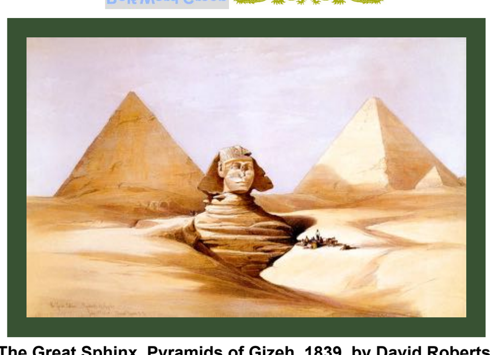
Rolf Ward Green



The Great Sphinx, Pyramids of Gizeh, 1839, by David Roberts

Faith is not a possession of all people.
(2Thessalonians 3:2)

True—

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Chapter 1: Faith Is Not Dependent-- Taking Radiocarbon Under Egypt

Right: The Meeting of Abraham and Melchisedek, The Louvre *(1620-1621 painting by Peter Paul Rubens, oil on wood, 49 x 65 cm)*

Paul, a prisoner for the sake of Christ Jesus, and Timothy, [our] brother, to Philemon, our beloved one and fellow worker, and to Apphia, our sister, and to Archippus, our fellow soldier, and to the congregation that is in your house: May YOU people have undeserved kindness and peace from God our Father and [the] Lord Jesus Christ.
(*Philemon 1-3, New World Translation 1984*)

Paul, a prisoner of Christ Jesus, and Timothy the brother, to Philemon the beloved and our fellow-worker, and to Apphia the beloved, and to Archippus our fellow-soldier, and to the assembly in your house:
Grace to you and peace from God our Father and the Lord Jesus Christ.
(*Philemon 1-3, Literal Translation of the Holy Bible, 1976-2000, by Jay P. Green, Sr.*)

¶1 Faith is not a possession of all people (2Th 3:2), and for this reason we cannot rely upon others to keep it. For those of us who have faith, it is vital and offers us many benefits, to the very heart of our very souls. This is, quite simply, because faith is not dependent. This means that our faith doesn't depend upon any fact or truth at all, which is why it has a different idea. The idea of faith never changes, it keeps believing in the original theory with which it started, and always. The only question remaining is: In what do we believe? Or, if we haven't determined our beliefs, yet, then in what ought we to believe, or what is worthy of belief? These questions are ongoing, and continue to be viewed earnestly by believing people, who continue to believe in the best available concepts and ideas, or just one. We have free will about whatever we choose to believe. When our beliefs are good enough and when we are fully convinced of their veracity, then they persist for us. We have no control over the beliefs of others, as they too have free will, except that we may share with them and in some way they may start learning to find faith. When faith in something persists, it is called "true."

Above: Great Isaiah Scroll of Qumran, Shrine of the Book, Israel Museum *(c. 100 BCE)* [detail here](#)

¶2 In light of our understanding of faith, then, we would be advised to evaluate the radiocarbon method in Egypt and elsewhere by embracing all of the details involved in its method, as well as all of the other disciplines surrounding sources in history and science in general. The particular importance of Egypt is from the fact of its having existed over a continuous period for a long time compared to some other nations, hence it has been used over many years as a standard to align the dates. This is necessary because of the other nations without such a long history, whose time is otherwise not clear in the absolute sense, being known relative to itself, but unknown as to exactly how long ago were the years. By aligning these other events with Egypt, it may thus be possible to get their relative years to each other. Egyptian chronology is thus a "master" by which others are determined or adjusted, and because of this it has been the testing ground for modern radiocarbon dating. Proponents of using Egypt as an absolute dating system for the rest of history are excited about radiocarbon. Egypt is thus the cause of the radiocarbon excitement. For this reason, Egypt can never be subjugated to C14.

¶3 Similarly, the Bible can never be subjugated to Egypt. The Bible was not established by Egypt, but some dates in Egyptian chronology may be anchored by this record. The Bible record of which we write and speak has found wide acceptance in the field of archaeology, over 1500 ancient sites having been discovered by one man alone, Mr. Nelson Glueck, taking the Bible as faithful guide. [1] The word "Bible" occurs 383 times in his book, "Rivers in the Desert," wherein he names his "chief source" of information on such ancient sites as the Bible itself. This champion of many Bible finds is quoted as saying: [2]

> **"As a matter of fact, however, it may be stated categorically that no archaeological discovery has ever controverted a biblical reference.** Scores of archaeological findings have been made which confirm in clear outline or in exact detail historical statements in the Bible. And, by the same token, proper evaluation of Biblical descriptions has often led to amazing discoveries. **They form tessarae in the vast mosaic of the Bible's almost incredibly correct historical memory."**
> [2](*Rivers in the Desert, 1959, 1st Printing, p. 31, by Nelson Glueck*, emphasis ours)

As distinguished as he was, Glueck was not alone in an optimism inspired by the Bible's stunning reliability. The great archaeologist Mr. William F. Albright wrote: [3]

> **"There can be no doubt that archeology (sic) has confirmed the substantial historicity of Old Testament tradition."**
> [3](*Archaeology and the religion of Israel, 1942, by W. F. Albright, as quoted in a review in Isis, A Journal of the History of Science Society, Volume 34, Number 6, Autumn, 1943, p. 522.*)

[1](*Rivers in the Desert, 1959, 1st Printing, p. 31, by Nelson Glueck*)
[2](*Ibid., p. 31*)
[3](*Archaeology and the religion of Israel, 1942, by W. F. Albright, as quoted in a review in Isis, A Journal of the History of Science Society, Volume 34, Number 6, Autumn, 1943, p. 522.*)

Above: Nelson Glueck *(1956 photo)*

¶4 Even though we have presented only a mere glimpse of a reliable book as the Bible is, it may not be difficult for a young child to imagine its values in other ways. Mature people would doubt the wisdom of ignoring this, and indeed would find it hard to go against this Book. Within it, it recounts the story of the Israelites who entered Egypt to rejoin their brother Joseph, bringing some 70 souls, including Jacob, and Joseph's brothers. It also tells us that 430 years after their arrival in Egypt, to the very day, they departed as led by Moses. This is a very specific time period, "to the very day" of their departure 430 years after they first arrived. According to the Greek Septuagint LXX version, as well as the Samaritan Pentateuch, they dwelt in two places, "in the land of Canaan and in the land of Egypt," thus the beginning of the 430 years may be the day when the interpreter of dreams, Joseph, was appointed as Ruler. How Joseph came to power is detailed in Genesis 37-41. Joseph's father Jacob journeyed shortly thereafter, by reason of a great famine, to bring his family to Egypt to live under Joseph's care in the land of Goshen, and on his way Jacob stopped at Beer-sheba (in Canaan), to "sacrifice sacrifices to the God of his father Isaac," whereupon God talked to Israel (for Jacob had also the name Israel), and said that Jacob should not be afraid to go down to Egypt, but that God would also bring him up again from there, this being of import to Jacob, as regards the promise that Jehovah had made with Abraham in covenant of the Promised Land (Ge 15:18, Gal 3:17).

¶5 The establishment of the time during which Joseph came into Egypt has been ascertained, as has that of Moses, using radiocarbon dating to confirm Sothic dates which have dated the Reigns of Senusret III and Amenhotep I. Thus both the time of Joseph and the time of Moses are found close to freakishly rare, recorded Sothic dates. The record of generations in the Bible between the era of King David and that of Joseph is consistent with it having been 430 years, and there are indeed many other evidences which have been presented in previous works. One example is the Bahr Youssef built during the Reign of Amenemhet III, and translated as: "Joseph's Canal." There is in Jewish tradition, including in Josephus, a quite different view of the number of years from Jacob to the time of Moses, which is not supported by any of the facts, such as the number of generations after the arrival in Egypt to the departure, from their numbers. Six hundred thousand fighting men departed from Egypt. Are we to believe that 70 men made these in 215 years? This alone should raise flags, considering that in the Bible we read of no 215 years, nor need it be implied. [1] It gives 430 years, which number has been later turned inside out, evidently by a solitary later commentator, and this has been propagated from Rabbis and Josephus.*

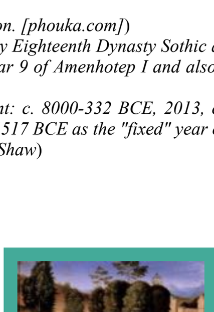
* That the Rabbis may not be trusted on this is seen from the "missing years" of Jewish history at the much later time, which amount to 164 missing years from the date of the destruction of Solomon's Temple in 587 BCE until the Jewish date of 423 BCE for that event.
[1](*To quote from my article, "Green," paragraph 2: There are 22 generations from Judah to David, as shown in 1Ch 6:33-38 in the genealogy of Heman, thus 215 years is incorrect here, whereas 430 years is true. The 480 years of 1Ki 6:1 as well as the connection of Solomon's temple to Dido by means of the Tyrian King Lists and Troy's connection to the Spartan Kings determine Solomon's date. Also, Solomon had a son Menelik with the Queen of Sheba who ruled in 975 according to the Ethiopian King list which is complete down to the time of Christ and averages a mere 16 years per reign. This also forces Solomon to remain higher than 975 by one generation. There is a way to arrive at the date of the Exodus from the destruction of the temple in 586, and without knowing anything about Solomon's temple, which is by simply adding 850 years to the date 586, giving the date 1436, a date which signifies the entry of Israel into Palestine according to the Talmud, but which probably is actually after settlement of the land about 16 years later. The Exodus is required to fit into the lunar calendar, and this makes it possible to pinpoint the year precisely as 1493. This is confirmed by the addition of the 430 years in Egypt from Ex 12:40,41 to arrive at 1923, where it is clear that during the reign of Senusret II the irrigation in northern Egypt is being worked on, connecting `Joseph's Canal' (Bahr Yussef), as it is still called today, with Lake Moeris. This puts Joseph at least as early as 1923 and allows the identification of Amenemhat II as the Pharaoh who reigned when Joseph `stood before Pharaoh'.*)

Above: Transfiguration of Christ, Museum of Fine Arts of Nancy, France
(1605 painting by Peter Paul Rubens, oil on canvas, 407 × 670 cm)

¶6 "Your seed will become an alien resident in a land not theirs, and these will surely afflict them 400 years." [1] Again, at Acts 7:6, "His seed would be alien residents in a foreign land and [the people] [ed. of the foreign land] would enslave them, and afflict them 400 years." The time of Joseph's arrival as a slave in 1936 BCE to the year of Moses' flight in 1533 BCE makes 403 years. Joseph's death in 1843 BCE to Jericho 1453, 391 years. Amenemhet II 1929-1895 BCE died in 1895, after a Reign of 35 years, and was succeeded by Senusret II (Joseph) in 1897 as CoRuler (1895 sole Rule) for 19 years (note 19 years is also given for Saites or Salitis, in whose Dynasty Joseph is said to rule, Manetho Dyns. 15, 17). [2] From the death of Amenemhet II in 1895 (or 1893) until **The Exodus** in 1493 BCE are also just 400 years. Paul spoke of Jehovah exalting Israel in Egypt and the period of "about 450 years" that followed until Israel divided the land of Canaan by lot, which refers to the exaltation "in the land of Egypt," and since the later event is six years after the Battle of Jericho, in our *Blessed Greenealogy,* or 1445 BCE, the first one is 1445 plus 450, which is 1895 BCE Year 1 Senusret II (which implies that Joseph is Senusret II, as we say). The 518 years of Manetho Dynasty 16 from Africanus for the Shepherd Kings run from 1923 (Joseph appointed 2nd to Pharaoh, over all Egypt) to 1405 BCE, which is Year 1 Amenhotep III, during whose Reign Akhenaten began to alter Egyptian religion, moving his capital to Amarna. Senusret III began to Rule in 1878 BCE, after Senusret II 1897-1878, and Year 7 of Senusret III has a date of Sothic alignment, that, used with the Sothic date from Year 9 of Amenhotep I (in our BG chronology 1517 BCE), [3,4] is the basis for the conventional Egyptian chronology: [5]

> **"Two Egyptian textual records of Sothic risings** (dating to the Reigns of Senusret III and Amenhotep I), **form the basis of the conventional chronology of Egypt, which,** in turn, **influences that of the whole Mediterranean region."**
> [5](*The Oxford History of Ancient Egypt, 2000, p. 9, by Ian Shaw*, emphasis ours)

[1](*Genesis 15:13*)
[2](*1895: Grimal, Clayton, Egyptsite; 1896: Redford, Dodson. [phouka.com]*)
[3](*"The Start of the Egyptian Lunar Month in Light of Early Eighteenth Dynasty Sothic and Lunar Dates," Göttinger Miszellen 249 (2016), 39-57, by Philip Derstine agrees with both the 1517 BCE date for Year 9 of Amenhotep I and also 1468 BCE for Year 23 of Thutmose III, these being our BG dates.*)
[4](*The Oxford Handbook of the Archaeology of the Levant: c. 8000-332 BCE, 2013, edited by Margreet L. Steiner, Ann E. Killebrew, "Levantine Chronology," p. 57, note 27, by Ilan Sharon, gives the date 1517 BCE as the "fixed" year of Sothic rising for "ideal" viewing conditions at Thebes.*)
[5](*The Oxford History of Ancient Egypt, 2000, p. 9, by Ian Shaw*)



Above: Scenes from the Story of Joseph, Discovery of the Stolen Cup, Galleria Borghese, Rome *(1515-1516 painting by Bacchiacca, oil on wood)*

¶7 The Sothic dates just mentioned, used to establish the absolute chronology of Egypt and the surrounding area, are of great interest in the study of the stratigraphy and pottery in Egypt's cultural context, since datings fixed to astronomy are potentially very absolute ones. But the fabric of Egypt's chronology is woven with the strands of King lists and genealogical information and forms an essentially independent political chronology, which according to Mr. Felix Höflmayer has an absolute set of calendar dates which are essentially unmovable: [1]

> **"The historical chronology of Egypt is a political chronology, and as such it is a priori independent from archaeological phases and sites' stratigraphies, material culture such as pottery, or scientific dating approaches, that is, radiocarbon dating."**
> [1](*"Radiocarbon Dating and Egyptian Chronology- From the 'Curve of Knowns' to Bayesian Modeling," 2015, Online Publication Date Jul 2016, Oxford Handbooks Online, p. 2 of 20, by Felix Höflmayer.*)

As we have stated already, radiocarbon measurements do have meaning in the context of known historical dates, but display variability, often due to unknown factors.

[1](*"Radiocarbon Dating and Egyptian Chronology- From the 'Curve of Knowns' to Bayesian Modeling," 2015, Online Publication Date Jul 2016, Oxford Handbooks Online, p. 2 of 20, by Felix Höflmayer.*)

¶8 The radiocarbon field has existed as a somewhat closed community, keeping tight hold on the reins of secrecy, particularly in the area of dendrochronological (tree) calibrations purporting to go back dozens of millenia. Radiocarbon (or Carbon-14) dating has been used by the assumption that the fraction of radioactive carbon (or isotope C-14) relative to stable carbon (C-12 or C-13) in a living organism is the same as that in the air at the time of the organisms death, and that the decay by radioactivity afterwards is according to the fixed law of radioactive decay with a half-life of "5730" years. The inventor of radiocarbon dating, Willard Libby, who got a Nobel prize, used a 5568-year half-life for C14. This is why the "conventional" (or "uncalibrated") C14 ages obtained by radiocarbon dating are younger values than "calibrated" ages, because Mr. Libby expected the samples to have reached their half-life some 162 years earlier than they did, and so calculated younger ages.

Above: Joseph and Potiphar's Wife, Gemaeldegallerie, Dresden *(1678-1680 painting by Carlo Cignani, oil on canvas, 99 x 99 cm)*

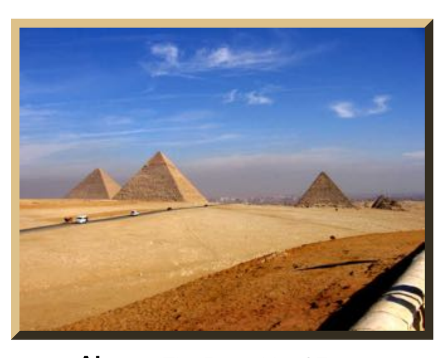
¶9 As an example of the sort of conflict existing between Egyptologists and the radiocarbon community, there was an argument made by an H. McKerrell for an alternative radiocarbon calibration curve to be constructed, since the Egyptian historical chronology conflicted at times with the standard curve, but no provision is seen yet. The occasions of agreement between radiocarbon results and the reconstructed "absolute calendar dates for the historical chronology" from written sources did rarely get acknowledged, as merely approximate confirmations. Supporting C14 dates were put in the main text, others in a footnote, and 'out of date' results were dropped, according to the preference for historical chronology. How to resolve these problems with radiocarbon may not yet be forthcoming, as the 2006 article concerning the Santorini olive branch made clear, wherein its authors Friedrich et al. gave new weight to the Thera eruption date using a radiocarbon series from that destruction. [1] When much debate on both sides ensued, it became clear that proponents of radiocarbon were undermining Egypt, totally oblivious to their own probable uncertainties.

radiocarbon were undermining Egypt, totally obvious to their own probable uncertainties.

[1](*"Santorini Eruption Radiocarbon Dated to 1627–1600 B.C.," 2006, Science 312: 548, by Walter L. Friedrich, Bernd Kromer, Michael Friedrich, Jan Heinemeier, Tom Pfeiffer, Sahra Talamo.*)

110 It was in the wake of this crisis that a comprehensive approach to radiocarbon dating the Egyptian historical chronology was first made by the eminent Bronk Ramsey. [1] His aim was to perform "a check of whether radiocarbon dating 'worked' in Ancient Egypt," and if not why not. The results of the Oxford-based Ramsey team showed for the first time, using more than 200 new high-precision radiocarbon measurements on short-lived plants brought from museums around the world, that the Egyptian "high chronology" of Shaw (2000), when modelled for Bayesian analysis, essentially agreed with radiocarbon results. We have shown in our previous work that the main error introduced by Shaw is eliminated in our own chronology and makes the results of Ramsey et al. more impactful. [2] The New Kingdom dates were 128 new radiocarbon samples of short-lived plant materials "from secure contexts." For the Middle Kingdom, 42 new samples were gotten and when all outliers were eliminated the results proved a preference for the "high Middle Kingdom chronology" as published by Shaw (2000), challenging any "low" model, even when the Reign lengths of "low" dating were used.

[1](*"Radiocarbon-Based Chronology for Dynastic Egypt," 2010, Science 328: 1554–1557, by Bronk Ramsey, Christopher, Michael W. Dee, Joanne M. Rowland, Thomas F. G. Higham, Stephen A. Harris, Fiona Brock, Anita Quiles, Eva M. Wild, Ezra S. Marcus, and Andrew J. Shortland.*)
[2](*"Trojan War," 2015, par. 8-2, by Rolf Ward Green, R. E. Green, M. F. Green (Skanes), and (the now late) A. R. Rutledge*)



Above: The Pyramids of Egypt

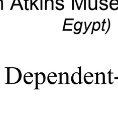
111 This landmark study by Bronk Ramsey and his associates thus essentially confirmed *Blessed Greenealogy,* our chronology found based on the Bible and astronomy. Bayesian modelling permits the use of Reign lengths or other preconditions such as stratification to be used. Whereas the Shaw (2000) chronology was successful, its Reign lengths were not perfect, we believe, and in the Ramsey study (2010) led to a date of 1557 BCE, instead of 1552 BCE, for the date of Ahmose I, accession year. This is a relatively minor error, and it appears to be nearly resolved in our own BG, confirming thereby also Egyptian historical chronology (Ahmose I 1550 Year 1). Our chronology has some "day of the week" beliefs that go with **The Exodus** and with the death of Moses. This means that the BG is very resistant to any shift. We are also 46 years higher than some "Bible" datings, because we refused to corrupt the Bible Reign lengths.

Above: David Playing the Harp Before King Saul (1Samuel 16:23) *(1897 illustration from a book, Bible Pictures with brief descriptions by Charles Foster, published in 1897, Philadelphia)*

112 It is an atrocity that is much more serious when those who suppose to represent the "Bible chronology" let it be known by their assertion of 1446 BCE as the date of **The Exodus,** instead of 1493 BCE, that they have accepted a compromise to the Biblical text itself, and failed in their responsibility as believers, in faith. This is because they have a higher responsibility when they represent the Bible and mislead any new believers into accepting something as true without examining it. We find by the success of our model that the believers in the chronology of Edwin Thiele are culpable indeed. Really, "How will you escape the judgment of Gehenna?" Of course, one in faith might continue to learn faith. But how will those escape who frivolously accept lies? This is a very serious matter, where we pray for them. Now Jesus said we should love our enemies, and he also was a proponent of the Hebrew Scriptures in mentioning and ratifying Moses, Noah, Adam and Eve as historical. His resurrection is the best-attested miracle in Bible history, so how may we escape if we deny a Hebrew King his rightful years as attested in the faithful record? In an actuarial sense, the average age of a man at the birth of his firstborn son is 27 years (as in Israel). We compute this average of 27 also for Kings of Judah. Jehoshaphat to Josiah in Thiele's chronology is a very compromised average age which is about 4 years too low compared to the average age of 27 years for all of the other Kings in his and our sequences, David to Josiah.

Above: Senusret III, Nelson Atkins Museum of Art, Kansas City *(12th Dynasty Egypt)*

end of Chapter 1: Faith Is Not Dependent-- Taking Radiocarbon Under Egypt



Chapter 2: Ancient Greece, Egypt, Sumeria And Noachian Deities Human Osiris, Prometheus Enki

Above: Funerary Figure, Osiride, Gautsoshen *(21st Dynasty Egypt)*

I always thank my God when I make mention of you in my prayers, as I keep hearing of your love and faith which you have toward the Lord Jesus and toward all the holy ones; in order that the sharing of your faith may go into action by your acknowledging of every good thing among us as related to Christ.
(*Philemon 4-6, New World Translation 1984*)

I thank my God, making mention of you always in my prayers, hearing of your love and faith which you have toward the Lord Jesus and toward all the saints, that the fellowship of your faith may operate in a full knowledge of every good thing in you in Christ Jesus.
(*Philemon 4-6, Modern King James Version, 1962-1998 by Jay P. Green*)

Io ringrazio continuamente il mio Dio, ricordandomi di te nelle mie preghiere, perché sento parlare dell'amore e della fede che hai verso il Signore Gesùe verso tutti i santi. Chiedo a lui che la fede che ci è comune diventi efficace nel farti riconoscere tutto il bene che noi possiamo compiere, alla gloria di Cristo.
(*Philemon 1:4-6, 1994 La Sacra Bibbia Nuova Riveduta Sui Testi Originali*)

Благодарю Бога моего, всегда вспоминая о тебе в молитвах моих, слыша о твоей любви и вере, которую имеешь к Господу Иисусу и ко всем святым, дабы общение веры твоей оказалось деятельным в познании всякого у вас добра во Христе Иисусе.
(*Philemon 1:4-6, 1876 Russian Synodal Text*)

ευχαριστω τω θεω μου παντοτε μνειαν σου ποιουμενος επι των προσευχων μου ακουων σου την αγαπην και την πιστιν ην εχεις προς τον κυριον ιησουν και εις παντας τους αγιους οπως η κοινωνια της πιστεως σου ενεργης γενηται εν επιγνωσει παντος αγαθου του εν υμιν εις χριστον ιησουν
(*Philemon 1:4-6, 1894 Scrivener Textus Receptus*)

Doy gracias á mi Dios, haciendo siempre memoria de ti en mis oraciones. Oyendo tu caridad, y la fe que tienes en el Señor Jesús, y para con todos los santos; ara que la comunicación de tu fe sea eficaz, en el conocimiento de todo el bien que está en vosotros, por Cristo Jesús.
(*Philemon 1:4-6, 1909 Spanish RV Bible*)

21 The Sacred Writ was recorded as a truthful witness, and by humans who, it can be acknowledged, lack perfection. Without the record of the Bible we would have no common knowledge of the intentions or faithfulness of Jehovah. Before we undertake to recount some of the aspects of a mythological record of lesser value, it is important to first attest to a fundamental connection between truths of scripture and the witnesses thereto, since the truth and the concept of it is central to any field of study. The resurrection of Jesus is central to the Bible text. Jesus, or the Son of God, as the son of Jehovah is also the source of "intellectual capacity," from 1John 5:20.* If this is true, then, as Mr. Robert L. Whitelaw wrote: [1]

> **"The authority of Christ hangs upon a fact of natural science, the resurrection; and the resurrection of Jesus Christ is the foundation of all Christian faith. Thus it is that without the Christian faith the scientific method is meaningless and no true science is possible. Man may "learn" much that is useful, but he can never learn anything that is truly true or truly false, truly right or truly wrong."**
> [1](*1972 Bible Science Newsletter. Creation Moments, "Does Christian Faith Depend Upon Scientific Fact?" by Robert L. Whitelaw, Department of Mechanical Engineering, Virginia Polytechnic Institute at Blacksburg*)

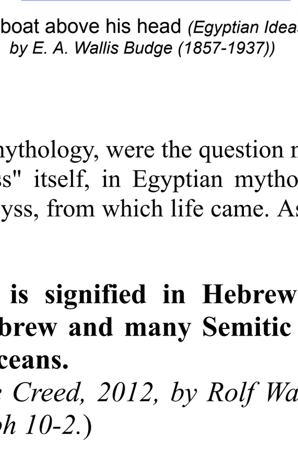
The corollary to this is to challenge anyone to write, without any faith in the resurrection of Jesus, a work of truth which has the same essential and clear value.

* Just as the truth of the Egyptian political chronology according to Mr. Höflmayer cannot be dependent on such things as radiocarbon or pottery, and just as Biblical chronology which is **faithful to the Word** cannot be dependent on the Egyptian political chronology, our precious Christian faith cannot be dependent upon that which comes after it or remains outside, like science. Is not skepticism of Christianity the most rigorous of all skepticisms, and most critical of false teachings? In fact, most teachers of religion are but charlatans. Of this are so-called Christians most culpable of all. Fake Christs are more common than Elvis impersonators. The imperfection of men is what causes us to idolize a human, rather than worship the spirit person, Jehovah. Although rarely, some scientists believe in the faith. The need for true faith in science is felt in the many published articles which argue endlessly without gain. This is far from saying that all of them are wrong, as in faith we believe that there is rarely good science. Jehovah allows freedom of belief, but the faithful are also remembered when they persist in looking for good. Science seems much more complicated when we don't have the guidance of our faith to narrow our focus somewhat by encouraging us to continue looking for good in all.

[1](*1972 Bible Science Newsletter. Creation Moments, "Does Christian Faith Depend Upon Scientific Fact?" by Robert L. Whitelaw, Department of Mechanical Engineering, Virginia Polytechnic Institute at Blacksburg*)

22 True worshipers can forget as women can forget a baby. [1] So what about the other testimony of record which came through the mythology of ancient times and its people? The curious legend of Osiris, god of the afterlife and fertility in Egyptian mythology, and his manifestation in the constellation Orion "The Hunter," is one story. He was said to have been tricked by Thoth and enclosed in a "chest," and set adrift near to the Nile's mouth. The date given by Plutarch was Athyr 17, the 28th Year of Osiris, and "when the Sun passes through Scorpion." [2] Where the "Scorpion" is the astronomical "Scorpio," we may look for the date using our astronomical software. But it is hard to know exactly what is intended by the one statement: "when the Sun passes through Scorpion." We had noted before that we could date it to 2774 BCE. When dated here, Osiris was Nimrod, the Mighty Hunter. [3] But, the god Osiris may have far greater implications. "When the Sun passes through the Scorpion," if applied to that 28th "Year," could logically apply to the time of the autumnal equinox at the Year's beginning, or to Oct 19 3283 Julian BCE in BG chronology **Deluge.** [4-6] The Sun is truly passing through Scorpio at this time. [7]

[1](*Isaiah 49:15*)
[2](*Plutarch, Moralia, Vol. V, Isis and Osiris, 13*)
[3](*Genesis 10:9*)
[4](*Sundial Time Correction - Equation of Time, Equation of Time Calculator, by C. Johnson, Julian Day Number determined using the calculator there as equal to: JD=522598.77533379005*)
[5](*NASA's Jet Propulsion Laboratory Time Conversion Tool used to convert Julian Day Number into the date Oct 19, 3283 BCE.*)
[6](*Notebook 36, WG, p. 159.*)
[7](*Skychart III Demo, running in Win XP using Oct 19, 3283 BCE (-3282) as the date. The Sun exits Scorpio around, very roughly, 700 years later, or 2583 BCE. So this still allows it to also apply to Nimrod, in the 28th century BCE, in our chronology. Note that in 2583 BCE, the autumnal equinox has shifted to Oct 14. All dates before 1582 CE use Julian dating, as is typically true of ancient dates, unless stated specifically as Gregorian.*)



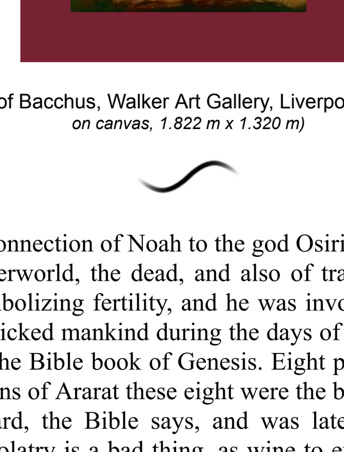
Above: Nu raising the boat above his head *(Egyptian Ideas Of The Future Life, 1908, by E. A. Wallis Budge (1857-1937))*

23 We might miss Noah in the abyss of mythology, were the question never asked, "Where does Noah exist in myth?" Interestingly, the idea of "abyss" itself, in Egyptian mythology, is represented in the god "Nu," symbolizing deification of the watery abyss, from which life came. As we wrote in the "Crucible of Credible Creed, 10:2": [1]

> **The Egyptian god `Nun' is signified in Hebrew by the letter `nun', the fourteenth letter in the Hebrew and many Semitic alphabets, and represents the watery abyss of green oceans.**
> [1](*The Crucible of Credible Creed, 2012, by Rolf Ward Green, with R. E. Green and A. R. Rutledge, paragraph 10-2.*)

This is a clear connection to Noah in Egyptian history for, in the Book of Gates, Nu is depicted as holding a boat in upraised arms, which boat holds eight deities. [2] When similarity of the name "Nu" to "Noah" is seen, it is clear that the story of Noah's Ark preserving eight humans from the **Great Deluge** is found in Egypt.

[1](*The Crucible of Credible Creed, 2012, by Rolf Ward Green, with R. E. Green and A. R. Rutledge, paragraph 10-2.*)
[2](*Egyptian Ideas Of The Future Life, 1908, by E. A. Wallis Budge (1857-1937)*)



Above: Baalbec, Ruins of the Temple of Bacchus, Walker Art Gallery, Liverpool *(1840 painting by David Roberts (1796-1864), oil on canvas, 1.822 m x 1.320 m)*

24 Less clear, but still evident, is a connection of Noah to the god Osiris of the Egyptian pantheon, wherein he is the god of the afterlife, the underworld, the dead, and also of transition, resurrection and regeneration. Osiris has green or black skin, symbolizing fertility, and he was involved in rites symbolizing resurrection. The global Deluge that destroyed wicked mankind during the days of Noah was survived by him, along with three sons and wives according to the Bible book of Genesis. Eight people thus survived the cataclysm, and when the Ark landed in the mountains of Ararat these eight were the basis for the new society from which we descended. Noah planted a vineyard, the Bible says, and was later idolized in the Greek god of wine Dionysius (Bacchus). Of course, idolatry is a bad thing, as wine to excess. Yet the realization of the link to Osiris is profound, especially if it may date to the **Deluge** itself. Until very recently, it had never occurred to me in my remotest imaginings that Osiris might be Noah, or that the date of Athyr 17 in the myth of Osiris might be an exact correspondence to the 17th day of the 2nd month, given in Genesis 7:11 as the day of the **Deluge.**

25 Using astronomical software, we can look at dates, and note phases of the moon, for determining lunar months. So, we will consider this in the following discussion. Firstly, seeing as an ark or ship was made use of as a sacred emblem in the rites of Isis and Osiris, it does make sense that the Osiris story and its calendar date of Athyr 17 should be associated to the **Deluge.** [1] The Sacred word makes reference to three calendar days in the account of the **Deluge,** one at the start, in the 2nd month, one in the 7th month when the Ark in riding the open sea landed in the mountains of Ararat, and one in the 2nd month of year 2 when Earth was dry. For now, we concern ourselves with the first day only, which is the 17th day of the 2nd month in one version. [2] The Septuagint dates it the 27th day of the 2nd month. In our own chronology the **BG,** there is only one year identified as that of **The Deluge,** 3282 BCE (so if it doesn't work at all we are in real trouble). The way in which 3282 BCE was arrived at was explained in **Joseph** and featured in **Ark of Urartu.** Since Mr. Fred Espenak's lunar phase tables don't date back as far as that, we use Solex 12 by A. Vitagliano. [3] This program has proven reliable compared to Espenak's tables after 2000 BCE, differing by up to a few hours.

[1](*New System, or, An Analysis of Ancient Mythology, Vol. II, 1774, p. 284, by Jacob Bryant.*)
[2](*Masoretic Text.*)
[3](*Numerical Integration for the Real Time Production of Fundamental Ephemerides over a Wide Time Span," Celestial Mechanics and Dynamical Astronomy 66, 1997, pp. 293-308, by Aldo Vitagliano*)

Above: The Entry of the Animals into Noah's Ark, Getty Center, Los Angeles
(1613 painting by Jan Brueghel The Elder, oil on panel, 54.6 x 83.8 cm)

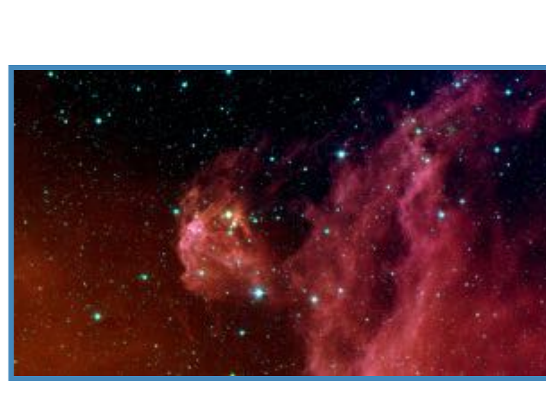
26 In the year of the **Deluge** in our chronology, it so happens that the 27th day of Phaophi, the 2nd month in the Egyptian calendar, comes to Jan 17 3282 BCE and is also the 17th day of the lunar month which began on Jan 01 if assuming that it began after 1st visibility. Perhaps more significantly, winter solstice was Jan 16 in the Julian calendar, the ancient standard calendar, and the one from which all ancient dates are computed. The Septuagint said that the **Deluge** began when, on the 27th day of the 2nd month (or the 17th day from the Masoretic text) all the springs of the watery deep were broken open and so were the floodgates of heaven. [1] Noah was 600 years old at this time, it also tells us. The preceding autumnal equinox may well have indicated the beginning of the lunar calendar, and is determined from Johnson's *Equation of Time* as Oct 19 3283, making Jan 17th the 17th day of the 3rd lunar month if the 1st one commenced after autumnal equinox 3283 from 1st visibility of Nov 02 3283, so that Lunar Day 01 is Nov 02 New Year's day, and Jan 17 recreates Hathyr 17. Hathyr is the 3rd month in the Egyptian calendar which we had believed to have been a later construct, but it appears from this, evidently, to have existed in 3283. Yet this is not the only remarkable result we find for this time period, for the day given in Genesis 8:14 as the day the earth had dried off is the 27th day of the 2nd month one year after the **Deluge** began, this being in the Egyptian calendar also Phaophi 27, or Jan 17 Julian again, and is also Lunar Day 27 in 3281 BCE. This is with Jan 19th as 1st visibility in 3281, plus, counting from autumnal equinox once again as Oct 19th, 3282 (note this is the year before 3281 in BCE years), Dec 20 is both 1st visibility and precisely 11 plus 16 days before Jan 16 3281 evening, the latter being also 3 days before Jan 19 evening as Lunar Day 27 is to 30. This is a remarkable coincidence which appears strong.

