

What Follows from Writing?

i103
History of Information
Geoff Nunberg
2/3/09



Itinerary

Discussion of assignment
Review of writing systems
Social & cognitive effects of writing &
alphabet



Today's Assignment

In his 1987 study of the cognitive effects of word-processing systems, *Electric Language*, Michael Heim wrote:

The accelerated automation of word-processing makes possible a new immediacy in the creation of public, typified text. Immediacy in the sense of there being no medium quod, no instrumental impediment to thinking in external symbols, but only a medium quo, or purely transparent element. As I write, I can put things directly into writing, My stream of consciousness can be paralled by the running flow of the electric element. Words dance on the screen. Sentences flow smoothly into place, make way for one another, while paragraphs ripple down the screen. Words become highlighted, vanish at the push of a button, then reappear instantly at will. Verbal life is fast-paced, easier, with something of the exhilaration of video games....

Because this playful way of putting things is immediate, enjoyable, and less constrained by materials, it encourages on-screen thinking, that is, thinking in a typified, public element.... Digital writing is nearly frictionless. It invites the formulation of thought directly in the electric element...

Reading this passage, would you say that Heim's view of the effects of writing technology comes closer to that of Havelock or r of Scribner and Cole? Why? Write a paragraph briefly defending and explaining your view.



The Swackhamerist Urge

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

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

See G. Nunberg, "All Thumbs," "Fresh Air," NPR, 7/10/08s



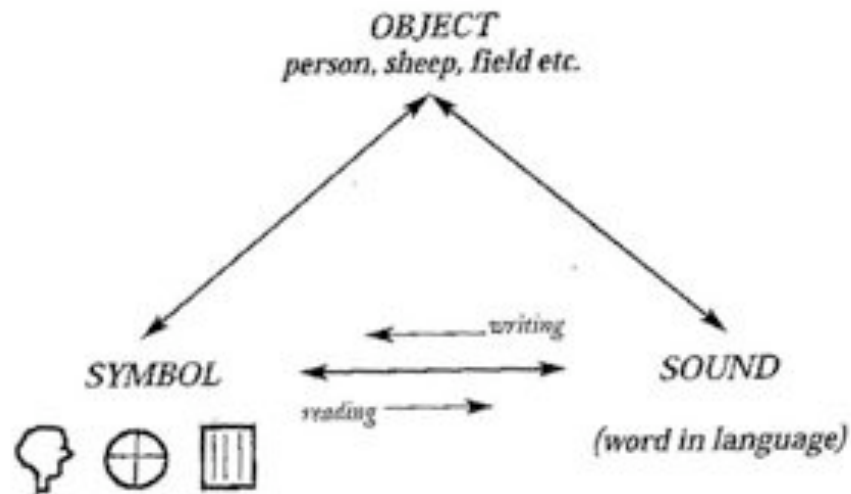
The Swackhamerist Urge

"Digital natives, those who were born after 1980, process information very differently than those who were not. And so, I think that we are seeing a very long-term trend here in terms of how young people relate to one another, to institutions and to information that is fundamentally different than what came before." John Palfrey, author of Born Digital, "On the Media," Jan. 30, 2009



The origins of ("true") writing

1.



Glottographic writing: rather than referring directly to ideas or things in the world, signs are associated with elements of the language (words, morphemes, syllables, phonemes).



