

Origin and Development of Writing in Ancient Egypt

Professor Abdelhalim Nureldin

Man underwent two main prehistoric phases: food collection and food production. The first phase, food collection, involved a daily search for sustainable food in which man went out hunting, fishing or collecting plant roots. During this phase, man had to move from one place to another in search of shelter, since he had no clothes to protect his body against the heat of summer and chillness of winter.

We do not know precisely when the food collection phase began, but we do know that it ended when man started to produce food.

The second phase, food production, resulted in man's giant achievements, such as raising animals, discovering fire and learning agriculture, all of which contributed to his stability. Raising animals provided man with a surplus of food, and the discovery of fire with the ability to cook, make pottery, warm himself in winter and illuminate moonless nights.

Agriculture, which was connected with annual river floods, marked the point at which man started to lead a relatively stable life. Man lived next to his land, divided the year into crop rotations, sowed seeds, harvested the grain, made linen clothes, built a family and exchanged interests with neighboring communities. The stability offered by this kind of life helped transfer man from food collection to intellectual and artistic creation, giving him time to observe the vast universe and ponder on the nature of different cosmic forces. He noticed that the sun rises then sets, that the moon appears at night and disappears in the morning, that plants grow again when harvested and that the river floods on an annual basis. The ongoing cycles of nature inspired man's concept of life after death: like other organisms, man lives for a certain duration then dies, then is resurrected for eternity. The belief in life after death was the essence of ancient Egyptian civilization, which prepared ancient Egyptians to deal and interact with nature, producing the glorious civilization to which Egypt is a living proof.

This was when man started to move steadily towards art. He used various materials to make statues inspired by his natural surroundings. He resorted to graffiti, a middle phase between inscription and painting, to document events from daily life as well as express his endless endeavors to

understand the anatomy of animals, birds, reptiles, water, deserts, mountains ... etc.

With the increase of population and, accordingly, daily activities, man had to adopt a fixed method of expressing ideas and documenting events. Man had, no doubt, used numerous temporary methods to communicate, chief among which were the exchange of signs and the use of body language. However, as man delved deeper into the domains of religious ethics, military activities and civil life, temporary communicative signs no longer sufficed. Most meanings, values and beliefs required specific terms, such as the belief in life after death and the need to preserve the body for its afterlife reunion with the soul. Man had always desired immortality, the achievement of which required that he documented his name on the walls of tombs, statues, mortuary objects ...etc.

Ancient Egyptians succeeded, after strenuous efforts, in inventing a fixed way of expression, which is writing. Writing marked the end of the prehistoric ages and the beginning of written history, and, since the First Dynasty, had been used for the documentation of the history and civilization of ancient Egypt.

The invention of writing reflected the physical and spiritual stability of ancient Egyptians, and emphasized that all the aspects of ancient Egyptian life contributed to the creativity and greatness of its people. The favorable weather, fertile land and life-giving Nile were the factors behind Egypt's prosperity and plenty.

We do not know for certain when ancient Egyptians invented writing, however, we can trace it back to the First Dynasty that existed around the 31st century BC. This dynasty witnessed the first serious attempts of Hieroglyphic writing, but there were probably earlier attempts. Evidence from the late Stone Age, Predynastic and Dynastic Eras proves that ancient Egyptians started to write about two centuries before the First Dynasty, at which time they used pictorial signs and simple vocabulary.

Before moving to the oldest script of the ancient Egyptian language, which is the Hieroglyphic script, we need to understand the name given to the language from which various scripts and languages originated.

Ancient Egyptians referred to their language as “Egypt’s tongue, Egypt’s mouth, Egypt’s speech and speech of Egyptians”. It was also known as “speech of the gods”.

The ancient Egyptian language was written in four scripts: Hieroglyphic, Hieratic, Demotic and Coptic, which we will deal with later.

The ancient Egyptian language was characterized by unique grammatical rules that set it apart from the languages of the Old World. Despite such uniqueness, the ancient Egyptian language was influenced by other languages due to Egypt being part of the old Lower East, as well as the commercial and military relations it had with Mediterranean islands and North Africa. We can recognize Semitic and Hamitic features in the language, proof to the ties that existed between ancient Egyptians and the people of the northeast, west and southeast.

