



Evidence of the Exodus

A Vindication of Jewish Testimony

Zachary R.J. Strong, B.Eng.Mgt

Table of Contents

Preface	3
Understanding Egyptology	4
Aligning the Stars	8
The Revised Dynastic Model	12
Revisiting the Jewish Claims	18
Conclusion	32
Appendix: Timeline	33

Key Sources

“Pharaoh”, by Rabbi Alexander Hool, is like a physics textbook for history. As shall be discussed, one of the keys to understanding the historicity of the Exodus lies in understanding the faulty methodologies that historians and archaeologists have used to provide a chronology for the ancient Egyptian empire.

“The Riddle of the Exodus”, by James D. Long, moves beyond Egyptian chronology to examine some of the surrounding evidence for the Exodus, as well as explanations for significant events such as the parting of the Red Sea.

“Codex: Game Over”, by Shakka Ahmose, is a comparison of the Egyptian Pyramid Texts with passages in the Jewish and Christian Bibles. Ahmose is an Afrocentric scholar who has spent his entire life reconstructing and reviving African culture and history, and although some of his claims may be surprising to religious readers, for reasons I will explain later it is absolutely crucial to honour African voices in matters regarding the African continent.

Image Credits

Roxanne Shewchuk (Website: www.roxanneshewchuk.com)

Thais Cordeiro (Instagram: [@thaisscord](https://www.instagram.com/thaisscord))

Wombo.art (an AI art generator)

Evidence of the Exodus: A Vindication of Jewish Testimony
Zachary R.J. Strong

Copyright © 2023 by Zachary R.J. Strong
ISBN 978-1-9991206-6-5 (Printable Paperback Version)

All rights reserved. No part of this book may be reprinted, reproduced, transmitted, or used in any manner without written permission of the copyright owner, with two exceptions. Quotes and short excerpts, or reproduction of a few pages for teaching and educational purposes, with attribution, do not require permission.

Printable Paperback Version: April 2023
Published by Terebinth Press in collaboration with the author.

Author Website: zacharystrong.net
Publisher Website: terebinthpress.com



Preface: Lies and Misunderstandings

Although the Christian-centric West is generally aware that Judaism makes specific historical claims about the founding of the Jewish religion, the Exodus narrative has usually been relegated to the stuff of movies like *The Ten Commandments* and *The Prince of Egypt*.

Indeed, the mainstream understanding of Ancient Egypt's history as constructed by scholars and archaeologists does not support a dramatic departure of an entire nation of people, nor can evidence for ten catastrophic plagues be readily found. Yet, the Jewish people affirm that their ancestors were slaves in Egypt; that they were freed by the mighty hand of the universe's Creator, and that they received the Torah at Mount Sinai shortly thereafter.

However, as we shall see, Egyptologists have been wrong many times before, often out of ignorance or a lack of evidence. Additionally, the methods that academics use to date events in Ancient Egypt's history are demonstrably faulty, and although this is known within the field, nobody has had a better alternative... until recently.

In the 2010s, a formidably erudite rabbi who specializes in Jewish history began corresponding with experts in ancient calendars to figure out exactly what happened thousands of years ago. The fruits of his efforts inspired my work on the subject, which is captured in this document. Over a period of several months, I cross-referenced R. Hool's arguments with mainstream and Afrocentric sources, as well as distilled his arguments into concise and accessible forms. The fruit of this work is this document.

- ZRJS



Understanding Egyptology

Whereas the creation narrative took place in prehistory and could only be indirectly verified by scientists working over the last century, the stories of Joseph and the Exodus happen during historical periods and claim that the Hebrews were intimately connected with the history of Ancient Egypt. These stories involve assertions involving countries, prominent figures, and nation-changing events that should be reflected in the archaeological record.

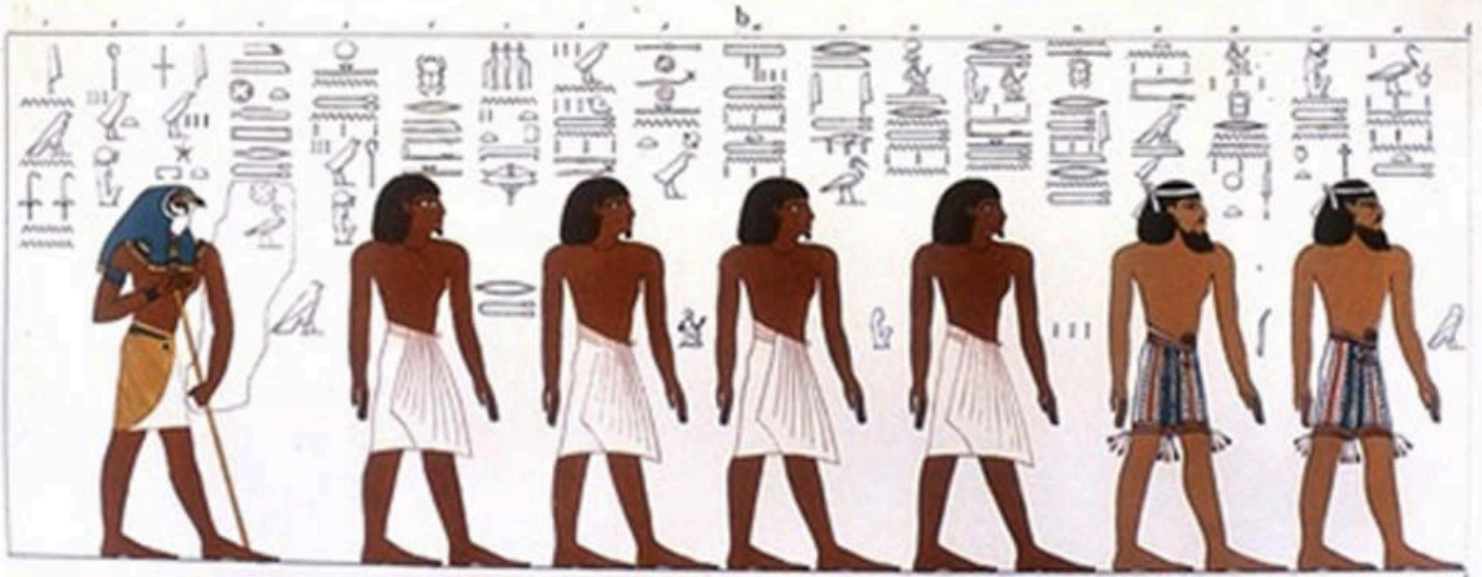
Unfortunately for the Jewish people, the prevailing opinion of most Egyptologists is that the Exodus did not happen as written. At best, it is thought to have been a small escape of a few thousand people, and they certainly did not destroy Egypt on the way out. Like many other stories in the Jewish Bible, it is believed to have but a grain of truth.

To make things even more difficult, interest in Ancient Egypt has exploded over the last two hundred years, making Egyptology an extremely rich and well-documented field. Academics are fairly certain they understand the history of the civilization, and society in general has become comfortable enough with the prevailing theories that they are taught to young children as fact. Put simply, this is problematic.

Ancient Egypt & Eurocentrism

One of the issues with Egyptology is that it was – and arguably still is – heavily Eurocentric. Many of the early theories and models of Egypt's history significantly downplayed the role of African people in Ancient Egypt, largely as a result of prejudice against continental Africans.

An example of this is the Dynastic Race Theory, which was developed by the founder of modern Egyptology, Sir William Matthew Flinders Petrie. Essentially, in his excavations in Naqadah, an area in Upper Egypt, Petrie found relatively sharp changes in the level of technologies between earlier and later artifacts, as well as traces of Mesopotamian influences. He hypothesized that an advanced race from the Near East must have moved into the region, bequeathed their knowledge to the indigenous Africans living there at the time, and became the first rulers of dynastic Egypt. The obvious problem with this theory is that it completely erases African contributions to Ancient Egypt, and an associated problem is that it casts Africans as primitive and subservient. Thankfully, mainstream scholarship



has since abandoned such theories and now acknowledges that Ancient Egypt was a development of the Nile River Valley.

Although the most prejudiced theories are falling by the wayside and the efforts of African scholars are beginning to be recognized within the field, Egyptology is still dominated by the legacy of European colonialism. Not only has this resulted in the devaluation of African knowledge, the Christian-centricity of Europe has also left most scholars ignorant of the existence of Jewish sources on matters pertaining to Egypt and the Exodus.

A Bunch of Best Guesses

Another problem with Egyptology is that we are extremely overconfident about what we “know” about Ancient Egypt. The prevailing theories taught in school are just that – theories. Shockingly, even the most “authoritative” models of Ancient Egypt’s history have inconsistencies and unexplained anomalies that have plagued the field for years. Admittedly, archeologists and historians must work with what they have available at the time, and any theory is liable to be upended by a new find. This causes progress to be painful, slow, and tentative. However, because the mainstream hasn’t found anything revolutionary in the past while, they have become relatively comfortable with their theories, leading the public to develop a sense of confidence in them as well.

What mainstream Egyptologists and Western society have been generally lacking in their quest for understanding, however, is Jewish and African input. Furthermore, it seems as though nobody has taken a step back to question the plausibility of what we will henceforth call the “Standard Dynastic Model”. As we shall see, a fair review of the prevailing opinions in the field will reveal several deficiencies which can only be addressed with reference to the totality of the evidence now available and a consilience-based approach.