[1](*Genesis 7:11*)

Above: Erechtheum Acropolis Athens evening moon *(2015 photo)*

27 The correspondence of the Biblical dates with Egyptian calendar dates and the lunar phases was not calculated prior to our choice of the date 3282 BCE, so we surely did not intend such an apparently divine proof for it. For believers, the only explanation may be by Jehovah. This is just a phenomenal result that is unimaginable. It appears to be very possible to explain the Biblical dates using the Egyptian calendar and the lunar phase, despite not expecting either one to be involved, here. While it is not surprising that a lunar calendar could have been in use at an early date, as other scientists would probably agree, the Egyptian calendar is more of a surprise-- except, Moses was also educated in Egypt. [1] Although there be many signs of the correctness of our **BG** chronology, it is yet one more confirmation. So, Osiris, who was shut up in his ark on the 17th day of Athyr or Hathyr in his 28th year of Reign, is Noah, who experienced the **Deluge** on Phaophi 27, or on a day corresponding to Hathyr 17 exactly, by the moon. And the 17th lunar day in 3282 BCE becomes exactly one year later in the Egyptian calendar Lunar Day 27 3281, with both days corresponding to Phaophi 27, for Egypt. That both days correspond to Jan 17 Julian can be only a miracle and not from any artifice of man imaginable. [2] If Noah can be Osiris, then why could he not be Orion?

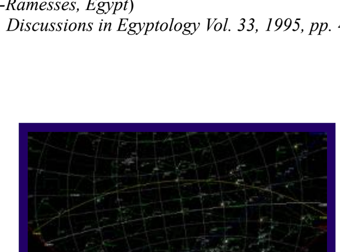
[1](*Acts 7:22*)
[2](*Lunar visibility by PLSV 3.1.0, Egyptian dates by Robert van Gent's Almagest Ephemeris Calculator, Equinox and Solstice Calculations by C. Johnson's Equation of Time as converted using Jet Propulsion Laboratories Time Conversion Tool, Lunar days confirmed using Aldo Vitagliano's Solex 11.0 and 12.0*)



Above: Young stars hatching in the head of Orion *(May 17 2007 photo by NASA, scaled and slightly sharpened)*

28 The Orion constellation has two dog companions, in the constellations Canis Major and Canis Minor, and we now notice for the first time that, as Noah had taken with him and his family into the Ark "two of every kind" of animal, from the Bible, so Orion has his two dogs, and one of them is larger than the other, for that matter. Nearby is the constellation of the ship, called "Argo" in the Greek myth of Jason and the Argonauts, and some having called the Argo the very first ship, Argo Navis is clearly and fully visible in 3282 BCE, at midnight. [1] Originally, it would appear, the Ark was "Argo Navis." In the time of the Argonauts, as we have dated them in our other articles, there is no complete view of Argo, with the constellation rising to be seen only in part. Arguments about the similarity of "Argo" to "Ark" as a linguistic comparison were tried over the years, also. The reason that Osiris is Orion may be argued from the point of view that Osiris is related to Sirius the Dog Star of Canis Major, and that the belt of Orion points to a point on the horizon near where Sirius will rise. These things may be observed with computer simulation, for which there are a number of astronomical programs. The word for "Orion" in the Pyramid Texts of Egypt has a transliterated form "S3h" meaning "Toe-star," and it has also a correspondence in myth in that the god Seth complains that Osiris had kicked him: "when there came into being this his name of Toe-Star (for Pyramid Text 959 continues...), long of leg and lengthy of stride." To complete the identification, one of the two feet of Orion is the star Rigel, one of the brightest stars in the night sky, rising near where Sirius rises only 100 minutes later, Sirius being a star much watched by the Egyptians, as we have seen, but being a bright star of Canis Major also, and furthermore associated with Isis the wife and sister of Osiris, the New Year harbinger. [2]

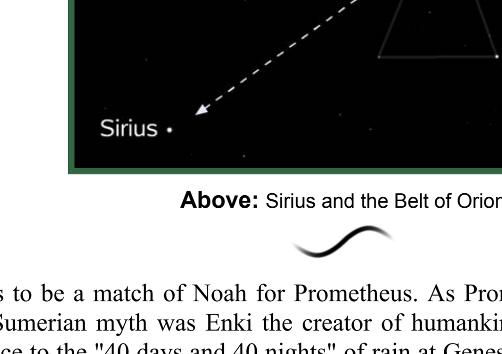
[1](*Using Skychart III Demo, from, for example, Pi-Ramesses, Egypt*)
[2](*'The Orion Correlation and Air-Shaft Theories', Discussions in Egyptology Vol. 33, 1995, pp. 45-56, by J.A.R. Legon*)



Above: Argo Navis at the Time of The Deluge *(3283 BCE an hour before sunrise, SkyChart III Demo, Argo Navis bottom middle, southern sky, seen as a complete ship shape which is just clearing the horizon, left of the name "Puppis" and right of "Centaurus." The hull and sail are visible, with the sail being called "Vela" and the left and bottom of the hull being called "Carina," since "Argo Navis" was broken up into these three different constellations. "Pyxis" is just above the ship, not part of it. The ship Argo Navis appears to accompany Canis Major and Orion.)*

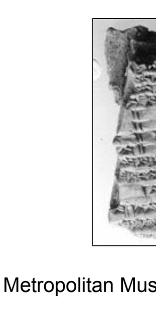
29 We have seen the close relation of Noah to Osiris from both the chronological and an astronomical standpoint. What about Prometheus, the Greek god who molded man of clay and gave fire to mankind against the wish of Zeus for which crime he was punished by being fastened to a rock at Colchis for 30 years, while each day his liver was eaten by an eagle to torment him, although it grew back at night, continually until Hercules rescued him? [1,2] For my whole life I could not see any logic behind the story of Prometheus, who appeared to be a mere enigma. In the way that Prometheus stole fire to give to human beings, there may be a parallel in that Noah protected fire on board the Ark during the **Deluge,** and at the conclusion of that cataclysm used it for firewood. Prometheus was a Titan who escaped the judgment of the offending Titans whom Zeus cast into Tartarus forever. Similarly, Noah was righteous and saved from judgment. Prometheus as a bit of a loner seems also to fit Noah. The confinement to the rock is also a parallel to Noah having landed on the mountaintop, where his family was confined for some time waiting for the flood waters to abate, while birds could fly from mountain to mountain we might suppose, of those birds that were on the Ark. Whether the eagle eating the liver has a connection to Noah's having planted a vineyard and the effect of the alcohol on his liver later on, is open to speculation, but it appears unlikely seeing as his liver grew back. It was probably a very emotional time after the family of Noah landed safely, and the liver symbolized to the Greeks or in actuality was the seat of human emotions, as Noah may have had to recover his emotions at night. The explanation of Prometheus with Noah is satisfying.

[1](*Colchis is a region on the eastern coast of the Black Sea, only 200 mi. NW of Noah's Ark.*) [
2](*Of course, mythology is convoluted and has many different versions in different places. As the place mentioned is Colchis in the Caucasus, an area not far from where Noah landed many years earlier, and where Sensusret III conducted his campaign, not unlike the land journey Hercules made from Spain (see article "B4 Chronology"), and as we have also identified Senusret III as Ephraim the son of Joseph, we may find reasons yet for the myth of Prometheus, often called a "cousin" of Hercules, to rescue Prometheus, as it may relate to the Ark site itself, where we we have seen that the Ark is held on the rock. For a specific reference to the place known as Colchis vis-à-vis Prometheus-Hercules see e.g. "New System, An Analysis of Ancient Mythology" Volume II, 1774, page 70, by Jacob Bryant*)



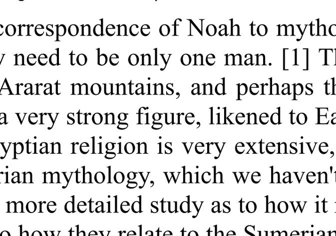
Above: Sirius and the Belt of Orion

210 There thus seems to be a match of Noah for Prometheus. As Prometheus created the human race, from Greek myth, so in Sumerian myth was Enki the creator of humankind. The "sacred number" of Enki was "40," with coincidence to the "40 days and 40 nights" of rain at Genesis 7:4. Also Genesis 7:12, a downpour "40 days and 40 nights." Enki was patron god of Eridu, which is in Mesopotamia, and the same region commonly taken to be that of Noah. Enki was the Sumerian god of water, also fitting Noah. Enki was also Sumerian god of crafts, while Noah built an Ark and thus knew a great deal about craftsmanship. Now, here there is a remarkable connection between the Hebrew word for "Ark," which is "tebah," and the abyss of Egyptian mythology rendered as "abzu," in Sumerian. The Babylonian god "Ea," whose Sumerian equivalent was Enki, lived in the ocean under the earth, called abzu. This seems to parallel Noah in the abyss of waters who survived by living in the Ark (tebah), in the "abyss." The similarity of "abzu" to the Hebrew "abba" (Father) and the Hebrew "tebah" (Ark) is more than interesting. Abzu in Sumerian mythology is sometimes at the tops of mountains, and sometimes at the bottom of seas, and is also the "floating and steering wheel palace" of Enki. But Abzu has three meanings, depending upon the period of time described, with Abzu being the Sun at the time of creation, then later Abzu is the place of dwelling, near Eridu, where Enki dwells before the Flood, and it is later Abzu as the "abyss," after the **Deluge.**



Above: Cuneiform Tablet, Balag to Enki, Metropolitan Museum *(c. 134 BCE poem or song, cuneiform tablet, clay, 7 x 3.8 x 2.7 cm)*

211 For some reason, Abzu as the last-defined case means a place underneath the earth where Enki took shelter, or survived, the **Deluge,** whence hollow earth myth. With "ki" meaning the Earth our planet, and "En" being translated "Lord," Enki is thus the Lord of the Earth. If "Anunna" (cf. Nun, Noah) is Noah, then Anunnaki may indeed imply the people descended from "Nun," or Noah, as it was the "Anunna of Ki" who were the Anunnaki who settled and became established on Earth, in mythology. This Sumerian myth has been popularized by taking from it the notion that the Anunnaki were extra-terrestrial beings, who corresponded to the Nephilim of the Bible. The story is that the human race was engineered as the work force for the alien race who did mining for gold. That a race of reptilian aliens is living underground, yet today, is another of the more outlandish theories. Were we not so busy learning chronology and history in using the Bible's time-tested books for our discovery, we would have more time to read all of these theories. Our chronological focus has been to establish a search method for the chronology itself, and we are learning. But it's been more about the timing and about a family of descendents of Noah and his wife, which we find has found a place as our global **Deluge** of 3282 BCE. It's by no means the only explanation, as we can tell. Our reader may decide for him- or herself what's true, and may feel free to study some of our other articles.

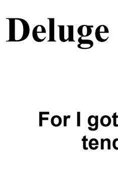


Above: Enki (middle right), Adda Seal *(circa 2300 BCE, greenstone cylinder seal. Note "Ishtar (full-face) who is winged and armed with weapons including an axe and a mace rising from her shoulders. She is holding a bush-like object, probably a bunch of dates, above the sun-god's head. The sun-god Shamash with rays, holding a serrated blade, is just begining to emerge from between two square topped moutains. The water god Ea stands to the right with one foot placed on the right hand mountain. He stretches out his right hand towards an eagle, probably the Zu bird who stole the tablets of destiny. A couchant bull lies between his legs and streams of water and fish flow from his shoulders. Behind him stands his two-faced attendant god Usimu with his right hand raised." quoted from British Museum)*

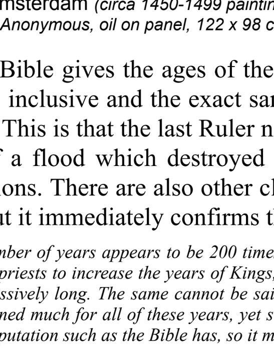
212 As this chapter has proven, the correspondence of Noah to mythological Osiris, Prometheus, and Enki is superb enough to establish that they need to be only one man. [1] The Ark was impaled on a rock as it slid down Doomsday Mountain in the Ararat mountains, and perhaps this can explain the disembowelment of Prometheus by the eagle. Enki was a very strong figure, likened to Ea (Yahweh), and of course Noah was the patriarch of all humankind. The Egyptian religion is very extensive, as is that of Greek mythology, and the Flood account is also part of Sumerian mythology, which we haven't yet touched upon. In our next chapter, the Sumerian Flood myth may get a more detailed study as to how it relates to the Bible, and in our doing so, the patriarchs may be examined as to how they relate to the Sumerian mythological story.[2] We are trying to see if our BG chronology can survive. The Bronze Age, age of trees, and our language origins have all indicated that we should express faith in it. The ages of the patriarchs have confirmed this dating. Nevertheless, it is a very difficult subject of study. This is the story of the patriarch of all men, "Noah."

[1](*Also to other gods, too, according to the book: "New System, An Analysis of Ancient Mythology" Volume II, 1774, page 70, by Jacob Bryant*)
[2](*By "patriarchs" here is meant pre-Diluvian*)

end of Chapter 2: Ancient Greece, Egypt, Sumeria And Noachian Deities Human Osiris, Prometheus Enki



Chapter 3: Indicative Native Deluge Accounts Total Extracted Saroi



Above: The Great Flood, Rijksmuseum, Amsterdam *(circa 1450-1499 painting by Anonymous, oil on panel, 122 x 98 cm)*

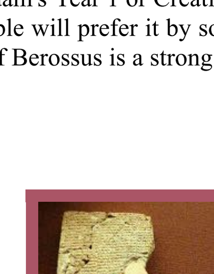
For I got much joy and comfort over your love, because the tender affections of the holy ones have been refreshed through you, brother.
(*Philemon 7, New World Translation 1984*)

For I have had great joy and consolation in thy charity, because the bowels of the saints have been refreshed by thee, brother.
(*Philemon 7, Douay Old Testament 1609*)

31 Alexander Polyhistor, who lived after Berossus, offers the account from Berossus concerning the 10 Rulers who reigned until the **Deluge,** for 120 saroi in all. The saros is 18 times 200 years in those accounts, and we take the actual number to be 18 years, according to the lifetimes of the patriarchs in the Bible, and also the modern saros of 18 years, the Moon-Sun cycle, used duly then and now to compute eclipses of Moon and Sun. [1] The Bible gives the ages of the patriarchs, and states that there were 10 patriarchs from Adam to Noah, which is inclusive and the exact same number as of Rulers in Berossus, but another exact correspondence is notable. This is that the last Ruler named Xisuthrus builds the same sort of vessel as Noah built to survive the event of a flood which destroyed mankind at that time, in so doing preserving also the animals, and his companions. There are also other close parallels to Noah's herein, which we will endeavour to cover at some point, but it immediately confirms the account of Noah of the Bible.

[1](*The number of years appears to be 200 times too large, but the accounts are truly identical in nature. Notably, it seems to have been a religious practise of priests to increase the years of Kings, either to hide the true numbers in a codified manner, or possibly for the purpose of making the past more impressively long. The same cannot be said of the Bible writers, who seem to have given a remarkably accurate record as related. Yes, it has been examined much for all of these years, yet still holds for its Septuagint version to be true. As for the Sumerian account, it is not claiming a very accurate reputation such as the Bible has, so it makes no sense to doubt that a Saros was only 18 years.*)

32 The term Saros is used today in astronomy and means an approximately 18-year period, of 18 years 11.321 days. It refers to a round number of 223 lunar cycles called synodic months, each being 29.530588 days, after which a series of similar eclipses occur at other locations. The exact numbers may matter when it comes to figuring out a greater length of time such as one of 120 saroi. At 18 years per saros it computes to 2160 years total. When we add 2160 years to the **Deluge** date, 3282 BCE, we arrive at 5442 BCE, 108 years shy of 5550 BCE, the date we established for Adam's Year 1 or Creation. The result is close enough to be extremely remarkable. Those of us who trust the Bible will prefer it by some very large measure over that of Berossus, but it still appears clear that the account of Berossus is a strong confirmation of the Biblical record, which we believe.



Above: Atra-hasis Epic, British Museum *(circa 17th century BCE, cuneiform tablet found at Sippar in southern Iraq)*

33 The period of time before the **Deluge** is, we may rightly expect, not so well known as what followed it, and more especially are the early dates held by faith. Accounts external to the Bible may not be trusted with any confidence at all, as they are not nearly trusted. So, we ought to turn to the account of Berossus on the dates of the 10 individual so-called "Chaldean" Kings, not to test the Biblical record, but that of Berossus.

Firstly, we might note that each of the Chaldean Kings ruling before the **Deluge** is given as ruling for a round number of saroi, with no additional fractions. What immediately appears as a possibility, is that the length of each Reign may have been fixed for a reason. One possibility is that a round number was the choice. Alternatively, the numbers may have been rounded down. There are also other possibilities, which we may get a view of as our understanding matures, but meanwhile we compute one at a time such things as we have pondered. [1]

[1](*Quitting work for the night.*)

Above: The Eve of the Deluge, Royal Collection, Windsor *(1840 painting by John Martin, oil on canvas, 143 x 218 cm))*

3[4] The similarities between the Biblical account and many Flood legends from around the world (including what is called "Chaldean" from Berossus, an "Eridu Genesis" of [circa] "16th century BC" Sumeria, as well as Akkadian versions, dating as early as Atra-Hasis, c. 1800 BCE), while far enough in variance to indicate independence, are numerous enough to evidence a common, true source. These accounts frequently were accompanied by Creation accounts, and the name of Noah was variously given, as "Atrahasis," "Ziudsura," "Xisuthros" or "Utnapishtim." The date of these records-- substantially all of which are believed to be copies of earlier records, is later than the 3282 BCE date for our Biblical **Deluge**. So, if they are independent, and record the same event in a Sumerian, Akkadian, Chaldean, or other context, a logical question arises, as to what else these relate. With particular regard to the Mesopotamian flood myth, Richard S. Hess and David Toshio Tsumura wrote a book: "I Studied Inscriptions from before the Flood" (1994).

3[5] Jewish and other scholars after the death of Alexander The Great were interested in potential alignments of a world outside of the Bible with the Bible text itself. One of these, called ("Pseudo-") Eupolemus relates the name of Babylon as originally being "Belus," the first city built after the Flood-- known later as "Babylon." The confusion of languages that resulted in the change to "Babylon" from "Belus," Mr. Bryant called a "labial failure," which our chronology dates to near 2745 BCE. Berossus was a Babylonian scholar who was possibly the source of the idea that the name of the first city was "Babylon." [1] He translated obscure cuneiform writing into Greek, since he was a Bablyonian scholar from the early part of the 3rd century BCE (circa 300-250 BCE). Mr. Hess mentions W. G. Lambert's assertion that there exists a "hebraized" version of Berossus (as conformed to the Hebrew way) containing a dual ("doublet") water creation story, one with creation by water alone (what was Babylonian tradition), and the 2nd a creation from "water and darkness," which was familiar from Genesis. [2,3]

[1](*I Studied Inscriptions from before the Flood, 1994, by Richard S. Hess and David Toshio Tsumura, p. 3, by Richard S. Hess*)
[2](*Ibid., p. 4*)
[3](*Genesis 1:2*)

Above: Entry of Alexander into Babylon, The Louvre *(1665 painting by Charles le Brun, oil on canvas, 450 cm x 707 cm)*

3[6] Hellenistic writer Berossus was known to Josephus, who wrote in the 1st century CE, and other than him it was later scholar Damascius (c. 458-538 CE) of Damascus to whom writers turned for Genesis-mythology comparisons. [1] Hess then addresses the discovery in 1847 CE by Austin Henry Layard, of the 600s BCE library of Ashurbanipal, holding thousands of the cuneiform tablets (written in usually Sumerian or Akkadian) and also some fragments. From such Mr. George Smith pieced together the famous, Akkadian, "Gilgamesh Epic" Tablet XI, the Flood Story. [2] The Akkadian Flood account had three identical copies, all accorded by Mr. Smith to date c. 660 BCE, Nineveh. However, he assigned the texts much greater antiquity. He discovered two more tablets of the Creation but was to die on his next expedition Aug 19, 1876, in Aleppo. [3] This highlights the seriousness of all such inquiries.

[1](*I Studied Inscriptions from before the Flood, 1994, by Richard S. Hess and David Toshio Tsumura, p. 4, by Richard S. Hess*)
[2](*Ibid.*)
[3](*I Studied Inscriptions from before the Flood, 1994, by Richard S. Hess and David Toshio Tsumura, p. 6;* secondary reference: *The Chaldean Account of Genesis. Containing the Description of the Creation, the Fall of Man, the Deluge, the Tower of Babel, the Times of the Patriarchs, and Nimrod; Babylonian Fables, and Legends of the Gods; from the Cuneiform Inscriptions, 1876, by George Smith:*)

> **"Whatever the primitive account may have been from which the earlier part of the Book of Genesis was copied, it is evident that the brief narration given in the Pentateuch omits a number of incidents and explanations-- for instance, as to the origin of evil, the fall of the angels, the wickedness of the serpent, &c. Such points as these are included in the Cuneiform narrative..."**
> (*The Chaldean Account of Genesis, 1876, pp. 13-14, Chapter 1, The Discovery of the Genesis Legends, by George Smith, quoting from his own article in the "Daily Telegraph" of March 4th, 1875.*)

3[7] Indeed the importance of the Biblical account has been responsible for many losing their way for pursuing it. After 1900 many appeared to question the Bible and try to assert the superiority of such Babylonian accounts. Of course, the **Deluge** occurred long before such a time as the nation of Israel came to exist, as Jacob was born 2044 BCE and came to be called Israel by God. In the 1900s the scholarship of the Babylonian textual interpretation attempted a break from the Hebrew text. [1] Over the years since then, newly discovered tablets or translations have included a few parallels, as regards Biblical Adam (Andreasen 1981) and Cain (Borger 1974), [2] in addition to Enoch (Ibid) and his journey to heaven. Furthermore, the discovery of Ebla's 3rd millenium BCE library reveals the name "Adam" and other Bible names. [3] Any borrowing from Mesopotamian sources into the Bible has been addressed by W. G. Lambert, based on Ugaritic texts, to confine it to the Amarna Age (1375-1315 BG). [4,5] The Bible continues to be evaluated and not overtaken, as inspiration by Jehovah is its distinguishing claim. While attempts to assert the superiority of some texts over that of the Bible are always made by some, it has indicated a failure to acknowledge that, while in myth the concept of creation may be the same process, there is a mythological nature to all such accounts, so that although they may contain identical elements, they are lacking in "theological content," called "distinctive" by Heinisch, and by Hasel "polemic" against any myths. [6,7] The actual age of the Genesis account is what some had mistaken, or the ambition of men, in seeking their own esteemed discoveries, caused them to assume that older mythological copies in the form of broken tablets left abandoned and in the dusty ground, are now superior to copies of a Book whose circulation exceeds all of them and was faithfully copied from a far longer antiquity. No, it is only by a great privilege that we come to be believers in a far greater salvation than that sought. Of course, we have to keep seeking such greater finds. [8] We should never kill the dreams of the dreamers, as we are warned also not to put out the fire of the spirit. [9]

[1](*I Studied Inscriptions from before the Flood, 1994, by Richard S. Hess and David Toshio Tsumura, p. 10, by Richard S. Hess*)
[2](*Also, for Cain cf. Kenites, Sawyer 1986, Ibid., p. 22*)
[3](*Ibid., p. 18*)
[4](*Ibid., p. 15*)
[5](*Ibid., p. 99, "A New Look at the Babylonian Background of Genesis," by W. G. Lambert*)
[6,7](*I Studied Inscriptions from before the Flood, 1994, by Richard S. Hess and David Toshio Tsumura, p. 10, by Richard S. Hess;* secondary reference 1): *Das Buch Genesis Ubersetzt und Erklart (Die Heilige Schrift des Alten Testaments 1/1; Bonn: Peter Hanstein, 1930) 109, by P. Heinisch. Heinisch quotes A. Jeremias (Das Alte Testament im Lichte des Alten Orients [3d ed., 1916] 35: "Ihm kommt es auf die Darstellung religioser Gedanken an, und er erfullt alte Formen mit neuem Inhalt." English Translation by Google: "He depends on the representation of religious thoughts, and he fulfills old forms with new content."* **cf. secondary references 2) and 3):** firstly, 2) *"The Significance of the Cosmology in Genesis 1 in Relation to Ancient Near Eastern Parallels," Andrews University Seminary Studies Vol. 10, 1972, pp. 1-20, by Gerhard F. Hasel;* and 3) *"The Polemic Nature of the Genesis Cosmology," Evangelical Quarterly, Vol. 46, 1974, pp. 81-102, by Gerhard F. Hasel*)
[8](*cf. Hebrews 2:1-4*)
[9](*1Thessalonians 5:19*)

Above: Matsya Avatar of Vishnu, Victoria and Albert Museum *(circa 1870 by Anonymous)*

Table 3.1
Chaldean Kings, in Saroi Before the Deluge

Abydenus		Apollodorus	
Alorus	10	Alorus	10
Alaparus	3	Alaparus	-
Amillarus	13	Amelon	-
Ammenon	12	Ammenon	-
Megalarus	18	Megalarus	18
Daos	10	Daonus	10
Euedoreschus	-	Euedorachus	18
-	-	Amempsinus	10
-	-	Otiartes	8
Sisithrus	-	Xisuthrus	18
Saroi, Composite Total			120

3[8] The account we have of Berossus is less than ideal, as it is transmitted from Abydenus and Apollodorus, which are both incomplete as to all the Reigns of the Kings. [1] Both are known indirectly from Syncellus and Eusebius. [2] From Berossus in Abydenus, and from Apollodorus, there is related in Syncellus and Eusebius, in a fragmentary way, a list of Chaldean Kings ruling in all 120 saroi. [3,4] Now let's examine it: The first King is named "Alorus" and rules 10 sari [cf. saroi]; the 2nd, "Alaparus" has a Reign of 3 sari (Abydenus but Reign length absent in Apollodorus, for this, as well as all the Reigns up to "Megalarus"); the 3rd, "Amillarus of Pantabiblon," who reigned 13 sari; the 4th, "Ammenon" who ruled 12 sari; the 5th, "Megalarus" who ruled 18 sari; [5] the 6th is "Daonus," (called "Daos" in Abydenus), ruling 10 sari; (from here Reign lengths are only in Apollodorus) 7th, "Euedorachus" ("Euedoreschus" in Abydenus) reigned for 18 sari; (8th and 9th unnamed in Abydenus) 8th, (named in Apollodorus) "Amempsinus" reigned 10 sari, 9th, (in Apollodorus) "Otiartes" reigned 8 sari; and finally in Apollodrus called "Xisuthrus" son of Otiartes, we have the hero of the flood myth ("Sisithrus," in Abydenus), 10th, who himself reigned 18 sari (120 sari in total). [6,7] Despite some missing details in each version, the high consistency between the two versions is quite evident. [8]

[1](*Apollodorus of Athens lived in the 2nd century BCE, as did Abydenus.*)
[2](*Syncellus died about 810 CE and Eusebius lived about 260-340 CE.*)
[3](*Quitting work for the night Apr 22, 2018.*)
[4](*The Chaldean Account of Genesis, 1876, by George Smith, p. 45-47*)
[5](*Both the account of Apollodorus and the account of Abydenus have the same number of Kings named but neither has a complete list of their Reigns together with their durations. After the 1st is named as Alorus and assigned 18 sari, the Reign lengths are not given anymore until the 5th one called Megalarus with 18 sari; In contrast, and in a complementary way, the account of Abydenus give the first six Reign lengths and names, and omits the 7th to 9th completely. The 10th, from time and account of the Flood, corresponding to the Biblical Noah, is called "Xisuthrus" ruling 18 sari in Apollodorus, whereas in Abydenus the Reign length is omitted, but the total for both accounts is exactly 10 Kings over 120 sari. The name of the 10th King in Abydenus is Sisithrus, and in that account this 10th King is described as having "sailed immediately to Armenia," once he deposits his records for safekeeping, having already received the forewarning that the Flood would occur on the 15th day of the month called "Daesius," as given by the deity "Cronus."*)
[6](*To his account, Abydenus adds: "With respect to the vessel, which yet remains in Armenia, it is a custom of the inhabitants to form bracelets and amulets of its wood. —Syncel. Chron. xxxviii.; Euseb. Præp. Evan. lib. ix.; Euseb. Chron. v. 8." The Chaldean Account of Genesis, 1876, by George Smith, p. 47*)
[7](*After his account of the Deluge events, Alexander Polyhistor adds the following: "The vessel being thus stranded in Armenia, some part of it yet remains in the Corcyraean mountains of Armenia, and the people scrape off the bitumen with which it had been outwardly coated, and make use of it by way of an alexipharmic and amulet." The Chaldean Account of Genesis, 1876, by George Smith, p. 44*)
[8](*See Table 3.1, above.*)

3[9] Both versions offer the exact same total, of 120 sari. Both also have the same character of the flood myth, a man called Xisuthrus or Sisithrus, names differing not very greatly from each other, and although they differ from the name "Noah," they are identical in character. Sisithrus sails "to Armenia," a detail very hauntingly true to the "mountains of Ararat" of the Bible account as well as the Ark site, at Doomsday Mountain, Turkey, today called "Noah's Ark National Park" and located in the Ararat mountains where the Ark is lying petrified. [1] When the ancient saros is equal to the modern one, the time spanned by 120 saroi (sari) is around 2160 years. When we add this to our **Deluge** date, we obtain:

3282 + 2160 = 5442 BCE

We subtract this date from our date, of 5550, which is the BCE date we computed for Adam's creation, and get:

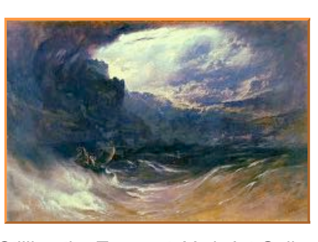
5550 - 5442 = 108 years
(difference in years from Adam's creation to beginning of Chaldean Kings of Berossus)

This is a fairly small discrepancy, which lends itself to any effort to understand it better or eliminate it. Hopefully, our understanding can improve more in time. When we believe that the earthly Rulership began after Jehovah's judgment of Adam and Eve and their departure from the **Garden of Eden,** as seems reasonable, a determination of the **Edenic** years would perhaps be helpful in our attempts to resolve the discrepancy.

[1](*On June 20, 1987 the Turkish Government officially established the site in the Ararat mountains known as Doomsday Mountain as the "Noah's Ark National Park," upgrading its status to that of "National Treasure." A groundbreaking ceremony for the Visitors Centre was held the same day, which centre was completed. The mountain is locally known as "Masher Dag" and "Mashur Dag," meaning, respectively, "Doomsday Mountain" and "Resurrection Mountain." Three earthquakes and heavy rains in the area May 19, 1948 revealed the Ark's shape which was then discovered in a Turkish Air Force aerial photo in October of 1959 by Captain Durupinar. The site is located near the village of Uzengili about 15 km southeast of the town of Dogubeyazit, near the border between Turkey and Iran and about 50 km south of Armenia's border, and about 25 km (17 miles) south of Mount Ararat, which is also within the borders of Turkey today). Many searches for Noah's Ark have been conducted also over the years on Mount Ararat, despite a scholarly consensus that the Bible does not say that the Ark landed on Mount Ararat, but on the "mountains of Ararat," in addition to it contradicting the observation of some believers that Mount Ararat is a new mountain created by volcanic activity that has taken place entirely after the time of Noah.*)

Above: The Deluge, Yale Center for British Art *(1834 painting by John Martin, oil on canvas, 1.683 x 2.584 m)*

3[10] All chronologies based on the Greek LXX text generally place the world's Creation and Adam's Creation at over 5 millenia before Christ's birth, or near to 5500 BCE. Eusebius had 5199, Theophilus of Antioch 5529, that of the Alexandrian computation 5493, and Byzantine, 5509. But we are not likely to change our 5550 BCE date just because the estimates of others are scattered greatly. Only under inspiration superior to that which produced it would we be able to improve it, which is difficult. The current difference of 108 years from the date 5442 for our date may not pose any problem based on a myth. However, other sources may be sought to reason it out. The suggestion might be that Adam and Eve were parents before the "world" could begin and Regnal Years count. Cain's birth year is not given in Genesis (nor Abel's) as a help here, while Seth is not born until Adam gets to 230 years of age in the LXX (130 in the Masoretic). The *Book of Jubilees* suggests that Adam was not graced by Eve's presence in the **Garden** until he had been there "80 days," and since a "Week" has often to be defined as 7 years in a Jubilee Cycle of 50, the period of time "80 days" can mean 80 years, as we see. This still does not account for 108 years, unless that reference to Year 28 of Osiris applies to Noah in some way that adds it to the end of 120 sari, with 80 years added to its beginning for Eve (extra: 80 + 28 = 108).



