LOCATION OF PI-HAIROTH OF MOSES'S EXODUS IN SUEZ GULF AND THE NEW KINGDOM'S SCENARIO: AN INTERDISCIPLINARY APPROACH

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ABSTRACT

In modern literatures, the location of Pi-Hahiroth at which the Pharaoh of Moses sank is unknown; and during the reign of which Pharaohs the Israelites have lived in Egypt is still unconfirmed. Besides, the historic and chronological scenarios suggested by modern scholars regarding this period differ from those mentioned by the Greek and medieval historians. Therefore, the paper shows the location of a mouth of an inland lake, in the western coast of Sinai that ramifies from the Suez Gulf, which according to Al Maqrizi the medieval Egyptian historian, Moses and the Israelites crossed it during the exodus. Regarding the dissimilarity in chronological data from different sources, the paper shows that the Egyptians used diverse time intervals, and four types of years, namely: the Earth’s solar year of ~365 days, the pilgrimage year of 6 months, the administrative year of 3 months, and the lunar year of ~30 days. Besides, regarding the dissimilarity in historic scenarios and names of pharaohs, the paper shows how to pronounce their names, similar to that mentioned by Greek and medieval historians, using the proper phonetic values and color-codes of signs, in addition to the rule of pronouncing the core and cover parts of the word in black texts. Finally, the paper shows that the pharaohs of Abraham, Joseph, and Moses are the so-called Amenhotep-III, Seti-I, and Ramesses-V, respectively.

KEYWORDS: Egyptian Calendars, Hieroglyphs, Middle Kingdom, New kingdom, Joseph, Moses, Exodus.
1. INTRODUCTION

During almost two centuries, great efforts have been done in deciphering the Egyptian Hieroglyphs (see, e.g., Budge, 1920 & Gardiner, 1927). The progress in this field encouraged scholars to look for Egyptian written texts related to the stories of Abraham, Joseph, Moses, and the children of Israel in Pentateuch and Quran. Particularly, in order to formulate the convincing answers for a set of perplexing questions, such as: when did they live in Egypt? Where did they live? What are the construction works they might have built? Who was Pharaoh of the exodus? This is in addition to identify the places of the exodus route that are still unknown, particularly Rameses, Succoth, Baal-zephon, and Pi-Hahiroth. Hitherto, there is no consensus among modern scholars regarding any of the claimed answers, due to the lack of discovered evidences in the Egyptian texts. Yet, few scholars endeavored to show where places of the exodus route are. Regarding Etham the second stop in the exodus route, in Observation on the Journeys of the Children of Israel (Pentateuch, 1828, p.666), “Etham is the place at the northern point of the western arm of the Red Sea”. Also, Palmer (1871, Part-I, p.270) confirmed that, the passage of the Red Sea took place at the head of the Gulf of Suez.

The claims of most scholars regarding the exodus story, names of Pharaohs, and location of Pi-Hahiroth are based partly on citing Josephus (37-100AD) who cited Manetho (Waddell, 1964), in addition to citing books written by other historians, particularly, during the 19th and 20th centuries. Some scholars observed the related narratives by Herodotus and Diodorus as unreliable (e.g. How, 1913-1927 & Eyre, 1991). This is because philologists (e.g., Budge, 1910) assumed that they had accomplished great advances in understanding the ancient Egyptian texts, therefore they (and other scholars) classified the historic texts that do not support their interpretations as part of the realm of myths or falsifying the history. Today, this opinion became an irreversible notion in the realm of Egyptology.

On the other hand, despite that the Egyptians used diverse calendars in their records (Waddell, 1940, p.5), in reckoning dates and ages, scholars assumed that all the Egyptian records are in earth’s solar year (~365 days), which affected the results of chronology researches in a negative way. Besides, researchers did not cite the historic texts of the medieval Egyptian historians. Perhaps the lack of translated copies was the prime reason, or due to that, some of these texts were not structured in chronological way. Al-Maqrizi (1364-1442AD) in particular did not write the history of ancient Egypt in a time line; his narratives are scattered in sections on buildings, districts, or cities, which need additional efforts to link them together in a sequential manner. Besides, the technical information that is depicted with words in texts by medieval Arab historians would be misunderstood even by native readers if the old writing methods and the related analogy of old Arabic words were not in mind. Add to this, in their narratives, medieval historians mentioned names of Egyptian kings that seem completely different from the list of Manetho, which made it difficult for modern readers to know which era they meant. These names are neither similar to those mentioned by the Greek historians (e.g. Herodotus, 484-425BC) or philosophers (e.g., Plato, 360BC-a) nor like those used by modern Egyptologists (e.g. Budge, 1920, pp.1257-1270). This dissimilarity did make it difficult too for researchers to observe the narratives that were written by mediaeval historians as reliable historic information.

Therefore, here the author endeavors to use the medieval historic texts to retrieve information regarding four closely related topics. The first topic is on Moses’s exodus route from the city of Rameses until he and the children of Israel arrived at the wilderness of Shur. The second topic is on intervals of the Egyptian system of calendars, in order to reckon dates of events correctly. The third topic is on the writing method of the Egyptian texts, in order to read names of kings and places in a correct way. The fourth topic is a brief history of the main events from the so-called Senusret-III to the so-called Ramesses-V that Al-Maqrizi (1364-1442AD, Vol.3, p.480) said he is Pharaoh of the exodus. Regarding method of double-checking the matching phonetic values of names of kings and places — the mentioned in historic and religious texts — in comparison to those mentioned in diverse Egyptian texts, table-1c shows the justification of the used phonetic values of the hieroglyphic signs. Additional related information will be mentioned in the Endnotes.

2. ROUTE OF MOSES’S EXODUS FROM RAMESES TO SHUR

Citing the narratives mentioned by Al-Maqrizi the Egyptian historian and Sunni judge (1364-1442AD, Vol.1 &Vol.3) in various sections, in relation to Exodus (13:1-14:31) and Numbers (33:3-7), the scenario of the Israelites’ journey to come out of Egypt until they crossed Pi-Hahiroth (mouth of an inland bay/lake) could be grouped and summarized as follows.

As shown in fig.1, Moses and the Israelites started the journey heading towards the north from Rameses, an old city (was) beside Hawara Pyramid (29°16’26″N- 30°53’56″E) in Fayyum in valley of the Gulf of Suez. The journey heading towards the north from Ramesses to Hahiroth and then to the desert of Shur. The isotherms were not mentioned in their records (Waddell, 1927). Thereby, we could not find any description of the weather during their journey. As shown in fig.1, the destination of that journey was the Gulf of Suez. The isotherms were not mentioned in their records (Waddell, 1927). Thereby, we could not find any description of the weather during their journey. As shown in fig.1, the destination of that journey was the Gulf of Suez. The isotherms were not mentioned in their records (Waddell, 1927).
two-dams, until they arrived at Succoth, the temple of Ain Shams, i.e., Heliopolis. Al Maqrizi said, from the royal palace in Ain Shams, they took a permission to go out off Egypt.

Figure 1: Rout of Moses’s exodus: 1-Rameses, 2- Succoth, 3-Etham, and 4-Pi-Hahiroth. (Raw image source: Google Earth, 2017).

Succoth is a place (30°7’50―N- 31°18‘6―E) at which a marvellous statue, depicts a man giving a speech, was set at the center of a lunar/solar horizon, meeting the shadows of the two obelisks on summer and winter solstices. The statue was in front of the royal palace of king Moeris (Seti-I). After having the permission, they turned to the right and marched towards the east until they arrived at Etham (Qulzum, now Suez), on the edge of the wilderness of Arabia. From Heliopolis to Etham is a distance of 3 days on foot.

As Moses had lived with the shark-whales hunters in Aylah on the Gulf of Aqaba (part of Median Ma’diyat), he was aware about that, the Amalekites do attack the armless caravans prior to the borders of Syria; hence, he decided to turn again to the right, in order to march beside the seacoast towards the south. They walked about 150 km in 3.5 days and camped between Migdol (28°54‘8―N- 33°22‘3.50―E), the mining site in mountain (Maghara mine), in their east side and the sea (Suez Gulf) in their right side. In this area by the seashore there was a statue (Baalzephon) on which a warning statement was engraved; perhaps they wrote, “Do not cross the coming lake (its mouth), you might sink”.

The term “Baal-zephon” is equivalent to “Bahol Sufe” in the Egyptian tongue, which means a lion statue of king Suphis (the so-called Snefrue), like sphinx (σφνγγα the Greek pronunciation of Suph Σ Nauges Ναγγες or Sufe Nagus). Over the years, Bahol became Abu-Alhol in the Egyptian tongue (see table-1c). The Suez gulf was named after him in the ancient days, e.g., sea of Sufe, bayah Sufe, or yam Safe. During the medieval eras, Pi-Hahiroth (28°32‘55―N-33°15‘29―E), was called “Phom Algabarate”, i.e., mouth of high current, because of high tides. People also named it fire (Hahiroth) of Moses; and the name of the lake was Alghrondel.

