HISTORY OF INFORMATION
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Why HOFI?

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INFO 103, COG SCI 103, HIST C192, MSC 104C
History of Information
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Itinerary, 1/20

The history of "information": Why now?
What historical assumptions does the "information age" usually imply?
   The determinant role of "information technology"
   Novelty: "Never before….

Why does it matter that we get Hofl right?
   Looking forward: How does history help us to understand the present & predict the future?
   Looking backward: How useful is "information" as a principle for organizing & understanding the past?

Outline of course structure, requirements, grades (Paul)
The history of "information": Why now?

Every age gets the history it needs: Gutenberg in the machine age

The monks around me besieged me so with eager questions: What is this curious thing? What is it for?...

"It is a public journal...The lines on it are not written by hand, but printed; by and by I will explain what printing is. A thousand of these sheets have been made, all exactly like this, in every minute detail--they can't be told apart."

Then they all broke out with exclamations of surprise and admiration: "A thousand! Verily a mighty work--a year's work for many men."

"No--merely a day's work for a man and a boy." They crossed themselves...

Mark Twain, *A Connecticut Yankee In King Arthur's Court*, 1889
The history of "information": Why now?

Article on "printing" in the Encyclopedia Britannica 11th ed., 1911
The coming of the information age

Relative frequency of machine age, atomic age, space age and information age in Google Books, 1920-2000
The coming of the information age

Relative frequency of *machine age*, *atomic age*, *space age* and *information/digital age* in Google Books, 1920-2000
Defining the "Information Age"

1960  R. S. Leghorn: Present and anticipated spectacular informational achievements will usher in public recognition of the ‘information age’, probably under a more symbolic title.


*Information Age* is a term that has been used to refer to the present era, generally beginning within ten years of 1990. The term alludes to the global economy's shift in focus away from the production of physical goods and towards the manipulation of information. Wikipedia
Historical assumptions implicit in "the Information Age"

The determinative role of technology
The march of progress
The unprecedented present: “Never before…”
Implicit historical assumptions about "The Information Age"

The historical role of Technology

However you date the "dawn" of the IA, presumed to be tied to new technologies (Jacquard loom, Babbage's "difference engine," punch cards, Eniac, Internet, etc.)
History as a Whiggish Progression leading to…. us

Whig theory of history = history is a triumphant (and, usually, inevitable) progress toward the present state...

... the history of our country during the last hundred and sixty years is eminently the history of physical, of moral, and of intellectual improvement. Thos. Babington Macaulay, 1848

That great, growling engine of change -- technology.
Alvin Toffler, 1970.
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Why HOFI is not a history of information technology

The only course of its kind!
Why HOFI is not a history of information technology

Well, almost...
Problem 1: Tracing Technological "Antecedents"
Tracing Technological "Antecedents"

- Schickard's calculator 1623
- Jaquard loom 1801
- Babbage's difference engine 1820's
- Hollerith tabulating machine 1890
- Apple II 1977
- DEC PDP-11 1965
- Eniac I 1946
“What was the first computer”?

“Each writer creates his own antecedents”
—Jorge Luis Borges

Antikythera mechanism, ca.150-200 B.C.

Abacus 2400, B.C.

Napier's bones 1617

Stonehenge, 3100 B.C.

Roman Calendar, ca 60 BC

Ishango bone, 20,000 B.C.
Problem 2: What are "Information Technologies"

What makes for "Information technology"? Prototypical instances of modern "IT"
More peripheral instances of "information technologies"
Non-IT?

What isn't IT?
Rethinking "Information Technologies"
Rethinking "Information Technologies"
The Interconnection of Technologies: Managing correspondence

James Watt 1780

Aniline dyes (1856)

Wooten desk

Mercantile Office, 1876
The Interconnection of Technologies: Managing correspondence

Christopher Latham Sholes

Ralph Wedgwood (1806)

Sholes & Gidden type-writer 1873
The Interconnection of Technologies: Managing correspondence

137. Reading Exercise.

22. All the characters given in this lesson are derived from another elliptical figure; thus:

P B F V CH J SH

The curve on the left side of the figure represents P and B, that on the right side, F and V, and the straight line, CH, J, SH. All these characters are written downwards.

23. Should you find any difficulty in memorizing these signs, the following mnemonics may be of assistance:

Graphophone 1887
The Social Setting of Technologies: Managing correspondence

The Feminization of the Office Work Force
The Shock of the New: "Never Before"

**Assumption:**
The advent of the Information Age entails fundamental and unprecedented changes in the nature of commerce, organizational structure, education, politics & public discourse, national identity, news and entertainment, community and personal relations – and in the nature of change itself.
"Been there, done that"?: History provides antecedents for:

- The digital generation gap – immigrants and "digital natives"
- "The death of distance" the "annihilation of space and time"
- "The end of the book"; "The death of the newspaper"; economic models for the new media
- "information overload" Organizing an unprecedented mass of information?
- Piracy and IP in the information age
- Problems of reliability; who can you trust online?
- Threats to individual privacy
- What role for the government in building infrastructure, monitoring use?

*But does that mean there's nothing new under the sun?*
Why Study History?:
Looking back to look ahead

Every age writes the future in its own image

Norman Bel Geddes, General Motors Futurama, 1939 World’s Fair
Why Study History?:
Looking back to look ahead

General Motors Futurama, 1964 World's Fair
"The American of tomorrow, clothed in plastics from head to foot, will live in a plastics house, drive a plastics auto, and fly in a plastics airplane." *Popular Mechanics*, 1940

Monsanto, House of the Future, Disneyland, 1957 -- "Everything is ultra-modern and almost entirely synthetic."
Getting the Future Wrong

Because everything in her home is waterproof, the housewife of 2000 can do her daily cleaning with a hose.
Anticipating Change

What would be most surprising to the characters of "Father Knows Best" if they could see the world of 2013?
Anticipating Technological Change
Anticipating Social Change: What would grampa have said?
Anticipating Social Change: What would grandad have said?
Anticipating Social Change

What will make our predictions most quaint or ridiculous to our descendants?

Not just getting the technology wrong…

Recognizing the historical roots of categories we take for granted—news, information, intellectual property, objectivity, privacy, etc.

(PD, next time)
Route Map

A changing subtitle...
Exercise for 1/22

Pick one of the following and write a (very) brief story or anecdote in which it serves as an "information technology," perhaps in conjunction with other things. Try to make your stories ingenious without being completely implausible. Bring your answer to class for discussion (but no need to hand them in).

- a necktie
- a blanket
- a rubber ducky
- a can of beans
- a lemon

"Extra credit" if you manage to use two of these in your story.