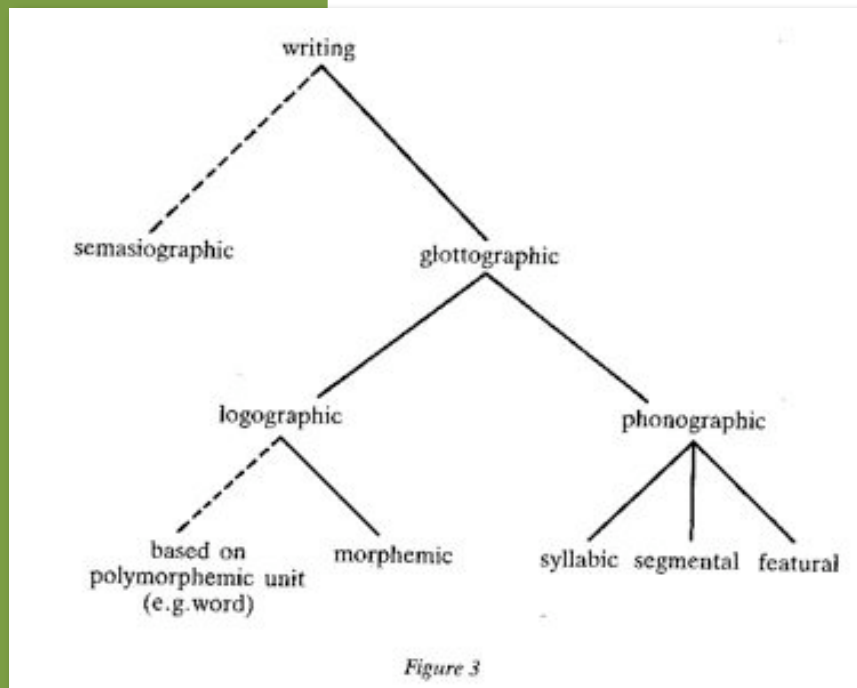
Origins of Glottographic Writing

Glottographic writing emerges when symbols stand for elements of language – words, syllables, sounds

Logographic: mod. Chinese, Japanese (mixed)

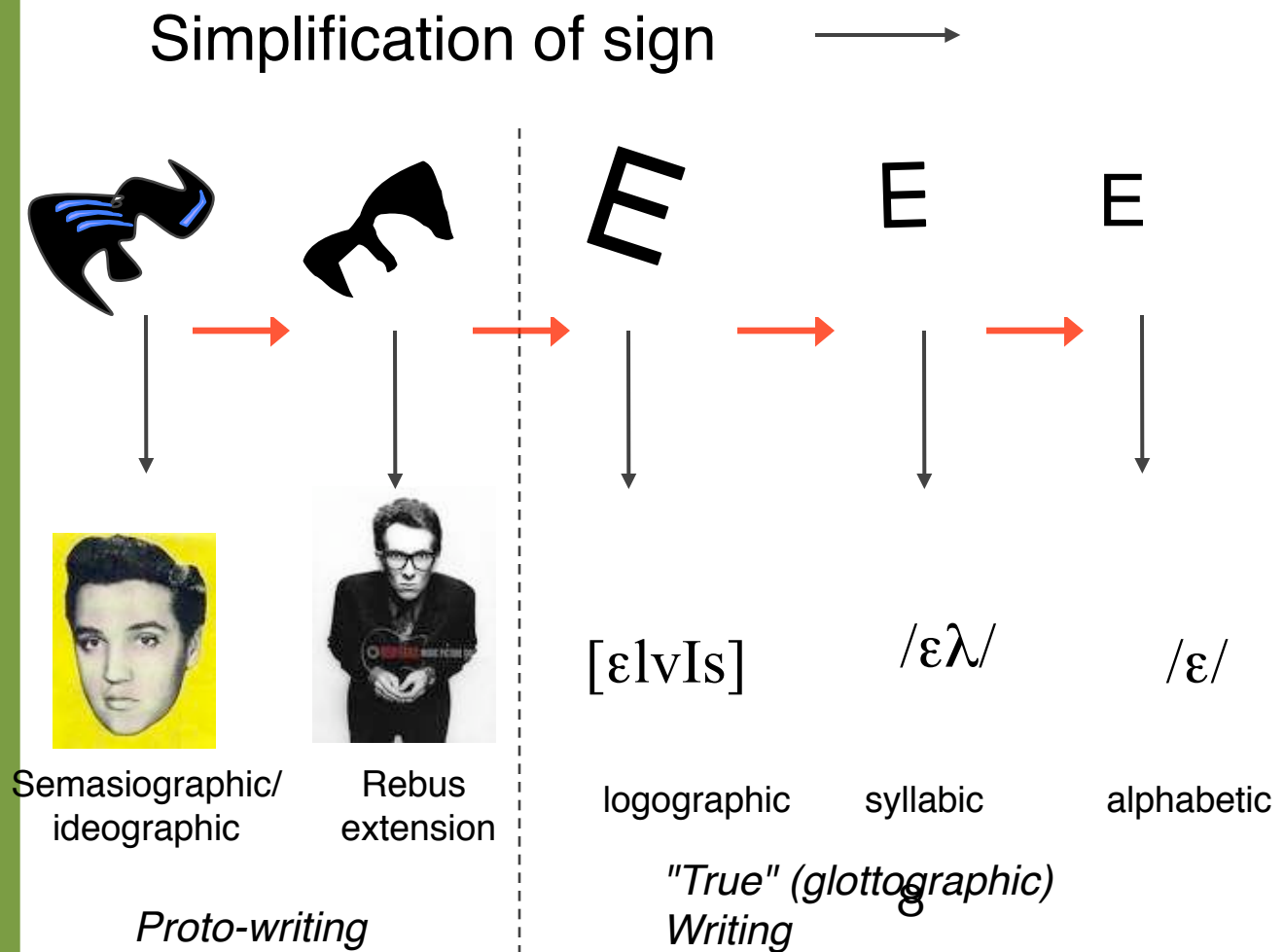
Syllabic: Linear B, Cherokee, Korean Hangul (featural)