After they arrived there, spies of the Pharaoh informed him that Moses and the Israelites did not use the northern road to Syria and they had camped before the warning statue of king Suphis. This news triggered his anger, because he had given them a permission to come out of Egypt, after 11 months of turmoil, imagining that they will take the north route, where the Amalekites will force them to go back to Egypt, as what happened with the caravan of Joseph’s grandson. Therefore, he decided to come with his troops and chariots to besiege them, until they die there, or force them to go back to Egypt. He thought that the warning statue will hinder them from crossing the lake. The encounter with Moses, and the Israelites, was on the night of Nissan 21 (Egyptian month Baba). After crossing the mouth, Moses and the Israelites continued to walk along the coast of Feiran, heading towards the south, to the wilderness of Shur (now El-Tur city).

Figure 2: Mouth of Hahiroth of inland lake in Suez Gulf (Raw image source: Google Earth, Imagery Date: 2-25-2016).

As shown in fig.2, using Google Earth data, the lake is semi-parallelogram in shape; its west side is ~3.8km, and its north side is ~1.75km. There is a stripe of land in between the lake and the gulf like anchorage (arm) partly under water level, where its width is ~1000m in the north and reduces to ~30m just before the mouth of the lake in the south. The width of the mouth (strait) is ~60m; over three millennia, erosion might have increased its width and depth. The part above the sea level is a passage all the way to the mouth (~30m in width), forming
the anchorage’s west edge. In addition, in the middle of the anchorage, there is a new artificial road above the sea level.

Regarding how many Israelites did cross the lake, and its justification, there are two hypothetical scenarios. The first scenario is that the west passage (edge) of 52,000m² (30°1,750) was slightly below the seawater level (e.g., -0.5m) but connecting the north and south sides of the lake (without a mouth); it appeared during a low ebb at the night of a full moon; and the high tide happened by dawn. The second scenario is that the west passage was slightly below the seawater level but not continuous, leaving a mouth of lower-floor as is now. In this case, just before they approached the mouth, the low ebb in the west side (Suez gulf) might was accompanied by a sudden seiche wave (oscillation of surface of water) in the lake from the west to the east. In theory, strong winds can cause seiches in inland bays (Tufty, 1969, p.121). These two unexpected miraculous factors could have lowered the water surface on both sides of the passage road (perhaps below the floor of the mouth) for some time. The speed of the seiche wave and the time it takes to reverse its direction depends on both width and depth of the inland bay (lake). Apparently, it was equivalent to the crossing period, implying the ultimate power of God12, the designer of the systems of safety in the dangerous side of nature. Otherwise, swimming the 60m would have delayed them and many would have sunk during one of the rhythmical sloshes of the seiche wave that might reach a height of more than 10 feet. A passage like this, with seawater from both sides, would take ~60000 walking persons at most. With a velocity of ~60m/minute for mass walk, each would take ~30 minute to get to the south side of the lake. If they walked in 12 lines as the story says ~5000 in each — the minimum time would be ~110 minute. Hence, the second scenario is the most probable.

Fortunately, the seacoast before and after this mouth (Pi-Hahiroth), and surrounding the lake are not yet developed. This site is highly suitable for cultural and touristic projects to serve thousands of visitors a year, even with minimum cost (e.g., camping). Besides, a mission of underwater archaeology could find the remains of war chariots, weapons, and other artifacts that were sank in the lake and around its western anchorage, which could be displayed in a new museum in this area, perhaps before the place of Behol statue’s remains that might be buried in sand.

Now, in order to reckon the date of the exodus and other historical events, included in section#5, section#3 discusses the types of ancient Egyptian systems of calendars.

### 3. INTERVALS OF ANCIENT EGYPTIAN CALENDARS

There were seven astronomical schools (specialization fields) in Ancient Egypt; each was for studying one of the observed moving orbs in the foreground of the sky dome in a period of 7 Earth-years (Al-Maqrizi, 1364–1442AD, Vol.3, p.515). Therefore, the Egyptian priests used diverse types of calendars in their records related to the cyclic motions of these orbs. They also used the observed motion of the star “Regulus” to measure the precession of the earth as recorded in Dendara zodiac and papyrus of cataclysmic events (Aboulfotouh, 2007). In school of the Sun, the cycle is ~365 Earth days (\(Y_{\text{Earth}}\)) Seda). In school of the Moon, the cycle is almost 30 Earth days\(^3\) denoted with a crest \(\sim\), where the beginning of each is denoted with \(\sim\) Dir\(\sim\). The lunar month is also the ancient lunar year \(Y_{\text{moon}}\) that was used in some ancient religious texts. Besides, in an astronomical horizon, the rising sun on summer and winter solstices divide the year into two parts that each is \(Y_{\text{Solstice}}\) Sedir of six months. It was called the pilgrimage year\(^15\), where a civil month\(^8\) \(\sim\) is 1/6 of it. Similarly, the rising sun on the equinoxes divides each \(Y_{\text{Solstice}}\) into two parts that each is almost three months; it is the administrative year, or the quarterly year \(\frac{1}{4}Y_{\text{Q}}\). As known, they also divided \(Y_{\text{Earth}}\) into 3 climatic seasons (Budge, 1910, pp.139-140), that namely \(\text{Ghadir} \sim\) (spring), \(\text{Bardir} \sim\) (winter), and \(\text{Manendir} \sim\) (summer). Moreover, pyramids studies (Aboulfotouh, 2007, 2014, and 2015) showed that pyramids designers had assumed that Armageddon cycle \(\frac{1}{4}\) is ~5070 \(Y_{\text{Earth}}\), where 4 of which is the period of Earth’s obliquity range of ~2280 Year. Worth mentioning, \(4/\pi\) of their assumption (~25821 \(Y_{\text{Earth}}\)) is close to the period of Earth’s precession cycle\(^17\) (~25772 \(Y_{\text{Earth}}\)). Besides, the motion of Regulus for one degree of arc in the tropical zodiac takes ~72 \(Y_{\text{Earth}}\). Knowing this basic information, the Egyptian priests could have created diverse timeframes in their records for diverse purposes. For example, \(14^\circ\) of arc make ~1008 \(Y_{\text{Earth}}\), which is almost a millennium. This matches the used cycle-span in Abydos kings list of 38 intervals (generations) per row. Each interval is ~26.52 \(Y_{\text{Earth}}\). Bearing in mind that Regulus was on the first minute of Cancer (~2345 BC ±1) after 400 years from the day of deciding to construct the pyramids of the 4th Dynasty (Aboulfotouh, 2007), during the reign of king Siphis. Thus, the year 2345BC is at four intervals (~106 \(Y_{\text{Earth}}\)) prior to the end of the first row (millennium). This implies that the first row that shows Min (Menes) as the first king does end in ~2239BC ±1 (where 2240BC was a year of minor lunar standstill). Accordingly, the end of
the second row that shows Moeris (Seti-I) as the last king, would be in ~1231BC. This indicates that the beginning of the 18th Dynasty (or New Kingdom) was in ~1522BC. Radiocarbon-based chronology by Ramsey et al (2010) suggests ~1544BC. Similarly, the end of the 3rd cycle was in ~2225BC, the end of the 4th cycle was in ~785AD, the end of the 5th cycle was in ~1793AD, and now we are in the ninth interval of the 6th cycle (millennium). Dislike the records in papyri, it seems that the priests assigned the intervals of wall records (for the public) only for the kings that their reign periods were more than half interval. In any case, the point in time that forms the frame of reference is fixed. Giza pyramids designer recorded ~3056BC as a year of reference (Aboulfotouh, 2002 & 2005a). Using the ancient Egyptian astronomical methods, there is one Armageddon cycle 3/2 between the minor lunar standstills of 3056BC and 2016AD (Aboulfotouh, 2014). The Armageddon cycle is composed of two parts that each is 5070 Y\text{Solsistent} \times 925908.75 days = bra, 30863.625 civil-months \text{b}, or 13 Aladir \frac{\text{b}}{900} of 390 Y\text{Solsistent}. Each Aladir is 15 Aindir \frac{\text{b}}{900} of 26 Y\text{Solsistent}. Budge\textsuperscript{19} (1910, pp.134-135) mistranslated the Egyptian text that says the number of digits in each part, i.e., from the number that is denoted by signs of hundred-thousand (in days) down to the number that is denoted by signs of ten (in Aindirs).

Accordingly, the reign periods in Manetho’s list, or in other ancient Egyptian texts, would be subject to translation mistakes if one thought that all the mentioned numbers in these texts are in Y\text{Earth}. If we transfer all records to Y\text{Earth}, we can easily link them to the year of reference. For example, the elder priest of Sais, perhaps Sected\textsuperscript{20} (Plutarch, 46-120AD), in his reply to Solon in ~550BC, most likely he used Y\text{Moon} (Plato, 360BC-b), where 9000 Y\text{Moon} = 739 Y\text{Earth} which meets \textsuperscript{20}~1289BC.

