Chapter 1 The Berlin Chronology of the Second Millennium B.C.

Limitations of the Berlin Chronology

Margin of Error

In chapter two of the book *Piankhi the Chameleon*, and again throughout the third book in our *Displaced Dynasties* series, we utilized the chronological data contained on two unique hieroglyphic inscriptions, a Serapeum stele housed in the Louvre, and a large monument displayed in the Berlin Museum, referred to in this book simply as the Berlin stela (see figure 1, page 3 below). In the Louvre inscription are recorded a dozen generations of a Memphite high priest of Ptah named Ashakhet. On the Berlin stele, in four rows, each containing 15 separate genealogical entries, another Memphite priest of Ptah traced his priestly ancestry back sixty generations, spanning almost a thousand years, apparently utilizing the detailed archives of the cult of Ptah in Memphis. In the latter document each of the genealogical entries consists of a standardized sketch of a priest with accompanying text, an entry which contained the priest's name, and frequently the name of a pharaoh reigning at the time of the priest's term in office. The two genealogies can be easily synthesized. The seventh generation on the Ashakhet stele, and the ninth item on the Berlin stele contain the name of the identical high priest Shedsunefertem. And the remaining five generations on the Ashakhet stele match perfectly with the 10th through 14th generations on the Berlin genealogy. Combining the information on the two stelae enables us to entend the genealogy of Ashakhet to 58 generations. Henceforth we will refer to this extended chronology as the Genealogy of Ashakhet.

The names of pharaohs, where present, enabled us in the previous two books to utilize these two monuments for chronological purposes, ostensibly to determine the order and lengths of Egyptian dynasties 18-22, through the first four hundred years of the 1st millennium B.C. We

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repeat the process one last time in order to go backward in time, sketching an outline of the dynastic chronology of the second millennium B.C.

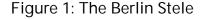
Our earlier analysis of the Louvre stele and the first two rows of the Berlin monument was based on four assumptions, each one critical for the interpretation of the documents. In the first place we determined that the author of the Louvre stele, the high priest Ashakhet, was born around the year 600 B.C. and served as high priest around the year 565 B.C., the years Nebuchadnezzar of Babylon invaded Egypt and destroyed the infrastructure of the land. We also demonstrated, based on both internal and external data, that each generation of his genealogy should be allotted 16 years, and that Ashakhet's high priestly ancestors served their respective pharaohs around the age of 35 years. Finally, we accepted the data preserved by Ashakhet, and by his counterpart, the author of the Berlin stele, as reliable, a fact confirmed by comparing the results of our analysis with a 1st millenium chronology independently established. The ends justified the means. Our assumptions proved to be valid.

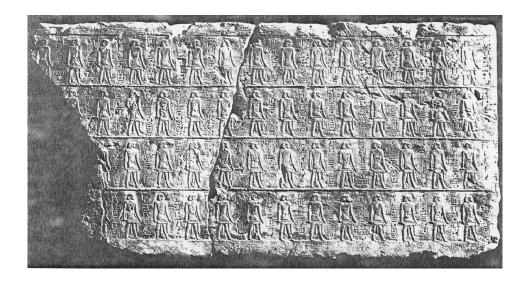
We did pause in our earlier analysis to defend the unusually low estimate of 16 years per generation of service for the priestly cult of Ptah. Not only was that small number necessary in order to harmonize the data of the Berlin monument with the historical situation otherwise determined; it was demanded by internal considerations. In particular we noted the fact that the six generations at the beginning (extreme right) of the second row, those belonging to the four priests who served Ramses II during his long reign (2.2-2.5) and the two who served Seti I, the father of Ramses II (2.6-2.7), must have spanned the combined 85 years assigned to these kings in the traditional Egyptian chronology. In fact, they suggested to us that the duration of Seti's reign needed to be increased by at least a decade. In no way could the 16 years per generation be reduced; nor could it be increased by any significant amount and still accommodate these six entries.

In *Piankhi the Chameleon* and *The Genealogy of Ashakhet Part 1* we utilized only the Louvre inscription and the first two rows of the Berlin stela, generations numbered consecutively from 1.1 to 2.15, thus around twenty-eight of the fifty-eight generations of ancestors of Ashakhet. Over this time span even a slight increase in the figure of sixteen years

per generation would not have significantly affected our overall argument. The number sixteen was maintained as much for ease of computation as for assured accuracy. For example, had we assumed a figure of 16.25 years per generation instead of 16 years, a number still sufficiently small to explain the Seti I/Ramses II data, dates would have been moved back only six years in the 400 years represented by the twenty five generations. Our argument in these earlier books would have remained essentially the same. Thus the number 16 was maintained throughout.

