

Crossing of the Sea

חצית הים

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“Crossing the Sea.” From Dura Europos Synagogue. 3rd century AD.

In the Book of Exodus we read that the exit of the Israelites from Egypt began at:
וַיֵּצְאוּ בְנֵי-יִשְׂרָאֵל מִרַעַמְסֵס, סִכְתֵּה - “And the children of Israel journeyed from Rameses to Succoth” (Ex 12:37; see also Num 33:5). Then: **וַיֵּצְאוּ מִסִּכְתֵּה; וַיַּחֲנוּ בְּאֶתְנָם, בְּקֶצֶה הַמִּדְבָּר** - “And they took their journey from Succoth, and encamped in Etham, in the edge of the wilderness” (Ex 13:20; see also: Num 33:6). The Greek translator wrote here: “Othom” but when this name appears in Num 33:6 and 33:7 he wrote: “Bouthan” which may be a misspelled form of **פִּי אֶתְנָם** (*pi etham*), a possible non-biblical variant of **פִּתּוֹם** (*pithom*) - “Pithom” as in: **וַיִּבְנוּ עָרֵי מִסְכְּנוֹת לַפַּרְעֹה--אֶת-פִּתּוֹם וְאֶת-רַעַמְסֵס** - “And they built for Pharaoh store-cities, Pithom and Rameses” (Ex 1:11).

The characterization of these places as “store-cities” was not shared by the Greek translators who defined them as “fortified cities.” The location of any of these cities is not known, but if indeed these were “fortified cities” “in the edge of the wilderness” they could have been located at the fortified western border of Egypt that at that time (as a result of increasing desiccation of Eastern Libya) was under constant threat of Libyan invasion (A De Cosson. Mareotis: being a short account of the history and ancient monuments of the North-Western desert of Egypt and of Lake Mareotis. Country Life LTD. London. 1935).

We read that to prevent the escaping Hebrews from contemplating a return to Egypt (Ex 13:17-18), God directed them to: **יָם-סוּף** (*Yam-suph*). This place-name, which appears in the bible 24 times, was consistently translated to English (probably under the influence of the Greek translators) as the “Red Sea.” However, although the Greeks, frequently translated **יָם-סוּף** (*Yam-suph*) to: *Ἐρυθρὰ Θάλασσα* (*Erythra Thalassa*) - “Red Sea” they also translated it to the “Sea of Siph” (Jud 11:16), “Sea of Souph” (Jer 49:20), and as the “Last Sea” (1 Ki 9:26). Although we currently name the north-western gulf of the Indian Ocean as the “Red Sea” it is not known whether this is the Biblical **יָם-סוּף** (*Yam-suph*).

In the Book of Exodus we read that when Moses' mother could no longer hide the newborn baby:

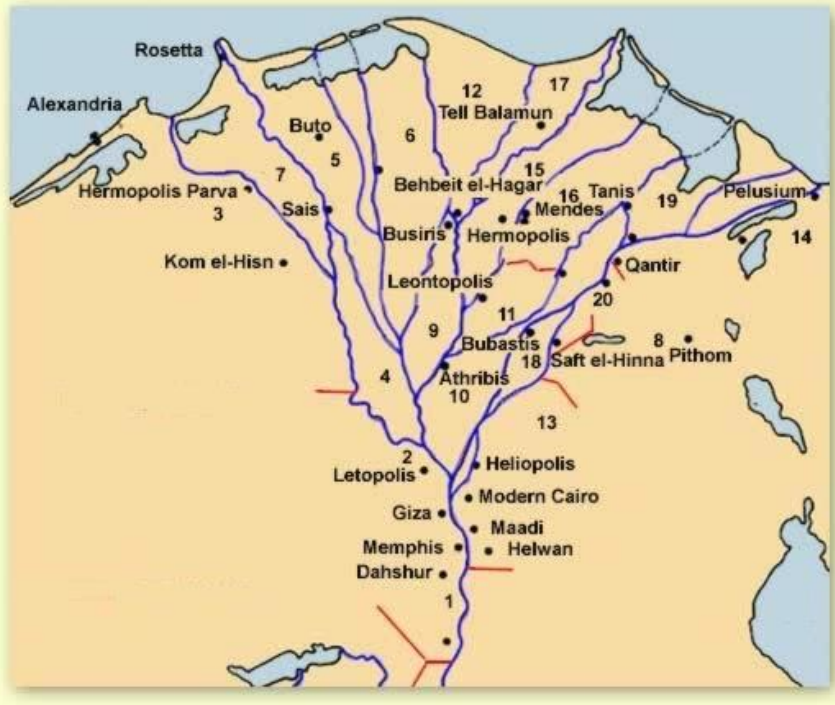
ותקח-לו תבת גמא, ותחמרה בחמר ובזפת; ותשם בה את-הילד, ותשם בסוף על-שפת היאר.
“And she took for him an ark of bulrushes, and daubed it with slime and with pitch; and she put the child therein, and laid it in the flags by the river's brink” (Ex 2:3).

