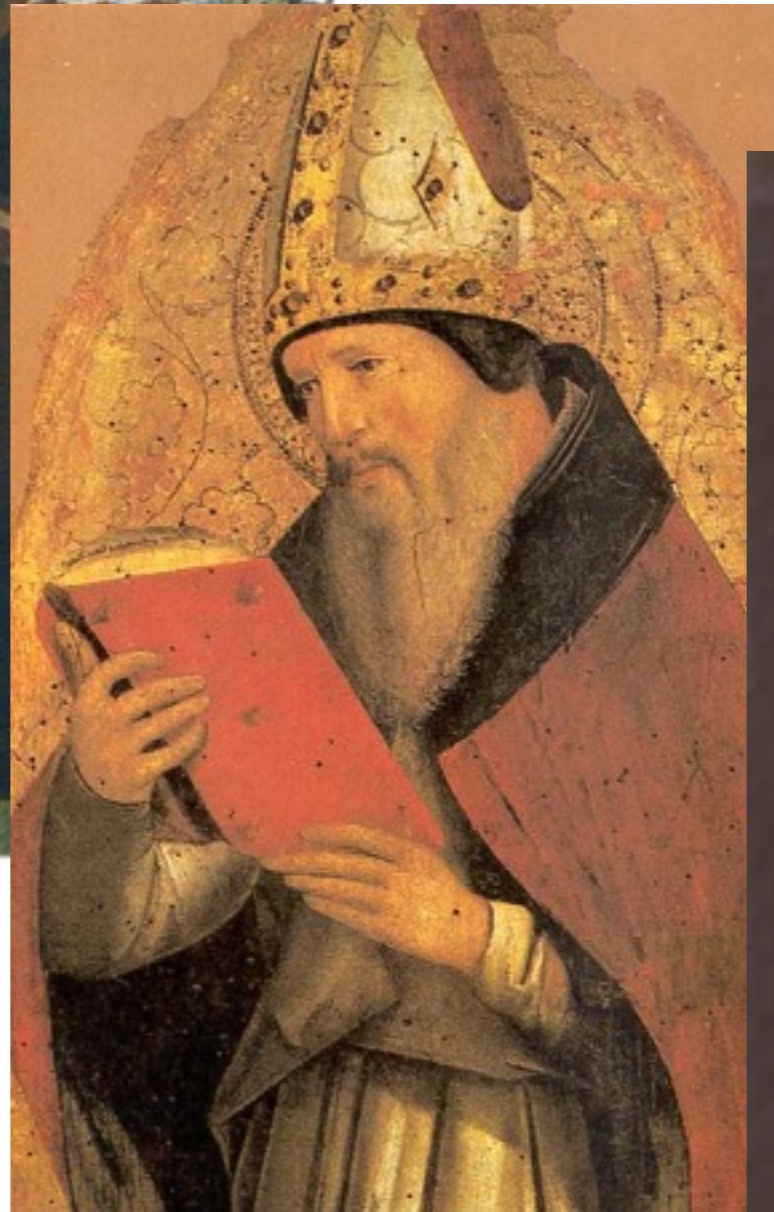
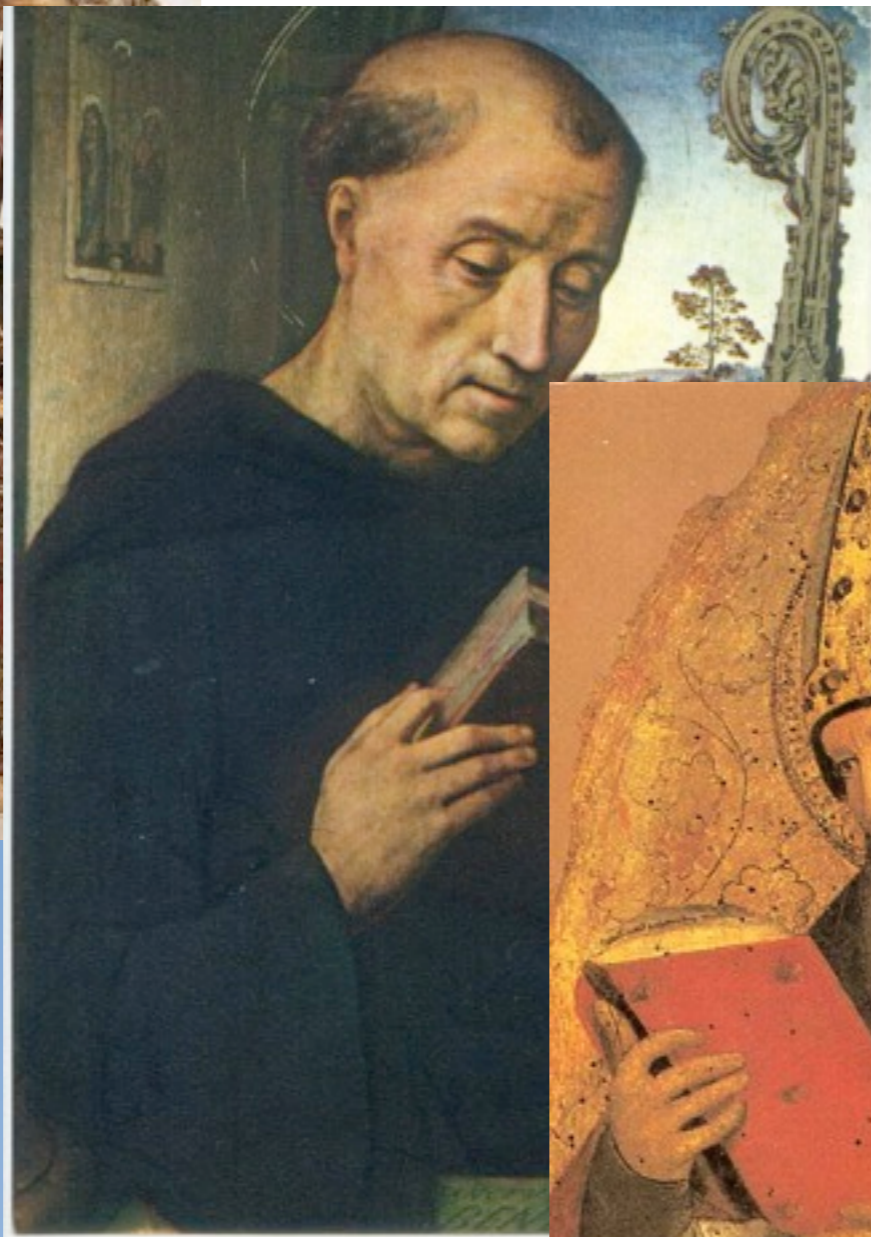
China, 9th (butterfly)