Besides, it seems that the Maya people of Guatemala have learned the intervals of Aindirs of 13 Y\text{Earth} from the Egyptian migrants\textsuperscript{21}. The Israelis too have learned some of these methods from the Egyptians. In Genesis, the mentioned periods and ages are not all in Y\text{Earth} e.g., regarding the cited Egyptian record about the age of Joseph as 110, it was in Y\text{Solsistent}; i.e., he died after completing his 55\textsuperscript{th} Y\text{Earth}. Similarly, they used Y\text{Moon} in the records of Noah, i.e., he died in his 78\textsuperscript{th} Y\text{Earth}.

Now, in order to recognize the differences between names of kings and places mentioned by the Greek and medieval historians in comparison to what is mentioned in the Egyptian hieroglyphic texts, as well as to know the name of Pharaoh of the Exodus, section\#4 discusses three missing rules, that are essential for understanding the ancient Egyptian texts.

4. \textbf{METHOD OF READING THE EGYPTIAN TEXTS}

On deciphering the Egyptian hieroglyphs, Budge (1910, p.16) said, “With the work of Young and Champollion we reached a firm ground”; and, in the 20\textsuperscript{th} century, Budge (1920) and other philologists (e.g. Gardiner, 1927) did additional serious efforts to improve the knowledge in this field. Yet, there are still other unknown rules.

Firstly, philologists did assign wrong phonetic values to several signs, because they assumed that the designer of the hieroglyphic system had used the phonetic value of some letter signs in a word to denote the phonetic value of the last (or first) sign in that word, e.g., some of the generic determinatives (Gardiner, 1927, p.32). Contrary to this opinion, in most cases other than the geometric or mathematical symbols, the designer used this technique only to denote a verb by a sign imitates the motion of a human. The way that the hieroglyphic letters were designed implies that, the Egyptian designer studied descriptive geometry. He designed the figures as observed by architects, e.g., he drew a plan of a house or (spread-out plan of) a bridge, a side view of a pharaoh, an elevation of a lighthouse or a pyramid, and a cross section of a cantilever. Excluding figures of humans – but not parts of a human body – the phonetic value that a sign denotes is (that of) the first letter of its subject name in the Egyptian tongue (Aboulfotouh, 2005b & 2007). Retrieving these ancient names is the key to know the phonetic values of signs, and the cause behind the use of each sign. In combined signs, the foreground precedes the background. One vertical stroke, as a suffix, is the letter H (or A). A suffix of three vertical strokes is either N or T according to the context (masculine or feminine, respectively). In general, the ancient Egyptian tongue is close to the ancient Arabic of 28 phonetic values (plus j and v); the slang language in the villages of Egypt today includes many of the old words. Table-1c shows the phonetic values of signs that are used in this paper.

Secondly, there is also the rule that concerns the precedence in reading the hieroglyph signs of the word, which might not be the observed sequence. This rule shows how to identify the correct sequence of letters following the colors of the rainbow in a reverse order, and within a cover made of white and black. Fig.3 shows the spectrum of the color codes of the hieroglyphic writings. The sequence of the nine colors is white, red, orange, yellow, green, light blue, blue, violet, and black (Aboulfotouh, 2016). Contrary to this opinion, Gliddon (1944, p.22), and others,
thought that the colors of signs relate only to the nature of the object, which is not true.

<table>
<thead>
<tr>
<th>The Color Codes for Denoting the Precedence in Reading the Hieroglyphic Letters of Words.</th>
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<tbody>
<tr>
<td>White</td>
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<td>Red</td>
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<tr>
<td>Orange</td>
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<td>Yellow</td>
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<td>Green</td>
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<td>L. Blue</td>
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<tr>
<td>Blue</td>
</tr>
<tr>
<td>Violet</td>
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<tr>
<td>Black</td>
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</tbody>
</table>

**Figure 3:** Sequence of the color-codes in Egyptian hieroglyphic texts.

In reading the texts, the white sign should be read before the red sign, the red sign should be read before the orange sign, and so on until we reach the last sign that is colored with black (Aboulfotouh, 2016). The ancient Egyptian designers of the scenes in temples and tombs did not use the nine colors together. Using the same sequence, they selected some of them for each scene. If any color was used to mark two adjacent letters (signs) in the same word, they colored part of the second with the color of the following letter, or the opposite.

Thirdly, if all letters were colored with black, in many cases they applied the rule of cover and core. This rule is also part of the realm of geometry. It is the spiral sequence of reading the letters, either clockwise or anticlockwise. As an example, if the word is composed of three letters, from top to bottom A, B, and C, respectively, the spiral sequence could be from top to bottom as AC forming a cover and the B in between is the core. If true, it should be either ACB or BAC, and not ABC. The color codes ensure the correct sequence, in the mind of the local readers. Besides, in case of four letters, the writer might put the second and third letters as a core.

**Figure 4:** The sequence of reading the letters in one of the cartouches of King "Sammenth-Tharem", the so-called Ramesses II; often, the sign M23 (Th or Z) is not included in his other cartouches of 8 letters.

For example, in the cartouche of the so-called Akhenaten, in the word that is pronounced as Atn-r, we see R in red, N in black, and the other two letters in blue, which accordingly form the core. Hence, the correct pronunciation sequence of this word is R-D-A-N, which could be Redan or Rydan (land of the sun). This word is also written in other kings’ cartouches, using different signs, i.e., the side view of a compass, of E and D letters in the middle.

Moreover, citing Hecataeus, Diodorus Siculus (60BC-30AD, p.24, 47-1) described the temple of king Osymandyas (Ramesseum); and modern scholars read his second cartouche as “Ramesses Meryamun” (Haeny, 1997, p.116). Fig.4a shows his cartouche of nine signs, which are colored with red, light blue, and black, excluding the figure of a hawk-man. Using the color codes and the rule of cover and core, fig.4b shows the sequence of reading the two words written in it. From right to left, the first word is composed of five letters that form the cover, which is “Sa-mmEn”. The last three letters form the core word “Sa-rrm”. Using the list of Gardiner (1927), if O34 (z or th) is used instead of S29 “s”, it will be “Tharem”. Greek historians said his name is Sammen-th, with M23 “z”, i.e., Osymandyas, and medieval historians (Al-Maqziri, 1364-1442AD, Vol.1, p.67) said his name is Tharem or Daren. Manetho (Wadell, 1964, p.119) mentioned his name as Cherres or Acheres, in his first cartouche, where sign S34 is “a” or “g”, sign H6 is “ch” or “g”, and the other claims are incorrect. Rereading the hieroglyphic texts using the color codes and the rule of cover and core will defiantly improve our understanding of the great legacy of our ancestors.

Furthermore, as said earlier, names of Egyptian kings or queens mentioned by medieval historians are not included in the list of Manetho and many mismatch those mentioned by the Greek historians or philosophers. It is due to the use of diverse short names. These scholars did not mention the full name(s) inside the royal cartouches. Using the color codes and phonetic values of signs, we can group these differences in six cases with some suggested meanings; see table-1a.

(i) Some used the royal administrative title (or epithet) before the cartouches, e.g., Phis as king, Sedare (or Sured) as ruler, Nazatte (or Znattit) as ruler, Zaden as custodian, and Thes-en (or Zeus-en); similarly, for queens they used Nito (or Diana) as lady, Zena-t as beautiful, or Al-rasheed as conscious or sensible.

(ii) Some used the feature term after the cartouche, e.g., Aliaad as heir or giver, Niroth-lade as evangelist, and Anum as son of Goddess. Similarly, they used Aldes (Atlas), Zkas (Adkhas), or Al-aziz for king’s deputies, and Serre or Esere for his vizier.

(iii) Some combined two words together, e.g., Thes-en with Sedare become Theuse-sdare-en (Sesostris), also Bat- (man/son) or Bo with Phis is Baphis.
### Table 1: Royal titles, names of kings, and phonetic values of some Egyptian signs.

