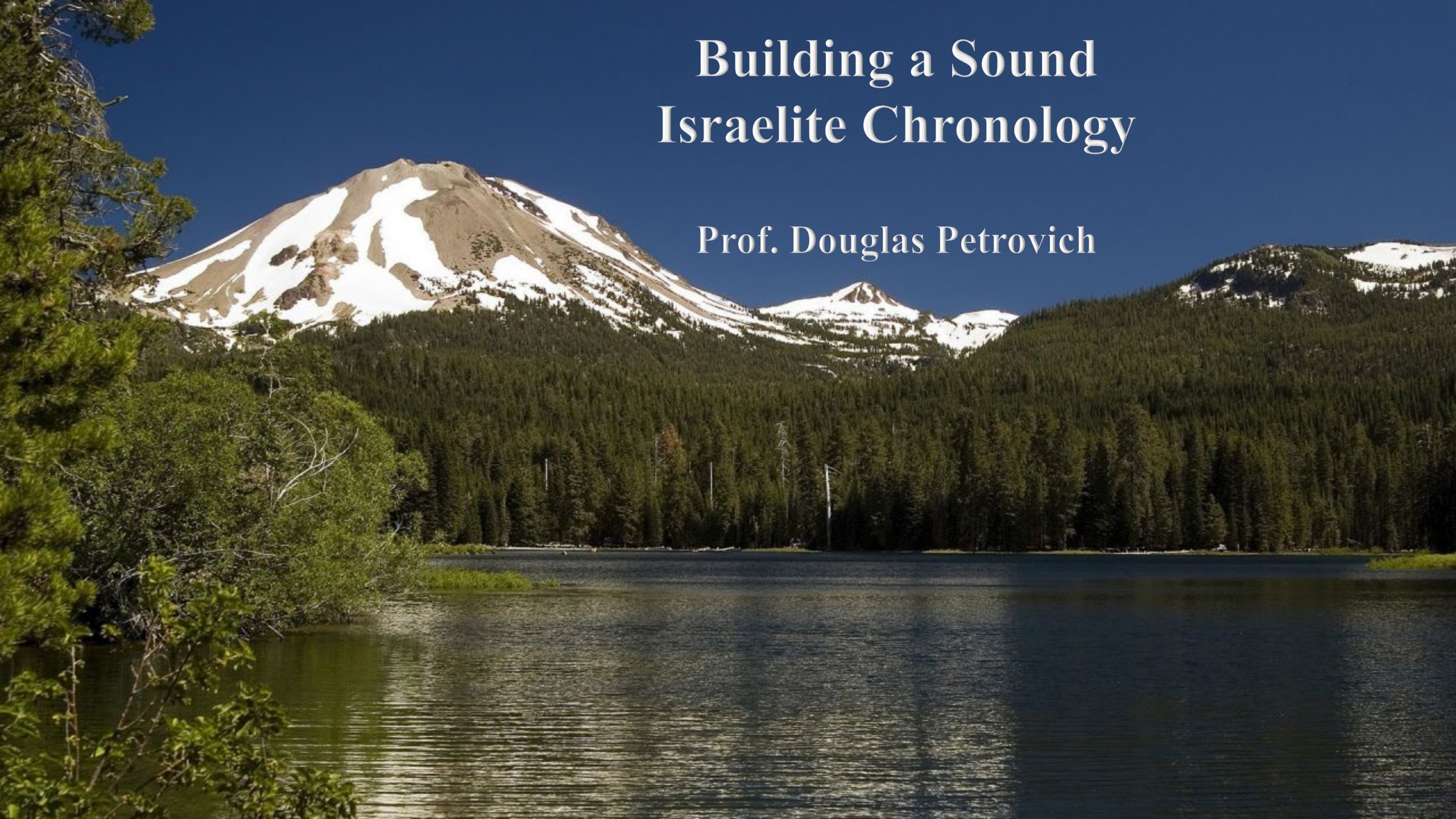


Building a Sound Israelite Chronology

Prof. Douglas Petrovich



History

A diagram of an umbrella with a blue outline. The word "History" is written in white on the canopy. The ribs of the umbrella are labeled with various historical disciplines: Archaeology, Epigraphy, Geography, Chronology (highlighted in yellow), Topography, Climatology, and Geology. The handle of the umbrella is a simple blue line.

Archaeology

Epigraphy

Geography

Aromachology

Iconography

Chronology

Topography

Climatology

Geology

Importance of Biblical Chronology

**Topic: God's Love of
Chronological Precision**

(Rationale for Valuing Chronology)

God's Love for Chronology

“*In the one of a kind beginning*, the King-of-the-gods-who-exists-in-plurality created the cosmos, then the earth.” (Genesis 1:1)

“Now it came about in *Year 37* of the exile of Jehoiachin, King of Judah, in *Month 12*, on *Day 25* of the month, . . .” (Jeremiah 52:31)

Chronology and Synchronizations

**Topic: Establishing a Chronological
Framework for Israelite History**

(Chronological Tent Pegs)

