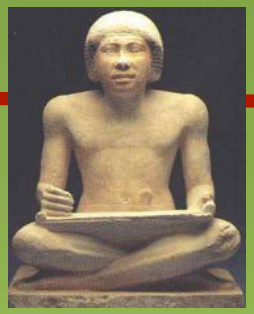
UC Berkeley School of Information



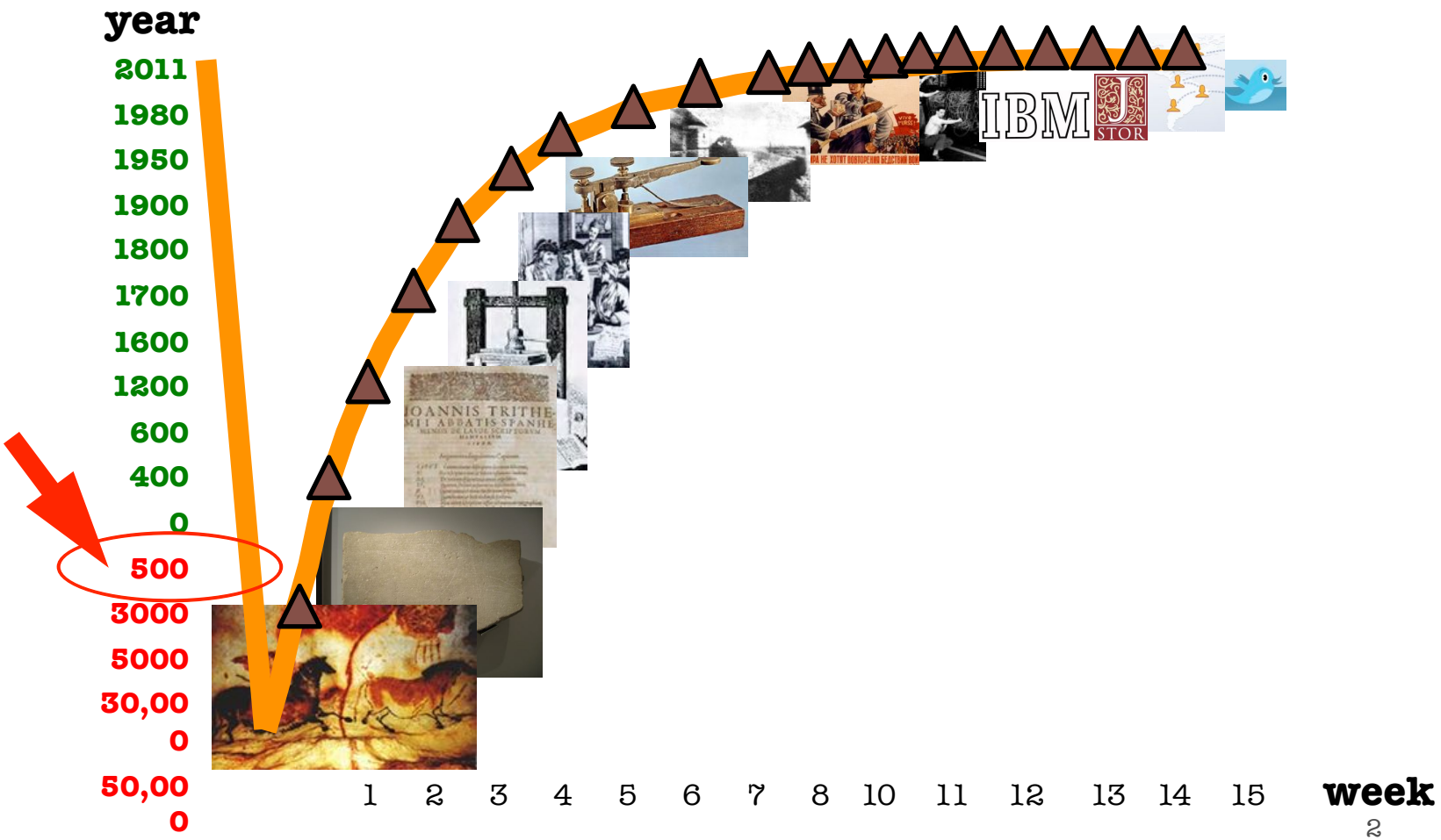
What follows from writing?