Alphabetic: Roman, Cyrillic, Gk, Hebrew, etc. More-or-less phonetic.





Development of Written Symbols





Development of phonographic writing

Shift from logographic to syllabic:

Cf English logographs @, &: imagine formation of words like "h@st&."

Where do we see this happen all the time?



Development of Written Symbols

Shift from logographic to syllabic:

Cf English logographs @, &: imagine formation of words like "h@st&."

Where does this happen?





Origins of Alphabetic Writing

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

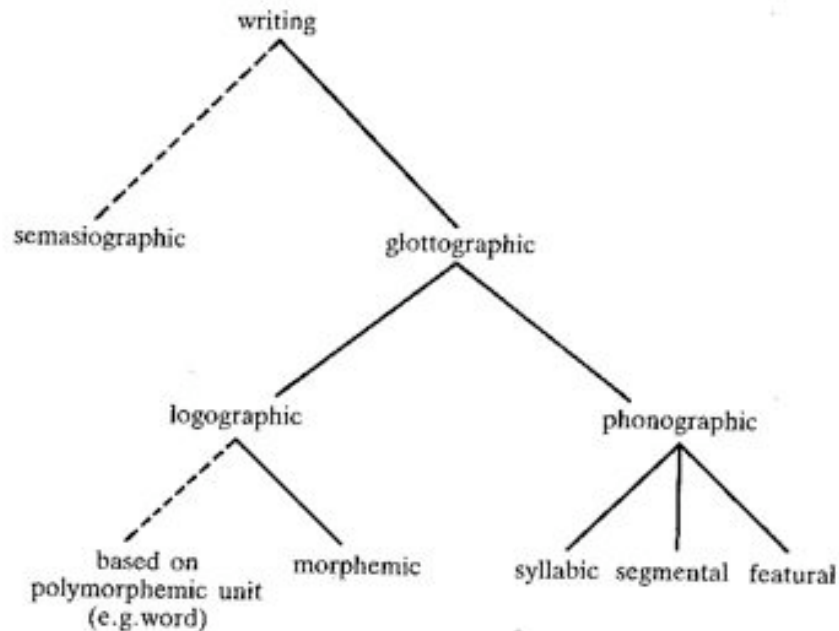


Figure 3

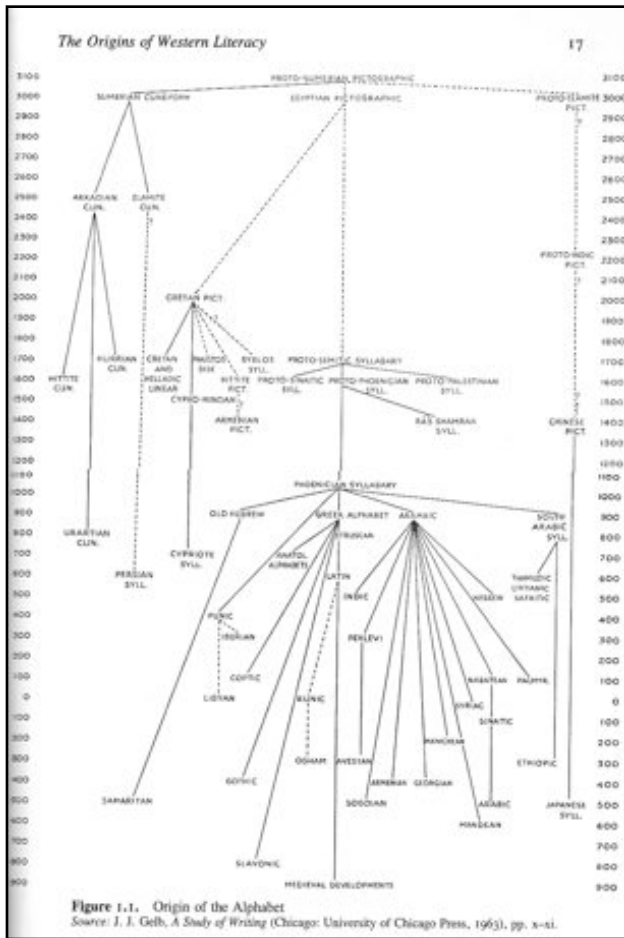
Logographic: mod. Chinese, Japanese (mixed)

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

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

Origins of major writing systems

Invention of the alphabet



But evidence is slight for derivation of Chinese from proto-Sumerian



Independent writing systems: The Cherokee Syllabary

