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TuTh 9:00–10:00 AM
TBD

Writing Systems and Language Conservation

Week 2: The History of Writing, Part 1: The Invention of Writing

1 Goals for this Week

Here is what we will learn the week:

- (1) a. The origins of writing (Mesopotamia, Egypt, China, Mesoamerica, and others)
 b. Some history of script transmission and script ‘revolution’
 c. Categorizations of writing systems (Abjads, Alphabets, Logographies, etc.)
 d. Other important aspects of writing: directionality, writing implements, and writing media.

2 Pre-History and Proto-Writing

Homo Sapiens have existed for approximately 300,000 years.

Our ability to speak is often considered something which came about around 100,000 years ago (common ancestry, phonemic diversification).

The oldest recorded figurative (representative of something, rather than abstract patterns) cave art is dated to about 44,000 years ago, from Indonesia.



Figure 1: Hand print paintings in Pettakere Cave, Indonesia (~ 42,000 BCE)

What many linguists would consider writing or proto-writing are recorded much later, all within 10,000 years of the present.

Proto-Writing: markings which communicate limited information through ideographic or mnemonic symbols.

For such early scripts, it is unclear if these markings are proto-writing or undeciphered writing.



Figure 2: From top left, clockwise: Jiahу symbols (China, ~6000 BCE), Dispilio tablet (Greece, ~5200 BCE), Indus Script (India, 3500–1900 BCE)¹

'Proto-Writing' can refer to both these ancient systems, as well as modern systems of proto-writing (such as Nsibidi, which we will see later).

¹Pictures of Jiahу symbols from Pilcher (2003); Dispilio tablet from Facorellis et al. (2014); Indus Script from Pokharia et al. (2017)

3 The Invention of Writing and Logographies

What linguists confidently call ‘true’ writing systems evolved independently four times: Egypt, Mesopotamia, China, and Mesoamerica.

3.1 Egyptian Hieroglyphs

Egyptian Hieroglyphs (3100 BCE – 400 CE) were originally inscribed in stone with chisels and other tools.



Figure 3: From top, clockwise: Narmer Palette; close up of early hieroglyphs of Narmer Palette; a rebus representing Narmer’s name (all Egypt, ~ 3100 BCE)

The earliest recorded instance: the Narmer Palette, a cosmetic palette inscribed with hieroglyphs including a rebus of Narmer, a pharaoh of the Early Dynastic Period: a serekh including the symbols *n'r* (catfish) and *mr* (chisel) inside, being the phonetic representation of Narmer’s name (Wengrow 2009).

All four systems used some combination of pictographic symbols usually to form a kind of **rebus**.

Pictograph: a sign which pictorially represents the word which it refers to.

Rebus: a symbol used to represent a word by depicting the pronunciation of the word through associations of pictures and symbols.

The rebus is important as it shows proof that the signs no longer only represented objects, but also the names of those objects.

A single Egyptian Hieroglyph thus represented a single word, typically through a combination of pictures representing the sound of the word, as well as some symbols called **determinatives**, which represented their meaning.

Logographic Script: a script such that each sign represents a word or morpheme.

Determinative: a sign used to mark semantic categories of words in logographic scripts which helps to disambiguate interpretation.

3.2 Cuneiform

Cuneiform was used in Mesopotamia (Iraq and surrounding areas) from about 3200 BCE – 75 CE. Cuneiform was used to represent multiple languages, including Sumerian, Akkadian, Elamite, and Hittite.

Cuneiform was written with a stylus pressed into clay. Though originally also a pictographic system, later cuneiform would become more abstract, with markings made mainly out of wedge-shapes from inserting the stylus at varying angles.