It follows from this discussion that any error in the years per generation number would necessarily be cumulative, and over the entirety of the fifty-eight generations of Ashakhet (928 years) represented on the two stele, might become significant. The same quarter of a year increase hypothesized above would amount to almost 15 years cumulative error at the extreme upper limit of the document. We must be cognizant of this potential error. It must be taken into account as we move backward in time into the second millennium.





Eighteenth Dynasty Beginning

Our interest in this book lies in the final two rows of the Berlin stele, entries which begin several generations into the 18th dynasty. When last we examined the Genealogy of Ashakhet we determined that the 18th dynasty began near the end of the second millennium. That date is easily determined from the Berlin stele. The entry in position 3.4 includes a reference to Nebpetire Ahmose, the founder of the dynasty. A strict application of our interpretive rules enables us to conclude that the priest Menet mentioned in this entry was born around the year 1096 B.C. and served Amasis around the year 1061 B.C. Since the Hyksos king Apophis, whom Ahmose replaced on the Egyptian throne, is mentioned in position 3.5 (dated 1077 B.C.), we assume that the transition into the 18th dynasty took place sometime between 1077 and 1061 B.C. Thus we begin our analysis of the 2nd millennium with the assumption that the 18th dynasty began around the year 1069 B.C. If the figure of 16 years per generation is in error and were to be increased slightly, that 1069 date would necessarily have to move back in time 8.5 years for every quarter year increase in the length of a priestly generation. For the time being however, we avoid making any correction to the dates provided by the Berlin stele. Any changes will be made on an ad hoc basis at the appropriate time in order to harmonize the Berlin chronology with that of the second millennium determined from other sources, primarily from data supplied by Jewish historians. The changes will be slight.

In table 1a and table 1b below we apply our basic principles to the entries in the final two rows of the Berlin stele, creating a rough chronology of the second half of the second millennium B.C.

Before we begin to analyze this chronology we should one last time defend the assumption of 16 years per generation, this time using the sparse data contained on rows three and four. A glance at table 1b informs us that two unnamed priests served the king Hakare (Sesostris III) in generations 4.1 and 4.3, and thus presumably in the intervening generation as well. On the assumption of 16 years per generation this would suggest that Sesostris reigned approximately 32 years, which agrees favourably with the traditional history. Egyptologists are adamant that this famous king died in his 33rd year. At most we can justify increasing the sixteen years per generation figure only slightly and still argue that the data on the stele is historically accurate.

Table 1a: The Berlin Stele Chronology (Row 3)

Position Number	Priest or Prophet Named	Name of King Served	Approx. Date of Birth	Approximate Date of H.P./Prophet
3.1	Ту	Not named	1048 B.C.	1013 B.C.
3.2	Pa'emrud	Djeserkare (Amenhotep 1)	1064 B.C.	1029 B.C.
3.3	Ту		1080 B.C.	1045 B.C.
3.4	Menet	Nebpetire (Ahmose 1)	1096 B.C.	1061 B.C.
3.5		'Ipp (Apophis)	1112 B.C.	1077 B.C.
3.6		Srk (Salatis?)	1128 B.C.	1093 B.C.
3.7			1144 B.C.	1109 B.C.
3.8			1160 B.C.	1125 B.C.
3.9			1176 B.C.	1141 B.C.
3.10			1192 B.C.	1157 B.C.
3.11			1208 B.C.	1173 B.C.
3.12		'-qn	1224 B.C.	1189 B.C.
3.13		'lby	1240 B.C.	1205 B.C.
3.14			1256 B.C.	1221 B.C.
3.15			1272 B.C.	1237 B.C.

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Table 1b: The Berlin Stele Chronology (Row 4)

Position Number	Priest or Prophet Named	Name of King Served	Approx. Date of Birth	Approximate Date of H.P./Prophet
4.1		H'-k'-R (Sesostris III)	1288 B.C.	1253 B.C.
4.2			1304 B.C.	1269 B.C.
4.3		H'-k'-R' (Sesostris III)	1320 B.C.	1285 B.C.
4.4		Nwb-k'-w-R') Amenemhet II)	1336 B.C.	1301 B.C.
4.5		Hpr-k'-R' (Sesostris I)	1352 B.C.	1317 B.C.
4.6		S-htp-'b-R' (Amenemhet I)	1368 B.C.	1333 B.C.
4.7		Skr-m-hb	1384 B.C.	1349 B.C.
4.8			1400 B.C.	1365 B.C.
4.9			1416 B.C.	1381 B.C.
4.10			1432 B.C.	1397 B.C.
4.11			1448 B.C.	1413 B.C.
4.12			1464 B.C.	1429 B.C.
4.13		Nb-hrw-R' (Mentuhotep)	1480 B.C.	1445 B.C.
4.14			1496 B.C.	1461 B.C.
4.15			1512 B.C.	1477 B.C.