Geoff Nunberg

IS 103
History of Information

Jan 31, 2012

The emergence of literate societies



Itinerary, 1/31

Writing & Technological Determinism

Writing and the Stages of Culture

Consquences of Writing

Alphabets vs logographic systems

Cognitive implications of literacy

Leapfrogging literacy?

Writing & Technological Determinism

Teachers say text messages r ruining kids' riting skills

Text and instant messaging are negatively affecting students' writing quality on a daily basis, as they bring their abbreviated language into the classroom. As a result of their electronic chatting, kids are making countless syntax, subject-verb agreement and spelling mistakes in writing assignments. *American Teacher*

Will text messaging produce generations of illiterates? Could this —OMG—be the death of the English language? *Newsweek*

Writing & Technological Determinism

The accelerated automation of word-processing makes possible a new immediacy in the creation of public, typified text. ….

Digital writing… invites the formulation of thought directly in the electric element... There is not only a new technology available in word processing but a gradually emerging sense of a new kind of community. And in such a community, psychic life will be redifined. Michael Heim, *Electric Language: A philosophical study of word-processing,* 1987

Writing & Technological Determinism

The Swackhamer Doctrine

Telegraph requires brevity & directness. Forces users to discard the verbosity and complexity of the prevalent English style. "The telegraphic style terse, condensed, expressive, sparing of expletives, and utterly ignorant of synonyms will propel the English language toward a new standard of perfection."

"Influence of the Telegraph upon Literature," by Conrad Swackhamer, *United States Democratic Review*, 1848

Writing and the Stages of Culture

Writing and the Stages of Culture

"primitive" societies → "advanced/"developed" societies

(after Jack Goody, *The Domestication of the Savage Mind*)

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Writing and the Stages of Culture

"primitive" societies → "advanced/"developed" societies

"simple"/"closed"/ "savage" → "complex"/"open"/ "domesticated"

anthropology → sociology

Man as animal is studied primarily by the zoologist, man as talking animal primarily by the anthropologist, and man as talking and writing animal primarily by the sociologist. Jack Goody, *The Domestication of the Savage Mind*)

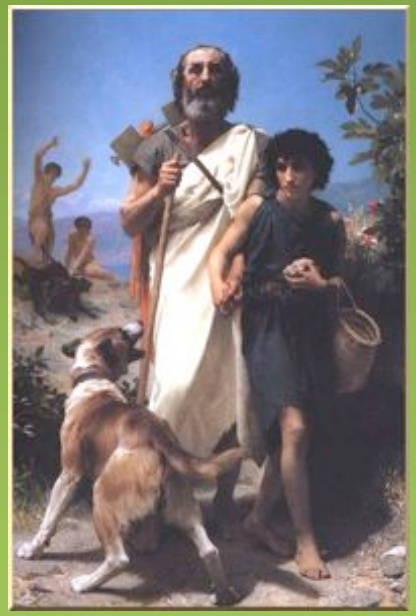
Writing and the Stages of Culture

"primitive" societies	→	"advanced/"developed" societies
"simple"/"closed"/ "savage"	→	"complex"/"open"/ "domesticated"
Anthropology	→	Sociology
Prehistory	→	History
Orality	→	Literacy

(after Jack Goody, *The Domestication of the Savage Mind*)

Modes of Cultural Transmission in Oral Societies

Milman Parry



Oral societies: pass on culture in "long chain of interlocking conversations…" (including rituals, etc.); culture stored in memory.

> In [oral] culture, storage and transmission between the generations can be carried on only in individual memories. Linguistic information can be incorporated in a transmissible memory,… only as it obeys two laws of composition: it must be rhythmic and it must be mythical. Eric Havelock, *The Coming of Literate Communication to Western Culture*

Cf the complex metrical formulas of oral poetry…

Jack Goody: In oral cultures, no fixity, "dictionary meanings."

The "past" is simply a way of interpreting/explaining the present. CF Tiv (Nigeria), Gonja (Ghana).

Emergence of Literate Societies

Egyptian scribe, ca. 1500 BCE

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.

Consequences of literacy: "What's in a List"

Writing makes possible lists/arrays of inventories, geneologies, words, plants and animals, administrative categories, registers, etc. Make complex administration possible.

List = "locational sorting device."

Creates awareness of distinct possibilities of order. Cf varieties of lexical lists, catalogues, etc.