However, we do not mean to trace the ancient Egyptian language to either Semitic or Hamitic origins, for, as I have made clear, it had unique characteristics that were only made richer through borrowing from other languages. Since Hieroglyphic script is the oldest and most lucid among the scripts of ancient Egyptian language, it was used in huge buildings such as temples and tombs. Hence, we will begin with the Hieroglyphic script.

Hieroglyphic Script

Writing is a fixed way of expression. The pictorial signs used by ancient Egyptians in the documentation of events were inspired by natural surroundings. For example, they painted a man to refer to a man, and this can also be applied to body parts, beasts, birds, reptiles, insects, plants, mountains, seas and rivers.

It is believed that the signs we now have are the outcome of the visions of different creative people who assembled and decided on certain forms that could be further developed. These people probably employed certain signs to express certain meanings, for instance, an owl was painted to refer to the owl, a sea wave to refer to water in general, a certain geometrical shape to refer to a house, a circular shape with two intersecting streets to refer to a city, and a heart and trachea to refer to parts of the human body. A horizontal dash was placed under each of these signs to emphasize that the

sign was used to depict itself. Later on, a sign was used to refer to several things. The reader is probably wondering: where in ancient Egypt had writing started? Did it start in one place then moved to others? Or had it started in different places at the same time?

It is possible to say that writing had a certain point of origin, from which the basics spread to other places. So can we specify where writing started? And can this help us know about the history of ancient Egypt, and the religious and intellectual roles played by some places?

We can refer to certain areas throughout Egypt that influenced ancient Egyptian thought: Heliopolis, which means the eye of the sun, was the city of learning and religious thought. Once called Oun, Heliopolis was the center of sun worship and the source of the “Ennead” theory that attracted Greek philosophers and scholars. There was also the great City of Manf (currently known as Mit Rahina, El-Badrashin City, Giza Governorate), which was the oldest capital of Egypt and the center of worship of the god Ptah, an influential ancient Egyptian god and the source of one of the “creation” theories. El-Ashmunein village in Al-Minia Governorate was the birth place of the “Ogdoad” theory, and the center of worship of Djehuty, the god of wisdom and knowledge. Abydos in Upper Egypt (Al-Araba El-Madfuna, Al-Balina City, Suhag Governorate) was the place where Osiris, the god of plenty and the afterlife, was worshipped, while Thana (Tinna) which is believed to be El-Berba village (Gerga City, Suhag Governorate), was the native city of King Narmer who united Upper and Lower Egypt. Nekheb and Nekhen Cities, located on the east and west banks of the Nile, 20 km north of Edfo, were the capitals of Upper Egypt before the unification of the two lands. The Cities were also the center of worship of the goddess Nekhbet. Buto, a village located in the north (Ebto, Tell El-Farein, Desuq City, Kafr El-Sheikh Governorate) was the capital of Egypt before the Unification, where the goddess Wadjet was worshipped.

Several other locations witnessed prehistoric civilizations that paved the way for written Egyptian history, chief among which were Fayoum, Helwan, Maadi, Gerza, Tasa, Badari and Naqada. We do not know whether any of these places had been the birthplace of writing.

The development of life in ancient Egypt made Egyptians realize that pictorial signs were not enough to express all of their ideas and activities, as well as their conceptions of the upper and lower worlds (the worlds of the

living and the dead). Thus, they started to develop the use of signs, reducing the pictorial significance and emphasizing the phonetic, so that each sign could give one, two, three, or sometimes four sounds.

Transliteration of Signs

Ancient Egyptians arrived at the system of transliteration, whereby each sign represented the sound of one letter, resulting in the formation of an “alphabet”. Some signs represented the sounds of two letters; others of three; and others, in a few cases, of four.

We can only imagine the difficulties that faced ancient Egyptian pioneers during the processes of classification and transliteration. Add to these the challenge of spreading their achievement throughout Egypt in order to standardize the systems of speech and writing. The process of choosing the signs had undoubtedly required much time and effort, the result of which was manifest in the linguistic and written integration of the ancient Egyptian language. Transliteration led to the invention of hundreds of signs, which is one of the reasons behind the difficulty of the language compared to other old and new languages that depend on alphabets of limited numbers of letters.