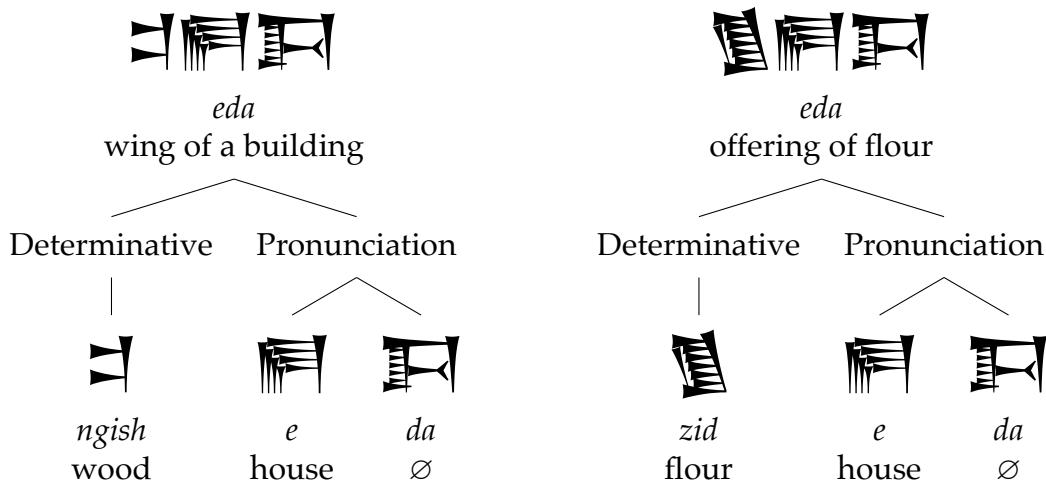


Figure 4: Two homophones in Sumerian; both read as *eda*, with different meanings represented by determinatives.

Cuneiform typically represented words through combinations of signs; each glyph could possibly represent a word, part of the pronunciation of a word, or part of the meaning of a word.

3.3 Chinese Characters

Chinese characters (1200 BCE – Present) were originally carved into bones and shells and cast into bronze, but later were written on bamboo and paper with ink and brush.

Chinese characters were originally used in writing Old Chinese, and employed many of the same principles as Hieroglyphics and Cuneiform.

While a Chinese character might be composed of multiple **components**, two characters typically always took up the same area (typically in the form of a square)

Component: A graphical component of a Chinese character which represents semantic or phonetic information about the character.

Unlike Cuneiform and Hieroglyphs, Chinese characters happened always represent single syllables.