13th (thread binding)

Korea, ?12th century (sutra binding)

Japan 18th century

technological triumph?





caveat lector

"In late antiquity, all **authority** was founded on Scripture...and the highest authority, the authority of the church, was represented by the codex."

--Cavallo, "Du Volumen au Codex," 1997

"[P]agans ... continued to regard it as a culturally inferior form. In contrast, the great majority of Christian texts were already in the form of codices."

--Peter Stallybrass, "Books and Scrolls," 2002

"the ordinary believer could easily stumble in this thicket of discordant editions"

--Resnick, "Codex in Early Jewish and Christian Communities," 1992

more change

changing readership

"The late medieval book differs more from its early medieval predecessors than it does from the printed book. ...

"The expectation of readers was changed, and this was reflected in changes in the physical appearance of books. A writer organized his work for publication, and if he did not ... then a scribe would .. **The production of books became more sophisticated**"

--Parkes, "Influence of the Concepts " 1976

6-Hof112-MS 39



"possibility that ... Arabic manuscripts inspired similar features ... in 13th century Europe" --Ann Blair, *Too Much to Know*, 2010

evolving technology

still with the manuscript

running heads

subdivisions: books, chapters

analytical tables of contents

chapter headings

cross references

alphabetical order

page numbers

indexes

overview

unintended consequences

authority of the book

technologies of the book

eyewitnesses



an information age?

preparing the ground

Domesday

cadastre/survey

dates

names

written evidence

centralization

down to business

"The oldest writings to survive to our time were inscribed five thousand years ago by temple **bureaucrats recording economic transactions ... crops, animals, manufactured goods**"

-- Lerner, *The Story of Libraries*, 1998

"In the twelfth century... magnates used documents occasionally ... In the thirteenth .. laymen began to **convey property** to each other by charter; in the latter half ... this practice extended below the gentry class to some peasants.

