GLIMPSES OF THE PAST IN GENESIS-EXODUS

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In the Torah's accounts of people and events, there is usually no way to assign exact dates. This is a problem in constructing a history of the time, and especially in determining when the Israelites arrived in Egypt and when they left.

The Torah clearly states that the Israelites dwelt in Egypt for 430 years (Ex. 12:40-41). However, at least two midrashim, Exodus Rabbah 1:23 and Numbers Rabbah 13:19, say that the stay in Egypt was 210 years.

THE ISRAELITES

After Abram returned from Egypt to the land of Canaan, the Lord told him: '*Know well that your offspring shall be strangers in a land not theirs and they shall be enslaved and oppressed 400 years'* (Gen.15:13). Abram did not then have any children, and it is not yet known what "offspring" would be slaves in a foreign land.

There is a branch of mathematics called set theory. A "set" is a collection of objects. In this context, the descendents of Abram are a "set." The items that make up the set are called "members" or "elements" of the set. Abram defined himself as a Hebrew, and all of his descendents can be classified as Hebrews. Within this set, is a sub-set: The children of Jacob-Israel. They alone are Israelites, and they are the offspring of Abram destined to be slaves in a foreign land.

THE HYKSOS

In the 18th century BCE, a people known as the Hyksos, whom the Egyptians called "Asiatics," invaded Egypt. They apparently came from southwest Asia, perhaps in the vicinity of Canaan or Syria, and some of them had Semitic names. They established ruling dynasties in Egypt, and set their capital in the city of Avaris in the Nile Delta. During the period of Hyksos rule, an era of relative peace and prosperity, there was a continuous stream of people coming into Egypt from nearby areas. It may be that Abram's own

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journey into Egypt came at this time, and that he found a people from his own region rather than native Egyptians in power there.

The Hyksos introduced the horse into Egypt, where it was hitherto unknown, and used it not for riding but for drawing war-chariots. This innovation was to change the character and strength of the Egyptian military forces. When Joseph, great-grandson of Abraham, became a high official in the service of a pharaoh of Egypt, that ruler *had him ride in the chariot of his second-in-command* (41:43). This is the first time that the word "chariot" appears in the Bible, and the appearance of a horse-drawn chariot in Egypt cannot be any earlier than the Hyksos period.

During the great famine in the region, *throughout the land of Egypt, there was bread* (41:54). This was when *Jacob and all his offspring with him came to Egypt* (46:6), and the pharaoh at that time told Joseph '*settle your father and your brothers in the best part of the land, let them stay in the region of Goshen'* (47:6). Goshen is assumed to be in the eastern part of the Nile Delta, near the Hyksos capital at Avaris and the Egypt-Sinai frontier. That the pharaoh wanted the Israelites in so strategic a position, suggests that he was confident of the loyalty of these migrants from Canaan.

In the fertile Delta, the Israelites prospered and their numbers grew. For a number of years, the Israelites and the Hyksos, both Semitic peoples who came from or by way of Canaan, lived peacefully side by side. The Torah does not record any conflict or confrontation between them.

IN EGYPT

The great famine . . . *spread over the whole world. So all the world came to Joseph to Egypt to procure rations* (41:56-57). The tribes seeking sustenance may well have included some of Abraham's other offspring, through his son Ishmael, six more sons by Keturah, and his grandson Esau. The Ishmaelites *dwelt from Havilah, by Shur, which is close to Egypt, all the way to Asshur* (25:18). The sons of Keturah moved eastward (15:5). Esau (Edom), with his Canaanite wives, settled *in the hill country of Seir* (36:2-43). As the famine spread and grew harsher, these descendants of Abraham faced the same problem as the Israelites: No food. Perhaps they too went down into Egypt to seek food, and perhaps there they met with their cousins the Israelites.

It is hypothetic but plausible that these migrants settled near their kin. It may even have been that a Hyksos pharaoh counted on these tribes, Semites and Canaanites, to support him against the conquered Egyptians. In this sense, the forecast of Genesis 15:13 was coming true: A range of Abraham's offspring, and not just the Israelites, were strangers in a land not theirs. The Egyptians would likely classify most or all of them as Hebrews.

During the 18th-16th centuries, the Hyksos pharaohs reigned over most of Egypt. In the 16th century, native Egyptian chiefs began a drive against the Hyksos kings, and by the middle of the century the Egyptian 18th Dynasty was in control of the land. According to Manetho, a much later Egyptian priest and chronicler, many of the Hyksos were killed, and the rest withdrew from Egypt back into southwest Asia. Some scholars associate the departure of the Hyksos with the Exodus, and suggest that the Israelites left Egypt along with them. The more widely accepted view is that the Israelites remained behind for more than 100 years or even 300 years,

Sometime during this interval, there was a drastic change in royal policy toward them:

> *A new king arose over Egypt, who did not know Joseph.'Look, the Israelite people are much too numerous for us. Let us deal shrewdly with them, so that they may not increase, otherwise in the event of war they may join our enemies in fighting against us'* (Ex. 1:8-10).

This king, who began the Oppression of the Israelites, has never been identified, nor has the successor who was the pharaoh of the Exodus.

THE NUMBER OF ISRAELITES

> *The Israelites were fertile and prolific; they multiplied and increased very greatly, so that the land was filled with them* (Ex 1:7).

When the Israelites left Egypt, they took a census. The census counted 603,550 men of 20 years of age and up, not including the tribe of Levi (Num. 1:45-47).

When Jacob-Israel came down into Egypt, he and his sons and grandsons numbered 70. Excluding the possibility that other offspring of Abraham had joined them in Egypt, then in 430 years those 70 men multiplied into more than 603,550, solely by natural increase. If the Israelites were endogenous, and did not intermarry with Egyptians, they began with a small gene pool.

Contrary to modern genetic theory, this does not seem to cause congenital defects, for the midwives Shiphrah and Puah testified that the Hebrew women *are vigorous* (Ex. 1:19), implying that the babies too were healthy.

The average natural birthrate per woman is about six children; some have more, some fewer, some none. Some have multiple births of twins or triplets. Some babies and children do not survive. A common way of measuring the population growth potential of any group of people is a combination of birth and death rates. This determines how long it takes for a population to double if this rate is held steady. What rate of increase could bring the male population from 70 to more than 603,550 in 430 years? According to an accepted mathematical formula, an annual increase of 2.40-2.41 percent produces a doubling of population in 28.75 years.

The worldwide average population growth-rate in that period of antiquity has been estimated at approximately 0.065 percent a year. To fit the generally accepted interpretation of the census data, the Israelites in Egypt would have to have a growth-rate almost 37 times that average. This is so improbable that the massive growth in their numbers cannot be attributed to natural increase alone.

An alternative theory is population growth through immigration, especially in the period when food was to be found only in Egypt; perhaps including forebears of the *mixed multitude* that eventually left Egypt along with the Israelites. Even allowing for this source of increase, the total of 2,000,000 is still strongly problematic. An intensive archeological survey of the Sinai Peninsula has revealed no trace of so mass a population movement, and it is proposed that a realistic statistic for the Exodus would be 20,000-25,000.

The Torah presents highlights of a nation's beginning and development, but is not concerned with the detailed experiences of the Israelites' four centuries in Egypt. Obviously, this history was considered common knowledge that everyone knew. It was not foreseen that future devastation and tragedies were to afflict the people of Israel: Wars, destruction of the Temples and forced expulsion from of the land of their ancestors, the land of the patriarchs. As strangers in strange lands, some historical knowledge faded from collective memory. All that remains in the Torah are glimpses of the past.

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