

Bio-Cultural-Historical Approaches
to the Study of Literacy

Lecture-Discussion #1

**The Cultural-Historical Origins of
Literacy**

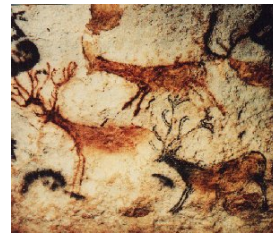
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From Oral to Written Language

- The origins of oral language coincide with the origins of the species.
- Uncertainty about when it arose: evidence indicates that it was enabled by anatomical changes about 150,000 years ago in hominid line, but no hard evidence.
- Advantage: ability to coordinate in space without visual contact and facility of learning from experience of others. Flexible mechanism of cultural exchange & inheritance
- “In the beginning was the word-- Genesis

Inscriptions

- Before there is evidence of written language there is evidence of inscriptions: symbolic representations of several kinds.
- Picture art on caves
- Forms of time marking (notched ivory, “sun dials”)
- “The word was made flesh, and dwelt among us”- John
- No indication that these inscriptions represented oral language, but they were important tools/mediators of human activity.
- New ability to interact in time and space.



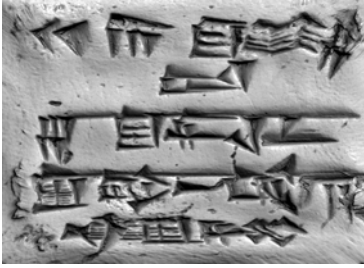
Origins of Writing

- Schmandt-Besserat Story:
Coincident with the origins of agriculture and sedentary life pattern, small clay tokens are found.
- The number and variety of tokens remains unchanged from 10,000-4,000 BC.
- Then great proliferation
- Earliest uses were as measures of quantities of agricultural products such as grain. Initially in one-one correspondence, then shapes plus quantity etched as lines

Tokens and Envelopes



Envelopes to Tablets



Money and Memory

- The word money comes from *Moneta*, a name by which the Roman queen of the gods, Juno, was known... *Moneta* was a translation of the Greek Mnemosyne, the goddess of memory and mother of the Muses, *Moneta* in turn was clearly derived from the Latin verb *moneo*, whose first meaning is 'to remind, put in mind of, bring to one's recollection'... . There seems little doubt that, ..., money in the form of coinage was an instrument of collective memory that needed divine protection, like the arts.“

Learning to Write: First Schools



Writing, City Life, CSTEP

- Culture, social organization, technologies, economics, politics *all* change:
- Consider Uruk:
 - New beliefs and customs, schooling
 - New forms of social relations– classes, division of labor expands
 - Ploughs, swords, cuneiform writing
 - Money, taxes, crafts versus farming versus war
 - Kings and priests and a horrible dictatorship
- These simultaneous changes in all spheres of life make standard analysis of “cognitive effects” treacherous

Evolution of Writing?

- Writing itself undergoes changes before and after the invention of cuneiform.
- Tokens-precursors of numeration
- Pictograms
- Ideograms
- Syllabary
- Alphabets

Again- Schmandt-Besserat Story

- Once conception of numerosity combine with use of tokens, the signs for things and signs for numbers evolve in separate ways.
- Early divergence seen in signs for names.
- Number=tallies
- Objects→ pictograms

Pictogram



Divergence of Number and Word

- Earliest signs for names were made of pictographs where the *sound* of object depicted becomes part of name:
- Picture of man+picture of mouth= lu-cas, the name of a person

Ideograms

- The line of change leading to the alphabet is only one thread in the tangled history of literacy. Not a simple question of "represent oral language **or** represent things/ideas."
- Even Sumerian system mixed as we have seen
- Chinese ideographs also included codes for sound.
- Under some conditions combinations of ideographs can be especially powerful (crisis, for example)

Ideograms- One word, one idea



Combined Ideograms- Crisis: danger and opportunity



Havelock: Shortcomings of Syllabary

- Restricted to pronounceable sounds, syllables
- Cumbersomeness results in situation where “In all the documentation which is pre- alphabetic the speed with which the correct guesses and choices are made by the reader is governed by the factor of familiarity with the material..”
- Restriction to traditional, formulaic, ritual texts
- Restriction to typical situations, paraphrases
- Consequence is that society mediated by such forms centered on religion and myth

Presumed Special Virtues of Alphabet

- Prior systems from Cuneiform through Phoenician, Semitic, and Hieroglyphic writing systems was that they represented oral language at the level of syllables.
- For languages considered by Havelock this led either to ambiguities or to exorbitant number of signs.
- Restricted to level of language that is pronounceable.
- Estimated that several thousand syllables necessary to represent English.