Above: Christ Stilling the Tempest, York Art Gallery *(1852 painting by John Martin)*

Table 3.2
Biblical Patriarchs Before the Deluge [3]

Age died	Name	Death	Sari	Rule Y1	Birth	Age Y1	Age end
930	Adam	4620	10	5442	5550	108	288
912	Seth	4407	3	5262	5319	57	111
905	Enosh	4208	13	5208	(5113)	(95)	139
910	Cainan	4012	12	4974	(4922)	(52)	164
895	Mahalalel	3857	18	4758	(4752)	(6)	318
962	Jared	3624	10	4434	4586	152	332
365	Enoch	4059	18	4254	4424	170	[494]
969	Methuselah	3289	10	3930	4258	328	508
777 (753)	Lamech	3294 (3318)	8	3750	4071	321	465
950	Noah	2932	18	3606	3882	276	600
		Sari Total	120		Ave.	126	342

3[11] As Höflmayer notes in his summary of radiocarbon dates in Egypt, scientific evaluation is always preliminary, because science is continually advancing and changing. [1] Seeing as the 10th Chaldean King is in the Flood myths as the character of Noah the 10th patriarch from Adam, a study with comparison of the ages of the patriarchs, *in situ* in our BG chronology, to the lengths of the Reigns of the Chaldean Kings may be of importance. Table 3.2 gives patriarchs and their births and deaths in the BG versus the chronology of the Chaldean Kings. A few problems appear in Reigns 3, 4, and 5 due to the fact that the patriarch in each case had not been born when the corresponding Reign began, and the problem is not fixable evidently without reducing a Reign, unless the patriarchs were not the same persons as the Kings. Of course, this is not really a problem, unless we are insistent that the patriarchs, not called Kings in the Bible, are in every case the same as Kings of Chaldea. These issues are very interesting in that they collect new information from the chronology of the patriarchs. The Bible is the reference used to make the scientific enquiry, as science is not possible without the truth. [2]

[1](*See also paragraphs 1-7 and 4-3, and reference: "Radiocarbon Dating and Egyptian Chronology- From the 'Curve of Knowns' to Bayesian Modeling," 2015, Online Publication Date Jul 2016, Oxford Handbooks Online, p. 15 of 20, by Felix Höflmayer.*)
[2](*Titus 1:9*)
[3](*Notebook 36, WG, p. 158*)

3[12] Lastly, the practical estimation of error is essential in scientific investigations, and is unwise to ignore. Radiocarbon and dendrochronology are also accountable. With respect to the Chaldean Kings, assuming that each Reign has been rounded down to the nearest Saros, then the estimated Reign is between 0 and +1 Saros too low. The average error, assuming a random distribution over and above the number of Saroi stated for each Reign is round-off, on average one half of one Saros per Reign. We had used this principle to determine the date 3282, adding extra years for the round-off over generations. The 10 Reigns are each thus increased by a half Saros, increasing the total of 120 Saroi, by 5 Saroi, to 125:

120 + (10 times (+1/2)) = 120 + 5 = 125 Saroi
108 years = 6 Saroi, and 120 + 6 = 126 Saroi expected

This is a purely scientific error correction as given, except that it introduces an unstated round-off error. However, it leaves us overall 1 Saros under 108 years, since 108 years is equal to 18 years times 6, compared to the 18 years times 5 = 90 years, of the correction. As Mr. Feynman points out in at least one of his talks regarding scientific theory, causing laughter over the "guess" part, theory may be beautiful but is no use if it doesn't fit the facts and is always just a "guess." And Feynman is one of the more brilliant of theorists. This theory is evidently not perfect, so we refine it. The 28 years of Osiris could make up 18 years or more, which could make the 5-saroi correction slightly less. Mesopotamian myth is in incredibly good agreement with BG chronology, so both can be supportive of the Bible. As scholars have learned, the Bible account of Noah is extremely difficult to improve upon or to brush aside.

end of Chapter 3: Indicative Native Deluge Accounts Total Extracted Saroi

Chapter 4: Thera Has Estimated Nothing

For this very reason, though I have great freeness of speech in connection with Christ to order you to do what is proper, I am exhorting you rather on the basis of love, seeing that I am such as I am, Paul an aged man, yes, now also a prisoner for the sake of Christ Jesus;
(*Philemon 8-9, New World Translation 1984*)

我雖然靠著基督能放膽吩咐你合宜的事； 然而像我這有年紀的保羅，現在又是為基督耶穌被囚的，寧可憑著愛心求你，
(*Philemon 8-9, 1919 Chinese Union Version*)

Above: Flight into Egypt, The Hermitage, St. Petersburg *(1600-1603 painting by Bartolome Carducho, oil on canvas, 127 x 105 cm)*

4[1] Looking for a date for the event in the aftermath of a big volcanic eruption such as the Thera Volcanic Event (VE) is much like looking for paper in a fire's ashes. No one seems to have noticed this fundamental problem. Studying human achievement using a source built upon a virus-plagued computer's operation is also no example. Everything in the history of Egypt's New Kingdom, some scientists would have us believe, is to be dated based solely on the date of the most destructive event ever. Excepting, of course, that the **Deluge** was a far more destructive event and they deny that it occurred. The Bible reminds us, here, to be always ready to make a "defense" before everyone who demands of us a reason for the hope in us, to sanctify Christ as Lord, in our hearts, and do so with a mild temper and deep respect. [1] Well, here it seems that this might be an opportunity to make a defense of our own hope to some unbelievers. On the other hand, what sort of "scientist" would look for the most vital evidence on an obliterated premise? Either way, this is going to take a lot of "splainin."

[1](*1Peter 3:15*)

4[2] I am myself a scientist and I also have a few theories about the dating of the Thera eruption, but these have to remain subject to the Egyptian chronology, which is not solely a political chronology, but also an useful, faithful creation properly founded on Bible Greatness. Our own chronology, the BG, is not the only chronology claiming that it is based on the Bible, nor are we, as most of them are, reducing the years of Israeli Kings. This is an important distinction about our chronology. Now while I admire to a greater or a lesser extent the work of some or all of these other "scientists," I can also say that I am fairly widely read currently on the subject of radiocarbon dating, and of Thera's science. So, I trust that this will be instructive and to many. My science background is MSc Physics, BSc Eng Physics, and I am a writer, interested in poetry and languages. My interests, areas of study, and abilities go further and in more directions than can be summarized or told. I am definitely biased in favour of the Bible, rightly so, seeing science and history in it in every quarter.

Above: Santorini Caldera Landsat Photo (volcanic crater, center, under water)
(0626h April 19 2011 NASA Landsat photo, resized and efficiency-optimized)

4[3] As a scientist, I want radiocarbon to succeed greatly. Perhaps I want this even more than other "scientists." However, this is really not the point of true science. Honesty is more important than anything, in "science." I think Höflmayer described the situation pretty well, in radiocarbon and Egyptian chronology, at the moment. [1] A lot of what he said I summarized in Chapter 1, so it will not be necessary to repeat much of it at present. Clearly what he said about the political chronology of Egypt applies more generally, to the Bible chronology. If this is the only Chapter you are reading then I may have to remind you that our chronology is not the same as most other Bible chronologies, or as any other one. We will deal with some aspects of it later in this our 16th article, as we have in many of the previous ones. Probably the main point relevant to the Thera event is **The Exodus** of Israel, and dated 1493 BCE by us.*

* Of course, others (eg. Manning) have argued for higher dates in the Aegean chronology, and we ourselves argue in earlier work (Trojan War) in favour of Betancourt's revision to the Aegean chronology, which is consistent with our own, as we have seen. However, such arguments as have been made for higher chronologies based on the insistence on "truth" are foolish when they ignore the Bible, the undisputed champion of truth in all matters and the best preserved record of history, in all ways: spiritual, scientific, philosophical, practical, wise, emotional, helpful, precise, prophetic and historical. This is my studied opinion, but I believe God concurs. I do not mean to ridicule those seeking for truth, but the point is that we are seeking for something better, and we are willing to adopt it, which was the point of the Bible, also (Isaiah 52:7), while these alternative theories are lacking or the Bible is, frankly, better.
[1](*"Radiocarbon Dating and Egyptian Chronology- From the 'Curve of Knowns' to Bayesian Modeling," 2015, Online Publication Date Jul 2016, Oxford Handbooks Online, p. 2 of 20, by Felix Höflmayer.*)

Above: Death of the Pharaoh's Firstborn, Rijksmuseum, Amsterdam (Exodus 12:29) *(July 20 1872 painting by Lawrence Alma-Tadema (1836-1912), oil on canvas, 77 x 124.5 cm)*

4[4] Of course science is ever-changing and advancing, but: "The saying of Jehovah endures forever." (1Peter 1:25) Or: "The measuring lines themselves have fallen for me in pleasant places. Possession [got] agreeable to me." [1] Whitelaw's suggestion is that evolution is less likely than our senses having been deceived by our perception and thus science is dependent on the existence of God. [2] Then there is Hasel's naturally "polemic" distinction. [3] These are distinguished scholars, but the Bible is and always has been unaffected by intellectual theorizing. The wisdom of this world is foolishness with God and a foolish thing of God is wiser than men (1Co1:25;3:19). It is not in the interests of science to take sides in open questions, which we have not begun to understand. The radiocarbon dating of Thera appears to be one such question, although here radiocarbon is not understood. More specifically, though, the nature of the errors in radiocarbon and their due causes has not been studied. It is my suggestion that error estimates are far below what the consideration of reasonable factors requires. I may propose later a mechanism to explain the offset.

[1](*Psalms 16:6*)
[2](*1972 Bible Science Newsletter. Creation Moments, "Does Christian Faith Depend Upon Scientific Fact?" by Robert L. Whitelaw, Department of Mechanical Engineering, Virginia Polytechnic Institute at Blacksburg*)
[3](*"The Polemic Nature of the Genesis Cosmology," Evangelical Quarterly, Vol. 46, 1974, pp. 81-102, by Gerhard F. Hasel*)

Above: Head, King Ahmose I (sculpture), Metropolitan Museum of Art, New York *(circa 1550–1525 BCE sculpture, 18th Dynasty Egyptian, Reign of Ahmose I, limestone, 56 cm high x 36.2 cm diameter)*

4[5] Bietak has written a summary of the low chronology for Egypt which appears to have high merit. It harmonizes, thus far, very well with our own chronology as it does also with Bronk Ramsey's (2010) C-14 study from Egypt. [1,2] Even if we ignored our own chronology it's impressive. There are several problems, not with Bietak's argument necessarily and, ostensibly, not with the Bronk Ramsey radiocarbon study of Dynastic Egypt in 2010, but with, it appears, the radiocarbon measurements at the cities of Tell el-Dab'a, Tell es-Sultan, and Akrotiri itself. These three cities correspond to the ancient cities of Avaris and Jericho, and the place of Thera's eruption. Tell el-Dab'a is a city where Bietak does excavations. However, there are a number of other problems as well. The "problem" is the radiocarbon results being higher, for Tell el-Dab'a in a seemingly known context and the date of which is around 1500 BCE, with similar results occurring for "ancient" Jericho, from our date of 1452 BCE there, plus on Thera, and in some other locations. Hopefully we will treat them honestly in what follows. However, we proceed with the bias that the Bible can't be ignored without retribution, and therefore we won't be flexible with regard to our Bible-based, BG dating. Anyone wishing to argue, including us, that this seems unscientific must be reminded that God is required for maintaining the laws of nature on which science rests. [3]

[1](*Radiocarbon and the date of the Thera eruption, Antiquity Volume 88, Issue 339, March 2014, pp. 277-282, by Manfred Bietak, published online Jan 02, 2015, Cambridge University Press.*)
[2](*"Radiocarbon-Based Chronology for Dynastic Egypt," 2010, Science 328: 1554–1557, by Bronk Ramsey, Christopher, Michael W. Dee, Joanne M. Rowland, Thomas F. G. Higham, Stephen A. Harris, Fiona Brock, Anita Quiles, Eva M. Wild, Ezra S. Marcus, and Andrew J. Shortland.*)
[3](*The prophetic and scientific accuracy of the Bible has been demonstrated in ways too numerous to mention.*)

Above: Santorini Pumice

4[6] The first element of Mr. Bietak's low chronology gives thought to the presence of the White Slip I pottery in Egypt which appears first several decades into the New Kingdom in Egypt and the Levant, and is present before the Theran eruption on Thera, as seen from one ancient bowl, which also is of a form "repaired in antiquity." Proponents of the high chronology for the Aegean, such as Manning, argue for complex, non-uniform White Slip. Bietak counters as Egyptian-made Tell el-Yahudiya Ware found in northern Cyprus and White Painted V-Ware from northern Cyprus found at Tell el-Dab'a imply contacts. When White Slip does not convince some, Bietak makes a 2nd argument based on "over 400 samples of pumice from well-stratified contexts" in Egypt and the Levant, and **"not a single sample was found before the Thutmosid** [ed. namely Thutmose I (1505-1493) or Thutmose II (1493-1490) - Thutmose III (1493/1468-1439)] **period in Egypt or the beginning of the Late Bronze Age"** [ed. c. 1550] "in the Levant. They appear **suddenly"** [ed. this is key] *"and in large quantities* **from c. 1500 BC onwards.** *No pumice"* [ed. none] "from the Minoan eruption at Thera was found **in Middle Bronze Age contexts," "which instead used resources of very different origin."** (Bietak 2014) [1]

[1](*Radiocarbon and the date of the Thera eruption, Antiquity Volume 88, Issue 339, March 2014, pp. 277-282, by Manfred Bietak, published online Jan 02, 2015, Cambridge University Press.*)

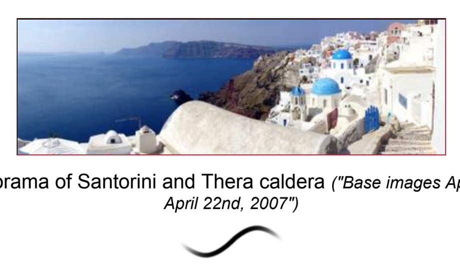
4[7] W. J. Eastwood reported, in 2002, on the environmental impact of the Thera eruption, specifically with regard to the ejection of tephra from the volcano, and on its dispersal axis in a northeasterly direction, resulting in the deposition of tephra from the eruption into the Anatolian lake sediment at Gölhisar, southwest Turkey. Importantly, radiocarbon results from peat found under the tephra gave 3330 +/- 70 and 3225 +/- 45 BP for the time of the eruption, the lower being 1508 +/- 52 BCE. [1,2] When we believe that the most recent radiocarbon date, 1508 +/- 52 BCE (the older is 1621 +/- 83 BCE), offers the last deposit before the tephra deposit covered and sealed it within what is now a lake bed, the date 1508 +/- 52 BCE is a potential date for the Thera eruption. It agrees with 1493 BCE as within the 1 sigma range of 1508-1456 BCE, and thus 1493 BCE of **The Exodus.** This is an important result with greater implications. But we need to get on to our discussion of other data.

[1](*Wrongly reported as 3300 +/- 70 in this paper, but 3330 +/- 70 in the originating paper, the current paper being: The Holocene, Volume 12, 2002, The environmental impact of the Minoan eruption of Santorini (Thera): statistical analysis of palaeoecological data from Gölhisar, southwest Turkey, pp. 431-444, by W.J. Eastwood;* originating paper for radiocarbon measurement: *"Geochemistry of Santorini tephra in lake sediments from southwest Turkey," 1999, Global and Planetary Change, Volume 21, pp. 17– 29, by W.J. Eastwood, N.J.G. Pearce, J.A. Westgate, W.T. Perkins, H.F. Lamb, and N. Roberts*)
[2](*CalPal calibration of 3225 +/- 45 BP*)

Above: Charles Bean on the Great Pyramid *(New Year's Day 1915 photo, Pyramid of Cheops)*

4[8] Friedrich et al. dated Thera to 1627-1600 BCE in 2006, based on a radiocarbon dating of an olive tree branch. [1] Cherubini et al. wrote a detailed critique in 2014, of the Theran olive branch date given by Friedrich et al. [2] Sturt Manning wrote an apparently scathing article, in 2014, reviewing Cherubini's, refuting him vigourously. [3] Bietak wrote his article that same year (2014), saying in this: Cherubini et al. "has to be fully supported." [4,5] Mr. Willard Libby its founder said that radiocarbon is not of any use without the written history, and he put the half-life of C-14 at 5568 years which differs from the revised half-life of 5730 years used by scientists today with little more certainty as to its true value. The average uncalibrated C-14 age of 3345 BP, obtained from "short-lived" samples in the Volcanic Destruction Layer (VDL) at Akrotiri on Thera (now the island known as Santorini) is obtained by a very involved procedure of sample preparation, including burning (after washes of the majority in acid-base-acid sequence) to get CO2 and then depositing as graphite before the measurement of the ratio of C-14 to some stable isotope of carbon. Acetone is sometimes used as a pretreatment procedure. As an experimental physicist who obtained a Masters in physics with my thesis in the sputtering of silicon as a means of depth profiling ion implants, I can soberly ask: Is this a measurement procedure or an experiment? The reason I ask is that it seems to me that extremely complex procedures such as the pretreatment and sample preparation protocols used here and which are standard in radiocarbon measurement nowadays, without beginning to introduce the variety of and uncertainties inherent in calibration using dendrochronology, are from my own experience **hardly introducing no new variables.**

[1](*Santorini Eruption Radiocarbon Dated to 1627–1600 B.C., Science, Volume 312, 28 APRIL 2006, p. 548, by Walter L. Friedrich et al.*)
[2](*The olive-branch dating of the Santorini eruption, Antiquity, Volume 88, 2014, pp. 267–291, by Paolo Cherubini et al.*)
[3](*Dating the Thera (Santorini) eruption: archaeological and scientific evidence supporting a high chronology, Antiquity, Volume 88, 2014, pp. 1164–1179, by Sturt Manning et al.*)
[4](*Radiocarbon and the date of the Thera eruption, Antiquity Volume 88, Issue 339, March 2014, pp. 277-282, by Manfred Bietak, published online Jan 02, 2015, Cambridge University Press.*)
[5](*Quitting work for the night, Apr 24 2018, 0728 h.*)



Above: Partial panorama of Santorini and Thera caldera *("Base images April 3rd, 2007, composited April 22nd, 2007")*

4[9] Interestingly, were we to abandon the dendrochronology calibration for the samples in the 3345 BP C-14 range, correcting only for the half-life of 5568 years, which differs from the more recent guess of 5730 years by an amount equal to 2.827% of 5730, while the desired 3442 BP (1493 BCE in our chronology) is 2.818% greater than 3345 BP, with the denominator being the larger number: [1,2]

$$\mathbf{(5730 - 5568) \div 5730 = 2.827\ \%}$$

(correction from Libby's to modern half-life of C-14)

$$\mathbf{(3442 - 3344.9) \div 3442 = 2.821\ \%}$$

(0.2% less, cf. 2.827% above)
(correction from measured BP to Exodus in 1493 BCE)

The average of 3344.9 BP is taken from P. James in his unpublished letter to the journal *Science,* sent by him to them Aug 20, 2006, and gives the result only about 0.2% different from the difference in half-life. [2] Mr. Manning gives a value of 3344.2 BP for an average. [3] In his letter, Mr. James points out the effects of old carbon and quotes Malcom Wiener who cited Floyd McCoy. [4]

[1](*1950 + 1493 - 1 = 3442 BP = 1493 BCE*)
[2](*"Comment on 'Chronology for the Aegean Late Bronze Age 1700-1400 B.C.' and 'Santorini Eruption Radiocarbon Dated to 1627-1600 B.C.'" Manning et al. and Friedrich et al. (28 April 2006, Reports, pp. 565-569; Brevia, p. 548) claim that radiocarbon results date the Minoan eruption of Santorini to the late 17th century B.C. A more critical assessment shows they have seriously underestimated the likelihood that volcanic carbon has "aged" the samples. (sic), by Peter James, Nick Thorpe, David Pyle, Nikos Kokkinos, Robert Morkot*)
[3](*"Chronology for the Aegean Late Bronze Age 1700 –1400 B.C.," Science, Volume 312, published April 28 2006, corrected April 24 2013, by Sturt W. Manning, Christopher Bronk Ramsey, Walter Kutschera, Thomas Higham, Bernd Kromer, Peter Steier, Eva M. Wild.*)
[4](*"Comment on 'Chronology for the Aegean Late Bronze Age 1700-1400 B.C.' and 'Santorini Eruption Radiocarbon Dated to 1627-1600 B.C.'" Manning et al. and Friedrich et al. (28 April 2006, Reports, pp. 565-569; Brevia, p. 548) claim that radiocarbon results date the Minoan eruption of Santorini to the late 17th century B.C. A more critical assessment shows they have seriously underestimated the likelihood that volcanic carbon has "aged" the samples. (sic), by Peter James, Nick Thorpe, David Pyle, Nikos Kokkinos, Robert Morkot*)

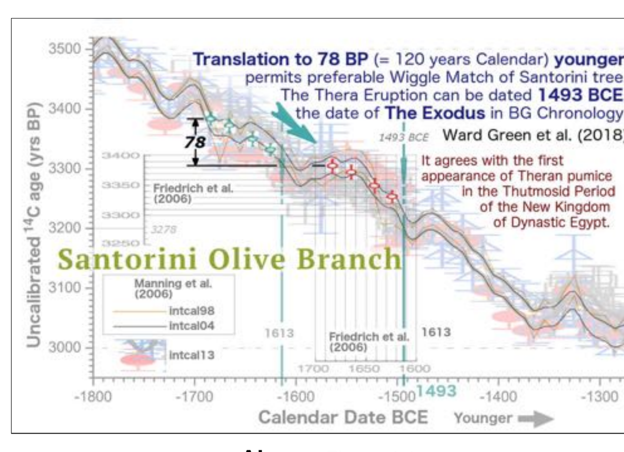
> **"Floyd McCoy, the volcanologist engaged in a long-term study of the Theran eruption, notes that 14C-deficient CO2 gas in the soil commonly leaks upward from a magma chamber prior to an eruption, to the point that such leakage is one of the major signals of an impending eruption used today ... McCoy further comments that in general he finds it 'surprising that the potential influence of magmatic CO2 on 14C dating is not more appreciated ... especially on an active volcano such as Santorini.' "**
> **(M. Wiener 2009, 'Response to the Friedrich et al. and Manning et al. Responses,' p. 329, in S. W. Manning & M. J. Bruce (eds.), *Tree-Rings, Kings and Old World Archaeology and Environment: Papers Presented in Honor of Peter Ian Kuniholm* (Oxford and Oakville: Oxbow Books)**

4[10] We have already noted in our BG (TWT/QWP) chronology a number of advantages in the high Aegean chronology, as in Chapter 8 of our article, *Trojan War (2015).* [1] However, perhaps the raising of the Thera date can yet be slight enough as to merely exact the date 1493 BCE. No contradiction appears between our QWP adjustment of the BG chronology and the dating of the Mediterranean. Supporting this is pumice as related by Wiener (2014): [2,3]

> **"Four hundred and fifteen samples of pumice and tephra from the Minoan eruption of Thera have been found** [at] a minimum of 15 sites in Egypt, the Levant, Cyprus and the Aegean, **all of them from New Kingdom contexts, whereas the 27 examples of pumice from earlier contexts all come from non-Theran eruptions.** The investigators note that if the Aegean Long Chronology were correct, ***it would indeed be most peculiar a phenomenon that pumice*** *from the Minoan Santorini eruption* ***were abundantly available*** *along the shores of the Eastern Mediterranean,* ***yet for some reason*** *had been left* ***unnoticed and unused*** *by the local inhabitants* ***for 100–150 years.***
> ***(Steinhauser et al., 2010)"***
> [2](*"Radiocarbon dating of the Theran eruption," Open Journal of Archaeometry, 2014, Volume 2:5265, pp. 60-64, by Malcolm H. Wiener, Jason W. Earle.*)
> [3](*"Provenancing of archeological pumice finds from North Sinai," Naturwissenschaften, 2010, 97:403–410; DOI 10.1007/s00114-010-0645-3, by Georg Steinhauser, Johannes H. Sterba, Eliezer Oren, Michaela Foster, Max Bichler*)

Should anyone be worried that such "contexts" in which pumice first appears (which seem no earlier than early New Kingdom Egypt) require Thera to be dated lower, or otherwise offer fuel for raising the New Kingdom date?

[1](*"Trojan War," 2015, par. 8-1,4 , by Rolf Ward Green, R. E. Green, M. F. Green (Skanes), and (the now late) A. R. Rutledge. There P. Betancourt is acknowledged as one of the leading proponents of the high Aegean chronology, also called the Aegean Long Chronology.*)
[2](*"Radiocarbon dating of the Theran eruption," Open Journal of Archaeometry, 2014, Volume 2:5265, pp. 60-64, by Malcolm H. Wiener, Jason W. Earle.*)
[3](*"Provenancing of archeological pumice finds from North Sinai," Naturwissenschaften, 2010, 97:403–410; DOI 10.1007/s00114-010-0645-3, by Georg Steinhauser, Johannes H. Sterba, Eliezer Oren, Michaela Foster, Max Bichler*)



Above: Figure 4.1
Santorini Olive Tree Radiocarbon Wiggle Matching Shown In Preferable "Low" Chronology *(78-year excess in BP years modelled showing the three most recent calibration curves or data in comparison).*

4 11 "Sufficient for each day is its own anxiety," we feel. [1] The equivalence of 1610 BCE and 1493 BCE is easily put within the error bars of the data points of the latest (intcal13) standard calibration curve for radiocarbon. This may be seen in Figure 4.1 where we present wiggle matching for the Santorini olive tree branch for 1493. A problem with the dendrochronological sequencing from about the time of 1500 BCE backwards could explain it, provided that older C-14 values can also be explained. A systematic error seems to be implied in some places. By "young" we mean "low," and by "old" we mean "high." The PhD Thesis of Stuart Dunn contains a comprehensive list, such as Myrtos-Pyrgos (low) and Chania (high), a cartouche of Khyan on an alabaster lid (low), frescoes at Tell el-Dab'a (low), White Slip bowl, Theran (low), Theran pumice (low), and "H/I" at Tell el-Dab'a (low). [2] Wiener (2012) presents an excellent treatment of a few problems with radiocarbon error, and summarily remarks how even the meaning of the word "probability" differs between statistics and what is meant in general usage. [3] He includes in his discussion the effects of reservoir carbon from old sources such as limestone, as does the very cogent Palincas (2017) overview of C-14 problems. [4]

[1](*Matthew 6:34*)
[2](*"The chronology of the Aegean late bronze age with special reference to the 'Minoan' eruption of Thera," Durham University, Durham, UK, Doctoral Thesis, 2002, metadata record link here, by Stuart E. Dunn*)
[3](*"Radiocarbon dating in archaeology: Interdisciplinary aspects and consequences (an overview," Exotic Nuclei and Nuclear/Particle Astrophysics (VI). Physics with Small Accelerators, AIP [American Institute of Physics] Conference Proceedings, 1852, 060006, 2017, doi: 10.1063/1.4984870, by Nona Palincas*)
[4](*"Radiocarbon dating in archaeology: Interdisciplinary aspects and consequences (an overview," Exotic Nuclei and Nuclear/Particle Astrophysics (VI). Physics with Small Accelerators, AIP [American Institute of Physics] Conference Proceedings, 1852, 060006, 2017, doi: 10.1063/1.4984870, by Nona Palincas. Palincas notes some problems with radiocarbon measurements on bone, in that when sufficient collagen is not present in the particular bone samples used for testing, then the residual mineral content of the bone has a bigger effect on the result, and intermingling between this part of the bone and the material in the earth around it is more likely than for the part containing collagen, so contamination of the bone carbonate can be problematic.*)

4 12 None of these issues or problems affect ones of faith. [1] Some proponents of the high Aegean chronology advocate raising the dates higher for the New Kingdom of Egypt. It is important to see that this may not be necessary. The "old carbon" effect in both freshwater sources and seawater has been observed as affecting all life forms that consume the water or that live in it, and calcium is associated with the carbonates that form using this "old carbon" and dissolve in water. Thus, with origins in the "old carbon effect" is the "hard water effect." The watering of plants in agriculture as well as using lime to increase crop yields affects C-14 potentially, as the uptake by plants of CO2 and carbonate is known. [2] Whenever seed from crop harvest is used in radiocarbon dating, I propose that measured C-14 may be less, thus the radiocarbon ages obtained may well appear "older." Limestone and other rocks contain older carbon usually which is correctly called a "carbon reservoir effect." I have not seen this reported yet in radiocarbon work. But clearly this appears to have been badly neglected, and needs to be considered as a known source of error. The study cited found uptake by the roots of plants of the order of a few percent of respiration, thus nearly the amount required to account for 70 years from 3350. [3,4]

[1](*2Corinthians 4:18; 5:7*)
[2](*On the Uptake of Carbon Dioxide and Bicarbonate by Roots, and Its Influence on Growth, Plant Physiology, November 1957, pp. 513-520; DOI: https://doi.org/10.1104/pp.32.6.513, by J. A. J. Stolwijk, Kenneth V. Thimann*)
[3](*This is discovered here by Ward Green. It seems reasonable that due to natural bedrock and its relation to the water supply locally, the lime content introduced by agriculture may vary for different places, as may other carbon minerals in the rocks and soils released by rainfall or irrigation plus use of agricultural lime, with the resulting change in plants being roughly a few percent "old carbonizing" of C-14 content, and so a few percent fewer C-14 years BP.*)
[4](*Quitting work for the night Apr 25, 2018, 0525 h EDT, signed WG*)

end of Chapter 4: Thera Has Estimated Nothing

Chapter 5: Historical Egyptian Astronomical Provenance

Above: Oia, Santorini *(Greece)*

I am exhorting you concerning my child, to whom I became a father while in my [prison] bonds, Onesimus, formerly useless to you but now useful to you and to me. This very one I am sending back to you, yes, him, that is, my own tender affections. (*Philemon 10-12, New World Translation 1984*)

갇힌 중에서 낳은 아들 오네시모를 위하여 네게 간구하노라저 가 전에는 네게 무익하였으나 이제는 나와 네게 유익하므로네게 저를 돌려 보내노니 저는 내 심복이라 (*Philemon 10-12, Korean Revised Version*)

5 1 In our previous Chapter we attempted to lower the date of Thera from that of the higher chronology (1613 BCE) to one more compatible with Egypt and the Bible, 1493. Since the former date was based on radiocarbon dating, it is essential to understand that 1613 is the same as 1493 BCE according to the 2013 radiocarbon calibration curve (intcal13) error bars for data points upon which the curve is based (as is shown in Figure 4.1, above): [1]

> **This may be seen in Figure 4.1 where we present wiggle matching for the Santorini olive tree branch for 1493. A problem with the dendrochronological sequencing from about the time of 1500 BCE backwards could explain it, provided that older C-14 values can also be explained. A systematic error seems to be implied in some places.**
> (*Paragraph 4-11, above*)[1]

The systematic error could be described as one causing radiocarbon dates to be older at Thera, Tell el-Da'ba, and Tell es-Sultan, as we also mentioned in Chapter 4. Since the Theran pumice arrived in the New Kingdom, it can't be separated from the dating of the New Kingdom. The dating of the Egyptian New Kingdom has always been determined absolutely with reference to its astronomy. With enough confidence in that astronomy, and, knowing when the pumice arrived in Egypt, we can determine the size of the systematic error in the radiocarbon dates.

[1](*Paragraph 4-11, above. For example, the BP date at 3278 years C-14 on the vertical axis at the extreme left, when extended horizontally, goes through, and aligns with the data scatter seen in the intcal13 curve, from 1613 to 1493. Some of the radiocarbon measurements from the Thera VDL at Santorini did measure near 3278 BP, but this is not the only BP value that can date to 1493 BCE, nor the only one given as 1613.*)

5 2 That Jericho, at ancient Tell es-Sultan, is one of the places at which an error is implied is seen from dates given for its destruction at 1550 BCE, which have been quoted from Dame K. Kenyon's work in 1952-1958, during which years she excavated at Jericho, which early date caused her to conclude that Joshua was not at Jericho. Since the time of Joshua's destruction of Jericho from our Bible chronology is 1452 BCE, or exactly 100 years after the start of the Egyptian New Kingdom, with 1552 as Year 1 of Ahmose I, and the New Kingdom dating also having been historically anchored to the day of rising of the star Sothis, dating may be linked to astronomy. We have examined this in previous articles, but it may be useful to try to simplify and improve its accuracy. The Sothic rising in the Reign of Amenhotep I, as well as one many years earlier (in 2774 BCE), are compared, with regard to the arcus visionis (visibility) at some of the probable sites where the observations happened. Since this is complex, the believability of the dating is greatly increased when we can find a simpler model. If we can establish the Sothic dating of this Egyptian chronology certainly, it is tantamount to proving that the old Thera C-14 dates suffer from systematic error. When an error is proven, its sources may be evaluated.

Above: Santorini caldera panorama *(Greece)*

The Historical Ancient New Kingdom Solidified

5 3

> **In the absolute dating of Egypt, the day of rising for** the star Sothis is generally used to determine crucial anchor points in the chronology, of the Middle Kingdom and New Kingdom, based on two Sothic rising records in the Reigns of (ostensibly) Senusret III, and Amenhotep I, respectively, as circa 1878 Year 1 and 1526 Year 1. [1] Schaefer (2000) states that the method of calculation, originating with Ptolemy's arcus visionis, and used in the work of Schoch (1928), had not been improved while astronomy in the days since had "made great advances." [2] According to Mr. Schaefer, most Egyptologists for 2000 accepted these dates computed of the rising of Sothis. There are actually two Sothic risings possible for the New Kingdom, one in Year 9 of Amenhotep I (or so it is claimed, from the Ebers Papyrus) in 1526-1525 BCE, and one in Year 4 of Seti I, sometime near 1323 BCE or so.