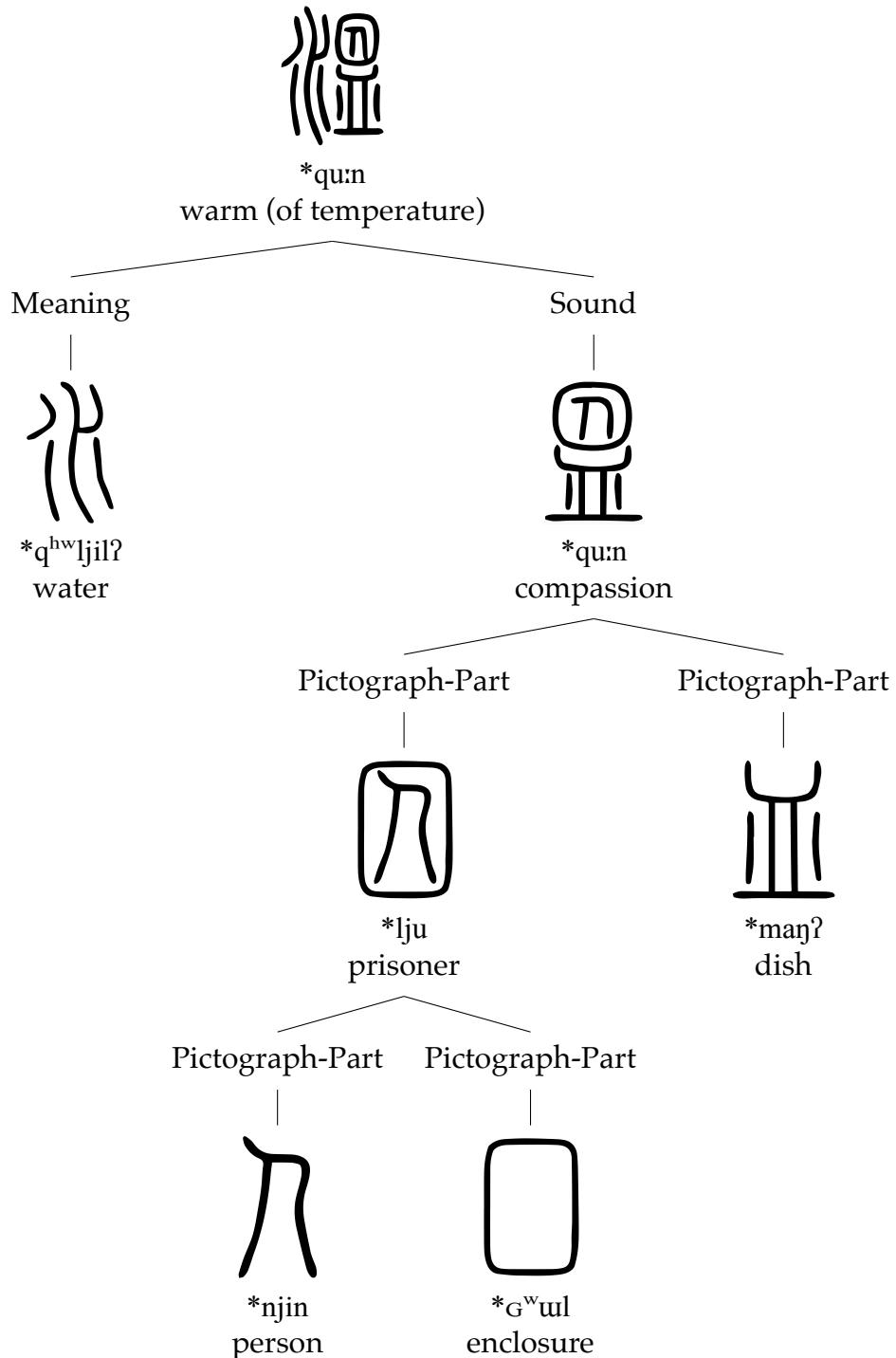


Figure 5: The breakdown of the Chinese character 溫 *wēn*, composed of multiple pictographic components

3.4 Maya Script

The Maya Script (300 BCE – 1500CE) was used to write the Mayan languages of modern day Mexico and Guatemala. They were either painted on ceramics, walls and bark-paper codices, carved in wood and stone, or molded in stucco.

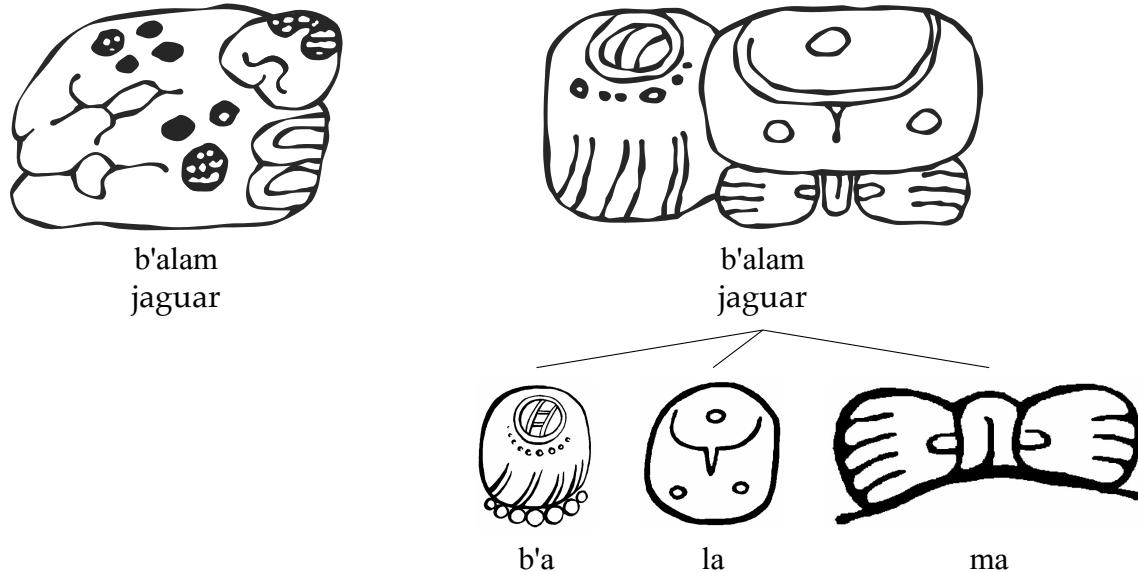


Figure 6: Two possible words written forms for *b'alam* 'jaguar', one completely logographic, the other completely syllabic²

Maya script could represent words through multiple combinations of a semantic marker and syllabic signs.