Israelite Chronology

Topic: Selecting a Chronological Scheme

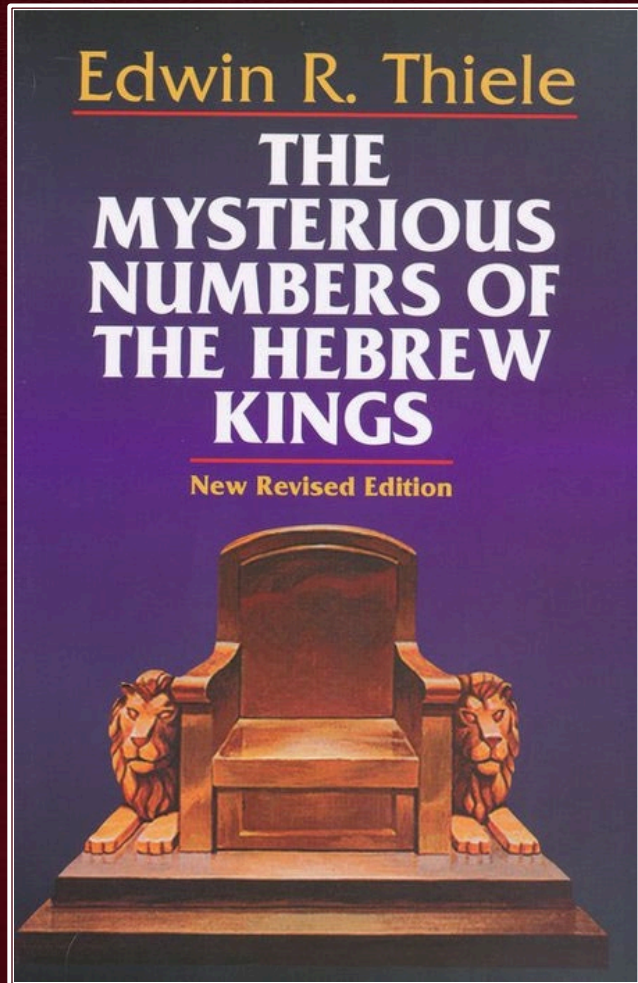
(General Chronology)

Israelite Chronological Framework

- Historical study, including archaeology, can make a contribution to biblical studies only if its findings can be synchronized with biblical chronology.
- Fortunately, this often is quite possible.
- There are two main chronological schemes for the Hebrew Bible followed by biblical scholars and laymen: James Ussher's, and Edwin Thiele's.
- Ussher's scheme is more popularly used, but it is problematic. Thiele's scheme is far more precise.

Rodger C. Young, “Ussher Explained and Corrected,” *Bible and Spade* 31/2 (2018), 47–58.

[Bishop Ussher: 1581–1656]



Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings* (Grand Rapids: Kregel, 1994).

[Edwin Thiele: 1895–1986]

Israelite Chronological Framework

- Thiele's scheme has been refined slightly by Rodger Young, who published several vital articles on the chronology of the Hebrew Bible.
- For the advanced student, reading Thiele's book and Young's articles (see his [academia.edu](#) page) provide the needed foundation for anyone to make a career in the field of biblical history.
- My two published books and numerous journal articles build on Thiele's and Young's work.

Basic Israelite Chronological Scheme

- 2166 BC – Birth of Abram (Mesopotamia)
- 2091 BC – Abram Enters Canaan (from Ur)
- 2066 BC – Isaac born to Sarah in Gerar
- 1876 BC – Jacob Moves Family to Egypt
- 1805 BC – Joseph Is Buried at Dahshur
- 1446 BC – Israelite Exodus from Egypt
- 1406 BC – Israelites Cross into Canaan
- **967 BC** – Construction on the First Temple
- 587 BC – Jerusalem Falls to Babylonians

Israelite Chronology

Topic: First Chronological Tent Peg

(1 Kings 6:1)

Basis for Israelite Chronology

1. Israelite history's foundational biblical text for establishing a firm chronology is 1 Kings 6:1.

“Now it came about in the 480th year after the sons of Israel departed from the land of Egypt, **in Year 4, Month 2** (the month of Ziv) **of Solomon's reign** over Israel, that he *began* to build the temple belonging to He-who-is.”

Synchronisms between Neo-Assyria & the kings of the northern kingdom of Israel are firmly established, giving absolute dates to moments in

Basis for Israelite Chronology

their reigns for which the Bible provides relative dates. Currently, no such synchronisms exist between Assyrian records and the southern kingdom of Judah, but internal synchronisms between Israelite and Judahite kings allows reliable dates to be established all the way back to the reigns of David and Solomon. Thus, Year 4, Month 2 of Solomon equates to 967 BC.

Basis for Israelite Chronology

2. The same verse (1 Kings 6:1) provides a relative date for the Israelite exodus from Egypt:

“Now it came about in **the 480th year after** the sons of Israel departed from the land of Egypt, in **Year 4, Month 2** (the month of Ziv) **of Solomon’s reign** over Israel, that he *began* to build the temple belonging to He-who-is.”

This number signifies an elapsed time of 479+ years from the exodus, giving a date of **1446 BC** for the year that the Israelites left Egypt.

External Evidence for Textual Variant in 1 Kings 6:1

Variant 1: “480th year after” the exodus

(1) Hebrew Masoretic text (Leningrad Codex), (2)
Latin Vulgate

Variant 2: “440th year after” the exodus

(1) No Hebrew textual support, (2) Septuagint

External Evidence for Textual Variant in 1 Kings 6:1

“[The Masoretic Text] has repeatedly been demonstrated to be the best witness to the [OT] text. Any deviation from it therefore requires justification” (Ernst Würthwein, *Text of the Old Testament*, 2nd ed., trans. Erroll Rhodes [Grand Rapids: Eerdmans, 1995], 116). Plus, the Septuagint has been shown to be inferior to the Masoretic Text in chronological matters (Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings* [Grand Rapids: Kregel, 1994], 90–94).

Tentative Conclusion Based on External Evidence

The antiquity of the LXX renders its text important for determining the originality of any variation in the Hebrew Bible. Therefore, there must remain the possibility that the LXX correctly preserves the original number as “440th year after” for the time between the exodus and the beginning of the building of the First Temple. However, the Masoretic Text preserved by the Hebrew scribes carries with it greater authority than any ancient version, including the LXX.

Tentative Conclusion Based on External Evidence

Therefore, based on the need to place more trust in the Masoretic Text when the only competing witnesses for a given textual variant are the MT and the LXX, along with the LXX reading's inability to provide any corroboration to its reading, Variant 1 ("480th year after") is preferred as the better reading based on external evidence alone.

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 1: “480th year after” the exodus

PRO (1) No reason exists to suspect any accidental error on the part of a Hebrew scribe as the reason for the appearance of “480th year” in 1 Kgs 6:1 of the MT.

