

How and why was writing invented?

At its core, writing is a way of representing experiences, both intellectual and physical, in a way that the spoken word may fall short. In 350BC, Aristotle claimed that “Spoken words are the symbols of mental experience and written words are the symbols of spoken words”.¹ While it is true that writing has the ability to portray anything spoken in the visual form, one cannot take that to assume that that is what the written word first set out to do. In this essay, I aim to explore how and why the Chinese, Mesopotamian and Egyptian writing systems were formed by consulting their semiotic affiliation to the symbolic, iconic or, in the case of early Chinese, neither.

It is important to recognise that writing first emerged in distinct areas and each system evolved mostly independently of the others over time with the help of many people. It is difficult to pinpoint exactly every place where a new writing system was born and therefore how each one was invented, but the systems that were arguably the most influential in terms of prompting the creation of new systems were from Mesopotamia (Cuneiform), Egypt (Hieroglyphics) and China. The most widely drawn from of these is Cuneiform, which is thought to have inspired the creation of at least 10 other systems, including Akkadian, Sumerian and Old Perisan.² As a result of the wide distribution of systems, the reasons and methods of creation of these systems varies, although we can draw some similarities based on the societal advancements taking place at the time of these systems’ conception.

Writing allows for the convergence of two of the most intuitive and innate methods of human understanding: the auditory, represented by symbols (essentially just spelling), and the visual, represented by icons. In his book *The First Writing*, Vincent Boudreau states that “visual perception is essentially iconic...spoken language is chiefly symbolic, representing the object through units of sound”.³ The symbols used in writing systems are those where the relationship between the signified (the object) and the signifier (the symbol) is entirely conventional e.g. most words. Whereas the icons are those that directly resemble the signified e.g. a picture.⁴ This distinction between the symbolic and iconic is significant when attempting to understand the reasons behind the development of different writing systems. We can question why early pioneers of writing systems were more naturally attracted to using drawn images of the object they were referring to. Certain writing systems may prioritise either the symbolic or iconic, which permits us to make inferences about the reasons why those systems came to be and about the civilisations they aimed to serve. Although, it must be noted that it is very difficult to be certain of the exact reasons systems were created, given that there is nothing recorded about them beforehand and there is little surviving documentation of the process. The natural tendency to choose the iconic is hindered by the fact that much of language (almost anything

¹Olson, David R. 2016. “Inventing Writing: The History of Writing and the Ontogeny of Writing,” *The Mind on Paper*: 21–25 10.1017/cbo9781316678466.003>

²Jaan Puhvel. 2019. “Cuneiform | Definition, History, & Facts,” *Encyclopædia Britannica* <<https://www.britannica.com/topic/cuneiform>> [accessed 2 March 2021]

³Boudreau, Vincent. 2004. *The First Writing : Script Invention as History and Process* (Cambridge, Uk.: Cambridge University Press), p. 21 [accessed 28 February 2021]

⁴University of Vermont. 2019. “Definitions of Semiotic Terms,” *Uvm.edu* <https://www.uvm.edu/~tstreete/semiotics_and_ads/terminology.html> [accessed 6 March 2021]

that's not a noun or the equivalent in the particular language) is unrepresentable in visual form. Therefore, the use of this as the predominant method of writing would suggest that the society that uses it does so for more practical needs - a means of elaboration on a system that already works. The use of the symbolic, however, presents an appealing efficiency, especially when recording "foreign words, grammatical signs and names"⁵ which might suggest the need for a society to record events, stories and the importance of literature in a culture.