<table>
<thead>
<tr>
<th>A- Royal titles</th>
<th>B-Names of kings, queens, or rulers</th>
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<tbody>
<tr>
<td><strong>Phis</strong></td>
<td>Cartouche (King/Queen)</td>
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<td><strong>Nazatte</strong></td>
<td>Ethiraken</td>
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<td><strong>Rab</strong></td>
<td>Chemroten</td>
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<td><strong>Zaden</strong></td>
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<td><strong>Irade-zaden</strong></td>
<td>Mareg (or Rameg)</td>
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<td><strong>Theus-en</strong></td>
<td>Acheres</td>
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<td><strong>Nito</strong></td>
<td>Orus-gein Raydan</td>
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<td><strong>Zenor-t</strong></td>
<td>Acheriaq</td>
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<td><strong>Zkhas</strong></td>
<td>Rasen (Rasien)</td>
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<td><strong>Al-aziz</strong></td>
<td>Geron</td>
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<td><strong>Aides/Atlas</strong></td>
<td>Phrgon Rydan</td>
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<td><strong>Sesostris-en</strong></td>
<td>Moris-Zuph</td>
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<td><strong>Phracon</strong></td>
<td>Al-Rgian</td>
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<td><strong>Ale</strong></td>
<td>Sacher Rydan</td>
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<td>Armisen Thoma</td>
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<td><strong>Phis-Thesery</strong></td>
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<td>Sacher Sgeron</td>
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<td><strong>Baker</strong></td>
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<td><strong>Osiris</strong></td>
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<tr>
<td><strong>Rashedat(t)</strong></td>
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<td><strong>Serre/Esere</strong></td>
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<td><strong>Balu</strong></td>
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<td><strong>Balu</strong></td>
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</tbody>
</table>

*C- Phonetic values of some signs*

<table>
<thead>
<tr>
<th>Phonetic value (Arabic in italic)</th>
<th>&lt; Sign &gt;</th>
<th>Phonetic value (Arabic in italic)</th>
<th>&lt; Sign &gt;</th>
<th>Phonetic value (Arabic in italic)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AL-lanigaa; life</strong></td>
<td>AL-lith; lion</td>
<td>N-nash; crown of elevated horn</td>
<td>N-nesh-qoter; half diameter</td>
<td></td>
</tr>
<tr>
<td><strong>A-drif; elf</strong></td>
<td>N-Neur; Tiger</td>
<td>N- nesr; vulture</td>
<td>G-gela; L. weight</td>
<td></td>
</tr>
<tr>
<td><strong>A-an; eye</strong> or <strong>Ira-an; observe</strong></td>
<td>Miz-Almang’saw; Threskornis +angle</td>
<td>O- ornoeb; rabbit</td>
<td>R-ryaq; ground</td>
<td></td>
</tr>
<tr>
<td><strong>B-bilb; duck</strong></td>
<td>M-mes’as; axe or tool for leveling</td>
<td>S-sahn; dish</td>
<td>Thoma</td>
<td></td>
</tr>
<tr>
<td><strong>D-darun; compass</strong></td>
<td>M-mdl; expand</td>
<td>T-tur; mountain</td>
<td>G-gadm; foot</td>
<td></td>
</tr>
<tr>
<td><strong>F-farrag; chicken</strong></td>
<td>S-Satil; large bottle</td>
<td>Z-zahraba; flower</td>
<td>Suffix H or A</td>
<td></td>
</tr>
<tr>
<td><strong>Ph, F, or B-Baglana; Lute</strong></td>
<td>B-bona; awlu</td>
<td>Z-zarqar; Anc’s’s</td>
<td>Suffix N or T</td>
<td></td>
</tr>
<tr>
<td><strong>Ez-ez-Zahra; hand +rower</strong></td>
<td>B-buha; urban space</td>
<td>D-Dekar; bench</td>
<td>Ta-Dair+Argon; circle +crescent</td>
<td></td>
</tr>
</tbody>
</table>

*Remark: 1- The letter T at end of word is silent if it implies the feminine. 2- The letter F is equal to Ph, P, B, or V. 3- The letter G is equal to Gh, Q, or K. 4- In names of persons, the last letter L is like N, and the middle L is like R, or the opposite. 5- Repeating a letter for two times implies adding O or E after it, similar to adding two strokes after the last letter; and repeating a letter for three times implies adding en or at after it, similar to adding three strokes after the last letter (e.g. FFF is Fen, as Fenas [F in Rosetta stone]).*
or Abo-Phis, Ba with Zaden is Bazaden (Posidon), and Phis with Thersy is Phis-thesy.

(iv) Some used one word from the first cartouche, e.g., Suphis, Orus, or Acheres as in list of Manetho (Waddell, 1964, pp.47-116).

(v) Some combined one word from the cartouche with one or two of those are mentioned previously, e.g., Amenophis, Ram-Phis-Sadens, Rem-phis, or Amun-mes. Similarly, Nito-Acheres (or Nito-cris) was used for some queens, as in history of Herodotus (484-425BC, p.229).

(vi) Some used two words, each from one of the two cartouches, e.g., Ramesses Miammun as in list of Manetho (Waddell, 1964, p.109).

Based upon this analysis, section #5 discusses the historic scenario of the new kingdom as mentioned by medieval and Greek historians, particularly the period in which the Israelites were living in Egypt.

5. A BRIEF HISTORY OF THE MAIN EVENTS

In this section, the names of kings and rulers are those mentioned by Manetho and medieval historians, or by transliterating kings’ cartouches, in addition to the names used by modern Egyptologists between brackets. Table-Ib shows all names.

According to Al-Maqrizi (1364-1442AD, Vol.1, pp.261-265), the period from the visit of Abraham to the days of Moses’s exodus was from king Amenophis (Amenhotep-III) brother of Thonis (Thutmose-IV), to king Thedos (Ramesses-V). It was the era of economic development, discovery of new gold mines, huge constructions, social enhancement, and expansion of the Egyptian kingdom. It included too days of famines, spreading of epidemics, conflict of ideologies, disrespect of minorities, social segregation, local unrest, revolts, and foreign invasions. Among the kings of this period, there were seven powerful Pharaohs the first six of them were descendants of two royal families.

The first is the royal family of Tomithon (Ahmes), son of king Tathrssan-III (Senusret-III26). This is in line with Abydos kings’ list, as there is no gap between 12th Dynasty and 18th Dynasty. The story says that Tathrssan-III and his brothers were rulers of the Egyptian cantons. After the death of their father king Elraq27 or Tathrssan-II (Senusret-II), they crowned him the new king of Egypt; but afterwards he exiled them away from the Nile valley, to rule the oases in the Libyan Desert. For his enjoyment, he built a wooden boat28 to use it in a long voyage in the river; but unfortunately, in a dark night, a violent storm did hit his boat until it sank and he died. His brother Chemroten (Amenemhat-III) succeeded him to the throne, and wanted to marry the widow of Tathrssan-III that was acquainted seer. By the help of some priests, she succeeded to escape with her young boy, the heir of the throne, to a secret place in Upper Egypt. Years later, Tathrssan-III’s son, and his mother, came back with their army. After series of battles with his uncles, he had killed Chemroten, defeated all of them, and recovered the throne of his father. Most probably, the dynasties 13th, 14th, [15th]29, and 16th were ruling other parts of the Egyptian kingdom, simultaneously with the 12th dynasty and part of 18th Dynasty. It seems they were dynasties of brothers and sisters of Tathrssan-III (Senusret-III), which possibly became independent (or isolated) kingdoms due to the civil war in the Nile valley. There is no reference to them in the radiocarbon dating studies (see, Ramsey et al, 2013).

Moreover, citing the second book of Manetho, Josephus (37-100AD) said in chapter-14, Hycos (might be folk of Add30 invaded Egypt during the days of Timaus31 (Ahmes), later they were subdued and driven out of Egypt by Misphragmathus (Thutmose-III) and his grandson Thmosis (Thutmose-IV). In other chapter, citing another book of Manetho, Josephus mistakenly quoted his text; he did not differentiate between Timaus and Thmosis. In a wrong way, Josephus wrote the names of kings who ruled after defeating Hycos, starting from Timaus. Hycos of 17th Dynasty invaded Egypt during or after the civil war of Tomithon or Timaus (Ahmes) with his uncles. They ruled the lower part of Egypt up to Memphis, starting perhaps simultaneously with the 18th Dynasty. Thus, Timaus was not able to build his pyramid in the north. The last king of this family was Orus (Horemheb) son 32 of king Amenophis (Amenhotep-III) and father of queen Acheres; he was the first of the seven powerful pharaohs.

The second family of kings were descendants of Moeris Suph Luliumura (Ramesses-I) king of the Cannaanites of Syria and son of Al-Rgain; he was called also Al-Rgain. He invaded Egypt because his son Geron-Zannanzat (Ay) was slayed by Orus’s daughter, after he killed Min Fotte Fah-az (Tutankhamun). The last king of the second family was Amenophis (Ramesses-IV) son of Ramesses Miammun (Ramesses-III) that was uncrowned and killed by, the vizier of his father, Sethos (Ramesses-V), Pharaoh of the Exodus.

Now, citing Ibn Wasif Shah (12th century AD), Ibn Abdel-Hakam (803-870AD), and Horeshious the Andalusian (5th century AD), Al Maqrizi (1364-1442AD, Vol.1 and Vol.3) wrote scattered narratives, in many chapters, on the history of Egypt during the reign of the seven kings. Here below is the rearrangement of the mentioned narratives in chronological sequence, and supported by citing other historians when necessary.