The Year 9 date of Amenhotep I is to us an anniversary of Sothic rising in Year 1 so that Year 9 is 1517 BCE. The calendar day for this Sothic rising anniversary in 1517 is Epeiph 9 at Thebes, and falls on Lunar Day 02. [3] From 1493 BCE, the 12 years of Miphris in Eusebius are added back to get 1505 as the accession of Thutmose I, said to be Phamenoth 21, 'certain' as dated on Mar 22. [4] It dates 12 y 1 mo before May 1493, **The Exodus.** While **The Exodus** is fixed by lunar requirements and alignments, the 1505 date could get moved to 1506, Mar 23, which could move Year 1 Amenhotep I up a year. Since we preserve the same months as Josephus for each Pharaoh's Reign, in Manetho, as much as possible, then Josephus gives 25 y 4 mo for Ahmose I, and also 20 y 7 mo for Amenhotep I which make 45 y 11 mo total, and we have a 'certain' accession of Thutmose I in Mar, which implies, with **The Exodus** date, May 03, that the 12 y 9 mo for Thutmose I is not right in its 9 months. We may take 13 y 1 mo, or 12 y 1 mo, but 12 y 9 mo may not be right between these beginning and ending dates. [5,6]

[1](*The conventional absolute chronologies as given by or guided by these anchor points are independent of our BG chronology as to the effect of Bible dates.*)
[2](*"The Heliacal Rise of Sirius and Ancient Egyptian Chronology," Journal for the History of Astronomy, Volume xxxi, 2000, pp. 149-155, p. 149, by Bradley E. Schaefer*)
[3](*The lunar alignment is preferred, because it is believed Egyptologists (Rolf Krauss, for example) that the Egyptians celebrated dates within 5 days after the new moon (lunar conjunction). This is also a reason to prefer 1517 as opposed to 20 years earlier for Memphis (1537 Sothic rising, for the more northerly latitude), seeing as the lunar alignment is not duplicated at any other year in the vicinity of 1517, for day Epeiph 09. Thebes is also preferred, as it's some 200 years later that Ramesses II moves the capital to Pi-Ramesses.*)
[4](*So: 12 y Eusebius, 12 y 9 mo Josephus, 13 years Africanus, in the three different versions of Manetho, for this Pharaoh of the 18th Dynasty of Egypt, who was called Miphris, Mephres, or Misaphris, and is accepted by modern scholars as Thutmose I*)
[5](*A plausible reason for 12 y 1 mo as the Rule of Thutmose I is that the calendar date shifts in 1525 in the Egyptian calendar (Almagest Ephemeris Calculator), and from July 14 to July 13 for the date of Epeiph 09, and 20 y 7 mo takes us from Mar 1505 back to 1526 BCE, August, for the accession of Amenhotep I. This enables the Sothic rising to occur in his Year 1, in 1525.*)
[6](*We would like to believe that the 'certain' day of accession of Thutmose I is true, which is why we do permit the ignoring of Manetho's month number for this Pharaoh, except that we do account for it in the total time for all three Pharaohs, which does raise Ahmose I Year 1 to late 1552 BCE for the New Kingdom beginning. There can be more than one accession, with CoRule, for example, so the numbers of Manetho may be correct, and often are seen to be, or, may have been corrupted, but we need to allow for the possibility that every source is correct, with all information faithfully given.*)

Sothic Rising in 1526 BCE

5 4 When Year 1 began Epeiph 09 1526 BCE (Sothic Rising at Thebes), Epeiph 09, 1517 BCE is just less than 9 years before the July 13 (Epeiph 11) Sothic Rising at Thebes [1] and is Year 9, July 11, Lunar Day 02 (Sothis rises two days later). The 20 years 7 months of Josephan Manetho for the Reign of Amenhotep I comes from July, 1526 BCE down to 1505, February, though Amenhotep I's accession may occur anytime after Epeiph 09 (July 14), 1526 BCE, **as Epeiph 09 may just mark Sothic Rising as a calendar year's beginning, for his Year 1 (The Ebers Calendar). [2]** Since the III Peret 21 accession of his successor, who is Thutmose I, is described as 'certain' (AEC p. 199), [3] and Phamenoth 21 (III Peret 21) is Mar 22 in 1505 BCE, the 12-year Reign of Thutmose I (Miphris) from Manetho is assured if Thutmose I drowned in the Red Sea in May 1493 BCE, as our BG chronology assures us that he did. Counting backwards from March 22, 1505 BCE, 20 years 7 months for Amenhotep I puts his accession on August 30 1526 BCE, if exactly 7 months, which is Mesore 26, one month and 17 days after Epeiph 09, 1526 BCE (47 days). Thus, Amenhotep I may not have acceded until after the Sothic Rising which began the calendar year, 1526 BCE. Also, since this is an excellent result, the 25 years, ruled by Amenhotep I's predecessor, Ahmose I, puts the accession of Ahmose no earlier than late in 1552 as we wrote already in our article *Trojan War (2015).* [4]

[1](*PLSV 3.1.0, 1517 BCE, Sirius, at Thebes, Egypt, arcus visionis 8.2-8.9, noting also with Table 1 of Schaefer's article ref 2 par 5-3 above, a value of arcus visionis of about 8.4 in PLSV 3 is equivalent to the decimal date of July 17.8 as given by Mr. Schaefer for 1500 BCE, and for 30 deg latitude over the years near 1500. [one in four are Jul 17, three are Jul 18] This 8.4 value for the arcus visionis using PLSV 3.1.0, at Thebes, gives the rising of Sothis in 1526, when the day is Epeiph 09 (Jul 14, 1526). With an arcus visionis of 8.4, using PLSV 3.1.0 for the range 1530-1510 BCE, three out of any four years compute to Jul 13, and one, Jul 14.*)
[2](*The Ebers Calendar is a document containing the date Epeiph 09, Year 9 of Amenhotep I, and has a reference to the Rising of Sothis, which has been used for years as an absolute date, since the star Sothis or Sirius rises on a different calendar day depending on the year given.*)
[3](*Ancient Egyptian Chronology, 2006, p. 199, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The New Kingdom," II.8, by Erik Hornung*)
[4](*"Trojan War," 2015, par. 8-1,4 , by Rolf Ward Green, R. E. Green, M. F. Green (Skanes), and (the now late) A. R. Rutledge.*)

Above: Entrance to the Tombs of the Kings of Thebes *(1848 colour lithograph, original by David Roberts, see also other version)*

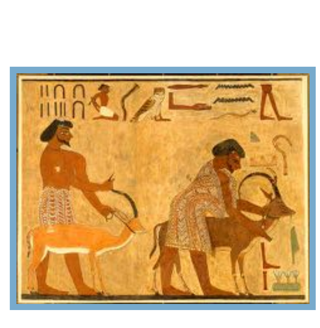
5 5 Thutmose I has a Year 2, II Akhet 15 (Phaophi 15) date which is Oct 17, 1504 BCE, Lunar Day 05, and roughly a year and a half after his accession of March 22, 1505. [1] Another recorded date could be (as this one also could be) considered Year 3, in May 1504 BCE, as it includes 3 different Sothic Years (viz.: Jul 1506-Jul 1505, Jul 1505-1504 (Mar 22), and (Mar 22) 1504-May 1504) and/or Regnal Years, and is his return from Nubia, in Year 3, on I Shemu 22 (Pachon 22) May 22, 1504 BCE. If I Shemu 01 is the beginning of the year (ie. May 01), then the time elapsed since the accession Mar 22, 1505 likewise includes three different years (or parts thereof). The reason for interpreting the Year 3 as "parts of" three different Regnal years is that May 19, 1504 is a lunar conjunction of Lunar Day 01, so May 22 is Lunar Day 4. The three ways of determining the start of an Egyptian calendar year are Thoth 01, Sothic Rise, and Pachon 01 (start of summer), noting also that summer solstice in 2774 BCE coincided with both Thoth 01 and Sothic Rise, when the Egyptian calendar, we perceived, was started. [2] The significance of Pachon 01 as 1st day of summer, as it came 8 months after Thoth 01, may be viewed as some later convention for beginning the Egyptian year, thus implying a date for the Reign of "Manesseh" (Amenemhet III) of: 2774 - 240 x 4 = 1814 BCE (and Pachon 01 1814 is summer Sothic Rise Jul 18 at Illahun for 1st time). The Reign of Manasseh or Amenemhet III ended 1814 BCE. [3]

[1](*See middle of previous paragraph for this.*)
[2](*Quitting work for the night Apr 26, 2018, 0617 h EDT.*)
[3](*See our article* ***Phoenix, Return of.***)

The Heb Sed Festival and the year 1814 BCE

5 6 The Heb Sed festival celebrated by Pharaohs from times as early as "Den" of the 1st Dynasty, who celebrated a 1st Heb Sed festival in his Year 22, later was clearly celebrated beginning in Year 30 and was connected to a date of Pachon 01 at Year 29's end and entirety of the Year 30 itself. The death of Joseph, who died in Egypt in 1843 BCE, is exactly 29 years (1843-29=1814) before 1814, which is the first year Pachon 01 coincided with the Sothic Rising of Illahun, Egypt, counting backward and using July 18 as that date, while in 1813 or later years Pachon 01 fell on July 17 (i.e., after Amenemhet III's Reign ended, which in our BG chronology is 1814, and is from Egyptological research unassociated to our own). [1] It is purely from the last Pachon 01, Sothic Rising at Illahun that the Pachon 01 connection to the Heb Sed or Tepi Shemu feasts therefore seems to arise. [2-5]

[1](*Notebook 37, WG, p. 10, below middle*)
[2](*PLSV 3.1.0, Pachon 01 July 18 Sothic Rising, using arcus visionis 8.64-8.83, Illahun*)
[3](*The dating of Ammenhet III's Reign as ending 1814 BCE was discussed at some length in "Phoenix, Return Of."*)
[4](*Sed festivals are discussed in Chapter 11 of "The Uncut Tut."*)
[5](*Tepi Shemu feasts are considered in Chapter 5 of "Trojan War."*)

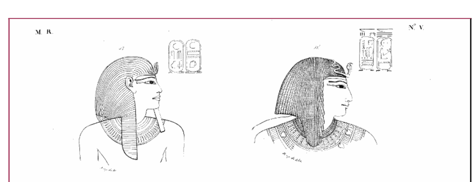


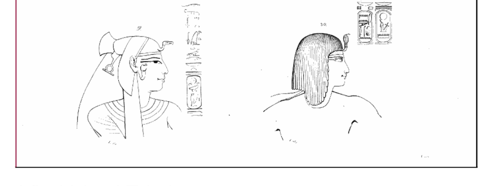
Above: Leaders of the Aamu of Shu, nomads, Metropolitan Museum of Art (facsimile) *(Reign of Senusret II, facsimile of tomb painting, tempera on paper, facsimile 63.5 x 81.5 cm, Tomb of Khnumhotep (Beni Hasan 3))*

Ramesses I and Seti I's Sothic Rising 1323 BCE

5 7 From my notebook 36, page 170, Sunday, April 01, 2018, Ramesses I has a lunar date Jan 06 1326 BCE in Year 2. [1] If the Sothic Rising Thoth 01 was in 1323, it is more likely that the observation was made at the city of Pi-Ramesses rather than Memphis, and it was to Pi-Ramesses that Ramesses II moved his capital. In this case, Jul 20 1323 BCE is Thoth 01 and it requires an arcus visionis between 8.87 and 9.06. [2] With Ramesses II (accession assumed III Shemu 27) acceding Jun 09, 1315 BCE, IV Shemu 13 Year 11 for his father Seti I would be 1316 (Jun 25), and this places Jun 28 of his Year 1 in 1326 BCE, with Jun 27, 1323 in his Year 4 (but so is Jul 20, 1324). Year 4 in 1324 requires an arcus visionis between 9.07 and 9.26. [2-4]

[1](*Mecheir 20 Year 2 Ramesses I is probably Jan 06, 1326 BCE, which is Lunar Day 04 based on conjunction Jan 03 (Espenak), and based also on 1322 being about 4 years after Seti I's accession in 1326, with the 1322 Sothic Rising in his Year 4 (his accession could instead be 1325 or the Sothic Rising 1323, but evidently not both). Also, it is assumed in the foregoing that the Reign of Ramesses I is in accord with Manetho's 1 y 4 mo in Josephus, in this case from the death of Horemheb in Feb 1327 to Jun 1326 BCE, and that the CoRule of Ramesses I with Horemheb is from 1331 to 1327, accounting for Manetho's 4 y 1mo for "Armais" (1331 to 1327) in Josephus (also for "Armais," in Eusebius). [Notebook 36, WG, p. 170]*)
[2](*Notebook 36, WG, p. 175*)
[3](*Notebook 36, WG, p. 176. Negebauer determined a value of 9 degrees in 1926/29, and Pachner in 1993 found 8.85 +/- 0.15 degrees for the arcus visionis in Egypt*)
[4](*We also believe that the arcus visionis is larger near the Mediterranean coast and in the Nile Delta, where increased evaporation from the sea and the moist earth creates mist.*)





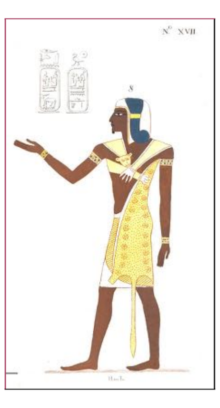
Above: Ramesses I and Seti I (and Tsire) *(1832 illustration, Figure 17: Ramesses I; Figure 18, 20: Seti I, Figure 19: Tsire, L'Egypte antique illustree de Champollion et Rosellini. (Paris 1933, p. 43).)*

5[8] There are a number of very good reasons for believing, although it is not certain, that there was a rising of Sothis, observed Thoth 01, 1323 BCE, beginning the new Sothic Cycle during the Reign of Seti I, 19th Dynasty. Seti's father Ramesses I began the 19th Dynasty with a very short Reign of 1 y 4 mo from Josephan Manetho and an attested year 2 is the only other evidence we have. But the time period for the rising of Sothis is fairly accurately known from a later Sothic rising in 139 CE, [1] and from a statement by the mathematician named Theon: [2-5]

> **"Rule for the heliacal rising of the Dog. For example, if we want to get the time of heliacal rising of the Dog for the hundredth year of Diocletian we count first the years passed since Menophres until the end Augustus: they give the sum of 1605 and, to it adding after the beginning of Diocletian 100 years we will have, in all, 1705."**
> [2](*"Menophres Reconsidered ," The Journal of Juristic Papyrology, Volume 25, 1995, pp. 99-108, by Adam Lukaszewicz*)

A Sothic rising comes five years earlier for every one degree of latitude further north, and one year earlier for every 0.2 increase in the arcus visionis, roughly. [6]

[1](*Censorinus recorded the Sothic rising of 139 CE, see our article "Trojan War," 2-1*)
[2](*"Menophres Reconsidered ," The Journal of Juristic Papyrology, Volume 25, 1995, pp. 99-108, by Adam Lukaszewicz, [quote from Theon, a mathematician who wrote in Greek, translated into English from French by WG, and discussed at length in the article by Lukaszewicz.]*)
[3](*Ramesses I had the Prenomen (Throne Name) "Menpehtyre" (cf. Menophres), and since he was the first Pharaoh of the 19th Dynasty, he may be implicated by "Menophres," but because of the shortness of his Reign the Reign of his successor becomes equally likely since Sothis will rise three or four years in a row on Thoth 01, anyway. We may see another parallel to the name of the Pharaoh of* ***The Exodus,*** *"Nenephreous," which we may see. In the meantime, we arrive at about 1323 BCE as Sothic rising in the time of Seti I by subtracting 284 (start of Diocletian in years CE) from 1605, to get 1322 with no zero year, or by subtracting 139 (Sothic rising, in CE, from Censorinus) from 1460 years (approximately, a Sothic Cycle) to get 1322 with no zero year again, and without knowledge of the location of the observations.*)
[4](*Czerny concluded that "Menophres" more likely referred to Ramesses I, although we need not agree.* ***Journal of Egyptian Archaeology,*** *Vol. 47, 1961, Brief Communications, "Note on the supposed beginning of a Sothic period under Sethos I," pp. 150-152, by Jaroslav Czerny*)
[5](*Sethe argued that the Rising of Sothis referred to by Theon occurred in the first four years of the Reign of Seti I.* ***Zeitscrift fur Agyptische Sprache,*** *Volume 66, 1931, pp. 1-7, "Sethos I. und die Erneuerung der Hundssternperiode," (Seti I and the Renewal of the Sothic Cycle), by Kurt Sethe*)
[6](*Planetary, Lunar and Stellar Visibility, v. 3.1.0, November 20, 2006, Rainer Lange and Noel M. Swerdlow, University of Chicago, a computer program by www.alcyone.de*)



Above: Merneptah (grandson of Seti I) *(1832 illustration, cropped (had six figures, 6-11), Figure 8: Merneptah, L'Egypte antique illustree de Champollion et Rosellini. (Paris 1993, p. 85))*

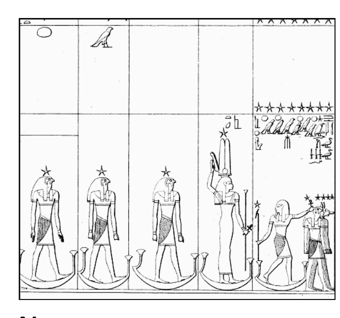
5[9] A case of the confusion of Seti I with his grandson is documented by H. Frankfort regarding a Cenotaph proven in 1933 to belong to Seti I, despite the many erasures of Seti's name from that Memorial at Abydos apparently done to replace Seti's name with that of Merneptah the grandson of Seti I, whose name also is like Menophres. [1] So while we can be wary of overconfidence for the date of the one called Menophres by Theon, it appears to be possible to identify Seti as the "Menophres" of Theon. Mr. Kurt Sethe wrote an article in 1931 about evidence in the inscriptions of Seti I that pointed to a Sothic rising which occurred during his first 4 Regnal years. [2] Sethe's opinion was strongly in favour of the Reign of Seti having begun with a Sothic rising, based upon the inscriptions in Years 1 and 2 that implied beginnings:

> **"Year 1, beginning of eternity (nhh), beginning of eternity (d.t), the celebration of millions of anniversaries, (spending) hundreds of thousands of peaceful years, the lifetime of the Re ', [], of the [King]ship [of the Atum on the part of the Majesty of] King Seti I."**
>
> **"Year 1, repetition of birth1, (under) King Seti I"**
>
> **"Year 2, repetition of the birth, (under) Seti I."**
> [2](*Zeitscrift fur Agyptische Sprache, Volume 66, 1931, pp. 1-7, "Sethos I. und die Erneuerung der Hundssternperiode," (Seti I and the Renewal of the Sothic Cycle), by Kurt Sethe*)

[1](*"The Cenotaph of Seti I at Abydos," in two Volumes (1933), 39th Memoir of the The Egypt Exploration Society, p. 23, by H. Henri (Hans) Frankfort*)
[2](*Sethe argued that the Rising of Sothis referred to by Theon occurred in the first four years of the Reign of Seti I.* ***Zeitscrift fur Agyptische Sprache,*** *Volume 66, 1931, pp. 1-7, "Sethos I. und die Erneuerung der Hundssternperiode," (Seti I and the Renewal of the Sothic Cycle), by Kurt Sethe*)

Astronomical Ceiling in Seti's Tomb

5[10] The tomb of Seti I has an astronomical ceiling showing stellar and lunar indicators regarding what clearly to me appear to be his Regnal duration and date of death. Research has not turned up any work by others on this, which means I will be required to make interpretation. However, we have seen an expectation of Year 4 for the year of first Thoth 01 Sothic rising (Gertoux), and we note in the stellar portion of the tomb depiction what seems clearly to indicate 10 years by divisions closed in from below by a line of 10 units in length, ending, at the 10th division, with a circle representing a Sun (or day), quite possibly his date of death in Year 10. [1] Another confirmation that these units are Years is the appearance in the units Years 3 through 6 inclusive of single bird hieroglyphics, as though 4 Sothic risings, and these bird glyphs appear inside the divisions made by the lower line that only extends over 10 divisions. While the last three are hawklike, the first bird from left is accompanied by several other glyphs (one star) and appears more like a vulture than a hawk in Year 3. Below Year 1 is the Bennu bird with star, indicating a rising of Sothis symbolically, perhaps the Year 3 one. Above the Year divisions there appear only two signs-- for Year 1 a hieroglyph of Osiris, and two circles for Year 6 above the final bird, perhaps showing the final rising of Sothis as occurring on Thoth 02, a day late. The only other Year unit having a sign is Year 7, with a multi-glyph sign having no bird, to be considered as possibly some symbol for the conclusion or a festival.
[1](*Absolute Chronology of the Ancient World from 2840 BCE to 1533 BCE, August 3, 2016, p. 43, By Gerard Gertoux*)



Above: Seti I tomb ceiling, Sopdet
(1315 BCE, 18th Dynasty Egypt, astronomical ceiling, star Sothis depicted as Sopdet, 3rd vertical division right of end point of Regnal Year divisions, which are 10 in number (click to see wider view), starting with Benu bird at left.)

5[11] The star Sothis appears three vertical divisions right of the last Year division, as though three hours ahead of sunrise, there being 25 of these vertical divisions after the Years end, thus apparently indicating hours. Each of these later units thus spans 15 degrees of arc to make the 360-degree expanse of heaven, consistently shown with celestial symbols of constellations at top. There are three boats following Sothis and one leading her, each having its own division, and its own figure. If the first unit indicates dawn, with Sothis a couple of hours ahead of the dawn as depicted, a date is seen which is about a month or two after Jul 20, which date is when Sothis first gets ahead of the Sun, so seventy days of embalming after a Jun 9th death corresponds to August 18, one month after July 20, when Sothis rises. Sothis thus has appeared to have moved two hours ahead of the Sun assuming she rose in the first unit Jul 20, and of course two hours is one twelfth of 360 degrees, which she traverses during the year, and so one month. The celestial chart is thus indicating a death in June of Year 10 (11, perhaps), and a funeral 70 days later. Since Ramesses II acceded June 9th 1315 BCE, by us, we see that Sothis rose Thoth 01 in Seti I's Year 3 or 4. Between Year 3 and Year 11 only 8 years elapse, so not enough to move Sothis more than 8 of 1460 years, which equates to only about two days of 360 during the years from Year 3 and Year 11, not enough to be significant.

Position of Sothis is True

5[12] The Reign of Seti I is apparently well-attested, apart from his Year 10, having a great abundance of sources. [1,2] The only attestation for Year 11 is not proof for Year 11, thus the 1323 BCE Sothic rising could be Year 3 if Year 1 was 1325 BCE or 1326 BCE, without a difficulty. The historical provenance of Egypt in the astronomical dating of the New Kingdom thus has proven quite sound, not only for Amenhotep I with Year 1 in 1526, but also for Seti I with Year 1 in 1326 BCE, on a Sothic basis. Something which was not noticed before by me was lunar alignment for Seti I with Year 1 as 1326 BCE, which is another astronomical provenance of this BG chronology. When we have thoroughly examined such lunar alignments as those of Seti I (with Year 1 in 1326 BCE) and those of Horemheb (with Year 1 in 1341 BCE), we will see how well astronomy fits these dates, to present us with an excellent historical Egyptian astronomical provenance. [3] In the next chapter, we will examine some lunar dates, and the effect of the arcus visionis on Sothic rising, which will prove the BG as an unparalleled chronology.
[1](*Ancient Egyptian Chronology, 2006, p. 211, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The New Kingdom," II.8, by Erik Hornung*)
[2](*The Monuments of Seti I and their Historical Significance: Epigraphic, Art Historical, and Historical Analysis, Ph.D. Thesis, Department of Near and Middle Eastern Civilizations, University of Toronto, 1998, 548 pages, by Peter James Brand*)
[3](*"The Heliacal Rise of Sirius and Ancient Egyptian Chronology," Journal for the History of Astronomy, Volume xxxi, 2000, pp. 149-155, p. 154, by Bradley E. Schaefer*)

end of Chapter 5: Historical Egyptian Astronomical Provenance

Above: Seti I tomb ceiling *(screen capture from virtual reality tomb, cuicui.be)*

Chapter 6: To Historical Egypt

Above: Earth and Moon from Mars *(October 03 2007 photo by NASA's Mars Reconnaissance Orbiter)*

> **I would like to hold him back for myself that in place of you he might keep on ministering to me in the [prison] bonds I bear for the sake of the good news. But without your consent I do not want to do anything, so that your good act may be, not as under compulsion, but of your own free will.**
> **(*Philemon 13-14, New World Translation 1984*)**
>
> **Jeg hadde lyst til å la ham bli her hos mig, forat hani ditt sted kunde tjene mig i mine lenker for evangeliet, men uten ditt samtykke vilde jeg intet gjøre, forat din godhet ikke skulde være som av tvang, men av fri vilje.**
> **(*Philemon 13-14, 1906/1930 Norwegian Bible*)**

6[1] Schaefer expressed a rather pessimistic view about the possibility of using lunar alignments to determine the absolute chronology of Egypt, based on the uncertainty of both Egyptian custom and meteorological conditions. [1] His viewpoint is, of course, not to be diminished by a healthy belief in the possibilities for new discovery. However, once a chronology has been firmly established by various independent criteria, the lunar data has to be considered as a possible negative indicator for it, and must not be completely ignored in this assessment. One of the problems is the way in which "Year" numbers for Pharaohs appear to have been erratically assessed. This implies that some flexibility is necessary and it opens our minds to embrace the other factors involved. Sothic risings also have uncertainties, but these seem to involve a smaller absolute uncertainty than a lunar chronology based on monthly cycles which realign again periodically in intervals of 11 and 25 years, roughly. It is precisely because of this lunar periodicity that Mr. Schaefer doubts the possiblity of firm resolution.
[1](*"The Heliacal Rise of Sirius and Ancient Egyptian Chronology," Journal for the History of Astronomy, Volume xxxi, 2000, pp. 149-155, p. 154, by Bradley E. Schaefer*)

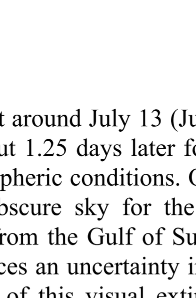
Problems Of Sothic Timing

6[2] Sothic dating is beset by a different set of problems. The atmospheric conditions prevalent in Egypt in those days may have had regional variance, touched upon only briefly above, but random fluctuations such as are due to occasional weather disturbances are random in lunar observations, having no effect on absolute chronology. The volume of observations reduces the random effects. While one should always be wary of assuming the things which "appear obvious" to a modern mind as being true, it seems inconceivable that a month end while the moon remain visible, so the effect is one-directional only. With Sothic rising the star appears aligned in earlier years in the Egyptian calendar if visibility is worse, but it is a consequence of the fact that Sothic rising happens every year on the same Julian calendar date in close approximation over a few centuries, but moves in the shorter Egyptian calendar one day forward in every four years (not conceptually very easy to understand). Bad weather therefore makes it look as though the same Sothic rising has occurred some years earlier in fact.

Above: The Plains of Heaven, Tate Britain *(1851 painting by John Martin, oil on canvas, 1.988 x 3.067 m)*

6[3] While possible errors in Sothic dating due to such bad weather are also one-directional, they are essentially different from possible lunar errors and cause a shift backwards of a number of years in absolute chronology. Northerly latitudes have the same effect of making the year of Sothic rising shift backwards, with a shift of five years back for each degree of increased latitude. Sothic and lunar observation in ancient Egypt are both probably connected with scientific and religious ends. We may not be certain of the movement of the celestial bodies in the millenia elapsed since then, although we are perhaps even less certain about Egyptian religion. By necessity or by choice, we make many assumptions in the areas of Sothic and lunar astronomy, which have an unknown number of religious and political implications in ancient Egyptian culture, no matter how we minimize these assumptions in the application of Occam's razor.*
* Occam's razor is the notion that the simplest explanation is best when all other things are equal.

[1](*Sothis rises 20 years earlier in Memphis in Egypt than in Thebes since Memphis is four degrees further north. Pi-Ramesses is almost as far north as Alexandria, both of these cities being further north than Memphis, five years earlier (Sothic rising), or one degree latitude.*)



Above: Column Hall of the Temple at Karnak (Thebes), Egypt *(Lithograph, [1838] original by David Roberts)*

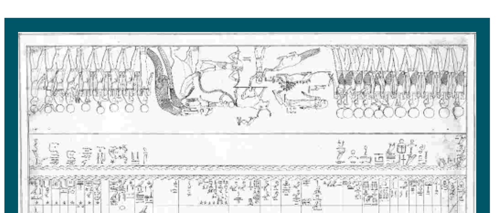
Seti's Holding in Pi-Ramesses

6[4] Sothis rises every year at Thebes in Egypt around July 13 (Julian) during the New Kingdom, as compared to its rising at Memphis on July 18, or about 1.25 days later for each degree of latitude that we go, further north. This assumes no differences in atmospheric conditions. One degree north of Memphis is Pi-Ramesses at July 20, but this assumes a slightly obscure sky for the Delta. [1] The view from Pi-Ramesses is conceivably affected by a haze of vapour from the Gulf of Suez to the southeast. For a latitude arbitrarily fixed at 30 degrees, visual extinction produces an uncertainty in the date of this Sothic rising, a variation of about July 16th to 19th. [2] One measure of this visual extinction is the parameter known as the *arcus visionis,* or the angle (arc) between the Sun and the star Sothis required before it becomes just possible to see Sothis above the horizon. The term *arcus visionis* is also used with lunar observations, and in this case varies with the season. [3]
[1](*These dates change very slowly over the centuries.*)
[2](*Ancient Egyptian Chronology, 2006, p. 436, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The Heliacal Rising of Sirius," III.9, by Teije de Jong*)
[3](*Ibid., p. 397, "Lunar Dates," III.8, by Rolf Krauss*)

6[5] Mr. Peter J. Brand has made an extensive record of the monuments of Seti I as his Ph.D. Thesis (1998) done at U of T under renowned Egyptologist Mr. Donald Redford. [1] Brand's thesis is a standard reference work on Seti I. He notes therein that Seti I is believed to have had a summer palace at Pi-Ramesses (Piramesse, Per-Ramesses, or various other spellings), and possibly even founded a capital there under the original name of "Per-Seti." [2]

[1](*The Monuments of Seti I and their Historical Significance: Epigraphic, Art Historical, and Historical Analysis, Ph.D. Thesis, Department of Near and Middle Eastern Civilizations, University of Toronto, 1998, by Peter James Brand*)
[2](*Ibid., p. 143, footnote 59 is quoted below as:*)

> **"Ramesses states that he returned from Abydos to Pi-ramesses in year one, but this claim is contained in the Abydos Dedicatory inscription. Redford called the date anachronistic since the inscription was not made until sometime after the first regnal year. Uphill maintains that the capital was founded by Seti and may have been called "Per-Seti" but he offers no clear evidence for this. D.B. Redford, "The Earliest Years of Ramesses II, and the Building of the Ramesside Court at Luxor," JEA 57 (1971), 112, n. 3; E. Uphill. "Pithom and Raamses: their Location and Significance," JNES 28 (1969), 22. Clearly, a royal residence existed there by the end of Seti's reign. Moreover, further evidence that Pi-Ramesses was established early in Ramesses' reign may now be forthcoming. Among the miscellanies included in papyrus Anastasi II is a praise of the Delta residence of the Ramessides there. The prenomen of Ramesses II is given twice, both times as Wsr-M3't-R'. A. H. Gardiner, Late-Egyptian Miscellanies, (Brussels, 1937), 13:1 & 4. The orthography for m3't is to be expected in hieratic, more telling is the absence of the epithet stp-n-R' that was invariably appended to his prenomen from about year two (e.g. ibid., Gardiner, 97:17, 98:8, 132:16, 135:10). Its absence here suggests, that the copyist was transcribing an original written in Ramesses' year one. The papyrus has been dated to the reign of Merenptah, (Ibid., Gardiner, xiv), so the king referred to must be Ramesses II."**
> (*The Monuments of Seti I and their Historical Significance: Epigraphic, Art Historical, and Historical Analysis, Ph.D. Thesis, Department of Near and Middle Eastern Civilizations, University of Toronto, 1998, p. 143, by Peter James Brand*)

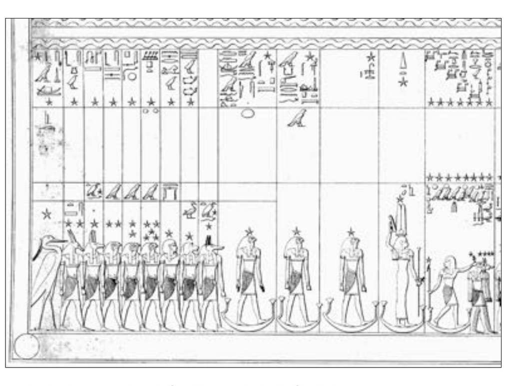


Above: Seti I Tomb Ceiling (Entire, Sopdet side up)
(Artwork from KV17, Valley of the Kings)

Astronomical Ceiling Exacts Secret

6[6] Since we see above that the possibility exists for the establishment of the city of Pi-Ramesses by Seti I and for its existence as a place of some importance during his Reign, it opens the door to our considering Sothic risings from the location of Pi-Ramesses at that time. This is important because it allows the event known as the rising of Sothis to have occurred earlier in time, an extra degree of latitude implying about five years, and it means that it may occur in Seti's Year 3, 1323. The astronomical ceiling in Seti's tomb also adds very much support to this notion by its depiction of birds, as is seen on the left side of the star chart section, and which birds occur for four years consecutively, in four of the ten uniquely separated divisions, which in themselves clearly imply years, with Years 3-6 marking the birds as symbolic Phoenixes (thus Sothic risings). There is no conceptual problem with 1323 as Year 3, or Year 3 as the Sothic rising in our BG chronology, nor, for that matter, in Seti I's own astronomical ceiling. [1]

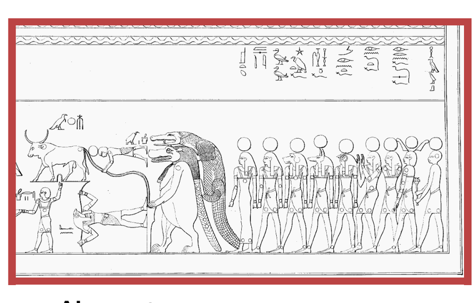
[1](*It appears logical to assume that there is a lot more to learn from the astronomical ceiling in Seti I's tomb, but most of it will have to undergo further scrutiny first. We do know that Sothic risings do tend to occur for four consecutive years, because the length of the Egyptian calendar year is 365 days, which is one quarter of a day shorter than a Julian year. We always defer to the best available interpretation of the facts.*)



Above: Seti I Tomb Astronomical Ceiling, detail Sothis *(Artwork from KV17, Valley of the Kings)*

6[7] It is puzzling why no one has attempted to explain, in simple detail, such as we have in the preceding, quite exactly how the star chart is meant to be interpreted, especially knowing how interested the Egyptians seemed to be in the rising of Sothis and the lunar festivals. The question we have to ask ourselves in situations of this kind, is always: "Is this the sort of thing Satan could use to trick us, seeing as he transforms himself into an 'angel of light' often for this very purpose?" Frankly, this looks more like a blessing than a trick. Furthermore, it confirms the BG chronology strongly in another independent way using fairly obvious astronomy and therefore does not appear to be the sort of thing, in fact, to come back and affect us in a negative way. My study of it is, though, a very brief one, thus far. This brings us to a consideration of the lunar side of the same tomb ceiling, which depicts the death of Seti I, as indicated by the "death" symbol (water), Day 12.

6[8] There are at least two ways of determining whether Day 01 on Seti's tomb ceiling's Lunar chart should be read from the left or right, yet the Apis bull hieroglyphic seems to count as Day 15 only when reading from right, and we believe the Apis installation is always Day 15. Secondly, the 2nd Day from the right has a particular, feathered headdress distinct from all the others, with Day 01 being a bald character, symbolizing a new moon, the implication being that Day 02 is "1st visibility." There is in fact a third way to show that Day numbers, for the Lunar chart, are read from the right, but this depends upon knowing the day of Seti I's actual death. Reading from the right, it appears that Day 12 is when the death symbol is best counted, and we believe that, different from the day of his funeral shown in the sky chart, Seti I's death occurred June 09, 1315 BCE based on the known date of accession of his son Ramesses II. This date is calculated also using modern science with computers to be Lunar Day 12, as the chart also shows. This is true for the BG chronology, not for many other chronologies, except those of similar lunar alignment. Every 11 and 25 years a similar alignment might occur.



Above: Seti I tomb ceiling (Lunar side)
(Artwork from KV17, Valley of the Kings)

6[9] Once again we see that we have been very blessed in an understanding of a chronology which we have called our *Blessed Greenealogy,* before we knew everything. Yes. In the remainder of this chapter, let's note what lunar alignments exist in the Reigns of both Seti I as well as Horemheb, who are both well-attested Pharaohs. We may use one paragraph for Seti I, one for Horemheb, and one to sum up the whole chapter, and round it out. Keep in mind that not every Year number is expected to be 100 percent reliable, with rare errors of one year.

