

LITERACY AND CONSEQUENCES

7/13/11

History of Information

Paper

2

- successful paper will draw connections between ***two*** of the readings in a way that demonstrates an original and well-argued understanding of the material

Presentations – Part 1

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- As a group:
 - ▣ post an entry to the class mailing list (i103@school)
 - ▣ on the day before class
 - ▣ that analyzes what you see as the key issues of the material
 - ▣ the material includes all of the required readings for that day, as listed on the course website

Presentations – Part 2

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- In-class presentation
 - ▣ ~15 minutes in length + ~10 minutes discussion
 - ▣ builds on the mailing list entry (including your interpretation of the readings)
 - ▣ relates the material for that session to the overall themes of the course
 - ▣ discusses related topics based on your group's interests
 - ▣ email slides (if used) before class starts to instructors
 - ▣ plan on leading class discussion immediately following your presentation

Recap

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- Tech Determinism
- Writing Systems

Quiz #1

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- 1. Which author from our reading views symbols, images, and notations “functionally” as part of understanding prehistory?
- 2. Which author(s) trace the alphabet to Ancient Greece? Based on this connection, name one or two claims they make about writing.
- 3. Besides Heilbroner, name an author or article that you think follows the model of determinism. Give reasons why.

"This is all engagingly told, though Gleick's focus on information systems occasionally leads him to exaggerate the effects technologies like printing and the telegraph could have all by themselves. For example, he repeats the largely discredited argument, made by the classicist Eric Havelock in the 1970s, that it was the introduction of the alphabet that led to the development of science, philosophy and "the true beginning of consciousness."

- Geoff Nunberg, New York Times Book Review, March 2011

Many “Literacies”

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- Nominal Literacy
- Computer Literacy
- Scientific Literacy
- Mathematical Literacy
- “Functional” Literacy
- Political Literacy
- Digital Literacy
- Cultural Literacy
- Health Literacy
- Physical Literacy
- Media Literacy
- Twitter Literacy
(Howard Rheingold)
- “Literacy Literacy”

Literacy Crisis?

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- That's the drift of screen reading. Yes, it's a kind of literacy, but it breaks down in the face of a dense argument, a Modernist poem, a long political tract, and other texts that require steady focus and linear attention — in a word, slow reading. Fast scanning doesn't foster flexible minds that can adapt to all kinds of texts, and it doesn't translate into academic reading. If it did, then in a 2006 Chronicle survey of college professors, fully 41 percent wouldn't have labeled students "not well prepared" in reading (48 percent rated them "somewhat well prepared").

-Bauerlein, Online Literacy is a Lesser Kind, Chronicle of Higher Education, 2008

Src: <http://chronicle.com/article/Online-Literacy-Is-a-Lesser/28307>

The Origins of the Alphabet in Greece

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- First “true” alphabet emerges ca 750 B.C.
 - ▣ “Flame of Literacy” spread along Phoenician trade routes



Src: <http://www.danstopicals.com/phoenicians3.htm>

The Greeks' Innovation

11

- Revising Phoenician script by providing symbols for individual consonants and vowels in isolation

A Work in Progress

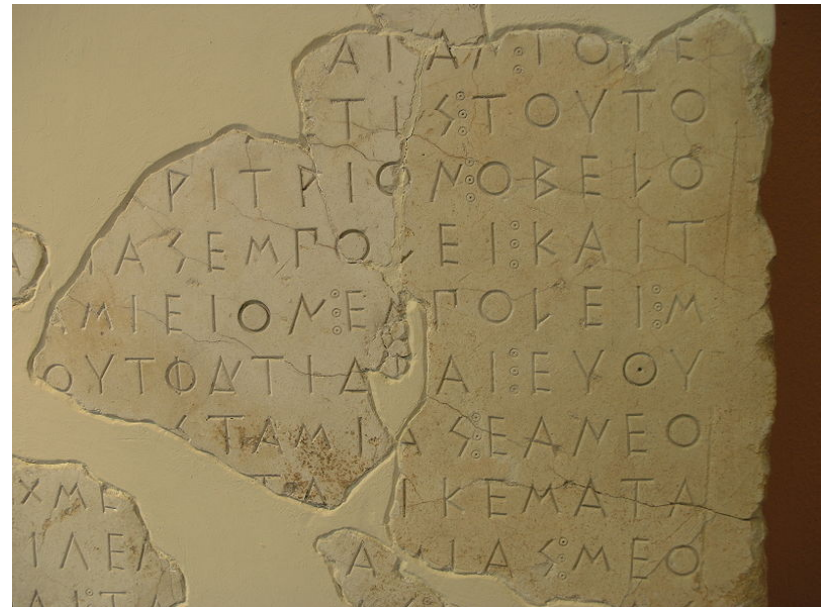
12

□ Stoichedon

- Horizontal/Vertical alignment – no spaces, punctuation
- Sacred law concerning temple worship in Acropolis
- 4th-5th C BC