They said, Amenophis III (Amenhotep-III) grandson of Mephibosethosis (Thutmose-III) succeeded to the throne after the death of his brother Thmosis (Thutmose-IV) who had no heir. But, Amenophis was not a wise man, because he was doing nothing more than eats, drinks, and enjoys his eighty beautiful concubines. Not only this, in order to be free for his nymphomaniac, he also gave his full authority to his vizier (might was a woman) to administer the affairs of Egypt. Therefore, his son Orus Memnon Misor (Horemheb) killed him while he was drunk, and killed the woman who was with him.

Orus was aweles, powerful, and brave man; so, the noblemen endorsed him to be the new king of Egypt. After congratulating him during the crowning ceremony, in his speech, he exhorted them to improve the performance of their businesses and encouraged them to increase the productivity of their projects. He also promised them with his continuous helpfulness and his support. Historians said that Abraham was his friend. Most probably, Abraham visited Egypt during the reign of his father, who might have invited Abraham and Sera to the Malqata place in Thebes; it seems that Sara was invited by Orus’s sister. This might be the reason why Orus was monotheist but he was not the only one. Like his grand father Esapha (Amenhotep-II), Orus was partly against the religious believes of the Egyptian priests and their ritual practices in the temples. He have had good relations with the Arabs and other nations in the east, thus, he excavated the first canal from the Nile River to the Red Sea, in order to facilitate the transportation of food and products of Egypt to them during the days of the famine. In the Egyptian text in a wall scene (dedicated to his daughter), the route of vessels was from Dga to Tur-T (Turah near Cairo) then via the canal to Tur-Eyadab or Tur-Obad (now Al-Adabiya beside Suez) on Suez Gulf. Egyptologists call it Punt. Therefore, the Arabs called him the genuine evangelist. Orus ruled Egypt for about thirty-seven years (Yearth), and was eager to have a son to succeed him to the throne, but he was given only a female heir, his daughter Acheres (Hatshpsut) who was beautiful, knowledgeable, wise, and strong woman. Medieval historians said her name is Acheria or Achriaq. During the last years of his reign, Orus killed many of his opponents. They were priests, wise men, some of his relatives, and even some of his women. Acheres was afraid of that the outcomes of his deeds might weaken the kingdom, and blamed him for what he did, but was not able to convince him to stop doing so. Thus, at last, she killed him with poison, in order to bring back the stability to the country.

After his death, some noblemen suggested handing over the throne of Egypt to Orus’s deputy Adkhas or Zkas Amin (Tutankhamun), descendent of king Atrieb; perhaps he was also captain of guards and cavalry. However, Acheres succeeded to keep the throne in her hand with the help of the vizier and the elder priest of Egypt. She promised the people with the improvement of their well-being. At the beginning, she levied sets of taxes, and collected huge amount of money. With this money, she improved the living condition and status of the priests, the wise persons, and principals of the sorcerers. She also renovated the temples. Those who did not accept her as their queen, or refused to work under the command of a woman, have decided to go to Atrib city (Atryb/Altribis), in Delta (30°27‘18”N - 31°10‘51”E), in order to crown Amin instead. They put the king’s diadem on his head, and started to increase his followers. As soon as Acheres was informed about the illegal ceremony for crowning Amin, she sent her army to Atrib, which defeated Amin’s troops and killed many of his companions.

Amin fled away to the kingdom of the Canaanites of Syria to request the help from their king Rgian (Suppiluliuma) who was his kin. Rgian (or Ry’an) sent with Amin an army led by his son Geron; Zannanza (Ay), and he sent with them his spy and servant Oen (Akhenaten) the Amalekite Am-leche (might be Hattushaziti the chamberlain), in order to collect information about Egypt, its treasures, and its resources. Acheres became sick, perhaps a Malaria infection, therefore, she appointed Tholfa, daughter of Orus’s brother Ma-Amun or Mamizmis (see note-40), to administer the affairs of Egypt, and sent her to lead the army in Sinai to stop the marching of Amin and Zannanza’s troops. The first battle between the two armies was in al-Arish, in north Sinai, but Tholfa’s army was defeated; they withdrew due south to the Ashmonien canton, and Amin succeeded to seize Memphis. After series of battles between the two armies, the invaders had withdraw from Memphis and erected their premises in a defendable site in the cliff of the eastern desert (Hofe), part of the mountain between the Nile and the gulf of Arabia (Red Sea), probably in Amarna. At then, Egypt was divided into two parts: part under the administration of Acheres and Tholfa, and the other was under the administration of Amin and the invaders. Tholfa then started another war campaign for three months, but was not able to continue; hence, she retrograded to Qus, a city to the north of Luxor (25°54‘45”N - 32°45‘48”E), and Amin proceeded to march after her. When she realized that it could be captured, she killed herself with poison.
Afterwards, Amin ruled great part of Egypt. He became dictator and killed many people. It seems, at that time, Amin bought Joseph to give him as a gift to king Rgian Suppiluliuma, but unfortunately, luck was against Joseph and was put in a person in Abusir for almost ten years (Y.earth).

Secretly without leaks to Amin, Acheres sent messengers of wise women to Zannanza in order to inform him about her desire to marry him. In other story, she sent a message to his father too, as Dja ≅ Min-SA or Min Zena-t, where i is silent (see, Bryce, 2005, pp.181-182). She said, “The reason is, I am not desirous to choose a man from my folk, but first you have to kill Adkkas Amin, and after the marriage, you will be the legitimate king of Egypt44”. Zannanza accepted the offer and killed Amin with poison that she sent it to him45. Then, she sent him another massage regarding her dowry, saying, “it is not permissible to marry you until your folk build for me a magnificent buildings (or a town), because it is our pride to build landmarks and works of wonders. Hence, you could move from your position to the west side of the Nile River, where you will find remains of old temples and palaces, as in Jedomht (beside Ramessium and at Medinet Habu), that you have to restore and rebuild”. He accepted her conditions. Shortly he started to build and restore some buildings, using money from a treasure that she indirectly helped him to discover without informing him that she is the source of that money.

After he completed the construction works that she requested, she started to send him her furniture and treasures in order to make him believe that she has a strong desire to come to the wedding ceremony. In the last message, she asked him to divide his troops into three separate camps along the road from her palace to the town at which the wedding ceremony will take place saying, the reason is to protect herself from any attack by her people if they knew that she intends to marry him. She also asked him to keep only his courtiers and servants of young boys in his palace during the wedding night, because she will be shy to appear with her transparent wedding dress in front of other men.

In her trip to his town, she stayed a night in each camp and her pretty charwomen invited his troops to a banquet where they served them with strong wine that made them drunks and unconsciously slept; then, her guards came and killed them46. She proceeded with the same plan until she arrived at his palace. After the ceremony, when they had became alone in the bedroom, she blew her ring’s poison at his face, and slayed him with her dagger on the spot, while saying, “who did think that he could defeat women, his inner conscience lied, and was defeated by women”. By this, she avenged the death of Tholfâ47. The bad news might have weakened Rgian’s immunity. Hence, unknown virus infected him. No one in his kingdom was able to cure him. Oen told him, the Egyptian priests could easily cure him after conquering Egypt. Consequently, Rgian sent another army to Egypt under the command of his servant Oen, who was able to conquer and control the land of Egypt, perhaps up to its southern border. In those days, Acheres died; maybe due to her old infection, or was murdered48.

Then, Rgian came and presented himself to the people of Egypt. They crowned him as a legitimate king named as Moeris Supe Luliumra (Ramesses-I). He collected huge amounts of their money and treasures. After he was cured of his disease, he decided to march due south, aiming to reach the mouth of the Nile River and the Mount of the Moon. He stayed there almost four years (Y.earth). Before starting his journey, he appointed Oen to be his deputy over Egypt, with two injunctions, that he should not wear the king’s diadem, nor should he marry women from the Egyptian royal families.

After Rgian had left Egypt, Oen (Akhenaten) disobeyed his commands and did exactly the opposite. He claimed that he is Rgian’s brother, in order to oblige the people to treat him like a king. He named himself Phergon A-Rydan, where g is silent. Despite that, Oen did show he is a man of god, and did respect the priests and the temples, his main hobby was to enjoy women; hence, he married daughters and widows of previous Egyptian kings. Nevertheless, he had stolen the money of the Egyptian noblemen and killed them afterwards. Those who were opponent to Oen (Phergon) sent messages to Rgian to inform him about that Oen had violated his commands. Then, Rgian decided to come back to Egypt to punish him. Phergon’s fear from Rgian’s punishment turned into nightmares. He saw Rgian was blaming him because of his misconducts and was about to put him naked in a big jar full of boiled oil, but then a giant vulture came and took him by its claws and flew away. Then it threw him on a crest of a mountain but he was not able to grasp its edge and fell in a vale full of sludge. When he consulted the priests, they advised him to create a statue from gold in the form of the vulture that rescued him and treat it sacred. Besides, to build for him and his loyal companions a fortified city in an anonymous place in the western desert.