PRO (2) Egyptian history, based on the preferable “high chronology” view, shows that Amenhotep II was the ruling pharaoh in 1446 BC. Based on the astronomical/chronological information obtained from

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 1: “480th year after” the exodus

the Ebers Papyrus, a medical document with a dating of the rising of the Sothic star alongside the regnal date of Amenhotep I (*ca.* 1550–1529 BC), Amenhotep II’s reign would have been from *ca.* 1453–1416 BC. He is the only king of Dynasty 18 with a predecessor who ruled over 40 years, which is a biographical requirement based on Acts 7:23 and 7:30 (cf. Exod 2:23).

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 2: “480th year after” the exodus

^{CON} (1) In Acts 13:20, the phrase “about 450 years” in the text of Paul’s exhortation in the synagogue at Pisidian Antioch is more difficult to reconcile with the historical and chronological details if using the Septuagint’s number (“440th”) in 1 Kgs 6:1 than is the MT’s number (“480th”). See Douglas Petrovich’s Acts 13:20 variant resolution on academia.edu for more

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 2: “480th year after” the exodus

details. See also the discussion by Andrew Steinmann, *From Abraham to Paul: A Biblical Chronology* (St. Louis: Concordia, 2011), 69–70.

^{CON} (2) According to Variant 2, the Israelite exodus thus would date to between April 1406 and April 1405. A date of 1406 BC for the exodus would mean that Amenhotep III (*ca.* 1407–1370 BC) was the reigning Egyptian king at the time of the exodus. However,

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 2: “480th year after” the exodus

Amenhotep III is not an acceptable candidate for the exodus pharaoh. For one thing, his father, Thutmose IV (*ca.* 1416–1407 BC), almost certainly reigned for 10 years or less, although the exact length of his reign is uncertain. Thutmose IV thus would be an impossible candidate for the predecessor of the exodus pharaoh, who must have ruled over 40 years.

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 2: “480th year after” the exodus

^{CON} (3) If the exodus occurred in 1406 BC, then the Israelites did not enter Canaan until *ca.* 1366 BC. Yet the Amarna Letters date from Year 30 of Amenhotep III (*ca.* 1378–1377 BC) through the reign of his son, Amenhotep IV (a.k.a. Akhenaten, *ca.* 1370–1353 BC), who ruled after him. These tablets record attacks by Apiru (i.e., Eberite Hebrews, since all

Internal Evidence for Textual Variant in 1 Kings 6:1

Variant 2: “480th year after” the exodus

Hebrews/Habiru/Apiru derived from Eber), who had to have sufficient time for the conquest under Joshua that would have ended in *ca.* 1360 BC, before the mop-up operations that are recorded in the Amarna Letters. This simply is not enough time for the rest that took place after Joshua’s conquest, plus all that is recorded in the Amarna Letters about the Apiru (e.g., Hazor).

Evaluation of Internal Evidence

The evidence makes a strong case in favor of the view that the gap between the exodus and the beginning of construction on the First Temple spanned 479+ years, rather than 439+ years. In light of all the evidence that can be gleaned from a careful study of ancient history and chronology, which proves to be irreparably damaging to Variant 2, the internal evidence favors Variant 1 (“480th year”) conclusively.

Evaluation of Internal Evidence

Both external and internal evidence point to Variant 1, the reading of “480th year,” as the original reading found in 1 Kings 6:1. The reading in the LXX cannot supplant the reading of the Masoretic Text here, as there is no evidence that compels this variant to be preferred. Moreover, the historical evidence related to the internal evidence clearly makes a reading of “440th year” highly implausible, if not completely impossible. Choose Variant 1 in a landslide.

Basis for Israelite Chronology

Rodger Young's articles confirm 1446 BC as the correct year of the exodus by corroborating evidence from extra-biblical sources, including the jubilee cycles (*Sedar Olam*), the Tyrian King List, and the Parian Marble (see p. 22 of *Origins of the Hebrews* [2021] for more). On p. 23 of *OOTH*, I show how the date of the 1st Passover can be calculated even more precisely, to the exact date of Friday, 24 April 1446 BC (based on the reference to Nisan 14 in Exod 12:6).

Israelite Chronology

Topic: Second Chronological Tent Peg

(Exodus 12:40–41)

Basis for Israelite Chronology

1. The date of the Israelites' entry into Egypt, under Jacob, is found in Exodus 12:40–41:

“Now **the sojourn of the sons of Israel** in which they lived **in Egypt was 430 years**. Then it came to pass at the end of the 430 years, and it was on that very day, that all of the armies of He-who-is departed from the land of Egypt.”

Jacob and all of his sons entered Egypt exactly 430 years before the exodus, to the very day, which means that it occurred in **1876 BC**.

Textual Variant in Exodus 12:40

Variant 1: “Now the residing of the sons of Israel during which they resided in Egypt is 430 years.” (MT)

Variant 2a: “And the residing of the sons of Israel during which they resided in the land of Egypt **and in the land of Canaan** is 430 years.” (LXX)

Variant 2b: “Now the residing of the sons of Israel and their fathers during which they resided **in the land of Canaan and** in the land of Egypt is 430 years.” (SP)

Textual Variant in Exodus 12:40

For the most comprehensive study yet published on the textual variant in Exodus 12:40, see this article:

“Determining the Precise Length of the Israelite Sojourn in Egypt,” *Near Eastern Archaeological Society Bulletin* 64 (2019): 21–41.

This article demonstrates conclusively that the 430 years describes the Israelite sojourn in Egypt *alone*.

Chronology's Impact on Archaeology

2. From these three dates (1876 BC, 1446 BC, and 967 BC), a large part of the history recorded in the Hebrew Bible can be plugged into this chronological framework with a high level of confidence.
3. Moreover, datable archaeological finds can be harmonized chronologically with biblical history, even those obtained by ^{14}C testing, though only if factoring the offset of 1400 BC into the equation.