Sequoyah [George Gist] and the "talking leaves": 1819



	a	e	i	o	u	v [w]
D a	R e	T i	Ꭰ o	Ꭱ u	i v	
S ga Ꭲ ka	F ge	Ꭳ gi	A go	J gu	E gv	
Ꭴ ha	Ꭶ he	Ꭷ hi	F ho	Ꭸ hu	Ꭹ hv	
W la	Ꭺ le	P li	G lo	M lu	Ꭼ lv	
Ꭽ ma	Ꭾ me	H mi	Ꭿ mo	Ꮀ mu		
Ꮁ na Ꮂ na G nah	A ne	h ni	Z no	Ꮃ nu	Ꮄ nv	
Ꮅ qua	Ꮆ que	Ꮇ qui	Ꮈ quo	Ꮉ quu	Ꮊ qv	
Ꮋ sa Ꮌ sa	Ꮍ se	B si	Ꮎ so	Ꮏ su	R sv	
Ꮏ ta W ta	S de Ꮎ te	J di J ti	V do	S du	Ꮏ dv	
Ꮏ da E ta	L te	C ti	Ꮏ to	Ꮏ tu	P tv	
G tsa	T tee	Ꮏ toi	K tso	J tsu	Ꮏ tv	
G wa	Ꮏ we	Ꮏ wi	Ꮏ wo	Ꮏ wu	E wv	
Ꮏ ya	B ye	Ꮏ yi	f yo	G yu	B yv	



Independently invented writing systems: The Cherokee Syllabary



Cherokee Phoenix: First American Indian newspaper (1828)

Independently invented writing systems: Korean Hangul



Hunmin Jeong-eum
Exemplar (1446):
Earliest Hangul text

Writing system invented in mid-15th c. to replace hanja (Chinese writing system). Invention sometimes credited to King Sejong ("the Great"), who introduced it to increase mass literacy. Possibly influenced by central Asian scripts.