The Standard Dynastic Model

Boiled down to its essence, the prevailing opinion on the course of Egypt’s history claims the following to be true:

- In the third millennium BCE, there was a pre-dynastic period where regional rulers along the Nile held sway over smaller dominions. Sometime around 3100 BCE, however, a leader named Narmer arose who united these fiefdoms into a civilization, becoming the first pharaoh of the first dynasty.
- Throughout Egypt’s history, it was ruled by a pharaoh who oversaw activity in what we now call Upper and Lower Egypt. Generally speaking, one pharaoh ruled both parts of the kingdom at a time, although the capital changed between Upper and Lower Egypt depending on the circumstances and the ruler’s preferences.
- This civilization lasted for thousands of years, building wondrous structures and developing many new technologies, eventually becoming conquered by the Persians and later the Greeks.

All of this seems logical enough. However, in matters of history – especially with topics as important as the Exodus – it is important to investigate how we “know” what we know.

Artifacts

One of the primary sources for what we know about Ancient Egypt come from artifacts we have recovered from excavations and burial complexes. One of the remarkable things about the Egyptians is that they carved incredible amounts of hieroglyphs onto columns and walls of buildings, giving us a rich source of raw data to draw from. Additionally, we have access to some papyri, as well as other items with dates, astrological sightings, and reign tenures, which help us patch together a rough succession of pharaohs and dynasties.

King Lists

Some of the most valuable artifacts in Egyptology are the “king lists”, which are essentially lists of the names of pharaohs that ruled in Ancient Egypt, presumably in chronological order. There are differences between the lists we have found, and some parts have been lost to vandalism or time. However, they remain one of the most informative sources regarding Egyptian history, particularly as pertaining to its rulers.

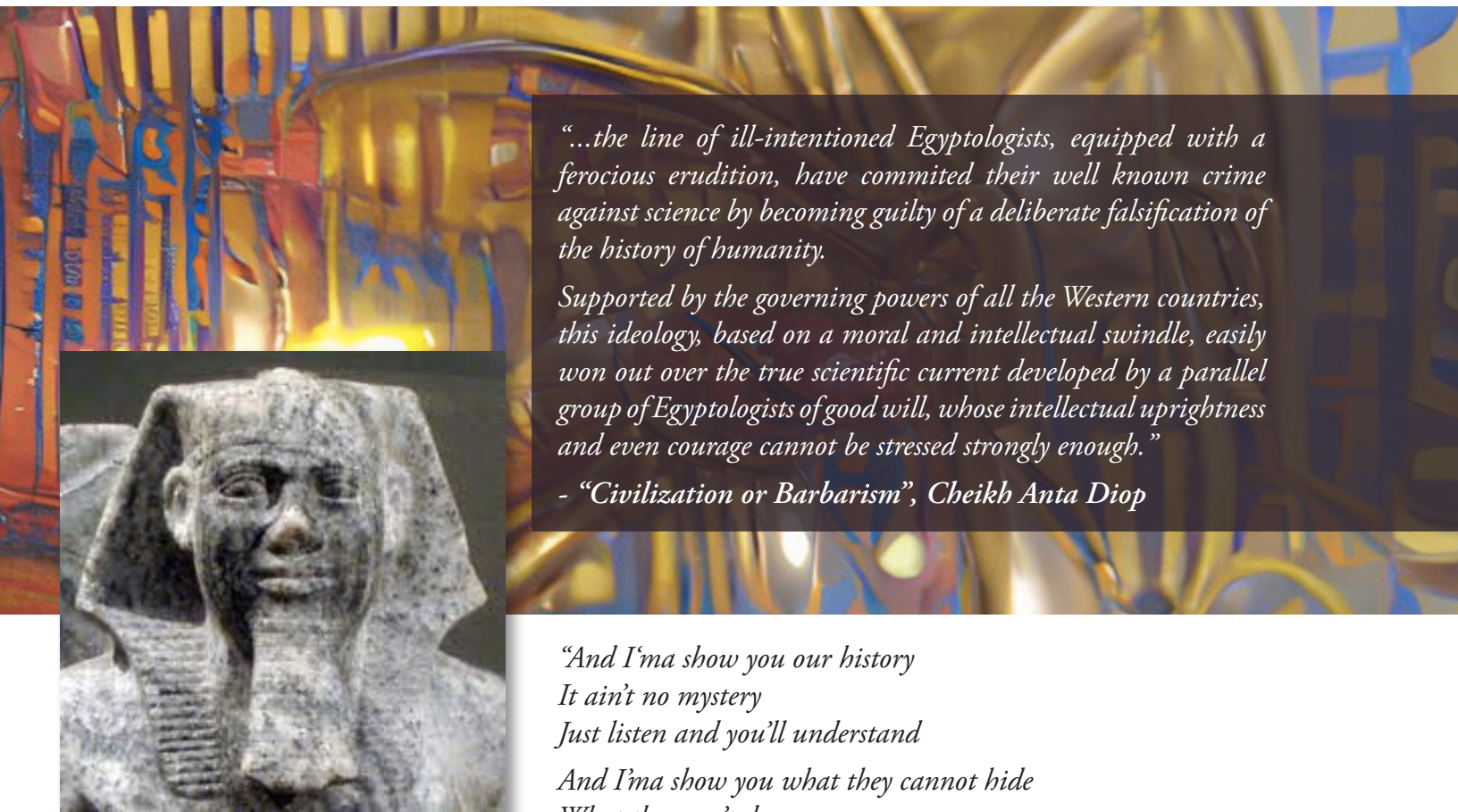
Sothic Dating

Although the archaeological record provides us with a lot of useful information regarding who ruled, and roughly in what order, based on the artifacts alone it is impossible to know when things happened in terms of our calendar. In order to overcome this hurdle

and find absolute dates for events in Ancient Egypt, historians have developed a system based on the Sirius star, known to the Egyptians as Sopdet and the Greeks as Sothis. As will be discussed, archaeologists have a few papyri with dates in both Egyptian and other calendars which have provided some reference points, as well as a handful of Egyptian sightings of the Sirius star known to occur at the same time every Gregorian year. Together, these findings have allowed archaeologists to correlate the Egyptian calendar to ours, and therefore construct a theoretical timeline of Ancient Egypt in "BCE years".

Radiocarbon Dating

In addition to the other dating techniques available to archaeologists, such as stratigraphy and the Sothic system, samples of organic material such as plants, wood, seeds, and papyrus can be examined using radiocarbon dating. Essentially, this method uses the presence of a radioactive isotope of carbon in once-living material, known as "carbon-14", as well as the known decay rate of that isotope, to estimate when that sample was alive. Although radiocarbon dating is not without its limitations, it is a highly useful tool that has allowed archaeologists and scientists to confirm many hypotheses about the chronology of the ancient world. We will examine its relationship to Egyptology, and our quest, at the end of this document.



"...the line of ill-intentioned Egyptologists, equipped with a ferocious erudition, have committed their well known crime against science by becoming guilty of a deliberate falsification of the history of humanity.

Supported by the governing powers of all the Western countries, this ideology, based on a moral and intellectual swindle, easily won out over the true scientific current developed by a parallel group of Egyptologists of good will, whose intellectual uprightness and even courage cannot be stressed strongly enough."

- "Civilization or Barbarism", Cheikh Anta Diop

*"And I'ma show you our history
It ain't no mystery
Just listen and you'll understand
And I'ma show you what they cannot hide
What they can't deny
That Egypt was a black land"*

- "Egypt Was a Black Land", Shakka Ahmose



Aligning the Stars

Although there is more contained in the book of Exodus than the liberation of the Israelites from slavery, the essence of the Biblical claims as they pertain to Ancient Egypt are as follows:

- At some point in Egypt's history, a descendent of Abraham named Joseph was elevated to the position of overseer of the kingdom. He helped facilitate prosperity throughout Egypt, was highly respected by all, and was embalmed and buried like an Egyptian noble. During his lifetime, his whole family moved to Egypt and began to multiply in number.
- Following Joseph's retirement or death, a pharaoh arose that did not recognize Joseph's legacy and was mistrustful of the growing population of Israelites. As a result, the Israelites were subjected to attempts at partial extermination, as well as brutal slavery.
- Following a long period of subjugation and misery, a Hebrew man arose named Moses. Guided by the God of Abraham, Isaac, and Jacob, he facilitated a series of ten miraculous catastrophes to punish the Egyptians and free the Israelites from bondage. This included a plague of boils and the death of every firstborn Egyptian child during the eve of Passover.
- Following a dramatic escape from Egypt and a pursuit from the pharaoh and his army, Moses facilitated another miracle – the parting of the Red Sea. The Israelites crossed through safely, while pharaoh and his army drowned.

The Jewish people are meticulous record-keepers regarding their own history and have several texts that provide specific years for these events. Furthermore, their calendar can be linked to the Western calendar, allowing us to correlate proposed Biblical events with the Standard Dynastic Model.

Although Chabad.org, one of the most popular Jewish sources, specifies a date of 1313 BCE for the Exodus, a number of respectable Jewish sources referenced in Appendix F of R.

Hool's *Pharaoh* indicate that it more likely took place in 1307 BCE. However, this leaves us with a couple of problems.

The Ramesses Perception

One of the most popular theories about the Exodus was that it happened during the reign of Ramesses II of the nineteenth dynasty. This was the view espoused in the 1956 Christian movie *The Ten Commandments*, where Ramesses II is both the main protagonist in the film, and cited as the pharaoh of slavery in a special introduction to the film highlighting its supposed historicity.

