



## REVISING THE EGYPTIAN CHRONOLOGY: JOSEPH AS IMHOTEP, AND AMENEMHAT IV AS PHARAOH OF THE EXODUS

---

Anne Habermehl, B.S.C., 25 Madison ST, Cortland, NY 13045 USA

**KEYWORDS:** Joseph, Imhotep, Djoser, Amenemhat IV, pharaoh of Exodus, Exodus, Egyptology, Manetho, timeline revision, Egyptian chronology, biblical chronology.

### ABSTRACT

The necessity of revising the standard secular chronology of Egypt is widely accepted, but efforts to achieve this so far have been inadequate. By recognizing Joseph of the Bible as the famous Imhotep of Egyptian history, and 12<sup>th</sup>-Dynasty Amenemhat IV as the pharaoh of the Exodus, a drastic shortening and rearranging of the 3<sup>rd</sup> to 12<sup>th</sup> Dynasties is indicated, making the chronology of Egypt accord with that of the Bible.

### INTRODUCTION

The standard secular timeline recognized by historians today is based on organization of the Egyptian pharaohs into consecutive dynasties, a system devised by Manetho in the 3<sup>rd</sup> century BC (Shaw, 2003, p. 1). Scholars have adjusted the original Manetho timeline downward considerably, as Crisler (2009) shows, but it still does not match the biblical timeline.

Efforts to relate biblical chronology to the secular chronology go back hundreds of years to Ussher (1658) and Isaac Newton (1728). More recently, Velikovsky (1952, 1978) raised the subject, and his thesis that the secular timeline based on the Egyptian dynasties needed to be drastically revised downward began a storm of controversy that goes on to this day. For example, Clarke (2010) finds it necessary to lambaste Velikovsky, even while admitting that the timeline needs to be reduced. Meanwhile, many others have come up with their own version of what chronological renovation is required (e.g., Courville, 1971; James *et al.*, 1993; Reilly, 2000; Rohl, 1995; Henry, 2003; Stewart, 2003; Long, 2006; Sweeney, 2008). These revisionists have varied in their adherence to the biblical timeline; even those who accept the Bible as solid history differ on the details of revising the chronology.

Timeline revision has been an especially thorny topic because members of the secular historical establishment have resisted making any changes. Having published materials for many years based on the accepted chronology, they do not want to admit that they could possibly be wrong; and above all, they want to save face. (Contrary to what most people may think, the pursuit of truth is generally a secondary matter for the intellectual establishment.) This kind of blatant refusal to accept new ideas was shown in its rawest form by the way Velikovsky's first work, *Worlds in Collision*, was castigated by scientists who even attempted to suppress its publication (Strickling, 2008, pp. 23–26; Velikovsky, 1952, p. 11). This has made it difficult to distinguish between valid criticism and simple bias with respect to chronology revision, and has created obstacles to achieving any kind of unanimity on the subject.

A further complication arises from those who, although nominally biblical scholars, do not consider the Bible to contain factual history, and are quick to declare it full of legends. Synchronizing secular history with the Bible is of little interest to them. Indeed, one might suspect that these people do not want historical events to correlate to the biblical narratives under any circumstances, as this might upset their unbelief. A glaring example of those who deny that a great deal of the Old Testament is history is the group commonly called minimalists, who place the findings of archaeology above the reliability of the Bible. Interestingly, their reasons for not accepting the Bible as accurate history often have to do with not finding archaeological evidence in what they consider to be the right time frame. (For a further description of minimalists, and their opposite, called maximalists, see Lendering, 2009.)

Not all scholars are this extreme, however. For instance, Levy *et al.* (2005, pp. 129–31) attempt a more moderate view; they declare the minimalist position untenable because of the many interconnections between biblical and extra-biblical sources of historical information. According to Levy *et al.*, the real salvation of chronology will be radiocarbon dating, a science for which they have great enthusiasm; and reliability of the Bible—or lack of it—will be measured by this dating yardstick. In applying their radiocarbon dating to sites in Edom, as an example, they conclude that Edom could not have existed as a kingdom as early as the biblical Exodus (see Num. 20:14–21). In their view, radiocarbon dating supersedes biblical chronology. Clearly we need to be careful of accepting secular radiocarbon dating, which has its own presuppositions and accuracy constraints.

Furthermore, if the standard accepted timeline were to be revised, it would be necessary to rewrite the history books, because all other ancient countries' historical dates are attached to those of Egypt (e.g., Velikovsky, 1952, p. 112). Rice (2003, p. 28) says, "...Egyptian chronology is the control by which the chronologies of the ancient Near East as a whole are formulated."

Erich von Fange (1974) also points this out clearly:

As prehistory is made continuous with recorded history, a problem of ancient chronology exerts a crippling effect on both the study of the Old Testament and on ancient history in general. Evidence is accumulating rapidly that Egyptian chronology is off by as much as 500–600 years. Since most scholars calibrate Old Testament events and the history of other ancient cultures by Egyptian dates, the effect is devastating, crippling, and stifling.

As we will see, the time error of secular chronology can be a lot more than 600 years. Faced with this kind of truly monumental change in chronology, historians often find it easier to leave things as they are.

In this paper, we will take the view that the Bible is a reliable foundation on which we can calculate chronology. Information from all other sources will be suspect unless it fits the biblical narrative. We will start by rejecting out of hand the long-held standard chronology based on the Egyptian dynasties that secular, and even some biblical historians tenaciously hold to in spite of acknowledging that this chronology has serious problems.

Solid bridges are needed from the biblical to the secular; these crossover points between the two provide firm ground for setting down historical equivalences (often called synchronisms). Two synchronisms between the Bible and secular Egyptian history will be developed in this paper: Joseph as the famous Imhotep, and the placement of the biblical Exodus.

This paper will be divided into three main parts. We will first examine the reasons for believing that Joseph and Imhotep were the same person, along with some historical and chronological implications. Then we will go forward in time from Joseph to the Exodus, and establish when and where this event must have taken place in Egyptian history. Finally, because this paper is primarily about chronology, we will propose a Bible-based timeline of the period from Joseph to the Exodus.

## **SECTION I**

### **A Comparison of Joseph and Imhotep**

Joseph's sudden rise from slave to second in command over all of Egypt is an amazing story. The way Joseph dealt with the severe seven-year famine, and its ultimate economic and political effects on Egypt, are monumentally important matters that one might think would be recorded in secular history, outside of the biblical record of Gen. 39–50.

There is reason to believe that Joseph figures prominently in Egyptian history as Imhotep, the famous vizier (chief administrator) who served under the 3<sup>rd</sup>-Dynasty pharaoh, Djoser. Scholars have noted the great similarities between the biblical Joseph and the historical Imhotep.

Chetwynd (1987) raised the subject when he published his arguments for equating the two men, even though he made no attempt to solve the inherent chronological problems. Hand (1991), Reilly (2000, pp. 44–71), Möller (2002, pp. 65–90) and Sweeney (2008, pp. 89–100) are among others who came to the same conclusion.

It was some time before Egyptologists realized that Djoser (other spelling variants include Zoser, Zozer, Djeser, Dzoser, Djozer) was also the pharaoh called Netjerikhet (Shaw, 2003, p. 482; Tyldesley, 2009, p. 34). There is some disagreement as to whether Djoser (meaning “the wise”) was his birth name or a name added later after Imhotep made him famous; Sweeney (2008, p. 82) says it was a name conferred on him only after his death. In any case, Egyptian pharaohs had multiple names; by the 5<sup>th</sup> Dynasty pharaohs had five names, one given at birth and four bestowed when they were crowned (Oakes & Gahlin, 2002, p. 342; Parsons, 2010; Shaw, 2003, pp. 6–7; Tyldesley, 2009, p. 11). Although the rulers of Egypt were always called kings in early times, and were not called pharaohs until the 18<sup>th</sup> Dynasty (Pharaoh, 2012), the Bible consistently calls these rulers pharaohs (Strong, 1894, # 6547), and we will therefore call them pharaohs throughout this paper.

Joseph’s elevation to the position of second in command to the pharaoh is described in Gen. 41: 40–44 (KJV):

“Thou shalt be over my house, and according unto thy word shall all my people be ruled: only in the throne will I be greater than thou. And Pharaoh said unto Joseph, See, I have set thee over all the land of Egypt. And Pharaoh took off his ring from his hand, and put it upon Joseph’s hand, and arrayed him in vestures of fine linen, and put a gold chain about his neck; And he made him to ride in the second chariot which he had; and they cried before him, Bow the knee: and he made him ruler over all the land of Egypt. And Pharaoh said unto Joseph, I am Pharaoh, and without thee shall no man lift up his hand or foot in all the land of Egypt.”

It is clear from this passage that the pharaoh made Joseph vizier of the land of Egypt.

Imhotep’s position as vizier is widely acknowledged (see, for example, Oakes & Gahlin, 2002, p. 91; Hurry, 1926, pp. 5,6). Earlier there had been doubt that Imhotep had actually existed, his claimed fame and accomplishments seemingly being greater than any mortal could actually achieve. However, his historicity was established beyond doubt when the base of a statue of the pharaoh Djoser, now in the Imhotep Museum at Saqqara, was discovered with Imhotep’s name on it (Base of a statue of Djoser, 1926; Oakes & Gahlin, 2002, p. 46; Malek, 2003, p. 86). Information on Imhotep’s origins is shaky and would appear to be based on legend. Historians say that he was “probably” born near Memphis and educated there, and that he rose to prominence because he was bright. His mother’s name is admitted to be pure myth, dating from

the time of Ptolemy. His father is stated (without proof) to be an architect named Kanofer (Hurry, 1926, pp. 3–4; de Camp, 1963, pp. 30–31). For a man so famous, Imhotep has a very vague background.

The duties of a vizier are described by Hurry in his book on Imhotep (1926, pp. 5–6): “‘chief judge,’ ‘overseer of the King’s records,’ ‘bearer of the royal seal,’ ‘chief of all works of the King,’ ‘supervisor of that which Heaven brings, the Earth creates and the Nile brings,’ ‘supervisor of everything in this entire land.’” As if that wasn’t impressive enough, the departments of the vizier’s office also included the Judiciary, the Treasury, War (Army and Navy), the Interior, Agriculture, and the General Executive. We might wonder how the vizier managed to do all of this. As Hurry observes, “A prodigy of efficiency must have been required to carry out such multifarious duties.” Ironically, he adds: “The office of vizier to the ruling pharaoh was one of high dignity and responsibility. The occupant of the post was a sort of Joseph...” (!). Hurry did not, however, equate Imhotep to Joseph.