Sometimes described as only "featural" system: symbols representing sounds as features (i.e., "labial," etc.) are clustered into a single "block" representing a syllable.



Writing and the Stages of Culture

"primitive" societies



"advanced"/"developed" societies

"simple"/"closed"/
"savage"

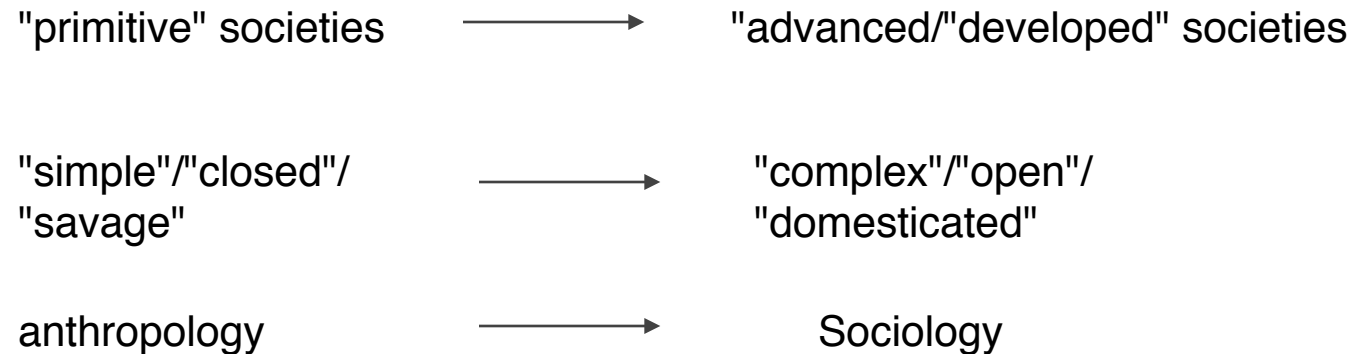


"complex"/"open"/
"domesticated"