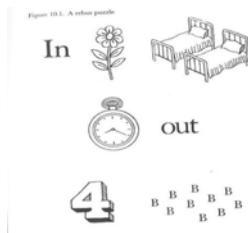
Phonetic Representation as an “abstract mode of thought”

- “The Greeks themselves perceived that the 23 or so signs of their own invention now furnished a table of elements of linguistic sound, ... thus explaining a variety of physical phenomena as the result of the combination of a finite number of primary elements.
- “Atomism and the alphabetic alike were theoretic constructs, manifestations of a capacity for abstract analysis, an ability to translate objects of perception into mental entities which seems to have been a hallmark of Greek thought”

Havelock Extolling Greek Literacy

- To enter the world of what we call “Greek literature”... is to enter a larger dimension of human experience, so much more diverse, personal, critical, subtle, humorous, passionate, ironic and reflective.”
- “The alphabet, making available a visualized record which was complete, in place of an acoustic one, abolished the need for memorization and hence for rhythm”
- The mental energies thus released, by this economy of memory, have probably been extensive, contributing to the immense expansion of the human mind.”
- Made possible the production of novel or unexpected statement, previously unfamiliar or unthought.

Rebus Reading- What does this say?



Finding Invariances: Incriptions” The Promote Science

- Money/writing coordinates humans with each other and as a primary function and secondarily through their pasts.
- Other modes of representation are crucial to systematic knowledge, the findings of invariances.
- Those who know the past knows the future, **IF** they can find an invariance. Example, Stonehenge



Literacy, Brief Summary

- Writing as a mode of communication allows new forms of coordination in time and space.
- Writing may represent both oral language and ideas in different ways.
- Writing allows/promotes, but does not cause new forms of social life with both good and bad consequences.

Goody: Literacy & Social-Cultural-Mental Change

- As he notes in the preface, Goody, “pursue the contrast between literate and non-literate societies: the analysis of the effects of writing on ‘modes of thought’ (or cognitive processes) on the one hand and the major institutions of society on the other.”
- (modes of thought is focus of this book, relation to major institutions of society follows in later books)

The Congeries of Dichotomies

Domestic	Wild
Hot	Cold
Modern	Neolithic
Science of Abstract	Science of Concrete
Scientific Thought	Mythic Thought
Engineer	Bricoleur
Abstract	Concrete/intuitive/emot/
History	A-temporality

Goody's Opening Critical Thoughts

1. Such categorizations are binary, ethnocentric
2. But denying difference is inadequate to the facts
3. "Any resort to comparative work necessarily raises the evolutionary issue" but
4. To resort to "great divide theories" does violence to the facts as well." Living among non-literate peoples for many years "I have never encountered the kind of hiatus in communication that would be the case if I and they were approaching the physical world from opposite ends."

An Approach to Study of Change

1. Abandon ethnocentric dichotomies and seek more specific differences.
2. Do not neglect the "material commitments of the mental 'domestication'".
3. Materialized forms are not only manifestations of thought, invention, creativity; they shape its future forms.
4. "They are not only the products of communication but also part of its determining features"

"Technologies of the Intellect"

- "examination of the means of communication, a study of the technology of the intellect, can throw further light on developments in the sphere of human thinking."
- "the system, or mode, of communication also includes the control of the technology.
- changes in modes of communication are **critical** but also **multiple** exerting uneven effects in different, inter-linked aspects of human life.
- "There is a half-way house between the choice of a single cause (of differences) and complete rejection of causal implications"
- We are dealing with a half-way house.....

Modes of Communication & Modes of Thought

- Wants to relate changes in modes of comm (especially writing) to changes in modes of thought.
- E.g changes in means of communication to changes in modes of thought.
- Wants balance between refusal to admit cognitive differences or cultural developments and extreme dualisms

Goody vis a vis Cole & Scribner

- "while cognitive capacities remain the same, access to different skills can produce remarkable results. Indeed I myself would go further and see the acquisition of these means of communication as effectively transforming the nature of cognitive processes, in a manner that leads to a partial dissolution of the boundaries erected by psychologists and linguists between abilities and performances."

Earliest Print: Money!