-- Clanchy, *From Memory to Written Record*, 1993

"If you ask [documents] what they mean ... they simply return the same answer over and over again ..."

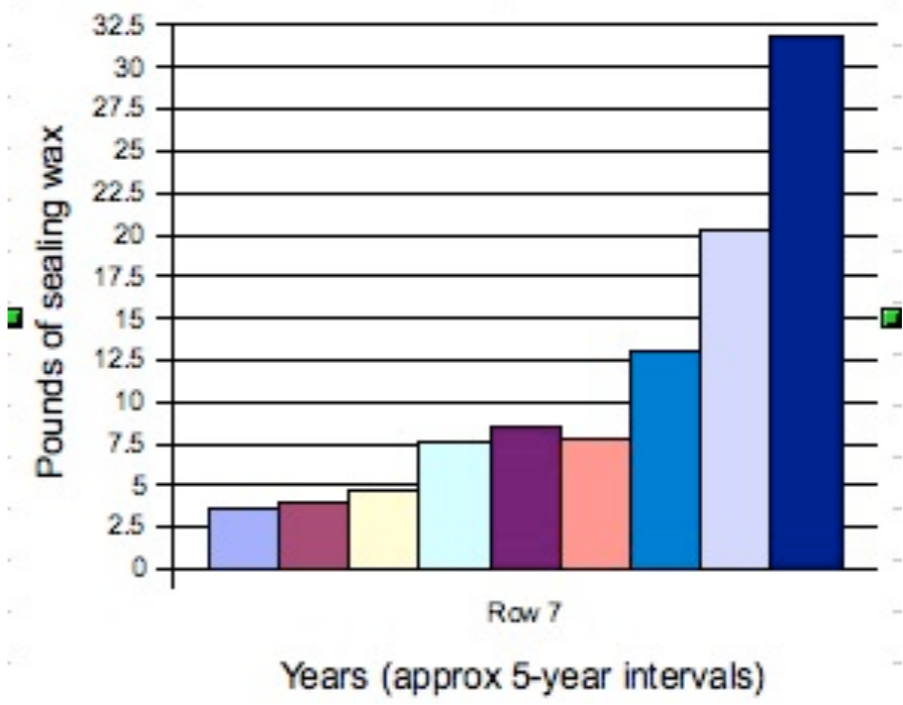
Socrates

how to seal the deal

"We don't accept the evidence of monks against bishops, why should we accept that of a sheepskin?"



Sealing wax consumption, 1226-1271



quo warrento?

