Systems of Writing
Ziqing Jack Wang

The system of writing is arguably one of the most crucial instruments humankind has invented in history. It is incredibly powerful for data recording, conveying values, and telling stories that unify the populace. Without a system of writing, “civilization” as people know it cannot expand and prosper. By looking into the Sumerian cuneiform, the Egyptian hieroglyphics, and the Chinese Oracle Bone inscriptions, this essay will explore the conditions in which a writing system could emerge and the reasons behind its emergence.

The Sumerian cuneiform is a set of logograms (a logogram is a written character that represents a word or object) that was used to write several languages of the archaic Middle East. Its story began in Mesopotamia, roughly around 3200 BCE, making it the oldest writing system to be invented. There has been some debate over the possible functions and purposes cuneiform served. In one Sumerian epic poem, Enmerkar and the Lord of Aratta, the author wrote, “Because the messenger’s mouth was heavy and he couldn’t repeat [the message], the Lord of Kulaba patted some clay and put words on it, like a tablet. Until then, there had been no putting words on clay.” By describing how the Lord of Kulaba utilized clay tablets to convey messages, this excerpt suggests that cuneiform was invented initially for accounting or recording purposes.

This explanation can also be corroborated by archaeological analysis. For example, in the ancient Sumerian city of Tell Brak, archaeologists unearthed tablets containing cuneiform in the shapes of animals and numbers. Some of these tablets date back to as early as the mid-4th millennium BCE. By trying to identify and link the shapes of animals with those denoting numbers, archaeologists and historians postulate that the Sumerians used these shapes and pictographs intensively to record the amount of livestock or grains, which were crucial supplies for early Sumerian cities.

Sumerian cities such as Uruk, Ur, Nippur, and Lagash were known to worship different gods or goddesses that represented various natural elements. Aside from serving as accounting tools, some archaeologists have also hypothesized that certain signs in the cuneiform system could indicate the names of deities, birds, trees, and other natural or supernatural elements. For instance, Anzû is a divinity in several Mesopotamian religions. In Mesopotamian texts, he was often portrayed as a colossal bird who could breathe fire and water. In 1989, Danish historian Thorkild Jacobsen found that in Sumerian cuneiform, Anzû’s name possessed a distinct symbol and appeared in the oldest cuneiform texts. This case shows that the Sumerians used cuneiform for religious or cultural purposes to systemize their religions and spread their cultural values as an accompaniment to rising population and economic development.
While cuneiform was taking its shape in Mesopotamia, a different kind of writing system was being developed by the ancient Egyptians. The ancient Egyptian hieroglyphics were invented around 3000 BCE, approximately two centuries before the start of the First Dynasty. Small signs or hieroglyphs constituted the hieroglyphic system. Some of these signs represented real-world objects, while others described the meanings of phonetic sounds when said aloud. Like cuneiform, archaeologists have yet to be able to settle a debate over the functions and purposes of the hieroglyphics.

The hieroglyphics could be utilized to record information. Take the classic example of the Rosetta Stone. The Rosetta Stone is a stele issued in Memphis, Egypt in 196 BCE during the Ptolemaic Dynasty on behalf of King Ptolemy V. Although this stele comes rather late in ancient Egyptian history, it is still a valid piece of evidence to demonstrate the function of hieroglyphics since the information was completely written in a later version of this writing system. The content is a decree to celebrate the anniversary of King Ptolemy V’s coronation, listing out the deeds of King Ptolemy V, including tax cuts, restoring peace, and so on. The huge amount of information presented in the Rosetta Stone demonstrates that the Egyptian hieroglyphics were capable and probably used to deliver information to the residents of ancient Egypt.

The hieroglyphics could additionally be utilized for more ceremonial purposes as dedications to royalty and deities. The religious writings in ancient Egypt were done in hieroglyphics, telling the story of the gods and recording instructions or spells to send the dead to their afterlife. The Book of the Dead is a prime example. The Book of the Dead is a collection of spells written on tomb walls to help souls transition into the afterlife. In this writing, the names of deities and religious-related items such as Anubis or the scale of Maat contain different hieroglyphic inscriptions. This fact reveals that the ancient Egyptians used their writing system to document their religious practices and beliefs to solidify the roots of their culture.