Scholars have compiled long lists of Joseph/Imhotep similarities; Möller (2002, pp. 87–90) offers 27. Although these points may be true about both Joseph and Imhotep, not all are unique to these two men, and many could also be true of other ancient Egyptian viziers. This is why other viziers have been believed to be Joseph by various writers. For instance, Courville (1971, vol. 1, pp. 141–42) concludes that Joseph is Mentuhotep, second vizier to 12<sup>th</sup>-Dynasty Sesostri I. Stewart (2003, pp. 90–103) believes that Joseph was an unnamed first vizier to Sesostri I. Aling (2003) chooses Sesostri II as Joseph’s pharaoh. Smith (1948, p. 505) favors one of the Hyksos kings, possibly Apophis.

We will confine ourselves to some of the strongest points that specifically indicate Joseph as Imhotep.

**Name similarity.** Although the name “Joseph” is pronounced “Yosef” in modern Israeli Hebrew, it wasn’t always so. There is a form of archaic Hebrew called Tiberian, considered to go back to at least second temple times, in which “Joseph” is pronounced “Yehosep” (Yəhōsēp̄). Tiberian Hebrew takes its name from the Jewish community of Tiberias and is the oldest form of pronunciation that scholars know today. (See Coetzee, 1999; Hebrew Given Names, 2012; Tiberian Hebrew, 2013.)

The phonetic similarity between (Ye)hosep and (Im)hotep is striking, especially considering that we do not know with certainty how either name was actually pronounced 3700 years ago. A further similarity of the two names is claimed by Metzler (1989, pp. 7–9, fn. 10), who says that an original spelling form of “Joseph” is “Ihosep,” and “Imhotep” may be spelled Ihotep. The variant spelling “Ihotep” appears in a long inscription of the tomb of sixth-Dynasty Weni, who mentions the Gate of Ihotep, a place near the coast of the Mediterranean (Horne, 1917, p. 39).

This leaves only the “s” and “t” phonetic difference between the two names. The Egyptians of Joseph’s day may have simply pronounced his name as if it was an Egyptian one. It would have been an honorable name; many pharaohs included “hotep” in their names, including one at the beginning of the 2<sup>nd</sup> Dynasty, well before Imhotep (Hotep, 2010).

Ironically, this name similarity between Joseph and Imhotep is one that Möller (2002, pp. 87–90) does not include in his extended list.

The two names have different meanings, however, because they come from different unrelated languages. “Joseph” means “let him add” (Strong, 1894, #3130). “Imhotep,” on the other hand, means “He who cometh in peace” (e.g., see Hurry, 1926, pp. 95–96, for a discussion of the name, “Imhotep”).

***Seven-year famine.*** The Bible is very specific on the details of this famine; it would be preceded by seven years of abundant harvests, after which there would be seven years of severe famine (Gen. 41:29–31). Joseph predicted the famine and advised the pharaoh what he should do to prepare for it. An account of Imhotep and his role in advising the pharaoh, Djoser, about a seven-year famine is written on the “famine stela” stone on Seheil Island near Elephantine Island in the Nile river in south Egypt. Although details are somewhat different, it appears to refer to the same famine and strongly backs Imhotep as Joseph. For a complete translation of the stela inscription, see Lichtheim (1980, pp. 94–100).

***Both possessed great wisdom.*** In the biblical story, the pharaoh said that nobody was as discreet and wise as Joseph (Gen. 41:39). Imhotep had the same reputation; for example, Asante (2004, p. 67) states: “He (Imhotep) is before all of the great names in antiquity and stands near the top of the ancients in terms of his display of genius.” Hurry (1926, p. 16) describes Imhotep’s fame for wisdom as making such a deep impression on his countrymen that it endured for many centuries. Both Joseph and Imhotep were therefore considered to be the wisest men in the kingdom.

***Both were seers.*** Joseph had predictive dreams while living with his family in Canaan (Gen. 37: 5–11). He predicted the fates of the chief butler and chief baker in Egypt (Gen. 40:5–22), and the seven years of plenty and seven years of famine (Gen. 41:25–32). Imhotep was famous as a seer and bore the title, “Greatest of Seers in Heliopolis” (Parsons, 2011).

***Lifespan of 110 years.*** Joseph lived to be 110 years old (Gen. 50:22, 26). Also 110 was traditionally considered to be an ideal lifespan throughout the history of ancient Egypt, and appears repeatedly in the manuscripts (Loza & Milad, 1990; Rowling, 1961; Taylor, 2001, p. 39). It would be highly unlikely that this could be a coincidence. There does not seem to be any clear connection of 110 years to Imhotep, as no secular inscriptions or manuscripts stating Imhotep’s age at death have yet been found (Hurry, 1926, pp. 25–26). We can, however, date an

early mention of 110 to the second-last pharaoh of the 5<sup>th</sup> Dynasty, Isosi, from a set of wisdom precepts, *The Instruction of Ptah-hotep*, that speak of an aged vizier who claims to be 110 years old. It is argued for this reason that these precepts must have been earlier ones that came down from Imhotep (e.g., Martin, 1983). However, it is possible that the 110 years may have been inserted into this manuscript by Ptah-hotep because it had become a traditional number for a respected old age, and therefore should not be taken literally. (For a translation of this manuscript, see Gunn, 1906.)

Because of this mention of the age of 110 years in *The Instruction of Ptah-hotep*, we can be confident in placing Joseph's death earlier than the end of the 5<sup>th</sup> Dynasty. Those scholars who place Joseph later than this must be putting him in the wrong time frame. Even Courville (1971, vol. 1, pp. 203–5), who believes that the famine of 12<sup>th</sup>-Dynasty Sesostri I is the same one as that of 5<sup>th</sup>-Dynasty Unas, puts Joseph later than the 5<sup>th</sup>-Dynasty Isosi, and Joseph's death would have been many years later than that. Although Djoser was a 3<sup>rd</sup>-Dynasty pharaoh, Joseph may have lived into the 4<sup>th</sup> Dynasty; the author of the manuscript, Ptah-hotep was old, and he may have grown up in an era not long after Joseph. The true length of the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> Dynasties is a key historical question.

### **Historical and Chronological Implications of Joseph as Imhotep**

Historians puzzle over how the great pyramids were built with nonslave labor (e.g., McClellan and Dorn, 2006, pp. 42–46). Obviously an enormous amount of manpower was required, and it seems unusual to these historians that the pharaoh should have been able to get his subjects to do this amount of labor for him if they were not slaves. In fact, the Bible clearly tells us the answer to this conundrum. During the course of the seven years of famine, the people of Egypt eventually sold everything they had, their animals, their land and themselves, to the pharaoh for food (Gen. 47:13–26 describes this). The people said that they would be pharaoh's servants because he had saved their lives (Gen. 47:19, 25). Therefore, from Joseph's time on, the pharaohs could commandeer the people to work as required, because he owned them. We need to look in Egyptian history for a time when great work projects were ordered by the pharaoh.

The first of these great Egyptian building projects was Djoser's pyramid complex at Saqqara, famously designed by his architect, Imhotep (Edwards, 1988, p. 34). Nothing on this scale had ever been built in Egypt before, and arguably would never be again, not even the famous Giza pyramids. Edwards (1988, pp. 51–52) describes this Saqqara complex as "one of the most remarkable architectural achievements produced by the ancient Egyptians." He also notes that it is a matter of discussion how such a "high degree of architectural perfection" could have been produced without a long process of development first taking place. The pyramid as an architectural element had been previously known only on a small scale, as in a 1<sup>st</sup>-Dynasty tomb

that was a pyramid with its top cut off and a traditional mastaba (tomb structure) built over it (Temple, 2010, fig. 36; Watson, 2011).

Because the ability of the pharaohs to conscript manpower for these projects started at the time of Imhotep, this is a strong indication that Joseph and Imhotep were the same person.

In addition, a great deal of cost was involved in pyramid building on the scale that we see, not only in the Saqqara complex, but also in the Giza and other pyramids that followed. According to the biblical story, the pharaoh became enormously wealthy from sale of the grain gathered during the seven plentiful years to both his people and to those who came from foreign countries to buy (such as Joseph's brothers, noted in Gen. 42– 43). The ongoing 1/5 income tax that Joseph instituted would also have continued to pour money into the pharaoh's coffers year after year (Gen. 47:26). The sudden available wealth displayed in Djoser's reign by his building program fits the biblical account well if Joseph was Imhotep.



**Figure 1.** The stepped pyramid of Djoser at Saqqara.  
(Photo by A. Habermehl, 2008)

After first becoming vizier for the pharaoh, Joseph lived another 80 years, and would have served several more pharaohs. Depending on how many years these pharaohs reigned (we cannot consider the secular reign lengths as reliable), Joseph may even have lived into the 4<sup>th</sup> Dynasty when the great pyramids at Giza were built. The transition of the pyramid shape from stepped to smooth could have been designed by Joseph himself; as a worshiper of God, he would have



known that the ziggurat shape was an ancient symbol of rebellion against God. The Tower of Babel was most likely a stepped pyramid (Habermehl, 2008).

Some historians wonder why Manetho started a new dynasty with Djoser. Since Djoser sealed the tomb of the previous pharaoh, Khasekhemwy, at the time of the latter's burial, it seems certain that Djoser was his son and heir (Regulski, 2004, p. 962), and therefore the 2<sup>nd</sup> Dynasty should have simply continued. However, Djoser was considered a very important pharaoh in later times; for instance, the Turin Canon marks Djoser uniquely with a title in red ink (Gardiner, 1964, p. 72; Malek, 2003, p. 85). As one writer has said, "The basic justification for a separation between the two periods is the revolutionary change in architecture accompanied by the effects on Egyptian society and economy of large-scale building projects" (Old Kingdom of Egypt, 2010). It could be argued that it was Joseph/Imhotep who gave Djoser this importance in meriting the start of a new dynasty.

The biblical story makes it clear that Joseph's family was well treated until "the pharaoh who knew not Joseph" arose (Ex. 1:8). This pharaoh said that the Children of Israel, who up to then had been favored because of Joseph, would now have to work like everyone else; he then enslaved them with especially hard labor (Ex. 1:11–14), making bricks from mud and straw. Scholars vary in their opinions as to who this pharaoh was; however, we can be fairly certain that this was one of the pharaohs of the 12<sup>th</sup> Dynasty. As we will show further on, the Exodus took place nearly at the end of this dynasty when Moses was 80 years old. At the time of Moses' birth (65 years after Joseph's death), the killing of male Israelite babies was being enforced. This edict had to have been fairly recent then because Moses' older brother Aaron, born three years before Moses, had not been killed. Working backwards through this dynasty, we can come up with some possible pharaohs who would have been this cruel, but it is doubtful that we can be certain which one. For instance, Stewart (2003, pp. 196–208) argues for Sesostris III.