After days of searching, he selected a place that could not be easily reached by the army of Rgian. Accordingly, he called up the builders and artisans of Egypt and started to built it on a distance of five days (200-250km) from Memphis due west (in Bahrariya Oasis), which he named it “City of the Vulture”. In that city, he built a temple for the pig, the god of
Saturn of strong magical protection (perhaps the so-called Bes). He used to make frequent recreation trips to this new city in order to adapt himself with the new environment that afterwards did became his escape gate to the realm of isolation and oblivion; the prison that he chose in order to pay the price of his deeds. When Rgian returned to Memphis, he found that Oen had fled to his new city with some of his women and the treasures he had stolen. He took also with him his troops, some priests, and some sorcerers. Before he left, he appointed other ruler over Memphis, and left a message to Rgian with some gifts, saying “forgive your servant, I am in my new place will defend you from any attack by kingdoms of the western (Libyan) desert and every year you will receive my taxes”. The priests informed Rgian that it is difficult to capture Oen⁴⁹, in his magical fortified city; and it is wiser to forgive him. Rgian accepted their advice but enslaved the people of Egypt; he had ruled six more years (Yfearth) until a lion attacked him and he died due to his wounds.

His son Moeris⁵⁰ (Seti-I) succeeded him to the throne but it happened that the Amalekites attacked Egypt and killed a military commander; therefore, Moeris marched due east with a great army, of 900 thousand soldiers, and subdued them. Then he marched due west, crossed the great sand sea, and continued until he reached the Atlantic Ocean; there he crossed the strait (of Gibraltar) and entered the land of the Gothic Romans (Spain). He levied taxes on all the nations he conquered.

When he returned to Memphis, he freed Joseph, and made him his seer. He also, gave him Asenath (Zenat) daughter of Poti-pherah priest of On, to be his wife. Historians said she was Zelgen the widow of Al-Aziz Amin (Tutankhamun). After he completed one administrative cycle of 30 YQ (i.e. 7.5 Yfearth), Moeris replaced him with other seer, and gave him a permission to administrate a reclamation project of a mega marsh at a distance of two days southwest of Memphis. He excavated two canals to link it with the Nile River and a third canal to drain the excess water to the west, hence, the upper land was cultivated (now Al-Faiyum), and the lower part in the west became Lake Moeris. Its crops fed Egypt during the years of the famine. Near by the two dams beside the two canals from the Nile, Joseph built two cities named Rameses and Pithom.

In the temple of Moeris (Seti-I) in Abydos there is a scene depicts Joseph wearing a golden helmet of a prince and standing before the king (depicted as a hawk angel); beside it, the Egyptian artists wrote a colored text that says: “Hor Yzieph-nath Baanah Moeris Acha”, where Baanah means seer. There is also a stele in temple of Amenemhat-II in the Giza plateau (Hassan, 1949. fig-36, pp.152-153) that shows Yzieph (where is ph) and king Moeris saluting the statue of king Suph (Naques and Sphinx), i.e., Behol Armageddon the great.

After the death of Moeris, his son Tharem (Rameses-II) succeeded him to the throne. In year 14 YSolstice of his reign, Joseph his vizier (S Serre or Esere) died and Latis was appointed as a new vizier in Memphis. Tharem commanded Latis, to be tough with the people and to bring him the most beautiful young women, of diverse ethnic groups, from Memphis and other cities in Egypt to be his concubines. It was such a strange action that the people of Egypt were not accustomed to it. Therefore, the Egyptians hated Tharem; many had rioted and insulted him in public.

Some people were killed during this uprising. As a remedy action, Latis exempted them from paying taxes for three years.

Later it happened that one of the Israelites insulted the priests and the Egyptian religion. Consequently, the Egyptians asked Latis to force the Israelites to come out of Egypt. Sooner, Latis sent a message to Tharem, who was in Upper Egypt, (perhaps for inspecting his projects) to ask him what to do; in his reply, Tharem said, wait until I come back. The delay had triggered the anger of the Egyptians in the north and led them to call for uncrowning Tharem. According to Diodorus (60BC-30AD) the Bacterians³³ of Aylah and Pharaoh’s Island in the Gulf of Aqaba had revolted (in 21 YSolstice) and refused to pay the taxes. Tharem returned to Memphis to start his wars; he defeated and hanged all those who did stand against him and his throne. At the end, the Israelites remained in Egypt. Five years later, Tharem sunk during a journey in the Nile River; they found his body by the shore between Turah and Helwan; most probably was murdered.

His son Hrmais Maadan (Merenptah) succeeded him. He was a wise man; hence, he tried to avert local wars. In the beginning, he had exempted the people from taxes and freed the concubines of his father to go back to their families. During his reign, one of the Israelites did not accept to marry his daughter to an Egyptian who was in love with her. Therefore, some Egyptians called once again to force the Israelites to come out of Egypt, but he refused as his father did, and made his commands to isolate the Israelites, in a city south of Memphis (perhaps in Rameses), at which they built their temple. During his reign, a destructive inundation occurred in Egypt (~1205BC); simultaneously, the Canaanites of Syria had revolted and refused to pay the taxes, but Hrmais was not a man of war. Thus, he decided to hand over this mission and the administration of Egypt to his son Ramesses Miammun (Ramesses-III)
and his brothers; he made himself the godfather of the Egyptian brotherhood of warriors that he established in order to enable his son Ramesses Miammun (Sesostris) or Egyptus) to rule a great part of the known world.

Ramesses Miammun (Ramesses-III) banished them as his grand father did with the Baterians, and made conquests in other kingdoms. Diodorus (60BC-30AD, p.30) said, his brother Danus (Ramesses) was his deputy over Egypt during the wars, and later, he escaped after he tried to kill Sesostris. Citing Manetho, Josephus (100AD, ch#16) said that Danus escaped to Argos. Later, Ramesses Miammun (Sesostris) became the most beloved king by the people of Egypt; he ruled 33 $Y_{Earth}$ (66$Y_{Solista}$). According to Diodorus (60BC-30AD, p.30) this king did commit suicide after he became blind.

His son Ammenophis (Ramesses-IV) or Sesostris-II succeeded him to the throne; he was also called Bahaldis (Al-Maqrizi 1364-1442AD, Vol.1, p.264). He accused Thoma (or $\frac{h}{i}$) the vizier (Esere) that he poisoned his father, but was not able to prove it; hence, he deposed him from the ministerial post and sent him to administer some projects in Upper Egypt with some of the Hebrew-labours. During his reign, the Egyptians discovered new mines of gold in the eastern desert. But, Ammenophis enslaved the Israelites and he also called for bringing married women to his palace, perhaps to cure his eye (see Herodotus 484-425BC, p.399) or to be his concubines. Consequently, Thoma became a strong opponent to Ammenophis; he called the people in Upper Egypt to revolt. Accordingly, Ammenophis sent some troops to capture him, but Thoma killed them and called for uncrowning Ammenophis in order to hand over the throne of Egypt to a prince from a previous royal family. Subsequently, Thoma organized a great army to invade Memphis. After series of battles, he won the war, seized Memphis, and killed Ammenophis.

Hence, the Egyptians crowned Thoma (Ramesses-V), starting a new royal family. According to Al-Maqrizi (1364-1442AD) Thoma is pharaoh of the Exodus; he was a lame man and probably was Moses’s illegitimate father. Ammury is his other famous name. According to Diodorus (60BC-30AD, p.31) he was native and he built the Labyrinth (beside Ramesses); or perhaps he only renovated it. Herodotus (484-425BC, p.399) did not mention his name in his history; after Pheros $\phi \rho \alpha \nu$ (Ramesses-IV) son of Sesostris (Ramesses-III), he talked about Proteus or Phi-Thyes-en (Ramesses-VI). Accordingly, the narrative about Moses — from his birth to the exodus — occurred during the reign of three Pharaohs. Since Moses was nearly 40 years old ($Y_{Earth}$) during the exodus, most likely he was born in year 13 ($Y_{Earth}$) of the reign of Ramesses Miammun (Ramesses-III) and escaped to Ayah in Sinai during the reign of his son (Ramesses-IV). Twenty years later, Moses returned to Memphis during the reign of Ammury Thoma (Ramesses-V) who was the last of the seven powerful pharaohs, where Ammenophis (Ramesses-IV) was not one of them. Most likely, Moses crossed Pi-Hahiroth (on the night of April 21) in ~1164BC, about 65 $Y_{Earth}$ after the death of Joseph, which was 240 $Y_{Earth}$ (or 480 $Y_{Solista}$) before constructing the temple in Jerusalem in ~924BC. Al-Maqrizi (1364-1442AD, Vol.1, p.265) said that, after the exodus, there was a transitional period that during which the Egyptians567 crowned the old lady Al-Qusat Nito Phreda of Median (Nefertary), who was 80 years old. She ruled Egypt for almost 5 years ($Y_{Earth}$), supported by the sorcerers. After that, a new boy king his name was Dragon57 the known as Proteus (Ramesses-VI) succeeded her to the throne of Egypt $\frac{h}{s}$.