Honouring All Lunar Omens

6[10] In all previous analyses of lunar alignments in Seti's Reign, I had ignored some of the known dates given for him, because they did not align with the lunar cycles. In the *Crucible of Credible Creed,* I believed a Year 1 for Seti I of 1328 BCE, two whole years earlier than 1326 currently proposed, and differently aligned.* Other than dates of military manoeuvres, which are not shown as they are not expected to align, all dates are aligned near to (i.e. just shortly after) new (LD1) or full (LD15) moons, dating Seti I's Year 1 as 1326 BCE: [see note 11]

Seti I:
Year 9, Epeiph 20, June 02, 1318, LD1 (Year 1, 1326) (LD1 new moon) [1]
Year 8, Tybi 02, November 17, 1320, LD1 (SY1, 1326) [2,12]
Year 11, Mesore 12, June 24, 1316, LD16 (SY1, 1326) (LD15 full moon) [3]
[Year 3,] Epeiph 24, June 08, 1324, LD1 (SY1, 1326) (LD1 new moon) [4]
[Year 10,] Epeiph 23, June 05, 1317, LD15 (SY1 1326) (LD15 full moon) [5]
Year 1, Mesore 30, July 15, 1326, LD15/16 (SY1 1326) (full moon) [6]
Year 2, Phaophi 01, August 19, 1325, LD3 (SY1 1326) [festival] [7]
Year 4, Phamenoth 20, February 04, 1322, LD17 (SY1 1326) [festival] [8]
Year 6, Choiach 01, October 17, 1321, LD18 (SY1 1326) [LD18 festival] [9]
[Year 7,] Tybi 02, November 17, 1320, LD1 (SY1 1326) (LD1 new moon) [10,12]
[Year 1,] Phaophi 01, August 19, 1325, LD3 (SY1 1326) [festival] [7]
Year 4, Tybi 01, November 17, 1324, LD16 (SY1 1326) (ast. full moon) [12-15]

As one may see, for all of the known dates expected to align in Seti I's Reign, given in detail, above, LD alignments display as consistently found (for Seti Y1 1326) here. [16,17]

* Crucible of Credible Creed, Chapter 9, paragraph 11, Iron Furnace, Seti I (listed as Pharaoh 17.)

[1](*"Towards an Absolute Chronology for Ancient Egypt," p. 2, by William MacMurray, according to W.M., from Kitchen: Deserts and Quarries, p. 31*)
[2](*Ibid., according to W.M., from Brand: Peter James Brand, "The monuments of Seti I and their historical significance : epigraphic, art historical and historical analysis," Ph.D. thesis, University of Toronto, Canada, 1998, 3.6 Stela of Ashahebused, Year 8 (No. 249), p. 135 (162), Sinai, Serabit el-Khadim: Large, free standing stela set up on approach to Hathor shrine, made by an official named Ashahebused, who made several expeditions to turquoise mines in the Sinai.*)
[3](*Ancient Egyptian Chronology, 2006, p. 211, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The New Kingdom," II.8, by Erik Hornung*)
[4](*"Towards an Absolute Chronology for Ancient Egypt," p. 1, by William MacMurray, Year 3 lunar anniversary of accession III Shemu 24, new moon, hypothetical only, not attested*)
[5](*Ibid., p. 1, III Shemu 23, full moon, hypothetical only, not attested*)
[6](*Ibid., p. 2, by William MacMurray, Brand: 3.139 Larger Stela of Seti I, Year 1 (British Museum EA 1189), p. 326 (353) Brand: 3.140 Smaller Stela of Seti I, Year 1 (Pennsylvania Univ. Museum E. 10988), p. 327 (354) Both record the king's order that a new endowment of various items be granted to the temple of Ptah in the fortress of Buhen in Nubia.*)
[7](*Ibid., p. 2, by William MacMurray, Brand: 3.70 Alabaster Stela of Seti I, Year 1 (Cairo CG 34501), p. 249 (276) Thebes, Karnak Precinct of Amen-Re: Erected "opposite the Mansion of the Prince, at the Place of Appearances of the Incarnation of Re," a rooftop shrine that served as the principle sanctuary of Re in Karnak where the morning form of the sun god appeared.*)
[8](*Ibid., p. 2, by William MacMurray, Brand: 3.128 Boundary Stela, Year 4, p. 319 (346) Near Kurkur Oasis: Carved in sunk relief on a sandstone slab; portrays Seti I bowing before god Khnum: "On this day, now His Majesty he is joyful at establishing the boundaries of Ta-Sety."*)
[9](*Ibid., p. 2, by William MacMurray, Brand: 3.109 Rock Stela, Year 6, p. 296 (323) Gebel Silsila East: Commemorates an expedition to quarry sandstone for building projects. Text known only from 19th century copies, current location unknown.*)
[10](*Brand: 3.6 Stela of Ashahebused, Year 8 (No. 249), p. 135 (162) Sinai, Serabit el-Khadim: Large, free standing stela set up on approach to Hathor shrine, made by an official named Ashahebused, who made several expeditions to turquoise mines in the Sinai, [considered as Year 7]*)
[11](*Solex 12.1 is used for Lunar Day determinations, confirmed by reference to the Thebes and Memphis tables of Rita Gautschy for borderline cases*)
[12](*In agreement with Rita Gautschy based on her new moon determination, Thebes or Memphis*)
[13](*Astronomical full moon, Fred Espenak*)
[14](*The date is referred to in our article "The Uncut Tut," 11-2, and implies that the method of year numbering may vary at times to be according to actual years, or Sothic and/or calendar years. See below, next for original reference.*)
[15](*Journal of Near Eastern Studies, Vol. 59, No. 4 (Oct., 2000), pp. 255-264, "The Ancient Egyptian Sed-Festival and the Exemption from Corvee," by Jose M. Galan*)
[16](*Notebook 36, WG, pp. 177-178*)
[17](*Quitting work for the night 2307 h May 08, 2018*)

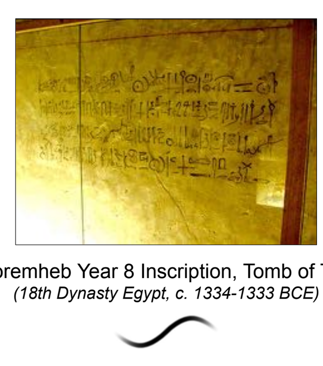
Above: Horemheb as a Scribe of the King, Statue, Metropolitan Museum, New York *(1357-1331 BCE, 18th Dynasty, statue granodiorite, 1.13 m height x 0.71 m width x 0.555 m depth)*

6[11] On the strength of the work of Jacobus van Dijk (2008) it has been established that the Reign of Horemheb was far shorter than Egyptologists had previously claimed, and did not exceed 14 years based on his wine dockets. [1-3] The sheer number of these dockets gives us confidence. With only the one short intervening Reign (approx. 1y) of Ramesses I between Horemheb and Seti I, it is shown by us that the Reign of Horemheb began about 1341 BCE, or about 15 years before the Year 1 of Seti I in 1326. [4] Mr. van Dijk asserts that in the village nearby to the tomb of Horemheb are found no Year 1 wine dockets from Horemheb's Reign, which we may take as slight evidence of his accession *after* Year 1 wine season, plus we have a "festival foundations" date i.e. Choiach 22, Year 1, which is Lunar Day 03 November 12 in 1341 BCE. [5,6] The "highest certain date" is III Akhet 01 Year 13, or in our BG chronology evidently September 19, 1328 BCE. [7]

Horemheb:
Year 1, Phaophi [-], [Aug 20-Sep 18], **1341, -** (Year 1, 1341) [coronation] [8]
Year 1, Choiach 22, November 12, 1341, LD3 (HY1, 1341) [10-12]
Year 6, Thoth 01, July 23, 1335, LD15 (HY1, 1341) (LD15 full moon) [11,12]
Year 8, Epeiph 01, May 18, 1333, LD1 (HY1 1341) (LD1 new moon) [12,13]
Year 13, Hathyr 01, September 19, 1328, LD3 (HY1 1341) [festival] [11,12]

As it was for Seti I's lunar alignments, above, Year 1 of Horemheb in 1341 is seen to give us excellent LD alignments for the duration of Horemheb's Reign in 1341-1328 BCE.

[1](*Journal of the American Research Center in Egypt, JARCE 44 (2008), "New Evidence on the Length of the Reign of Horemheb," pp. 193-200, by Jacobus van Dijk*)
[2](*The Uncut Tut, 2-8, by Ward Green et al.*)
[3](*"Towards an Absolute Chronology for Ancient Egypt," p. 4, by William MacMurray, Dated Monuments from Reign of Horemheb, 3. [the year 27 attested in a graffito from his mortuary temple is suggested by many as dated rather in Year 27 of Ramesses II]*)
[4](*The Uncut Tut, 2-8, by Ward Green et al.*)
[5](*Journal of the American Research Center in Egypt, JARCE 44 (2008), "New Evidence on the Length of the Reign of Horemheb," p. 197, by Jacobus van Dijk [the name of this nearby village is "Deir el-Medina"]*)
[6](*Ancient Egyptian Chronology, 2006, p. 209, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The New Kingdom," II.8, by Erik Hornung*)
[7](*Ibid., p. 209 [the highest here means the latest or highest Year number, and refers to a dated wine jar label from Saqqara, the necropolis of the city of Memphis, Egypt, as distinct in location from Horemheb's tomb in the Valley of the Kings near Thebes]*)
[8](*Ibid., p. 209 [the mention of Year 26 and 27 in the same paragraph's discussion is invalid now with the latest understanding of Year 13 or 14 being very close to the end of Horemheb's Reign, and the Year 27 believed to be a later inscription from Year 27 of a later Pharaoh, thus the II Akhet proposal holds as the accession month derived from the Coronation Inscription of Horemheb]*)
[9](*"The True Length of Reign of Horemheb, last of Egypt's 18th Dynasty Pharaohs," August 2015, from: Akhenaten and Biblical Joseph: Bringers of Monotheism to Egypt, p. 93, (see also pp. 91-92), by Russell Jacquet-Acea, quote p. 93: "Horemheb's Coronation inscription which indicates that he accessed the throne during the Opet Festival, traditionally held in II Akhet (*265*). The Ostraca IFAO 1254 document mentions a 26 to 27 year change near early I Shemu. However, not only does the Ostraca not indicate which pharaoh ruled during the time the document was written but the "March dates" given for this I Shemu date as the accession of Horemheb contradict the dates the Opet Festival was traditionally held, thus attributing the ostraca to Horemheb's reign is not absolutely verifiable and cannot be absolutely attributed to Horemheb. Other candidates include Ramesses II and Amenhotep III."*)
[10](*Festival foundations are expected to be near the beginning of a lunar month*)
[11](*Ancient Egyptian Chronology, 2006, p. 209, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The New Kingdom," II.8, by Erik Hornung*)
[12](*In agreement with Rita Gautschy based on her new moon determination, Thebes or Memphis*)
[13](*"The True Length of Reign of Horemheb, last of Egypt's 18th Dynasty Pharaohs," August 2015, from: Akhenaten and Biblical Joseph: Bringers of Monotheism to Egypt, p. 89, by Russell Jacquet-Acea [correcting III Akhet from other publications of this date to III Shemu, in harmony with the translation of the text accompanying it, which mentions, literally: "Year 8, 3rd month of summer."] May 1340 is Year 1, in harmony with Horemheb's accession in Aug-Sep 1341 BCE.*)

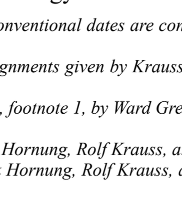


Above: Horemheb Year 8 Inscription, Tomb of Thutmose IV
(18th Dynasty Egypt, c. 1334-1333 BCE)

6[12] The conventional dates for the New Kingdom differ from our own BG chronology (are lower) because they fail to consider all of the evidence, believing fewer sources. [1] The results of the Sothic and lunar alignment studies, presented in this chapter and our previous, have shown that our BG chronology, having been established on the sound basis of the Bible genealogy and chronology, has no difficulty producing the lunar alignments required. On the contrary, the BG chronology of the New Kingdom, from Ahmose I through Seti I to Ramesses II and ending with Ramesses XI, may be **"absolute" chronology,** as appears justified based on how many factors fitted. [2-5] Only in our chronology do the astronomical charts from the tomb ceiling of Seti I find a perfect explanation. The values of *arcus visionis* determined by work done originally by Borchardt and Neugebauer in 1926 in Egypt and reported by Pachner in 1993 have a range and go from 8.7 to 9.2 degrees for Sirius (Sothic) rising. [6] From astronomical diaries of ancient Babylon there are only two known observed Sothic risings, dated 325 BCE, or Year 12 of Darius III, and 290 BCE Seleucid Empire. These have been analyzed with modern techniques, which give *arcus visionis* values 11.0 or 8.6 degrees. [7] All of the known data thus confirms our own work, with an *arcus visionis* 8.58-9.19 degrees for Thebes, 1526 BCE Sothic rising, and 8.87-9.06 degrees for 1323 BCE Sothic rising at Pi-Ramesses, and values 8.16-8.92 degrees at Memphis in 2774 BCE for July 18 (Thoth 01). [8] Thus our chronology the *Blessed Greenealogy,* in its refined versions TWT and QWP especially, proves it **may fit all of the available astronomical data.** [9] There is no other chronology that comes close to that.

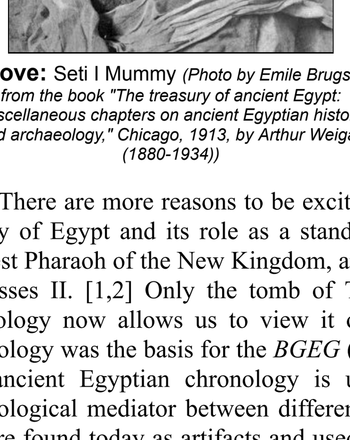
[1](*The difference might be only 25 years, but we know that conventional dates are constantly being changed in accordance to what is in "fashion" in the Egyptological community.*)
[2](*For the time after Ramesses II, we have seen the lunar alignments given by Krauss, which are valid in our own chronology, and which extend all the way to Ramesses XI. Refer to notes [3] to [5] below.*)
[3](*"B4 Chronology -- History of Babylon" (2015), see Table 2, footnote 1, by Ward Green et al.*)
[4](*"Trojan War" (2015), par. 3-9, by Ward Green et al.*)
[5](*Ancient Egyptian Chronology, 2006, p. 414, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "Lunar Dates," III.8, by Rolf Krauss*)
[6](*Ancient Egyptian Chronology, 2006, p. 434, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The Heliacal Rising of Sirius," III.9, by Teije de Jong*)
[7](*Ibid., pp. 433-434*)
[8](*Notebook 36, WG, pp. 175-177*)
[9](*TWT was from our "B4 Chronology-- History of Babylon," and QWP was from "Trojan War"*)

end of Chapter 6: To Historical Egypt



Above: Seti I and his son Ramesses II, Oriental Institute Museum, University of Chicago
(19th Dynasty Egypt, Reign of Seti I, limestone)

Chapter 7: Holding On Tight



Above: Seti I Mummy *(Photo by Emile Brugsch, from the book "The treasury of ancient Egypt: miscellaneous chapters on ancient Egyptian history and archaeology," Chicago, 1913, by Arthur Weigall (1880-1934))*

Perhaps really on this account he broke away for an hour, that you may have him back forever, no longer as a slave but as more than a slave, as a brother beloved, especially so to me, yet how much more so to you both in fleshly relationship and in [the] Lord.
(Philemon 15-16, New World Translation 1984)

Mindhaa wuxuu cabbaar kaaga maqnaa inaad weligaa haysatid; laakiinse aadan mar dambe u haysan addoon sidiis, illowse si mid addoon ka wanaagsan oo ah walaal aan khusuusan anigu jeclahay, laakiinse adigu aad iga sii jeceshahay, xagga jidhka iyo xagga Rabbigaba.
(Philemon 15-16, Somali Bible (Kitaabka Quduuska Ah) 2008)

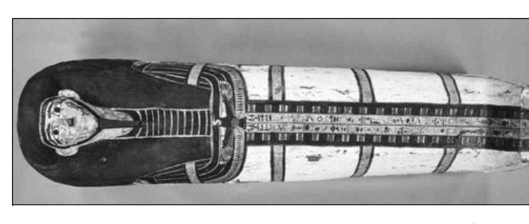
7[1] In the previous chapter we saw how the Reign of Seti I may be important in absolutely dating the Egyptian New Kingdom, based on a Sothic rising (Thoth 01) and lunar phases, which independently align to his Regnal Years. The spectacular nature of his tomb, with its wonderful ceiling depicting his time of death and funeral, isn't the only reason to be excited, but its size, masterful construction, historical content, and quite remarkably well-preserved condition make it a wonder of all time. There are more reasons to be excited about the Pharaoh known as Seti I, but the most important is the history of Egypt and its role as a standard for world history. It has been stated that Seti I is perhaps the greatest Pharaoh of the New Kingdom, and an important character "overshadowed" only, perhaps, by his son, Ramesses II. [1,2] Only the tomb of Tutankhamun has rivalled Seti's tomb, and modern virtual reality technology now allows us to view it on our computers and mobile devices from home. [3] The Bible chronology was the basis for the *BGEG* (BG Egyptian Chronology), and we have worked on it for the reason that ancient Egyptian chronology is used as the basis for standardizing all of world chronology, a chronological mediator between different nations which did business with Egypt separately, trading goods that are found today as artifacts and used to correlate the dates in ways which would be improbable without Egypt. The importance of Seti I is thus more than in absolute dates for Egypt-- he embraces all of world chronology.

[1](*http://www.ancient-egypt-online.com/seti-I.html*)
[2](*http://www.ancient-origins.net/ancient-places-africa/stunning-temple-seti-i-abydos-egypt-002313*)
[3](*http://cuicui.be/egypt-seti-i-tomb/*)

7[2] The added confidence that comes from the absolute date for Seti I is always welcome, no matter how certain we may seem to be about any other time period in history. In the second half of this article we may make no more significant a discovery, although we may remain happy. Because of the seriousness of the revelations on Seti, the current chapter should summarize the implications. Some extra monumental documentation may hold interest, but none of it, barring some new discovery, will serve other than as artistic or historic provenance to Seti. The other point that seems important with regard to BG absolute chronology is

that the date of Seti does help to solidify dates which are relatively not far removed from him in Egypt, such as **The Exodus** of Israel and the associated Pharaohs of the New Kingdom period. For example, I had previously noted in my own notes on October 17, 2017, that the rising of Sothis during the Reign of Amenhotep I in the New Kingdom, together with radiocarbon dates confirming the time of Ahmose I, his predecessor, make the date of 1533 BCE for the Year 19 of Ahmose I and his expulsion of the Hyksos from Egypt "one" of the most "certain" dates in Egyptian history. [1]

[1](*Notebook 35, WG, p. 141, Tuesday, October 17, 2017, 1105 AM EDT*)



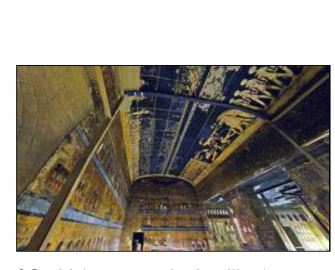
Above: Ahmose I sarcophagus, Metropolitan Museum of Art, New York
(Early 18th Dynasty, 1526 BCE, sycamore wood, stucco, paint, 229 cm (90 3/16 in) x 60 cm (23 5/8 in))

7[3] **The Exodus** occurred about 58 years after Ahmose Year 1 in our chronology, with Ahmose Year 1 1551 BCE, precisely in 1493 BCE, and from 1493 BCE down to 1323, Seti I's Year 3 (or 4), there are precisely 170 years. Thutmose I is the Pharaoh of **The Exodus,** and he dies in 1493 in accord with the Bible's statement that not one of the Egyptians remained alive, and after him there came a total of 13 Pharaohs before Seti I, 1326. This is 13 Reigns in 167 years-- 12.8 years per Reign. Our chronology, the BG, is the only one that tells the story of **The Exodus** in its accurate provenance. We have discussed this at length in previous articles. The time period has never been more exactly known than it is now, with 167 years between two known endpoints. Furthermore, the 13 Pharaohs are sufficiently attested so as to leave little room for doubt about the period, having sufficient lunar dates so as to add confidence. Whether this intervening period actually might bolster the certainty of the endpoints is another question, as to how something less certain can confirm a certainty.

7[4] **More to the point, it is very important how the dating of Seti I increases the certainty of *The Exodus* of 1493 BCE, by better fixing the New Kingdom Pharaoh.** The additional Sothic anchor point during the Reign of Amenhotep I (1526 BCE) combined with only 200 years of distance between that and Seti I lends more certainty. For this reason precisely does importance increase, of the details of the Reign of Seti I and its provenance. Joy at the discovery of Seti I's dating and puzzlement about why it was not seen sooner are the two feelings. Jehovah provides insight about this, in His Holy Word:

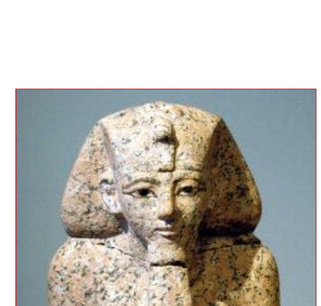
> ***Ecclesiastes 3:1 "For everything there is an appointed time, even a time for every affair under the heavens:"***
> [1](Ecclesiastes 3:1, New World Translation, 1984)

[1](*Ecclesiastes 3:1, New World Translation, 1984. It continues (3:2-8):*
"A time for birth and a time to die;
a time to plant and a time to uproot what was planted;
a time to kill and a time to heal;
a time to break down and a time to build;
a time to weep and a time to laugh;
a time to wail and a time to skip about;
a time to throw stones away and a time to bring stones together;
a time to embrace and a time to keep away from embracing;
a time to seek and to give up as lost;
a time keep and a time to throw away;
a time to rip apart and a time to sew together;
a time to keep quiet and a time to speak;
a time to love and a time to hate;
a time for war and a time for peace.")



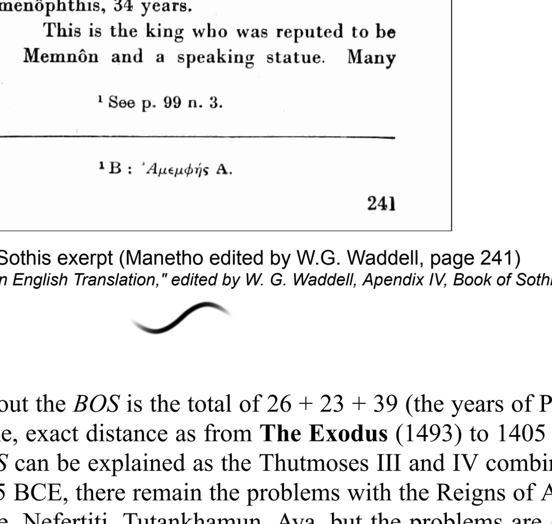
Above: Tomb of Seti I (astronomical ceiling) *(Rising of Sothis 1323 BCE and His death 1315 BCE, depiction in virtual reality cuicui.be)*

7[5] The total number of years from Ahmose I to Seti I does not pose many problems to us, as the two controversial Reigns during this period are that of Horemheb (viewed as resolved above by the work of J. van Dijk), and the Reign of Thutmose IV, which is 9 years in Manetho, but some give him 39 years from the *Book of Sothis.* With only one Reign left to resolve, the situation was tantalizingly close to resolution, when I began to ask myself how an error of 30 years could have originated. But the *Book of Sothis* appears to omit Thutmose III, and it then occurred to me that his Reign is very close to 30 years (excluding the years of Hatshepsut). This understanding together with an indifference about the names of the Pharaoh's in the *BOS* allows us to see the perfection of that source over this period.



Above: Hatshepsut bust, Metropolitan Museum of Art
(18th Dynasty Egypt, joint Reign of Hatshepsut and Thutmose III, 1490-1468 BCE, from Thebes, Deir el-Bahri, "Hatshepsut Hole" (depression east of temple of Thutmose III), MMA excavations, 1922–23, granite, paint, height 69 cm- original height approximately 87 cm)

7[6] From my notes made in September 2017, the total of the years of the Pharaohs from Ahmose I down to the end of the Reign of Thutmose IV, with emendations to Amemphis (Amenhotep I) and Misphragmuthosis (Amenhotep II), and the exclusion of Chebron (26 + 21 + 11 + 26 + 23 + 39) is 146, which is the difference between 1551 and 1405, or viz. Year 1 of Ahmose I and Year 10 of Thutmose IV. We exclude Chebron as subsumed and we know the lengths of the Reigns of the two emended cases to adjust them. Ignoring the names assigned to the two Pharaohs having 11- and 23-year Reigns, they correspond to the lengths of the Reigns of Thutmose I/Hatshepsut, fairly nearly, and the only Pharaoh not listed is Thutmose III, thus. Excluding Hatshepsut's 23 years from the known 53-year Reign of Thutmose III (subsuming hers) gives 30 years.



33. **Amôsis, also called Tethmôsis, 26 years.**
34. **Chebrôn, 13 years.**
35. **Amemphis, 15 years.**
36. **Amensês, 11 years**
37. **Misphragmuthôsis, 16 years.**
38. **Misphrês, 23 years.**
39. **Tuthmôsis, 39 years.**
40. **Amenôphthis, 34 years.**
This is the king who was reputed to be Memnôn and a speaking statue. Many

[1] See p. 99 n. 3.

[1] B : Ἀμεμφής A.

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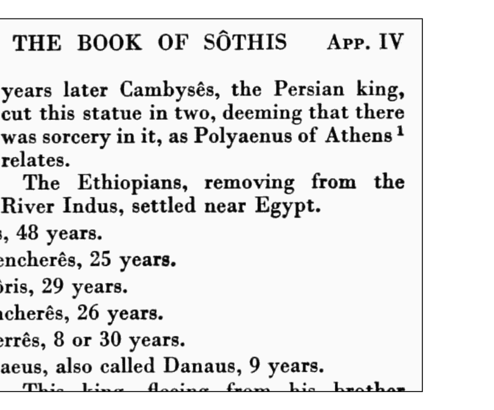
Above: Book of Sothis exerpt (Manetho edited by W.G. Waddell, page 241)
(From 1940 book, "Manetho with an English Translation," edited by W. G. Waddell, Apendix IV, Book of Sothis, p. 241)

7[7] One more perfect thing to note about the *BOS* is the total of 26 + 23 + 39 (the years of Pharaohs after **The Exodus**), which is 88 years, the same, exact distance as from **The Exodus** (1493) to 1405 BCE. We see that the 39 years of Thutmose in the *BOS* can be explained as the Thutmoses III and IV combined. After the end of the Reign of Thutmose IV in 1405 BCE, there remain the problems with the Reigns of Amenhotep III and his son Akhenaten, also Smenkhkare, Nefertiti, Tutankhamun, Aya, but the problems are greatly limited by the Sothic anchor point in Seti I's Reign, in 1323. The lunar alignments in Tutankhamun's Reign are exact, and put his 1357-1348 BCE as a secure, anchored range. Seti I's and Horemheb's lunar alignments are also very good and in line with Amenhotep III's and Akhenaten's. All 225 years from 1551 to 1326 are thus quite secure. [1]

There are a few more interesting and exact things that remain to be mentioned about the *BOS* and Reigns 38.-44. therein, where the 23 years of Misphres at 38. precede the 39 of Tuthmosis and are close to exact for what Hatshepsut actually ruled from her true accession in 1490, later backdated to her husband's accession in 1493 (or rather, the accession of Thutmose III in 1490 was later dated to subsume her and his father Thutmose II, who was her husband). These dates are by lunar and Manethan dating carefully aligned, with 22 years given by Africanus for Amersis and 21 y 9 mo by Josephus for Amesses, both associated with Hatshepsut.

From 1405 BCE, *BOS* can be seen to carry us, via 41. Orus (48 years) to the exact 1357 BCE accession of Tutankhamun, then 42. Achencheres (25 years, evidently Akhenaten, or Tutankhamun) and 45. Acherres (8 years), whom we identify as Ay, and 46. Armaeus (9 years) to a total of 42 years (25 + 8 + 9 = 25 + 17 = 42) which is from 1357 just 1315 BCE, or Ramesses II Year 1, by us. Horemheb and Seti I are fogged in this representation. However, the *BOS* can be seen to be workable for those years with minor allowances such as ignoring 43. Athoris (29 years) and 44. Chencheres (26 years), both of which can be seen as duplicates for 42. (25 years).

[1](*Quitting work for the night at 2054 h EDT, May 11, 2018*)



THE BOOK OF SÔTHIS **App. IV**

years later Cambysês, the Persian king, cut this statue in two, deeming that there was sorcery in it, as Polyaenus of Athens [1] relates.

The Ethiopians, removing from the River Indus, settled near Egypt.

41. **Ôrus, 48 years.**
42. **Achencherês, 25 years.**
43. **Athôris, 29 years.**
44. **Chencherês, 26 years.**
45. **Acherrês, 8 or 30 years.**
46. **Armaeus, also called Danaus, 9 years.**

Above: Book of Sothis exerpt (Manetho edited by W.G. Waddell, page 243) *(From 1940 book, "Manetho with an English Translation," edited by W. G. Waddell, Apendix IV, Book of Sothis, p. 243)*

7[8] Our article *The Uncut Tut* shows in its Chapters 1 through 5 that the Amarna period is fixed now in our BG chronology from Akhenaten to the death of Tut, 1375 to 1348 BCE, with Tut's successor Ay determined by the remaining years divided between Horemheb (r. 1341-1327 BCE), Ramesses I (r. 1327-1326 BCE), and Seti I (as we show above also, r. 1326-1315 BCE), before Ramesses II (r. 1315-1249 BCE), with Ay thus (r. 1348-1341 BCE), a closed chronology which includes Hittite synchronisms. [1] That article explains it in detail, and remains valid, although Year 1 of Seti I is absolute now at 1326 BCE. The **200 years** exactly, from 1526-1326 BCE, from the two Sothic alignments presented above, will now be seen as enabling more detailed analysis in the future. The Pharaoh who succeeded Tutankhamun is Ay, one often (wrongly) identified with Armais, who has 4 y 1 mo, in Josephan-Manetho (cf. Paramesses = Ramesses I), though we identify him with Acherres of Eusebian-Manetho, who may, in what follows, obtain some justification by us.

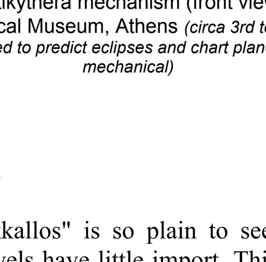
[1](*See also "Wild Road Ahead To History" 1-1 for Akhenaten's lunar alignments at 1375.*)

Above: Knob-like object with cartouche of Ay
(18th Dynasty Egypt, 1348-1341 BCE)

7[9] The name "Acherres" itself is a Greek translation from the Egyptian Pharaoh's unknown original name, the name of "Ay" or "Aya" being the Egyptian name that probably corresponds, for reasons which we hope to now present. It is commonly known that the pronunciation of ancient Egyptian words may be shown by hieroglyphic depiction, a typical example being the anatomical "eye," used for the long "i" in the name Osiris (like "Os-[eye]-ris.") There is hardly a doubt that both of our English words "eye" and "iris" have their origin in the name Osiris. In light of the similarity between the name "Ay" (Aya) and our word "eye," it seems appropriate to search out the Greek word for "eye" in one of the finest books on ancient Greek vocabulary, by Liddell and Scott (1901). [1] We find an entry for the word "okkos" on p. 1038 here: [1-3]

> *" 'okkos, 'o, **the eye, Hesych.: hence** 'oktallos **or** 'okkallos **(Boeot.), Arcad. 54.4; Lat. oculus, ocellus; akin to** 'osse, 'ossomai, 'opsomai, 'ophthalmos **(cf. equus,** 'ippos**). "***
> [1](*A Greek-English lexicon, 1901, p. 1038, "okkos," by Henry George Liddell (1811-1898) and Robert Scott (1811-1887)*)

[1](*A Greek-English lexicon, 1901, p. 1038, 'okkos,' by Henry George Liddell (1811-1898) and Robert Scott (1811-1887) [Greek words in non-bold Roman letters by us for improved readability. Note: the apostrophe is a Greek breathing mark signifying something like an 'h' sound]*)
[2](*Notebook 33, WG, p. 155, December 22, 2016, 1610 h EST*)
[3](*See also "A New Greek and English Lexicon," by James Donnegan, 1st American, From the 2nd London Edition, Revised and enlarged by R.B. Patton, 1840, p. 896, 'okos and okkos'*)



Above: Antikythera mechanism (front view), National Archaeological Museum, Athens *(circa 3rd to 2nd century BCE, device used to predict eclipses and chart planetary positions, mechanical)*

Lunar Alignments Near Ay's Reign

7[10] The similarity of "Acherres" to "Okkallos" is so plain to see, when "r" and "l" are often taken as equivalent in ancient translation, and vowels have little import. This implies that "Acherres" and "Ay" both mean "eye." [1] When we believe the 8 years for Acherres (in Eusebius) we have good agreement with our 7 years 8 months (Ay). [2] There are only two known dates in Ay's Reign, and they are both donation stela, dated from Year 3 and Year 4. [3]

> **Year 3, Epeiph 01, May 22, 1346, LD10** (AY1, 1348) [3,4]
> **Year 4, Choiach 01, October 24, 1346, LD18** (AY1, 1348) [festival] [3,5]

Problems with lunar alignment between these two dates, not improved by chronology, seem to work best with one as Lunar Day 10 (Epeiph 01 Year 3) and the other Lunar Day 18 (Choiach 01 Year 4), when both are in 1346 BCE. The Reign of Ay is poorly known because of the erasure of so many of his monuments by his successor Horemheb. The number 18 as a Lunar Day number may be significant based on the Egyptian understanding of the Saros cycle in the observation of eclipses, this an 18-year cycle.