Among the one-letter signs is the sign representing the eagle, which is equivalent to the Arabic ‘aleph’. Two-letter signs include the sign referring to a house ‘pr’, and three-letter signs include the sign depicting a heart and trachea ‘nfr’.

Before I move on to the scripts of the ancient Egyptian language, I would like to shed light on the story of deciphering its symbols.

The Rosetta Stone and Ancient Egyptian Language

Scholars of ancient Egyptian civilization must be acquainted with the Rosetta Stone, which is the key to deciphering the ancient Egyptian language. In order to discuss this important antiquity, one must be aware of four factors: the stone, time, place and person.

The stone is made of black basalt; the place is Rosetta, a city in Beheira

Governorate; and the time is 196 BC and 1799 AD. The first date indicates the time when the text was first inscribed on the stone, during the reign of King Ptolemy V. The second date marks the discovery of the stone at the hands of French soldiers, during the French Campaign on Egypt, while digging a moat around Fort Julien. The person is Champollion, the young French scholar.

But for the discovery of the Rosetta Stone in 1799, ancient Egyptian civilization would have remained unknown to us even to this day. Jean-François Champollion procured, like other scholars had, a copy of the stone and studied it. He was especially interested in the Hieroglyphic script and embarked on his diligent studies, depending on his extensive knowledge of Old Greek and other ancient languages.

The Rosetta Stone is exhibited in the British Museum, and consists of an irregular slab of black basalt of the dimensions: 113 cm high, 75 cm wide and 27.5 cm thick. Some parts are missing at the top and bottom of the stone. It represents a decree issued around 196 BC by the priests of Manf (currently known as Mit Rahina, El-Badrashin City, Giza Governorate), expressing their thanks to King Ptolemy V for repealing taxes on temples and exempting them from some obligations.

The decree was inscribed in three scripts which, from top to bottom, are: Hieroglyphic, Demotic and Greek. The greater part of the Hieroglyphic text, and a smaller part of the Greek had been lost. The priests first expressed their thanks in Hieroglyphic, the official script at that time; then in Demotic, the script used in daily life; and finally in Greek, the script used by the Ptolemies. The discoverers of the stone had suggested that it contained one text written in three different scripts, which later turned out to be true. After the stone was moved to Cairo, Napoleon ordered several copies to be made for those interested in Egyptian Civilization, whether in Europe or France. The stone was moved to England in 1802 according to an agreement signed between England and France, whereby England was to get the stone and other antiquities. Researchers translated the Greek text, while Sylvester de Sacy and Akerblad showed special interest in the Demotic text.

A major transition in the field of Hieroglyphic studies was achieved by Thomas Young, an English scholar, who procured a copy of the Rosetta Stone in 1814. He assumed that the cartouches contained royal names, and referred to other texts such as those inscribed on the Obelisk discovered in

Philae in 1815, which contained two Greek and Hieroglyphic texts.

Despite all the attempts to decipher the Rosetta Stone, it was Jean-François Champollion (1790 – 1832) who succeeded in unraveling its mysteries.

Champollion had to address several hypotheses:

Firstly, were the texts different, or did they represent the same text written in three different scripts?

Secondly, was the ancient Egyptian language based on an alphabet, or was it written in signs that transliterated one or more letters?

Thirdly, did vowels exist in the ancient Egyptian language? Were the signs logographic or phonetic? What were the methods that ancient Egyptians used to define their vocabulary? Did the language have adjectives and vowels? ...etc.

Champollion considered all of these hypotheses when deciphering the stone. Besides, he tried to find out whether there was a relationship between the Hieroglyphic, Hieratic and Demotic scripts, and to discover the nature of the oval shapes surrounding some Hieroglyphic signs, which we now refer to as cartouches.

Champollion first read the Greek text and recognized the name of Ptolemy V. It seems that he based his research on proper nouns, which do not change much from one language to the other, and realized that the name of the king would probably be the same in Greek, Hieroglyphic and Demotic. A modern example would be the Arabic names 'Magdy' and 'Hassan', of which the first three letters remain the same in every language, even if other letters (vowel letters in particular) were dropped or changed. Since vowels did not exist in the ancient Egyptian language, only consonants were subject to change.