The description here (and in Ex 2:5; Is 19:6) indicates that סוף (*soph*) was a type of a plant (or plants) that grew in the Nile or in the marshes formed near this river. Therefore ים-סוף (*Yam-soph*) was most probably a fresh water lake and not part of the salty sea.



Reed growth in Lake Mareotis

Several such lakes are positioned around the Nile-delta. Several scholars suggested that one of the lakes located east to the Nile-delta was the one crossed by the Hebrews that escaped from Egypt.



In the Book of Exodus we also read:

ויהי בשלח פרעה את-העם, ולא-נחם אלהים דרך ארץ פלשתים כי קרוב הוא: כי אמר אלהים, פן-ינחם העם בראתם מלחמה-ושבו מצרימה. ויסב אלהים את-העם דרך המדבר, ים-סוף;

“And it came to pass, when Pharaoh had let the people go, that God led them not by the way of the land of the Philistines, although that was near; for God said: Lest peradventure the people repent when they see war, and they return to Egypt. But God led the people about, by the way of the wilderness by the Red Sea” (Ex 13:17-18).

The Greek translator wrote here: “led the people roundabout” which is a more accurate translation of the Hebrew **ויסב** (*vayasev*) - “and he turned [the people]” (e.g. 2 Sam 18:30). The near “**Land of the Philistines**” (although the Philistines will arrive there much later) was north-east of Egypt and at that time it was, as well as the rest of Canaan and the Sinai Peninsula, dominated by Egypt politically and militarily (W A Ward. Egyptian relations with Canaan. In: D N Freedman (ed.). The Anchor Bible Dictionary. Doubleday. New York, N Y. 1992. Vol 2). Series of military strongholds protected the roads of the Egyptians to Canaan and to their turquoise and copper mines and the stone-quarries in south Sinai. Had the Hebrews escaped Egypt eastward surely they would have faced enmity from the Egyptian frontier sentries. If the Hebrews followed God’s logic then they definitely did not leave Egypt in a north-east direction and most probably avoided the Egyptian eastern border altogether.

On the other hand “turning” and escaping from Egypt westward would soon have gotten the Hebrews to a region not controlled by Egypt, where they would immediately reach an area that was in fact hostile to the Egyptians.

The Book of Exodus also suggests an alternative scenario: If the Egyptians indeed believed that the series of plagues that was inflicted upon them was due to the presence of the Hebrews among them (Ex 10:7), and therefore:

“And the Egyptians were urgent upon the people, to send them out of the land in haste; for they said: We are all dead men” (Ex 12:33; see also: 12:39), they would have expelled them out of Egypt as fast as possible. This could have been accomplished rapidly only through the western border of Egypt. Furthermore, the Egyptians may have also believed that such plagues would now be inflicted upon their Libyan enemy.

We read: **“And Pharaoh will say of the children of Israel: They are entangled in the land, the wilderness hath shut them in”** (Ex 14:3). The Greek translator wrote here that Pharaoh was speaking to his own people about the children of Israel. If the Greek translation is correct then we may conclude that the Egyptians were concerned (as God was) that because of the harsh conditions in the desert, or due to the hostility of the Libyans, the Hebrews may turn back and return to Egypt. Now to prevent this from happening:

“And YHWH hardened the heart of Pharaoh king of Egypt, and he pursued after the children of Israel” (Ex 14:8), and we may assume that the Egyptians wanted at all cost to prevent the Hebrew from returning to Egypt. We are told that the results of this pursuit:

וירדפו מצרים אחריהם, וישיגו אותם חנים על-הים, כל-סוס רכב פרעה ופרשיו וחילו-על-פי החירת, לפני בעל צפון.

“And the Egyptians pursued after them, all the horses and chariots of Pharaoh, and his horsemen, and his army, and overtook them encamping by the sea, , in front of Baal-zephon” (Ex 14:9).

This event is also mentioned in a historical review at the end of the Book of Joshua:

ואוציא את-אבותיכם ממצרים, ותבאו הימה, וירדפו מצרים אחרי אבותיכם, ברכב ובפרשים-ים-סוף.