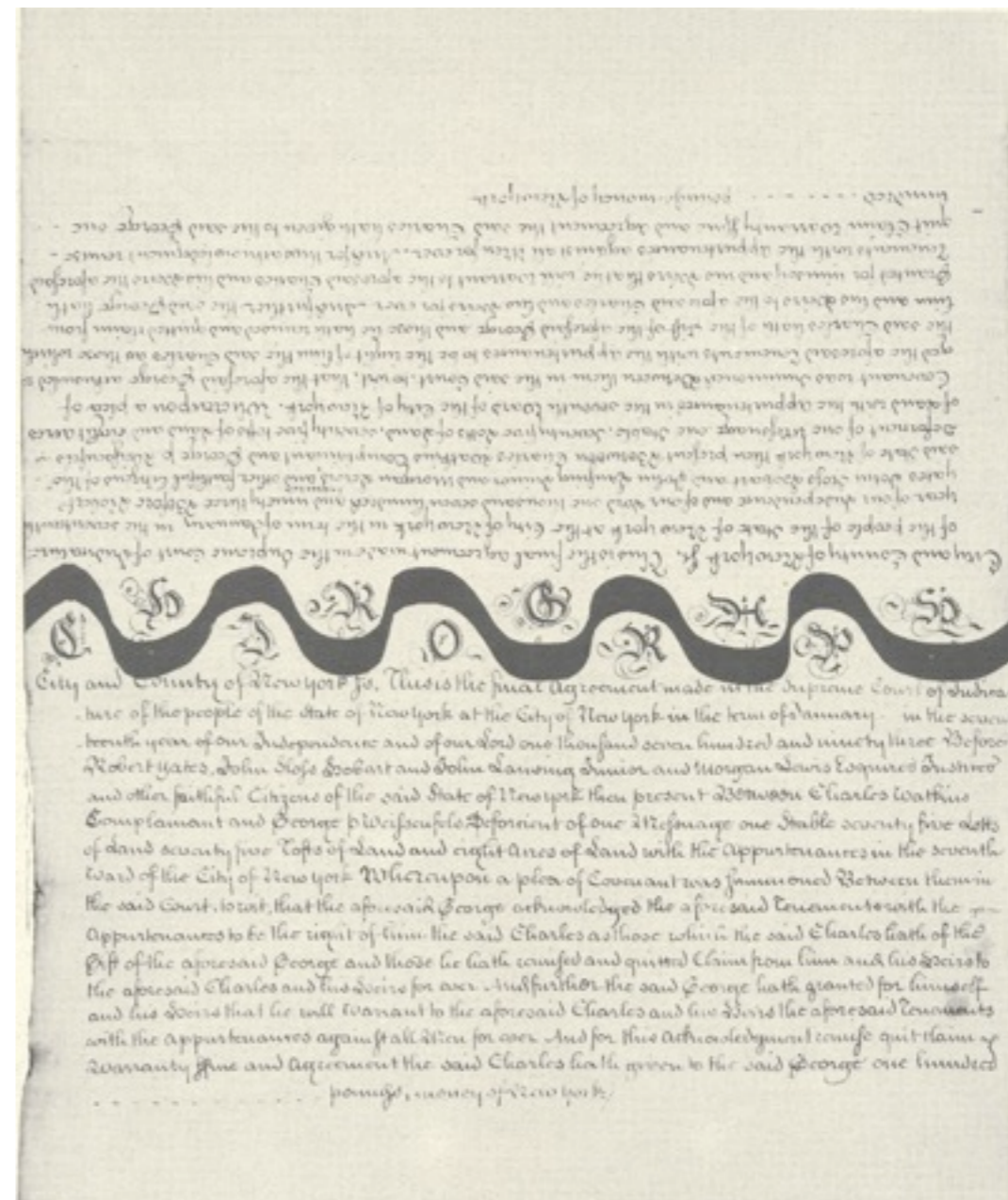
"usual practice ... to preserve the memory of a title to property in the object that symbolized their possession ... Earl Warenne in a gift to Lewes priory in 1147 had given it possession by the hairs of his head; these, together with his brother's, were cut off before the altar."

causal connections?