But cf also existence of complex lists in oral societies (Panini's grammar of Sanskrit -- 6th c. BC)

Changes accompanying literacy in Greece

Writing as the "technology of the intellect"

Transition from "mythical" to "logico-empirical" thought

Emergence of logic & philosophy, history, etc.

Past is no longer mutable -- multiple versions exist. Possible to question inconsistencies, etc.

Writing detaches words from context, makes critical consideration of meanings possible. Emergence of "systems of rules for thinking"

Systematization/compartmentalization of fields of knowledge.

Assignment for 2/1

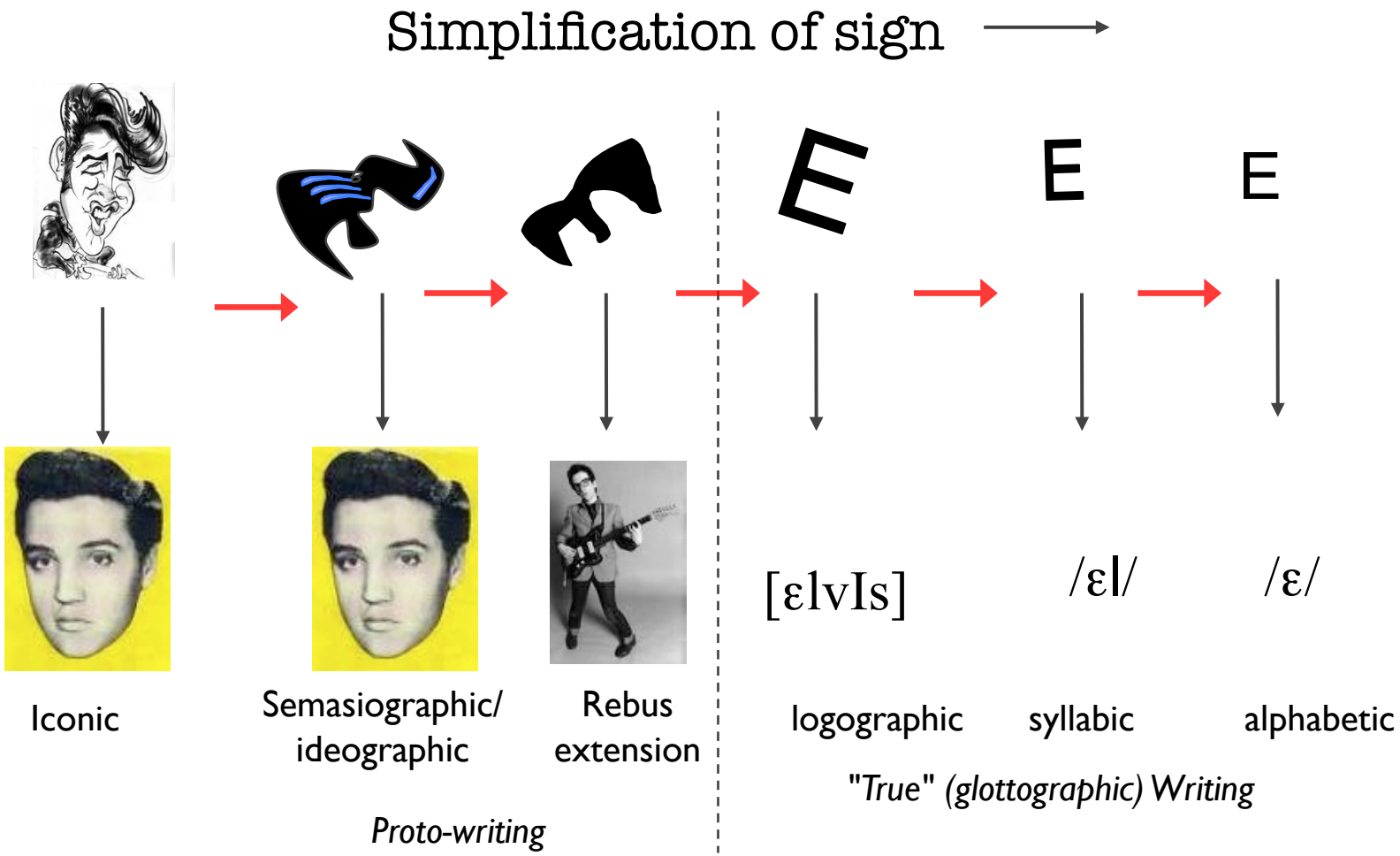
Havelock writes:

> The invention of the Greek alphabet... constituted an event in the history of human culture, the importance of which has not as yet been fully grasped. Its appearance divides all pre-Greek civilizations from those that are post-Greek. … On this facility were built the foundations of those twin forms of knowledge: literature in the post-Greek sense, and science, also in the post-Greek sense.