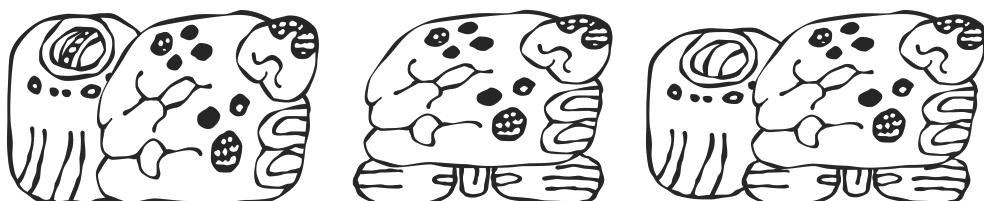


Figure 7: Three other possible ways of writing *b'alam* 'jaguar' in Maya Script: each of these use a mixture of the logographic and syllabic forms

²'Jaguar' words by Goran tek-en, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=40927431>, individual syllables by Mabarlabin - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=34678369>

3.5 Other Independent Inventions of Writing/Protowriting

3.5.1 Indus Script

The Indus Script was used in 3500–1900 BCE in present day Pakistan and India among the Indus civilization. The script is formed through impressions in ceramic and clay.

Because the script has not been deciphered, and all instances of the script are fairly short, it is unclear whether it constitutes writing or proto-writing.



Figure 8: Indus cylinder seal with elongated buffalo with Harappan script imported to Susa in 2600-1700 BCE (Marshall 1996)

3.5.2 Gomgwejui'gasit

Gomgwejui'gasit (suckerfish writing) is the script used to write the Mi'kmaw language (modern day Mi'kma'ki, Wabanaki Confederacy) until the 1800s CE.

It was written with porcupine quills on birch bark, which deteriorates quickly, and as a result, the earliest maintained records of the script date from the 1600s CE, during European contact.

Later Gomgwejui'gasit utilized a logographic script but it is unclear whether or not the earliest versions of Gomgwejui'gasit were logographic writing or proto-writing.



Figure 9: A bilingual Mi'kmaw German text (Faulmann 1880)

Later Gomgwejui'gasit included additions in the Latin Script, and was eventually replaced with the Latin Script for Mi'kmaw.

3.5.3 Nsibidi

Nsibidi is a form of proto-writing used at the latest since 400 CE, and currently used by the Efik, Ibibio, and Igbo peoples (Nigeria and Cameroon). It is typically marked through inscription on wood and woven into textiles.

Although this system arose independently from other writing systems and is currently in use, because it is proto-writing, it is not typically considered among the 'big four' independent writing systems.

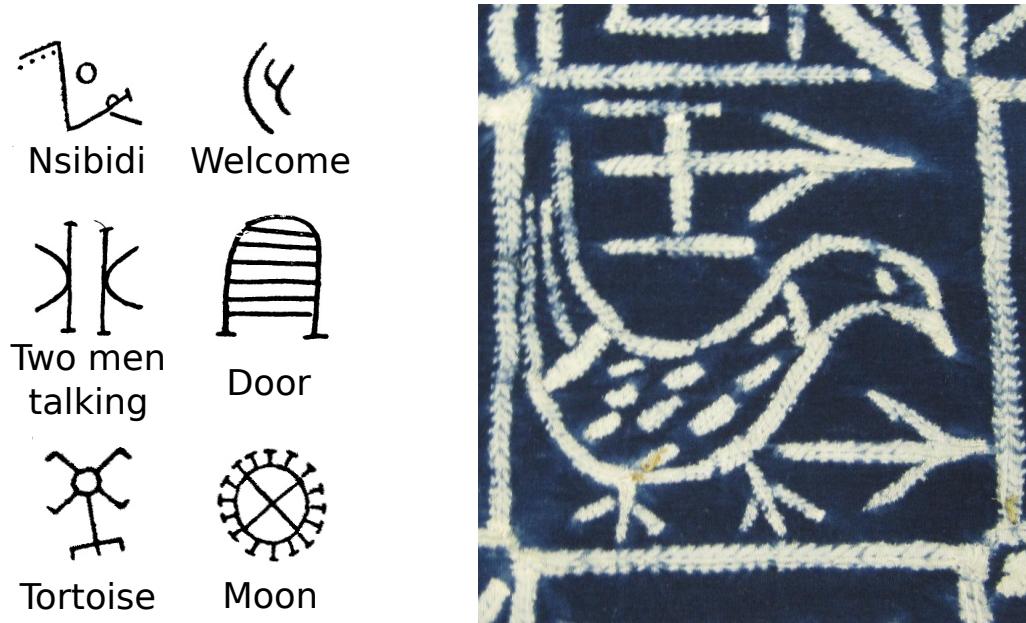


Figure 10: Left: examples of Nsibidi signs with their meanings (Dayrell 1911); Right: Igbo 'Ukara Ekpe' textile with Nsibidi character (Online Collection of Brooklyn Museum CUR.1990.)