□ Boustrophedon

- textgoesoneway
- niagakcabnehtdna
- justlikeanoxturning
- hguolpahtiwdleifa



Src: http://en.wikipedia.org/wiki/File:EPMA-6794-IGI%283%2948-Sacred_Law-3.JPG

Punctuation (An Aside)

13

- Orthographic elements such as word-spacing, punctuation, paragraphing, etc. occur later
 - woman without her man is nothing
 - to be or not to be that is the question
 - you don't know jack

Punctuation (An Aside)

14

- Orthographic elements such as word-spacing, punctuation, paragraphing, etc. occur later
 - woman: without her, man is nothing!
 - woman, without her man, is nothing.
 - To be, or not to be: that is the question...
 - To be or not. To be, that is. The question?
 - You don't know, Jack.
 - You don't know Jack?

Emergence of Literate Societies

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- In early literate societies, literacy restricted to small priesthood or guild
- (association of literacy w/ magic)
- Functions of literacy restricted to record-keeping, administration, rituals, laws, monumental inscriptions, etc.

Emergence of Alphabetic Societies

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- Alphabetic scripts are easier to learn, facilitate development of widespread literacy.
 - "This invention... could be learned by a majority of the population, thus creating the possibility of a popular literacy." Havelock
- Aided by introduction of papyrus from Egypt.
- Expansion of functions of literacy to other genres -- poetry, history, letters, etc.
- By 5th century BC, Greece is an "alphabetic society" (Havelock)

Nunberg's "Alphabetolatry"*

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- The premise that the technology of communication controls the content of what is communicated has been popularized in connection with modern radio, cinema, and television. I am applying it in a more radical fashion to a shift in the character of the human consciousness which occurred in ancient Greece, and which we inherit. Briefly I am arguing that the history of the human mind, as of the human language, falls into roughly two epochs, the pre-alphabetic and the post-alphabetic.

-Eric Havelock

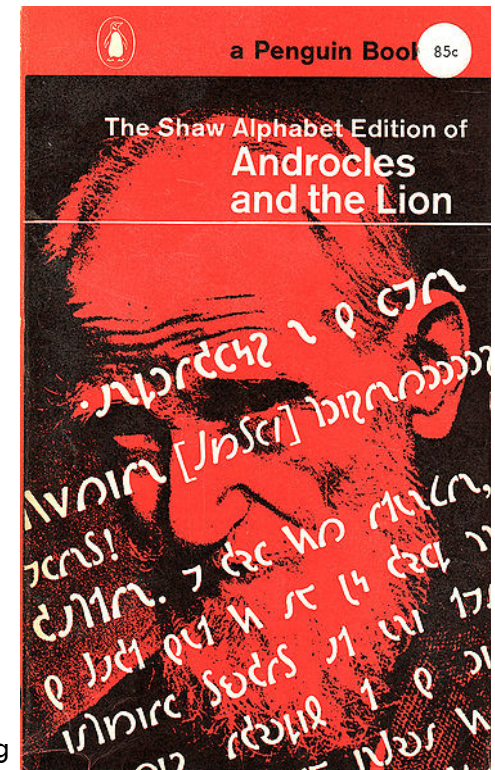
*Alphabet + Idolatry = Alphabetolatry

Alphabetic vs. Logographic systems

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Virtues of "pure" or "phonetic" alphabetic writing:

- ▣ Ease of learning
- ▣ Typographic simplicity
- ▣ Ease of processing



Src: http://en.wikipedia.org/wiki/File:Shaw_alphabet_paperback.jpg

Alphabetic vs. Logographic systems

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- Virtues of logographic systems
 - Doesn't privilege one dialect. Symbolic importance for linguistic community -- cf irregularity of English spelling.
 - "Purely" phonetic systems can lead to ambiguities; Cf French *os, ô, eau, eaux, haut, hauts, au, aux, etc.*
 - How "phonemic" is English?
 - *famous: uh*
 - *should: U*
 - *journey: er*
 - *you: oo*
 - *loud: ow*
 - *through –oo*
 - *bough – ow*
 - *though – oh*
 - *cough – awf*
 - *thought – aw*
 - *tough – uhf*
 - *And...*

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 - *should*: U
 - *juourney*: er
 - *yoou*: oo
 - *looud*: ow

 - *through* –oo
 - *boough* – ow
 - *though* – oh
 - *coough* – awf
 - *thought* – aw
 - *toough* – uhf
 - And...hiccough – up

Literacy and Ideology

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- Universal literacy seen as tool for cognitive and social development
 - Is it justified?

Consequences of Literacy

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- Social
- Cultural
- Cognitive

Social/Cultural Consequences

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- The invention of history (“liberates from the tyranny of the present”)
- The elimination of “structural amnesia” and “homeostasis”
- Ability to challenge tradition favoring inconsistency (intellectual skepticism)
- Spread of religion ◆

- The separation of truth from myth
- Democracy and new forms of civic and political participation
- Ability to govern and organize at a greater range
- Development of modern science

More Social/Cultural Consequences

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- Inability to participate “fully in cultural tradition”
- Increase in social stratification through differentiation
- Separation of public and private?
- The whole idea of individuality?
- [So how do these reconcile with arguments about democracy?]