The system created in Mesopotamia, one of the first writing systems ever created (approximately 5,500 years ago), is a prime example of how a shift from the iconic to symbolic mimics the transformation of the requirements of the language.⁶ The earliest forms of Cuneiform primarily consisted of pictorial signs combined with pre-existing numerical features in order to elaborate on accounting lists for the trade of popular commodities such as cattle and wheat.⁷ The iconic was favoured as a means of easy and atemporal understanding of business transactions. For example, the outline of the head of a cow depicted a cow but over time, these symbols could also represent words or ideas. The hypothetical used by Assyriologist Saana Svärd is that a picture of an eye could depict an actual eye and the pronoun, I⁸. This linguistic development allowed for syntactical relationships and ownership (e.g the farmer's wheat) to be represented in writing. Eventually, the pictographs became more abstract in shape and the objects they originally depicted became imperceptible, creating the need for shapes to be given phonetic values or sounds derived from the original word for the object. This veer away from the iconic to the symbolic is testament to the new uses of Cuneiform, denoting ownership and the natural desire to use the system for more if given the linguistic tools meant that the efficiency and versatility of a symbolic system was more appropriate. Once again, we can understand the societal changes taking place and the need for new structures in systems by examining the semiotic nature of it. As nature writer Robert MacFarlane put it, "nature is dynamic, and so is language".⁹ Early writing systems were incredibly subject to change and adaptation as the uses for them expanded beyond the original notion to make accounting records more detailed.

Hieroglyphics, for example, were devised as a means of identifying and annotating images with names and titles, such as a significant battle or a member of the royal family.¹⁰ This system is one that, unlike early Cuneiform, started as an alphabet, leaning towards the symbolic, rather than the iconic (although there seems to be a combination of the two in the way that each Hieroglyph is itself an icon separate to the sound it denotes). This would indicate a society in need of a method to record stories and history - perhaps a reference to ancient Egypt's famous history of

⁵Boudreau, Vincent. 2004. *The First Writing : Script Invention as History and Process* (Cambridge, Uk.: Cambridge University Press), p. 19-25 [accessed 28 February 2021]

⁶Clayton, Ewan. [n.d.]. "Where Did Writing Begin?," *The British Library* <<https://www.bl.uk/history-of-writing/articles/where-did-writing-begin#>>

⁷ Halton, Charles, and Saana Svärd. [n.d.]. "The Origins of Writing in Mesopotamia," *Women's Writing of Ancient Mesopotamia*: 3-15 10.1017/9781107280328.002>

⁸ Halton, Charles, and Saana Svärd. [n.d.]. "The Origins of Writing in Mesopotamia," *Women's Writing of Ancient Mesopotamia*: 3-15 10.1017/9781107280328.002>

⁹ Halton, Charles, and Saana Svärd. [n.d.]. "The Origins of Writing in Mesopotamia," *Women's Writing of Ancient Mesopotamia*: 3-15 10.1017/9781107280328.002>

¹⁰ Dorman, Peter F. [n.d.]. "Hieroglyphic Writing | Definition, Meaning, System, Symbols, & Facts," *Encyclopedia Britannica* <<https://www.britannica.com/topic/hieroglyphic-writing#ref53614>> [accessed 4 March 2021]

royal drama and bloody battles. True to the fluid nature of language, as time went on, hieroglyphics were also used for images of non-royals and then unaccompanied on cylinder seals in order to give information about what was inside and who was responsible for it. Most famously, Hieroglyphics adorned the tombs of the dead and the ornate temples dedicated to the ancient Egyptian gods. One can infer that not only was the system designed to be practical in its use of the symbolic by means of an alphabet (one of the first ever invented), but it was also designed to look ornate enough to be worthy of accompanying dead royalty to the afterlife, and honouring the revered gods. This notion of practicality is reinforced by the development of the Hieratic Script in 3000BC, a cursive, more informal version of Hieroglyphics, designed for everyday writing. Towards the end of the second dynasty (c. 2670 BC), the use of hieroglyphics was revised once more, and sentences began to appear. In fact, it was only until the 3rd dynasty (c. 2686 - 2613BC) that a recognised canon of rules and principles conforming to language actually arose, further emphasising the idea that writing systems were not originally designed to record spoken utterance, but instead began to follow it as the uses of the system became more versatile and widespread. Whilst it is therefore apparent that the iconic origins of writing in Mesopotamia were rooted in trading commodification, the origins of Egyptian Hieroglyphics were contrastingly symbolic in function, representing monarchs and military figures.

