Writing Systems and Cultural Effects

History of Information, July 12, 2010

Agenda

- Administrivia
- Discuss: Marshack
- Discuss: McLuhan

Administrivia

- Reading Responses
- Pres/Blog Signups
- Paper
- Questions?

Paradox's Precursor

▶ "Writing and literacy are generally seen as forces for good. It hardly needs saying that a person who can read and write has greater opportunities for fulfillment than one who is illiterate. But there is a dark side to the spread of writing that is present throughout its history, if somewhat less obvious. Writing has been used to tell lies as well as truth, to bamboozle and exploit as well as to educate, to make minds lazy as well as to stretch them."

   - Andrew Robinson, The Origins of Writing, 1999

▶

The Origins of Language

▶ Nunberg: the first "information system"?

▶ Early theories based on onomatopoeia:

 ▶ "bow-wow," "uh-oh," "pooh-pooh," etc.

 ▶ 1886: Linguistic Society of Paris forbids "toute communication concernante l'origine du langage" [All papers dealing with the origin of language]

▶ No direct evidence about origins of language

 ▶ No existing "primitive" languages: all modern human populations speak languages of comparable complexity.

▶

The Origins of Representational (Symbolic) Artifacts

▸ Cave paintings, Lascaux, France: ca 15-13,000 BC (others perhaps to 30,000 BC)

# The Origins of Representational (Symbolic) Artifacts

▸ Vogelherd horse

  ▸ "Images and symbols… were markers of periodic and continuous cultural processes, of rites, and of repetitive myths and stories…" Alexander Marshack

▷
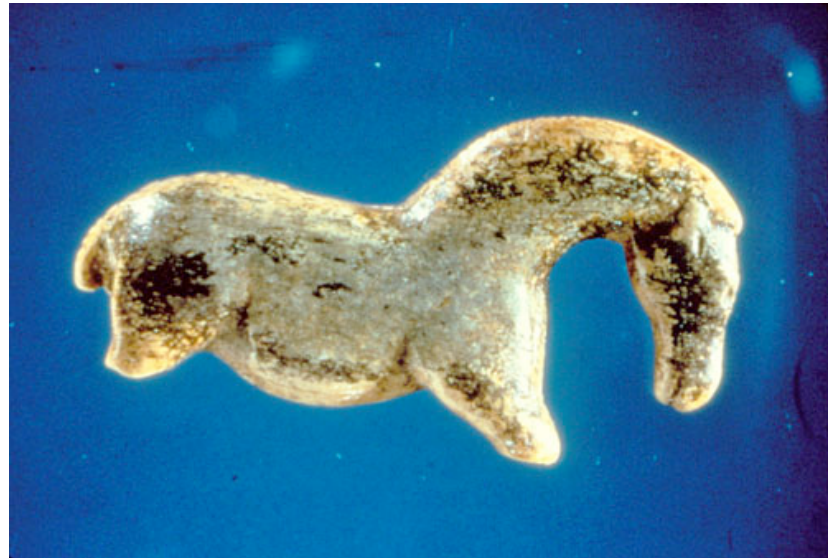
The Origins of Representational (Symbolic) Artifacts

▸ **Blanchard bone plaque**

 ▸ "…whereas notations of whatever sort were apparently means of recording the passage of time in terms of culturally significant events."

Trend Toward Complexity

▸ Many different systems eventually combined and used together (Pech-Merle)

  ▸ Images

  ▸ Signs

  ▸ Symbols

  ▸ Notations

▸ What approach to technology does this suggest?

▸

The Origins and Development of Writing Systems

True Writing

▸ Glottographic writing: rather than referring directly to reference/ideas, signs are associated with elements of the language (words, morphemes, syllables, phonemes).

OBJECT
person, sheep, field etc.