Dates for Mentuhotep II and Amenemhet I

Several aspects of the Berlin data as outlined in table 1b are deserving of comment.

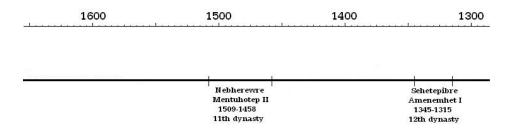
- 1) Two dynasties prior to the 18th are clearly cited in the genealogy. The 11th dynasty is represented by the single reference to Neb-herew-Re Mentuhotep in position 4.13, and the 12th dynasty is represented by four kings, Amenemhet 1 through Sesostris III, in positions 4.1 through 4.5. These entries for the 11th and 12th dynasties, and the earlier third row entries for the 18th dynasty, beginning with Nebhepetre (Ahmose 1) in position 3.4 (figure 1a), are separated by multiple generations which omit king names, suggestive of the fact that during these intervals Egypt may have been ruled simultaneously by multiple kings. The gap between the 12th and 18th dynasties, wherein several foreign rulers are named, is at least consistent with the view of the traditional history, which believes that Egypt was ruled by foreign invaders prior to the beginning of the 18th dynasty. This specific group of foreigners is referred to collectively as the Hyksos.
- 2) According to the Berlin chronology the 11th and 12th dynasties were separated by a full century, this in contrast to the traditional history which claims that the two dynasties ruled in succession. Needless to say this aspect of the genealogy has "raised the eyebrows" of most Egyptologists, and needs to be discussed in some detail.
- 3) The unnamed priest who served the 11th dynasty king Nebherewre Mentuhotep was born around the year 1480 and served the king around the year 1445 B.C., this assuming a strict application of the 16 years per generation figure by which we have interpreted the Berlin genealogy. While we continue to maintain the general viability of this number, we have already argued the case that even a small error may have produced a significant discrepancy in dates as far back as the time of Mentuhotep, only two generations removed from the beginning of the document. Thus the date 1445 for Mentuhotep may be as much as fifteen years too late, perhaps even a few years more. It follows that the date may be moved back as early as 1460 B.C. or slightly earlier. The precise date

must ultimately be decided on other considerations. For the time being we adopt this slight adjustment to the Berlin data. The alteration will be justified momentarily.

- 4) If a priest of Ptah served king Nebherewre Mentuhotep around the year 1460 B.C. then Nebherewre must have died only a few years later. This conclusion follows from the known history of the life of this king. In a later chapter we will discuss the fact, accepted by all Egyptologists, that Mentuhotep began his reign as king of Upper Egypt, Thebes being his primary residence. The delta area, including Memphis, was at the time under the domination of pharaohs of the 10th Heracleopolitan dynasty. By degrees Mentuhotep extended his rule northward, drove the Heracleopolitans from central Egypt around his twentieth year, and over the course of the next several decades assumed sovereignty over the whole of the delta. Only in the final decade of his life could it be said that Mentuhotep was pharaoh over all of Egypt. Only then could he be recognized as such by priest of the cult of Ptah in Memphis.
- 5) If Mentuhotep ruled for 51 years, as claimed by a majority of scholars, and if his reign ended several years after the 1460 adjusted date provided by the Berlin chronology, then the dates for Mentuhotep must arguably be approximately 1509-1458 B.C. This king was the second of the 11th dynasty who bore the nomen Mentuhotep. This Mentuhotep II was succeeded by his son, who was named after him, and with this third Mentuhotep the dynasty ended.
- 6) A strict reading of the Berlin data suggests that Sehetepibre Amenemhet I, the founder of the 12th dynasty, was on the throne in 1333 B.C. Sufficient to say that this date may need to be moved back a decade, only slightly less than was the case for the dates of Mentuhotep II. But this is only the beginning of the chronological problems associated with this king. We have already mentioned the fact that the traditional history places the 12th dynasty in immediate succession to the 11th, whereas the Berlin stela appears to assume an interval of at least 100 years between the two. The traditional history also assigns to Amenemhet a reign length of precisely 30 years. The Berlin genealogy instead credits this king with a single genealogical entry, suggestive of the fact that his reign was of considerably shorter duration. Clearly some extended discussion is in

order. The matter will occupy an entire chapter later in this book. For the time being we simply assign to this king, and thus to the beginning of this dynasty, the years 1345-1315 B.C. These dates cannot be far from correct, the 1333 B.C. date from our table 1b falling roughly in the middle of his reign.