Consider just one aspect or element of this broad claim. On the basis of the specific evidence presented by Havelock and Gough, would you say it is largely true, largely false, or true in some respects?

Consequences of the Alphabet

Development of Written Symbols



Origins of Alphabetic Writing

Alphabetic system derived from application of syllabic system to different phonological structures.

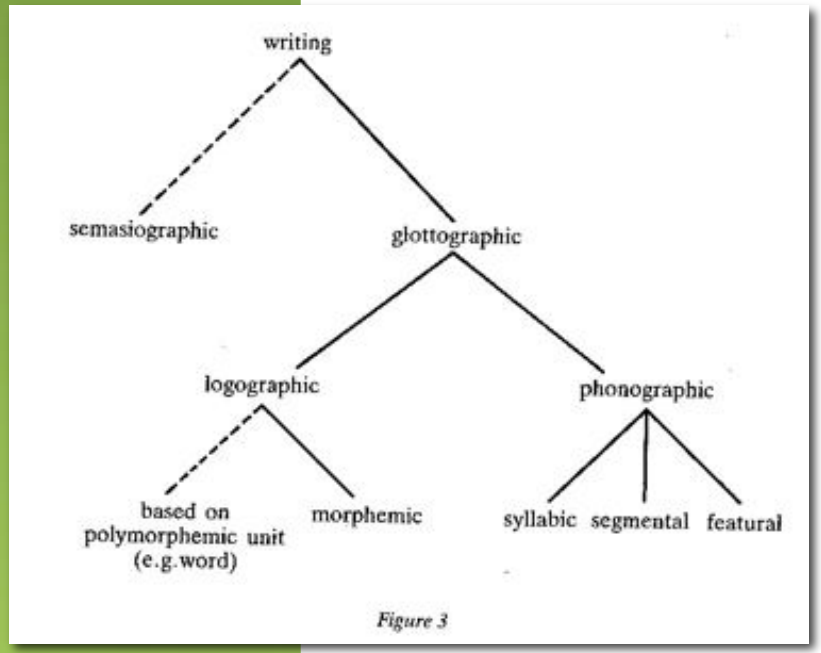


Figure 3

Logographic: mod. Chinese, Japanese (mixed)

Syllabic: Linear B, Cherokee, Korean Hangul (featural)

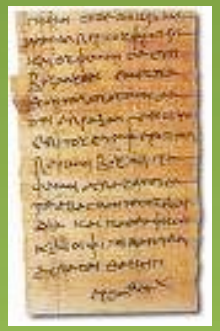
Alphabetic: Roman, Cyrillic, Gk, Hebrew, etc,

Emergence of the Alphabet in Greece

First "true" alphabetic script emerges in ca. 750 BC in Greece: revises Phonecian script by providing symbols for both individual consonants and vowels.

"Cup of Nestor" ca. 750 BC, with earliest known Greek inscription; found near Ischia in Italy

"Alphabetic Societies"



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)

Does the alphabet drive societal development?

At social level: Does writing facilitate or determine cultural & cognitive changes?

E.g., Geoffreys Lloyd on development of Greek and Chinese science: role of debate in political life, testing of ideas, patronage

> "The Chinese norms, were identification with a group and aspiration toward an imagined orthodoxy.... They were the mirror image of the Hellenic emphasis on a thinker's own ideas even when he belonged nominally to a group" Chinese scholars "discouraged open disputes with contemporary rivals over concepts….Compared with their Chinese counterparts, Greek intellectuals were far more often isolated from the seats of political power"

Assignment for 2/1

- Havelock writes:

  –The invention of the Greek alphabet... constituted an event in the history of human culture, the importance of which has not as yet been fully grasped. Its appearance divides all pre-Greek civilizations from those that are post-Greek. … On this facility were built the foundations of those twin forms of knowledge: literature in the post-Greek sense, and science, also in the post-Greek sense.

