

Chapter Three The Alphabet

The invention of the alphabet was a major step forward in human communications. Previously we had discussed early visual language systems, such as pictographs and petroglyphs, cuneiform, hieroglyphs and Chinese calligraphy. These early systems were very hard to learn and master. Literacy was at an all time low. However, those who did know how to read and write wielded incredible power in these early cultures.

The alphabet is defined as a set of visual symbols or characters used to represent the elementary sounds of a spoken language. The Minoan civilization that lived on the Mediterranean island of Crete ranks only behind Egypt and Mesopotamian in its advancement. Minoan or Cretan picture symbols were in seen as early as 2800BC. About 135 Pictographs include figures, arms, animals, plants and some geometric symbols. By 1700BC these pictographs seem to have yielded to linear script writing, a possible precursor to the spoken Greek language.

The Phaistos Disk, from the Minoan civilization, was an incredible find unearthed in Crete in 1908. The 6-inch disk has pictograph and alphabetic forms printed in spiral fashion on both sides. Type like stamps were used to impress each character into wet clay. The meaning of the markings, who made it and for what are a mystery. Canaanites, Hebrews, and Phoenicians of the western Mediterranean region are widely believed to be the source of early alphabets. Hence, the term North Semitic Alphabet. The earliest samples are from Phoenicia-on the Mediterranean Sea where Lebanon and parts of Syria are now. They were advanced mariners and they linked civilizations along the Mediterranean region. Phoenician city-states became a hub in the ancient world for international trade. They came into contact with all influences of the day and sought a writing system for their own Northern Semitic speech.

The Ras Shamra script was found on clay tablets written in a true Semitic alphabetical script around 1500bC. Written with a tool similar to the cuneiform of the Samaritans, it used cuneiform like characters to represent elementary consonant sounds. There were no vowels. Although North Semitic writing is the historical beginning of the alphabet, it may have descended from an earlier, lost prototype. Early alphabets branched into multiple directions, including the Phoenician alphabet that evolved further in Greece and Rome, as well as the Aramaic alphabet, which gave rise to Hebrew and Arabic writing elsewhere in the region.

The tribes from Aram first used the Aramaic alphabet. Aram is now part of Syria. It was a major early derivation from the North Semitic script. The oldest surviving specimen dates from 850BC. The Aramaic alphabet has 22 letters for consonant sounds and was written form right to left at a forty-five degree angle. This language and writing became dominant throughout the Near East. It is the predecessor of hundreds of scripts, including modern day Arabic and Hebrew. The oldest examples of the Old Hebrew alphabet date from around 1000 BC when the Israelites returned to the western Mediterranean area following their Babylonian exile. (516BC) The Israelites found that Aramaic writing had replaced Old Hebrew in the region. The Aramaic alphabet spawned the Square Hebrew alphabet that evolved into Modern Hebrew. Modern Hebrew consists of the twenty-two consonantal letters of the ancient North Semitic alphabet. Arabic writing probably originated before 500BC. Six additional characters added to the end supplement the 22 original sounds of the Semitic alphabet.

There are two forms: Kufic (shown here) and Naskhi. Kufic has a majestic solidity and was widely used on coins, manuscripts, and inscriptions on metal and stone. It is still used for titles and decorative elements. Naskhi became the dominant script after 1000AD. With its more

cursive style Naskhi is ideal for writing on papyrus and evolved into the modern Arabic script. Arabic is the most widely used alphabet today, after the Latin alphabet.

Arab conquests during the 7 and 8th century AD spread the Muslim religion and its holy book the Koran, which was written in the Aramaic Alphabet. As a result, the Aramaic alphabet was spread from North Africa and Spain to India. Respect for these religious writings has elevated calligraphy to a high art in Muslim cultures.

The Aramaic alphabet is believed to be the predecessor of scripts used in India arriving around the 7th century BC. This is an example of classical Indian Sanskrit type printed in 1844. The Indian language is extremely complex and differs according to regions. Therefore, the origins of early writing in India are controversial. Their classical Sanskrit has a strong horizontal line, which the writing underneath seems to hang from. This may have come from a tribal custom of writing beneath a ruled line.