The inscriptions on oracle bones, or “oracle bone script,” constituted the central writing system adopted by the Chinese during the Shang Dynasty. The Shang Chinese invented it from 1500 BCE to around 1200 BCE. As a primitive writing system, it served comparable functions and purposes to the ancient Chinese. As an aspect, people wrote hieroglyphs in the oracle bone script to record social events. The Chinese devised special hieroglyphs in the system for fire, rain, the Sun, the Moon, people, bow and arrow, and so much more. Combining these individual hieroglyphs produced accounts of crop yield, natural calamities, wars between armies, or the hierarchies of the Shang social structure.

Moreover, the oracle bones script contained religious motives. The words on the bones convey divination purposes. Many of the words today give historians a peek into the spiritual life of the Shang Chinese. For example, one famous oracle bone reads:
Introduction: “On renzi (day 49), [the king] made cracks and divined:
Charge: ‘We will hunt at Wu; going and coming back there will be no disasters.’”
Prognostication: The king read the crack and said: “Auspicious.” This was inscribed.
Verification: “[We] caught one wild buffalo, one tiger, seven foxes.”

This piece contains the prevalent structure of “introduction, charge (the topic), prognostication, verification” in oracle bone scripture. It shows how China’s earliest writing system was closely intertwined with divination, religious beliefs, and ceremonies.

The appearance of the cuneiform, Egyptian hieroglyphics, and the Chinese oracle bones script is an intriguing topic to investigate. What were some of the larger environments that allowed these ancestors to systemize writing?

Relative political and territorial stability within and with neighboring states was an essential prerequisite for writing systems to emerge. Cuneiform was invented around 3200 BCE. Roughly at that time, the Sumerians consolidated their control of Mesopotamia. City-states such as Uruk, Eridu, and Nippur were being constructed. It was an age marked by political strength and expansion. Similarly, the invention of Egyptian hieroglyphics came shortly after Narmer unified Upper and Lower Egypt, bringing an era of peace and administrative prosperity. The advent of the oracle bones script coincided with a peaceful and constructive period of politics after Pan Geng moved the capital of the Shang Dynasty to a place called “Yin.” When a state enters a time of political stability, it would have a greater demand for effective record-keeping and the dissipation of cultural values to boost political unity and stability. This situation creates a circumstance for people to employ writing as a tool to meet these increasing demands. Plus, only when there is no major political conflict can civilians possess the time and space to focus on establishing culture, including a writing system.

Economically, a growing economic trend could be another premise for the emergence of writing. Take the example of the Sumerian city of Uruk, one of the most well-developed and prosperous. It started with around 10000 residents and grew to about 45000 by 3200 BCE. Following this increase in population was a significant jump in agricultural production. According to American historian Cynthia Stokes Brown, the birth of the cuneiform followed the jump in agricultural production. “Writing began in Uruk as a way to keep track of how many sheep, goats, and measures of grain passed through the central warehouses.” Similarly, after moving the capital to Yin, the Shang Dynasty entered a period of economic progression around 1400 BCE. The ruler Pan Geng oversaw the mass production of rice, millet, wheat, and barley among agricultural products. The manufacturing of bronzeware also reached its apex. This period of economic boom culminated in the birth of the oracle bone script.
To conclude these discovered patterns, why did humankind invent writing? Writing is a device to help people cope with “information overload.” As states become increasingly complex, generating more significant amounts of information, the human brain is not an optimal storage device for these numbers and pieces of random data. Instead, its capacity is limited, it dies, and most importantly, it has evolved to store only certain types of information. Writing effectively helps share some of the brain’s burdens in keeping these excess bits of information by erecting an external catalog system.

Moreover, writing can be a way to solidify cultural roots and spread cultural values. The arrow of human history has pointed towards unity. We have been attempting to tell stories or create fiction from the earliest agricultural societies to secure our dominant position on this planet. From religions to moral rules to states and empires, our global culture has been based on fictional accounts of values, gods, and heroes. Without writing, there would be no strong catalyst and bridge behind all these stories that weave together human civilization.
Works Cited


2. Mark, Joshua J. “Cuneiform.” World History Encyclopedia, 17 Nov. 2022,