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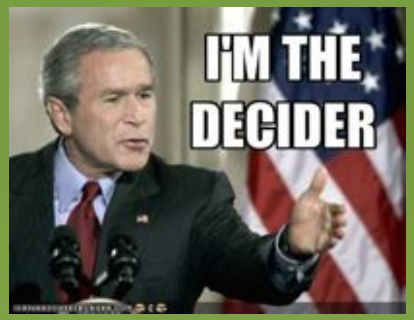


Be like him!

Not like her!

Bear in mind:

1. Don't just summarize the reading – come down on one side or the other!
2. Do NOT write more than 500 words or one page! Try to write less.

Timothy Webster

Havelock's claim rests upon recognising the Greek civilization at the moment of “abstraction” ... Gough observed that advanced literature and sciences developed in [India and China] even without a written alphabet working on the level of "abstraction" of the Greek. Popular literacy, which Havelock argues was made possible by the Greek alphabet, was also achieved in China, where they had public schools, universities, a highly developed bureaucracy, and letter-press printing, centuries before anything equivalent in Europe Since this was achieved with a language written logographically (though Gough mistakenly identifies Chinese as ideographic) - and in the case of India in a semi-syllabic alphabet … the developments cannot be explained solely by the nature of the alphabet. ... Gough's argument is that the individualism of modern society is a result of capitalism, not literacy [G. 54]. ... i am unconvinced by… monocausal explanations of concepts as hard to grasp as 'individualism'.

Arla Rosenzweig

Havelock focuses primarily on the Greeks and recounts the impact that the alphabet had on not just the population, but also the manner in which history was preserved for the posterity. …it is the technology (or manner) of communication that controls the content of what is communicated (Havelock, 132).

Gough… does not seem to find the Greek alphabet as the sole turning point in history, but rather points out that the system of writing in China was syllabic and just as influential in its ability to description of the passing of time, the study of space, and the concept of the universe. In her argument denying that "widespread literacy...produces psychological alienation", she takes a stance that differs from Havelock's technological determinism … For this reason, while the alphabet was certainly an important turning point in human history, its significance may depend heavily on the way in which history was preserved rather than determining the course of the future.

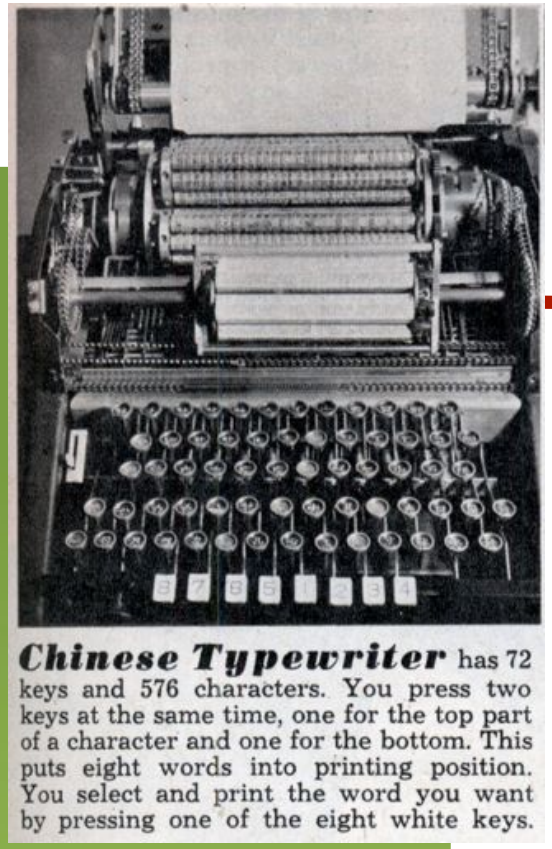
Sang Qiu

I think the high efficiency of alphabet system was the key evidence that strongly supported Havenlock's argument. …Because the alphabet system had such simplicity to be easy to reuse and reconstruct, it built up a powerful foundations of knowledge that could be fast adapted in the post-Greek sense. On the other hand, in non-alphabet world, the development of science and technology in China and India were relatively much slower to the modern European world. In "Branch of Knowledge", Gough presented that it was very difficult to separate the supernatural and natural knowledge in China and India, because they both disregarded the contradictions between scientists and religious specialists… It indicated that the lack of alphabet system in China and India gave them more difficulty to adapt new knowledge, such as the emergence of new technology.