The first writing in China, on the other hand, was more aligned with the iconic than Hieroglyphics. However, it became much more aligned with something entirely different, a logographic script, which is a system that has carried on into modern-day Chinese Mandarin. Logographic script refers to the fact that each character represents a meaningful unit of language i.e. an entire word. The basis of the shapes of the characters were created to resemble the object they described, making it more iconic. For example, if one wanted to ask whether they should go hunting the next day, an oracle might carve an image of a person with a bow and the sunrise. There is evidence that the Chinese writing system drew on elements of Cuneiform, in regards to its use of similar sounding words to represent words that could not be given in a pictograph, as aforementioned with the hypothetical example of the eye to mean "I".¹¹ As one could possibly imagine, the sheer number of characters that sounded the same meant that carrying on with this principle would have resulted in a system in which too many words could be interpreted in vastly different ways; it would have been too ambiguous for even native users to communicate messages effectively. The solution was a system that was adopted in approximately 213BC, whereby words having the same sound would have another part added to suggest the meaning, creating a two-part character system that was eventually standardised so as to obtain one distinctive character representing each morpheme, or unit of language.¹² The highly logographic script emerged and was called Lishu, or Clerky Script and was born from the need for official documentation of governmental affairs by clerks.¹³ Thus, the logographic script was prioritised.

¹¹ Olson, David R. [n.d.]. "Chinese Writing," Encyclopedia Britannica <<https://www.britannica.com/topic/Chinese-writing#ref255828>> [accessed 3 March 2021]

¹² Olson, David R. [n.d.]. "Chinese Writing," Encyclopedia Britannica <<https://www.britannica.com/topic/Chinese-writing#ref255828>> [accessed 3 March 2021]

¹³ Mark, Emily. 2016. "Chinese Writing," Ancient History Encyclopedia <https://www.ancient.eu/Chinese_Writing/#:~:text=Ancient%20Chinese%20writing%20evolved%20from> [accessed 4 March 2021]

While the exact origins of the first forms of the Chinese system are still largely unknown, it is clear that, as with other early systems, its semiotic affiliation is related to the need for a writing system for spiritual use and oracle divination. The earliest evidence of this system comes from inscriptions incised on pieces of bone and tortoiseshell dating back to approximately the 18th century BC although by then, it was already a highly developed system.¹⁴ They recorded questions that were proposed to royal ancestors about topics ranging from agricultural advice, warfare, and family issues¹⁵ and the idea that the Chinese writing system arose for spiritual reasons gives us a greater insight into the hierarchy of influence in ancient Chinese civilisations, illustrating the fact that spirituality was at the centre at the time. The drastic transformation in the writing system from heavily iconic to a system of standardised logographic script was a testament to the societal and hierarchical developments in Chinese society, namely the expansion of the governmental bureaucracy and the wave of new ideas in the development of Confucianism, Taoism and Legalism that all called for records to be made. Regardless of this system's great differences to Hieroglyphics or Cuneiform, it is undeniable that there is a correlation between their semiotic affiliations and the reasons for their creation and evolution.

This brief exploration of the reasons and methods behind the invention of ancient writing systems shows that while the exact origins and reasons for their creation are difficult to discern, due to the lack of surviving documentation, investigating the use of the iconic, symbolic and logographic in these systems allows us to reach conclusions about the possible reasons for their creation. Using the examples of China, Mesopotamia and Egypt creates a discussion around the implications of the prioritisation of the different avenues of human perception, including trade, spirituality and significant changes in societal structures.

¹⁴ Clayton, Ewan. [n.d.]. "Where Did Writing Begin?," The British Library
<<https://www.bl.uk/history-of-writing/articles/where-did-writing-begin#>>

¹⁵ Clayton, Ewan. [n.d.]. "Where Did Writing Begin?," The British Library
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