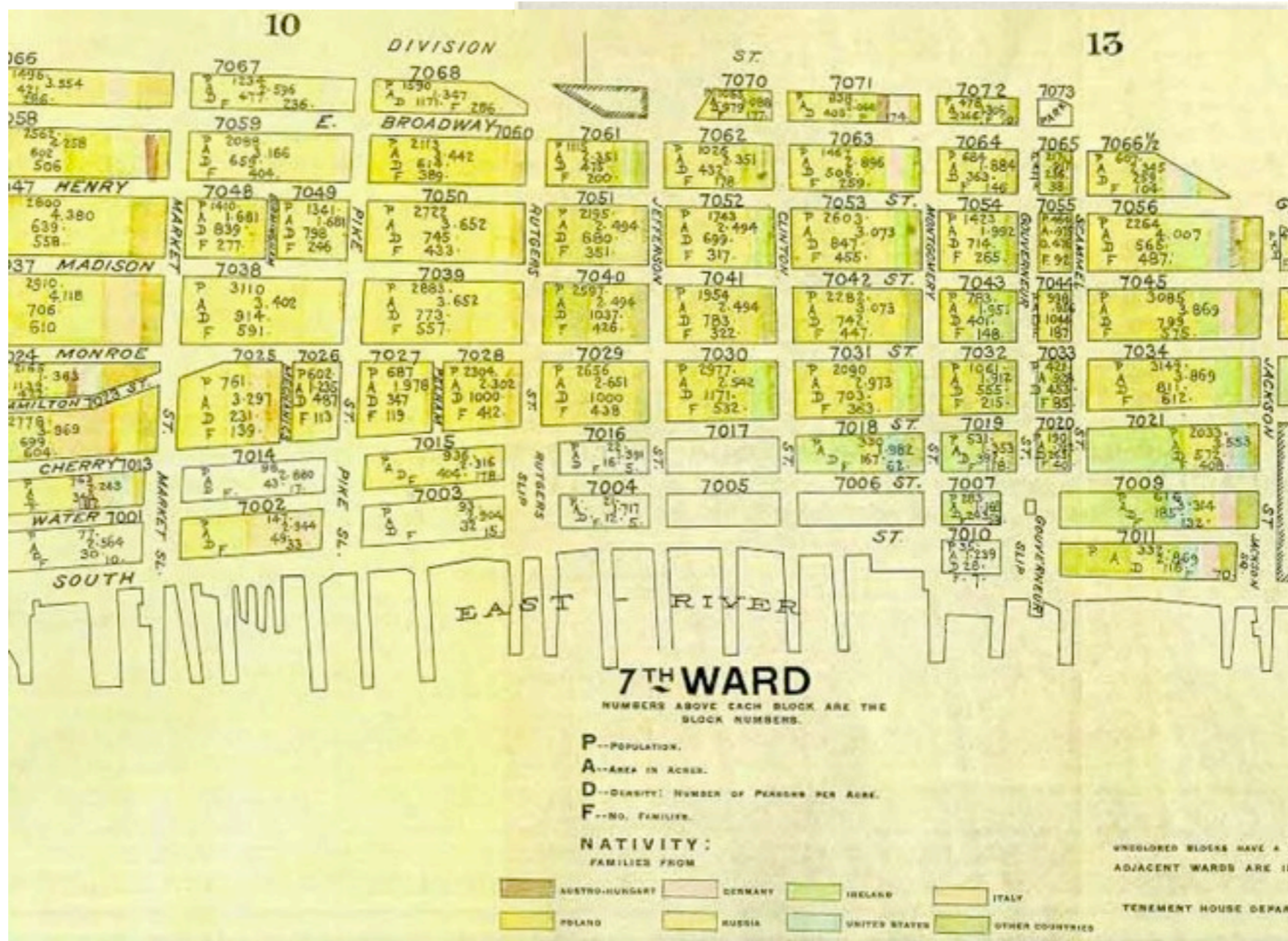
... rusty swords, knives, cups, staffs cut from the land; chirographs, seals, signatures,

chirograph

"Fine and Recovery:
Conveyance of
property,
7th Ward NYC, 1793



chirograph



ancient issues?

Buri Buri land grant 1827-1872



-Hof112-MS 47

Title:

[Diseño del Rancho Buri Buri : San Mateo Co., Calif.]

Description:

4362 B84 On verso: Deposited ... November 30th, 1860. From: U.S. District Court. California, Northern District. Land Case 101 ND, page 481; land case map D-231 (Bancroft Library). José de la Cruz Sanchez, clmt. Pen-and-ink and watercolor. Relief shown by shading.

Creator/Contributor:

United States. District Court (California : Northern District). Land case. 101, Related Name Indexing Term

Date:

1860

Contributing Institution:

UC Berkeley, Bancroft Library

overview

unintended consequences

authority of the book

technologies of the book

eyewitnesses



unintended consequences

quo warrento

"No document coming from such centres of proved fabrication as Westminster, Evesham, Winchester cathedral, Chertsey and Malmesbury should be accepted at its face value without close examination. ... Ancient monasteries like Chertsey had traditionally forged charters. Now that the king was keeping copies ... abbots ensured that their forged documents were reinforced by inspection in the Chancery and enrollment among the royal records. The Chancery rolls, which were intended to prevent fraud, thus became a means of making forgeries official."