However, there is absolutely no evidence for this claim. Ramesses II was an extremely successful pharaoh, with multiple military victories, several building campaigns, and over two hundred female consorts. There is no record of disasters resembling the ten plagues during his reign, no evidence of a mass exodus of an entire nation of people, and no evidence that his entire army was washed away in the Red Sea.

The Horemheb Paradox

Additionally, the Jewish chronology we are using, which specifies a year of 1307 BCE, places us within the reign of Horemheb, the last pharaoh of the eighteenth dynasty. Horemheb is known for reforming the Egyptian state and restabilising the country after a period of political turmoil, which does not seem to suggest that a series of catastrophes and a slave revolt happened during his reign either.

This seems to leave us at an impasse, at least within the Standard Dynastic Model. Neither of the proposed candidates for the Biblical pharaoh seem to fit with known historical events. At this point, it becomes necessary to revisit some assumptions that Egyptologists have used to construct their model, and corroborate them with both Jewish records and Afrocentric insights. As will be shown, when several errors in mainstream Egyptology are corrected for, the impacts that Joseph and Moses had on Ancient Egypt emerge quite clearly.

Fixing the Sothic System

One of the primary inconsistencies with the Standard Dynastic Model is the Sothic dating system, which is used to provide absolute reference points for certain moments in Egyptian history.

Key to understanding the Sothic system is the fact that the Ancient Egyptians used a calendar with three hundred and sixty-five days, about one quarter-day shorter than the seasonal year. This means their calendar fell back one day with respect to ours every four years, and also that it fell back with respect to the stars and the seasons over time. Although this is a bit of an odd pattern, to us at least, it is still a pattern that can be tracked across time.

In order for us to relate the Egyptian calendar to our own, however, we require reference points. One such date scholars have used is the 20th of July, 139 CE, which is known to have been the first day of the Egyptian year.

The reason that Sirius is so relevant is because it was of some importance to the Ancient Egyptians. Indeed, on various temple inscriptions and papyri, there are documentations of the rising of the Sirius star that can be correlated to the reigns of specific pharaohs. Because Egyptologists know that the Egyptian calendar falls back one day every four years, they are able to take two sightings of the rise of Sirius at different points in Egyptian history, calculate the number of Egyptian calendar days between them, and multiply by four to arrive at the number of years elapsed between those two sightings. This allows for the time between reigns of different pharaohs to be calculated, and therefore a skeleton chronology of Egyptian history to be established.

Astronomical Inconsistencies

Despite the logic of the Sothic dating system as currently espoused by the academic mainstream, there are intractable problems that have recently emerged with regards to the astronomical record. Sophisticated computer programs are now able to calculate the movement of celestial bodies backwards and forwards through time, giving Egyptologists a glimpse of what the Ancient Egyptians would have seen in their night sky. The problem is that the positions of these bodies, as calculated, does not resemble the assembled astronomical sightings of the Ancient Egyptians.

For example, there are over dozens of dated astronomical events, including new moon sightings, that archaeologists have recovered from the twelfth dynasty. In the Standard Dynastic Model, these sightings are believed to have occurred in the eighteenth century BCE, but when compared to computer models of the night sky at that time, the patterns of sightings do not match what actually happened. Amazingly, Egyptologists have either ignored or downplayed this blatant discrepancy between their theories and reality.

A closer inspection of the Sothic system will reveal that the entire timeline is pinned to the date in 139 BC when Egyptian and Julian calendars were known to coincide. All of the dates in the system, and therefore in Egyptology, are extrapolated back from that connection. However, as explained by Rabbi Alexander Hool in his books *The Challenge of Jewish History* and *Pharaoh*, about ten different lines of evidence suggest that the Egyptian calendar underwent a revision near the turn of the millennium.

This revision, which was invisible until we had access to computer models of the night sky, has severely misled historians about what happened, and when, with profound impacts on several fields of study. As observed by R. Hool, this leads to inescapable “dark periods” in not only Egyptian history, but also in periods of Near Eastern history which are tied to Egypt. This means we must first correct the Sothic system before doing anything else.

Realigning the Stars

Although the entire Sothic dating system may seem tenuous at best, especially given the inconsistencies with computer models of the night sky, it is possible to correct the system using a consilience-based approach. We shall begin by reviewing the artifacts and evidence available for us to establish a revised model with, which includes:

1. A sighting of the Sirius star recorded in a twelfth-dynasty temple in Ilahun, which almost certainly took place during the reign of Senureset III.
2. Another Sirius sighting recorded in a twelfth-dynasty temple in Elephantine, which is attributed to the reign of Thutmose III.

3. A third Sirius sighting recorded on the ceiling of a cenotaph dated to the reign of Seti I of the nineteenth dynasty.
4. A papyrus from the time of Amenemhat III of the twelfth dynasty provides eleven observations of the new moon over a time period of eleven months.
5. Other papyri from the reigns of Amenemhat III and Senureset III provide another twenty-eight new moon sightings.
6. The "Elephantine Papyri", a collection of Egyptian documents from the time of Persian occupation that bear dates from both Babylonian and Egyptian calendars.

Taken together, these pieces of evidence provide us with the ability to establish absolute dates for the reigns of Seti I, Thutmose III, and Senureset III, as well as the ability to check our chronology with known models of the night sky.

We shall begin with the computer models. Astronomers have not been able to find a match for the twelfth-dynasty astronomical events in the eighteenth century BCE, and the Babylonian dates in the Elephantine Papyri, which are based on the lunar cycle, do not match up with computer models either. This indicates multiple points of failure for the current Sothic system.

However, not only have astronomers discovered a near-perfect pattern match for the twelfth-century sightings one hundred and seventy-one years later, the Babylonian dates for the Elephantine Papyri match with the lunar cycles when they are shifted forward in the same way. Additionally, when moved forward in time, some of the details discussed in the Elephantine Papyri match up with the timelines specified by *Seder Olam*, one of the definitive works of Jewish history. Besides the concordance with astronomical models, the added consilience with *Seder Olam* suggests that this revised timeline is much more accurate.

The Revised Sothic System

After correcting the Sothic system to accurately reflect computer models of the night sky, we are able to establish a more accurate skeleton of the Egyptian dynasties based on the reigns of Senureset III, Thutmose III, and Seti I. This is reflected in the companion timeline at the end of this document. However, by fixing the Sothic system in this way, we shorten Egyptian history by two hundred years and are faced with the very difficult problem of reconciling the reigns of many pharaohs within a compressed timeframe. This suggests that there is something else wrong with the Standard Dynastic Model, or at least with the chronology of pharaohs we currently adhere to.



The Revised Dynastic Model

Whereas the flaws of the traditional Sothic dating system only become apparent when one consults computer models of the night sky, the absurdity of the Standard Dynastic Model is hidden in plain sight. Indeed, when some of the central claims of Egyptologists are critically examined and contextualized, it becomes clear that a major error has been made.

Upper & Lower Egypt

We shall begin with the division of Ancient Egypt into upper and lower kingdoms, which is well-accepted within Egyptology. From artifacts like the Narmer Palette and other depictions of pharaohs throughout the history of Egypt, researchers have concluded that the position of pharaoh implied dominion over both of these kingdoms. However, multiple lines of evidence and reasoning suggest that this was not the case for sections of Egypt's history.

Logistical Challenges

It has been well-established by archaeologists that Ancient Egypt had two main centers of power: Thebes in Upper Egypt, and Memphis in Lower Egypt. Although we have cars and airplanes to facilitate easy travel between cities today, in ancient times these cities were separated by about a week's worth of walking under the desert sun, or a few days by boat. This creates obvious challenges for would-be rulers of Ancient Egypt, as any correspondence between officials would take days.

Furthermore, any transportation of goods or soldiers, to quell rebellions, for example, would take even longer. To borrow a term from anthropologist James C. Scott, this would make the state rather "illegible" to the ruler and would not facilitate long-term stability or cohesion.

Under the Standard Dynastic Model, the Egyptian civilization lasted for thousands of years with a remarkable degree of internal harmony despite this geographic separation. Although this is not impossible given the circumstances, it certainly is somewhat implausible.

The Mysterious Migrating Capital

As we have seen, Egyptologists hold that Ancient Egypt's history was characterized by consecutive dynasties, each with pharaohs ruling roughly in succession. However, when one reviews a list of all the dynasties with their associated capital cities, a strange pattern emerges.

Dynasty	Capital City	Years (Standard Model)
First Dynasty	Thinis (Upper Egypt)	3100 - 2900 BCE
Second Dynasty	Thinis (Upper Egypt)	2880 - 2686 BCE
Third Dynasty	Memphis (Lower Egypt)	2687 - 2613 BCE
Fourth Dynasty	Memphis (Lower Egypt)	2613 - 2494 BCE
Fifth Dynasty	Memphis (Lower Egypt)	2494 - 2345 BCE
Sixth Dynasty	Memphis (Lower Egypt)	2345 - 2181 BCE
Seventh Dynasty	Memphis (Lower Egypt)	Egyptologists don't know
Eighth Dynasty	Memphis (Lower Egypt)	2181 - 2160 BCE
Ninth Dynasty	Heracleopolis Magna (Upper Eg.)	2160 - 2130 BCE
Tenth Dynasty	Heracleopolis Magna (Upper Eg.)	2130 - 2040 BCE
Eleventh Dynasty	Thebes (Upper Egypt)	2130 - 1991 BCE
Twelfth Dynasty	Itjtawy (Middle Egypt)	1991 - 1802 BCE
Thirteenth Dynasty	Itjtawy (Middle Egypt)	1803 - 1649 BCE
Fourteenth Dynasty - Canaanite	Avaris (Lower Egypt)	1725 - 1650 BCE
Fifteenth Dynasty - Hyksos	Avaris (Lower Egypt)	1650 - 1550 BCE
Sixteenth Dynasty	Thebes & Avaris (Upper & Lower)	1649 - 1582 BCE

For the first two dynasties, the capital of the kingdom is said to be in Thinis, which is a lost city in Upper Egypt. Then, for the next few dynasties, the capital is in Memphis – Lower Egypt. Then it went to Thebes – Upper Egypt – for a dynasty, then to a couple of cities in Lower Egypt for four dynasties. Then it bounces back to Thebes, and then the role of “capital” is shared between multiple cities until Egypt is conquered by Such-and-Such the Imposing from Babylon.