Egyptian Chronological Scheme

- 2170–2025 BC – First Intermediate Period
- 2025–1674 BC – Middle Kingdom (Dyn. 11–13)
- 1668–1560 BC – Second Intermediate Period
- 1560–1069 BC – New Kingdom (Dyn. 18–20)
- 1069–633 BC – Third Intermediate Period
(Dynasties 21–25)

Dating Tool for Dynasty 12: Lahun Papyrus 10012

Dating Tool for Dynasty 18: Ebers (Medical) Papyrus

Pre-Israelite Chronology

Topic: Chronology from Babel to Abram

(Post-Diluvian World)

Basic OT Chronological Scheme

- 2625 BC – Tower of Babel Dispersion
- 2320 BC – Nimrod's/Sargon's Reign Began
- 2166 BC – Birth of Abram (Mesopotamia)
- 1876 BC – Jacob's House Moved to Egypt
- 1526 BC – Birth of Moses in Egypt
- 1446 BC – Israelite Exodus from Egypt
- 1406 BC – Israelites Crossed into Canaan
- 967 BC – Construction of 1st Temple Began
- 587 BC – Jerusalem Fell to Babylonians

Sources for Dating Universal Flood to 3rd Millennium BC

Jeremy Sexton and Henry B. Smith Jr., “Primeval Chronology Restored: Revisiting the Genealogies of Genesis 5 and 11,” *Bible and Spade* 29/2 (2016): 42–49.

Rodger C. Young, “Ussher Explained and Corrected,” *Bible and Spade* 31/2 (2018): 47–58.

Douglas Petrovich, *The Forgotten Era: Illuminating Biblical History from the Tower of Babel to Abraham* (no date), forthcoming

Chronology and Synchronizations

**Topic: Biblical Chronology and
the ^{14}C (Radiocarbon) Offset**

(Dating and Biblical History)

Chronology and pre-1400-BC Offset

Topic: Radiocarbon Evidence after 1400 BC

(Biblical Chronology and Radiocarbon Dating)

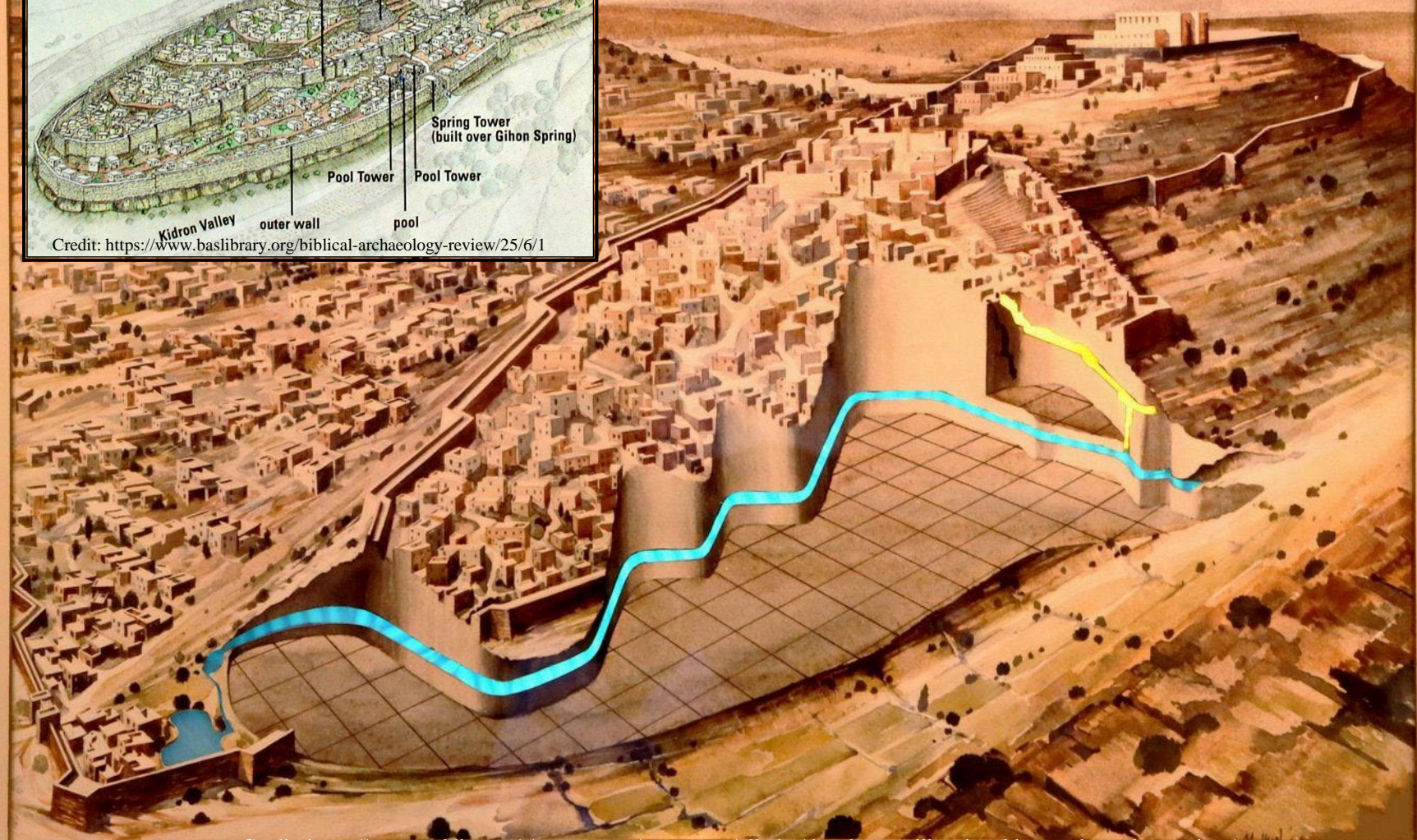
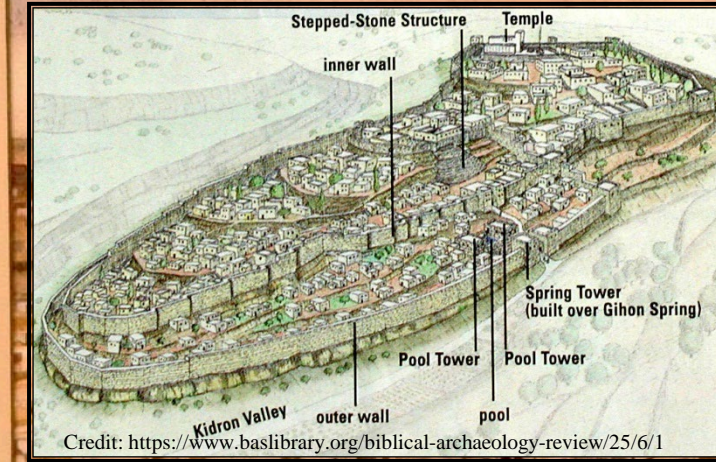
Radiocarbon Dating and ANE History