SYMBOL

writing

SOUND

reading

(word in language)
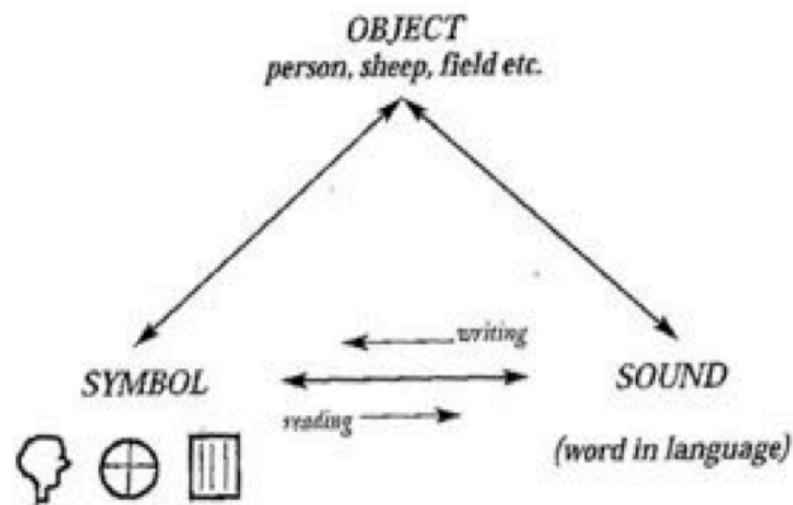
The Origins of True Writing
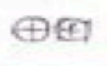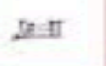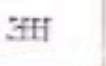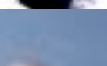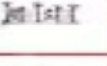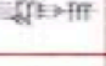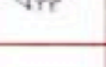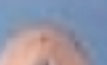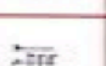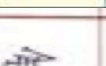
▸ Divine origin a dominant theory until the 1700s

▸ Most likely theory is economic roots and adminstration of expanding empires

(Andrew Robinson, The Origin of Writing, 1999)

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Writing's Origins in Sumer

- One theory holds that clay bullae used in Sumer for business transactions (8000-5000 BC) were the precursors to cuneiform (~3000 BC)

Writing's Origins in Sumer (2)

- 2500 BC cuneiform "true" writing
- 2400 BC script used for Akkadian
- 2000 BC script used for Babylonian & Assyrian..
- 1750 BC Code of Hammurabi

Some Functions of Early Writing

- Accounting (Sumeria, Greece)
- Memory aids (in Greece)
- Codification of laws (in Bablyon)
- Funerary inscriptions (Etruscan writing)
- Predicting the future (Mayan Civ. and China)
- Identity cards/signatures/seals (Egypt, Mesopotamia, China, Central America)
- Propaganda (Egypt)

(Andrew Robinson, The Origins of Writing, 1999)

Writing: A Theory of Evolution

▶ Pictographic systems – graphic representation of **objects in the world** (pictograms)

Increasing Abstraction of Written Form

Proto-cuneiform c.3000 BC	Early cuneiform c.2400 BC	Late (Neo-Assyrian) cuneiform c.700 BC	Transcription and meaning
			sag "head"
			ka "mouth"
			du/gin/gub "go/walk/stand"
			gud "ox"
			udu "sheep"
			ku "fish"
			dug "pot"
			gi "reed, to render"

Figure 2.2 The development from proto-cuneiform, through early Sumerian cuneiform, to later Akkadian cuneiform. Proto-cuneiform signs are often pictographic, though not always, as the sign for "sheep" shows

Writing: A Theory of Evolution

▸ Pictographic systems – graphic representation of **objects in the world** (pictograms)

▸ Logographic systems – graphic representation of **words** (logograms)

The Rebus

▸ "the radical idea that a pictographic symbol could be used for its phonetic value"

  - Robinson, 1999

Photo from www.JokeLibrary.150m.com

The "Phonetic Principle"

▸ "The notion of representing a sound by a graphic principle is itself so stupefying a leap of the imagination that what is remarkable is not so much that it happened relatively late in human history, but rather that it ever happened at all.

▸ "For a long time, however, these phonetic inventions had a limited effect because they were only *partially exploited:* … logograms and pictograms [were] retained…

▸ *"Only one further step remained…"*

   -Goody, Jack and Ian Watt. 1963. The Consequences of Literacy.

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A Theory of Evolution

▸ Pictographic systems – graphic representation of **objects in the world** (pictograms)

▸ Logographic systems – graphic representation of **words** (logograms)

▸ Introduction of "the phonetic principle"

▸ Syllabic systems – graphic representation of **consonant-vowel combinations (phonemes)**

▸ According to this theory, what comes next?

▸

The Origins of the Alphabet

▸ Wednesday: The Alphabet; Literacy and Consequences