3.5.4 Rongorongo

Rongorongo was used sometime between 1200 CE – 1800s CE on Rapa Nui (Easter Island). It was written with shark teeth on wood.

Rongorongo has never been deciphered but tradition about its existence is present among the Rapa Nui people, making it likely that Rongorongo represented the Rapa Nui language.



Figure 11: Inscription from a Rongorongo tablet (Englert 1970)

4 Change within the First Scripts

Each of the 'big four' writing systems existed for thousands of years; this is generations upon generations of different people who likely used incredibly different language.

The aesthetic of a script often reflected the change of technology (medium of writing) and change in demographics (a more diverse group of writers and readers). How do these scripts diverge? How do they converge?

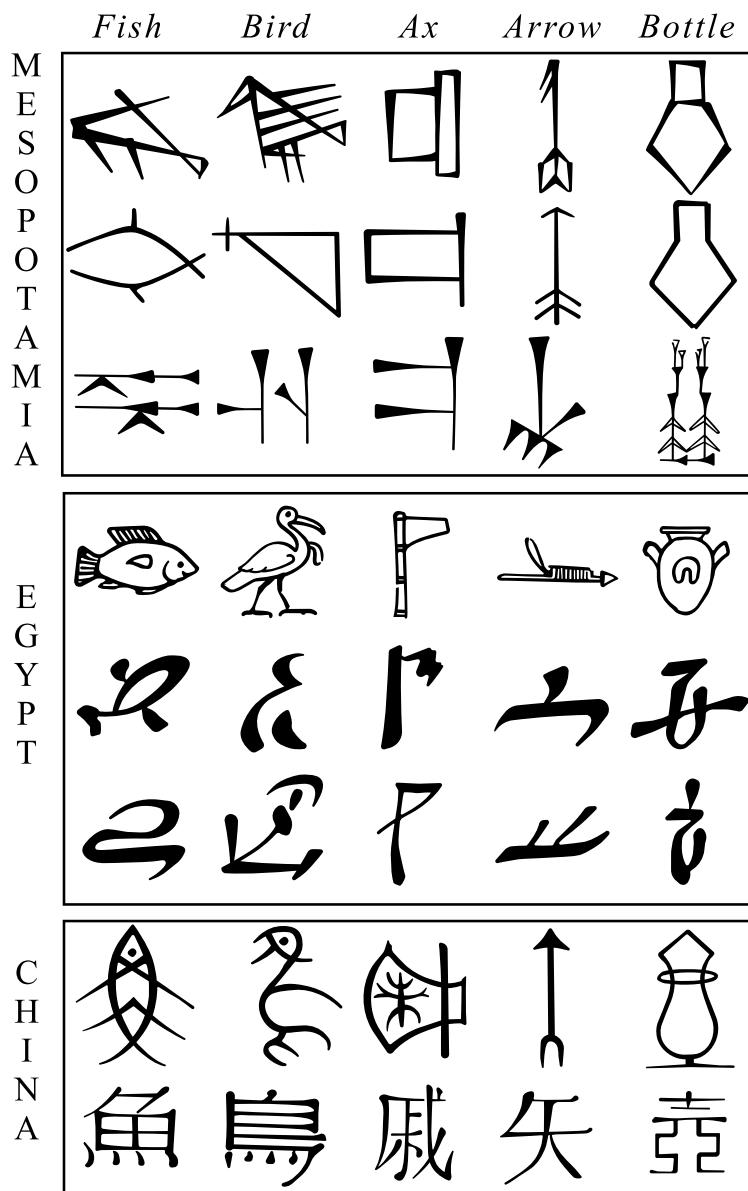


Figure 12: Comparative Evolutions of the three aforementioned scripts (Maspero 1902)

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