“And I brought your fathers out of Egypt; and you came to the sea; and the Egyptians pursued after your fathers with chariots and with horsemen to the Red Sea” (Jos 24:6).

Although the Greek translator wrote here “Red Sea” for **ימה** - “sea” we have to wonder whether this “sea” was indeed **ים-סוף** (*Yam-suph*) - “the Sea of Suph” or some other sea. We are also told in the Book of Exodus that this event took place **על-פי החירת** - “beside Pi-hahiroth.”

The Book of Numbers tells us about this third station of the exit from Egypt:

ויסעו מאתם, וישב על-פי החירת, אשר על-פני בעל צפון; ויחנו לפני מגדל.

“And they journeyed from Etham, and turned back to Pihahiroth, which is before Baal-zephon; and they pitched before Migdol” (Num 33:7; see also: Ex 14:2, 9).

The Greek translator wrote here (but not in Ex 14:2, 9) “Heiroth’s mouth.” In spite of the fact that we are told that it was close to **בעל צפון** - “Baal-Zephon” (in Greek: “Beelsephon) and to **מגדל** - “Migdol” (in Greek: “Magdolos), it is not known where this place is.

Similarly to the description of the Land of the Israelites: **מדן ועד-באר שבע** - “from Dan even to Beer-sheba” (1 Ki 5:5; see also: Jud 20:1; 1 Sam 3:20; 2 Sam 3:10; 17:11; 24:2, 15), the Prophet Ezekiel describes Egypt:

לכן הנני אליך, ואל-יארִיך; ונתתי את-ארץ מצרים, לחרבות חרב שממה, ממגדל סונה, ועד-גבול כוש.

“Therefore, behold, I am against you, and against your rivers, and I will make the land of Egypt utterly waste and desolate, from Migdol to Syene even to the border of Ethiopia” (Eze 29:10; see also: Eze 30:6).

Syene is the Greek (and Coptic) name of the town of Aswan which is located near the southern border of Egypt, and therefore Ezekiel’s description of the Land of Egypt suggests that **מגדל** - “Migdol” is located at the northern edge of Egypt. In Hebrew the meaning of **מגדל** is a “tower” (e.g. Gen 11:4; Jud 8:9; 2 Ki 9:17), and therefore **מגדל** - “Migdol” could had been a famous tower that was erected somewhere on the Mediterranean sea-shore. Such towers were built already in antiquity, in particular near ports, to warn the approaching ships. In the Amarna letter 234, Satatna, the ruler of the port-city of Akka (Acco) writes to the Egyptian king: “Akka is like Magdalu in Egypt.”

Some scholars believe that the Egyptian used the word “Migdol” to mean a “border fort.” If correct, then such an understanding may indicate that sea-ports that were close to the borders of Egypt needed to be protected by such forts.



The seaside Pharos of Abusir (30 mi south-west to Alexandria. 3rd Century BC.

A known deity in Syria and in particularly in Ugarit was **בעל צפון** - “**Baal-Zephon.**” Albright indicated that it was also the major deity of mariners and he assumed that its shrines were located near sea-ports (William F. Albright. BASOR 118:16, 1950). A Drawing of Baal-Zephon standing on Mount (Casius) and a ship, was found on a cylinder seal, dated to the 13th Egyptian dynasty, that was excavated in Tell el-Daba, a town that was an important Egyptian port (Edith Porada. The Cylinder seal from Tell el-Daba. Am J Archaeol 88:485-488, 1984).



The cylinder-seal from Tell el-Daba, Egypt. (c. 17th Century BC)

Taken together **מגדל** - “**Migdol**” and **בעל צפון** - “**Baal-Zephon**” suggest that **פי החירת** - “**Pihahiroth**” or **חירת** - “**Khiroth**” (e.g. Num 33:8) was a major Egyptian sea-port.

Since the fourth century BC, the major port of Egypt was in Alexandria. However, the Greeks knew that prior to the building of Alexandria, there stood an ancient Egyptian city that the Greeks referred to as “Rhacotis.” This place, named by the Egyptians Ra - Kedet, was there at least since the second millennium BC (J-D Stanley, R W Carlson, G V Beek, T F Jorstad, E A Landau. Alexandria, Egypt, before Alexander the Great: A multidisciplinary approach yielding rich discoveries. GSA Today 17:4-10, 2007). The protection of its sea-shore by the Island of Pharos made it the safest anchorage place in the entire Egyptian sea-shore. Most likely Ra - Kedet was a center for the seafaring ships that were trading with the Minoans, the towns of Cyprus, and later with the Phoenicians and the Greeks. Furthermore, on the southern side of this town, river boats could carry the imported goods from the northern shore of Lake Mareotis through man-made canals, to the Canopic branch of the Nile, and from there to other towns throughout Egypt.