The start of a new dynasty usually indicated a break of some kind, and we could even wonder whether the pharaoh "who knew not Joseph" (Ex. 1:8) was the first of the 12<sup>th</sup> Dynasty, Amenemhat I. Historians believe that this pharaoh overthrew the one that preceded him, and had no royal blood (Gardiner, 1964, pp. 125–26). He would indeed have qualified as a pharaoh who did not continue the previous customs with respect to Joseph's family, the Children of Israel. However, this would have ramifications for the length of the 12<sup>th</sup> Dynasty, which would have to be drastically telescoped; the secular chronology currently allots about 200 years from its beginning to the end of the reign of Amenemhat III (Shaw, 2003, p. 482).

Because Djoser reigned before any of the 4<sup>th</sup>-Dynasty kings, none of the great Giza pyramids had yet been built, and this should be noted by those who claim that Joseph's great-grandfather Abraham saw the pyramids (Brewer, 1910, p. 885; Ashton & Down, 2006, p. 37; Byers, 2005). The pyramids therefore are not as old as many historians claim; the Giza pyramids were built

during the 4<sup>th</sup> Dynasty, in the century after Joseph's rise to vizier, making them about 3600 years old. Standard chronology would place them in the 26<sup>th</sup> century BC, about a thousand years earlier (Edwards, 1988, p. 284).

With Joseph as Imhotep, we have placed Joseph in the reign of the pharaoh Djoser of the third dynasty, beginning his service as vizier somewhere around the year 1700 BC. Going backwards in time from there, the previous historic/chronological marker in the Bible is Abraham's visit to Egypt during a time of great famine in Canaan, somewhat less than 205 years earlier; this calculation is based on 215 years from Abraham's entrance into Canaan to Jacob's entrance into Egypt, less the 10 years of Joseph's service before Jacob's arrival in Egypt. (Later on we will address the question of the length of time that the Children of Israel spent in Egypt). This puts Abraham's visit to Egypt at somewhere around 1900 BC. The Bible does not name Abraham's pharaoh; however, it is possible that he reigned early in the 1<sup>st</sup> Dynasty, about 3000 BC on the secular timeline. A date of 3000 BC for Abraham would be in line with Joseph as Imhotep around 2700 BC. At this time the colonies of Egyptians who had been living in south Palestine abandoned their residences there and returned to Egypt for unknown reasons (Raffaele, 2003; Porat, 1992; Watrin, 1998, pp. 1224–26). We might wonder if the same severe famine in Canaan that drove Abraham to Egypt might also have caused these Egyptians to return home.

Secular history books are unanimous in claiming that horses were introduced into Egypt only during the time of the Hyksos rule in the 15<sup>th</sup> Dynasty, after the Exodus (Bourriau, 2003, p. 202). However, the Bible says that the pharaoh gave Joseph his second-best chariot for travel throughout Egypt (Gen. 41:43), and we would expect that it was pulled by horses, although it does not say so. Certainly, 26 years later, when Joseph buried his father in Canaan, there were chariots and horsemen in the crowd that accompanied him (Gen. 50:9). This pushes horses in Egypt back to the 3<sup>rd</sup> Dynasty, a not impossible situation because there is evidence of horses in Nahal Tillah (northern Negev, not a great distance from Egypt) in predynastic times (Aardsma, 2007). In addition, the pharaoh of the Exodus had a large number of chariots at his command when he pursued the Children of Israel at the end of the 12<sup>th</sup> Dynasty (Ex. 14:7–9).

Egyptians did a form of embalming from earliest times; this art became more sophisticated as time went on. The embalming of Joseph's father, Jacob (Gen. 50: 2–3), would have taken place during the 3<sup>rd</sup> Dynasty, because Jacob died 17 years after moving to Egypt (Gen. 47:28). Jacob, as the father of Joseph, would have received the best embalming of the time. Note that it took 40 days, not 70 as in later times (Fletcher, 2009, p. 119) for the entire time of embalming and preparation of Jacob (Gen. 50:3). In the era of the Old Kingdom, mummies were poorly preserved, and consisted of little but bones (Taylor, 2001, p. 48; Weser *et al.*, 1998). Hence the reference to Joseph's bones that were taken out of Egypt along with the Children of Israel (Gen. 50:25; Ex. 13:19) would support placing Joseph's death in the 3<sup>rd</sup>–4<sup>th</sup> Dynasty era.

There is one more implication of placing Joseph in the 3<sup>rd</sup> Dynasty. If we choose a later time for Joseph instead, a problem arises, namely that a lot more historical time has to be accounted for between Joseph and the Flood. That time has to include the Ice Age, the predynastic years, and all dynasties previous to Joseph (Habermehl, 2013).

### **Why Has Joseph Not Been Recognized as Imhotep?**

The most likely answer is that historians place the two men as much as a thousand years apart. Joseph is considered by most biblical historians to have lived around the 17<sup>th</sup>–18<sup>th</sup> century BC (e.g., Ussher, 1658, p. 30; Ashton and Down, 2006, p. 206; Jones, 2007, p. 54). Secular historians generally have placed Imhotep in the 26<sup>th</sup> century BC (McCallum, 2008, p. 159), 27<sup>th</sup> century BC (Edwards, 1988, p. 1; Oakes and Gahlin, 2002, p. 46), or even earlier, in the 28<sup>th</sup> (Cormack, 1965, p. 7). Biblical historians vary considerably with respect to placing Imhotep/Djoser, depending on whether they accept the secular timeline, or some version of a revised timeline. Ashton and Down (2006, p. 205), for instance, revise downward and put Djoser in the 21<sup>st</sup> century BC, and Aling (2002, pp. 16, 50) sticks to the secular chronology.

This time difference interposed between Imhotep and Joseph has proven to be a nearly insurmountable obstacle to equating the two men. It is easier to believe that it is a sheer coincidence that both men were alike in so many ways. Biblical scholars have formed their own opinions on this problem. For instance, Vasicek (2007) worked out a compromise whereby Joseph is thought to be a reincarnation of Imhotep, and Imhotep becomes a sort of composite figure of the two. Oakes (n.d.), in replying to a question about Joseph and Imhotep, dismisses the whole subject:

“... I believe it is irresponsible to form and publish theories such as the one about Imhotep. This tends to make Christians look foolish and blatantly biased, which does not help skeptics come to belief.”

Predictably, secular writers don't think much of the notion either. RationalWiki (Joseph was Imhotep, 2010) cannot say enough negative things about it:

“The idea that the Joseph of the Old Testament was Imhotep is a mixture of the usual "Biblical history" pseudo-historical distortion, with a bit of crossover appeal to the lunatic fringe "Alternative" Egyptology nuts. It's a kind of anti-intellectual, anti-historical supermarket, with something for everyone.”

Clearly, equating Joseph to Imhotep has not been a popular idea in some quarters. However, as we have seen, there are very good reasons to believe that Joseph was Imhotep, and to rearrange the timeline to do so.

## SECTION II

### From Joseph Forward in Time: The Exodus as a Chronology Crossover Point

Besides Joseph as Imhotep, the other known synchronism of Egyptian history and the Bible is the event known as the Exodus, when Jacob's descendants left Egypt en masse after 215 years there. The 430 years of sojourning (Ex. 12:40–41) has been shown to be the total time from Abraham's entry into Canaan to the Exodus. The NETS LXX reading is clearer: "Now the residence of the Sons of Israel during which they dwelt in the land, Egypt, and in the land of Chanaan was four hundred and thirty years." The Apostle Paul specifies that the law was given 430 years after the promise to Abraham (Gal. 3:16–17); Josephus (100, 2.15.2, pp. 74–75) says that they were only 215 years in Egypt. Examples of others who calculate a stay of 215 years in Egypt: Jones (2007, pp. 53–55), Ashton & Down (2006, p. 206), and Courville (1971, p. 47). Stewart (2003, p. 34) inexplicably claims 210 years in Egypt.

It is questioned by some whether the Children of Israel could have achieved the numbers of the Exodus given in Ex. 12:37 ("six hundred thousand on foot that were men, beside children") in only 215 years. This easily works out to over 2 million people, raising questions about the logistics of such a large group in the wilderness. Indeed, scholars have calculated that the entire population of Egypt at that time would have been around two million (Butzer, 1976, pp. 76–98). Wood (2009a) addresses this:

"The number of Israelites who left Egypt at the time of the Exodus is a vexed problem. ... At the heart of the issue is the meaning of the Hebrew word *eleph*. It is usually translated "thousand," but has a complex semantic history."

In other words, an ancient meaning of "*eleph*," long lost, could reduce the numbers of the Exodus considerably. More research is needed on this subject.

We need to establish as closely as possible when the Exodus took place on the biblical timeline, and then look for this event in Egyptian history. The biblical information is from I Kings 6:1, where the number of years between the Exodus and the year Solomon started building the temple is given as 480 years (MT) or 440 years (LXX). Apart from this 40-year difference, there are also some discrepancies among calculations of the beginning of Solomon's reign. Jones (2007, p. 53) puts the Exodus at 1491 BC (from the MT). Courville (1971, vol. 1, p. 11) arrives at 1445 BC (also from the MT). Collins (2005, 2007) sets the Exodus at 1406 BC (from the LXX). For all practical purposes, we shall accept 1450 BC as an Exodus date.

The Bible describes ten severe plagues sent by God immediately preceding the Exodus, designed to persuade the pharaoh to permit the Children of Israel to leave (Ex. 7–12). In addition to the plagues, there was the “borrowing” (read “plundering”) of the Egyptians’ wealth by the Israelites (Ex. 12:35–36), the actual departure from Egypt of this vast number of slaves, and then the drowning of the pharaoh and the entire Egyptian army. Although the Exodus account of the drowning of pharaoh’s army does not specifically say that the Pharaoh drowned (Ex. 14:23–31), it appears certain that he was. Verse 28 says that “there remained not so much as one of them.” Psalm 136:15 clearly says that the pharaoh and his army were destroyed.

All this had to have caused a total collapse of Egypt (Aardsma, 1994; Ashton & Down, 2006, pp. 98–102; Stewart, 2003, pp. 252–83). That such a collapse did actually occur can be seen from a study of historical sources—in fact, secular historians believe that Egypt collapsed not once, but twice: once at the end of the 6<sup>th</sup> Dynasty of the Old Kingdom (followed by the First Intermediate Period), and again at the end of the 12<sup>th</sup> Dynasty of the Middle Kingdom (followed by the Second Intermediate Period) (Shaw, 2003, p. 11). The two collapses are considered to have occurred about 400 years apart on the Manetho-based timeline (Shaw, 2003, pp. 482–83).

Which collapse was precipitated by the Exodus? It is likely there was only one collapse, with the 6<sup>th</sup> and 12<sup>th</sup> Dynasties running concurrently and ending in chaos at the same time (we will discuss this more later on). Gardiner (1964, p. 147) compares the traditional two intermediate periods with a very interesting description, and inadvertently backs the idea that these two periods were one:

“...it will be well to note that the general pattern of these two dark periods is roughly the same. Both begin with a chaotic series of insignificant native rulers; in both, intruders from Palestine cast their shadow over the delta, and even into the Valley; and in both relief comes at last from a hardy race of Theban princes, who after quelling internal dissention expel the foreigner and usher in a new epoch of immense power and prosperity.”