From North Semitic writing, the Aramaic alphabet and its descendants branched towards the East, forming a rich heritage of graphic forms remarkably different from their distant cousins, such as the Greek and Roman alphabets, that evolved in Western locales.

Greek civilization laid the foundation for many of the accomplishments of the Western world-science, philosophy, democratic government; art, architecture and literature are just a few examples. The ancient Greeks about 1000BC adopted the Phoenician alphabet. In this alphabet 5 consonants were changed to vowels. The oldest known inscriptions date from the 8th century BC, but the Greek alphabet may have been around much longer. In this wheel from 525BC, a dedication to Apollo is clearly legible on the outer ring of the wheel. It may have been used for worship purposes.

The Greeks took the Phoenician alphabet and changed five consonants to vowels. It is not known who brought the Phoenician alphabet to Greece, but mythology and tradition points to King Cadmus. There is a Greek myth that says that Cadmus, King of Phoenicia; set out to find his sister Europa after Zeus abducted her. Well, he killed a dragon on his journey, planted the teeth like seeds and an army of men sprang forth. Tradition says that King Cadmus had an uncanny ability to raise and command his troops and this could be not from the teeth he planted, but from his command of the alphabet. Then again, King Cadmus's story could be a malarkey, and it could have been the Phoenician traders who brought it to Greece.

Various regions adapted the alphabet to their own needs until around 400bc Athens officially adopted a version that became standard throughout Greece. During the Greek cultural renaissance, around 700bc, including achievements such as Homer's Odyssey and the Iliad were created, stone architecture and human figures as major subjects on pottery, Athens organization of government created a wider need and use of a unified alphabet.

From a graphic viewpoint, the Greeks applied geometric structure and order to the Phoenician characters. They created an alphabet, which was aesthetically pleasing, conveying harmony and beauty. From a graphic viewpoint, the Greeks applied geometric structure and order to the Phoenician characters. They created an alphabet, which was aesthetically pleasing, conveying harmony and beauty.

In its inscriptional form, the letters became symmetrical geometric constructions of timeless beauty. Stone carvers took imaginative liberty with letterform design while maintaining the basic structure of the 24-character alphabet that had stabilized by the classical period and is still used in Greece today. In this tablet, both the E and M are based on a square, A is made from an equilateral triangle and the o is nearly a perfect circle.

Initially, the Greeks adopted the Phoenician way of reading from right to left but later changed it to a right to left and the next line was written left to right and so on. This helped the eye to move in a easy way back and forth over the page. It was also called boustrophedon.

As early as 2nd century AD the Greeks developed a more rounded writing style called uncials. This was an easier to write script with rounded letters formed by fewer strokes. Uncials were used on manuscripts, wood and soft materials like clay and wax tablets. Large letters were called majuscules. Meaning all capital letters. During the golden age of Athens (500bc) the alphabet played a role in democracy. It enabled the use of allotment tokens when selecting citizens by lot for public service and jurors through the use of metal ballots with inscriptions made secret voting possible. Wealthy Greek citizens used signature seals to authorize and endorse documents-which could be pressed into wax or clay and animals were a favorite motif. Reading and writing became more important by this time and because of the expansion of information and knowledge that exceeded an cultures oral capabilities to document it.

Alexander the Great formed libraries with several thousand scrolls. Unfortunately, only about 30,000 scrolls have survived. After his death, Alexander's empire was split into two Hellenistic kingdoms. Greek civilization and its alphabet now became influential throughout the world. The Greek alphabet fathered the Etruscan, Latin, and Cyrillic alphabets. Through the ancestors of this alphabets- we have the modern alphabet systems used throughout the world today.

By the first century AD, The Roman Empire reached from England to Egypt and from Spain the west to the Persian Gulf at the base of the ancient land of Mesopotamia. After the Roman conquest of Greece in the second century BC, scholars and whole libraries were packed and moved to Rome. The Romans captured Greek literature, art and religion, altered them to conform the their society and spread them through the vast Roman Empire.