--Clancy, *From Memory to Written Record*



science of diplomatics

Jean Mabillon (1632-1707)

De Re Diplomatica, 1681

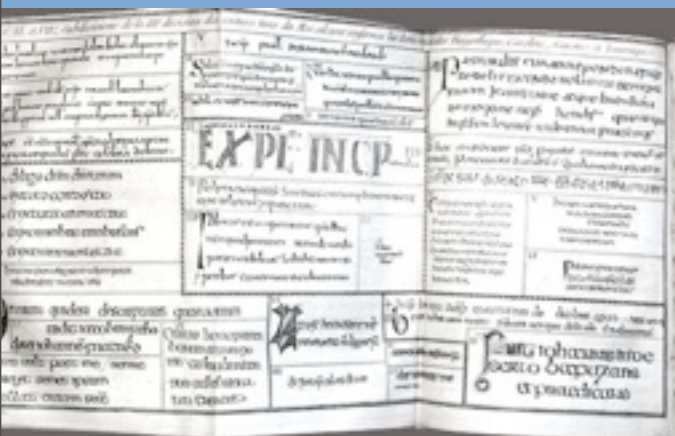
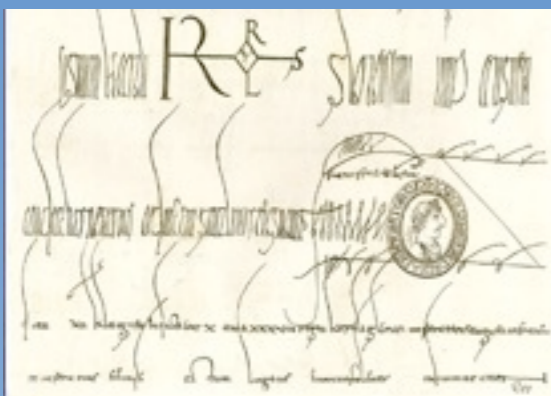
"the Reformation era ... bringing to light thousands of documents .. hitherto inaccessible and unknown. ... France pioneered in this new historical research ... Mabillon Montfaucon."

-- James Thompson,
"The Age of Mabillon," 1942



"**Truth** is not enough for you; you think it matters who the speaker is and where he comes from."

beyond the page



"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, "Jean Mabillon," 1963

6-Hof112-MS 51



from authority to ...

a guide to forgery

Mabillon "had exposed the fabricated charters of the Carmelite Father Andrew, in a model memorandum which later fell into the forger's hand, and was taken by him to heart with such good effect that he was able with a subsequent fabrication to have his revenge by planting one of his forgeries ... on Mabillon himself"

--David Knowles

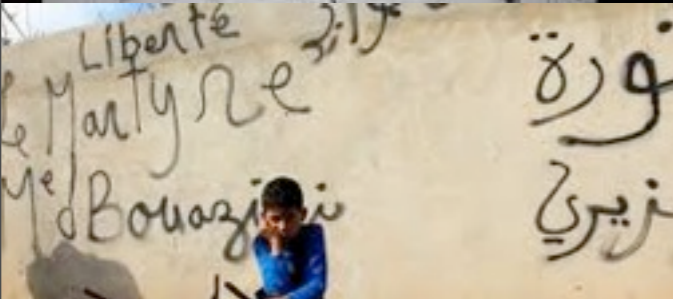
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"this will kill that"?

manuscript after print

accounting

music

note taking

personal communication

"subversive forms"

The New York Times

in the news

Jan 27, 2012

Teaching Tibetan Ways, a School in China Is an Unlikely Wonder



Dan Levin for The New York Times

A student practicing Tibetan handwriting at the Anymachen Tibetan Culture Center. Students also learn Mandarin and English.

print "revolution"

Week 4

7 Feb: Print Revolution

Required reading:

- Elizabeth Eisenstein, 'The Emergence of Print Culture in the West, *Journal of Communication*, Winter (1980): 99-106.
- Adrian Johns' "Personal Note" in "Historical Perspectives on the Circulation of Information," *American Historical Review* 116(5) (December 2012): 1392-1435, **you are only required to read the comments by Johns on pp 1394-6.**

Additional material:

- [Grafton, Johns, Einstein], "AHR Forum: How Revolutionary was the Print Revolution?" *American Historical Review*, 107 (1, February 2002).
- Watch: Fry, Stephen. 2008. *Stephen Fry and the Gutenberg Press*. From the series *The Machine that Made Us*. BBC.

assignment

Eisenstein, Trithemius, and Plato all discuss the relation of the written word to education. How do the views of Eisenstein differ from those of *either* Plato in *Phaedrus* or Trithemius in *In Praise of Scribes*. Give examples and say who you think has the better argument. (If you think Adrian Johns's comments throw light on these questions, do, of course, feel free to use them.)