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



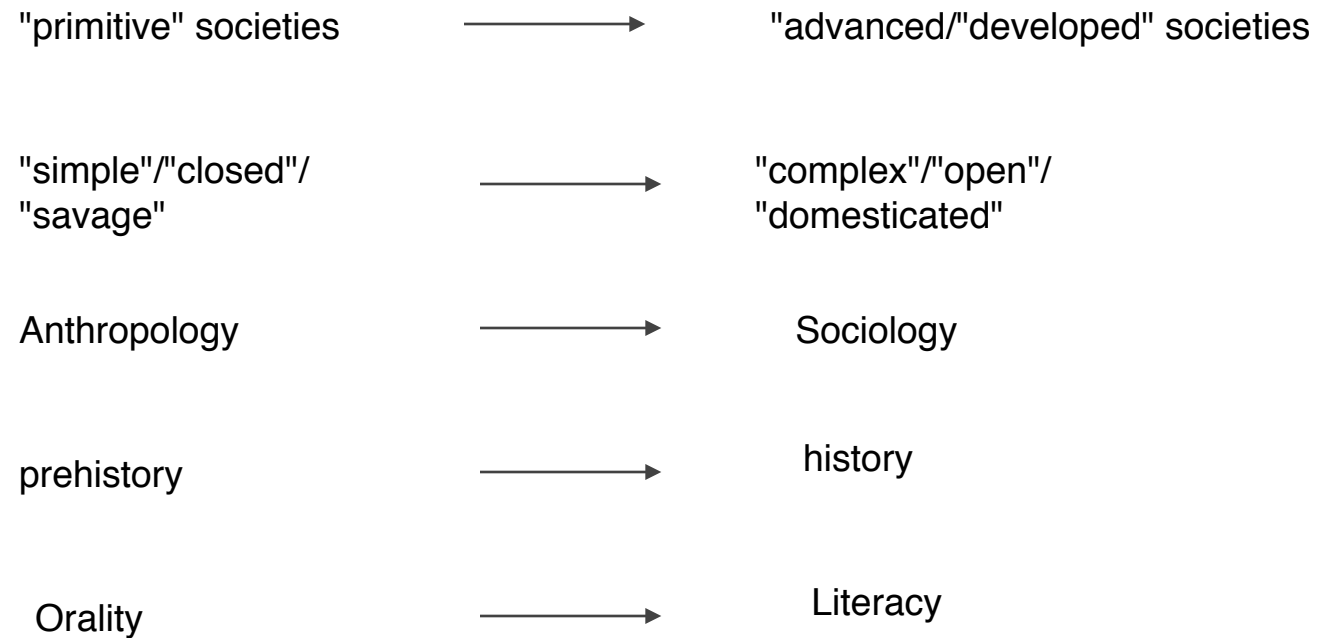
Writing and the Stages of Culture



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



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



Modes of Cultural Transmission in Oral Societies

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, as against some one person's 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*



Milman Parry

Cf the complex metrical formulas of oral poetry...



Modes of Cultural Transmission in Oral Societies

Jack Goody: In oral cultures, no fixity, "dictionary meanings." The "past" is simply a way of interpreting/ explaining the present (e.g. of geneologies)



Emergence of Literate Societies

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 the Alphabet in Greece

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

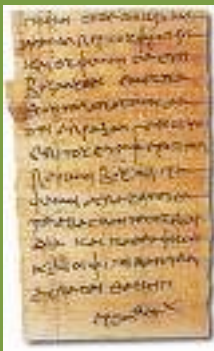


"Cup of Nestor" ca. 750 BC, with earliest known Greek inscription; found near Ischia in Italy





Emergence of 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)



Alphabetolatry, 1

What made Greece different?

"The notion of representing a sound by a graphic symbol is itself so stupefying a leap of the imagination that what is remarkable is not that it happened relatively late in human history, but rather that it ever happened at all." Jack Goody and Ian Watt, "The Consequences of Literacy"

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



Alphabetolatry, 2

"The invention of the Greek alphabet, as opposed to all previous systems, including the Phoenician, 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. ...

Eric Havelock, "The Preliteracy of the Greeks"



Consequences of Widespread Literacy in Greece

Writing as the "technology of the intellect"

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

Birth of abstraction:

"The opening lines of the Iliad speak of a man's anger, to us a psychological phenomenon, which however behaves as a destroyer, that places afflictions upon people, and hurls their souls to Hades.... We can reword by saying this is Homer's description of the psychology of the hero and its negative *effect* upon the *situation* of the Greek army, but in so doing, we are substituting our vocabulary of subjects and objects in place of his. This kind of vocabulary, conceptual and abstract, only became possible as an end product of the literate revolution." Havelock



Consequences of Widespread Literacy in Greece

Writing as the "technology of the intellect"

The invention of history: Past is no longer mutable -- multiple versions exist. Possible to question inconsistencies, etc.



Consequences of Widespread Literacy in Greece (Havelock)

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

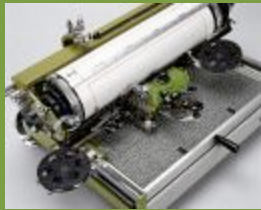
Language increasingly available in visual documented form ceases to be an unseen impulse carried through the air-the winged word-and becomes an artifact, a thing in itself, an object of its own study. The evidence again is that this is exactly what occurred in Athens in the fifth century, as the sophists began to name the parts of speech and investigate their "grammar," which means the rules governing the written characters, the *grammata*. Havelock

Leads to notion of "author" as composer separates himself from the composition.

The twin concepts of the individual ego, the "soul," and the "intellect" which is part of the ego or soul, or which the ego employs to form concepts, were on their way to achievement when Plato was born. But would they have emerged into the discourse of Europe without the help of the alphabet? Havelock



The Persistence of Alphabetolatry



“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



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Contrasting alphabetic and logographic systems

BUT: Usefulness of having a written language that doesn't encode any particular spoken dialect or variety.