The Latin alphabet came to the Romans from Greece by way of the ancient Etruscans. The letter G was designed to replace the Greek letter Z, which was of no use to the Romans. The Latin alphabet contained 21 letters. Later after the Roman conquest of Greece during the first century BC the Greek letters Y and z were added to the end of the alphabet because the Romans were appropriating Greek words containing these sounds. Additional letters were added during the Middle Ages to bring us up to our Modern day 26-letter English alphabet.

Rome took great pride in its accomplishments and created monumental letterforms for architectural inscriptions celebrating their generals and victories. They were designed to stand the test of time. The roman inscriptions became a sequence of linear geometric forms adapted from the circle, square, and triangle. When lined up together, they create a nice sense of spatial harmony and legibility. There is debate on where the Roman serifs came from. Some believe they are "clean up" strokes, others believe they are from the end of a brushstroke. In any event, they do not fit any geometric pattern and they do not appear to be constructed the exact same way. Perhaps they are just artistic expression.

The Roman written hand took several design styles. The most important is capitalis quadrata. Written carefully and slowly with a flat pen, square capitals had stately proportions and outstanding legibility. There were spaces between letters and lines, but not between words. Serifs were added and strengthened the end of strokes. The capitalis rustica were extremely condensed letterforms written quickly and saved space. Parchment and papyrus were expensive and this style allowed one to cram as many letters as possible.

In Pompeii and Herculaneum Roman brush writers wrote notices, political campaign material, advertising announcements and even crude obscenities on walls using these styles of handwriting.

Eventually parchment became used for writing in 190BC. Tradition holds that Ptolemy V of Alexandria and King Emeses II of Egypt became involved in a battle to build libraries. Ptolemy V placed an embargo on papyrus shipments to prevent his rival from rapidly producing scrolls. As a result, parchment, which is made of the skins of domestic animals (calves, sheep, goats), was invented to overcome the embargo.

About the time of Christ, a new format design began to replace scrolls called codex. Parchment was gathered in bundles of two, four, or eight sheets. They were folded, stitched, and combined into codices with pages like a modern Book. These parchments had several advantages over scrolls. The time and labor process of unrolling a scroll was replaced by the quick process of opening a codex to the desired page. Also, papyrus was very fragile, and you could not write on both sides. This saved material and storage space.

During the rise of Christianity until about 400AD both scrolls and codices were used side by side. The durability of the codex appealed to Christians because their writings are considered sacred. Pagan scholars were less inclined to revere their religious writing with a plethora of gods to choose from and little difference between both. Christians were involved in comparative study of different texts. It was easy to have several codices open on a table. The codex system was also sought to set themselves apart from the pagan religions. Graphic format became a symbol of religious belief during the late decades of the Roman Empire. By 325AD the emperor Constantine adopted Christianity as Rome's state religion and elevated books and writing to a higher level of importance than their previous roles in the ancient world. Eventually, after the fall of Rome, its alphabet became the design form for visible languages in the western world. As scribes and priests lost their power, their political power and influence declined. Secular and military leaders came to the forefront as in the classical world of Greece and Rome.

Alphabets are one of man's greatest achievements; they brought whole communities of people together and provided greater access to information in public affairs. As the book says the simplicity of alphabets belies its pivotal role in human history and the history of graphic design.

Just as the invention of printing launched a quiet revolution in Chinese culture, so did alphabetic writing slowly transform western society? Alphabetic writing was easy to learn and literacy was put within reach of ordinary people, in contrast to the Egyptian and Mesopotamian cultures.

These visual symbols can be connected and combined to make visual configurations signifying sounds, syllables, and words uttered by the human mouth. The hundreds of signs and symbols required by cuneiform and twenty replaced hieroglyphs or thirty easily learned elementary signs. No one knows for sure about the origins of the alphabet. Perhaps it contains a little of all the areas we have discussed.