Imagine that you had never learned anything about Ancient Egypt, except that it was a civilization with a rich culture and economy that lasted for over two thousand years. Now, imagine someone was explaining to you how the capital changed six times in fifteen dynasties, yet the kingdom remained internally cohesive and unified. For comparison, some Western nations, barely centuries old, have torn themselves apart multiple times without their capital changing once.

Does this make sense to you?

The “Battle” Between Horus and Set

A third line of reasoning on this matter comes from the Afrocentric scholar Shakkah Ahmose, and has to do with one of the most popular images or symbols of Ancient Egypt – the depiction of the “battle” between the mythological deities Horus and Set. The relationship between Horus and Set in Egyptian mythology is adversarial, so this image

is generally assumed to depict that relationship. However, as Shakka Ahmose points out, both Horus and Set have one foot planted on what appears to be a heart. Furthermore, they seem to be engaged in some kind of mutual labour, not fighting each other.

This does not imply an adversarial relationship, at least in this picture. Indeed, it represents a collaboration – but not just between Horus and Set. Ahmose notes that Horus was associated with Upper Egypt, or Thebes, and Set is associated with Lower Egypt, or Memphis. He also notes this symbol was usually present at the coronation of a pharaoh and indicated the continuation of a contract between the two lands.

The One-Pharaoh Fallacy

As evidenced by these three lines of reasoning, the assertion that Egypt was always a unified kingdom ruled by one pharaoh is rather implausible. If we allow for the possibility that there might have been one pharaoh for Upper Egypt and another for Lower Egypt, both ruling at the same time, not only is this a more reasonable proposition, it provides a solution for the problem of a shortened timeline as implied by the revised Sothic system.

However, if this is indeed the case, we should expect to see this reflected in the archaeological record. Amazingly, there is evidence in the king lists that supports a two-pharaoh hypothesis – at least for certain periods of Egypt's history.

Reviewing the King Lists

Although there are many partial lists of Egypt's pharaohs that exist, there are five key sources that inform both mainstream Egyptology and our present quest. Unfortunately, historians have neglected the fact that some of these lists are of limited reliability, and have also ignored a glaring "error" in one of the oldest known king lists that hints at the presence of multiple pharaohs in the kingdom.

MANETHOS

One of the most famous sources in Egyptian history is Manethos, an Egyptian priest and



"[They have their feet on a heart]... If you have an Upper Kingdom and the Lower Kingdom, who is the heart of that kingdom? The king! When you look at this symbol.... it is usually present during the coronation of the king. What you're looking at is a contract that the king is obligated to keep... the unity of the North and the South. Why? Because Set represents the South and Horus represents the North. So what you're looking at [in this symbol] is a geographical contract."

- Shakka Ahmose

historian who lived in the third century BCE. Although his original history of Egypt was lost, excerpts and references survive through later historians such as Josephus and Julius Africanus. Yet, even Manethos was writing over a thousand years after the fact in most cases. Despite these problems, Manethos' characterization of Egyptian history as consisting of about thirty dynasties has informed scholarship since the beginning of Egyptology.

THE "PALERMO" STONE

This artifact is a stone slab over two meters long, bearing the names of the pharaohs that ruled from what scholars believe to be the first to fifth dynasties. Unfortunately, some of the earlier names are no longer readable. There were also kings listed that must predate before the first dynasty, which scholars assume to be a predynastic or proto-dynastic period with regional rulers. It currently resides in Italy.

THE "TURIN" ROYAL CANON

This is a preserved papyrus discovered in Thebes and stolen away to a museum in Turin, Italy. Compiled during the reign of Ramesses III of the twentieth dynasty, like other lists it aims at completion but has largely been lost to time – even after reconstruction, over half of the document is unreadable or disintegrated. It is generally considered to be unreliable for chronological events before the nineteenth dynasty.

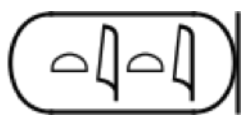
THE ABYDOS KING LIST

An earlier artifact can be found in a nineteenth-dynasty temple in Abydos, a short travel downriver from Thebes. It contains a list of seventy-five pharaohs that ruled between the first and nineteenth dynasties, and has been generally well-preserved.

THE KARNAK KING LIST

One of the earliest king lists rests in the Karnak Temple Complex, located near Thebes. This carved list of kings stretches from Menes, the legendary founder of Egypt, through to pharaohs from the eighteenth dynasty. Although parts of it have been destroyed or lost, this list is quite curious as it contains an anomaly that has either been ignored or dismissed by mainstream Egyptologists.

The first identifiable name on the list is Sneferu, a fourth-dynasty pharaoh. Then, it jumps to Djehuty, a sixteenth-century pharaoh, followed by three eleventh-dynasty pharaohs. And then, we encounter an anomaly so incomprehensible it seems to have evaded the serious attention of Eurocentric Egyptologists:



TETI



PEPI



MERENRE

Teti, Pepi, and Merenre, in order, are the first three pharaohs of the sixth dynasty. The list continues with Amenemhat I, the first pharaoh of the twelfth dynasty. What are we to make of this strange interpolation?

Taken on its face, this could have been an error committed by the Ancient Egyptians. But how could an otherwise brilliant civilization make such an egregious mistake? Not only does stone take a lot of time to carve, allowing plenty of opportunities to reconsider and

make corrections, R. Hool notes that the Karnak King List is in a very public place and an error of that magnitude would not have gone unnoticed. Put simply, it is more likely that the Karnak King List is intentionally correct, rather than blatantly wrong. However, if we review the list of dynasties and their capital cities previously discussed, we see something very interesting. Indeed, the consensus is that the sixth-dynasty pharaohs, and indeed several of the “earlier” dynasties, ruled from Memphis, whereas the eleventh-dynasty pharaohs and many other dynasties ruled from Thebes.

Given this information, rather than this being a boneheaded mistake by an Egyptian stonemasonry team, it seems much more likely that Teti, Pepi, and Seti I ruled, from Memphis, contemporaneously with pharaohs located in Upper Egypt. Although this arrangement was not the case for all of the kingdom’s history, as we shall see there are additional lines of evidence, all relevant to the Israelites’ time in Egypt, that corroborate what may seem like a radical revision of Egyptology.

What is Most Correct?

In R. Hool’s *Pharaoh*, he provides extensive analysis and background knowledge as part of his reconstruction of the Egyptian dynasties. Indeed, with the revised Sothic system and a more realistic vision of the dynasties of Ancient Egypt, we are not only able to resolve some of the inconsistencies and mysteries within Egyptology, but evidence of the Israelite conquest of Canaan, parts of Mediterranean Bronze Age history, elements of Assyrian history, and other quandaries of ancient history can be reconciled with the history of Ancient Egypt, and of Israel.

To recount R. Hool’s effort, even briefly, would involve a great deal of things beyond the scope of this document. In the interests of maintaining focus, a summary of what we shall call the Revised Dynastic Model is provided, and the book shall once again be recommended strongly.

As we can see from the Revised Dynastic Model (following page), there are varying levels of cohesion within the kingdom at different points in time. Additionally, there is a third city of power – Avaris – which was primarily occupied by the “Hyksos dynasties” of mainstream Egyptology. These rulers, perhaps regional occupiers at best, were contemporaneous with other pharaohs and were eventually driven out for good by Thutmose III. This is also a much more reasonable chronology of events than having a full-scale invasion of the civilization mysteriously overturned within a dynasty or two.

Note that this model looks very different from what people are taught in school, however R. Hool has been able to demonstrate a high level of consistency and internal coherence in his books. He has also supplemented his analysis with not only Near Eastern archaeological evidence, but with Torah, Oral Torah, and Jewish history, providing additional levels of consistency. It is these latter elements that we will now layer onto our revised Sothic system and Revised Dynastic Model, demonstrating with multiple lines of evidence that the Exodus not only happened as written, but the history of Ancient Egypt reflects these events.

A Summary of the Revised Dynastic Model

Year (BCE)	Thebes (Upper)	Memphis (Lower)	Avaris (North)	Itjtawy (Middle)
???	Pre-Dynastic	Pre-Dynastic		
???-2000s	1st-2nd Dynasties	1st-2nd Dynasties		
1900s	11th Dynasty	3rd Dynasty		
1800s	11th Dynasty	3rd Dynasty		
1700s	12th Dynasty	4th Dynasty	Hyksos/Canaanites (14th)	12th Dynasty
1600s	12th Dynasty	4th Dynasty	Hyksos (15th)	12th Dynasty
1500s	5th Dynasty	5th Dynasty		13th Dynasty
1400s	5th Dynasty	5th Dynasty		13th Dynasty
1300s	17th & 18th Dyn.	6th Dynasty	Brief Hyksos Invasion	
1200s	18th Dynasty	18th Dynasty	18th Dynasty	18th Dynasty
1100s	19th Dynasty	19th Dynasty	19th Dynasty	19th Dynasty



Revisiting the Jewish Claims

Although the books of Genesis and Exodus are quite detailed in their depiction of the time of the Israelites in Egypt, there is a wealth of information available in Oral Torah, Jewish historical writings, and other sources that creates a vivid picture of their oppression and liberation.