Cassandra Ramirez

Gough makes a compelling argument for the idea that simply having an alphabet does not allow for a one culture to be more superior in thought and development than any other... These two differing views of the impact of an alphabetic language are reminiscent of anthropological viewpoints dealing with different cultures utilizing different modes of production. For example, anthropologists during the beginning of the emergence of the study used to generally believe that cultures that thrived on modes of production such as hunting and gathering were culturally "less developed" than those that had an industrial culture. This thought process was steadily thwarted as anthropologists adopted the thought that different cultures simply adopt practices that align with their needs in that time, meaning that no mode of production was less civilized than the next.

Ultimate triumph of the alphabet?



Chinese Typewriter has 72 keys and 576 characters. You press two keys at the same time, one for the top part of a character and one for the bottom. This puts eight words into printing position. You select and print the word you want by pressing one of the eight white keys.

Chinese Typewriter
1947

"To become significantly learned in the Chinese writing system normally takes some twenty years. Such a script is basically time-consuming and élitist. There can be no doubt that the characters will be replaced by the Roman alphabet as soon as all the people in the People's Republic of China master the same Chinese language ('dialect'), the Mandarin now being taught everywhere. The loss to literature will be enormous, but not so enormous as a Chinese typewriter using over 40,000 characters."
Walter Ong, "Writing Restructures Consciousness," 1982

Is Romanization Inevitable?

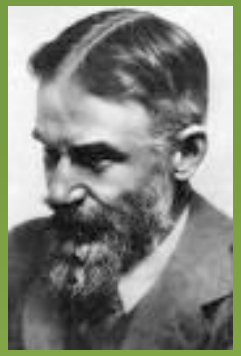
Barriers to shift to Pinyin:

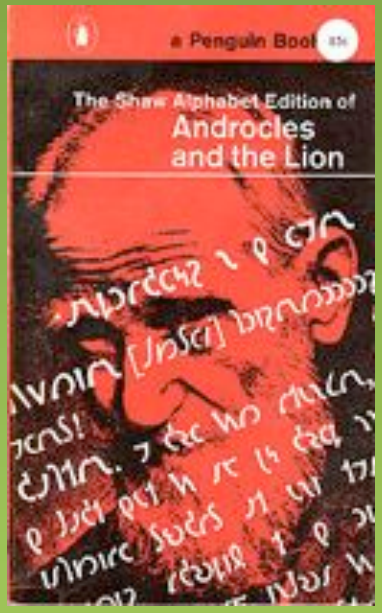
- Attachment to tradition and to characters
- Loss of symbols of Chinese identity
- Foregrounding of dialect differences/reshaping of national identity?
- Apprehension about radical change

Favoring shift:

- Ease of learning
- Technological advantages (data imput, texting, etc.)
- Emerging digraphia/multilingualism
- Spread of Mandarin

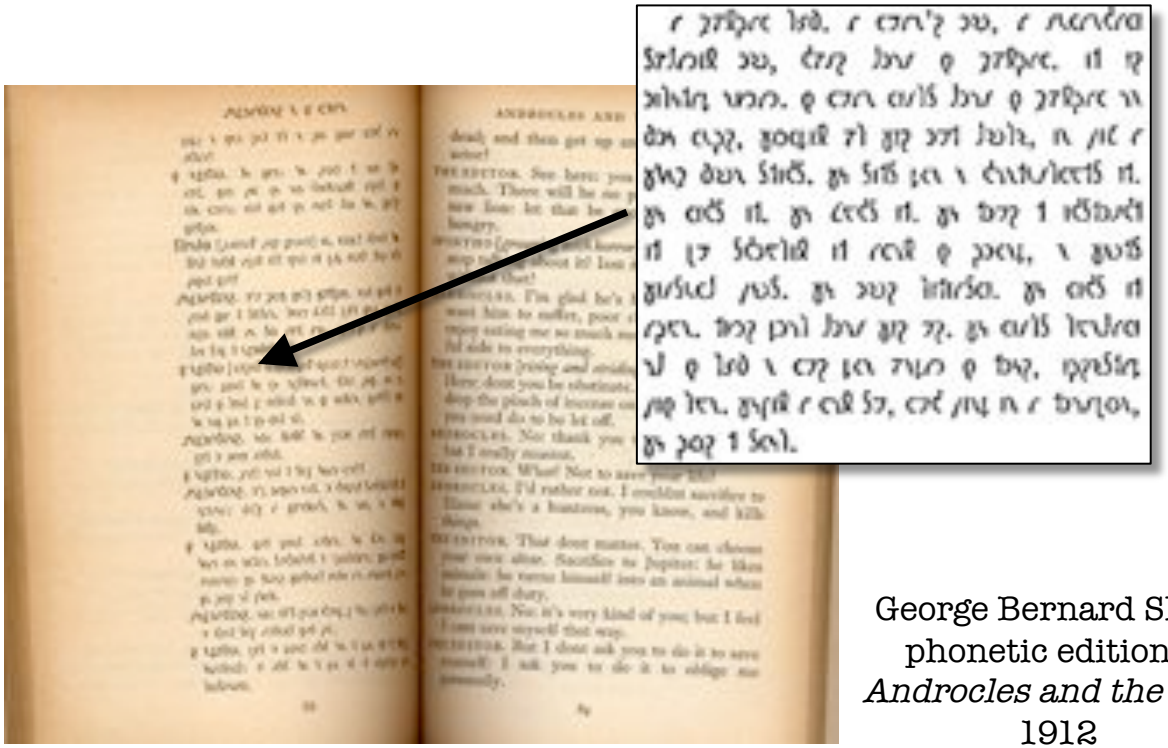
Contrasting alphabetic and logographic systems