6. CONCLUSION

This paper showed the location of Pi-Hahiroth, which is a mouth of an inland lake in Sinai-side of the Suez Gulf that Moses and the Israelites have crossed during the exodus. For reckoning the correct dates of historic events, the paper showed that researchers must take into their consideration that the Egyptians did not use only the earth’s solar year of ~365 days in their records. They used also, the pilgrim age ($Y_{Solista}$) of 6 months, the administrative year of 3 months, and the lunar year of one month. For the long time intervals, they used the Armageddon cycle of 5070 Earth’s solar years and its dividers, starting from the Aindir period of 13 $Y_{Earth}$.

The paper also showed that the colors of hieroglyphic signs imply the precedence of pronouncing each sign in the word, following the sequence: white, red, orange, yellow, green, light blue, blue, violet, and black. Using these findings regarding the Egyptian system of calendars and the missing rules in the Egyptian writing system, in addition to the information provided by the Greek and Medieval historians, the paper also showed the related historic scenario. In this scenario, Abraham visited Egypt during the region of king Ammenophis (Amenhotep-III). Joseph worked as a vizier of both king Moeris (Seti-I) and his son king Osymandayas Thurem (Ramesses-II). Moses was born during the reign of king Ramesses Miammun (Ramesses-III), escaped to Sinai during the reign of king Ammenophis (Ramesses-IV) and the exodus occurred during the reign of king Ammury Thoma (Ramesses-V).
REFERENCES
Aboulfotouh, Hossam (2005b) The Planning Model of the Ancient Egyptian Atlantis in the Nile Delta, proceedings of the 2nd Conference of the Department of Restoration, Faculty of Fine Arts at Minia University.
Josephus, Flavius (37-100AD), Against Apion (1) - BOOK I.

Pentateuch (1828) *The Five Books of Moses*, appendix on: Observation on the Journeys of the Children of Israel, Published by A. Alexander and Son, York, p.666.


Plato (360 BC-b) *Timaeus*.

Plutarch (46-120AD), *Life of Solon*.


NOTES

1 - Exodus (13:1-14:31), and Numbers (33:3-7).

2 - Titles of the sections are, e.g., Wonders of Egypt, Red Sea (*Qulzum*), Kings of Amsus, Kings of Memphis, Alexandria, Pyramids, Sphinx, Ain-Shams, Cairo’s canal (gulf), Feiran, Oases, City of the vulture, Aylah, Madian, Faiyum, Joseph, and Moses (Al-Maqrizi, 1364-1442AD, Vol.1 &Vol.3).

3 - Al-Maqrizi (1364-1442AD, Vol.3, p.492) said the start was from *Ain-Shams* (Heliopolis). In Numbers (33:3), the start was from Rameses (beside Pithom in Faiyum). See section#5, in this paper.

4 - See the 12th word in line 11 in the Rosetta stone (Sharpe, 1871, Plate-6); see also Succoth (temple) on the obelisk of Ain-Shams in Planche-(26:1-4) in *Description de l’Égypte* (1822). In this regard, philologists postulated that the word *Fantine* (Elephantine) is the written form of *On*. Another similar word is *Sugod* that denotes sacred, e.g., *Sugod of Turah Mountain* 𓎏𓎏 for god *Mend-es𓎏𓎏*.

5 - According to Al-Maqrizi (1364-1442AD, Vol.1, p.67) king *Tharem* (Osymandyas) had made this statue and erected it in front of the palace of his father, king Moeris (Seti-I), on the first day of Cancer (21 June) after discovering a new silver mine; the Egyptians named it statue of the moon, because the moon was then in the house of Cancer. Every year, they used to celebrate this day that during which they wear it the red silk. Twenty-centuries later (890AD), Ibn Tulun heard about it, hence, he wanted to see it, but his servant advised him not to go because all the rulers who saw this statue had been afflicted with curse of the Pharaohs. However, Ibn Tulun decided to go to see it, and then because of his poor knowledge, his skepticisms regarding that the Egyptians might have assigned any magical power to it, he ordered the workers to smash it. Its upper part is now on display at the Egyptian Museum in Cairo.

6 - Al-Maqrizi (1364-1442AD, Vol.1, pp.429-430) said the shadow of the two obelisks appear on the statue twice a year, on summer and winter solstices. Using Google Earth data of 2017, archaeoastronomical geocentric analysis would show the following. If we imagine that the statue of the moon (at 30°7’49.6―N - 31°18’6.16―E) was set at center (C) of a lunar-horizon (of radius ~570m) facing the east. The positions of the two obelisks (O1 and O2), which were erected ~430 YEarth before the statue, are at the eastern edge of the horizon. The obelisk at O2 (30°45.7’N-31°18’27.05’E) is still standing in the site, and the other obelisk at O1 did collapse during the earthquake of circa 1276AD. The azimuth of the line O-C02 is ~103.5° and the azimuth of the line O-C01 might was ~76.5°; thus, marking the moon rises on winter and summer solstices of ~1225BC±3, respectively. Archaeoastronomical topocentric measurements in this site would show the precise readings of the mentioned figures of the azimuths and the erection date of the statue.

7 - In Arabic, "Al" could be pronounced as "A" or "E" (i.e., the lunar Al); thus, Etham is equivalent to *Alzum* or *Althum*, which is the slang Egyptian form of *Qulzum* (as pronounced in formal Arabic).

8 - See Manetho’s list of kings of 4th Dynasty (Waddell, 1964, p.47).

9 - See the hieroglyphic form of *Bahol* in (Hassan, 1949, pp.151-153).
LOCATION OF PI-HAHIROTH OF MOSES’S EXODUS IN SUEZ GULF AND THE NEW KINGDOM’S SCENARIO

10. - Feiran is an Egyptian province between Quzum and El-Tur in the western part of Sinai (Al-Maqrizi, 1364-1442AD, Vol. 1, p.353; see also p.28).

11. - Seiche (or saysh) is an oscillation of the surface of a lake or land locked sea that varies in period from few minutes to several hours (Webster Dictionary, 7th ed, 1965, p.782); see also (Intergovernmental Oceanographic Commission, 1985, p.50).

12. - See Pentateuch (Exodus, 14:21) and Quran (Ash-shu’ara, 63).

13. - In modern astrology, Y\textsubscript{Moon} of 29.5 days is the lunar month (see NASA Fact Sheets, David, 2016).

14. - See the 6th word in line 12 in the Rosetta stone (Sharpe, 1871, Plate-6).

15. - It is the ancient pilgrimage year of caravans to temples of the sun/moon in Egypt (a trip in summer and the other trip in winter).

16. - See the 16th word in line 11 in the Rosetta stone (Sharpe, 1871, Plate-6). Budge (1920, p.978) had assumed it is the name of Egypt and changed the sign of a month τ to a sign of a city Ω (industrial).

17. - See, e.g., “Precession or of the Earth” of ~25700 Y\textsubscript{Earth} in (Weigert et al, 1990, pp.206-207).

18. - Herodotus (484 - 425 BC) mentioned the history of Egypt in a span of 34 generations, most of them in the third cycle.

19. - Budge (1910, pp.134-135) misunderstood this statement, perhaps due to lack of knowledge on Egyptian astronomy.

He reversed the meaning of the statement and assumed that the sign of a man seated and raises his hands up υ that implies “size of” (Aboulfotouh, 2012) denotes one million.

20. - The year 1289BC is close to the date of war with the Canaanites; where a descendant of their king Suppiluliuma became king of Argos; see section#5 in this paper.

21. - Perhaps they were deserters from the garrison of either king Ethrag Tathr\textsubscript{II} (Senusret-II) Sesosiris/Phis-theory of 12th Dynasty or king Moeris (Seti-I) on the Atlantic Ocean (see Al-Maqrizi, 1364-1442AD, Vol.1, p.63).

22. - In some cases a human implies N of nass (human), and an evangelist-king implies R of Ra’yu (patron).

23. - Ancient Arabic includes words from different cultures lived in Egypt and in the Middle East; all the words are included in the old Arabic dictionaries such as Al-Qamus Al-Muhib, by Fairuzabadi (1324-1414AD).

24. - Photo’s source: http://www.memphis.edu/hypostyle/images/clerestory/ramesses_ii_soffit_4.jpg

25. - See the 23rd word in line 6 in the Rosetta stone (Sharpe, 1871, Plate-6), i.e.,, Permis Ρ Ὁ Phenas Φ that means God Epiphanes.

26. - Senusret is a wrong pronunciation. As pronounced by the medieval historians, it should be “Tathr\textsubscript{II}”, because the core part “Tathr” precedes the cover part “San”.