Symbolic importance for linguistic community -- cf irregularity of English spelling.

Usefulness of making orthographical distinctions that aren't reflected in speech.

Increasing number of signs to avoid ambiguity: cf French *os*, *ô*, *eau*, *eaux*, *haut*, *hauts*, *au*, *aux*, etc.



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

Napoleon -- literate people can march in step.



Cognitive Consequences of Literacy

Research shows cognitive differences between literate and illiterate people in developed societies. Tests of abstract thinking (ability to recategorize objects).

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



Questions about Literacy & Societal Development

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

E.g., Geoffrey Lloyd on development of Greek science: role of debate in political life, testing of ideas; need to win students, etc. Contrasts role of patronage in Han China where scholarship was subjected to court politics

Cognitive Consequences of Literacy

Cf Work by Cole & Scribner among the Vai (western Liberia). Syllabic writing system, independently invented in 19th c. Used for letters, commercial records. Taught at home

Many Vai are also literate in Arabic (Koranic schools), 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)

We did not find, for example, that performance on classification tasks and logic problems was affected by non-school literacy. This outcome suggests that speculations that such skills are the "inevitable outcome" of learning to use alphabetic scripts or write any kind of text overstated.

But different for English-literate Vai.

E.g. be careful in ascribing cognitive benefits to "literacy" itself. (Cf Heath's work in Southern town)

THE COMPLETE VAI SYLLABARY

	i	a	u	e	ɛ	o
p	⦿	⦿	⦿	⦿	⦿	⦿
b	⦿	⦿	⦿	⦿	⦿	⦿
d	⦿	⦿	⦿	⦿	⦿	⦿
mb	⦿	⦿	⦿	⦿	⦿	⦿
kp	⦿	⦿	⦿	⦿	⦿	⦿
mgb	⦿	⦿	⦿	⦿	⦿	⦿
gb	⦿	⦿	⦿	⦿	⦿	⦿
f	⦿	⦿	⦿	⦿	⦿	⦿
v	⦿	⦿	⦿	⦿	⦿	⦿
t	⦿	⦿	⦿	⦿	⦿	⦿
d	⦿	⦿	⦿	⦿	⦿	⦿
z	⦿	⦿	⦿	⦿	⦿	⦿
nl	⦿	⦿	⦿	⦿	⦿	⦿
a	⦿	⦿	⦿	⦿	⦿	⦿
z	⦿	⦿	⦿	⦿	⦿	⦿
o	⦿	⦿	⦿	⦿	⦿	⦿
j	⦿	⦿	⦿	⦿	⦿	⦿
nj	⦿	⦿	⦿	⦿	⦿	⦿
y	⦿	⦿	⦿	⦿	⦿	⦿
k	⦿	⦿	⦿	⦿	⦿	⦿
g	⦿	⦿	⦿	⦿	⦿	⦿
g	⦿	⦿	⦿	⦿	⦿	⦿
h	⦿	⦿	⦿	⦿	⦿	⦿
w	⦿	⦿	⦿	⦿	⦿	⦿
k	⦿	⦿	⦿	⦿	⦿	⦿
m	⦿	⦿	⦿	⦿	⦿	⦿
n	⦿	⦿	⦿	⦿	⦿	⦿
ny	⦿	⦿	⦿	⦿	⦿	⦿
o	⦿	⦿	⦿	⦿	⦿	⦿
t	⦿	⦿	⦿	⦿	⦿	⦿



The Complexity of Literacy Practice



After 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" is a broad range of social practices



The Complexity of Literacy Practice

Knowing when to write & read...



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

Roman alphabet introduced in 1972, but has not replaced gabay as means of political discourse.



Co-existence of writing with other forms of transmission

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



http://youtube.com/watch?v=rFFgHwwnD_k&mode=related&search=

<http://www.youtube.com/watch?v=57M7zx15bx0&feature=related>



Thursday's Readings

5 Feb: Manuscript Culture

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

Plato. 1973. *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"