Secular scholars apparently believe that the same strange series of events happened in Egyptian history twice and do not consider the statistical improbability of this.

The collapse of the Old Kingdom at the end of the 6<sup>th</sup> Dynasty appears to be the big event to most Egyptologists. Erman (1966, p. 93), says that at the end of the 6<sup>th</sup> Dynasty “Egypt is suddenly blotted out from our sight in obscurity, as if some great catastrophe had overwhelmed it.” Both historians and scientists continue to wonder exactly what caused this collapse, and to offer theories. A favorite is that there was a series of low Nile risings, causing widespread famine (Bard, 1994, pp. 275–81; Krom *et al.*, 2002; Stanley *et al.*, 2002; Hassan, 2005; Gawad, 2007; Dumont, 2009, pp. 14–15). Goudie (1999) suggests that the “mysterious” collapse could be due

to climatic deterioration. Also mentioned often is that Pepi II, last pharaoh of the 6<sup>th</sup> Dynasty, lived too long, and his purported reign of 94 years somehow weakened the country to the extent that it collapsed (e.g., Gardiner, 1964, p. 101; Malek, 2003, pp. 106–7). To a Bible believer, it is amazing how the events leading up to the Exodus, and the Exodus itself, are basically invisible to secular historians.

One might think that there must be some appearance of this catastrophe in the ancient writings. It would be naïve of us to expect this, however, because the pharaohs in general did not admit to anything bad ever happening. To judge by their monumental inscriptions, they always won their battles; Egypt was gloriously prosperous under their rule; and they were the paramount rulers of their day. They never let on if they were ruling only part of Egypt, if they ruled under the authority of a more powerful pharaoh, if they lost a battle, or if their people were starving. As Collins (2005) says:

“The operative word for virtually everything written by the ancient Egyptians is propaganda... Their method was to emphasize the positive (true or not) and expunge the negative... Under these conditions, it is not surprising that scholars... have found it difficult to place the biblical story of the Hebrew Exodus in Egyptian documents. To admit such defeats and weaknesses would have been to invite internal strife and territorial rebellion.”

In spite of this, one ancient surviving manuscript describes utterly chaotic conditions in Egypt. This lengthy piece of writing is called the Ipuwer Papyrus or The Admonitions of Ipuwer (Ipuwer, 2012). Its writer (who is not a pharaoh) bemoans times when people are starving, servants wear jewels, wealthy people live as paupers, many men are being buried, and the Nile river is blood. It is difficult not to see this as a description of Egypt in the aftermath of the ten plagues that preceded the Exodus. Because the beginning of this manuscript is missing, we do not know who Ipuwer is addressing. The conditions Ipuwer describes would indicate a time immediately after the Exodus, perhaps when there was no pharaoh ruling because he had drowned and arrangements for his successor had not yet been made. Comparisons of the highlights of the Ipuwer manuscript and the biblical account have been made (e.g., Henry, 2003, pp. 24–26; Stewart, 2003, pp. 252–68). Of course, secular scholars do not want to admit that this manuscript might describe the state of Egypt at the time of the Exodus, and some of them pointedly say so (e.g., Lichtheim, 1975, p. 150). For a translation of the entire manuscript, see Erman (1966, pp. 92–108).

Many scholars believe that the events described in the Ipuwer Papyrus date to the time of the First Intermediate Period after the end of the 6<sup>th</sup> Dynasty (e.g., Gardiner, 1964, pp. 109–10; Erman, 1966, p. 93). Some date these events to the 13<sup>th</sup> Dynasty or later (which was in the period that they call the Second Intermediate Period) (e.g., Velikovsky, 1952, pp. 67–68). Others

acknowledge that dating of this manuscript is not secure (e.g., Lippert, 2012, p. 3). We conclude that these two intermediate periods are concurrent and therefore the scholars are all correct.

### **Who Was the Pharaoh of the Exodus?**

In synchronizing secular history with the biblical account, the big question is who the pharaoh of the Exodus was, since he is not named in the Bible. Perhaps the most popular candidate has been Rameses II, because of the mention of the cities of Pithom and Rameses that the Children of Egypt built under bondage (Ex. 1:11); statements to the effect that there is a consensus among historians and Egyptologists about Rameses II are easily located (e.g., Sennott, 2004). However, the city of Rameses had different names in its past, and it was most likely called Rowaty at the time of the Children of Israel, then Avaris later on after the Exodus. Today it is called Tell el-Daba. (See Hoffmeier, 1996, p. 63; Tell el-Daba, 2008.) Its mention as Rameses was probably a later geographical update of the biblical text.

But many other pharaohs have been nominated. Aling (1981, p. 102), Petrovich (2006) and Vos (2003, pp. 99–100) choose Amenhotep II of the 18<sup>th</sup> Dynasty, and therefore have to argue that the pharaoh did not die in the Red Sea (although this is refuted by Psalm 136:15, which they discount). Courville (1971, vol. 1, p. 122) argues that a pharaoh of the 13th Dynasty, Koncharis, must have been the Exodus pharaoh. Down (2001) accepts Khasekemre-Neferhotep I. Collins (2005) argues that Ex. 14:30 (where the Children of Israel saw the Egyptians lying dead along the shore of the sea) leaves open the possibility that the pharaoh's body was actually recovered; this allows Collins to choose Tuthmosis IV from the 18<sup>th</sup> Dynasty, even though we know where his body is in the Cairo museum (Firestone, 2010, pp. 265–66). (Unfortunately, this preferred pharaoh has other problems in qualifying, but Collins is not deterred.) Möller (2002, pp. 138, 151) also chooses Thutmosis IV, whom he claims was the same person as Amenhotep III. Aardsma (1994, p. 14) believes that Pepi II (Dynasty 6) has to be the Exodus pharaoh. This is not an exhaustive list.

It is obvious that these people cannot all be right. One factor that keeps coming up is a belief that applying chronology considerations to the Exodus pharaoh will aid the search. For example, Reilly (2000, p. 71), says that his timeline *compels* identification of 11<sup>th</sup>-Dynasty Mentuhotep III as the Exodus pharaoh. In other words, as this belief goes, if we can determine when the Exodus took place, we need merely check the list of Egyptian rulers to see who was reigning in Egypt at that time, and we will have our Exodus pharaoh. That there is a problem with this method is evident from the many pharaohs that have been considered as candidates.

What do we know about the pharaoh of the Exodus?

1. He cannot have been sole ruler of Egypt for very long, although his period of rule in the king lists could have included a few years of a co-regency with his predecessor. After the previous pharaoh's death, God told Moses that it was now safe to return from Midian to Egypt (Ex. 4:19), and he appears to have done so fairly promptly. An unspecified time then elapsed for the ensuing ten plagues to take place. Moses was 80 when he stood before pharaoh (Ex. 7:7), and wandered in the wilderness for 40 years, dying at 120 years old (Deut. 34:7). This leaves a very short time (no more than a few months) for the period of the plagues.

2. The Exodus pharaoh cannot have been the firstborn of his mother because he did not die in the 10<sup>th</sup> plague. The definition of "firstborn" was a son who was the first child his mother bore (Ex. 13:2). If a woman bore a daughter first, her first son did not qualify as a firstborn.

3. There was at least one firstborn among this pharaoh's sons that died in the 10<sup>th</sup> plague (Ex. 11:5, 12:29).

4. The pharaoh died by drowning only a few days after the 10<sup>th</sup> plague.

5. Logic dictates that as a result of the ten plagues we would look for essentially total collapse of the country of Egypt immediately after the death of this pharaoh of the Exodus.

Many scholars would add that the predecessor of the Exodus pharaoh must have been in power longer than 40 years because they believe that he must have been reigning when Moses fled to Midian, and Moses was there for 40 years until that same pharaoh's death (Acts 7:23, 30). However, Ex. 4:19 merely states that more than one person had sought Moses' death, without indicating who these people were, and there is nothing to say that the same pharaoh had reigned all that time. We can infer from Ex. 2:23 only that the pharaoh who died was the last of those who wanted Moses dead.

From previous discussion it is clear that if the plagues and the Exodus caused the collapse of the concurrent 6<sup>th</sup> and 12<sup>th</sup> Dynasties, we need to look for our Exodus pharaoh at the end of one of these dynasties. The 12<sup>th</sup> Dynasty, ruling Lower Egypt in the north, is the one which would produce our Exodus pharaoh because the Children of Israel lived in the Delta there (the 6<sup>th</sup> Dynasty would have ruled Upper Egypt in the south).

There was a large amount of building with mud bricks, and other work projects, during the 12<sup>th</sup> Dynasty (Down, 2004; Tyldesley, 2009, pp. 70–80). This accords with the biblical story of the Children of Israel being forced to make bricks, build cities, and otherwise labor for the pharaoh (Ex. 1:11, 14). Amenemhat III, third-last pharaoh of the 12<sup>th</sup> Dynasty, to whom Shaw (2003, p. 483) gives a reign of 45 years, engaged in truly enormous building programs for which he was



renowned, to the extent that there is speculation that he strained the economy (Thompson, 2008, pp. 56–57).

This author concludes that the facts most strongly support Amenemhat IV, also called Amenemes IV, the second-last ruler of the 12<sup>th</sup> Dynasty, as the pharaoh of the Exodus. Evidences of this pharaoh's drowning are discussed at length in an unpublished manuscript, including an unsuccessful search for the pharaoh's body (Sparks, 1986). The reign of Amenemhat IV was brief; many believe that he reigned for a total of nine years (Gardiner, 1964, p. 140). Edwards (1988, p. 223) suggests that he might not have reigned separately at all, but only as a co-regent with the previous pharaoh, his father, Amenemhat III. (We would not agree with this, of course, as he had to have reigned on his own for at least a short time after his father's death.) In the Egyptian system of co-regency, the pharaoh would eventually designate his heir apparent by appointing him as a co-regent, thus avoiding problems of succession. Pharaohs always counted the years of co-regency at each end of their reign as part of their total years of rule (Shaw, 2003, pp. 10–11; Tyldesley, 2009, p. 72).

Amenemhat IV had a son, Ameni, whose name appears along with that of his father on a glazed steatite plaque in the British Museum; in the inscription this son is called "The son of the Sun of his body" (Budge, 1902; British Museum, 1891). This is of note because Amenemhat IV does not appear to have left any known male heirs (Salisbury, 2001, p. 327). In the 10<sup>th</sup> plague this son may have been the pharaoh's firstborn who died (Ex. 4:23; 12:29); alternatively, if this son was not a firstborn, he could have followed his father into the Red Sea and drowned.