- ❑ The fact that the Bible requires the age of the earth to be under 7,500 years old presents a problem, given that radiocarbon dating yields evidence of life forms that date back much further than that.
- ❑ Given that historians now can date ancient events with an even greater level of confidence, going back further in time than could be accomplished in previous generations, the question comes as to whether ^{14}C dating is accurate at each *datable* point in antiquity.
- ❑ Since Israelite chronology is that of only one ANE people group that kept careful chronological records, the question can be asked whether these various chronologies coincide well with ^{14}C or not.

Test #1: *ca.* 700 BC

Biblical Chronology Post-1400 BC Put to Test

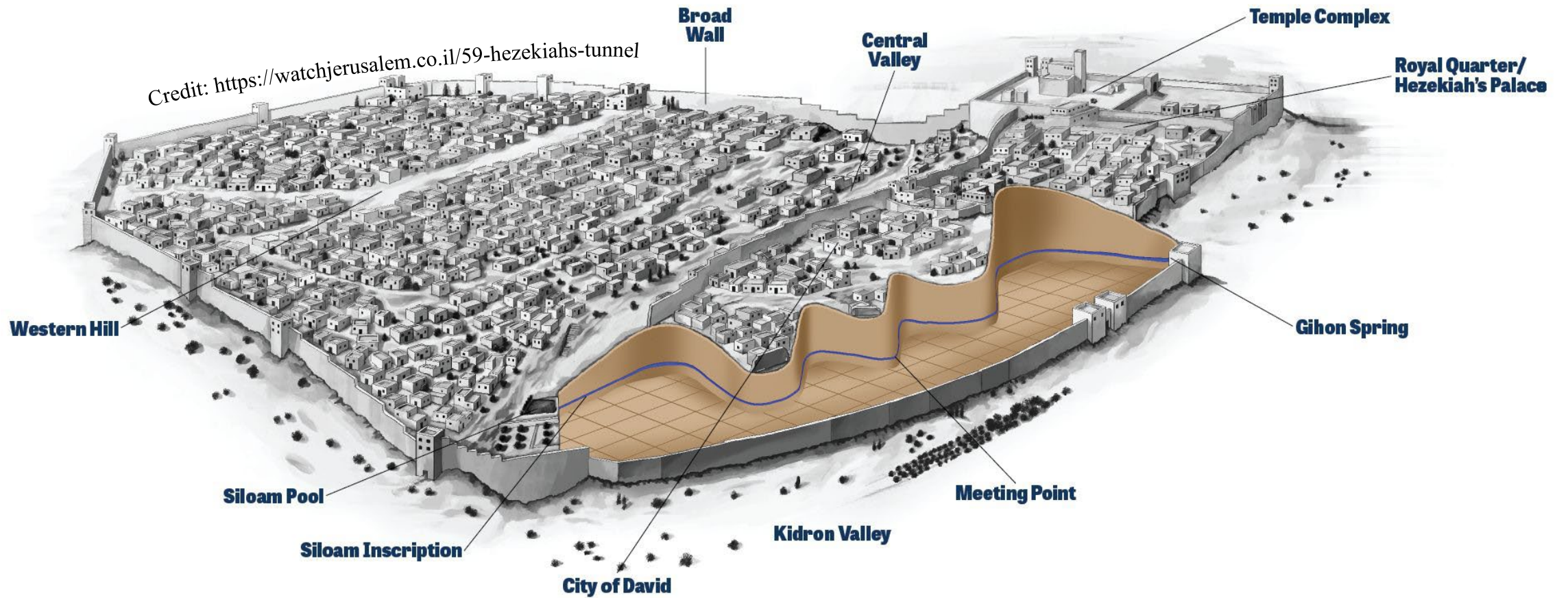
- ❑ The first test that can be offered relates to the Neo-Assyrian invasion of Jerusalem, when Sennacherib invaded the Kingdom of Judah and captured 46 cities, as he claimed in his regnal annals.
- ❑ Historical dating, thanks to confident synchronisms between Neo-Assyrian chronology and Judahite chronology, provides a date of **701 BC** for Sennacherib's planned conquest of Judah's capital.
- ❑ The Bible indicates that Hezekiah (716–687 BC) built a water-shaft in anticipation of the Assyrian siege by Sennacherib (2 Kings 20:20). What does ^{14}C evidence have to say about the shaft's origin, since this tunnel-carving extracted ancient plant matter?



Credit: https://www.reddit.com/r/papertowns/comments/6llmbv/the_three_millennia_old_tunnels_under_ancient/

Hezekiah's Tunnel (built 701 BC)

Hezekiah's Tunnel



Hezekiah's Tunnel

This photo was taken while walking through the water-tunnel that Hezekiah ordered to be carved into the limestone between the Gihon Spring and the Pool of Siloam in *ca.* 701 BC.

The glossy texture of the walls betrays the presence of plaster that was applied to them by the builders, to prevent water leakage. Scientists found the presence of plant matter inside this plaster.



Biblical Chronology Post-1400 BC Put to Test

- ❑ The article “Radiometric Dating of the Siloam Tunnel, Jerusalem” was published in *Nature* 425 (Sept 2003). A geologist and his colleagues found plant-matter under a plaster lining that was laid down in the tunnel when first built. Plant-matter that was trapped inside the waterproof layer dated to “700 BC or slightly earlier.”
- ❑ They wrote: “We conclude that the Biblical text presents an accurate historic record of the Siloam Tunnel’s construction” (given that the date of “700 BC or slightly earlier” fits with 701 BC). How does organic material dating back even further (using ¹⁴C analysis) match the archaeological/historical dating scheme?