The similarity between the shape of the Hebrew letters **ד** (d) and **ר** (r) resulted in many spelling errors in the Hebrew Bible and raise the possibility that **חירת** (*khiroth*) is a misspelled “Kedet.”

The Hebrews who escaped (or were driven out of) Egypt may have proceeded westward out of the delta region of the Nile on the narrow isthmus stretching between the Mediterranean sea-shore (on its north side) and Lake Mareotis (on its southern side). When the Hebrews saw the Egyptians approaching behind them from the east (Ex 14:9), and looking at the harsh desert (or at the hostile Libyans) in front of them (in the west), the Hebrews might have felt trapped and therefore:

וייראו מאד, ויצעקו בני-ישראל אל-יהוה - “and they were sore afraid; and the children of Israel cried out to *YHWH*” (Ex 14:10; see also: Jos 24:7).



From left (north) to right (south): The Mediterranean Sea. The Island of Pharos. The long and narrow (1-2 mi) isthmus where Alexandria was built. Lake Mareotis. The desert leading to Wadi Natrun. East to Lake Mareotis is the Canopic branch of the Nile.

We are told that the reason for the pursuit of the Hebrew by the Egyptian army was because:
ויהפך לבב פרעה ועבדיו אל-העם, ויאמרו מה-זאת עשינו, כי-שלחנו את-ישראל מעבדנו.
“And the heart of Pharaoh and of his servants was turned towards the people, and they said: What is this we have done, that we have let Israel go from serving us?” (Ex 14:5).

However, we also read:

ויאמרו אל-משה, המבלי אין-קברים במצרים לקחתנו למות במדבר : מה-זאת עשית לנו להוציאנו ממצרים.
הלא-זה הדבר אשר דברנו אליך במצרים לאמר, חדל ממנו ונעבדה את-מצרים : כי טוב לנו עבד את-מצרים ממתנו במדבר.

“And they to Moses: Because there were no graves in Egypt, had you taken us away to die in the wilderness? Wherefore had you dealt thus with us, to bring us forth out of Egypt? Is not this the word that we spoke to you in Egypt, saying: Let us alone, that we may serve the Egyptians? For it was better for us to serve the Egyptians, than that we should die in the wilderness” (Ex 14:11-12).

These words suggest that the Hebrews were not afraid of being captured by the Egyptians and of being enslaved again, but believed that they were about to die in the desert at the hand of the Egyptians (or the Libyans). Their only prospect of avoiding death was if somehow they could have turned south, but such a move was dependent on their ability to cross Lake Mareotis.

The distinctive hydrology of Lake Mareotis may bear relevance to the biblical narrative about the crossing of the sea. At the beginning of the 20th Century AD, the surface area of this elongated lake which lies parallel to the Mediterranean coast was still greater than 200 km². The western arm of the lake (reaching some 40 km south-west to Alexandria) was much shallower and when the water level in the lake reaches its nadir it turned to mud flat. The Lake was fed solely by the Nile through several man-made canals that connected the Canopic branch of the Nile to the eastern edge of the lake. Obviously, the amount of water flowing in the Nile determined the water level in Lake Mareotis. As a result of the flooding cycle of the Nile, the water level in the lake fell gradually in late summer and reached its lowest point in the early spring. The water would rise again with the new flood that usually began in late spring.

We read that the exit from Egypt occurred: **היום אתם יצאים בחדש האביב** - “**This day you go forth in the month Abib**” (Ex 13:4), and we may assume that at that time of the year the water level at Lake Mareotis was at its nadir.

We also read in the Book of Exodus:

ויט משה את-ידו על-הים, ויולך יהוה את-הים ברוח קדים עזה כל-הלילה, וישם את-הים לחרבה;

“**And Moses stretched out his hand over the sea; and YHWH caused the sea to go back by a strong east wind all the night, and made the sea dry land**” (Ex 14:21).

The Greek translator wrote here: “strong south wind” but when **רוח קדים** appears in the Book of Jonah (Jon 4:8; see also: Jer 18:17; Eze 17:10; 19:12) the Greek translator wrote: “scorching wind of heat.” If the Greek translator is correct and we are reading here about a “hot wind” then this description may relate to the Saharan hot winds (in Arabic: *Khamsin*) that blow into Egypt from the west. Such a strong western wind that blew throughout the night could have pushed the remaining water of the western arm of Lake Mareotis so that its muddy bottom was now exposed.