Instead of providing the raw information in list or paragraph form, which would be laborious to consume, we shall begin with a brief comparison of Biblical events to Egyptian history to establish a chronology of events we can follow. Then, we will walk through the Biblical stories from the promotion of Joseph to the crossing of the Red Sea, weaving Egyptian and Jewish sources together in a consistent thread. This method of consumption will be more pleasurable and more understandable.

As Numerous as the Stars

As previously mentioned, the Jewish people have kept meticulous records of their own history. Given that our sources, provided in R. Hool's *Pharaoh*, date the Exodus to 1307 BCE, there are several simple calculations derived from Torah verses that allow us to establish the timeline of the Israelites in Egypt.

At this point, it may be helpful to open the companion timeline to follow along with the events and "connect the dots".

In Genesis 15:13, God tells Abraham that his descendants will be "strangers in a land that is not theirs for four hundred years". However, in Exodus 12:41, the Torah states that the Israelites left Egypt after four hundred and thirty years. The discrepancy here can be resolved by observing that this covenant could not come into force without there being a descendant for it to apply to. Therefore, the four hundred years of being strangers in a strange land began with the birth of Isaac, at which point the covenant – and the clock – began. The larger figure refers to when Genesis 15:13 occurred.

Four hundred years back from 1307 BCE places us at 1707 BCE for the birth of Isaac, who was forty or forty-one years old when Jacob and Esau were born in 1667 BCE. Joseph is

born when Jacob is ninety-one, in 1576 BCE. Although this is unusually old for us, for the Biblical Patriarchs this was quite common. In Genesis 41, Joseph interprets Pharaoh's dream at the age of thirty and becomes vizier – this is in 1546 BCE. Nine years later in 1537 BCE, Jacob and his family come to live in Egypt to enjoy time with their long-lost son and brother.

Joseph dies at the notable age of one hundred and ten, which moves us to 1466 BCE. Using Seder Olam's chronology, which states that Hebrew slavery lasted one hundred and sixteen years, as well as our absolute date of 1307 BCE for the Exodus, we can determine that oppression began about four decades after Joseph's death in 1423 BCE.

The final year of note is the plague of boils – the sixth of ten plagues – which occurred in the year prior to the Exodus in 1308 BCE. We can deduce this as the tenth plague happened on Passover, in the spring, and Jewish sources say the afflictions happened at the rate of about one per month.

From Prisoner to Vizier

Now, what happens if we work back through the Revised Dynastic Model? Which pharaohs were in power, and where, as Biblical events progress? Are there happenings, documents, or artifacts in Egyptian history that align with Biblical claims?

Aside from a cameo appearance earlier in Genesis, Egypt only becomes relevant when Joseph is sold into bondage and ends up in captivity.

Then, at age thirty, in 1546 BCE, Joseph interprets a dream for Pharaoh and becomes vizier. At this point, if we refer to our model, we find that the reign of Djedkare Isesi of the fifth dynasty was just beginning in Lower Egypt, which would have been the most likely place Joseph would have landed after being sold into bondage in Canaan.

This means that we should expect to find corroboration between Biblical and historical events during Djedkare's reign. Indeed, this is the case. There are two notable characteristics of the Torah's description of Joseph's tenure as vizier. The first is that there was a famine that grew increasingly severe as time went on. The second is that Joseph, as vizier, oversaw preparations before the famine and trades with the people of Egypt throughout the famine.

Given that Joseph became vizier in 1546 BCE and the famine began seven years later, this would place the beginning of the famine years at 1539 BCE. Unfortunately, there is no evidence – or perhaps not publicly-available evidence – that there were famines during the reigns of Djedkare. However, what we do have is evidence of extensive administrative reforms that centralized state power in what scholars refer to as a feudalistic system. How does this compare to Torah?

In the later chapters of Genesis, particularly in Genesis 47:20-26, we see the progression of a feudal system set up under Joseph's direction. Indeed, as the famine gets more severe, the Egyptian people are forced to make several concessions with the officials that Joseph instituted during the seven years of plenty. Eventually, the people sell their land to Pharaoh, and pledge to tithe twenty percent of their crop to the crown. This is very much the definition of a feudal system, which is a remarkable correlation to how mainstream

Egyptologists describe Djedkare's reforms.

Alongside the lists of pharaohs, from various documents and inscriptions we also know quite a bit about the viziers of Egypt, considered the right-hand people of the kingdom. There could be more than one at once, and often was. However, for our purposes, we will focus on the vizier named Ptahhotep – a very familiar name to “Joseph”. Admittedly, there were a couple of viziers with this name during Djedkare's reign, but we will focus on Ptahhotep I as he is purported to be the progenitor of the first literary work in history, the Maxims of Ptahhotep.

Note this: although it is not generally believed that Ptahhotep I himself directly authored the Maxims, which is actually helpful for our purposes, it is accepted that the text was either directly or indirectly inspired by the words of a court official pleading for retirement at the remarkable age of ninety-six. Furthermore, the very end of the document states that Ptahhotep I died at the age of one hundred and ten, just like Joseph. The only full copy of the Maxims is found in the Prisse Papyrus, to which we will now turn.

Understanding the Prisse Papyrus

The Maxims, arguably the oldest book-form document and certainly the first piece of wisdom literature, lives on primarily through the Prisse Papyrus. Although earlier scholars claimed through linguistic analysis that this papyrus dates to the eleventh and twelfth dynasties, they seem to have neglected the fact that it was found in a seventeenth-dynasty sarcophagus, likely dating the Papyrus to about one century after the fifth dynasty in the Revised Dynastic Model.

Whereas this piece of literature would have had to survive for twelve dynasties in the model espoused by mainstream Egyptologists, this one-century timeline is much more realistic given the natural lifetime of a set of ideas in a society marked by polytheistic competition. This is the first archaeological “time warp” we will be able to resolve as a result of revising the dynastic model.

But what of the maxims themselves? Put simply, they are a series of instructions on living an upright life and obtaining honour in the courts, given by an elderly Ptahhotep I. In the translation provided by University College London, there are repeated references to “god” or “God” in the singular, which seems unusual in a polytheistic society. The specific Kemetic word used is “neter”, which is not the name of any specific deity in the Kemetic pantheon. In fact, there are only a couple of references to Egyptian deities in the entire work. Although this is speculation, this could suggest that the original work may have been inspired or dictated by a monotheist and later modified slightly by the scribes responsible for copying it over the following decades.

Now, it is not certain that Joseph was Ptahhotep I, although it seems very likely that this was the case given the correspondences between the ages of these two figures and the other similarities between historical and Biblical events. Regardless, this particular topic should be handled with care, as it implies foreign involvement in an important African document and could be taken by some to diminish the influence of continental Africans in the emergence of wisdom literature. This is obviously not the case from the rich documentation of Kemetic spirituality we have obtained over the years.

NO IDOLATRY!

Finally, it may also be interesting to note that unlike his predecessors, Djedkare Isesi did not build a sun temple to facilitate worship of the greater luminary. Perhaps he received a word of wisdom from one of his viziers.

Elsewhere in the Kingdom...

It should be noted that the thirteenth dynasty, located in the lost city of Itjtawy, also existed during the time of the fifth dynasty. However, the reigns of their pharaohs are extremely short, and there are not many monuments from this time. Additionally, this dynasty seems to have been marked by chaos and disorder, which is much more reasonable on a regional sense than a civilization-wide one. It is likely these pharaohs were city-state rulers, at least during the time of Djedkare and Unas. Indeed, no artifacts in the north of Egypt have been discovered from the thirteenth dynasty, further suggesting that Djedkare, Unas, and the sixth-dynasty pharaohs maintained primary influence in that area.

The Bitterness of Slavery

Given Joseph's long lifetime and the reported retirement age of Ptahhotep I, this places Joseph's retirement just after the beginning of Unas' reign. This pharaoh was the last of the fifth dynasty, after which there was a bit of a political change of seasons. The first pharaoh of the sixth dynasty, Teti, ascended to power in 1478 BCE through marriage with the princess Iput, disrupting the traditional chain of birth succession. This was two years after Joseph's retirement, and fifty-five years before the beginning of the period of slavery.

Indeed, if we look at the succession of pharaohs, we see that Teti and Pepi were the first two significant pharaohs of the sixth dynasty, with Userkare reigning for a very brief time between them. Late in the reign of Pepi, our timeline indicates that the enslavement of the Israelites began. This leaves plenty of time for him to observe the growing fortunes of the Hebrews and become increasingly concerned, as is related in Torah.

Tricked with a Brick

In its article on the time of oppression, Chabad.org relates that following Joseph's tenure as vizier and the relocation of his family to Lower Egypt, the Israelites began to flourish. Much like in certain European countries of times not long ago, they occupied respectable positions in society and did quite well for themselves besides.

In Torah, we learn of a new pharaoh, known to history as Pepi I Merire, who either didn't know of Joseph or refused to respect his legacy. Towards the end of his reign, by our timeline, he enslaved the Israelites, a practice which was continued throughout the fourteen years of Merenre's reign and into the reign of Pepi II.