[1](*A Greek-English lexicon, 1901, p. 1038, "okkos," by Henry George Liddell (1811-1898) and Robert Scott (1811-1887). The Latin word "ocellus" as a translation of "okkos" is, by its resemblance to "Acherres," and "oculus," an indicator which is apparently proof.*)
[2](*See "The Uncut Tut" 1-6 to 1-8 for more discussion of Ay's identity.*)
[3](*Ancient Egyptian Chronology, 2006, p. 209, top, edited by Erik Hornung, Rolf Krauss, and David A. Warburton, "The New Kingdom," II.8, by Erik Hornung*)
[4](*With Year 3 one year earlier, there is a new moon on May 23, 1347, and the date given is May 22, 1347 BCE, one day before LD1, which could be an error due to poor visibility.*)
[5](*With Year 4 one year earlier, there is a new moon on Oct 25, 1345, and the date given is Oct 23, 1345 BCE, two days before LD1.*)

7[11] There is no apparent way to improve Ay's alignment, as the relative lunar days for the two dates could induce a waning moon date for any improvement in one of them. [1,2] On the other hand, there are two years with alignments near the end of the lunar month for both, when we move the Year 3 date into 1347 and the Year 4 date to 1345. These are the best alignments possible near LD1, which tends to validate this lunar alignment for Ay's Reign. With lunar alignments for Ay's predecessor Tutankhamun being essentially perfect, Ay's dates are not movable. To be specific, two of Tut's four dates are new moons, or LD2, and the other two are astronomical full moons. [3] Ay's two dates are thus sandwiched between the four of Tut and the four of Horemheb (chapter 6), and wouldn't be likely to exert much influence over their position, because Horemheb is held by Seti I's Sothic alignment.

[1](*These dates when taken as 1347 BCE are nearly possible at Lunar last visibility (Yr 3) and Lun Day 07 (Yr 4). However, this appears to require a changing of Year "1." Lunar last visibility is that day before the new moon.*)
[2](*In fact, even moving them one year back, to the year 1347 BCE, drops the Year 3 date into what appears to be a waning moon at last visibility (thus, it implies an error in observation such as could be caused by bad weather, and is thus more questionable for this reason, also).*)
[3](*B4 Chronology -- History of Babylon (2015), par. 2-11, Chart 1, "A Moon Alignment Reconstructing Neat Amarna" at the end of par. 2:11, Chapter 2, God's Iron Furnace Translated*)

Above: Horemheb relief usurped from Tutankhamun *(Temple of Luxor, Egypt)*

7[12] The BG chronology for the New Kingdom period of Egypt, from Ahmose I Year 1 1551 BCE to Ramesses II 1315 BCE, is fixed by Sothic alignments in 1526 BCE and 1326 BCE (Amenhotep I's Year 1 and Seti I's Year 1), and may be readily resolved with superbly aligned lunar dates, as well, and as we verified for the Amarna period, above. The *Book of Sothis* offers support for Manetho's chronology, as we also explained in this chapter, with dates in our BG chronology guiding the interpretation. There are 236 years from Ahmose I to Ramesses II, Year 1 to Year 1, and **The Exodus** is firmly 1493 BCE. In-depth research has proven to us that we should hold on tightly to our *Blessed Greenealogy*-- the BG. There is another Sothic rising dated to a Year 11 from Gebel Tjauti (slightly north of Thebes), and one known from Elephantine in the Reign of Pharaoh Thutmose III. The New Kingdom secured, we seek further implications.

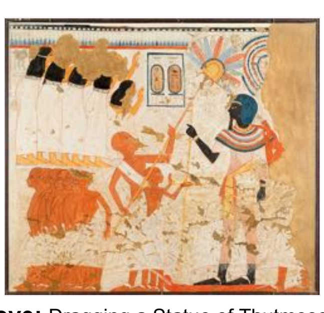
end of Chapter 7: Holding On Tight

Above: Thutmose III statue, Egyptian Museum Cairo
(1906 photo, 18th Dynasty Egypt, statue, found by Georges Legrain (1865-1917) in 1904 in Karnak Cachette.)

Chapter 8: Exodus Mediator By Exact Rising Sothis

If, therefore, you consider me a sharer, receive him kindly the way you would me. Moreover, if he did you any wrong or owes you anything, keep this charged to my account.
(Philemon 17-18, New World Translation 1984)

Ef þú því telur mig félaga þinn, þá tak þú á móti honum, eins og væri það ég sjálfur. En hafi hann eitthvað gjört á hluta þinn, eða sé hann í skuld við þig, þá fær þú það mér til reiknings.
(Philemon 17-18, The Icelandic Bible 1981)



Above: Dragging a Statue of Thutmose I in Reign of Seti I, Metropolitan Museum of Art, New York *(1326-1315 BCE, 19th Dynasty, facsimile, tempera on paper)*

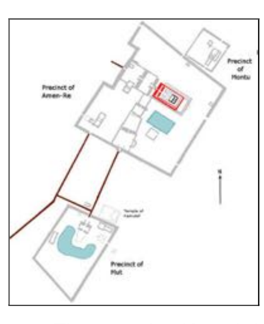
81 As I mentioned in 7-2, the rising of Sothis during the Reign of Amenhotep I in the New Kingdom, together with radiocarbon dates confirming the time of Ahmose I, his predecessor, make the date of 1533 BCE for the Year 19 of Ahmose I and his expulsion of the Hyksos from Egypt "one" of the most "certain" dates in Egyptian history. [1] Biblical mention of the city of "Pithom," built by the Israelites under their slavery to "Egypt," is proof of their having been under Hyksos control, since "Pithom" is one city believed, from modern excavations, to have existed only during a time called the "Hyksos period." [2] The expulsion of the Hyksos in 1533 BCE thus would not be identifiable as the Israelite **Exodus** at all. Also, Israel must have been slaves under the "Hyksos." The Hyksos Dynasty (Dynasty XV) lasted 108 years (from the *Turin Papyrus*), narrowing the time frame of Israel's **Exodus** from unknown to after 1641 BCE. The non-existence of Thutmose I's mummy, together with his daughter's proclamation regarding Asiatics and the 'vagabonds' of the Northland said that by Hatshepsut's time Israel had departed (**The Exodus**) and meant that the event was 1493 BCE, the year Thutmose I died. [3]

[1](*Notebook 35, WG, p. 141, Tuesday, October 17, 2017, 1105 AM EDT*)
[2](*Ibid.*)
[3](*The date is independently determined by adding the 479 years of 1Kings 6:1 to the date of the founding of Solomon's Temple, 1014 BCE.*)

Above: The City of God and the Waters of Life, Private Collection
(1850-1851 painting by John Martin, oil on canvas, 46 x 66 cm)

82 Many if not all Egyptologists have been concerned with the date of **The Exodus** of Israel from Egypt and many proposals are offered for **The Exodus** date. The Reign of Ramesses II has been proposed very often, while some propose Amenhotep II or Thutmose III or II. [1] All of these proposals err with regard to Bible facts. They ignore the scriptural statement about the Pharaoh having died, and about the death of his firstborn son, or they don't fit the date of the Biblical chronology. These things are true of Thutmose I, who fits Biblical details in more ways than the other proposed Pharaohs, including a dating that aligns with the Biblical Kings of Israel and 1Kings 6:1, and with modern computation. The rising of Sothis determines 1517 BCE as Year 9 for Amenhotep I, the predecessor of Thutmose I, precisely. **The Exodus** occurred very nearly 24 years later.

[1](*Some also propose the Reign of Akhenaten.*)



Above: Thutmose I at Karnak (red)
(18th Dynasty, 1505-1493 BCE, Legend (by others): modern Karnak in grey, things built before Thutmose I in black, construction done by Thutmose I in red)

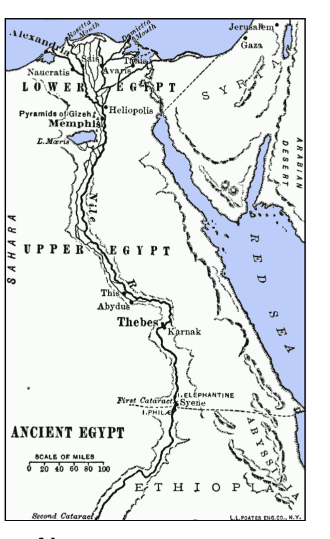
83 The time of Moses is determined by the 1452 lunar date (Adar 7) of his death at age 120 years, and also gives the time of **The Exodus** as 1493 BCE in agreement with the independently determined Bible/Egyptian date. We have also shown that **The Exodus** year itself, 1493 BCE, has a lunar alignment to the day of the week which is fulfilled at the time of Sabbath institution. The Egyptian Pharaoh Hatshepsut memorialized the death of her father Thutmose I in an unique way, celebrating a Year 30 Heb Sed festival in her Year 16, at the time dedicating a coffin, too, to the memory of her father, things which may be more difficult to explain, had her father's mummy not been unrecoverable, and had his end not come in an ignominious fashion, one might suppose. [1,2]

[1](*"Wild Road Ahead To History," Part 2, 8-2*)
[2](*A mummy that had at one time been identified as that of Thutmose I was discounted when in 2007 renowned Egyptologist Zahi Hawass decided that the mummy which had previously been thought to be that of Thutmose I was not him, because the mummy had been a man of only about 30 years of age and died of an arrow wound to the chest, a combination of factors causing many to believe the mummy of Thutmose I is still missing. See: "Mummy awakens new era in Egypt," Jul 14 2007, Chicago Tribune article, by Lisa Anderson*)

Above: Saint Michael Protecting the Hebrews on The Exodus from Egypt, Eglise Saint-Michel de Lille *(1893-1898 painting by Alberic Victor Duyver, oil on canvas)*

84 The Bible chronology is expected to be good, reliable, and is not subject to traditional or scientific views. So while it can be extremely reassuring to note strong confirmation of the Bible dating in the other sources, these other sources are never expected to be reliable. The 518 years of Shepherd Kings (Hyksos) in Manetho by Africanus puts their beginning date as 1970 BCE, which is Year 1 of Senusret I in Sothic-aligned dating based on Year 7 of Senusret III as the fixed Sothic heliacal rising occurring less than 100 years later (1872 BCE).[1] There is also an inscription associated with Amenemhet I, the predecessor of Senusret I, which describes some ongoing Hyksos invasion (Prophecy of Neferty, p. 19 of Gerard Gertoux, "Moses and the Exodus-- Chronological, Historical and Archaeological Evidence" 2015 Edition). This is an interesting correspondence seeing as it has the at least possible implication, that Senusret I was connected to the Hyksos. Even more importantly, Israel enters Egypt in 1914 (during the Reign of Amenemhet II the successor of Senusret I, eg. Redford), and Jacob's (Israel's) son Joseph entered Egypt in 1936 BCE at age 17 years, thus during the Reign of Senusret I himself![2] The *Book of Sothis* gave 815 years from 2738 BCE (death of Menes) to 1923 BCE, the exact year we deduce to be when Joseph became 2nd only to Pharaoh in Egypt.[3]

[1](*518 added to 1452 BCE, when Jericho fell to the nation of Israel in the BG, is thus 1970.*)
[2](*Israel (or more specifically Jacob and his sons apart from Joseph) entering into Egypt in 1914 BCE is first reported in my article "Green" as is the year 1923 BCE, with 1936 BCE being seen from "Joseph and On (Poseidon)," and with 2738 BCE first appearing in "Ark of Urartu" as from John Jackson's "Chronological Antiquities Vol. 1 p. 277 footnote (referred to Herennius Philo of Byblus), although 2738 BCE we see discussed in my work "Wild Road to History Part 2," with the closely-related Chinese date 2737 BCE seen in "Ark of Urartu" (13 instances in all).*)
[3](*Although this is very messy, the Book of Sothis gives 815 years from the "Dispersion," what we understand Biblically as the scattering of the people over all the surface of the earth, from Genesis 11:8, near the time of Nimrod's death, until Joseph arriving in Egypt as a slave into Egypt for the 1st time in what is given in the Book of Sothis as the 17th year of Apophis, as the Pharaoh is there named, and there being 16 years thus added to the previous three Reigns, which are there 19, 44, and 36 years, in total 115 years 16+19+44+36 added to 700 years, with 700 being the number from the Dispersion.*)



Above: Map of Ancient Egypt (Avaris*, Memphis, Thebes, Elephantine) *(From the book "The Ancient World from the Earliest Times to 800 AD," 1913, by Willis Mason West, p. 16, Library of Congress (colour added by Ward Green). Elephantine is near modern-day Aswan (Swennet, Syene) about 112 miles south of Thebes (modern-day Luxor).) *Avaris (Tell el-Daba) is 2 miles southwest of Pi-Ramesses, both of which would be today indicated as about 10 miles (16 kilometers) south of Tanis.*

85 Only in our own chronology do these things become even remotely possible. They come fraught with uncertainty. But they make it impossible to prove the Bible untrue. We need only find "one" possible path to true history. This, it appears, we have done. It matters not whether uncertainties remain. Ancient periods always bewilder. It is difficult to describe the gamut of emotions that I endure in order to make progress in ancient matters. Yet there remain two Sothic risings recorded in Egypt, but lacking all of the details. One is in a Year 11 of an unknown Pharaoh, at Gebel Tjauti dated II Shemu 20, and the other at Elephantine, no Year number, dated as III Shemu 28, in the Reign of Thutmose III, some year. One may never know when something important might turn up during our study of an ancient astronomical record. [1]

[1](*Quitting work for the night, Monday, May 14, 2018, 2111 h EDT, anniversary day of my marriage to my late wife, Anne R. Rutledge.*)

Above: Egypt, Sinai and Dead Sea *(March 20 2013 photo by NASA, scaled for size. "The Nile and the Sinai, to Israel and beyond. One sweeping glance of human history." Caption by astronaut Chris Hadfield on board the International Space Station.)*

86 It's very important that when we look at these things, which are not exactly specified, that we do so with an open mind but that we do not let them ever take on any more importance than the exact Sothic alignments which are already a part of the chronology which we present. The Gebel Tjauti Sothic event was recorded merely as a Year 11, and without a Pharaoh named, although we note that Khyan has been proposed, by some, as the Pharaoh. In Egyptian history it has been thought that Khyan was a Pharaoh who reigned in the period of the Hyksos, 108 years (Turin King List) that we date as 1641-1533 BCE. [1] The date of the rising of Sothis for the Year 11 is in this case determined by us, with *arcus visionis* above 8.65 degrees (in PLSV 3.1.0) as Jul 14 1605 BCE. [2] Rita Gautschy determined a date of from 1608-1595 BCE, using an *arcus visionis* of 9-11 degrees, but an Oriental Institute Annual Report for 1996-1997, p. 72, dated it 1593-1590 BCE (July 11), showing they assumed a low value of *arcus visionis* of 7 degrees, but they say that Jurgen von Beckerath had agreed with it. They, not Gautschy, name Khyan (Seweserenre) Pharaoh.

[1](*Year 19 of Ahmose I is 1533 BCE, and the year when the Hyksos were driven out of Egypt.*)
[2](*Lowering the date to Jul 13 in 1601 BCE would require lowering the arcus visionis.*)

Above: Grand Entrance to the Temple of Luxor *(1848 lithograph of an illustration by David Roberts, Egypt & Nubia / from drawings made on the spot by David Roberts ... ; lithographed by Louis Haghe. London : F.G. Moon, 1846-1849, v. 2, pt. 38, Library of Congress, U.S.A.)*

87 To reiterate, both Gautschy (1608-1595 as Year 11) and the Oriental Institute, Chicago, give Year 11 for this Sothic rising II Shemu 20 at Gebel Tjauti (U. Chicago, 1593-1590 Jul. 11 dating). Phouka.com offers variously for Khyan (called also there Apachnan) 50 years, or 25 years (1625-1601)(Manetho), 20 years from Piccione, 39 years from Redford, and 40 years from Ryholt.

In the *Blessed Greenealogy* Year 1 of Apophis is 1583 BCE (assuming he ruled 40 years), so 25 years put Khyan at Year 1 1608, with a Year 11 of 1598 BCE, thus in agreement with the astronomer, Rita Gautschy.

A Reign of 20 years for Khyan (Khiyan) would make Year 1 1603 BCE, and Year 11 1593 BCE agrees with the given estimate from the Oriental Institute (1593-1590 BCE).

Above: Landscape and Flight into Egypt, Courtauld Gallery, London *(1563 painting by Pieter Brueghel the Elder, oil on panel, 37.1 x 55.6 cm)*

88 For Apophis, 1588 is the average of six datings by six leading archaeologists as his Year 1, but Manetho gave him 14 or 61 years and Phouka takes Apachnas as him in Manetho, with 36 y 7 mo in total. Manetho put "Janias" (cf. "Khyan") as ruling 50 y 1 mo (Josephus). However, for a Sothic rising agreeing with Gautschy, we require a total of between 52 and 65 years, roughly, for both. [1]

Gebel Tjauti's Sothic rising (on II Shemu 20) has been dated by David Lappin (2002), "The Decline and Fall of Sothic Dating," as having in the Orthodox Chronology a date of "July 13, 1598 BCE," implying 1608 Year 1, and exactly 25 years of Rule for Khyan, in total agreement with what Phouka.com gives as of Manetho (and 50 years alternatively), 25 years for this King (note they date it 1625-1601 BCE). This is indeed excellent agreement.

'Gebel Tjauti' is located on the west side of the Qena Bend, on a path connecting Thebes with Hou [(Hiw)] and Abydos, latitude 26 deg 11' N, longitude 31 deg 55' E. An *arcus visionis* of 8.0 in PLSV 3.1.0 produces a July 13 Sothic rising (Julian) at this latitude. The observation is believed to have been made from the top of a plateau. The date II Shemu 20 of this inscription (when July 13) is a religious (Day 15) full moon, plus an astronomical full moon (both) in the year 1600 BCE, close to the 1598, cited above, and near the middle of Gautschy's 1608-1595 range. Also, conjunction July 09, 1601 BCE, would make July 13 a LD 5, or feast day, and an annular solar eclipse Jan 14 1601 came over Thebes.

[1](*Based on 1583-40+65= 1608. Or, 62 to 75 years to Year 1 Khyan with Year 11 1608-1595, if we compute 1618-1605 as Gautschy's range for Year 1, with the end of Apophis in 1543 BCE. Thus, 1543+75=1618 and 1543+62=1605, for example.*)

89 Khyan Year 1 is 1612/1611, from the lunar-aligned Year 11 of 1601 BCE, with a Sothic rising on II Shemu 20 at (near) Thebes (July 13).

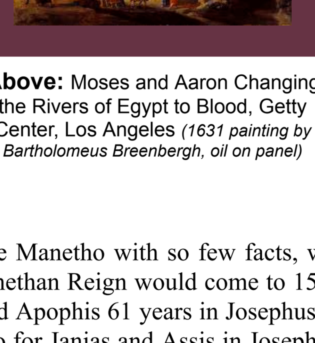
The 36 y 7 mo given by Josephus as the length of Reign (in Manetho) for 'Apachnas' works well as the Reign of Apophis in the north up to Ahmose I in 1550 in Thebes:

1550 + 37 = 1587 BCE Yr 1 (Apophis)

This is new for our dating of Apophis (was 1583 BCE Yr 1 before), and 1587 is about 15 years before the birth of Moses (in Eusebian Manetho, Apophis has 14 years!).

This date agrees with Khyan ruling 25 years (1612-1587 BCE), from Phouka.com. It also permits Salatis in this same Dynasty 15 to have 19 years from 1641, leaving 10 years for Sheshi and Yakubhar in Dynasty 15, and while Yakubhar may have 8 years, Sheshi rules between some 2 (Redford) and 13 (Franke), at Phouka.com. With Apophis reigning from 1587 BCE, 44 (or 43) years appears to be his Reign as Beon (Bnon) in Manetho's Dynasty 15, thus reaching to our Year 1 Khamudi (1533 + 10 = 1543 BCE). [1,2]

[1](*Notebook 35, WG, p. 94*)
[2](*This is because Khamudi is attributed by some as having a Year 11 (unnamed King) during the time of the attack on Avaris by Ahmose I in 1533 BCE, thus the result 1533 + 11 - 1 = 1543 BCE, Year 1 Khamudi. Also, Ahmose I is in his Year 19 or thereabouts at the time of the capture of Avaris, so this Year 11 of an unnamed King appears not to be attributable to Ahmose I. The year 1533 BCE is fairly well established as the date of the capture of Avaris, driving out the Hyksos from Egypt, this based on dates in the Reign of Ahmose I, as discussed in our earlier articles "Moses" (about 40% of the way down) and "The Crucible of Credible Creed" par. 3-3 through 3-5 mainly, plus 3-12, 6-1, 6-7.*)



Above: Moses and Aaron Changing the Rivers of Egypt to Blood, Getty Center, Los Angeles *(1631 painting by Bartholomeus Breenbergh, oil on panel)*

810 Very difficult though it is to resolve Manetho with so few facts, we note that were Apophis counted as ruling from 1612 BCE his 61-year Manethan Reign would come to 1551 BCE, or just the Year of Ahmose I (Aphobis has 61 years in Africanus, and Apophis 61 years in Josephus). The other interesting questions have to do with the 50 y 1 mo and 49 y 2 mo for Janias and Assis in Josephus, and the Bible's mention of "Jannes and Jambres" as two opposers of Moses, which might be related in some way. This is a very interesting potential discussion, which may have to wait while we look after the Sothic rising date from the Reign of Thutmose III, from Elephantine. But it seems the time from a Sothic rising in 1601 BCE is about 50 years before Year 1 of Ahmose I, 1551 BCE.

811 No Year number is given for the record at Elephantine. It is a Sothic rising, dated Epeiphi 28, and depending upon where it was observed, may be dated by astronomy. If it were observed at Elephantine, it is in the final few years of the Reign of Thutmose III; allowing for a value of the *arcus visionis* as low as 8.0 (July 11 rising coinciding with Epeiph 28 is 1441-1439 BCE), and as high as 8.88 (July 12 Epeiph 28 1445-1442 BCE), then it occurred in the last seven years of his Reign. However, it would not pose any difficulty were it made at Thebes or Memphis, with July 18 at Memphis just one year at most from the 1st year of his sole Rule, 1468, Epeiph 28 falling in 1469-1466 BCE on July 18, thus it may have been recorded to commemorate the year that he (Thutmose III) began sole Reign (death of Hatshepsut). Of course, in our chronology only could this align so.

Above: Sphinx of Thutmose III, Metropolitan Museum
(18th Dynasty Egypt, quartzite, 34.6 x 11.4 cm x height 23.3 cm, weight 4.5 kg)

812 We may yet see some more ramifications for these dates of Sothic risings known from Egypt, but we note how it is possible to get absolute dates from Sothic risings. The exact date for **The Exodus** is related to one such Sothic date, which is from Year 9 of Amenhotep I. From this, it is possible to date Amenhotep I's Year 1 to 1526 BCE, his Reign ending in 1505 at the accession of Thutmose I, given by Manetho as ruling for 12 years and who then died in 1493 (we believe in the Red Sea). This chapter has been extremely illuminating, and only strengthened our absolute dating of **The Exodus.** The Mediator to the Biblical date of 1493 BCE is great Egyptian chronology *(BGEG)* aligned with Sothis.

Above: Seti I White Alabaster Sarcophagus, 3D model of original in Soane Museum
(Factum Foundation produced a 3D model of the Sarcophagus of Seti I, which was recorded using photogrammetry in 2016)

end of Chapter 8: Exodus Mediator By Exact Rising Sothis

Above: Shabti of Seti I, Metropolitan Museum *(19th Dynasty Egypt, faience and paint, height: 30 cm)*

Chapter 9: Outshining Nenephreous

Above: Return to Nazareth from Egypt, Museum of Art, Cleveland *(1734 painting by Francesco Conti, oil on canvas, 118 x 84 cm)*

I Paul am writing with my own hand: I will pay it back-- not to be telling you that, besides, you owe me even yourself. Yes, brother, may I derive profit from you in connection with [the] Lord: refresh my tender affections in connection with Christ. (*Philemon 19-20, New World Translation 1984*)

I Paul haue written this with mine owne hande: I will recompense it, albeit I doe not say to thee, that thou owest moreouer vnto me euen thine owne selfe. Yea, brother, let mee obteine this pleasure of thee in the Lorde: comfort my bowels in the Lorde. (*Philemon 19-20, Geneva Bible 1587*)

91 It has long been the desire of Biblical scholars along with Egyptologists and Biblical archaeologists to know the name of the Pharaoh reigning in **The Exodus.** Other than idle curiosity, it would serve the purposes of history to verify the Bible story of how Israel got free of Egyptian slavery, and find the Pharaoh's name. Actually, the name of the Pharaoh at the time of which we speak has been named by various sources to which we have referred already in various articles, one example being the Tethmosis named by Manetho (cf. Thutmose I). Artapanus also mentioned the name of the Pharaoh whose Reign coincided with the time of Moses, it having been preserved in Clement's Stromata I.23 as: "Chenephres." Since we name Thutmose I, we will note that he is also named in Manetho "Misaphris" (in Africanus), "Mephres" (in Josephus), and "Miphris" (in Eusebius), but he has the Throne Name "Aakheperkare," after getting crowned. What appears in Clement, however, *was emended, from "Nenephreous,"* which appears to take a Greek form. [1,2] Were the custodians of this text justified, or how did they think to exchange "Nenephreous" for "Chenephres?" In this chapter we will seek to gain validation for BG chronology as obtained from the writings of Artapanus.

[1]((*Quitting for the night Thursday May 17, 2018, 2144 h EDT*)
[2]((*Notebook 36, WG, p. 160, Mar 27, 2018*)

Above: Daniel in the Lions' Den, National Gallery of Art, Washington, D.C. *(1614-1616 painting by Peter Paul Rubens, oil on canvas, 224.2 x 330.5 cm)*

92 The reason for the emendation has been given as due to Eusebius, in whom we have seen the name "Cencheres" at the time of Akhenaten, but which dates much later than **The Exodus** in the BG, and has little similarity to the original given from Artapanus as "Nenephreous." [1-3] The basis for this emendation is questionable based on the sequence in Eusebius which is an error of 7 Reigns (Cencheres is 7 Reigns after Miphris and is, according to Eusebius, the Pharaoh of **The Exodus,** despite the fact that Eusebius knows that no one else agrees). [4]

On the other hand, "Mephres" and "Nenephreous" have no difference apart from "M" being substituted with "Nn," because vowels were more often changed in translation. Egyptian "Nun" (cf. "Nn") means the "abyss," of water, but referring to the inactivity from which life comes. "Nu" is also the Greek letter "n," while the Greek "m" is called "Mu" and was derived from the Egyptian "Mem" which is the hieroglyphic symbol for "water," as well.

The emendation does not appear to be justifed, at all, based on the Eusebian reference, and is so outrageous, in fact, as to show a great disregard for all writers.

We shall use "Nenephreous," as the name was originally written, to refer to a Pharaoh who lived at some time during the life of the Biblical Moses, but who because of the similarity to "Mephres" (Miphris, Misaphris) of Manetho, we can identify as **The Exodus** Pharaoh.

To put it simply, *Nenephreous* is the Pharaoh of **The Exodus** who is also called *Mephres* by Manetho and who corresponds in real life to Thutmose I of Egypt (ruled 1505-1493 BCE), being conflated in the writings of Artapanus with Apophis and Ahmose I, other Egyptian Pharaohs living in the younger days of Moses. We will also consider Thutmose I and the other reasons why he should be identified as Pharaoh *Mephres.*

[1](*The Chronology of the Old Testament, by D. R. Fotheringham, 1906, p. 122*)
[2](*Among the relatively few commentators who would date* The Exodus *as occurring during the Reign of Akhenaten is Eusebius, viz. note 4, below.*)
[3](*Harvard Theological Review, Volume 61, Issue 3, July 1968, pp. 451-481, footnote 29*)
[4](*Manetho, with an English translation (1940), by W. G. Waddell, p. 115, Fr. 53 (a) (from Syncellus). Eusebius is here quoted as saying:* ***"About this time Moses led the Jews in their march out of Egypt."***)

93 We expect that there are many linguistic factors which play into the identification of one name with another. An ancient name may be corrupted or altered over time. In Manetho, *Nenephreous* more strongly resembles *Miphris* than any other Pharaonic name from 18th Dynasty Egypt, as it is the only name with the letters *phr* (apart from "Misphragmuthosis," of course). The emendation Chene*phr*eous shares the same, as it appears to originate in the ending, *perkare,* of the Prenomen of Thutmose I, in Aakhe*perkare.* No other Pharaoh in Egypt's history has an ending like *perkare* **in any part of their Prenomen** or Throne Names (other than Senusret I, aka. Kheperkare). Thus *Mephres* (Thutmose I) is the Exode Pharaoh.* I will endeavour to explain some Egyptian linguistics.

* Another name given in Artapanus for the Pharaoh ruling at the time of **The Exodus** takes different forms in the Chronicle of Michael of Syria and Bar-Hebraeus' Chronography, according to an article *The True Date of the Exodus and the Pharaoh of the Exodus S. 51.* It is **Psonos, Phosinos,** or **Petissonios,** which, in "Phosinos," strongly resembles "Mephres," or "Misaphris," Manetho's names for Thutmose I, by simple reordering of letters and taking "N" for "M," equally. Only the "r" is missing, which is not a large problem. Of Amenhotep I, Thutmose I, Hatshepsut and Thutmose II the sole Pharaoh having a name containing something of the nature of "Peti" in one of his names, with the "s" and the "n" also, is also Thutmose I, whose Nebty name is *Kha·em·neseret Aa·pehty,* the last part of it providing the "Peti" and the earlier "nese" providing the "ssonios" equally well with the end of "Thutmose." When Egyptian names have been translated into Greek in Manetho, we do not always see their good preservation.

Above: Ruins of Karnak
(1847 colour lithograph of original by David Roberts, Egypt and Nubia, Volume I, 43 x 60.4 cm)

94 The symbol for "M" in Egyptian hieratic script is "3," very similar to the "alef" symbol ("A"), written as an unjoined, sideways "m," two semi-circles not touching. The hieroglypic symbols for "A" and "M" are both birds (as such, being again similar enough to confuse them)! "Alef" is used in Egyptian transliterations of symbols used for letters, such as hieroglyphics sometimes are, to make them pronounceable, and "3" is used instead of "[two semi-circles not touching]" to represent "alef," because of their closeness in appearance, alef (as two semi-circles not touching) and hieratic "M" (viz. "3") being possibly mistakeable for one another, explaining *Mephres* as the Greek rendering of Aakheperkare. [1] Apparently, I am the first to recognize this identity. [2,3]

[1](*As already explained, Aakheperkare is the Throne Name of Thutmose I.*)
[2](*It should be noted, however, that Greek translation of Egyptian names of Pharaohs may not anyways be regular, nor may we know the reason for it (Ps 108:12; 92:5,6).*)
[2](*As we note above, the Pharaoh "Mephres" is unique in the 18th Dynasty in the "phr" combination, as Thutmose I in the "perkare" ending of his Throne Name "Aakheperkare," the obvious exception being "Mephragmuthosis" (Amenhotep II) and "Kheperkare" (Senusret I), the latter being 12th Dynasty. The attempt to obliterate* ***The Exodus*** *from Egyptian history and the subsumption of successive Reigns after Thutmose I drowned in the Red Sea explains why the name "Mephres" is followed by "Mephramuthosis" on all three Manethan lists (Africanus, Josephus, Eusebius), despite the latter being later and clearly followed by Thutmose IV (Thmosis (sic), 9 years).*)

95 "Mym" is a Hebrew word, meaning "water," "mother," and "from," and "mu" is the Greek letter "M" which derived from Egyptian hieroglyphic [zig-zag line] for "water," is also pronounced with an "m" sound. "Mo" is Egyptian for "water," which is "el maa" in Arabic. As mentioned above, "nu" is the Egyptian word for "watery deep," or "abyss," and thus is associated with water, as the god of the watery abyss also is "Nu, an Egyptian deity and "the Father of the Gods" (feminine form is "Naunet"). The god "Nu" is also called "Nun," and "nun" is found in the Hebrew alphabet, correlating to our letter "n." [1] Both "M" and "N" are thus associated to water, so that "Mephres" and "Nenephreous" do not appear far-fetched, at all, for the name of a drowned Pharaoh, Thutmose I.

[1](*Notebook 36, WG, p. 162, March 28, 2018.*)

Above: Egyptian Hieroglyphs
(sunk relief)

96 Another proof of the "Mephres"-"Aakheperkare" identity lies in Greek "phi" ("ph"), whose origin is uncertain, but is written like the Phoenician "qoph" ("qop", like our "q"), which is a "k" sound, like Hebrew "Qof", and which was "used in early forms of the Greek alphabet," before preference was given to "K" ("Kappa"), for this sound, "Q" ("Koppa") being relegated to numeral (=90). "Qoppa" ("Koppa") is also the source of the Latin "Q." [1]

[1](*Notebook 36, WG, p. 162, March 28, 2018.*)

97 Furthermore, Egyptian hieroglyphic symbols often found multiple use in the representation of phonetic sounds. While the exact order of the symbols was not specific, elements were often also used individually, such as in "nfr + f + r," to add "clarity to the spelling" and it was done without concern for any character repetition.

[1](*Notebook 36, WG, p. 162, March 28, 2018.*)

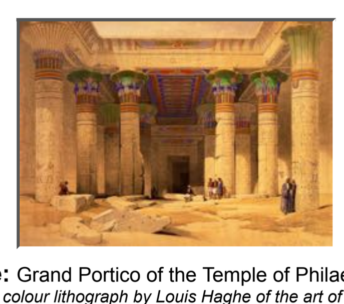
Above: Hieratic Script (funerary text)
(Third Intermediate Period Egyptian, linen with ink)

98 "Kheper" is a tri-literal (3-letter) hieroglyphic sign appearing in "Aakheperkare," the Scarab beetle. There, "Kh" is transliterated "h" by modern scholars, so that the "phr" of "Mephres" is not inconceivable (ie. "hpr" may be reordered into "phr"). Pharaoh "Palmanothes" of Artapanus has been often identified with "Amenhotep I" and in Artapanus he has a daughter "Merris" who we see in Manetho bearing a remarkable resemblance in name to "Amersis" (in Africanus only, but she is "Amesses," in Josephus, and both are from Manetho) while the Pharaoh "Nenephreous," who in Artapanus marries Merris and who succeeds "Palmanothes," is Thutmose I ("Aakheperkare," called "Mephres" in Josephus) whose wife is Mutnofret. There thus may be a degree of conflation between these two women, Mutnofret and Hatshepsut (whose Throne Name was "Maatkare"), as Hatshepsut is clearly "Amersis" of Manetho, although her name in Manetho wrongly precedes "Mephres" her father. The time period was very greatly confused, by Egypt's desire to deny **The Exodus,** and by three Pharaohs, all having the name "Thutmose."

[1](*Notebook 36, WG, p. 163, March 29, 2018.*)

99 The Reign lengths given by Manetho permit the positive identification of Mephres as Thutmose I (allowed 12-13 years, conventionally 9-13), the three Pharaohs before him and four Pharaohs who succeeded him, but also with Chebron (13 years), evidently "Chenephreous," revealed to be a repeat of Thutmose I spuriously inserted after Ahmose I, seeing as Thutmose I married the daughter of Ahmose I.

