

The Biblical Chronologist

WHAT HAS BEEN IS REMOTE AND EXCEEDINGLY MYSTERIOUS. WHO CAN DISCOVER IT?
(Ecclesiastes 7:24)

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I have been intending for several years to write an article for The Biblical Chronologist on the origin of writing in relation to the new Biblical chronology resulting from restoration of the missing thousand years to 1 Kings 6:1. Unfortunately, this project has repeatedly been pushed aside by more urgent research tasks. Prospects for an article on this important topic by myself have not looked good for some time.

I was immediately interested, therefore, when Tom Godfrey wrote to me expressing some of his thoughts on this topic. Tom has substantial background training in languages, including a Ph.D. in linguistics from the University of Texas. I invited Tom to write an article for us, and he has kindly obliged.

Though Tom Godfrey and I have never met in person, we have come to be close friends through an extensive correspondence stretching back nearly a decade. Tom has followed the work of The Biblical Chronologist closely since its inception, and has contributed to it in numerous ways. I believe you will find the following introductory article on this topic to be interesting, informative, and helpful.

Earliest Writing Confirms Missing Millennium

by Thomas James Godfrey
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In the premier issue of *The Biblical Chronologist*, Gerald Aardsma predicted that mainstream bias against his discovery of a missing millennium in Biblical chronology would “only be overcome when the data heaped up against it has become so mountainous that every grade school child can

immediately see what it means.”¹ It appears that data concerning the earliest writing can now be added to the growing heap.

The argument can be easily summarized. One notes the dates when writing first appeared for specific languages. When these dates are compared with traditional Biblical chronology, a serious difficulty is encountered. Multiple languages are seen to have existed long before the date for the Dispersion from Babel, in apparent contradiction to the record of the origin of language diversity at Babel found in Genesis 11:1–9. This difficulty disappears when the 1000 missing years discovered by Aardsma are restored to Biblical chronology.

Sumerian Cuneiform

The currently accepted date for the earliest texts written in Sumerian cuneiform is approximately 3200 B.C.² or perhaps even a century or two³ later.

¹Gerald E. Aardsma, “Mount Sodom Confirms Missing Millennium,” *The Biblical Chronologist* 1.1 (January/February 1995): 1, footnote 4. See Gerald E. Aardsma, *A New Approach to the Chronology of Biblical History from Abraham to Samuel*, 2nd ed. (Loda, IL: Aardsma Research and Publishing, 1993), for an early, substantial account of his missing millennium theory, and Gerald E. Aardsma, “Biblical Chronology 101” *The Biblical Chronologist* 6.4 (July/August 2000): 12–15, for a more recent but much briefer review of it.

²Piotr Michalowski, in “Origin” subsection of “Mesopotamian Cuneiform,” Section 3 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright (New York, NY: Oxford University Press, 1996), 33; Jerrold S. Cooper, in “Sumerian and Akkadian” subsection of “Mesopotamian Cuneiform,” Section 3 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright (New York, NY: Oxford University Press, 1996), 37.

³Marc Van De Mierop, *Cuneiform Texts and the Writing of History* (New York, NY: Routledge, 1999), 2, 9–10; Florian Coulmas, *The Writing Systems of the World* (New York, NY: Basil Blackwell, 1989), 72; J. Nicholas Postgate, *Early Mesopotamia: Society and Economy at the Dawn of History* (New York: Routledge, 1994), 55, 57, 63, 66.

These texts were discovered at Uruk in southern Mesopotamia at the Uruk IV level, which goes as far back as 3300⁴ or 3400 B.C.⁵

Sumerian cuneiform, written with a reed stylus on soft clay, appears to have arisen from an accounting system⁶ that has allegedly been traced back to about 8000 B.C.⁷ This system used counters in the form of small, mostly geometrically shaped tokens of clay or stone. Each token was supposed to represent a commodity, such as an animal, parcel of land, or measure of grain.⁸

The token system, however, always remained independent of the language or languages spoken by its users. In contrast, once cuneiform writing began to extend beyond the old applications of the token system and became more expressive, it rapidly developed clear, close, and crucial connections to the Sumerian language.

At least by 2800 B.C.,⁹ the earliest cuneiform images were adapted to represent syllables, so that anything spoken could also be written. The Sumerian language is not related to any other known

language, ancient or modern.¹⁰

Egyptian Hieroglyphics

In Egypt, a rather different system of writing, one that used hieroglyphic symbols, appeared at about the same time as cuneiform in the “late Predynastic” period, as early as 3100 or 3000 B.C. according to presently accepted standard chronology.¹¹ This period was characterized by “great cultural change and technological innovation, with a system of government increasingly concentrated around the royal court.”¹²

The development of writing in Egypt may be the result of “stimulus diffusion” by which Egypt gained the “notion of writing” through trade with the Sumerians. However, it must be stressed that the Egyptian system is quite alien to the Sumerian and represents a distinctly local creation.¹³

Egyptian hieroglyphics are clearly distinctive, but a more important observation in regard to tests of Biblical chronology is the distinctive nature of the language represented. Ancient Egyptian, classified as Afroasiatic or Hamito-Semitic, is

⁴C. B. F. Walker, “Cuneiform” in *Reading the Past: Ancient Writing from Cuneiform to the Alphabet*, introduced by J. T. Hooker (Berkeley, CA: University of California Press, 1990), 19.

⁵Harriet Crawford, *Sumer and the Sumerians* (New York, NY: Cambridge University Press, 1991), 18. See also pp. 13–20 for an excellent overview of the dating of each period of Sumerian civilization.