After the drowning death of Amenemhat IV, his sister Sobekneferu reigned for about four years (Shaw, 2003, p. 482), and the 12<sup>th</sup> Dynasty ended. She may have been his wife, but Manetho merely informs us that she was his sister (Gardiner, 1964, p. 141). A mystery associated with her is that as pharaoh, she does not mention Amenemhat IV, her predecessor, in the various inscriptions; she associates herself only with her father, Amenemhat III, and calls herself "king's daughter," never "king's sister" or "king's wife" (Callender, 1998, pp. 230–31). The "disappearance" of Amenemhat IV from the space between Amenemhat III and Sobekneferu is a peculiarity of history that has given Egyptologists much leeway for speculation. Callender (1998, p. 230) suggests that by linking herself to Amenemhat III, Sobekneferu intended to strengthen the legitimacy of her reign. Some suggest that there may even have been a family feud (Gardiner, 1964, p. 141). Courville (1971, vol. 1, p. 224) notes that Amenemhat IV is not recognized in the Sothis king's list "for reasons which can only be speculative at this time."

This mystery of the pharaoh who went missing is a matter of great significance because the Egyptians did not normally lose track of their pharaohs. Indeed, they believed that the king's *ka* (breath of life) contained the life force of all his living subjects. The pharaoh's physical body was therefore needed for transfer of the kingship from the dead pharaoh's body to the body of

the new living pharaoh through rituals carried out at his pyramid. In addition, there were other religious implications of the dead mummified pharaoh preserved in his tomb. For more on this see Breasted (1972, pp. 15–17), Fletcher (2009, p. 81; 2011), and Lehner (1997, pp. 9, 24, 25, 30).

In causing the pharaoh's physical body to be lost in the Red Sea, God dealt a major blow to the whole fabric of Egyptian belief and priestly practice. Not having the pharaoh's body in hand was an unthinkable catastrophe. It appears that what happened (no doubt after desperate attempts to find the drowned pharaoh's body) was that the transfer of kingship was now officially made from Amenemhat III to Sobekneferu, and Amenemhat IV ceased to exist.

Although the mummy of Amenemhat IV is missing, it is suggested here that we resist the urge to declare that any pharaoh was the pharaoh of the Exodus merely because we can't find that pharaoh's body. There are plenty of missing pharaohs' mummies; of over 200 known pharaohs (estimates vary greatly), only about 40 mummies, including some for which we only have parts, have been located (Deem, 2012).

It is well documented that Egypt descended into an extended period of disorder and chaos after the 12<sup>th</sup> Dynasty (the so-called Second Intermediate Period), as is shown by the large number of kings with short reigns in the 13<sup>th</sup> Dynasty. It would appear that many of these kings ruled small territories at the same time (Bourriau, 2003, p. 179, calls Egypt "fragmented" during this period). This is what we would expect as a result of the ten plagues and the loss of the pharaoh and his army.

The idea that Moses ever was a pharaoh, or was a co-regent, or was in line to be either, has no basis, biblical or otherwise. It is surprising how many people have entertained this idea; e.g., Down (2001, p. 54) even believes that Moses was Amenemhat IV. Möller (2002, pp. 113–23) argues at length that Moses was Thutmose II; Osman (2002, *passim*) points to Moses as Akhenaten. We need to consider the implications of the verse, "Who made thee a prince and a judge over us?" (Ex. 2:14). This Hebrew most certainly would not have talked to Moses insolently like this if the latter was in line to be a pharaoh; Moses could have had this man's head chopped off, rather than having to flee in fear. The princess who adopted Moses could have been the daughter of any of the pharaoh's women, and may have had relatively minor importance among the pharaoh's children. It is a large and unsubstantiated leap to say that Moses was ever in line for the throne of Egypt.

By placing the Exodus near the end of the 12<sup>th</sup> Dynasty, we avoid altogether the highly debated matter of the Hyksos rulers of Egypt. These mysterious people appear to have walked into Egypt some time after the Exodus; in its collapsed state, with the army drowned, it would have been rather easy for them to take over without a fight. The Hyksos were called "Aamu" by the

Egyptians, a term conventionally translated as “Asiatics” (Shaw, 2003, p. 174). Opinions as to who these people were vary widely. Anati (1963, pp. 390–409) offers solid reasons based on their artwork, style of fortifications, and burials of humans with horses, for the Hyksos to have been Indo-Europeans originating from as far away as the southern Russian steppes. Courville (1971, vol. 1, pp. 229–32) argues for the Hyksos as Amalekites, a less likely possibility. This author rejects the idea that the first Hykso pharaoh was the one who “knew not Joseph”(Gen. 1:8), as postulated by Byers (2005), for example.

## SECTION III

### Telescoping the Dynasties

The Bible counts about 225 years between Joseph’s becoming vizier and the Exodus; this is 215 years that the Children of Israel were in Egypt, plus approximately ten years that Joseph had been Djoser’s vizier before Jacob’s arrival. This same period is assigned close to 900 years in the current standard secular timeline (Shaw, 2003, pp. 482–83). The issue is how to shorten the secular timeline by as much as 675 years.

On the surface, this amount of reduction may appear to be a nearly impossible task. But Egyptologists have been shortening Manetho’s timeline for years. Originally the 1<sup>st</sup> Dynasty started around 5000 BC, while today scholars put it at about 3000 BC (Africanus *et al.*, 2007, pp. 101–25; Shaw, 2003, p. 481). We suggest that the secular Egyptian timeline is not anywhere as solid as scholars would have us believe.

Whole books have been written on the enormous subject of shortening the Egyptian timeline to correlate with the Bible, and we cannot do justice to it within the scope of this paper. We can only point to some ways in which this collapsing of the timeline might be done. It may be impossible to totally untangle the Egyptian dynasties because these ancient people did not think about history the way we do, and did not oblige by leaving us the kind of ordered records that our modern Western minds would like. Also, we cannot be sure that the Egyptian rulers did not inflate their lengths of reigns. Egyptologists may have made assumptions about the Egyptian kings and dynasties that may not be true at all.

We suggest that Dynasties 3 to 12 cannot have reigned one after the other in the order that Manetho listed them. Dynasties 5 & 6 may have run concurrently with Dynasties 11 & 12. The First Intermediate Period (at the end of the 6<sup>th</sup> Dynasty) and Second Intermediate Period (at the end of the 12<sup>th</sup> Dynasty), both times of great disorder in Egypt, appear to be the same period, as mentioned earlier. Dynasties 7, 8, 9 and 10 would therefore have reigned after the Exodus at the same time as Dynasties 13, 14, 15, 16 and 17. Versions of this scheme have been offered by various revisionists (e.g., Courville, 1971, vol. 1, p. 101; Ashton & Down, 2006, p. 206). This

alone could potentially remove close to 500 of the 675 years by which we wish to shorten the secular timeline.

History offers hints of the concurrence of Dynasties 6 and 12. For example, Amenemhat I, first king of the 12<sup>th</sup> Dynasty, supposedly “reverted” to the pyramid-style complexes of the 6<sup>th</sup> Dynasty, as did his two immediate successors (Edwards, 1988, pp. 202–3). Allen (1998) discusses the similarity of Middle Kingdom royal funerary pottery to that of the Old Kingdom. His conclusion is that the Old Kingdom was the source of inspiration for this Queen’s Ware. However, we suggest that the similarity was because the pottery was made at the same time. Also, the 6<sup>th</sup> Dynasty shows a rather sudden decline about halfway through; an example is the first appearance of tomb inscriptions of officials that tell how they had helped disadvantaged people during their lifetime (Strudwick, 2005, pp. 43–44). This could possibly refer to a famine known to have occurred in the time of Senusret I of the 12<sup>th</sup> Dynasty (Callender, 2003, pp. 150–51). However, judging by a certain 6<sup>th</sup>-Dynasty scavenged carved stone built into Amenemhat I’s pyramid complex, his reign would have had to have extended at least into that of Pepi I, and possibly into that of Pepi II (Goedicke, 1971, pp. 27–28). Fitting together the pieces of the puzzle is not easy because secular Egyptian history is written entirely from the point of view of consecutive dynasties.

Because we are used to thinking in terms of rulers who reigned over all of Egypt, the concept of two dynasties running concurrently is difficult to comprehend. How would Egypt be divided up? Would one pharaoh exert power over the other?

From earliest predynastic times Egypt has been a dual country, composed of Upper Egypt (Southern Egypt) and Lower Egypt (Northern Egypt). Two different cultures had developed, the Nagada in the south and the Maadi in the north (Midant-Reynes, 2003, pp. 41–56). The papyrus plant and the bee were symbols of the north, and the lotus and sedge plant symbols of the south. Two goddesses protected the king: the vulture goddess, Nekhbet, of the south, and the cobra goddess, Wadjet, of the north. The kings’ chief titles were traditionally “Lord of the Two Lands” and “King of Upper and Lower Egypt.” There were two crowns for the two Egypts as well: the Red Crown of lower Egypt and the White Crown of upper Egypt. Any king who claimed to rule over all of Egypt wore both crowns at once, with the tall white one inside the red one, forming what was called the Double Crown. This concept of duality appears throughout the literature of Egypt; for example see Oakes & Gahlin (2002, pp. 336–37). Even today, just about any discussion of Egypt refers to Upper Egypt (everything south of Cairo) or Lower Egypt (Cairo and the Delta), retaining the ancient division of this country. An example is a recent news article online, “Electricity returns to Upper Egypt after short power shortage” (Electricity Returns, 2013). Another example is a tourist information page online that offers hotels in Lower Egypt (Lower Egypt Tourist Information, 2012).

It is possible that the two divisions of Egypt may have been far more important historically than has been realized, and Egypt may have often been divided into two parts under two pharaohs. It is likely a myth that Egypt unified at the beginning of the 1<sup>st</sup> Dynasty and was ruled by only one pharaoh at a time after that. Two pharaohs may have reigned concurrently for a lot of Egypt's history, and more than two pharaohs during some periods, especially in times of disorder. Some pharaohs who have caused much trouble for historians, e.g., the much-debated mysterious Nebka (or Sanakht) of the 3<sup>rd</sup> Dynasty (Tyldesley, 2009, p. 32), may well have ruled a small piece of Egypt under the auspices of a more powerful pharaoh who was ruling at the same time. We suggest that scholars have been naïve in believing that every pharaoh who claimed both the red and white crowns necessarily ruled over all of Egypt, and this has led to confusion in working out when and where some kings reigned. There were kings who obviously exaggerated their importance; for example, it is known that Intef I (11<sup>th</sup> Dynasty) claimed the title of King of Upper and Lower Egypt, but actually ruled only the southern part up to Abydos (about 1/3 of the length of Egypt) (Edwards, 1988, p. 191). Because Egyptian rulers glorified themselves at every opportunity, they might not have been inclined to suggest that they were ruling over only a portion of the country, or that they ruled under the auspices of another pharaoh.