Test #2: *ca.* 1000 BC

Biblical Chronology Post-1400 BC Put to Test

- ❑ The second test to make is whether biblical chronology around 1000 BC matches well with ^{14}C dating for organic matter that dates to the same timeframe as datable events in Israelite history.
- ❑ This test relates to an Israelite site that was occupied for only about 25 or 30 years, a site that is known to overlap between the reign of King Saul and that of King David.
- ❑ The site is known in Arabic as Khirbet Qeiyafa, and its name in the Hebrew Bible is Dual Gates (Heb. *Shaaraim* in 1 Sam 17:52). The Israelites camped there when David met Goliath, and it has been shown that David became king over all of Israel in *ca.* 1002 BC.

End_boundary: Destruction of Khirbet Qeiyafa

***Median Date: 988 BC**

68.2% probability

*1006 (68.2%) 961BC

95.4% probability

1011 (95.4%) 921BC

Probability density

0.015
0.01
0.005
0

Jar C11747: Olive pits (17) from a storage jar in Building C10 (part of the destruction layer), unearthed in the excavations of 2012.

28 SAMPLES FROM THE 17 OLIVE PITS

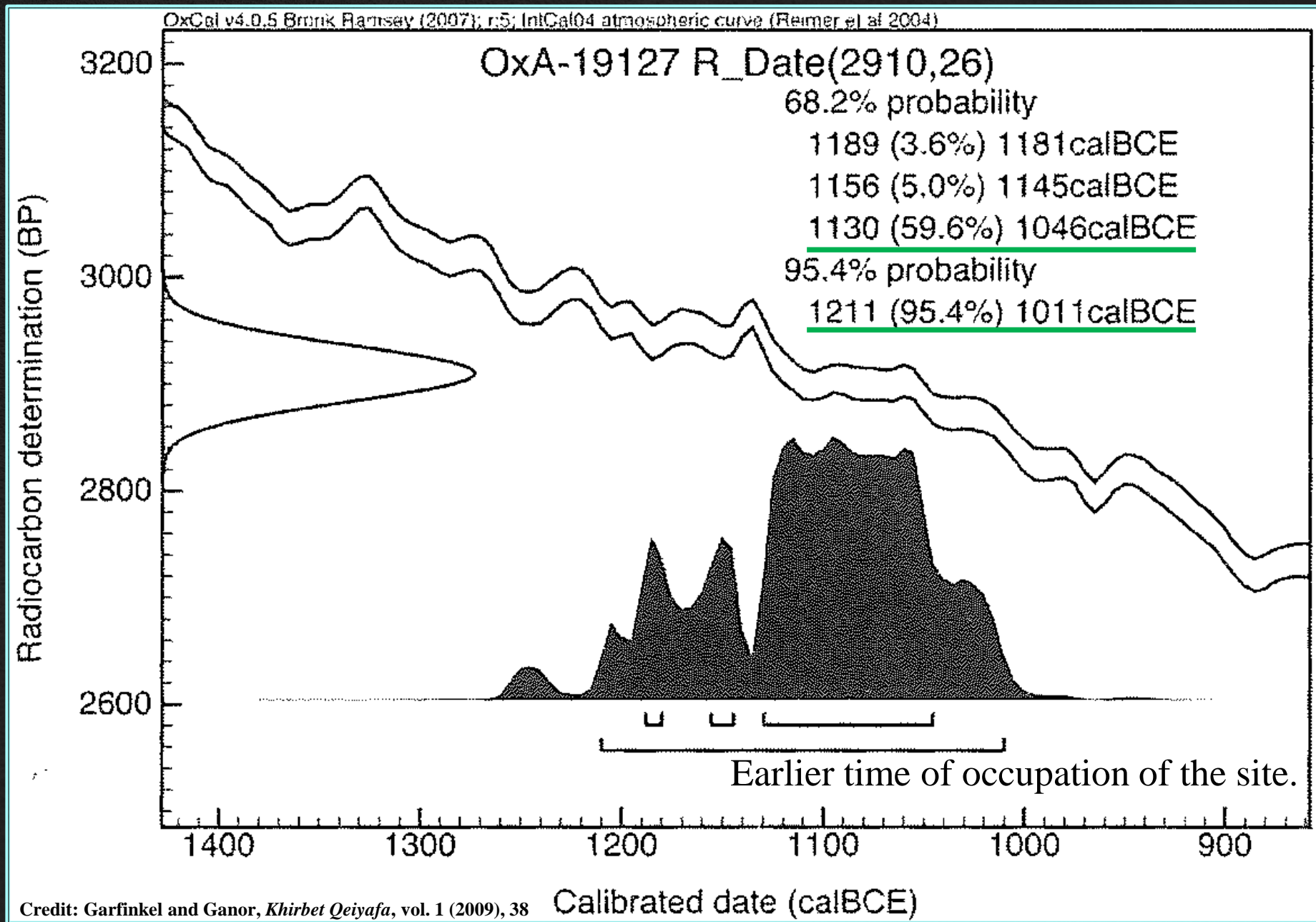
1050 1000 950 900 850

Modelled date (BC)

Radiocarbon Evidence for 17 Olive Pit Samples

Biblical Chronology Post-1400 BC Put to Test

- As for the earliest attested date for organic material found at Qeiyafa IV, the excavators found numerous samples throughout the site, some of which address this question. Most samples taken record probable date-ranges that fit best within the first ¼ of the 10th century BC (e.g., Qeiyafa 5, 6, 7, 10), which justifies Garfinkel's conclusion that the site was inhabited for at least part of David's reign in that century, but several samples fit best overall in the last two decades of the 11th century BC. For example, the olive pit designated Qeiyafa 3 (year taken: 2008), excavated in Locus 214 from Area B, dates to 1211–1011 BC with a 95.4% probability and to 1130–1046 BC with a 59.6% probability.