27. - Herodotus (484-425BC, p.311) wrote his name \textit{Ethrag (阗\textit{σα}) as (Ethrag) Etearchus the Ammonian \textit{σα} king.}

28. - In Abydos, an underground vaulted chamber constructed with mud brick was discovered and surveyed lately by Wegner (2016), perhaps it was used for manufacturing boats. The most remarkable thing in this chamber is that its vault is perfect parabola conforms to the equation \(Y = 0.5X\), where half the span equals the parabola’s height.

29. - There is a mistake in the cited list of Manetho (Waddell, 1964, pp.91-97); kings of 15th dynasty are similar to kings of 17th dynasty.

30. - Al-Maqrizi (1364-1442AD) called Hycsos the folk of Add; in the text of Josephus (37-100AD) their total reign period was 298 Y\textsubscript{Solstices} which is 149 Y\textsubscript{Earth}.

31. - In some cases, his name starts with the combined letter Ta υυα (T and A) and not A υυα (or h).

32. - Al Maqrizi (1364-1442AD, Vol.1, p.26) said, the so-called Amenhotep-III (Melia) is brother of the so-called Thutmosis-IV (Gege or Gelga).

33. - Al Maqrizi (1364-1442AD, Vol.1, p.26) mentioned his name as Melia (see table-1b).

34. - Amenhotep-III is son of Amenhotep-II that Al-Maqrizi (1364-1442AD, Vol.1, pp.260-261) called him Hepsa Ω or Hepsa (a word in his cartouche). He is not included in Eusebius’s list of Manetho (Waddell, 1964, pp.111-115), but in Africanus’s list of Manetho, his name is mentioned as Amenis Ap\textit{ερεις, which is Min plus S of (R8) † and the prefix “A” is the Egyptian definitive article that means “the”. Africanus mistakenly cited Manetho; he had placed him the fourth king in 18th dynasty; then, some Egyptologists did postulate he is the so-called queen Hatshepsut.

35. - In Genesis (12:15) “The princes also of Pharaoh saw her, and commended her before Pharaoh”.

36. - During wars, this canal was refilled; and other kings re-excavated it once again (Al Maqrizi, 1364-1442AD, Vol.1, p.131).

37. - Eydab or Eythlab was also a port on the Red Sea, south of El Quseir (Al-Maqrizi, 1364-1442AD, Vol.1, p.379).

38. - Punt is a wrong pronunciation, because philologists added the preposition N, which means “from”. In this regard, Meeks (2003) suggested that the so-called Punt is in the Arabian Peninsula.

39. - About 70 Y\textsubscript{Solstices}.

40. - Philologists postulated that Acheres (Hatshepsut) is the daughter of the so-called Thutmosis-II, that Manetho (Waddell, 1964, p.116) wrote his name as Mipers ꠋ billed \textit{Miqq\textit{ęς}} (a word inside his cartouche) and she ruled Egypt before king Rameg (or Merg) Mis-phra-smuthosis (Thutmosis-III). This is due to that she appears in some scenes with her deputy, daughter of Orus’s brother Mammisis that her first cartouche is similar to the first cartouche of king Rameg (Thutmosis-III). For example, in temple of Deir el-Bahari, beside the entrance of the central chapel, in the upper floor, her
two cartouches are named: [אצטטי סרר] (ruler’s vizier) Rameg and [ארבי] Mamiznis, where T of feminine is between brackets. Philologists did not recognize that she is a woman and not a man. Acheres (Hatshesut) and daughter of her uncle ruled Egypt together, during the Canaanites invasion, i.e., after the death of king Oras. Al-Maqrizi (1364-1442AD, Vol.1, p.261) mentioned the name of her deputy Rameg as Tholfi; it is a name outside her cartouche.

41 - The cartouche of the so-called Sebekhotpe of Dynasty XIII [אצטטי] reads as Ethreph or Atrib.

42 - The name of king Suppilliuma (Bryce, 2005, pp.181-182) or Seph-Lelemra in medieval literatures is Al-Vâlid son of Al-Ryan or the opposite; in Manetho’s list, he was called Rahotesh and Egyptologists called him Ramesses-I.

43 - See the 40th word in line 10 in the Rosetta stone (Sharpe, 1871, Plate-6).

44 - In other story by Al-Maqrizi (1364-1442AD, Vol.1, p.270), she sent also another message to his father Rgian or Al-Ryan.

45 - In the north scene in Amin’s tomb (KV62 of Tutankhamun), we see the compass rotated 180 degrees towards Zannanza (Ay), which might imply he did succeed him to the throne.

46 - If she was the same Nitocris (Nitoxiq) in history of Herodotus (440BC, p.387), they sunk them in underground water tanks.

47 - Herodotus (440BC, p.389) said, Nitocris revenged for murdering her brother.

48 - Herodotus (440BC, p.389) said, Nitocris threw herself into an apartment full of ashes.

49 - It seems that Oen (Akhenaten) never appeared again until he died; the text on the coffin’s cover that was found in KV55, says: Phera of Hatgema (might be Helgema oasis) Amlecu (Amalekite) Nezetti Serre (ruler’s vizier) -------- , Amer (Prince), Fares (knight) or Beser (lion) of Rydan (land of the sun). Therefore, the bones found in that sarcophagus would never be for the father of Al-azzz Adkhass Amin Fotte Fath-az (Tutankhamun) because Amin was not Amalekite. Most probably, some artefacts found in the tomb of Amin were gifts from relatives and friends for the second coming, thus bearing their names for remembering each one, as this was part of the ancient Egyptian notion of reincarnation. See also note#51.

50 - One of his combined names from his two cartouches is Mer-zen or Mersel; similar to Mursili (see Bryce, 2005, pp.181-182). Some nations in the Middle East including the Arabs change the last letter L (in nouns) to the letter N or the opposite; until today, local people in Luxor pronounce the last letter as N, e.g., from Ismael to Ismaen; the ancient Egyptians prefer N to be the last letter in their poems.

51 - Egyptologists postulated that she was the youngest daughter of Oen (Akhenaten) that her name was Selina of Rydan daughter of Zenat Fefon or Veavian (Neferititi). The two names are different; Selina is not Selgen.

52 - Using the list of A. Gardiner (1927): Aa2F is F-fanos: lantern of light; F3 N-naqas: acoustic jar/vase; O25 M-mesla: obelisk; see the other signs in table-1c.

53 - In the war scene in Ramesseum temple, the name of those people is written as Ba Khur Tur-Caterin, which means those who were defeated (or sank) in Catar (or Caterin) mountain’s Island. The phonetic value of the combined sign U30 is Ct; philologists thought it is the letter T; thus, they pronounced the name of these people as Hittite. The name of the two forts was Kokate. Citing Al-Masoudi (896-965AD), Al-Maqrizi (1364-1442AD, Vol.1, pp.344-349) said the nation of Kokah (Al-kokahh) lived in this fort, and they were anglers; they were also called the shark whales’ hunters of Aylah Island in front of Taba’s Taia; it was part of Madian. Once they succeed to tie a whale’s tail with ropes, they pull it into their shallow water, and leave it there for a day or two until it dies, and afterwards they sell it, or manufacture other products from its flesh, its skin, and its oil. Moses lived almost 40 pilgrimage years (Y+hのだるΕ) in this area, and then he returned to Memphis. In 1174AC (566H), Sahl Aldin defeated the Romans who seized the fort of Aylath; and in 1184AC (577H), the people rebuilt it after it was deteriorated and was partly collapsed due to heavy rain.

54 - The title Sesostrən Seseostre (Sesostris) of king Ramesesses Miammun is different from the title Phis-Thesusry of king Tathrsan-I (Senusret-I) on the obelisk of Helipolis. In this regard, Diodorus (60BC-30AD, p.30) said the two obelisks of Sesostris were placed in Memphis that whereon the inscriptions were on the extant of his empire, the national revenue, and the nations he conquered, which differ from the text on the obelisk of Helipolis. Herodotus (440BC, p.401) did not say two obelisks in Helipolis, but in temple of the sun (Hλίον), which implies that its axis is aligned to the sunrise on either the winter solstice or the summer solstice.

55 - On the second pylons of his temple in Medinet Habu in Luxor, there is a scene depicts his war against those from Phergan or Bergan (might be Vergina Berytus the city of King Philip-II), that some of them were Sabaya Meomen or Atrib, i.e., captives from the Minoans. According to the narratives of Herodotus (440BC, p.3), the initial spark of this war might was due to that the Phoenician (Canaanites) kidnapped Io, the daughter of Inachus king of Argos. Al-Maqrizi (1364-1442AD, Vol.3, pp.480-490) said, Moses did participate with the Pharaoh (i.e., Ramesess Miammun) in the war against the Greeks who invaded Egypt; most likely he meant this war.

56 - See the 30th word in line 12 in the Rosetta stone (Sharpe, 1871, Plate-6).

57 - In one of the cartouches of the so-called Ramesses-VI, his name is Thraig économique, i.e., the Dragon Falcon; his other name was Serach Miammun or Sera-Aga Miammun.