There are other factors that could have contributed to an inflated timeline. We have already mentioned co-regency, in which Pharaohs overlapped with both the preceding and succeeding pharaohs, but claimed the entire time as the years of their reign (which were then laid end to end in the dynasties). Pharaohs' reigns were often measured by cattle counts that supposedly took place every two years (but see McClellan, 2011). Also, an event called the *sed* festival was supposedly held only after a king reigned for 30 years, but this doesn't seem to hold up either (McClellan, 2011; Verner, 2001, p. 58). A statuette of the 12<sup>th</sup>-Dynasty pharaoh Sobekneferu in the Metropolitan Museum of Art, New York, shows her wearing a *sed* festival cloak, but she is known to have reigned for less than four years (Callender, 2003, p. 159).

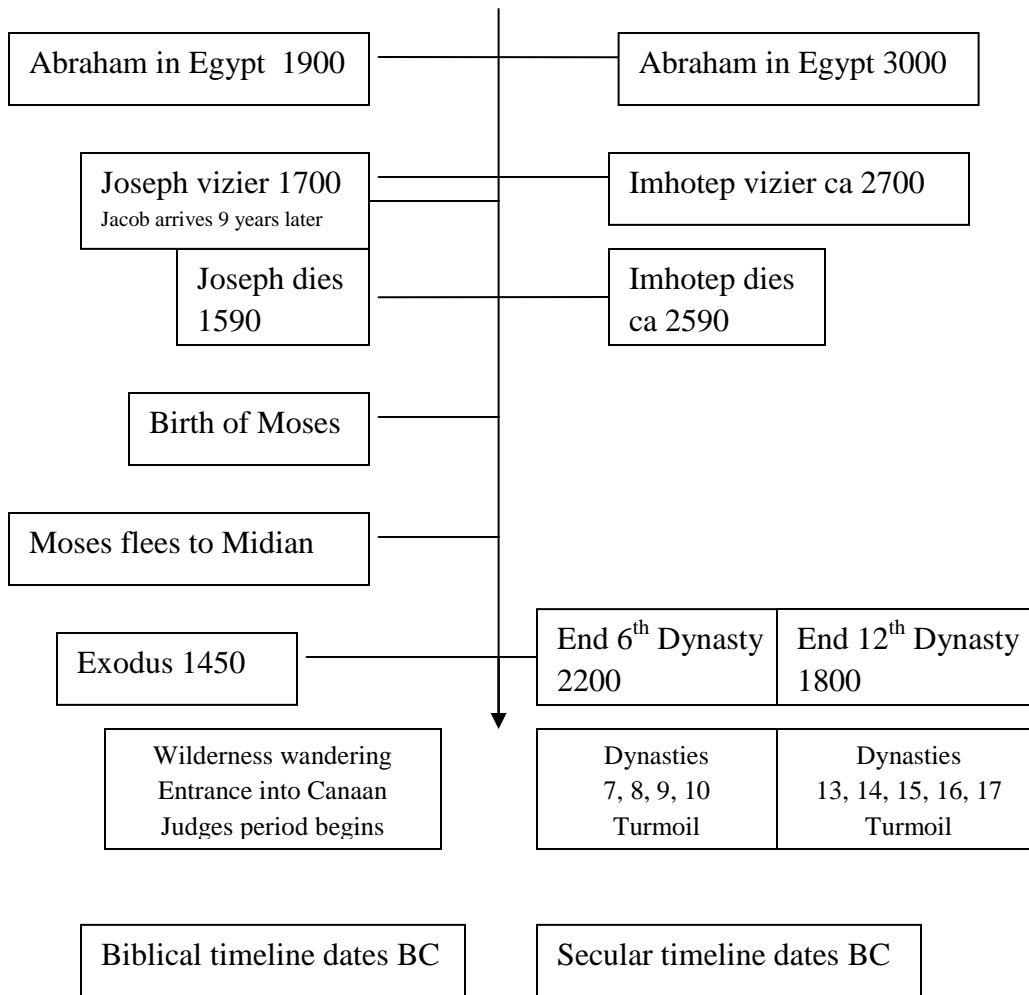
### **The Revised Timeline**

In Figure. 2 below we show a comparison of biblical versus secular dates, based on the suggested timeline revision in this paper.

In general, secular dates stretch out more and more as we go back farther in time, but do not do so evenly. As an example, Imhotep is brought forward in this paper by about 1,000 years to Joseph's time. By contrast, the reign of Amenemhat IV, as the pharaoh of the Exodus, moves forward about 350 years from his secular end-of-12<sup>th</sup>-Dynasty spot. Any event at the end of the 6<sup>th</sup> Dynasty moves forward by about 750 years. In other words, how much a revised date moves depends on what point in the secular timeline this event is tied to.

This is why we cannot make a blanket statement that all pre-Exodus secular dates should be shortened by the same amount. For example, Ashton and Down (2006, pp. 194–210) shorten all ancient Egyptian dates by five centuries, an exercise that leads in the right direction but does not give us date correlations that are good enough.

If we do not distinguish between the biblical and secular timelines, we are doomed to confusion. As some examples of what happens when we mix the two, Anati (1963, pp. 382–83) places Abraham after Sargon of Akkad, when actually Abraham lived well before Sargon. Indeed, Sargon would have reigned after Joseph. Wood (2005) says that ancient Mari on the Euphrates was already thriving in 2800 BC; because he puts Abraham's birth at 2166 BC (Wood, 2009b), he therefore places Abraham over 600 years later than 2800 BC, instead of before this date. Byers (2004) says that the Old Kingdom fell in 2190 BC, thereby placing all Old-Kingdom events before Abraham, when they were actually all after Abraham. Landis (2011) states that Hammurabi wrote his famous law code before Moses; under this timeline revision, the two would have been contemporaries. The famous Ebla tablets are dated 2500–2250 BC (Pettinato, 1981, pp. 72–73; Astour, 2002, pp. 62–64) on the secular timeline; on the revised timeline, these would be dated after Joseph, not before Abraham.



**Figure 2.** Comparison of biblical versus secular dates. Biblical dates are on the left of the vertical line and secular dates are on the right of the vertical line. (A. Habermehl)

We therefore see that matching the secular timeline to the biblical one is of paramount importance if we are going to line up historical events in the order that they actually occurred. The underlying problem has been the deeply flawed Egyptian timeline that diverges from the biblical timeline.

## CONCLUSIONS

1. Joseph of the Bible is plainly visible as Imhotep of Egyptian history.
2. The Exodus pharaoh was Amenemhat IV, second-last pharaoh of Dynasty 12.

3. The Exodus occurred at the end of the 12<sup>th</sup> Dynasty of the Middle Kingdom, which was most likely the same time as the end of the 6<sup>th</sup> Dynasty of the Old Kingdom. The two dynasties ran parallel.
4. The currently accepted secular chronology of the dynasties of Egypt needs to be drastically revised downward to accord with the Bible.
5. People and events must determine synchronisms between the Bible and secular history. It is not possible to use chronology comparisons between the Bible and the Egyptian dynasties to determine historical synchronisms.
6. The secular and biblical timelines must not be mixed together if we are to avoid confusion as to the order of historical events.

## REFERENCES

- Aardsma, G.E. (1994). The Exodus happened 2450 BC. In *Proceedings of the Third International Conference on Creationism*, R.E. Walsh, editor. Creation Science Fellowship, Inc., Pittsburgh, PA.
- Aardsma, G.E. (2007). Correspondence: Horses and chariots in Egypt. Retrieved Feb. 7, 2013, from [http://www.biblicalchronologist.org/correspondence/horses\\_chariots.php](http://www.biblicalchronologist.org/correspondence/horses_chariots.php).
- Africanus, S.J., Wallraff, M., and Adler, W. (2007). *Iulius Africanus chronographiae: The extant fragments*. Berlin, Germany: Walter de Gruyter.
- Aling, C. F. (1981). *Egypt and Bible history from earliest times to 1000 BC*. Grand Rapids, Michigan: Baker Book House.
- Aling, C. (2002). Joseph in Egypt: Part I. *Bible and Spade* 15(1), pp. 21–23.  
Aling, C. (2003). Joseph in Egypt: Part IV. *Bible and Spade* 16(1), p. 14.
- Allen, S.J. (1998). Queens' Ware: Royal funerary pottery in the Middle Kingdom. In *Proceedings of the Seventh International Congress of Egyptologists*, C.J. Eyre, editor. Leuven, Belgium: Peeters Publishers and Department of Oriental Studies.
- Anati, E. (1963). *Palestine before the Hebrews: A history, from the earliest arrival of man to the conquest of Canaan*. New York, New York: Alfred A. Knopf.
- Asante, M.K. (2004). *From Imhotep to Akhenaten: An introduction to Egyptian philosophers*. Paris, Francis: Menaibuc.
- Ashton, J., and Down, D. (2006). *Unwrapping the pharaohs*. Green Forest, Arkansas. Master Books.



- Astour, M.C. (2002). History of Ebla. In *Eblaitica: Essays on the Ebla archives and Eblaite language, Volume 4*, C.H. Gordon, & G. Rendsburg, editors. Winona Lake, Indiana: Eisenbrauns.
- Bard, K.A. (1994). State collapse in Egypt in the late third millennium B.C. *Annali Istituto Universitario Orientale* 54(3), pp. 275–81.
- Base of a Statue of Djoser. (1926). The Global Egyptian Museum JE49889. Retrieved Feb. 7, 2013 from <http://www.globalegyptianmuseum.org/record.aspx?id=15183>.
- Bourriau, J. (2003). The Second Intermediate Period (c. 1650–1550 BC). In *The Oxford history of ancient Egypt*, I. Shaw, editor. Oxford, England: Oxford University Press.
- Breasted, J.H. (1972). *Development of religion and thought in ancient Egypt*. Philadelphia, Pennsylvania: University of Pennsylvania Press, paperback edition. Original copyright: 1912, Charles Scribner's Sons.
- Brewer, E.C. (1910). *The reader's handbook of famous names in fiction, allusions, references, proverbs, plots, stories, and poems*. Philadelphia, Pennsylvania: J. B. Lippincott Company.
- British Museum.(1891). Plaque/lid/casket. Retrieved Feb. 7, 2013, from [http://www.britishmuseum.org/research/search\\_the\\_collection\\_database/search\\_object\\_details.aspx?objectid=118213&partid=1&output=People%2F!!%2FOR%2F!!%2F114273%2F!%2F114273-1-8%2F!%2FNamed+in+inscription+Ameny%2F!%2F%2F!!%2F%2F!!!%2F&orig=%2Fresearch%2Fsearch\\_the\\_collection\\_database%2Fadvanced\\_search.aspx&currentPage=1&numpages=10](http://www.britishmuseum.org/research/search_the_collection_database/search_object_details.aspx?objectid=118213&partid=1&output=People%2F!!%2FOR%2F!!%2F114273%2F!%2F114273-1-8%2F!%2FNamed+in+inscription+Ameny%2F!%2F%2F!!%2F%2F!!!%2F&orig=%2Fresearch%2Fsearch_the_collection_database%2Fadvanced_search.aspx&currentPage=1&numpages=10).
- Budge, E.A.W. (1902). *A history of Egypt from the end of the Neolithic period to the death of Cleopatra VII: Vol. III, Egypt under the Amenemhats and Hyksos*. New York, New York: Henry Frowde, Oxford University Press, American Branch.
- Butzer, K.W. (1976). *Early hydraulic civilization in Egypt: A study in cultural ecology*. Chicago, Illinois and London, England: University of Chicago.
- Byers, G. (2004). The Bible according to Karnak. *Bible and Spade* 17(4), pp. 97–106.
- Byers, G. (2005). Israel in Egypt. *Bible and Spade* 18(1), pp.1–9.
- Callender, V.G. (1998). Materials for the reign of Sebekneferu. In *Proceedings of the Seventh International Congress of Egyptologists*, C.J. Eyre, editor. Leuven, Belgium: Peeters Publishers & Department of Oriental Studies
- Callender, G. (2003). The Middle Kingdom renaissance (c. 2055–1650 BC). *The Oxford History of ancient Egypt*, I. Shaw, editor. Oxford, England: Oxford University Press.