Radiocarbon Evidence for 1 Olive Pit Sample (Qeiyafa 3)

Biblical Chronology Post-1400 BC Put to Test

- ❑ For another example, the burnt olive pit designated Qeiyafa 1b (year taken: 2008), acquired from a fireplace in the casemate of Building II and part of Locus 214, dates to 1132–974 BC with an 88.6% probability and to 1114–1014 BC with a 68.2% probability.
- ❑ For a final example, the olive pit designated Qeiyafa 9 (year taken: 2009), excavated in Locus 383 from Area B, dates to 1126–922 BC with a 95.4% probability and to 1056–974 BC with a 53% probability. Given that David became King of Israel only in 1002 BC, Qeiyafa 3's date-range suggests that the site was occupied for some length of time before David ruled the nation, as the chance is

Biblical Chronology Post-1400 BC Put to Test

- greater than 95% that the olive was taken from its tree by 1011 BC. This supports the idea that the site was founded during Saul's reign (1049–1009 BC). While the probability is almost 60% that Qeiyafa 3 dates to before 1046 BC, this possibility is hardly binding. If so, it roughly would triple Qeiyafa's length of occupation, which Garfinkel justifiably limited to about 20 to 30 years.
- The ^{14}C evidence from Qeiyafa thus fits well with historical and archaeological dating, suggesting Dual Gates was built in *ca.* 1021 BC, occupied for about 30 years (per Garfinkel), then destroyed in *ca.* 990 BC, a mere 2 years after the ^{14}C evidence's median date.

Chronology and pre-1400-BC Offset

Topic: Radiocarbon Evidence before 1400 BC

(Biblical Chronology and Radiocarbon Dating)

ANE Chronology Pre-1400 BC Put to Test

- ❑ With proof that biblical chronology after 1400 BC matches ideally with ^{14}C evidence, the question arises as to how ancient historians have found non-Israelite cultures' chronology to match up with it.
- ❑ Essentially, no problems exist between Neo-Assyrian and other ANE peoples' chronologies with any organic matters dating to the first millennium BC. The same also is true going back to 1400 BC.
- ❑ However, a problem arises with the matching of any ^{14}C samples to archaeological/historical chronology before ≈ 1400 BC. An Egyptologist named Manfred Bietak, the chief excavator at Avaris (biblical Ramesses) for over 4 decades, documented this problem.

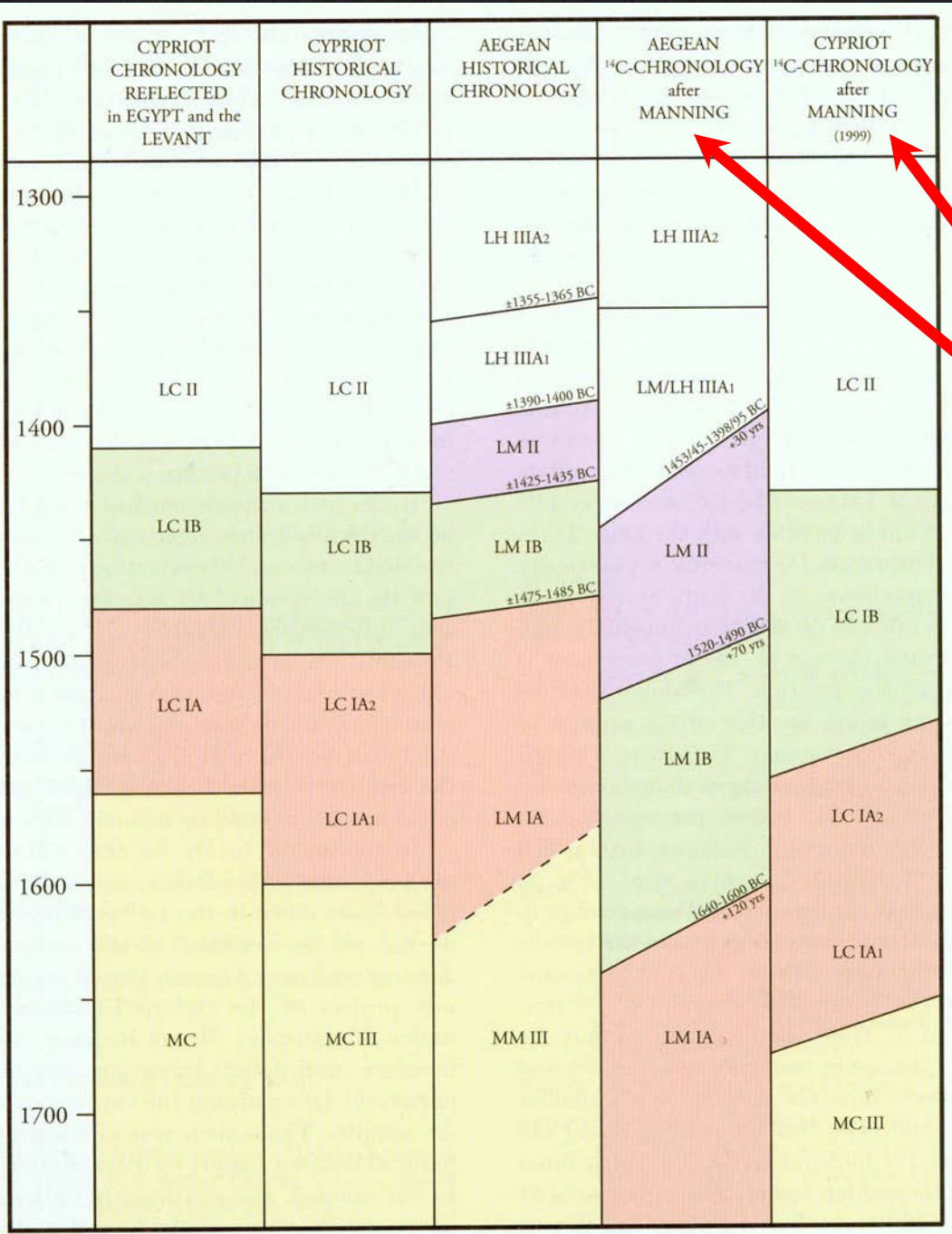
ANE Chronology Pre-1400 BC Put to Test

- “In summation, the agreement between ^{14}C and historical chronology in the 14th century (BC) and **the sharp rise of an offset a century earlier of up to 100–150 years** as well as in the preceding centuries only shows that the calibrated radiocarbon dates presented by Manning, Bronk Ramsey et al. cannot be considered as a series where the precision seems to deviate considerably **from the 15th century backwards**. This conclusion is the more cogent one as within the historical chronology of the 18th Dynasty with its dense network of regnal and genealogical data nobody could claim that a mistake of more than 100 years could have mounted up from the Amarna period to the early Thutmositides (within a