Figure 2: Provisional dates for Mentuhotep II and Amenemhet I



Revised Chronology for Dynasties 9-12

Thus far we have restricted our discussion to two pharaohs named in the Berlin stele, Mentuhotep II and Amenemhet I. We will say no more about Amenemhet I at this time. The 12th dynasty is best discussed in historical sequence and will be left to a later chapter. Sufficient to say that Amenemhet I was the founder of the dynasty. Its length will be determined in later discussion.

As for Mentuhotep II and the 11th dynasty we add only the following detail at this time. It is well known that this king was succeeded by a son, also named Mentuhotep, whose reign lasted for 12 years. His dates, accordingly, must be 458-446 B.C. According to some sources the reign of this Mentuhotep III ended the dynasty. According to others an enigmatic fourth Mentuhotep ruled for several years afterward. In due time we will determine that the reign of Mentuhotep IV is an illusion. Following the death of Mentuhotep III civil strife erupted throughout Egypt and a prolonged period of chaos prevailed. If Mentuhotep IV, a

son of Mentuhotep III, attempted to bring order out of chaos, he certainly failed and may have died in the upheaval. Egypt entered a prolonged period of anarchy which may have lasted fully a hundred years. An entire chapter will be devoted to its description. It is a well documented time of trouble.

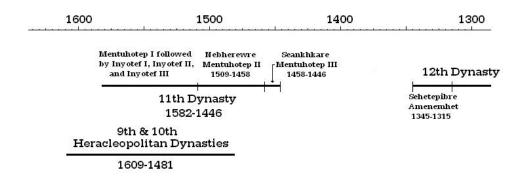
Thus in our figure 3 which follows we end the 11th dynasty with the reign of Mentuhotep III.

According to the influential *Cambridge Ancient History*, whose chronological data we follow consistently in the following arguments, Mentuhotep II was preceded by a sequence of three kings by the name of Inyotef and they in turn were the successors of another king Mentuhotep, the first of that name. This sequence of four kings ruled Upper Egypt for a combined 73 years. Assuming that the Cambridge History is correct in the relative placement of these kings (though not in their absolute dates) we should assign to the 11th dynasty the dates 1582-1446.

That same Cambridge history affirms that Lower Egypt was ruled for much of the duration of the 11th dynasty by two dynasties of kings with residence in Heracleopolis in middle Egypt – hence their designation as the 9th and 10th Heracleopolitan dynasties. The kings of these two dynasties combined are credited with ruling Lower Egypt for a total of 128 years, their reign ending when Mentuhotep overtook their capital in his 29th year (1481 B.C. in the revised history). If Egyptologists can be trusted as to the length of the combined 9th and 10th dynasties we can confidently assign the dates 1609-1481 to the Heracleopolitan era.

We summarize this data in figure 3 below.

Figure 3: Revised Dates for Dynasties 9-11 and the Beginning of Dynasty 12



Revised Chronology 1900-1446

There remains for us to outline a revised Egyptian chronology back to the beginning of the 2nd millennium.

According to the traditional history the reign of Mentuhotep II began in the year 2060 B.C., once again using as our source the *Cambridge* Ancient History. The dates provided by other scholars seldom differ from this number by more than a dozen years. It follows that dates for the reign of Mentuhotep II, and by extension for the reigns of his near contemporaries, can be obtained by simply subtracting 551 years from the traditional dates for these kings. The procedure can be extended to all dynasties preceding the 11th on the assumption that Egyptologists have correctly determined the correct relative, though not the correct absolute dates, for these sequences of kings. In table 2 below we list the traditional dates for Egyptian dynasties 5-10 following the Cambridge The revised dates which follow in the second column are obtained by lowering these dates by precisely 551 years. purposes of this initial chapter these dates should provided an adequate framework for discussion. The reader should expect to see some modest adjustment of these dates as our analysis proceeds.