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

Ease of learning. Typographic simplicity. Ease of processing.



George Bernard Shaw, phonetic edition of *Androcles and the Lion*, 1912

Contrasting alphabetic and logographic systems

Virtues of (semi-)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
journey: er
loud: ow

should: U
you: oo
_____?: y___

through –oo
though – oh
thought – aw
_____?: -uhp
…

bough -- ow
cough -- awf
tough – uhf

Contrasting alphabetic and logographic systems

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through –oo *bough* -- ow

though – oh *cough* -- awf

thought – aw *tough* – uhf

and… hiccough -- up

Social and Cognitive Effects of Literacy

The Ideology of Literacy

Universal literacy seen as tool for cognitive and social development.

> "The illiterate man's thought… remains concrete. He thinks in images and not in concepts… His thought rarely proceeds by induction or deduction. The result is that knowledge acquired in a given situation is hardly ever translated to a different situation to which it might be applied." — 1972 UNESCO report
>
> "Writing maketh an exact man" -- Francis Bacon

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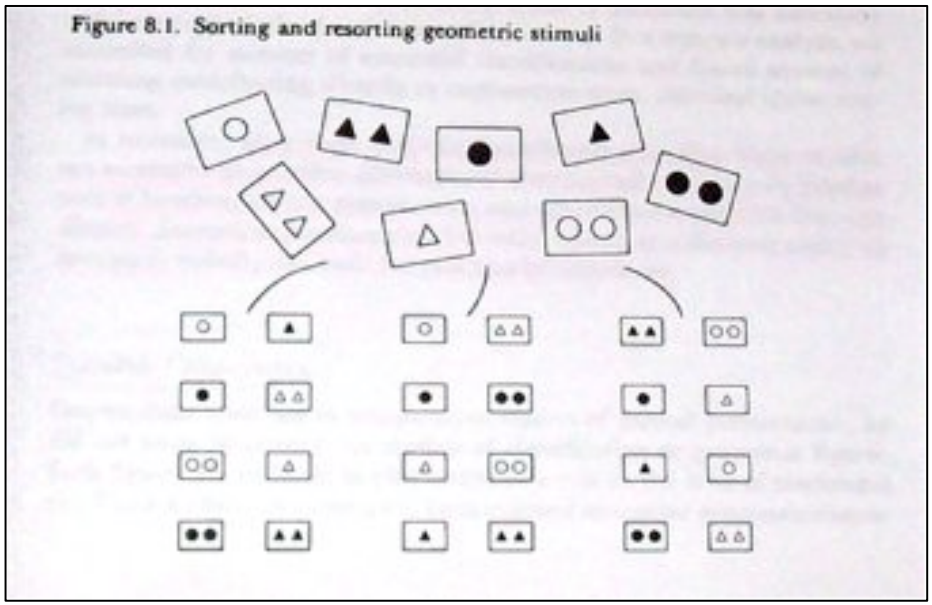
> "Writing maketh an exact man" -- Francis Bacon

> Napoleon -- literate soldiers can march in step.