The Rosetta Stone contained a cartouche that was repeated six times throughout, enclosing the name of King Ptolemy V, which had also been inscribed on the Obelisk of Philae along with the name of Cleopatra. Champollion took down the signs enclosed inside the Ptolemy cartouche and numbered them, then did the same with the Cleopatra cartouche, since both names had some signs in common. He then wrote down and numbered the two names in Greek, comparing each Hieroglyphic sign with its Greek equivalent. In this way, Champollion was able to recognize the

transliteration of many signs, and through conducting more comparative studies, he succeeded in deciphering all the signs of the ancient Egyptian language. In 1822, he announced his achievement to the whole world, revealing that the language was based on transliteration of signs rather than an alphabet.

Champollion's achievement gave rise to hundreds of researchers who contributed new discoveries to the field of ancient Egyptian language, paving the way for the emergence of a new science at that time, Egyptology.

Scripts of Ancient Egyptian Language

The ancient Egyptian language was written in four scripts: Hieroglyphic, Hieratic, Demotic and Coptic. These scripts did not appear at the same time but developed throughout the centuries. Before I move on to the explanation of the scripts, I would like to correct a common mistake which is the reference to the ancient Egyptian language as the 'Hieroglyphic' language. Hieroglyphic is a script, not a language, resembling in that the Naskh, Req'a, Thuluth, Kufi and Diwani scripts of the Arabic language.

1) Hieroglyphic Script

The word "Hieroglyphic" was derived from the Greek words 'hieros' and 'glophos' which mean 'sacred writing'. The sacredness of the Hieroglyphic script comes from the fact that it was inscribed on the walls of sacred places such as temples and tombs. It was also known as "engraved writing" since it was inscribed in high and low relief on the walls of immovable antiquities (buildings) as well as on movable antiquities (statues, panels ...etc).

2) Hieratic Script

"Hieratic" was derived from the Greek 'hieratikos' which means clerical, since priests were famous for using the hieratic script. The majority of Hieratic texts written in the Late Period were religious, mostly written by priests. The Hieratic script is a simplified (or abbreviated) form of the Hieroglyphic script. Ancient Egyptians arrived at these scripts for several reasons. The Hieroglyphic script is characterized by its complete sign system, which could not be used in either secular or religious texts, owing to the enormous increase of these texts. The fast pace of life required a 'faster'

script, as well as suitable writing materials such as papyrus and ostraca. The Hieroglyphic script (or detailed script) was inscribed using chisels, thus deemed more fitting for huge buildings. The Hieratic script, on the other hand, was written using ink and bamboo pens, which justifies its use in daily life.

3) Demotic Script

The name of this script is derived from the Greek word 'demos' and its relative adjective 'demotikos' which means 'popular'. The name 'Demotic' did not relate the script to the lower stratum of society, but rather signified that it was used in daily dealings. In that sense, it resembled today's 'Req'a' script.

The Demotic script emerged in the 8th century BC and continued to be used until the 5th century AD. It was invented as a response to increasing activities and dealings, especially administrative dealings that required speed. It was written on papyrus and ostraca.

4) Coptic Script

The Coptic script is the final phase of development of the ancient Egyptian language. The word 'Coptic' is derived from the Greek 'Aigyptos' which means 'Egyptian', a reference to the ancient Egyptians who lived in Egypt and used this script to express the language they used at this point in history. Coptic had a special linguistic significance since it was the first ancient Egyptian script in which vowels were used. The use of vowels in the Coptic script helped scholars to arrive at the closest correct pronunciation of the ancient Egyptian language.

Among the reasons that led ancient Egyptians to include Greek letters in their writing was the presence of Greek invaders in Egypt, which forced ancient Egyptians to find a script that would help maintain some level of mutual understanding. Accordingly, the Greek alphabet was used to express the sounds of ancient Egyptian language, to which were added seven Demotic signs that had no phonetic equivalent in Greek.