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Dynasty	Traditional History	Revised History	
5th	2494-2345	1943-1794	
6th	2345-2181	1794-1630	
7th	2181-2173	1630-1622	
8th	2173-2160	1622-1609	
9th	2160-2130	1609-1579	
10th	2130-2040	1579-1481	

Table 2: Dynasties 5-10 (Traditional & Revised Dates)

Incorporating these dates into the timeline already established we arrive at the chronology outlined in figure 4 below. The provisional dates for dynasties 5 and 6 will be revised downward considerably in later chapters. But first we need to put biblical events into this picture, utilizing data contained in the Hebrew Bible.

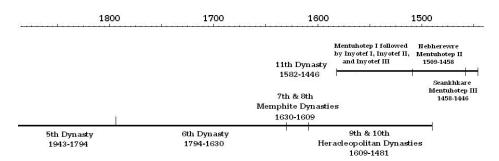


Figure 4: Revised Chronology 1900-1446

Biblical Chronology 1900-1446

Assigning dates to the pivotal second millennium events described in the Hebrew Bible is a relatively straightforward matter. The Jewish historians who later recorded the history of the nation apparently had recourse to fairly detailed genealogical material collected and collated by scribes over the preceding centuries, materials which had been meticulously cared for and preserved in the state archives. Sufficient numbers of dated anecdotal insertions are provided in the Hebrew Bible to provide a reasonably accurate overview of national events as they unfolded.

We accept the dates provided by the ancient Jewish scribes at face value. Our rational is clearly stated. Sooner trust what are arguably early and carefully preserved records of events as they transpired in the lives of scribes contemporary with those events, than the vain speculations of twentieth and twenty-first century scholars based on fragmentary and often misinterpreted evidence.

The biblical evidence is clear and incontrovertible. According to 1 Kings 6:1 the Jewish exodus from Egypt under the leadership of Moses took place precisely 480 years prior to the 4th year of king Solomon. Since we have adopted a chronology which dates the beginning of Solomon's reign sometime in the year 970 B.C., the exodus must have taken place around the year 1446 B.C. (966 B.C. + 480 years). We are also informed from Exodus 12:40-41 that the entrance of the family of the patriarch Jacob into Egypt took place, to the very day, 430 years prior to the exodus from Egypt. Without doubt the reference alludes to the arrival in Egypt of Joseph's brothers and his father Jacob in 1876 B.C. (1446 B.C. + 430 years).

The biblical text also allows us to assign dates, both birth and death, to Joseph, his father Jacob, his grandfather Isaac and great grandfather Abraham. There is no reason to doubt the validity of the numbers provided, notwithstanding the unusually long lives of all of these notables. This was a different age, the final generations of a culture that

habitually lived much longer than modern science has been able to reproduce for our so-called enlightened age.

According to Genesis 41:46 Joseph was 30 years old when first introduced to pharaoh, and therefore 39 years old after 7 years of plenty and 2 years of famine, at which time, according to Genesis 45:6, Jacob arrived in Egypt. This implies Joseph was born in 1915 (1776 B.C. + 39 years). And since according to Genesis 50:22, 26 he lived to be 110 years of age, his death must be dated to 1805 B.C. The dates for Joseph are therefore 1915-1805 B.C.

When Jacob arrived in Egypt in 1876 B.C. he was 130 years of age, this according to Genesis 47:9. It follows that he was born in 2006 B.C. And since, according to Genesis 47:28 he lived to be 147 years of age, his death must be dated in 1859 B.C. The dates for Jacob are therefore 2006-1859 B.C.

According to Genesis 25:26, Jacob was born when Isaac was 60 years of age. Isaac's birth must therefore be dated to 2066 B.C. According to Genesis 35:28 he died at the age of 180, thus in 1886 B.C. The dates for Isaac are therefore 2066-1886 B.C.

Isaac was born when Abraham was 100 years of age, this according to Genesis 21:5. Abraham's birth must therefore be dated to 2166 B.C. According to Genesis 25:7, Abraham lived to the age of 175 years. That places his death in 1991 B.C. The dates for Abraham are therefore 2166-1991 B.C.

For the most part we are not concerned with the lives of Abraham, Isaac and Jacob. Our 2nd millennium chronology begins with the arrival of Joseph in Egypt at the age of 17 (Genesis 37:2) and the famine which began when he was 30 years old (Gen 41:46).

Returning momentarily to the time of the exodus, we provide three further dates of some importance, all concerned with the life of Moses.