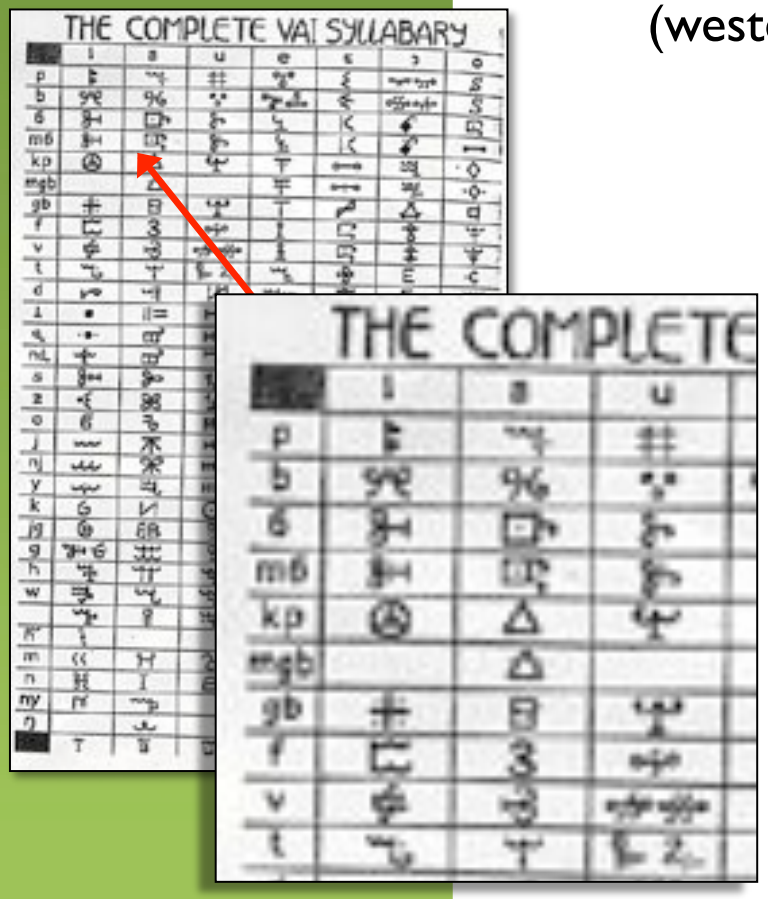
Cognitive Consequences of Literacy

Cognitive differences between literate and illiterate people in devleoped societies. Literate speakers tend to do better on logic problems, tests of abstract thinking (ability to recategorize objects).



But are differences due to literacy, schooling, or independent social differences?

Cognitive Consequences of Literacy



Cf Work by Cole & Scribner among the Vai (western Liberia)

- Syllabic writing system, independently invented in 19th c. by Dualu Bukele
  Used for letters, commercial records. Taught at home
- Many Vai are also literate in Arabic (Koranic schools) and English (state schools)
- Vai-literate adults do no better than illiterates on most cognitive tests (resorting) unless tests were directly related to writing (rebus puzzles)
- But different for English-literate Vai.
- E.g. be careful in ascribing cognitive benefits to "literacy" itself.

The Complexity of Literacy Practice

After Operation Head Start "failures": Research on "early literacy" (Shirley Brice Heath, Yetta Goodman. Etc.)

- Learning the functions of literacy
- Bedtime stories and other rituals of literacy: building expectations, postponing questions, "reading" in pre-literate children: "talking like a book"
- Discourse structure -- topic shifts. Oral precursors in religious services
- How literate parents talk to infants…

Moral: "Literacy" involves a broad range of social practices…

Leapfrogging literacy

Co-existence of writing with other forms of transmission

Cf Somali oral forms (gabay-- alliterative 21 syllable form)

(U) UU UU U UU UU U UU | UU U UU UU U

Romanized alphabet introduced in 1972; developed by Shire Jama Ahmed in collaboration with Italian linguists.

But written Somali has not replaced the gabay as means of political discourse.

Leapfrogging Literacy

New forms of transmission can obviate the transition to writing

Readings for 2/2

Plato. 1973 [c. 360 bce]. Phaedrus & the Seventh & Eighth Letters. W. Hamilton, trans. Harmondsworth: Penguin. pp 21-26, "Prelude" pp. 95-103, "The inferiority of the written to the spoken word", & "Recapitulation and conclusion"

Trithemius, Johannes. 1974 [1492]. In Praise of Scribes. R. Behrendt, ed. Lawrence, KA: Coronado Press. chapters I-III, V-VII, XIV.