But how exactly did the entire Hebrew people get thrown into slavery? This seems difficult to establish, given their various roles in society, as well as evidence from recent history that subjugating an integrated people in this way requires "legibility" of the populace. Indeed, as we have discussed, the conditions of Ancient Egypt – and of ancient civilizations in general – were not conducive to legibility.

Here, the Talmud and Midrash relate that the pharaoh who instituted slavery, who we will nickname Merire, tricked the Hebrews by engaging in a large "collaborative" building project with them. Merire himself laid a ceremonial brick, after which point Hebrew and

Egyptian workers laboured alongside each other for some time. One day, the Egyptians didn't show up for work. Soon after, the Egyptians returned as taskmasters and the ruse was complete.

Word Association

Every year during Passover Seders held around the world, Jews eat pieces of horseradish, a bitter root, in memory of the time they spent in slavery. In the Hebrew language, the word "marar" means "to be bitter", which is very similar to the name of Pepi I Merire. My understanding is that this association is intentional, and even from a secular perspective could easily be a linguistic development of this period of oppression.

The Brooklyn Slave Papyrus

A papyrus recovered from Upper Egypt, attributed to the thirteenth dynasty, contains a list of slave names – some of which are obviously Hebrew in origin. Known as the Brooklyn Slave Papyrus, it is stored in New York City and provides clear evidence of Israelite oppression during the timeframe specified by the Revised Dynastic Model. This document also helps explain why both Upper and Lower Egypt were punished by the plagues when the sixth-dynasty pharaohs of Memphis seem to be the primary offenders. As we can see, the entire kingdom took part in this affair and was therefore held collectively liable.

Longest Reign in the Books

Another element of Jewish history that is important to our quest is the fact that one of the pharaohs of slavery reigned for ninety-four years. Amazingly, there is only one pharaoh in the history of Ancient Egypt who is said to have reigned for that length of time, and that is the Pharaoh following Merenre – Pepi II.

Under Pepi II's rule, Jewish sources relate terrible atrocities. We know from Torah that there was infanticide involved, and that is just the beginning with this pharaoh of cursed memory. Ultimately, this state of affairs lasted until just after the end of Pepi II's extremely long reign. At this point, the history of the sixth dynasty enters what historians characterize as a mysteriously turbulent phase, the true causes of which we shall now discuss.

A Year of Liberation

Note carefully that although Moses' encounter with a burning bush could be considered to be the beginning of the Exodus story, an important clue is provided at the end of the previous chapter to help us date this event. In Exodus 2:23, while Moses was living in exile, we learn that the reigning pharaoh had died, which places the beginning of the Biblical narrative at the end of Pepi II's reign.

If history and Torah align, we should expect that the pharaoh following Pepi II to have a reign of about one year, as this new pharaoh would have perished in the Red Sea. Additionally, it would stand to reason that the entire kingdom would show signs of catastrophe. Indeed, not only are the miraculous events of the Exodus reflected in Egyptian sources, we also see upheavals and anomalies in both Upper and Lower Egyptian dynasties around the time of the Exodus.

The Pharaohs of the Exodus

The successor to Pepi II is known to history as Merenre Nemtyemsaf II, or Merenre II. In our first point of consilience, we find that Egyptian sources attribute a reign of only one year and one month to this pharaoh, after which the kingdom entered a period of collapse. However, as we know, the earlier-dynasty pharaohs ruled from Memphis. What was happening in Upper Egypt at this time?

Following the end of the fifth dynasty, in our revised model we see that the seventeenth and eighteenth dynasties ascended in Thebes while Pepi II was busy enslaving the Hebrews in Lower Egypt. Shortly before the Exodus, in 1314 BCE, Thutmose III becomes co-regent with his father, Thutmose II. Queen Hapshetsut, the wife of Thutmose II, is also in the picture at this time, and as we shall see is important to the story of the Exodus.

Let My People Go!

Following his encounter with the God of Abraham, Isaac, and Jacob, Moses returns to Egypt to liberate the enslaved Hebrew people. He encounters a new pharaoh who stubbornly refuses to remove his sandal from the necks of the slaves. At this point, we encounter a series of events that absolutely must be reflected in Egyptian history for the story of the Exodus to be plausible. Yet, as one might expect from the corroborations we have already encountered, there are several lines of evidence that suggest the Biblical plagues actually occurred as written.

The Plague of Boils

Egyptian sources attest that in the seventh year of Thutmose III's co-regency with his father, the elder Thutmose died and Queen Hapshetsut assumed a temporary position as co-regent. A curiosity of the mummies of Thutmose II, Thutmose III, and Hapshetsut are that they are all covered in boils, as revealed by scans of the bodies.

Jewish sources relate that the plague of boils, which occurred several months before Passover, was so severe that it caused many people to die – presumably from infection. This would explain the death of Thutmose II, as well as the boils on his royal family.

Forsooth...

There is an enigmatic Egyptian document called the Ipuwer Papyrus which is believed to have been created sometime in the nineteenth dynasty. Also known as Admonitions of an Egyptian Sage and with a source text believed to be much "older" than the nineteenth dynasty, the document speaks of absolute catastrophe in the kingdom. This is the second "time warp" we shall resolve.

Beyond simply referencing vague misfortunes, the author of Admonitions relays specific kinds of events that bear an uncanny resemblance to the plagues of the Exodus, as well as Jewish scripture. Consider the following:

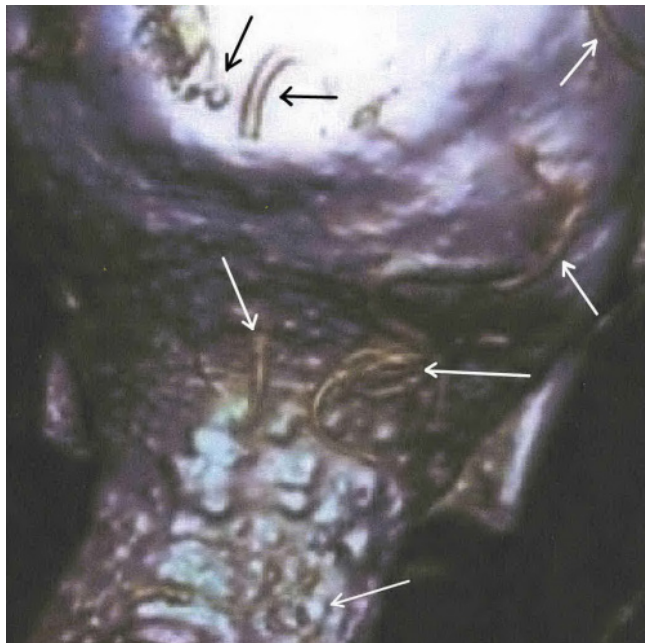
<i>"... he raised the staff and struck the water that was in the Nile before the eyes of Pharaoh and before the eyes of his servants, and all the water that was in the Nile turned to blood" (Exodus 17:20)</i>	"Behold, the river is blood, and yet men drink of it - Men shrink from tasting... they thirst after water."
<i>"Aaron cast his staff before Pharaoh and before his servants, and it became a serpent... Each one of [the Egyptian magicians] cast down his staff, and they became serpents; but Aaron's staff swallowed their staffs." (Exodus 7:10-12)</i>	"Behold, the serpent is taken from its hole - The secrets of the kings of Egypt are divulged."

<p><i>The Zohar, a Kabbalistic text hundreds of years older than our knowledge of the Ipuwer Papyrus, states that the frogs' croaking was so incessant that nobody could concentrate.</i></p>	<p>“O that the earth would cease from the noise, and tumult be no more.”</p> <p>“Forsooth... on account of noise - Noise is not lacking... there is no end to noise...”</p>
<p><i>“So Moses stretched forth his hand toward the heavens, and there was thick darkness over the entire land of Egypt for three days.” (Exodus 10:22)</i></p>	<p>“... the land is not light because of it...”</p>
<p><i>“[The locusts] obscured the view of all the earth, and the earth became darkened, and they ate all the vegetation of the earth and all the fruits of the trees, which the hail had left over, and no greenery was left in the trees or in the vegetation of the fields throughout the entire land of Egypt.” (Exodus 10:15)</i></p>	<p>“Lower Egypt weeps - The storehouse of the king is the common property of everyone, and the entire palace is without its revenues - to it belong (by right) wheat and barley...”</p>
<p><i>There are multiple references to widespread death in the land, which could reflect the plague of boils or the plague of the firstborn.</i></p>	<p>“Forsooth, the children of princes are cast out in the streets... the children of princes are dashed against the walls...”</p> <p>“A man looks upon his son as his enemy...”</p>
<p><i>“And the children of Israel did according to Moses' order, and they borrowed from the Egyptians silver objects, golden objects, and garments.” (Exodus 12:35)</i></p>	<p>“Forsooth, gold and lapis, silver and malachite, carnelian and bronze, stone of Yebhet and [?] are fastened on the necks of female slaves - Good things are in the land (yet) the mistresses of houses say would that we had something to eat.”</p> <p>“Forsooth, poor men are become owners of good things. He who could make for himself no sandals is the possessor of riches.”</p>
<p><i>“And the Lord went before them by day in a pillar of cloud to cause it to lead them on the way and at night in a pillar of fire to give them light, [they thus could] travel day and night.” (Exodus 13:21)</i></p>	<p>“Behold, the fire has mounted up on high - Its burning goes forth against the enemies of the land”</p>
<p><i>“So they took furnace soot, and they stood before Pharaoh, and Moses cast it heavenward, and it became boils breaking out into blisters upon man and upon beast.” (Exodus 9:10)</i></p>	<p>“Forsooth, hearts are violent - plague is throughout the land - Blood is everywhere - Death is not lacking...”</p> <p>“He who places his brother in the ground is everywhere.”</p>
<p><i>A Jewish source called Me'am Lo'ez relates that the Amalekites raided Egypt after the Exodus. Later, they caught up with the Israelites in the desert and used the census lists and other records to harass the Israelites by name.</i></p>	<p>“A foreign tribe from abroad has come to Egypt...”</p> <p>“Forsooth, public offices are opened and census-lists are taken away...”</p> <p>“Forsooth, (officials) are slain, and their writings are taken away...”</p>

Although this seems to be obvious evidence of the plagues given the perspective we are working from, mainstream Egyptologists have generally been confused by this document. One of the mysteries of the text itself, not necessarily of the papyrus, is its age. Although the papyrus dates to the nineteenth dynasty, the text seems much older, which is confusing when working within the Standard Dynastic Model.