- Chetwynd, T. (1987). A seven-year famine in the reign of king Djoser with other parallels between Imhotep and Joseph. *Catastrophism and Ancient History* 9(1), pp. 49–56.
- Clarke, P. (2010). Why Pharaoh Hatshepsut is not to be equated to the Queen of Sheba. *Journal of Creation* 24(2), pp. 62–68.
- Coetzee, A.W. (1999). *Tiberian Hebrew Phonology: Focussing on Consonant Clusters*. Assen, The Netherlands: Van Gorcum & Comp.
- Collins, S. (2005). Using historical synchronisms to identify the pharaoh of the Exodus. *Biblical Research Bulletin* 5(8), pp.1–70. Retrieved Feb. 7, 2012, from [http://www.biblicalresearchbulletin.com/uploads/BRB-2005-8-Collins-Pharaoh\\_of\\_Exodus.pdf](http://www.biblicalresearchbulletin.com/uploads/BRB-2005-8-Collins-Pharaoh_of_Exodus.pdf).
- Collins, S. (2007). A response to Bryant G. Wood's critique of Collins' northern Sodom theory. *Biblical Research Bulletin* 7(7), pp.1–36. Retrieved Feb. 7, 2013, from [http://www.biblicalresearchbulletin.com/uploads/BRB-2007-7-Collins-Response\\_to\\_Wood.pdf](http://www.biblicalresearchbulletin.com/uploads/BRB-2007-7-Collins-Response_to_Wood.pdf).
- Cormack, M. (1965). *Imhotep: Builder in stone*. New York, New York: Franklin Watts, Inc.
- Courville, D.A. (1971). *The Exodus problem and its ramifications, Vol. 1*. Loma Linda, California: Crest-Challenge Books.
- Crisler, V. (2009). The pre-patriarchal era. Retrieved Feb. 7, 2013, from <http://venerable.wordpress.com/archaeology/egyptian-chronology-1/>.
- de Camp, L.S. (1963). *The ancient engineers: Technology and invention from the earliest times to the Renaissance*. New York, New York: Barnes & Noble, Inc.
- Deem, J.M. (2012). Pharaoh mummies. Retrieved Feb. 7, 2013, from <http://www.mummytombs.com/egypt/pharaohmummies.htm>.
- Down, D. (2001). Searching for Moses. *TJ* 15(1), pp. 53–57.
- Down, D. (2004). The pyramids of ancient Egypt. *Creation* 26(4), pp. 44–49.
- Dumont, H. J. (2009). A description of the Nile basin, and a synopsis of its history, ecology, biogeography, hydrology, and natural resources. *The Nile: Origin, environments, limnology and human use*, H.J. Dumont, editor. New York, New York: Springer-Verlag New York, LLC.
- Edwards, I.E.S. (1988). *The pyramids of Egypt*. Harmondsworth, England: Penguin Books Ltd.
- Electricity Returns to Upper Egypt After Short Power Outage. (2013). *Ahramonline*. Retrieved Feb. 7, 2013, from <http://english.ahram.org.eg/NewsContent/1/64/63700/Egypt/Politics-/UPDATE-Electricity-returns-to-Upper-Egypt-after-sh.aspx>.
- Erman, A. (1966). *The Ancient Egyptians: A sourcebook of their writings*. New York, New York: Harper & Row Publishers. Originally published in German, 1923, translated by A.M. Blackman, 1927.

- Firestone, M. (2010). *Egypt*. Melbourne Australia: Lonely Planet.
- Fletcher, J. (2009). *The Egyptian book of living & dying: The illustrated guide to ancient Egyptian wisdom*. London, England: Duncan Baird Publishers Ltd.
- Fletcher, J. (2011). Ancient Egyptian mummification. Retrieved Feb. 7, 2013, from <http://www.channel4.com/programmes/mummifying-alan-egypts-last-secret/articles/ancient-egyptian-mummification>.
- Gardiner, A.H. (1964). *Egypt of the Pharaohs*. Oxford, England: Oxford University Press (paperback edition).
- Gawad, J. (2007). Historical fluctuations of Nile flow: Effects on the Old Kingdom of ancient Egypt, and sapropel deposition off the coast of Palestine and Israel. Retrieved Feb. 7, 2013, from <http://gwadi.org/sites/gwadi.org/files/NileDischarge.pdf>.
- Goedicke, H. (1971). *Re-used blocks from the pyramid of Amenemhet I at Lisht*. New York, New York: The Metropolitan Museum of Art.
- Goudie, A.S. (1999). The Ice Age in the tropics and its human implications. In *Environments and historical change: The Linacre lectures 1998*, P. Slack., editor. Oxford, England: Oxford University Press.
- Gunn, B.G. (trans.) (1906). *The instruction of Ptah-hotep and the instruction of Ke'gemni: The oldest books in the world*. London, England: John Murray.
- Habermehl, A. (2008). The meaning of the Tower of Babel. Retrieved Feb. 7, 2013, from <http://www.rae.org/pdf/babel.pdf>.
- Habermehl, A. (2013). Ancient Egypt, the Ice Age, and biblical chronology. In *Proceedings of the Seventh International Conference on Creationism*, M. Horstemeyer, editor, Creation Science Fellowship, Inc., Pittsburgh, PA.
- Hand, J.W. (1991). Joseph and Imhotep. *Catastrophism and Ancient History* 13(2), pp. 113–22.
- Hassan, F.A. (2005). A river runs through Egypt: Nile floods and civilization. *Geotimes* 50(4), pp. 22–25.
- Hebrew Given Names (Appendix). (2012). *Wikipedia*. Retrieved Feb. 7, 2013, from [http://en.wiktionary.org/wiki/Appendix:Hebrew\\_given\\_names](http://en.wiktionary.org/wiki/Appendix:Hebrew_given_names).
- Henry, R.(2003). *Synchronized chronology: Rethinking Middle East antiquity*. New York, New York: Algora Publishing.
- Hoffmeier, J.K. (1996). *Israel in Egypt: The evidence for the authenticity of the Exodus tradition*. New York, New York: Oxford University Press, Inc.

- Horne, C.F. (1917). *Sacred Books and Early Literature of the East: Egypt*. New York, New York, and London, England: Parke, Austin and Lipscomb, Inc.
- Hotep. (2010). *Wikipedia*. Retrieved Feb. 7, 2013, from <http://en.wikipedia.org/wiki/Hotep>.
- Hurry, J.B. (1926). *Imhotep: The vizier and physician of King Zoser and afterwards the Egyptian god of medicine*. New York, New York: Oxford University Press, Inc.
- Ipuwer. (2012). Papyrus Leiden I 344 *recto*. Dutch National Museum of Antiquities, Leiden, Netherlands. Retrieved Feb. 7, 2013, from <http://www.rmo.nl/collectie/zoeken?object=AMS+27+vel+4>.
- James, P., Thorpe, I.J., Kokkinos, N., Morkot, R., and Frankish, J. (1993). *Centuries of darkness: A challenge to the conventional chronology of Old World Archaeology*. New Brunswick, NJ: Rutgers University Press.
- Jones, F.N. (2007). *The Chronology of the Old Testament*, 16<sup>th</sup> edition. Green Forest, Arkansas: Master Books.
- Joseph was Imhotep. (2010). *RationalWiki*. Retrieved Feb. 7, 2013, from [http://rationalwiki.org/wiki/Joseph\\_was\\_Imhotep](http://rationalwiki.org/wiki/Joseph_was_Imhotep).
- Josephus, F. (100). The Antiquities of the Jews. In *The works of Josephus: Complete and unabridged, new updated edition*, W. Whiston, translator. Peabody, Massachusetts: Hendrickson Publishers, Inc., 1987.
- Krom, M.D., Stanley, J.D., Cliff, R.A., and Woodward, J.C. (2002). Nile River sediment fluctuations over the past 7000 yr and their key role in sapropel development. *Geology* 30(1), pp. 71–74.
- Landis, D. (2011). Hammurabi or Moses—Who’s the Authority? Retrieved Feb. 7, 2013, from <http://www.answersingenesis.org/articles/am/v7/n1/who-is-authority>.
- Lehner, M. (1997). *The complete pyramids: Solving the ancient mysteries*. New York, New York: Thames and Hudson.
- Lendering, J. (2009). Maximalists and minimalists. Retrieved Feb. 7, 2013, from <http://www.livius.org/th/theory/theory-maximalists.html>.
- Levy, T. E., Najjar, M., van der Plicht, J., Higham, T., and Bruins H.J. (2005). Lowland Edom and the high and low chronologies. In *The Bible and radiocarbon dating: Archaeology, text and science*, T.E. Levy & T. Higham, editors. Sheffield, England: Equinox Publishing.
- Lichtheim, M. (1975). *Ancient Egyptian literature: Volume I: The Old and Middle Kingdoms (Near Eastern Center, UCLA)*. Berkeley, California: University of California Press.