[1](*Notebook 36, WG, p. 163, March 29, 2018.*)



Above: Grand Portico of the Temple of Philae, Nubia
(1846 or 1848 colour lithograph by Louis Haghe of the art of David Roberts)

910 It is a fascinating tale that he tells, but it appears that Artapanus places the Pharaoh Nenephreous earlier, before Moses had fled to Midian, and married his wife. The Pharaoh who threatened the life of Moses before he fled to Midian was Ahmose I according to our timeline, while Apophis was Pharaoh at the time of Moses' birth. Artapanus would have Nenephreous as Pharaoh all along, which is anachronistic, and controverted by the Bible. [1-3]

Knowing that "without faith it is impossible to please [Jehovah] well," however, we have no problem in seeing past the mythological aspects of so much embellishment to gather only the name of Pharaoh as the true kernel. Furthermore, it does not matter about the time period, because that is always confused by those who have lost track of the timeline or who are without a chronology.

[1](*"The Despoliation of Egypt: in Pre-Rabbinic, Rabbinic, and Patristic Traditions," 2008, p. 49, by Joel S. Allen*)
[2](*Exodus 2:23*)
[3](*Exodus 4:19*)

Above: Ruins of the Great Temple at Karnak, Sunset
(David Roberts, 1796-1864)

9:: We now have a detailed explanation for many aspects of Manetho's early 18th Dynasty, in which the 13 years of Chebron (Chebros) align with those of Mephres (Miphris or Misaphris) and possibly include the 2 or 3 years of Thutmose II (both Chebron and Mephres have 13 years as one indicator, but the name of Chebron also identifies him with "Aakheperkare" (Thutmose I) or "Aakheperenre" (Thutmose II) by the identity of "Ra" in the "Kheper." The "kh" was pronounced more like "ch," it is commonly believed today, but the name given in Artapanus, which is "Nenephreons" (or wrongly emended, "Chenephreons"), also favours the same identification, as to "Chebron." Hatshepsut was daughter of Thutmose I and also wife of Thutmose II, whose Reign as "Amensis" fits both with her being "Merris" wife of "Chenephres," in Artapanus, as well as with her Reign of 22 years (in Manetho, she is "Amerris" in Africanus, and "Amesses" in Josephus). [1,2]

Thutmose I (1505-1493)
Thutmose II (1493-1490)
Hatshepsut (1490-1468)
Thutmose III (1493-1439)

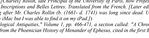
[1]*The Chronology of the Old Testament, by D. R. Fotheringham, 1996, p. 122).*
[2]*"Chenephres" (Chenephreon, Xenephreon) is more likely from "Aakheperenre" than "Aakheperkare." Thutmose II may have felt obliged to subsume his father's Reign to alleviate the shame of the Exodus, or at least Egyptian history might indicate it in this way as Amenra was also later expunged.)*

9:: We have long since committed to the Crucible of our BG chronology, ever since we had great success in writing a first history *The Crucible of Credible Creed*. It is very common in non-canonical writings (those not from the Bible) to find confusion between the earliest childhood years of Moses and **The Exodus** itself. The confusion is greatly magnified when no Bible faith is exercised by the interpreters of the many writings. However, having said that, we also as believers of the Sacred Tome also must feel no shame in adhering nearly to the Bible, nor in rejecting literal interpretations of these other writings, even by the Jewish Artapanus.

end of Chapter 9: Outshining Nenepherous

Above: SNR 0519-69.0, Large Magellanic Cloud *(Expanding debris from a star exploding in the Large Magellanic Cloud, a satellite galaxy to the Milky Way, NASA photo, resized)*

Chapter 10: As Noting Carthage Israel Elicits Noran Tyre



Above: Dido, Metropolitan Museum of Art *(also is see 1st edition of this chapter, which was removed, 28.9 x 21 cm)*

Trusting in your compliance, I am writing you, knowing you will even do more than the things I say. But along with that, also get lodging ready for me, for I am hoping that through the prayers of YOU people I shall be set at liberty for YOU.
(Philemon 21-22, New World Translation 1984)

Da ich deinem Gehorsam vertraue, so habe ich dir geschrieben, indem ich weiß, daß du auch mehr tun wirst, als ich sage. Zugleich aber bereite mir auch eine Herberge, denn ich hoffe, daß ich durch eure Gebete euch werde geschenkt werden.
(Philemon 21-22, 1905 German Darby Elberfelder Bible)

10: The history of Carthage has always been linked to Tyre by Dido the sister of King Pygmalion of Tyre, when she departed that city in his Year 7 to go found Carthage. Mr. Charles Rollin writes about it in his (apparently) uncorrupted edition "Ancient History Of The Egyptians, Carthaginians, etc..." (1784), where he gives the time of Carthage's duration as 742 years, total, after 887. [1] Although his numbers are inconsistent, he also has the founding date of Carthage as 882 BCE, remarkably quite identical to my own estimates in my earlier articles. As we shall see, there is no need to change the dates, because the popular lower dating has no basis in fact. But while the dating of Carthage as we presented it is agreeable to a founding date of 890-870 BCE, agreeable to radiocarbon dates as well as the *Nora Stone*, in this chapter we will be happy to resolve the Reigns of the Kings of Tyre by lengthening the Reign of Hiram its King, to 54 years from 34, putting his Year 1 back to 1046 from 1026 BCE as the Bible appears to require.* Mr. John Jackson makes a case for this in his history, based on the years of Tyrian Kings, given by Josephus, in *Against Apion*, which appear short of number. [2]

Above: Aeneas and Dido at Carthage *(1675-1678 painting by Claude Lorrain)*

10: As always, the Bible is found to be a reliable source, and the resulting amendment to the Kings of Tyre makes that account agree with the Biblical account of Hiram, which states that Hiram was a friend of both David and Solomon, both of whom had 40-year Reigns, and that the house of David in Jerusalem, which he built soon after conquering the City of Zion there, was built with some considerable material assistance of timber from Hiram. [1,2] For a long time this has been a problem in chronology, because the Bible account also indicates that Hiram is alive some time after Solomon completes his own house, and that time is as late as 994 BCE, in BG chronology. [3] David's conquest of Jerusalem, on the other hand, took place after his first seven and a half years of Reign, and may be thus no earlier than 1051 BCE, but is dated to about 1046 BCE by the relative numbers of Josephus. This makes a time span of at least 52 years for Hiram.

[1]*The Bible is always assumed to be reliable, for any other assumption flies in the face of its enormous success in testifying to historical facts and poetry, time and time again to be correct in such things, even when material evidence had been lacking for some time, and while other sources had shown no such reliability. The historicity of both Pontius Pilate and (in Daniel) the name of Belshazzar as ruler of Babylon are but two of many examples. Nebuchadnezzar, for instance, was thought to be a fictitious character, but the finding of Daniel's house is not specific enough with regard to exactly how much time elapsed after the conquest of Jerusalem by David and this building.)*
[2]Samuel 5:11: 1Kings 5:1 [Here the Bible seems to be indicating a definite longstanding relationship between King Hiram of Tyre and Kings David and Solomon of Jerusalem, going back to David's early days in Jerusalem, when he built his house there not long after his Year 8, a year we latter show as Year 12 in paragraphs 10.9, 10.11.])
[3]The date 997 BCE has been verified from actual Babylonian records knowing the date of capture of Babylon to be 539 BCE, and then using years as exactly determined for Babylon's Kings (see The Gentile Times Reconsidered, 4th Edition by Carl Olof Jonsson, 2006) prior to this date to get to 997 BCE as the date of Nebuchadnezzar's Jewish deportation to Babylon, from this point adding back the years of all of Judah's Kings, to arrive at 1014 BCE for the founding date of Solomon's Temple in Year 4 of Solomon, and the date of "994 BCE" is 20 years after that.)

Above: Carthage Ruins, Phoenician Quarter on Byrsa Hill *(2004 photo)*

10: Assuming that Hiram was King for all of those 52 years (an important consideration in attempting to reconcile the sum total of the years of the Tyrian Kings offered in Josephus to a date of Dido's founding of Carthage), the 34 years recorded for Hiram in Josephus appears to be short by about 20 years, a problem he can deal with by other commentators by adding years to the Reigns of other Tyrian Kings, and citing corruption in Josephus. [1] Dido is said to flee from Tyre in Year 7 of Pygmalion, her brother, who is the last Tyrian King on this list. Thus the total of years of Tyrian Kings may be seen as the total of years from the founding of Carthage's founding. [2-4]

[1]*"Chronological Antiquities," Volume 1, pp. 466-471, a section called: "A Chronological Dissertation, on the Kings of old Tyre, from Abibalus to Pygmalion, from the Phoenician History of Menander of Ephesus, cited in the first Book of Josephus against Apion, Sect. xviii," by John Jackson. (this is concerning the Reign of Hiram, specifically, from which the corruption in Josephus is inferred.))*
[2]Dates from radiocarbon at Huelva, Spain give an middle date of 800 BCE for the 9th range which implies settlement on or before this date, and this is consistent with Carthage as we date it 1082 BCE, although radiocarbon is hard to get from Carthage itself due to the removal of the earliest layers by Roman fill, and the Phoenicians, who founded Carthage, left no monumental inscriptions to date the region, as Mr Gertous has summarized nicely, on p. 82 of his "Annals vs. the King of Nineveh," and all of these can be shown to date 841 -> 38 BCE.))
[3]"Annals vs King of Nineveh Chronological, Historical and Archaeological Evidence," 2015, by Gerard Gertous, p. 82.)
[4]"An Interpretation of the Radiocarbon Determinations of the Oldest Indigenous-Phoenician Stratum thus far. Excavated at Huelva, Tartessos (South-West Spain)," B.Ribesch 81, 2006, by Albert J. Nijboer and J. van der Plicht)

Above: Solomon's Stables, Jerusalem *(2006 photo, Merwan underground mosque)*

10: We had determined the founding date of Carthage before by invoking the *Aeneid* of Virgil, wherein it is noted by Dido that Aeneas had wandered about after the **Trojan War** and it is now the 7th summer. Since the **Trojan War** ends in 888 BCE in the BG, we have close to 882 BCE, as independently determined. As noted in *Wild Road Ahead To History*, Part 2, the city of Carthage was dated by records of the Kings of Tyre as 127 years after the founding in 1014 BCE of Solomon's Temple, receiving Dido in 887 BCE, just five years before the establishment of the city in 882 BCE. [1,2] Since that period of 127 years was computed from the year of the founding of *Solomon's Temple,* in 1014, it did not depend on the Reign of Hiram for its total. [3] The founding of *Solomon's Temple* Josephus gives in this account as also the *12th Year of Hiram*, but Mr. Jackson states that ancient writer Theophilus, instead, reckoned it as the *22nd Year of Hiram*. [4] Seeing as the particular Year of the Reign of Hiram is in dispute, we may see no great difficulty in deciding it to have been from us the *32nd Year of Hiram*.

[1]*Wild Road, Ahead, Re-Printing, Part 2, (2014), pp. 11-13, Lessons at all. While in pp. 11-13 of Wild Road we mentioned that we had better not rely upon Virgil's history, it remains for us one of the best sources because in Aeneid the meeting of Dido with Aeneas is historic.)*
[2]Joseph (2008), by Lessons, search text for: Nilgemesis. As presented briefly there, only in certain specific years is the lunar date of Nisan 15 aligned with the date Apr 18, which is the Julian date closest to the date of sunrise on the axis of the 1st Jewish Temple, that known as Solomon's Temple. The Nilgemesis website, by Rod Dutton, has a table of such years, and we have found that the 127 years of Carthage's founding is in agreement with the axis of Solomon's Temple. Redinger assumes this alignment occurs on the 1st full moon of spring during the year of founding of Solomon's Temple, which in our chronology is aligned with 1014 BCE, exactly, in proof of our other interdependent date relations, such as the Exodus date and the date of Jerusalem's destruction (the latter also a generally accepted date in conventional chronology, 587 BCE). Our Exodus date of 1491 BCE is thus vindicated by Redinger's work, though he is looking for Solomon's Temple date at a later point in time. The founding of Solomon's Temple is in Solomon's Year 4, from 1 Kings 6:1.)
[3]"Against Apion," 18, by Flavius Josephus.)
[4]"Chronological Antiquities," Volume 1, pp. 466-471, a section called: "A Chronological Dissertation, on the Kings of old Tyre, from Abibalus to Pygmalion, from the Phoenician History of Menander of Ephesus, cited in the first Book of Josephus against Apion, Sect. xviii," by John Jackson. [Theophilus is there identified as the Bishop of Antioch, and his work as his "Third Book to Autolycus."])

Above: Maurus Servius Honoratus commenting Virgil, British Museum *(15th century Frank, work by Maître de Robert Gaguin, a mitteram after Servius,1ith 4th early 5th century)*

10: Maurus Servius Honoratus judged **Rome's founding** to be 40 years after Carthage's, which with Rome dated in 842 BCE in our BG chronology (with sound reasoning, see *B4 Chronology: History of Babylon*) puts the **Founding of Carthage** in 882 BCE, as we compute. [1] This agrees well with the 737 years of Solinus for the existence of Carthage (883-146 BCE), as few historians can disagree that Rome destroyed Carthage, in 146 BCE. The year 883 BCE precedes the 7th *summer* quoted from Virgil. Now, if Dido founded Carthage immediately after arriving there, from our BG chronology (887 BCE) we require 159 years to agree with Josephus, that Year 1 of Hiram should be 1046 BCE, and this 159 is 3 years in excess of the 156 that he gives. In support of 887, the 144 years of Josephus is 17 years in excess of the 127 years from *Solomon's Temple* founding to the time of Dido's flight from Tyre, as though it takes 17 years to found the *city of Carthage,* so that it also suggests the year 870 as the official year of the *founding of Carthage,* when vernal equinox would have for the first time fallen upon Egyptian Thoth 01, something noticed first by the great Sir Isaac Newton, who gave 870 BCE as the date of a ceremony proposed by him as the *official Carthage founding Encomium*.

[1]*The commentary of Maurus Servius Honoratus on the Aeneid of Virgil has been called the only "complete extant edition of a classic author" written before the collapse of the Roman Empire in the West.*)

10: Another important source for dating the Kings of Tyre, although it depends upon the absolute date for ancient writings, is the *Nora Stone*, a Semitic document believed to contain the name of Tyrian King Pygmalion. Mr. Gerard Gertous gives a tabulation showing the date and style of the known Semitic inscriptions, making it possible to date the *Nora Stone* to 890-880 BCE. [1,2] Even the lower dating of Edwin Thiele for Israel's Kings and the Assyrian chronology cannot lower this to any lower than 844-834 BCE (46 years lower), because a study of character styles indicates the years 890-880. Even so, 834 BCE is not low enough to signal a date as low as 814/825 BCE as the *founding of Carthage*. Thus conventional dates err, by the *Nora Stone*. This widespread, false chronology lowers Pygmalion, to 831-784 BCE, and lowers the date of the Syrian Hazael, whereas Hazael must be congruent with Bible dates, and the *Kings of Israel* we show to be correct based on a large variety of factors, as upheld by the Bible. We thus reject lower datings for Tyre as unscriptural. Pygmalion reigned 894-847 BCE, from our previous work, *Wild Road Ahead To History,* Part 2, and 887 BCE as his Year 7 concurs well with the *Nora Stone*.

[1]*"Annals vs. King of Nineveh: Chronological, Historical and Archaeological Evidence," 2015, p. 96, by Gerard Gertous)*
[2]It also depends on the belief that name of King Pygmalion is correctly translated, which makes it less likely, but more not, of a coincidence when the date and name are correctly assessed.)

Above: Tyre from the Isthmus *(David Roberts, 1796-1864)*

10: Anyone can examine the *Nora Stone* and arrive at the same conclusion, which reinforces our Biblical and multi-disciplinary approach to the chronology of Tyre. [1] The *Kings of Israel* in the uncorrupted Biblical account establish the astronomical dating of *The Temple of Solomon* as founded in 1014 BCE, and from 1Kings 6:1 as a fixed point the astronomically aligned dates for Moses (b. 1572 BCE) and **The Exodus** of 1493 BCE hold and validate the *Kings of Israel*. There is thus no dropping to a lower chronology as was attempted by Thiele and followed by very many since. Year 18 of Shalmaneser III in our BG chronology is not 841 BCE, but 887 BCE, and Year 7 of Pygmalion of Tyre, the year that Dido ran away, is also the year that her husband likely was murdered by Pygmalion, or probably.

[1]*See also par. 11-1 notes 1,2.)*

10: We are not exactly certain of the year that Dido fled, though Pygmalion's Reign appears to have started after 900 BCE because of the presence of one "Mattinu-Ba'la" (cf. Mattan I King of Tyre, father of Pygmalion), at a battle known as the Battle of Qarqar, in 900 BCE, when we believe "King Mattinu-Ba'lu" to be Mattan, of Tyre. Pygmalion's father Mattan I ruled 9 years, which could give a range for Pygmalion's Year 1 of c. 900-891 BCE, remembering that we dated the **Trojan War** ending in 888 BCE, and Dido and Aeneas as meeting in 882/1 at Carthage after coming from Tyre and Troy respectively. In 887 BCE, Year 18 of Shalmaneser III, word came from Shalmaneser III demanding tribute from Tyre (and other nations), and this may be when Dido fled, uncertainly. With 900-891 the range for Pygmalion's Year 1, 894-884 is the range of his Year 7, which means that Dido also could have fled in 890 BCE at the time Jackson states. [1] Based on radiocarbon (Nijboer 2006), it has been said: [2]

"The Phoenicians crossed the whole Mediterranean from onwards the first half of the 9th century BC if not before."

[2]*"An Interpretation of the Radiocarbon Determinations of the Oldest Indigenous-Phoenician Stratum thus far. Excavated at Huelva, Tartessos (South-West Spain)," B.Ribesch 81, 2006, , p. 36, by Albert J. Nijboer and J. van der Plicht.)*

Based on early 9th century BCE dates of such colonies, would it not be simply logical to believe that similar timing for the founding of Carthage seems appropriate? [3] All of the Phoenician colonies, including Carthage and Kition (Cyprus), would then be dated as beginning near to the time when Dido (Elissa) fled Tyre, and it were possible for her to start colonies during her own wandering, or to perhaps visit newly founded colonies. [4] Gertous reasons that the founding of Carthage is to be dated the same as the other Phoenician colonies, and I should concur, with *Occam's Razor* as my reason.

However, another thing to keep in mind is that earlier dates for Huelva than 9th century would agree with the Bible regarding ships sent to Tarshish by Hiram during the Reign of Solomon, if "Tartessos" is "Tarshish," as Huelva is a city in this Tartessos in southwest Spain. [5] No settlement earlier than Huelva is thus far known as a Phoenician settlement in the Mediterranean, although most important is that none so far predates the timing of our chronology. Hiram is dated ca. 1000 BCE (at the time of Solomon's Reign), which is the upper limit for radiocarbon obtained at Huelva in Nijboer's 2006 work. The trade with Tarshish mentioned in the Bible now may take the position of the earliest account of Tarshish.

[1]*"Annals vs King of Nineveh Chronological, Historical and Archaeological Evidence," 2015, by Gerard Gertous, p. 82. (Now Gertous notes a shift upward in exact years for the dating of Phoenician colonies in Spain, showing that the timing is BCE -> 38 BCE for all known colonies of Phoenicians around the Mediterranean, which includes an urn in Andalusia dated by Egyptian Pharaoh cartouche to before 946 BCE (Year 1 of Takeler II).)*
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[4]"The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians, and Grecians," 1784, Vol. 1, p. 142, by Mr. Charles Rollin, late Principal of the University of Paris, now Professor of Eloquence in the Royal College, and Member of the Royal Academy of Inscriptions and Belles Lettres. Translated from the French.)
[5]"Annals vs King of Nineveh Chronological, Historical and Archaeological Evidence," 2015, p. 82, by Gerard Gertous.)

Above: Tartessos *(Tarshish)* Ivory Pyxis, Spain *(Museo Arqueologico Nacional, Madrid, photo)*

10: Mr. Gerard Gertous, in his work, *Annals vs. King of Nineveh*, has noted that the Phoenicians had colonies in Spain, showing that the timing is BCE -> 38 BCE for all known colonies of Phoenicians around the Mediterranean, which includes an urn in Andalusia dated by Egyptian Pharaoh cartouche to before 946 BCE (Year 1 of Takeler II.) [1] Based on radiocarbon (Nijboer 2006), it has been said: [2]

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[2]*"An Interpretation of the Radiocarbon Determinations of the Oldest Indigenous-Phoenician Stratum thus far. Excavated at Huelva, Tartessos (South-West Spain)," B.Ribesch 81, 2006, , p. 36, by Albert J. Nijboer and J. van der Plicht.)*

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[4]"The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians, and Grecians," 1784, Vol. 1, p. 142, by Mr. Charles Rollin, late Principal of the University of Paris, now Professor of Eloquence in the Royal College, and Member of the Royal Academy of Inscriptions and Belles Lettres. Translated from the French.)
[5][Kings 10:22]

Above: The Visit of the Queen of Sheba to King Solomon, Art Gallery of New South Wales *(1890 painting by Sir Edward John Poynter, oil on canvas)*

10: The years between Hiram and Pygmalion of Tyre being in total uncertain, we may try to ascertain the endpoints as well as we can. Dido's flight from Tyre has perhaps its greatest probability to be 887 BCE, as I proposed. The year is a congruent date for the *7th summer* argument in 881 BCE, relative to the **Trojan War** dating also of 898-888 BCE, in the BG, our chronology. The other endpoint is Year 12 of David as explained by Mr. Jackson, which is also 1046 BCE in our chronology. Year 12 of David is justified in ways which I may also explain, one of these being Hiram's sending to him men and materials after David's conquest of Jerusalem that took place in David's Year 8, hence sent after Year 8. Mr. Jackson determines it as being Year 12 of David in a rather ingenious way, using the numbers in Josephus, which are wrong in an absolute sense but imply Year 12 from their relative values or differences, as I agree. [1] The second line of reasoning is that it cannot be very long after Year 8 of David, as this (from 1Samuel 5:5) is when Jerusalem is first mentioned as being the seat of David's Throne, but Year 8 is too early for Hiram's gift based on Jackson's observation of 53 years as the length of Hiram's Reign, because, with 1050 as David's Year 8, we have 997 as Hiram's death, and it is stated in the Bible that Hiram lived 20 years after Solomon's Temple was founded (1014 BCE founding, our BG) to 994.*

* This is because David ruled for 40 years, and likewise did Solomon, as is agreed by all those concerned here, and the founding of *Solomon's Temple* took place in his Year 4 (1Kings 6:1), while Hiram received after 20 years of construction beginning in Solomon's Year 4 a gift of twenty cities from Solomon (1Kings 9:10-13).

[1]*Please see paragraph 10-11 for an explanation of Year 12, regarding how it is determined, with caveat.*

Above: The Meeting of Dido and Aeneas, Tate Britain *(1766 painting by Sir Nathaniel Dance-Holland, oil on canvas, 123 x 171 cm)*

10: For Solomon's Temple in 1014 BCE (as dated in the BG), the numbers of Josephus only work with 870 as the *end* date for *founding Carthage*, since 870 is roughly 144 years after 1014 BCE and Josephus writes that Carthage was founded 143 years 8 months after Solomon's Temple. [1] But 1014 BCE is also agreeable to 887 BCE for the year of Dido's flight as it accords with 126 years 8 months after *Solomon's Temple*, as computed from a list of Tyrian Kings with Reign lengths, given in Josephus. Since there are some differences in Tyrian King Lists, as they have come down to us, we will not be surprised if the numbers don't always tally. One version appears about 25 years short, when 894 is Year 1 Pygmalion and 1046 is Year 1 Hiram. [2] Hiram is *one* King, he appears to rule 53 years or more (cf. 34), and this is the main difference between Josephus and the Bible, as regards the timeline in the days of David and Solomon.

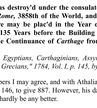
[1]*"Against Apion," 18, by Flavius Josephus.*
[2]*Notebook 36, 90(c, p. 153. The period is summing more like 20 years short rather than 25, although I wrote 25 years as the shortfall here in my notes, this being the shortfall in the years of Josephus. It can be 25 years, as from: 1046 - 127 - 12 = 882 = 25.)*

Above: General View of Tyre *(Standard First Edition, 1840-49, lithograph with added hand colouring, by David Roberts, approx. 14 x 20 in.)*

10: We pray need to clarify the logic by which Mr. Jackson arrives at his dating of Year 1 of Hiram King of Tyre. Josephus computes 515 years from Joshua's dividing the *Land of Canaan* (this the 46th year after **The Exodus**) and David's capturing the City of *Zion*, and Jerusalem, after which Hiram sent to David an embassy. [1] Josephus also reckons 592 years from **The Exodus** to the founding of *Solomon's Temple,* from which we may deduct the 45 years, to the dividing of Canaan. [2] This leaves 547 years, from which we now deduct the 32 years between Year 12 of David and the founding of the *Temple of Solomon* (29 years of David, from Year 12 to Year 40, and 3 years of Solomon to his Year 4 of the Temple founding), to see just 515 years remaining. From this, Jackson says, we see that Josephus puts the sending of Hiram's embassy about the Year 12 of David.

Of course, this was calculated by relative dating, and while it might be accurate, does not mean that anybody should accept either the 515 or 592 years as absolute. In fact, I believe the numbers are rather 402 and 479. So all non-Biblical sources are considered unreliable. In this case, the difference is 77 years between these two numbers in both cases, and the larger numbers from Josephus indicate his giving more years to the Judges. That is, 592 - 515 = 77 = 479 - 402, and Josephus with 592 allocates 113 years more than 479, and the surplus of 113 years in Josephus would be in error for Judges. [3]

[1]*"Chronological Antiquities," Volume 1, pp. 466-471, a section called: "A Chronological Dissertation, on the Kings of old Tyre, from Abibalus to Pygmalion, from the Phoenician History of Menander of Ephesus, cited in the first Book of Josephus against Apion, Sect. xviii.," by John Jackson)*
[2]*Joshua 14:10)*
[3]*The period of the Judges followed Moses, and it continued up to Israel's first King, Saul, who was followed by King David and Solomon, whose Year 4 (ie. Solomon's) was given in Kings 6:1 as being the 480th year (ie. Solomon's Year 4) after Israel's departure out of Egypt, thus it may be determined how long and when the Judges ruled, by subtracting the wilderness years and the Reigns of David and Solomon and Saul, or a sum of 40 and 4 and 40 and 40 (124) years from 479, with 355 years remaining for Judges (with the years of Joshua included in this 355).*



Above: Carthage, North Africa from Space *(June 08 2006 photo by NASA)*

10: Mr. Rollin writes, in 1784, possessing insight, I find: [1]

> **"It is certain that *Carthage* was destroy'd under the consulate of *Cn. Lentulus*, and *L. Mummius*, the 607th Year of *Rome*, 385th of the World, and 146 before Jesus Christ. The Foundation of it therefore may be plac'd in the Year of the World 3121, when *Athaliah* was King of *Judah*, 135 Years before the Building of *Rome* and 883 before Christ. By this Calculation, the Continuance of *Carthage* from its Foundation, will be 742 Years."**
>
> [1]*"The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians, and Grecians," 1784, Vol. I, p. 145, by Mr. [Charles] Rollin)*

With the 146 BCE and the last two numbers I may agree, and with Athaliah being King (or Queen) of Judah, too. The 742 years is also true, added to 146, to give 887. However, his dating of Rome and the World seem to err. But an account of Carthage could hardly be any better.

[1]*The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians, and Grecians," 1784, Vol. I, p. 145, by Mr. [Charles] Rollin, late Principal of the University of Paris, now Professor of Eloquence in the Royal College, and Member of the Royal Academy of Inscriptions and Belles Lettres. Translated from the French. [Later editions of this book have altered the chronology to correspond to the lower dating after Mr. Charles Rollin (b. 1661- d. 1741) was long since dead. Unfortunately, this original edition was not available from Google Books on my iMac but I was able to find it on my iPad.])*

end of Chapter 10: As Noting Carthage Israel Elicits Noran Tyre

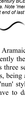
Above: Solomon's Stables under the Temple Platform *(circa 1915 photo)*

Chapter 11: True Hiram Epigraphy Rises At Nora

Above: Ladder of Tyre *(1900 photo)*

> **Sending you greetings is Epaphras my fellow captive in union with Christ, [also] Mark, Aristarchus, Demas, Luke, my fellow workers.**
> **(*Philemon 23-24, New World Translation 1984*)**
>
> **Epaphras, who is in prison with me for the sake of Christ Jesus, sends you his greetings, and so do my co-workers Mark, Aristarchus, Demas, and Luke.**
> **(*Philemon 23-24, Good News Bible, Second Edition 1992*)**

11: The *Nora Stone* inscription has achieved fame as textual evidence for King Pygmalion, having a spelling "PMY" at the bottom rightmost of its rectangular area. [1] When we assume it to be contemporary, in BG it doesn't predate 900 BCE, nor may it be later than ca. 850 BCE. Archaeology in this case presents us with paleographic evidence which, we will see, validates our chronology. [2] The Semitic texts are sometimes referred to as Aramaic and bear a close resemblance to Hebrew in chief usage, although the letter styles themselves are transformed. Through decades of inscription we may chart the change in these letter styles and use it to date the writing. This is one aspect of archaeology where we date people based on paleography, the study of writing and dating. Although we have many absolute points of reference for the *Blessed Greenealog*, only one is necessary, by which the relative dates may be exactly positioned. [3] Keep in mind, however, that paleography is not precise and gets better the more different characters we have. Please see paleographic Table 5.1, paragraph 5, below. [4]



Above: A Figurine from Tell Fekheriye, Oriental Institute Museum, University of Chicago *(Pre-pottery from Tell Fekheriye, Syria)*

11: The *Tell Fekheriye* inscription contains Aramaic letters, and is generally dated to **ca. 850 BCE,** originating from a place near Gozan in northern Syria. Mr. Gerard Gertoux points to Hadad-yiʿi, the Governor under Ashurnasirpal II who he says likely remained for a time under Shalmaneser III (by us dated 905-869 BCE, in *Blessed Greenealog*, no later than 869 BCE). [1-3] The letter 'nun' in this inscription is distinctive to the time prior to the (next-nearest in dating) writing in the inscription of King Kulamuwa, which Mr. Gertoux dates to the end of Shalmaneser III, or 869 BCE in BG.

[1]*The Crucible of Cuneiform Cursive, 2012, by Rolf Ward Gruen, with R. E. Green and A. R. Rutledge, paragraph 10-3, Table 4.)*
[2]*"Zenuh vs. King of Ninevrh: Chronological, Historical and Archaeological Evidence," 2013, p. 96, by Gerard Gertoux)*
[3]*"Writing and Literacy in the World of Ancient Israel: Epigraphic Evidence from the Iron Age, 2010, p. 59, by Chris A. Rollston)*

Above: Nora Stone (detail), Museo archeologico nazionale, Cagliari, Sardinia *(circa 9th century BCE, stone with raised Phoenician inscription yet found in Sardinia. Note 'mem' at both left and right end of middle line, and 'nun' at left end of last line. Nora, Sardinia, Italy)*

11: The letter **nun** in the Semitic alphabet, seen in Aramaic in the *Tell Fekheriye* inscription (also said to be "the earliest Aramaic inscription" dated to "apparently the 10th to 9th centuries" by *Cambridge History of Iran (1985)*) displays less acute angles between its three segments and has a longer top stroke distinct from later styles like the *Tell Dan* or *Hazael* inscriptions, being at least as vertical if not more so as to its top and bottom line segments. [1] The *Nora Stone* has a 'nun' style very much like the 'nun' of the *Tell Fekheriye* inscription and on this basis alone we should have to date the *Nora Stone* no later than 869 BCE, but probably earlier.

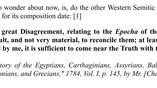
Nun (with more acute angles):

[1]*The Cambridge History of Iran,* Vol. 2, p. 698, 1985, by W. Bayne.)

Above: Ruins of a Temple of Eshmun–Aesculaptus, Nora, Sardinia *(Italy)*

11: The letter 'mem' (our 'm', as 'nun' is our 'n') in the *Nora Stone* has a very short bottom extension, a trait shared by the 'mem' at *Tell Fekheriye* and not seen before or after in any 'mem' having an angle, such as the slight diagonal angle in *Nora Stone* 'mem,' which is slanted from top left to bottom right. This clearly does not apply to any 'mem' of later date and earlier 'mem' is more vertical, with no extenders. Thus **mem** is another strong witness for the case of the *Nora Stone* dating **before 869 BCE.**

Mem (horizontal, with long bottom extension):



Above: Table 11.1 Paleographic Table of Phoenician Language *(from Jonah vs. King of Ninevrh, p. 96, by Gerard Gertoux. Phoenician is similar to but older than Old Aramaic and Hebrew, and similar to but younger than Proto-Canaanite or Proto-Sinaitic script)*

11: **Kap,** the letter corresponding to Hebrew 'Kaph,' Greek 'Kappa,' and our 'K,' is evidence in a different direction, dating *Tell Fekheriye* as **terminus post quem** for the *Nora Stone,* which may not be any earlier than the date of *Tell Fekheriye,* as **kap** stands **completely vertical** in all previous examples and at *Tell Fekheriye,* having an **angled** stem in the *Nora Stone,* and in all of four later examples, in the epigraphical table. Based on a combination of the evidence for **mem, mem,** and **kap,** alone, an estimate for the date of the *Nora Stone* would be **870 BCE, and not much later,** or perhaps **887 BCE,** when we see the **middle of the Reign of Shalmaneser III.** Interestingly, this corresponds to Pygmalion Year 7 as the Year 18 of Shalmaneser, the **time of the Tribute of 887 to Shalmaneser III,** potentially the year of Dido's flight to Carthage, and a likely time to record details of the happenings in the vicinity of Tyre.

Kap (sideways, but with vertical stem):

Above: House at Ur, Biblical home of Abraham, U.S. Army *(Nov 15 2009 photo)*

11: The only thing we have to wonder about now, is, do the other Western Semitic letters of the *Nora Stone* agree with a date of 887 BCE for its composition date: [1]

> **"AUTHORS are in great Disagreement, relating to the *Epocha* of the Foundation of *Carthage.* It is difficult, and not very material, to reconcile them; at least in Prosecution of the Plan proposed by me, it is sufficient to come near the Truth with the Loss of a few Years."**
>
> [1]*"The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians, and Grecians," 1784, Vol. I, p. 145, by Mr. [Charles] Rollin)*

[1]("*The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians, and Grecians,*" *1784, Vol. I, p. 145, by Mr. [Charles] Rollin*)

Above: Ruins of Carthage Amphitheatre, Tunisia, North Africa *(2017 photo, Roman, 1st century CE)*

117 Benjamin Sass calls it the "West Semitic Alphabet," in the title of one of his articles, and, from the title, "alphabet" contains the first two letters ("alpha" and "beta" in Greek), with **alep** (aleph), the first. [1] I don't doubt that the character chart we are using is attributable to Mr. Sass, whose article has eluded me. The *Nora Stone* itself was discovered in 1773 on the south coast of Sardinia, and is since in Cagliari. The **alep** is seen from the paleographic chart to date the *Nora Stone* once again with the *Tell Fekheriye* as a **terminus post quem,** implying a *Nora Stone* dating no earlier than the *Tell Fekheriye,* but no later from our discussion above.