Before I move to another point, I cannot but address the questions surrounding the purpose of having four different scripts in the same

language, and the process through which ancient Egyptians moved from one script to the other. It is possible to say that the use of ancient Egyptian language for so many centuries led to the emergence of several linguistic phases, which will be dealt with later, as well as several phases of writing that responded to the requirements of the age. The Hieroglyphic script was the clearest of the ancient Egyptian scripts, and was governed by specific calligraphic rules. It was mostly written on rocks by expert inscribers using sharp instruments, such as chisels. We can only imagine what used to happen in the case of error; most probably the inscriber replaced the old slab with a new one, thus wasting time, money and effort. In some cases, the error was covered using a layer of plastic, over which the correct signs would be inscribed. Sometimes, these layers would fall after a period of time. Besides, it was extremely difficult to move these inscribed slabs from one place to the other, since pack animals could only carry a limited number of slabs.

Hence, ancient Egyptians realized that they had to look for easier writing materials and a simpler script than Hieroglyphic. The Hieratic script appeared as a response to these demands, and was developed by literate ancient Egyptians who decided to overcome the difficulties posed by the Hieroglyphic script. They also sought to regulate the process of simplifying the ancient Egyptian language. For instance, the use of the sign 'n', which represented a water wave, was reduced from six to three units in order to preserve its pictorial significance. At times, the units in the middle would be dropped, and the sign would start or end with a reference to the water wave. Eventually, they probably agreed to inscribe the wave in one flat line to reduce the vowelness of the sign and the time it took to be inscribed. This is how the sign came to be inscribed, maintaining traces of ink at the end. The simplification of the sign was as important as spreading it throughout Egypt, or else every group of people would have inscribed the sign differently, thus preventing its standardization.

Ancient Egyptians did adhere to the rules of simplification; however, there were a few factors that influenced the basic principles of these rules including time, place, craftsmanship, tools and materials. For instance, the script of a document written in Manf in the 20th century BC must have differed in certain non-basic ways from that of a document written in Thebes in the 15th century BC. Not to mention the skill of the inscriber, and the tools and materials he used.

When did ancient Egyptians start the phase of script simplification? Or in other words, when did they arrive at the Hieratic script? This must have taken place after the Hieroglyphic script became well-established, since it is the script that was later simplified. Script-related studies indicate that simplified signs emerged as far back as the First Dynasty, although no Hieratic text was found before the Fourth Dynasty, when small pieces of papyri containing a text written in Hieratic were discovered in Algabalein. Other pieces of papyri were found in the mortuary temple of king Sahura' at Abusir, south of Giza (some of these pieces are preserved in the Egyptian Museum and the rest in international museums).

The invention of papyrus as a fundamental writing material at the hands of ancient Egyptians had a great impact, not only on the ancient Egyptian civilization, but on other Old World civilizations as well. Ancient Egyptians must have arrived at this invention since the First Dynasty, as some blank pieces of papyri were found in the tomb of Hem-Ka located in Saqqara (he lived during the reign of king Den, one of the monarchs of the First Dynasty), which are now preserved in the Egyptian Museum as part of Hem-Ka's acquisitions. Thus, ancient Egyptians succeeded in achieving both the simplification of writing and the invention of papyrus, a light writing material that saved time and effort.

The third phase of writing started during the reign of the 26th Dynasty (664 – 525 BC), when the Demotic script was invented. The Demotic script is an abbreviated form of Hieratic, whereby much of the calligraphic rules were dropped, resulting in a clearer but more intertwined script. Because of the intricacy of the Demotic script, there were not many people who were skilled at it. It flourished in the Ptolemaic and Roman Eras, and was written on both papyrus and ostraca. Hieratic texts were mostly religious, whereas Demotic texts reflected the social and economic conditions of ancient Egypt.

The Coptic script emerged during the Ptolemaic Era, but since it was written in Greek letters, it had no calligraphic relationship with the other scripts. However, it maintained some kind of linguistic, grammatical and phonetic continuity, and was used in many texts that helped shed light on the later phase of ancient Egyptian Civilization.

Eras of Ancient Egyptian Language

In 280 BC, upon assignment by king Ptolemy II, Maniton, an ancient Egyptian historian, divided Ancient Egyptian history into thirty dynasties. Modern historians then classified these dynasties into historic eras such as the Old, Middle and New Kingdoms. Besides, there were linguistic eras related to the ancient Egyptian language. The language lasted for a long time, and was subject to several grammatical, morphological and spelling appropriations and phonetic changes. Through the studies conducted by ancient Egyptian language specialists, it was possible to divide the language into eras of distinctive linguistic characteristics:

1) Old Egyptian

Old Egyptian is the cornerstone of the ancient Egyptian language, and it was used during the Early Dynastic Period, Old Kingdom and the Seventh and Eighth Dynasties of the First Intermediate Period. The texts of this linguistic period are manifest in Old Kingdom antiquities and pyramid texts.