From Moses’ song (after the crossing of the sea) we learn that the Hebrews and the Egyptians used different types of transportation:

כי בא סוס פרעה ברכבו ובפרשיו בים, וישב יהוה עליהם את-מי הים; ובני ישראל הלכו ביבשה בתוך הים.

“**For the horses of Pharaoh went in with his chariots and with his horsemen into the sea, and YHWH brought back the waters of the sea upon them; but the children of Israel walked on dry land in the midst of the sea**” (Ex 15:19; see also Ex 14:29).

In the entire description of the exit of the Hebrews from Egypt we never hear that they rode on animals’ back or used carts. In fact we are told:

וישא העם את-בצקו טרם יחמץ; משארתם צורת בשמלתם, על-שכמם.

“**And the people took their dough before it was leavened, their kneading-troughs being bound up in their clothes upon their shoulders**” (Ex 12:34).

While men and beast could (although with some difficulty) walk on the exposed muddy ground, heavy chariots and horse-riders would get mired, or as it is said by the writer of the Book of Exodus:

ויסר את אפן מרכבתיו, וינהגו בכבדת - “**And He took off their chariot wheels, and made them to drive heavily**” (Ex 14:25). This gave advantage to Hebrews who could harry and cross the lake and reach it southern shore.



The Egyptian chariots and horsemen overtaken by the returning water. Watercolor, by Jamse J Tissot. 1896-1900. Jewish Museum. New York.

Now we read:

ויט משה את-ידו על-הים, וישב הים לפנות בקר לאיתנו, ומצרים נסים לקראתו; וינער יהוה את-מצרים בתוך הים.

וישבו המים ויכסו את-הרכב ואת-הפרשים, לכל חיל פרעה הבאים אחריהם בים:

“**And Moses stretched forth his hand over the sea, and the sea returned to its strength when the morning appeared; and the Egyptians fled against it; and YHWH overthrew the Egyptians in the midst of the sea.**

And the waters returned, and covered the chariots, and the horsemen, even all the host of Pharaoh that went in after them into the sea” (Ex 14:27-28).

As this was the spring season, an unexpected early flood rushing down the Nile, could have rapidly raise the water level in Lake Mareotis and drawn the Chariots and horsemen that were still bogged in the mud at the bottom of the lake.



We read that after crossing of the sea:

ויסע משה את-ישראל מים-סוף, ויצאו אל-מדבר-שור; וילכו שלשת-ימים במדבר ולא-מצאו מים.

ויבאו מרתה-ולא יכלו לשתת מים ממרה כי מרים הם; על-כן קרא-שמה מרה.

“And Moses led Israel onward from the Red Sea, and they went out into the wilderness of Shur; and they went three days in the wilderness, and found no water.

And when they came to Marah, they could not drink of the waters of Marah, for they were bitter. Therefore the name of it was called Marah” (Ex 15:22-23).

About fifty miles south to Alexandria one comes to an elongated desert depression (~ 23 meters below sea level) that contain several lakes fed from the water table of the Nile. The sands in this area contain soda (sodium oxide) that was used in ancient Egypt for mummification and glass manufacturing. Similarly to the Latin name for sodium, this region is named Wadi el-Natrun. When soda dissolves in water it turns to sodium hydroxide and therefore the lakes' water are very alkaline and in most of them the pH is about 11 which give them a very bitter taste (J F Imahoff, H G Sahl, G S H Soliman, and H G Truper. The Wadi Natrun: Chemical composition and microbial mass developments in alkaline brines of Eutrophic desert lakes. Geomicrobiol J 1:219-234, 1979).

Now we read:

וילנו העם על-משה לאמר, מה-נשתה.

ויצעק אל-יהוה, ויורהו יהוה עץ, וישלך אל-המים וימתקו המים;

“And the people murmured against Moses, saying: What shall we drink?

And he cried to YHWH; and YHWH showed him a tree, and he cast it into the waters, and the waters were made sweet” (Ex 15:24-25).

Many plants and trees contain significant quantities of organic acids. Therefore, the contact of alkaline water with such a wood could lower the pH of the water (acid - base titration reaction) and that would make the water edible.

In a previous publication (ISBN 0-9734376-0-X) I already described my view about the rest of the journey of the Hebrews, from Marah to the Land of Canaan.