Put simply, Egyptologists have no idea where the text came from or why it was so significant to the Egyptians to preserve across so many dynasties. In the Revised Dynastic Model, this problem disappears as the Ipuwer Papyrus can be seen to have been created within a century or so of the Exodus.

However, given that it may actually be more reasonable to believe that Upper and Lower Egypt were separate-but-allied at various points in their history, then not only does it become more possible for an "older dynasty" text to be copied by a "later dynasty" scribe, this may indicate the presence of regional dialects within Egypt that have been mistakenly attributed to earlier and later versions of the Kemetic language. Viewing the language on a regional basis is also much more reasonable than having a diverse civilization remain in



From "Archaeologist: Reign of Egyptian Pharaoh Thutmose II Suggests Crisis" (Press Release, 2012 CE)

"Further, there is evidence that disease affected the royal court before the reign of Hatshepsut. The mummy of Thutmose II is the only corpse of a pharaoh during the Eighteenth Dynasty covered with cysts from an unknown malady. These lesions coat the back, waist, arms and legs of Thutmose II and exhibit a mixture of papules, scabs and scars up to several centimeters in length. These cysts also cover the corpse of the wet-nurse Sitre-In, who was probably unrelated to the royal lineage. In addition, Hatshepsut and her successor, Thutmose III, bear traces of the disease suggesting their skin healed after a period of time."

complete linguistic lockstep for thousands of years.

The Plague of the Firstborn

The most dramatic plague, and the one occurring on the night of Passover, is the plague that caused the firstborn child of every Egyptian family to die. Although the impacts of this on the general population are reasonably lost to the sands of time, we should expect to see the effects of this plague on the royal lines of both Upper and Lower Egypt.

Indeed, this is certainly the case for both kingdoms. In the Upper Kingdom, mainstream Egyptology holds that Thutmose III, who survived the plague of the firstborns to become a great ruler, was the son of another wife of Thutmose II and not a firstborn child. Additionally, both Manethos and Herodotus discuss the rule of Queen Nitocris in the Lower Kingdom following the end of Merenre Nemtyemsaf II's reign. This was likely due to the possible dearth of male heirs.

Additional Evidence

There is even more evidence of Biblical events contained within the Egyptian archaeological record. For example, an inscription on Hapshetsut's temple in Speos Artemidos states that Egypt was "ruined" and "gone to pieces" before her reign, which would have coincided with the plague of boils and catastrophe throughout Upper and Lower Egypt she inherited. There is also a reference to a population of "vagabonds" that were responsible for "overthrowing that which had been made" and causing these issues in the kingdom.

Additionally, one of the most prominent Egyptian historians, Manethos, provides corroboration in this matter. He is quoted as saying that divine forces drove Egypt to destruction during the reign of "Tutimaheus", and that foreign powers came to occupy Lower Egypt for a time. Notably, he mentions that the seat of these new rulers, known to Egyptologists as the Hyksos dynasties, was in Memphis, and that tribute was levied from Upper Egypt. This would be consistent with our historical model which suggests an embattled Hapshetsut may have been too busy dealing with the collapse of a kingdom to deal with the Hyksos.

The Crossing of the Red Sea

The final miracle involved in the Israelites' escape from Egypt is their passage through the Red Sea, which was said to be miraculously divided for them and closed upon Pharaoh's army. Although this seems extraordinarily implausible, we must keep in mind that we have already covered a great number of miracles that seem too good to be true, but actually have basis in science and history.

Furthermore, there are a couple of geographic features of that particular region, as well as two natural phenomena, that suggest this miracle would require significantly less divine intervention than previously assumed.

In his book *Riddle of the Exodus*, scholar James D. Long observes that prior to the construction of the Suez Canal, the shores of the Red Sea were different and encompassed what is now a land bridge in an unrelated body of water. This would all have been underwater at the time and part of the Red Sea.

Additionally, there is a meteorological phenomenon called "wind set-down" that was first documented by Swedish oceanographer Bo Hellstrom. In certain situations, extremely strong gusts of wind can cause waters to literally part, and furthermore can result in what is known as a seiche wave – a dramatic collapse of the wall of water. Long also shares documented observations of what are known as "blow-out tides", also facilitated by meteorological events.

Although the parting of the Red Sea is dramatic, impossible to ignore, and would have been clearly visible to the Israelites and Egyptians, that was one of the points of the miracle. Indeed, seeing how God stretched His mighty hand out against the Egyptian army caused the Israelites to put faith in God and His servant Moses. In terms of eyewitnesses, the only people who survived to carry on the memory were the Jews, which makes this complex miracle intentional, multi-functional, and therefore elegant.

A Review of the Evidence

As the Biblical narrative progresses to the Song of the Sea and the Israelites' journey to Mount Sinai, it is worth pausing for a moment to review the plethora of archaeological, scriptural, and historical evidence we have considered. Throughout this document, we have seen that:

- The methods used for dating the dynasties of Ancient Egypt are demonstrably wrong;
- Multiple lines of reasoning and evidence suggest it is highly implausible that a single pharaoh ruled Upper and Lower Egypt for the entirety of Egypt's history;
- One of the most famous Egyptian images has been misinterpreted;
- There is evidence for Joseph's involvement in the court of Djedkare Isesi;
- The timelines of Upper and Lower Egypt corroborate dramatic Biblical events;
- Many historical references do in fact exist for the Exodus, however they remain enigmatic to mainstream Egyptologists working from an incorrect model;
- Although the parting of the Red Sea is a complex miracle, it was a multipurposed one likely involving known phenomena that was meant to be seen and remembered by the Israelites and their descendants.

Given all of what we have covered, it seems like we have a very strong case in making the audacious claim that mainstream Egyptology is in need of serious correction, and that the key to understanding the history of this impressive civilization is in fact the Jewish Bible.

What About the Radiocarbon?

Despite the merits of our case in favour of the Biblical Exodus, there remains one significant point of contention between our new understanding of Egypt and the Standard Dynastic Model espoused by mainstream Egyptologists. That point of contention is radiocarbon dating.

Indeed, in discussions that involve science and the Bible, radiocarbon dating has long been a source of debate and disagreement. Most notably, the dates given for many ancient artifacts flatly contradict the "young Earth" beliefs held by evangelical Christians, which has spawned a variety of ill-fated attempts to discredit or debunk the entire technique.

As we shall see, although radiocarbon dating is indeed a useful tool in archaeological inquiry, it is neither as reliable or accurate as the general public has been led to believe. In particular, the kinds of extrapolations that scientists make based on their measurements include a lot of assumptions and a little bit of hand-waving, and there is more disagreement between measurements than is reported by journalists working the archaeology beat.

The Carbon Cycle

In order to understand how and why radiocarbon dating works, we must understand how carbon-14 atoms are created and integrated into living tissues. Essentially, cosmic activity in the Earth's upper atmosphere creates carbon-14, which then gets absorbed by plants in the form of carbon dioxide and soil nutrients. These plants are then eaten by animals, and both are eaten by humans in turn. Thus, carbon-14 works its way into all living creatures.

When a living organism dies, whether it be a plant or an animal, it stops acquiring carbon-14 from its environment and the atoms of carbon-14 present begin to decay into regular carbon at a predictable rate – approximately by half every six thousand years. In order to estimate the age of a preserved organic sample, all scientists have to do is measure how much carbon-14 is present in the artifact now, and then do some math to find out how long ago the sample was alive.

Radiocarbon Dating and Egyptology

Although scientists and archaeologists have been using radiocarbon dating to check the age of Near Eastern artifacts for many decades, the most comprehensive, formidable, and challenging publication of Egyptian radiocarbon results is a paper entitled *Radiocarbon-Based Chronology for Dynastic Egypt*, published in 2010 by a team of researchers led by Christopher B. Ramsey. Using about two hundred different measurements from artifacts throughout the history of Ancient Egypt, including artifacts pertaining to some of the pharaohs we have discussed, the authors of the paper claim to have thoroughly verified the Standard Dynastic Model.

On its face, this paper seems like a catastrophic blow to our Revised Dynastic Model. Radiocarbon dating is indeed a highly useful technique, and the decay rate of carbon-14 does not fluctuate over time. How, then, could these results possibly be disputed?

We shall begin with some of the conflicting and contradictory evidence uncovered by archaeologists themselves, some of which matches the revised chronology. Notably, reeds from the tomb of Tutankhamun seem to be two centuries earlier than is allowable by the Standard Dynastic Model, which supports both a revised Sothic system and a revised dynastic model.