ANE Chronology Pre-1400 BC Put to Test

□ century). Under such auspices, one has to ask if it would not be worthwhile to investigate if a systemic failure in the Mediterranean ^{14}C evaluation could be discovered, or **if the absorption of ^{14}C was, for environmental reasons, different from the 15th century [BC] backwards.** Probably we do not know what may affect radiocarbon and its evaluation process.”

– Bietak, Synchronisation of Civilisations, *SCIEM* 2003 (Vienna: ÖAW, 2007), 20.



¹⁴C Anomaly before 1400 BC

Increasingly Higher
Dates for ¹⁴C
Technology than
Historical Chronology

Differences in the periodization of Minoan and Cypriot chronologies, based on the historical chronology of Egypt, showing the offset in the ¹⁴C calculations before 1400 BC

ANE Chronology Pre-1400 BC Put to Test

- This ^{14}C anomaly before ≈ 1400 BC appears at locations other than Egypt, such as throughout the eastern Mediterranean world. One such location is Jericho, which is located in the Jordan Rift Valley.
- For Jericho of the Early Bronze Age, radiocarbon dates “are ca. 150–300 yr older than conventional archaeological assessments” (abstract, p. 621, “Hendrik Bruins, “Early Bronze Jericho: High-Precision ^{14}C Dates of Short-Lived Palaeobotanic Remains,” *Radiocarbon* 40/2 [1998]: 621–628).
- The same ^{14}C anomaly at Jericho occurs for the LBA, when City IV was destroyed, just after the Israelites crossed into Canaan.

ANE Chronology Pre-1400 BC Put to Test

- Radiocarbon dates for the destruction of Jericho City IV are given in Hendrik J. Bruins and Johannes van der Plicht, “Tell Es-Sultan (Jericho): Radiocarbon Results of Short-Lived Cereal and Multiyear Charcoal Samples From the End of the Middle Bronze Age,” *Radiocarbon* 37/2 (1995): 213–220.
- Results of ^{14}C dating of the cereal samples from Jericho are 3306 +/- 6 BP. Applying the 1986 version of the Oxcal calibration curve gives an equal probability for the 1σ range as either 1601–1566 BC or 1561–1524 BC. Given that Jericho City IV’s destruction dates to 1406 BC, the radiocarbon dates are ≈ 120 – 160 years too early.

ANE Chronology Pre-1400 BC Put to Test

- ❑ The most important subsequent resource on this subject is *Radiocarbon and the Chronologies of Ancient Egypt*, edited by Shortland and Ramsey (Oxbow, 2013).
- ❑ The book (p. 95) cites many sites with ^{14}C anomalies: “Jericho, Khirbet Batrawy, Tell Abu-el-kharaz and other sites.” Thus, the problem with pre-1400-BC ^{14}C dating extends far beyond Egypt.
- ❑ Another problem created by the ^{14}C anomaly is the over-dating of the length of archaeological periods. The Oxbow 2013 book (p. 95) also states that researchers reported in 2011 that the dates of the EBA III in Canaan/Israel reach from 2900–2400 BC, a huge

ANE Chronology Pre-1400 BC Put to Test

- ❑ span of 500 years: 200 years longer than standard dating allows.
- ❑ What could account for this exponentially increasing offset in the ^{14}C dating vs. historical/chronological dating as one moves further back in time from 1400 BC?
- ❑ There is no satisfactory answer that the field of ANE history can provide, although Manfred Bietak was asked after his plenary address at the ASOR annual meeting of 2012 for his opinion as to the culprit. His answer, to the dismay of all, was . . . fog. Really!?
- ❑ This radiocarbon anomaly has created a controversy in the field.

Solving the Dilemma of the Pre-1400 BC Offset

- The archaeological community is divided, with conservatives such as Bietak favoring historical dating over ^{14}C figures when going back beyond 1400 BC. On the other side, the less seasoned ‘science oriented’ members of the community advocate the ‘correction’ of historical dating with data produced strictly by ^{14}C dating.
- In the Oxbow 2013 volume on ^{14}C dating and chronology, one writer said that “the chronology proposed by Hornung et al. (2006) is probably too low and should be corrected upwards by about 150–200 years” (p. 232). Without consulting biblical history, no resolution will come for the advocates of these two sides.

Solving the Dilemma of the Pre-1400 BC Offset

- One potentially attractive solution to the pre-1400-BC ^{14}C anomaly derives from an illumination of biblical history and chronology.
 - Ages of pre-Flood/post-flood patriarchs
 - Effects of radiation on post-flood earth and the magnetosphere
 - Potential change in rate of ^{14}C decay (i.e., Bietak's "absorption of ^{14}C [is] different from the 15th century BC backwards")
 - Normalization of radiocarbon decay coincides with death of Moses in 1406 BC (died at 120, per Deut 34:7). Only Jehoiada the priest lived beyond that age (died at 130, per 2 Chr 24:15).

Solving the Dilemma of the Pre-1400 BC Offset

- This hypothesis was presented to Dr. John Baumgardner (of the ICR), a key figure in the 8-year research project called RATE (Radioisotopes and the Age of the Earth).
- Dr. Baumgardner replied, “Most definitely, our conclusions suggest that the ‘renormalization,’ as you are calling it, of the atmospheric C-14 level during that interval between the Flood and about 1500 BC should have been smooth, or to use your word, gradual. Yes, our conclusions definitely imply that the older the actual age, the greater the difference ought to be between the actual date and the date provided by radiocarbon measurement.”