Cognitive/Psychological Consequences

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- Logical thought and deduction
- Abstract thought and categorization
- Individual thought (as opposed to collective thought)
- Loss of memory (?)
- Objectivity and rationality
- “Writing restructures consciousness” (Ong, Walter. 1982. *Orality and Literacy*)

Historical Comparison with China and India

26

- What assertions does Gough (1968) make about literacy in China and India?

Historical Comparison with China and India

27

- Distribution of literacy a result of social stratification rather than the reverse
- In China, alphabet not required for widespread literacy
- Strong oral tradition (as in ancient Greece)
- Emphasis on the mythical/mystical

Deconstructing “Literacy”

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- Scribner and Cole
 - Field study of the Vai, a traditional African society
 - Acquired literacy **without** formal schooling
 - Literate in English, Arabic, and Vai
 - Writing used for a wide variety of functions
 - “uses of writing for institutional purposes are fully within the grasp of **uneducated, but literate**, Vai people.”
 - Found no evidence of “general” consequences of literacy

THE COMPLETE VAI SYLLABARY

	i	a	u	e	ɛ	ɔ	o
p	𐄂	𐄃	𐄄	𐄅	𐄆	𐄇	𐄈
b	𐄉	𐄊	𐄋	𐄌	𐄍	𐄎	𐄏
ɓ	𐄐	𐄑	𐄒	𐄓	𐄔	𐄕	𐄖
mɓ	𐄗	𐄘	𐄙	𐄚	𐄛	𐄜	𐄝
kp	𐄞	𐄟	𐄠	𐄡	𐄢	𐄣	𐄤
mgb	𐄥	𐄦	𐄧	𐄨	𐄩	𐄪	𐄫
gb	𐄬	𐄭	𐄮	𐄯	𐄰	𐄱	𐄲
f	𐄳	𐄴	𐄵	𐄶	𐄷	𐄸	𐄹
v	𐄺	𐄻	𐄼	𐄽	𐄾	𐄿	𐅀
t	𐅁	𐅂	𐅃	𐅄	𐅅	𐅆	𐅇
d	𐅈	𐅉	𐅊	𐅋	𐅌	𐅍	𐅎
ɗ	𐅏	𐅐	𐅑	𐅒	𐅓	𐅔	𐅕
ɲ	𐅖	𐅗	𐅘	𐅙	𐅚	𐅛	𐅜
a	𐅝	𐅞	𐅟	𐅠	𐅡	𐅢	𐅣
nd	𐅤	𐅥	𐅦	𐅧	𐅨	𐅩	𐅪
s	𐅫	𐅬	𐅭	𐅮	𐅯	𐅰	𐅱
z	𐅲	𐅳	𐅴	𐅵	𐅶	𐅷	𐅸
o	𐅹	𐅺	𐅻	𐅼	𐅽	𐅾	𐅿
j	𐆀	𐆁	𐆂	𐆃	𐆄	𐆅	𐆆
nj	𐆇	𐆈	𐆉	𐆊	𐆋	𐆌	𐆍
y	𐆎	𐆏	𐆐	𐆑	𐆒	𐆓	𐆔
k	𐆕	𐆖	𐆗	𐆘	𐆙	𐆚	𐆛
jg	𐆜	𐆝	𐆞	𐆟	𐆠	𐆡	𐆢
g	𐆣	𐆤	𐆥	𐆦	𐆧	𐆨	𐆩
h	𐆪	𐆫	𐆬	𐆭	𐆮	𐆯	𐆰
w	𐆱	𐆲	𐆳	𐆴	𐆵	𐆶	𐆷
ɸ	𐆸	𐆹	𐆺	𐆻	𐆼	𐆽	𐆾
m	𐆿	𐇀	𐇁	𐇂	𐇃	𐇄	𐇅
n	𐇆	𐇇	𐇈	𐇉	𐇊	𐇋	𐇌
ny	𐇍	𐇎	𐇏	𐇐	𐇑	𐇒	𐇓
ŋ	𐇔	𐇕	𐇖	𐇗	𐇘	𐇙	𐇚
ɲ	𐇛	𐇜	𐇝	𐇞	𐇟	𐇠	𐇡

Getting It Wrong Again?

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- One Laptop Per Child
- Texas Education Agency's Technology Immersion Pilot
- California Schools E-Rate program
- NY State school district laptop program

Digital Divide?

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- Example of social stratification
- Reduce inequality by lowering cost of information, enhancing the ability of low-income men and women to gain human capital, find and compete for good jobs, and otherwise enhance their life chances
- Greatest benefits will accrue to high-socioeconomic status persons, who may use their resources to employ the Internet sooner and more productively than their less privileged peer

DiMaggio, Paul, Eszter Hargittai, W. Russell Neuman, and John P. Robinson. 2001

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Continued on Friday 7/15