Additionally, other later-dynasty artifacts from Egyptian sites throughout the Near East, such as from the tomb of a twenty-first dynasty priest or the Kurru Cemetery in Nubia, have also been shown to be two hundred years younger than previously believed. Finally, an artifact from the third dynasty pharaoh Djoser was found to be six hundred years younger than the standard chronology would suggest.

If nothing else, these radiocarbon dates in favour of a new dynastic chronology suggest that there is room for disagreement in what seems like a straightforward scientific procedure. But how could this be the case, if radiocarbon dating is so reliable?

A Closer Look at Radiocarbon Dating

Although carbon-14 decays at a very predictable rate, which gives the illusion of objectivity, scientists and archaeologists who employ carbon-14 dating have to make a lot of assumptions about the historical environment of the artifact in question. Indeed, the

amount of carbon-14 present in living organisms has varied throughout the history of life on Earth, and can even differ from region to region. This makes “calibrating” the raw measurements obtained somewhat more difficult than most of us would assume. For example, the strength of the sun’s rays roughly determines how much carbon-14 is created in the atmosphere, and both of these things fluctuate over time.

This has forced scientists to construct “calibration curves” for the northern and southern hemispheres to account for the variability in carbon-14 concentrations between different time periods. These curves represent a layer of mathematical analysis that is layered on top of the raw measurement to obtain a “best guess”.

However, the process of calibration does not end with accounting for effects of cosmic radiation. Indeed, the measurements that scientists have must further be “calibrated” to the expected time period. Put simply, scientists take a measurement and then fit it to their predetermined model, as the individual measurements they get are so noisy that it is difficult – if not impossible – to make decisions based on radiocarbon data alone.

Finally, scientists have observed that the presence of certain types of rocks, called carbonates, can cause measurements taken in that area to be wildly skewed. This is because rocks like calcium carbonate, or limestone, contain lots of regular carbon but very little carbon-14. If a water table, river, lake, or other body of water sits on a limestone deposit, the plants that grow around it will have less carbon-14 than expected, making them seem much “older” when subjected to radiocarbon dating techniques.

Revisiting the Radiocarbon-Based Chronology

With these nuances in mind, we can return to the paper published by Ramsey and his team, which purports to verify the Standard Dynastic Model with about two hundred radiocarbon dates of artifacts found in tombs and caches across Ancient Egypt. Although their methodology has elements of soundness, especially when considering the kinds of artifacts they sampled, their preconceived notions about the dynastic chronology not only caused them to ignore some of their own evidence, but made their work a self-fulfilling prophecy.

First, it must be observed that out of about two hundred measured samples, the researchers reported discarding fourteen of them for being far too young. Furthermore, an unspecified number of samples returned dates that were a “few hundred years” younger than expected, and these were also left out of the final set of measurements. This could represent anywhere between ten and twenty percent of the total data!

The research team then took this incomplete data set and fed it into a complicated statistical modelling process, using the Standard Dynastic Model as the framework. Essentially, they calibrated their preferred measurements according to the chronology that was already established, perhaps even cramming their data to fit their preconceived notions of Ancient Egypt. Notably, the researchers also report “young outliers” encountered during their modelling process, which were either ignored or hand-waved away through mathematics.

Despite these deficiencies, some of the measurements taken by Ramsey and his team strongly suggest that earlier-dynasty pharaohs like Djedkare Isesi ruled at about the time estimated by the Standard Dynastic Model. Furthermore, these measurements also

suggest that earlier-dynasty pharaohs were not ruling alongside later-dynasty pharaohs, as is suggested by our revised chronology. This challenge can be accounted for by the very geology of Egypt.

Limestone (Almost) Everywhere

The Nile River, perhaps the single most important contributing factor to the development of Egyptian civilization, winds its way through a number of different valleys and canyons as it makes its way through Egypt. In ancient times, the river flooded periodically, allowing the Egyptians to cultivate relatively vast areas of farmland in the middle of what would otherwise be a desert. Indeed, the annual deposits of nutrient-rich silt caused by this flooding made Egypt one of the most agriculturally-productive civilizations of the ancient world.

But what was this silt made of? As it happens, the rocks in Upper Egypt and Nubia, from where the Nile flows, are primarily sandstone or other kinds of rocks. However, North of Thebes, this geology gives way to limestone – the predominant type of rock found in Lower Egypt, as well as the primary building material of the Great Pyramids. Indeed, the Nile flows through many limestone-based canyons and valleys on its way to Memphis.

What this means is that by the time the Nile's waters reached Lower Egypt, significant amounts of limestone or dissolved carbonates would have been present in the water and silt. This would have created an environment where all of the plants in Lower Egypt would have less carbon-14 than generally assumed, making them appear much "older" when subjected to radiocarbon dating. If properly accounted for, this would shift the "older dynasties" ahead in the radiocarbon timeline by several centuries at least, making them concurrent with later dynasties.

Interestingly, the paper by Ramsey and his team does not mention limestone once. In the research process for this book, a number of works about radiocarbon dating and Egypt were reviewed, and there are no mentions of environmental limestone in them either. This suggests a possible lacuna, or blind spot, within Egyptology, and one that could have significant ramifications on the "calibration" of findings within Lower Egypt.

Results Inconclusive

Despite the strong claims made by Ramsey and his team, and the reception their work has received in the mainstream media, their paper does not conclusively determine that the Standard Dynastic Model is correct. Their methodology contains multiple obvious failures to consider "outliers", almost all of which were significantly younger than their preconceived notions would allow. There is also a significant amount of mathematical modelling involved which seems to create a self-fulfilling prophecy.

Finally, and perhaps most intriguingly, it is possible that Egyptologists have not yet considered the geology of their region of interest and its potential impacts on the carbon cycle of Lower Egypt as opposed to Upper Egypt. When seen in context of the work we have done with historical documents and other artifacts, we can be confident that the Revised Dynastic Model, and the Biblical account of the Exodus, are as worthy a competitor as anything mainstream Egyptologists have proposed.

Minor Clean-Up Work

There are two small questions which we should cover before concluding, which primarily stem from quirks in Torah and the Karnak King List.

Respect My Nouns?

If there were multiple pharaohs ruling in Egypt at any given time, why were they not named in the Bible to help us differentiate between them? Indeed, it would have been a lot easier for everyone if the names had been included. However, it is important to note that at those times, the pharaohs were considered as gods or god-like. To have the names of such figures in Torah, which even discourages us uttering the names of foreign gods, would be a terrible thing from a religious perspective. Thus, their names and memories are reduced as much as possible to "Pharaoh".

Pharaohs of Cursed Memory

As we previously saw, the list at Karnak only includes the first three pharaohs of the sixth dynasty – Teti, Pepi, and Merenre. Evidently, the Egyptians themselves were so irritated with the main offenders of the Exodus – Pepi II and Merenre II –that they were expunged from memory entirely. Nitocris and other Lower Egyptian rulers in the wake of the catastrophe likely escaped notice as well.



Conclusion

Although atheist-types like to trumpet the virtues of the scientific method, there is simply no way one can conduct an experiment on the existence of the Creator. However, in the case of the Jewish people, we have eyewitness testimony passed down through the generations combined with hard evidence from archaeological and historical sources.

This is just the beginning of concordance between Jewish and scientific/historical sources. The Jewish physicist Gerald Schroeder outlined similarities between early universe physics and the Biblical creation narrative some decades ago, and even as you read this, the world's best rabbis are working on topics like evolution, geology, and the Flood.

If you'd like to "go deeper", please email me for more information. I have lots of recommendations that I am happy to share.

All the best on your quest!



Appendix: Timeline

Note: there may be some slight differences between different Jewish chronologies, but only slight!

<i>YEAR (WESTERN)</i>	<i>JEWISH EVENTS</i>	<i>WORLD EVENTS</i>
1807 BCE	<i>Abraham is born</i>	<i>Amenemhat I (12th Dyn.)</i>
1759 BCE	<i>Tower of Babel disrupted</i>	
1748 BCE		<i>4th Dyn. Begins (Great Pyramids)</i>
1732 BCE	<i>Abraham & Sarah, Pharaoh in Avaris (Canaanite/Hyksos regional power)</i>	
1707 BCE	<i>Isaac is born</i>	
1692 BCE		<i>Ilahun temple inscription (Senureset III)</i>
1647 BCE	<i>Jacob & Esau are born</i>	<i>Famines in Egyptian records, fits Jewish history</i>
1576 BCE	<i>Joseph is born</i>	
1546 BCE	<i>Joseph becomes vizier</i>	<i>Ptahhotep I of Djedkare (5th Dynasty, Lower)</i>
1537 BCE	<i>Jacob and his family move to Egypt and settle in Goshen</i>	
1480 BCE	<i>Joseph retires at age 96</i>	<i>Maxims of Ptahhotep</i>
1466 BCE	<i>Joseph dies at age 110</i>	<i>6th Dynasty begins</i>
1423 BCE	<i>Hebrew oppression begins</i>	<i>Pepi I started it</i>
1388 BCE	<i>Moses is born</i>	<i>Pepi II is ruling</i>
1308 BCE	<i>Pharaoh dies, Moses returns</i>	<i>Merenre II is "Pharaoh"</i>
1307 BCE	<i>The Exodus</i>	<i>Egypt collapses (Merenre II & Thutmoses)</i>
1284 BCE		<i>Thutmose III inscriptions</i>
1189 BCE		<i>Akhenaten tries monotheism (hmm...)</i>



Terebinth
Press