Alep (similar to that at Tell Fekheriye):

[1](*2005. Sass B. The alphabet at the turn of the millennium. The West Semitic alphabet ca. 1150–850 BCE; the antiquity of the Arabian, Greek and Phrygian alphabets*)

Above: A Figurine from Tell Fekheriye, Oriental Institute Museum, University of Chicago *(Pre-pottery from Tell Fekheriye, Syria)*

118 **Bet,** the 2nd letter of the alphabet, implies by its form the same dating as the **alep** did above. No dating prior to *Tell Fekheriye* is supported, while any later date was ruled out by **nun, mem.** The situation of **gimel** is much like **bet. Dalet** possibly favours a slightly later dating. Letter **he** doesn't change much from 900-850 BCE. So **alep, bet, gimel, dalet** and **he** are in agreement with **nun** and **mem** near 887 BCE. We might see these letters as archaic in style, but it is pointed out by Rollston that Phoenician language as a standard writing system developed at about 1050 BCE. [1] This is, in fact, the beginning of David in Jerusalem. Phoenician writing is believed to have been brought by Dido from Tyre on her wanderings, to come to Carthage. We seem to date this event 60 years earlier than some, although we have found that we have scholarly support.

Bet:	Gimel:	Dalet:	He:

[1]("*Epigraphic Evidence from Jerusalem and its Environs at the Dawn of Biblical History: Methodologies and a Long Duree Perspective,*" *2017, p. 13, by Christopher Rollston*)

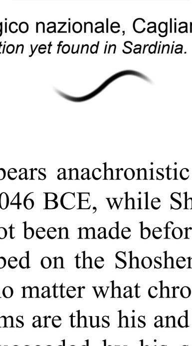
Above: Aeneas before Dido, Neue Galerie, Kassel, Germany *(1773 painting by Johann Heinrich Tischbein, oil on canvas, 62.5 x 68.5 cm)*

119 All of the above discussion leads to the same date for the *Nora Stone,* of near 887 BCE or 890-870 BCE. Mr. Gertoux dates it 890-840 BCE from the same points. With this absolute dating C. Rollston agrees, as shown by his dating of Shipit-baal to the time near 900 BCE. [1] Because of this, the *Nora Stone* reaffirms dates from our own chronology which were based on the Bible, and is thus one more independent witness to its truth. The inscription of Elibaal of Sidon on a statue of the Pharaoh Osorkon I (Zerah), whose Reign dates surely in our *Blessed Greenealogy* to Year 1 959 BCE, puts the writing of Elibaal no earlier than 959 BCE, as the **terminus post quem** for the Elibaal inscription.

[1]("*Epigraphic Evidence from Jerusalem and its Environs at the Dawn of Biblical History: Methodologies and a Long Duree Perspective,*" *2017, p. 13, by Christopher Rollston*)

Above: Citadel of Sidon *(1839 colour lithograph of artwork by David Roberts)*

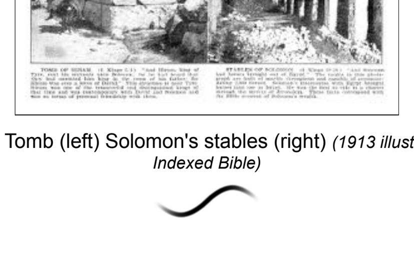
1110 The sarcophagus of Ahirom/Ahiram/Hiram appears to date to ca. 1000 BCE based on the complete absence of grave goods connected to Egyptian 20th or 21st Dynasties, as relations between Phoenicia and Egypt had broken down, and did not resume until the 22nd Dynasty (Shoshenq I) which began after 1000 BCE, but if inscribed by who it says it was, **Ithobaal,** a descendant of Hiram or "son" who ruled Tyre and was the father of Jezebel the wife of King Ahab of Israel (ruled 920-900 BCE), it is clear that the lettering could date to 950 BCE or even later seeing that Ithobaal lived 68 years in Josephus. Ithobaal's Reign ends about 910 BCE if his date has to be raised by 63 years as Pygmalion was (894-831 = 63). Pygmalion has Year 1 in 894 BCE (as we proposed), so a date of 910 BCE for Ithobaal is reasonable seeing as a "conventional" date for Pygmalion is Year 1 in 831 BCE (which we know is wrong, as it should be near 894 BCE) and Ithobaal "conventionally" was given to die 847 BCE (which is also wrong, and should be close to 910 BCE). Anyway, he predates the time of the *Nora Stone.*



Above: Nora Stone, Museo archeologico nazionale, Cagliari, Sardinia *(9th century BCE, stone with oldest Phoenician inscription yet found in Sardinia. Nora, Sardinia, Italy)*

1111 The name of King Abibaal of Tyre appears anachronistic on a statue of Shoshenq I, as he ruled Tyre before his son Hiram and thus died about 1046 BCE, while Shoshenq I ruled only from about 980 BCE (or 993 BCE), and thus his statues had likely not been made before that date. This problem is however illusory, because this Abibaal whose name is inscribed on the Shoshenq I statue can't be the same as the father of Hiram, who reigns earlier than Shoshenq I no matter what chronology is utilized. Instead, Abibaal is King of Byblos, and the names seen inscribed on items are thus his and those of his sons. The Byblian Kings are said to constructed as: Yehimilk (1008-988); succeeded by his son Abibaal (988-968); he succeeded by his brother Elibaal (968-948); his son is said to be Shipitbaal (946-928); all dates being based on the Year 1 of Shoshenq I as 993 BCE, 20 years each. [1] The positions of Abibaal and Elibaal on the epigraphic chart thus could be adjusted, as too that of Yahimilk. [2]

[1]("*Phoenician Inscriptions from Iron I-II Byblos,*" *undated, after 2007, by Daniel Walter.*)
[2](*There may be some question about whether these inscriptions are contemporary, for why would a King own the statue of a Pharaoh of Egypt and inscribe his own name on it?*)



Above: Hiram's Tomb (left) Solomon's stables (right) *(1913 illustration from The New Indexed Bible)*

1112 We have examined the *Nora Stone* in this chapter in detail, and also in Chapter 10, from which it seems clear that Pygmalion, if he is truly identified in the inscription of the *Nora Stone,* should be surely dated earlier than in "conventional" chronology, or to about 894 BCE as his Year 1, as we showed, and this is based on the paleography as seen in Aramaic lettering. This is a remarkable conclusion, as it now becomes all too apparent that the "conventional" chronology has to have been based entirely upon the false evidences of a lower chronology made by corrupting the Biblical Kings of Israel, to offer an Assyrian King list as superior, whereas the Bible has proven itself the superior text. With Pygmalion 894-847 BCE, Hiram finds his true place in 1046-991 BCE, during the days of David and Solomon.

Hiram was a common name in Palestine in ancient times, as indicated by another Hiram sent from Tyre to assist Solomon, with the building of *Solomon's Temple.* [1] **King Hiram** of Tyre ruled 1046-991 BCE, was said to have been a lover of David always, and lived even a ways after 994 BCE, when Solomon completed 20 years of building work that began in 1014 BCE with the founding of *Jehovah's Temple,* and ended only after both *Jehovah's Temple* and his own house were done, a span of 7 years for the former, and 13 for the latter. [2]

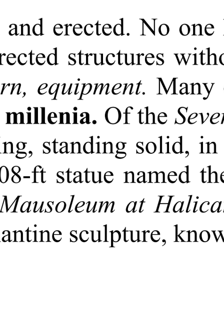
These dates are based on far more than just epigraphic evidence, as we present elsewhere, while the epigraphy is seen as convincing and an independent confirmation. The *Nora Stone* of Sardinia causes Hiram to rise to his proper place in history, reigning 1046-991 BCE. The word for stone, or rock, in Hebrew is Tzor (Tyre).

[1](*1Kings 7:13,14*)
[2](*1Kings 6:1,38; 7:1; 9:10*)

end of Chapter 11: True Hiram Epigraphy Rises At Nora

Above: Table of Semitic Alphabets, M. Lidzbarski, from Gesenius' Hebrew Grammar *(from 1910 book "Gesenius' Hebrew Grammar," edited by E. Kautzsch and A. E. Cowley, Oxford)*

Chapter 12: High In Seti's Tomb Our Reasoning Identifies Absolutely Noteworthy Sirius



Above: Ur, aerial photo *(1927 aerial photo by Royal Air Force, from "History and Monuments of Ur," by C. J. Gadd)*

The undeserved kindness of the Lord Jesus Christ [be] with the spirit YOU people [show].
(*Philemon 25, New World Translation 1984*)

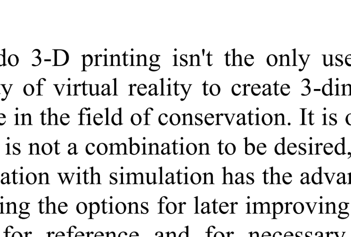
Que la grâce de notre Seigneur Jésus Christ soit avec votre esprit!
(*Philemon 25, 1910 Louis Segond Version*)

The grace of our Lord Jesus Christ be with your spirit. So be it.
(*Philemon 25, 1949/1964 Bible In Basic English*)

121 The Tyrians were great builders, as we know, but their material was cedar from Lebanon and junipers and gold. The Egyptians were builders on a scale not known since the days of the enormous obelisk, cut out using simple hand tools, perhaps, from a single solid piece of rock from the quarry, then somehow transported and erected. No one knows today how to do it, but the Pharaohs did. They built well, and they built and erected structures without modern equipment that *we can't build today, even with all of our best, more modern, equipment.* Many of the Egyptian structures are still standing and being admired today, after weathering **millenia.** Of the *Seven Wonders of the Ancient World,* only the Great Pyramid of Khufu at Giza is still surviving, standing solid, in its essentially original condition. The *Seven Wonders of the Ancient World* were the 108-ft statue named the *Colossus of Rhodes,* the 300-ft tower, the *Lighthouse of Alexandria,* the 148-ft tall *Mausoleum at Halicarnassus,* Turkey, the awe-inspiring *Temple of Artemis* at Ephesus, and the Chryselephantine sculpture, known as *Statue of Zeus,* commissioned for the Greek Olympic Games.

122 The Egyptians built structures of great proportions as we know, they erected gigantic obelisks, and they made provision for lavish tombs for their Pharaohs, in such a way as to conceal the possessions needed by that one in the Afterlife, protecting them against tomb robbers as much as possible, although these were often looted. The tomb of Pharaoh Tutankhamun is one exception, when discovered nearly intact in 1922 by Mr. Howard Carter. Such spectacular treasures it contained! Made of gold! [1] Because of the fact that Tut's tomb was preserved, and became so famous, it was a higher priority for the 3-D printing work of *Factum,* who have since begun a 3-D printed copy of the tomb of Seti I in Switzerland. The full name for the *Factum Foundation for Digital Technology in Conservation* describes their motive. [2,3]

[1]("*Stunning Levantine gold artefacts found in Tutankhamun's tomb are revealed for the first time in almost a century,*" *May 21, 2018, by Harry Pettit*)
[2]("*Remaking Egypt: The Resurrection of the Tomb of Seti I Through 3D Scanning and 3D Printing,*" *Nov 16, 2017, by Hannah Rose Mendoza*)
[3]("*3D printing resurrects ancient Egyptian Tomb in Switzerland,*" *Nov 15, 2017, by Julia of 3ders.org*)



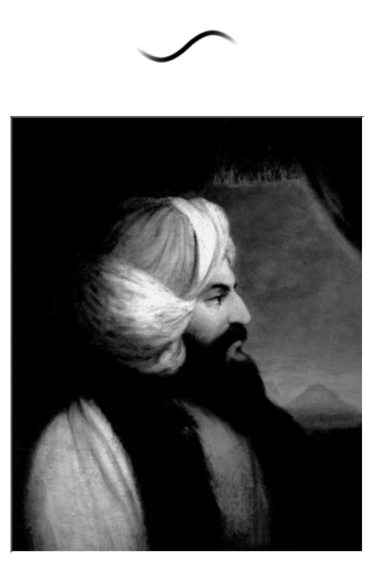
Above: Pyramids at Giza(h)
(Nov 21 1904 photo by Eduard Spelterini (1852–1931), left to right: Menkaure, Kephren, Cheops. Photographed from a balloon from about 600 metres above ground, first published in 1928 in "Uber den Wolken/Par dessus les nuages," Brunner & Co, Zurich 1928, p. 88.)

123 The use of 3-D technology to do 3-D printing isn't the only use of 3-D, because it can be used in simulation. The increasing popularity of virtual reality to create 3-dimensional simulations of all kinds of environments has a very practical use in the field of conservation. It is obvious that vast crowds of tourists at delicate or deteriorating ancient sites is not a combination to be desired, which is where recreation can play a role. In fact, it is known that conservation with simulation has the advantage of being able to restore features of the original now lost, while retaining the options for later improving the simulation further, or leaving the original conserved and kept only for reference and for necessary refinements to the simulation and modelling. We expect these techniques to be used more and more in the future, because VR can be shown over the internet.

124 Let's not be naive and think that 3-D simulations will be used only by tourists to view historic sites in the comfort of their homes, because scientists will be the recipients of equally great benefit from 3-D advances. No longer will journeys to Egypt be required to study, document, and discuss Egyptian monuments with friends. Further damage to existing monuments is ameliorated by the preserved simulations, which are always conserved. The other thing is that a monument can be simulated in a state of earlier conservation or preservation, also.

125 The original 1817 watercolour paintings done by **The Great Belzoni,** as Seti's tomb discoverer is known, were of assistance to *Factum* for the recreation of a separate version of the tomb as it stood in 1817. Faded and vandalized is how it stands today, but these 3-D renditions are hard to distinguish from originals, and the paintings of Belzoni are thus vitally secured. Of the **77 Wonders of the Modern World,** Seti I's tomb is ranked **1st** by 128 votes to 25 votes for *Palmyra* in 2nd place, *The Pyramids* at 16 votes with *The Great Sphinx* being in 4th place. [1]

[1](*cuicui.be/77-world-wonders*)



Above: Giovanni Battista Belzoni, National Portrait Gallery, London *(Painting by William Brockedon (died 1854), oil on canvas, 86.7 x 69.9 cm)*

126 On October 19, 1817, Giovanni Belzoni found within the tomb of Seti I the alabaster sarcophagus, after having discovered the tomb's entrance only three days earlier of Seti's tomb, what also was known as Belzoni's tomb. [1] In his travel diary Mr. Belzoni described the gloss of the varnish on the tomb's paintings as "retained," and **"over the colours" it "had a beautiful effect."** The 'sarcophagus' the stupified explorer described as: [2]

> **"...not having its equal in the world, and being such as we thought could never exist... a sarcophagus of the finest oriental alabaster … it is transparent when a light is placed inside it … minutely sculptured within and without with several hundred figures..."**
> [2](*"Discovering Seti's Sarcophagus, 200 Years On," The Soane Museum website, Oct 19, 2017*)

[1](*"Discovering Seti's Sarcophagus, 200 Years On," The Soane Museum website, Oct 19, 2017*)
[2](*Ibid.*)

127 **Seti's sarcophagus** was the first thing that was considered by Adam Lowe of *Factum Foundation* in his 3-D printing of the tomb and its artefacts that is said to have begun in 2016 by the Egypt buff and team. As if that were not exciting enough, Mr. Lowe calls it (the tomb): **the most important library of Pharaonic religion, philosophy, art, poetry, and science** and **the [source] for the three Abrahamic religions.** If this is true, the importance of Seti I as a Pharaoh of Egypt in the *New Kingdom* must be very great. The late architect John Soane's house is the location, today, for Seti's sarcophagus which, "historically too heavy to steal," was carved of solid, white alabaster.

[1](*"3D printing resurrects ancient Egyptian Tomb in Switzerland," Nov 15, 2017, by Julia of 3ders.org*)

Above: Seti I White Alabaster Sarcophagus, head (side view) *(from Factum Foundation 3D recreation recorded using photogrammetry in 2016)*

128 Mr. Lowe founded *Factum* in Madrid (in 2009) and was recreating Seti's tomb in Basel, Switzerland, with the intent of resurrecting it in its full form for the purpose of moving it to Egypt, near the original site. The "crypt" is the largest chamber thereof, having the vaulted ceiling with astronomical art I explain above. The importance of the Pharaoh Seti I is not solely his prominence or pre-eminent importance to the "Egyptian" culture, but also his importance to "Egyptian" history in the chronology of Egypt (by virtue of the astronomy in the tomb ceiling), which by my own efforts to bring it together is now the **chronology of the world.**

[1](*"3D printing resurrects ancient Egyptian Tomb in Switzerland," Nov 15, 2017, by Julia of 3ders.org*)

129 All Egyptologists are of course interested in the tomb of Seti I to some extent or other, and I am very aware of its significance in a new way, based on chronology. I am overawed and grateful for having the opportunity. An important aspect, though, is that our BG chronology does not depend on one single source, or otherwise our integrity could be compromised by political ambitions. Which means, a key source could withhold material such as would be mandatory to prove basic tenets of belief. For this reason, it is difficult and undesirable to be overly excited or "carried away" with the promise of a new publication or new technology that could help out. There are enough different new developments in various areas of interest to justify some excitement, however.

Above: Sarcophagus of Ahiram, King of Byblos (Phoenicia), Beirut National Museum *(Nov 28 2010 photo)*

1210 This article has been an extreme pleasure to write, as well as a privilege, as both a writer and "Christian." The BG chronology of which I write can't be just mine. There are many facets contained in the last statement. But the shortest face is that it must be from Jehovah. It is important to be brief in a work of great import. Even more than usual, that is why I reserve some here. However, I also would hope that I have also conveyed a sense of the wonderment that I feel in my study of the ancient texts, but more especially the Bible, and that the way in which I have recorded it will not have been purely technical nor without some poetical flavouring. More than anything, I would be hoping to touch hearts.

1211 At the outset I did not understand the role of Seti in the *Blessed Greenealogy,* nor aught of his tomb. While it would not be right for me to be the estimator or esteemer of my own authority (nor to limit it), the information that I have gathered has convinced me that the lower choice of dating for Pygmalion (831, Year 1) has by far the lower authority and that he is 894 BCE. This has definite implications with regard to the date of Solomon, which in turn affects David, and so on, up to Jephthah in 1152 BCE, who spoke the duration of the dwelling of Israel **to his enemies** as 300 years, thus determining more certainly, seeing as he also won that battle, that 1452 BCE is the accurate date of the *conquest of Jericho by Joshua,* into which frame of time also are the Pharaohs of Egypt finely aligned.

Above: Joshua passing the River Jordan with the Ark of the Covenant, Art Gallery of New South Wales *(1800 painting by Benjamin West (1738-1820), oil on wood, 0.677 x 0.895 m)*

1212 Of the 77 wonders of the modern world, Seti's tomb may rank 1st (128 votes compared to 16, for the Pyramids), on a website dedicated to 3D models for famous places. [1] Jehovah is of course the Creator of all wonders, be it of the world or of angels, so to him I give the glory. There is in fact one Mediator between Jehovah and men, and this is Jesus Christ, Jehovah's only-begotten son. Only-begotten means created, without other assistance. But within the tomb of Seti I is found the evidence of the Sothic rising which dates his Year 1, to 1326 BCE. The Bennu bird at the start of his Reign, and the four birds in Years 3 to 6, of Seti's astronomical ceiling. [2]

[1](*According to cuicui.be*)
[2](*This article has been completed May 22, 2018 by Ward Green, at 0554 h AM EDT, working from the residence where I live in Osgoode, Ontario, in the country known as Canada, but which I might humbly suggest would be named Newfoundland for all the migrant fisherman who came here first, were it not for the early native peoples.*)

end of Chapter 12: High In Seti's Tomb Our Reasoning Identifies Absolutely Noteworthy Sirius

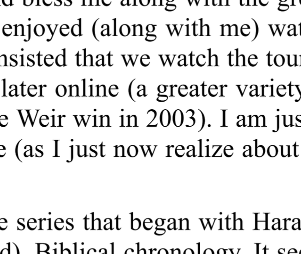
Above: Seti I Tomb Astronomical Ceiling, Lunar (top) and Celestial (bottom), colourized *(top half flipped for viewing top and bottom at the same time, colourized by Ward Green June 13, 2018)*

True—

Rolf Ward Green

Historical Notes:

Some images may have been restored.



Anne Ruth Rutledge (1924-2016)

Thank you to Jehovah God and his son Jesus Christ, and to everyone who helped to make BG chronology possible. Thanks to my late wife, Anne, who helped in many ways. While she passed away before this article was begun, I am indebted to her for many things she showed me and a lot of support financially, both of which continue and bless me along with the great love that she showed me. She and I used to enjoy watching golf, and she enjoyed (along with me) watching Juli Inkster ("The Inkster"). She was very faithful to golf and always insisted that we watch the tournaments (men's and ladies'), whenever they were on, first on television, and later online (a greater variety of options was available online) after our plasma TV quit (we watched Mike Weir win in 2003). I am just now trying to piece back together the events as they transpired, before Anne (as I just now realize about her) because of age was slowed in her busy life.

This is now article number 16 of the series that began with Harald Hildetand and Rollo, and developed into an unexpected (but greatly desired), Biblical chronology. It seems that since the "Joseph" article, and even the Table at the beginning of the "Green" article, where I first presented the chronology explained afterwards in "Joseph," that the Bible chronology fits very well and resolves the world chronology to fit better than ever. Further research after that refined some of the dates, and obtained more of an absolute, Egyptian chronology, which is important for synchronizing national records. The latest results presented in this article gain more absolute accuracy with respect to the New Kingdom from Ahmose I in 1551 BCE to Seti I (1326-1315 BCE), making an adjustment to fix the Rule of King Hiram I of Tyre. The Theran Volcanic Event was examined also because of the controversy it caused in chronology, and explained or obviated through an analysis of the relevant facts.

Our *BG* chronology is alive and well, evidently.

Grieving is a slow process, I believe, and although it is very sad to try to reconcile a vibrant life such as Anne had with her death at the age of 92 years, I also have happy memories which resurface from time to time. I have come to the realization of how grief really may be best defined, which is perhaps as the difficulty in our accepting the death of someone who was so alive as to make it inconceivable that they have actually died. Of course, believers in the resurrection take comfort. However, the mind still wants to resolve the conflict. The hope of a future resolution is also quite helpful.

The support that I have received during my grief until this point has been wonderful, and I appreciate all of the many considerate acts made by so many people, many of whom knew Anne or me only from afar, which relieved my burden of trying to verbalize to them how it hurts. I will say that it does hurt a great deal, but Anne is still a very positive influence in my life, and always was an innocent person who didn't compromise anything. She was very different from me, and yet we found love. For 34 years we were married and bound to be faithful. The bond remained unbroken, I believe, for both of us, as we communicated our needs and kept our bodies pure. My mind was at times a roving thing, but hers unmoved. I could cry at the most minor scenes in movies, and it sometimes perturbed me that she was not thus affected.

Then, at other times, when it happened that we came up to one another without the other's being aware of that other one's presence, the frightful scream of surprise would shock me into that state of unreality engendered by surprise, and screams would be exchanged both ways, until one of us came to our senses, and we remembered. This could be a novel experience, affording amusement, but only when we were both independent could it occur. It was one of the things that was so astonishing about love, which was how scared you can be of your beloved.

Anne always wanted her toast buttered to the edges, as she liked it that way, and I was happy to do it right. The labels that came off the bananas and other produce would be stuck on one corner of the breadboard to keep them out of the way, and she always managed somehow to get them stuck onto her sleeve, and without knowing it come to me with labels stuck all together there again. You see, they would be under the sleeve, out of sight. It was funny at first, because she was so caring about everything, and it got annoying, but hopefully it will be a happy memory for which I can remember her fondly.

Table Supplementary: Proposed Titles For This Article

(Feb 23, 2018 — May 31, 2018 CE) Note 36 p. 120 — Note 37 p.26		
1.	Goodness Of A Lifetime	Greatness Of A Lifetime
3.	An Orderly Kingdom	Acclaimed Osiris King
5.	The Original Chronology Kept	Conjunction Of Dates Elaborated
7.	Time Is Passing	A Distant Dream
8.	An Oath Kept	Nothing Ever Works
9.	Inexorability Of Time's Advancement	In Our Times Apparent
10.	In Our Times Adjudged	In Our Times Ascertained
11.	In Our Times Apprised	In Our Times Assessed
12.	Faith Is Not Dependent	Holism In Truth
13.	Legacy Enters Another Phase	Winning Holistically Either Way
14.	Putting Right Our Own Faith	Promise
15.	One Mediator	Right Or Wrong
17.	**True--** *Find True*	

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2. Skjöldings (Sep 17, 2008)
3. Valdr (Oct 09, 2008)
4. Smith (Nov 1-6, 2008)
5. Green (Nov 23, 2009) (Easter calculator first used and cited) (mod. Mar 02, 2010 Title illus., Hippocrates)
6. Joseph (Dec 24-29, 2009) (Easter calculator used) (mod. Mar 02, 2010 Title illus.) (Easter calculator used and stopped working before Feb 28, 2010)
7. On (Feb 28-Mar 05, 2010)
8. Phoenix (with A. R. Rutledge; Apr 01-06, 2010)
9. Moses (with A. R. Rutledge; Jul 31-Sep 23, 2010)
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11. The Crucible of Credible Creed (with R. E. Green and A. R. Rutledge; Apr 07, 2012–Jun 20, 2013)
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15. The Uncut Tut (with R. E. Green, M. F. Green (Skanes), and A. R. Rutledge; Dec 05, 2016–Jan 02, 2017) (Dedicated To A. R. Rutledge (1924-2016)) [She is the late wife of Rolf Ward Green and coauthor]
16. True-- May 22, 2018–Oct 02, 2020) (the present article)

- **May 22, 2018 finished writing the article, completely (not proofread nor corrected yet).**
- **Jun 13, 2018 finished adding illustrations, apart from dedicatory, and apart from last-minute additions; full text file uploaded for proofreading and any additions.**
- **Jun 14, 2018 many and various corrections (typos etc).**
- **Jun 15, 2018 many and various corrections continue on.**
- **Jun 16, 2018 many and various corrections; 3-4 (added) are numerous enough to evidence a common, true source; 3-4 [a... questions arises] [[a... question arises,]]; 3-5 fix [Flood, known later,] [[Flood-- known later]]; 4-10 [There is no contradiction between ... ajustment] [[No contradiction appears between ... adjustment]].**
- **Jun 17, 2018 3-7 [born in 2044 BCE and came to called] [[born 2044 BCE and came to be called]]; 3-11 spelling [a study and comparison of... ages of the patriarches] [[a study plus comparison... ages of the patriarchs]]; 2-12 sp. and punct. [doing so the patriarches] [[doing so, the patriarchs]]; 3-11 [unless the patriarches are not] [[unless the patriarchs were not]]; 4-11 note [4] added remark about collagen deficiency in bone sample; 5-7 add "this" [places Jun 28] [[this places Jun 28]]; 5-8 quote translated, Lukaszewicz [of sum] [[sum of]].**
- **Jun 18, 2018 Hist. Notes par. 5 [Anne and I] [[Anne or me]]; 11-11 [King of Biblos] [[King of Byblos]]; 11-11 [Biblian[[[Byblian]].**
- **Jun 19, 2018 4-9 note [4] missing quote added and date of quotation reference added, plus initial for Wiener.**
- **Jun 30, 2018 3-7 [6,7] 3-8 line breaks in notes fixed; 3-9 note [1] [respectfully] [[respectively]]; 3-9 edit [The difference between this date and our date of 5550, which is the BCE date we computed for Adam's creation:] [[We subtract this date from our date, of 5550, which is the BCE date we computed for Adam's creation, and get:]]**
- **Jul 02, 2018 1-10 [measurments on short-lived samples] [[measurements on short-lived plants]]; amended 6-5 in note [2] quotation, a few machine typos corrected from [Wsr-M3t-R'. A. H. Gardiner, Late-Egyptian Miscellanies, (Brussels, 1937), 13:1 & 4. The onhography for m3t is to be expected in hieratic, more telling is the absence of the epithet stp-n-R' that was invariably appended to his prenomen fiom about year two (e.g. ibid., Gardiner, 97:17, 98:8, 132:16, 135:10). Its absence here suggests, that the copyist was transcribing an onginal] to [[Wsr-M3't-R'. A. H. Gardiner, Late-Egyptian Miscellanies, (Brussels, 1937), 13:1 & 4. The orthography for m3't is to be expected in hieratic, more telling is the absence of the epithet stp-n-R' that was invariably appended to his prenomen from about year two (e.g. ibid., Gardiner, 97:17, 98:8, 132:16, 135:10). Its absence here suggests, that the copyist was transcribing an original]]; 10-9 [justified as I will try to explain shortly] [[justified in ways**

transcribing an original]]; 10-9 [justified as I will try to explain shortly,] [[justified in ways which I may also explain,]]; 11-3 [would have to date the Norah Stone] [[should have to date the Nora Stone]]; 12-3 [future improving the simulation further and having the original conserved and kept only for reference and for] [[later improving the simulation further, or leaving the original conserved and kept only for reference and for]].

- Jul 10, 2018 4-9 1st equation [5370] [[5730]].
- Aug 03, 2018 10-10 note [2] added equation to show the 25-year difference as: [[1046 - 127 - 12 - 882 = 25]]; 11-9 fixed two instances of [Norah] [[Nora]] and added the sense modification of [confirms] to [[reaffirms]]; 11-10 edit [Pymalion has a Year 1 in 894 BCE, as we've shown] spelling and slight adjustment into [[Pygmalion has Year 1 in 894 BCE (as we proposed)]]; 11-12 [-947] [Pygmalion 894-947 BCE] to: [[Pygmalion 894-847 BCE]].
- Aug 11, 2018 6-11 [the only the] [[only the one]]; 7-7 paragraph left and right justification fixed; 7-10 sp. and rewording [similarlity of "Acherres" to "Okkallos" is obvious] - [[similarity of "Acherres" to "Okkallos" is so plain]].
- Feb 02, 2019 9-2 missing word 'one' added, simplified: [the fact that Eusebius knows no else agrees with him).] [[the fact that Eusebius knows that no one else agrees).]]; 5-3 wording [If we to preserve] [[Since we preserve]]; 8-9 note [2] had wrong number, was [1], but now [[2]]; 8-3 one word [which] [[that]] in note [2], readjusted; 8-4 added notes [1] and [3] for further clarification; Recent Articles fixed the links below, with apologies.
- Jul 03, 2019 1-6 Note [2] typo: [clayton] [[Clayton]].
- Jul 09, 2019 10-3 Note [4], 10-8 Note [2]: fixed typo, (two occurrences in 10-8) [Pheonician] [[Phoenician]].
- Sep 11, 2019 8-4 Notes [2] and [3]-- line break added.
- Oct 27, 2019 1-6 corrected sentence for year BCE 1405. [1 Thutmose I, at whose death The Exodus occurs.] [[1 Amenhotep III, during whose Reign Akhenaten began to alter Egyptian religion, moving his capital to Amarna.]]
- Apr 29, 2020 10-8 grammatical: [or perhaps visited new Phoenician] now [[or to perhaps visit newly founded]].
- Sep 06, 2020 7-7(3) gramm. 'who' 'so' [who we identify ..., so a total] : [[whom we identify... to a total]].
- Oct 02, 2020 8-7 1st sentence [Gautsche] [[Gautschy]].
- Dec 12, 2020 Historical Notes p4: age [94] age [[92]].

REFERENCES:

Own Work:

(15) ('The Uncut Tut', by Rolf Ward Green, Ralph Ellis Green, Anne Ruth Rutledge and Flora Marie Green)
(14) ('Wild Road Ahead To History', by Rolf Ward Green, Ralph Ellis Green, Anne Ruth Rutledge and Flora Marie Green)
(13) ('Trojan War', by Rolf Ward Green, Ralph Ellis Green, Anne Ruth Rutledge and Flora Marie Green)
(12) ('B4 Chronology', by Rolf Ward Green, Ralph Ellis Green, Anne Ruth Rutledge and Flora Marie Green)
(11) ('The Crucible of Credible Creed', by Rolf Ward Green, Ralph Ellis Green, and Anne Ruth Rutledge)
(10) ('The Ark of Urartu', by Rolf Ward Green and Anne Ruth Rutledge)
(9) ('Moses', by Rolf Ward Green and Anne Ruth Rutledge)
(8) ('Phoenix', by Rolf Ward Green and Anne Ruth Rutledge)
(7) ('On', by Rolf Ward Green)
(6) ('Joseph', by Rolf Ward Green)
(5) ('Green', by Rolf Ward Green)
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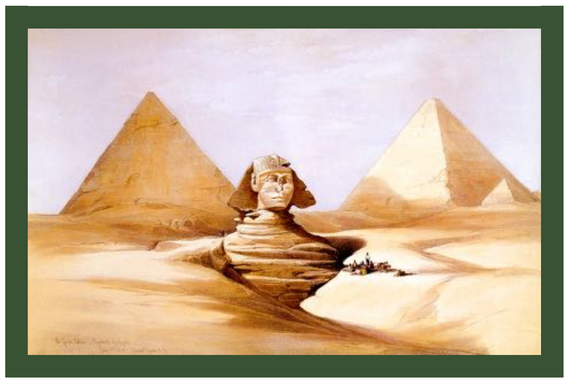
(3) ('Valdr', by Rolf Ward Green)
(2) ('Skjöldings', by Rolf Ward Green)
(1) ('Harald Hildetand', by Rolf Ward Green)

Unique Source Material:

(4) (The chronology of the Old Testament, by Fotheringham)
(3) (Manetho, with an English translation by W.G. Waddell)
(2) (Ancient Egyptian Chronology, 2006, ed. by Erik Hornung, Rolf Krauss and David A. Warburton)
(1) (Synchronology, 1839, Cambridge University Press, by Charles Crosthwaite)



The Great Sphinx, Pyramids of Gizeh, 1839, by David Roberts

Faith is not a possession of all people.
(*2Thessalonians 3:2*)

True—

Chapter 1: Faith Is Not Dependent-- Taking Radiocarbon Under Egypt
Chapter 2: Ancient Greece, Egypt, Sumeria And Noachian Deities Human Osiris, Prometheus Enki
Chapter 3: Indicative Native Deluge Accounts Total Extracted Saroi
Chapter 4: Thera Has Estimated Nothing
Chapter 5: Historical Egyptian Astronomical Provenance
Chapter 6: To Historical Egypt
Chapter 7: Holding On Tight
Chapter 8: Exodus Mediator By Exact Rising Sothis
Chapter 9: Outshining Nenephreous
Chapter 10: As Noting Carthage Israel Elicits Noran Tyre
Chapter 11: True Hiram Epigraphy Rises At Nora
Chapter 12: High In Seti's Tomb Our Reasoning Identifies Absolutely Noteworthy Sirius