2) Middle Egyptian

The linguistic characteristics of Middle Egyptian emerged mid-Eighth Dynasty and continued until the 18th Dynasty. This period witnessed the full maturity of ancient Egyptian language. It covered, on the historic level, the First Intermediate Period, Middle Kingdom, Second Intermediate Period and the beginning of the New Kingdom.

3) Late Egyptian (New Egyptian)

Late Egyptian was used from mid-Eighteenth Dynasty until the 25th Dynasty. It covered the New Kingdom and Late Period.

4) Demotic Egyptian

It started in the Eighth century BC and continued until the Fifth century AD. Although Demotic script differed linguistically from the other scripts, it is considered one of the linguistic phases of the ancient Egyptian language.

5) Coptic

The Coptic script is a linguistic phase that started in the 3rd century BC and ended officially after the Arab Conquest of Egypt in 641 AD. Coptic was gradually replaced by Arabic, although they co-existed for a long time.

The Direction of Writing

The Hieroglyphic script was written horizontally and vertically from right to left, except for certain cases when the direction of writing had to agree with that of a scene or text of special architectural nature. At times, the arrangement and aesthetic form required that some texts be written from left to right. Hieratic and Demotic were always written from right to left. The direction of a Hieroglyphic text can be determined according to the direction of signs that have backs and fronts, such as signs representing humans, animals, birds and reptiles.

The development of writing in Egypt is made clear through the four scripts of the ancient Egyptian language and the relationship between them, especially the Hieroglyphic, Hieratic and Demotic scripts. The Coptic script was written in Greek letters, and so does not have the calligraphic connection of the other three scripts.

Several factors influenced the development of the scripts of the ancient Egyptian language including the material and tools used, as well as the subjects and activities tackled. Inscription on slabs and stone buildings required that signs be written in their complete form, in either high or low relief. On the other hand, writing on papyri, ostraca and movable antiquities required a more simplified form of Hieroglyphic script, which later developed into Hieratic script. Ancient Egyptians had to simplify the Hieroglyphic script in keeping with the nature of the writing material (papyrus), the increase of daily activities and the need to reduce the effort and expense of writing. Because of its resemblance to the simplified Hieroglyphic, Hieratic was first known as ‘unconventional Hieroglyphic’.

They were also careful not to alter the basic components of the signs. Still we can detect certain differences between Hieroglyphic and Hieratic signs.

We might never find out why ancient Egyptians dispensed with the heads when simplifying the signs representing some birds, or why the dimensions of certain signs differed during the simplification process. In some cases, we cannot even tell the Hieroglyphic origin of the simplified sign, owing to factors such as the skill of the writer and his physical and psychological states when writing. There is no evidence as to whether Hieroglyphic and Hieratic scripts co-existed. By the end of the 25th Dynasty (656 BC) and the beginning of the 26th, a simplified form of Hieratic emerged, which was called the Demotic script. It continued to be used in Egypt until the end of the Roman Era. Demotic script scholars believe that it was invented as a response to the increase of secular and religious activities.

Although this might seem logical, close study of the Demotic script raise doubts as to the certainty of such belief. There are still questions concerning the development of ancient Egyptian scripts, chief among which are:

Is the Demotic script the simplification of a simplified form of Hieroglyphic, which is the Hieratic script? Or were the Hieratic and Demotic scripts direct simplifications of Hieroglyphic? Does the Demotic script have different characteristics than the Hieroglyphic and Hieratic scripts?

Demotic signs appear to be more simplified than the Hieratic, since much of the basic components of the signs were dropped. This is one of the reasons behind the difficulty of reading Demotic, beside the smallness of the used materials (such as ostraca), and the shortness of the inscribed subjects. In order to understand the methods of simplification applied by ancient Egyptians, Demotic signs must be compared with the signs of the other three scripts.

Studies conducted on ancient Egyptian writing have come a long way, but there is still much to be done to fully understand the journey of development of writing in Egypt.