- Lichtheim, M. (1980). *Ancient Egyptian literature: A book of readings. Vol. 3: The Late Period*. Berkeley, California: University of California Press.
- Lippert, S. (2012). Law (definitions and codification). In *UCLA Encyclopedia of Egyptology*, E. Frood, & W. Wendrich, editors. Los Angeles, California: University of California. Retrieved Feb. 7, 2013, from <http://escholarship.org/uc/item/0mr4h4fv#page-4>.
- Long, J.D. (2006). *Riddle of the Exodus: Startling parallels between ancient Jewish sources and the Egyptian archaeological record*. Springdale, Arkansas: Lightcatcher Books.
- Lower Egypt Tourist Information. (2012). *TodayTourism.com*. Retrieved Feb. 7, 2013, from <http://www.todaytourism.com/travel-guides/Lower-Egypt-tourist-information.html>.
- Loza, N., and Milad, G. (1990). Notes from ancient Egypt. *International Journal of Geriatric Psychiatry* 5, pp. 403–5.
- Malek, J. (2003). The Old Kingdom (c. 2686–2160), *The Oxford history of ancient Egypt*, I. Shaw, editor. Oxford, England: Oxford University Press.
- Martin, E.L. (1983). The writings of Joseph in Egypt. *Associates for Scriptural Knowledge*, edited and expanded by D. Sielaff (2004). Retrieved Feb. 7, 2013, from <http://www.askelm.com/doctrine/d040501.htm>.
- McCallum, J.E. (2008). *Military medicine: From ancient times to the 21st century*. Santa Barbara, California: ABC-CLIO, Inc.
- McClellan, M. (2011). Ancient Egyptian chronology and the book of Genesis. *Answers Research Journal* 4, pp. 127–59.
- McClellan, J.E., and Dorn, H. (2006). Baltimore, Maryland: The Johns Hopkins University Press.
- Metzler, E. (1989). *Discovering the Israelite identity of the pyramid builders*. Herborn, Germany: Baalschem Press.
- Midant-Reynes, B. (2003). The Naqada Period (c.4000–3200 BC). *The Oxford history of ancient Egypt*, I. Shaw, editor. Oxford, England: Oxford University Press.
- Möller, L. (2002). *The Exodus case*. Copenhagen, Denmark: Scandinavia Publishing House.
- Newton, I. (1728). *The chronology of ancient kingdoms amended*. London, England: Kessinger Publishing.
- Oakes, J. (n.d.). Is the Egyptian figure Imhotep actually Joseph? Is there any evidence of a seven year drought in Egypt? Retrieved Feb. 7, 2013, from <http://www.evidenceforchristianity.org/is-the-egyptian-figure-imhotep-actually-joseph-is-there-any-evidence-of-a-seven-year-drought-in-egypt/>.

- Oakes, L., and Gahlin, L. (2002). *Ancient Egypt*. New York, New York: Hermes House, Anness Publishing Inc.
- Old Kingdom of Egypt. (2010). *Wikipedia*. Retrieved Feb. 7, 2013, from [http://en.wikipedia.org/wiki/Old\\_Kingdom](http://en.wikipedia.org/wiki/Old_Kingdom).
- Osman, A. (2002). *Moses and Akhenaten: The secret history of Egypt at the time of the Exodus*. Rochester, Vermont: Bear and Company. Originally published 1990 in London, England, by Grafton Books.
- Parsons, M. (2010). Royal Titles for Kings of Egypt, *Tour Egypt*, Retrieved Feb. 7, 2013, from <http://www.touregypt.net/featurestories/titles.htm>.
- Parsons, M. (2011). Heliopolis, Egypt's Iunu, a feature *Tour Egypt* story. *Tour Egypt*. Retrieved Feb. 7, 2013, from <http://www.touregypt.net/featurestories/heliopolis.htm>.
- Petrovich, D. (2006). Amenhotep II and the historicity of the Exodus Pharaoh. *The Master's Seminary Journal* 17(1), pp. 81–110. Retrieved Feb. 7, 2013, from <http://www.tms.edu/tmsj/17f.pdf>.
- Pettinato, G. (1981). *The archives of Ebla: An empire inscribed in clay*. Garden City, New York: Doubleday & Company, Inc.
- Pharaoh. (2012). *Encyclopædia Britannica Online*. Retrieved Feb. 7, 2013, from <http://www.britannica.com/EBchecked/topic/455117/pharaoh>.
- Porat, N. (1992). An Egyptian colony in southern Palestine during the Late Predynastic/Early Dynastic Period. *The Nile Delta in transition: 4<sup>th</sup> – 3<sup>rd</sup> millennium BC: Proceedings of the seminar held in Cairo, 21–24 October 1990, at the Netherlands Institute of Archaeology and Arabic Studies*, E.C.M. van den Brink, editor, Netherlands Institute of Archaeology and Arabic Studies in Cairo.
- Raffaele, F. (2003). Dynasty 0. *Aegyptiaca Helvetica* 17, pp. 99–141.
- Regulski, I. (2004). Second Dynasty ink inscriptions from Saqqara paralleled in the Abydos material from the Royal Museums of Art and History (RMAH) in Brussels. In *Proceedings of the International Conference "Origin of the State. Predynastic and early dynastic Egypt," Krakow 2002*, S. Hendrickx, R.F. Friedman, K.M. Cialowicz, M. Chlodnicki, editors. Leuven, Belgium: Orientalia Lovaniensia Analecta.
- Reilly, J. (2000). *Volume 4—The Genealogy of Ashakhet Part 2: From Imhotep to Apophis*. Retrieved Feb. 7, 2013, from <http://www.displaceddynasties.com/volume-4.html>.
- Rice, M. (2003). *Egypt's making: The origins of ancient Egypt 5000–2000 BC*. London & New York: Routledge.

- Rohl, D.M. (1995). *Pharaohs and kings: A biblical quest*. New York, New York: Crown Publishers, Inc. Also published in 1995 as *A test of time: The Bible— from myth to history*. London, England: Century.
- Rowling, J T. (1961). Pathological changes in mummies. *Proceedings of the Royal Society of Medicine* 54(5), pp. 409–15.
- Salisbury, J.E. (2001). *Encyclopedia of women in the ancient world*. Santa Barbara, California: ABC-CLIO, Inc.
- Sennott, C.M. (2004). Who struck down Pharaoh's firstborn son? *Belief Net*. Retrieved Feb. 7, 2013, from <http://www.beliefnet.com/News/Science-Religion/2004/12/Who-Struck-Down-Pharaohs-Firstborn-Son.aspx>.
- Shaw, I. (2003). Chronology. In *The Oxford History of Ancient Egypt*, I. Shaw, editor. Oxford, England: Oxford University Press.
- Smith, W. (1948). *A Dictionary of the Bible*. Grand Rapids, Michigan: Zondervan Publishing House.
- Sparks, B.C. (1986). *Egyptian Exodus parallels*, preview manuscript, unpublished.
- Stanley, J.D., Krom, M.D., Cliff, R.A., and Woodward, J.C. (2002). Nile flow failure at the end of the Old Kingdom, Egypt: Strontium isotopic and petrologic evidence. *Geoarchaeolog*, 18(3), pp. 395–402.
- Stewart, T. (2003). *Solving the Exodus mystery*. Lubbock, Texas: Biblemart.com.
- Strickling, J.E. (2008). *Man and his planet, an unauthorized history*. New York, New York: Eloquent Books.
- Strong, J. (1894). *The exhaustive concordance of the Bible*. New York, New York, and Nashville, Tennessee: Abingdon Press.
- Strudwick, N.C. (2005). *Texts from the pyramid age*. Atlanta, Georgia: Society of Biblical Literature.
- Sweeney, E. (2008). *The Genesis of Israel and Egypt*. New York, New York: Algora Publishing.
- Taylor, J.H. (2001). *Death and the afterlife in ancient Egypt*. London, England: The British Museum Press.
- Tell el-Daba. (2008). Tell el-Daba homepage. Retrieved Feb. 7, 2013, from [http://www.auaris.at/html/history\\_en.html](http://www.auaris.at/html/history_en.html).
- Temple, R. (2010). *Egyptian dawn: Exposing the real truth behind ancient Egypt*. Post Falls, Idaho: Century.

- Thompson, J. (2008). *A history of Egypt: From earliest times to the present*. New York, New York: Vintage Books, a division of Random House.
- Tiberian Hebrew. 2013. *Wikipedia*. Retrieved Feb. 7, 2013, from [http://en.wikipedia.org/wiki/Tiberian\\_Hebrew](http://en.wikipedia.org/wiki/Tiberian_Hebrew).
- Tyldesley, J. (2009). *The pharaohs*. London, England: Quercus Publishing Plc.
- Ussher, J. (1658). *The annals of the world*. Revised and updated by L. and M. Pierce, 2003. Green Forest, Arkansas: Master Books.
- Vasicek, E. (2007). Joseph, the Grand Vizier. Biblical/doctrinal studies: Desert of discipline series. Retrieved Feb. 7, 2013, from <http://www.highlandpc.com/studies/dezdisp/joevizier.php>.
- Velikovsky, I. (1952). *Ages in chaos. I: From the Exodus to King Akhnaton*. Garden City, New York: Doubleday & Company, Inc.
- Velikovsky, I. (1978). *Ages in chaos. II: Rameses II and his time*. Garden City, New York: Doubleday & Company, Inc.
- Verner, M. (2001). *The Pyramids: The mystery, culture, and science of Egypt's great monuments*. New York, New York: Grove Press.
- von Fange, E. (1974). Time upside down. Chino Valley, Arizona: *Creation Research Society Quarterly* 11(1), pp.13–27.
- Vos, H.F. (2003). *Wycliffe historical geography of Bible lands*. Peabody, Massachusetts: Hendrickson Publishers.
- Watrin, L. (1998). The relationship between the Nile Delta and Palestine during the fourth millennium: From early exchange (Naqada I–II) to the colonization of southern Palestine (Naqada III). In *Proceedings of the Seventh International Congress of Egyptologists*, C.J. Eyre, editor. Leuven, Belgium: Peeters Publishers & Department of Oriental Studies.
- Watson, J. (2011). The 1<sup>st</sup> Dynasty tombs of Saqqara in Egypt. Retrieved Feb. 7, 2013, from <http://www.touregypt.net/featurestories/firstdynastysaqqara.htm>.
- Weser, U., Kaup, Y., Etspüler, H., Koller, J., and Baumer, U. (1998). Embalming in the Old Kingdom of Pharaonic Egypt. *Analytical Chemistry* 70(15), pp. 511A–516A.
- Wood, B.G. (2005). Great discoveries in biblical archaeology: The Mari archive. *Bible and Spade* 18(1), p. 32.
- Wood, B.G. (2009a). The number of Israelites in the Exodus. *Associates for Biblical Research*. Retrieved Feb. 7, 2013, from <http://www.biblearchaeology.org/post/2009/04/16/the-number-of-israelites-in-the-exodus.aspx>.



Wood, B.G. (2009b). The army of the kings of Ur. Current Events Articles. *Associates for Biblical Research*. Retrieved Feb. 7, 2013, from <http://www.biblearchaeology.org/author/Bryant%20G.%20Wood%20PhD.aspx?type=ce>.

## **NOMENCLATURE**

MT = Masoretic

LXX = Septuagint