We have dated the exodus in the year 1446 B.C. According to Exodus 7:7 Moses was eighty years old at the onset of the plagues which

precipitated the exodus. It follows that Moses was born around the year 1526 B.C. According to Acts 7:23 he was approaching the age of 40 when his killing of an Egyptian official led to his self imposed exile in the wilderness of Midian. Therefore, that exile must be dated 1486-1446 B.C. And finally, according to Deuteronomy 34:7 Moses died at the age of 120, thus in the year 1406 B.C., on the eve of the entrance of the descendants of Jacob, the "children of Israel", into the promised land.

One final date should be sufficient to blend the history of the children of Israel with the dynastic history of Egypt in the second millennium B.C. We note that the book of Exodus begins with a summary statement discussing the growth of the extended family of Jacob who entered Egypt (70 in number according to Genesis 46:27) into a multitude numbering in the hundreds of thousands, an explosion in population which must have occupied considerable time.

And all the persons who came from the loins of Jacob were seventy in number, but Joseph was already in Egypt. And Joseph died, and all his brothers and all that generation. But the sons of Israel were fruitful and increased greatly, and multiplied, and became exceedingly mighty, so that the land was filled with them. Now a new king arose over Egypt, who did not know Joseph. (Exodus 1:5-8)

The new pharaoh is credited with initiating the enslavement and affliction of the descendants of Jacob.

The only hints as to the length of time required for the seventy to multiply so as to fill the land are the dual facts that a new king arose "who did not know Joseph" and that "all the original generation had died in the interim. Since lifespan in those days was around 120 years, we assume that the youngest children who entered Egypt with Jacob in 1867 would be deceased by 1747. The beginning of the enslavement and persecution of the Israelites must have taken place sometime after 1747 but before the birth of Moses in 1526.

Two factors contribute to our selection of the year 1609 B.C. as the year of the new pharaoh. On the one hand it seems necessary to allow sufficient time to allow for the growth of population from seventy to about a half million persons. On the other hand the text seems to indicate

that the affliction of Israel prior to the birth of Moses lasted sufficiently long to allow for further multiplication of the numbers of Israelites, thus several generations. During this prolonged period of persecution the Israelites are credited with constructing two entire cities in the eastern Delta.

So they appointed taskmasters over them to afflict them with hard labor. And they built for Pharaoh storage cities, Pithom and Raamses. But the more they afflicted them, the more they multiplied and the more they spread out, so that they were in dread of the sons of Israel. (Exodus 1:11, 12)

One final factor was considered in arriving at the specific date in question. The arrival of a pharaoh who did not know Jacob seems to imply not only a change in pharaoh, but a change in dynasties within Egypt. In our revised scheme the only change in the political landscape in Egypt that can explain the sudden antagonism toward landed immigrants in Egypt took place when the 9th and 10th Heracleopolitan dynasties replaced the more benevolent Memphite kings of the 7th and 8th dynasties. This change occurred in 1609 B.C. in the revised chronology. In due time we will justify this selection.

The data as presented above is incorporated into the timeline in figure 5 below. We are reasonably confident that these numbers are accurate within a few years.

- Jacob dies (1859) --- Joseph dies (1805) --- Seeph dies (1805) --- Seeph dies (1805) --- Moses born (1526) ---- Moses born (1526) ---- Exile to Midian (1486) ---

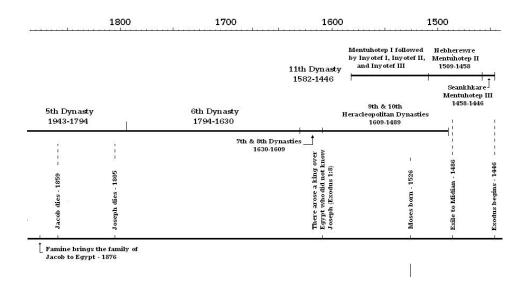
Figure 5: Biblical Chronology 1900-1446

Famine brings the family of Jacob to Egypt (1876)

Revised and Biblical Chronologies Synchronized

There remains for us one final task, that of blending the revised chronology of Egypt for the period in question (figure 4) with the chronology of Israel for that same period of time (figure 5). The result is displayed below in figure 6.

Figure 6: Revised and Biblical Chronologies Synchronized 1900-1446



The balance of this book will attempt to explain, defend and make adjustments to the revised history of Egypt represented by this timeline. Additionally we will extend it forward in time to the beginning of the 18th dynasty at the end of the second millennium, continuing to rely on the data on the Berlin stela summarized in tables 1a and 1b. It will be a time consuming process. Hopefully the argument will be convincing.