⁶J. Nicholas Postgate, *Early Mesopotamia: Society and Economy at the Dawn of History* (New York: Routledge, 1994), 54. Denise Schmandt-Besserat, *Before Writing, Vol. I: From Counting to Cuneiform* (Austin, TX: University of Texas Press, 1992), 8–9, describes a hollow tablet with an Akkadian cuneiform inscription on the outside and forty-nine counters on the inside that became “the Rosetta stone of the token system.” This tablet was found at Nuzi in northern Iraq.

⁷Denise Schmandt-Besserat, *Before Writing* (Austin, TX: University of Texas Press, 1992), 36. The rest of the chapter, up to page 48, is rich in absolute dates for counter tokens. See also Peter T. Daniels, in “The First Civilizations,” Section 2 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 23, for an overview of the work of certain critics who cast some doubt on the claim by Schmandt-Besserat that this accounting system had any significant connection to the invention of writing.

⁸Denise Schmandt-Besserat, *Before Writing* (Austin, TX: University of Texas Press, 1992), 152.

⁹C. B. F. Walker, “Cuneiform” in *Reading the Past: Ancient Writing from Cuneiform to the Alphabet*, (Berkeley, CA: University of California Press, 1990), 21–22.

¹⁰Peter T. Daniels, in his introduction to “Part II: Ancient Near Eastern Writing Systems,” in *The World’s Writing Systems* (New York, NY: Oxford University Press, 1996), 19; J. Nicholas Postgate, *Early Mesopotamia: Society and Economy at the Dawn of History* (New York: Routledge, 1994), 36.

¹¹Florian Coulmas, *The Writing Systems of the World* (New York, NY: Basil Blackwell, 1989), 57, 60; W. V. Davies, “Egyptian Hieroglyphs” in *Reading the Past* (Berkeley, CA: University of California Press, 1990), 81–82, 112; Antonio Loprieno, *Ancient Egyptian: A Linguistic Introduction* (Cambridge: Cambridge University Press, 1995), 5, 11; Robert K. Ritner, “Egyptian Writing,” Section 4 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 73.

¹²W. V. Davies, “Egyptian Hieroglyphs” in *Reading the Past* (Berkeley, CA: University of California Press, 1990), 110.

¹³Robert K. Ritner, “Egyptian Writing,” Section 4 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 73. W. V. Davies, “Egyptian Hieroglyphs” in *Reading the Past* (Berkeley, CA: University of California Press, 1990), 112, and Peter T. Daniels, “The First Civilizations,” Section 2 in *The World’s Writing Systems*, 24, express essentially the same conclusion.

completely unrelated to Sumerian. Both languages are surprisingly well attested and understood, considering their great antiquity.

Proto-Elamite

Once writing had become firmly established in Mesopotamia and Egypt, there was little need for any other society in contact with these great civilizations to invent writing independently. However, there are a few other cases where writing does seem to have emerged more or less independently. These provide additional evidence for the simultaneous existence of distinct languages.

Clay tablets found at Susa in modern Iran bear witness to a distinct script nearly as old as the oldest found in Mesopotamia. This script appears to have originated somewhat before 3000 B.C.

Superficially, a large number of signs seem entirely abstract—which, considering the probability that the script developed explosively during the Jemdet Nasr Period (*ca.* 3050–3000 B.C.E.), suggests that its developers consciously chose geometric and other nonpictographic shapes and introduced them into conventional usage. The extent to which pictography may have been represented in a dead script is, however, difficult to discern.¹⁴

Unfortunately, these texts have not been fully deciphered, and the symbols used apparently do not directly represent the sounds of their underlying language. The development of this third ancient script was either cut short or later texts employing it have yet to be found. The suggestion that these economic or administrative texts are written in a precursor of the Old Elamite language (Proto-Elamite) still remains in doubt. Without a definite tie to a specific spoken language, the exact linguistic significance of these “Proto-Elamite” texts is open to question.¹⁵ However, the follow-

¹⁴Robert K. Englund, “The Proto-Elamite Script,” Section 10 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 162.

¹⁵Robert K. Englund, “The Proto-Elamite Script,” Section 10 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 160.

ing three points seem relevant to the present study: (1) a third type of script appeared at yet another place at about the same time as Mesopotamian cuneiform and Egyptian hieroglyphics, (2) it also emerged rather suddenly, and (3) the language behind it, although still unidentified, was probably neither Sumerian nor Egyptian.

The Indus Script

Yet another script had emerged independently by about 2500 B.C., namely the Indus script.

From the fourth millennium until about 2600 B.C.E., the Early Harappan cultures of eastern Baluchistan and the Indus Valley used “potters’ marks” but had no real writing. The Indus script came into being during the short transition period that led to the emergence of the literate Indus Civilization around 2500. . . . The first seafaring Indus merchants probably saw writing being used by their western trade partners, who had become literate much earlier. Instead of copying foreign script signs, however, the Harappans devised their own; some at least go back to local Early Harappan symbols.¹⁶

The story of this script reminds one of the “Proto-Elamite” script. The Indus script changed little during its relatively brief history. Around 1900 B.C., when the urban centers of its home civilization fell, the script ceased to be used except in one remote area, where it hung on for another few hundred years.

The Indus script has not been deciphered either, in spite of intense interest and thousands of texts available for study. This failure is due to several problems: the longest text has only twenty-eight signs, the average number of signs is only five per text, no helpful ancient translations have been

¹⁶Asko Parpola, “The Indus Script,” Section 11 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 165. Florian Coulmas, *The Writing Systems of the World* (New York, NY: Basil Blackwell, 1989), 180, states that the pre-Aryan civilization unearthed at Harappa in the Punjab flourished “between 3500 and 2000 BC.”

found, and the language of the Harappans remains uncertain.¹⁷

Some remarkable differences between the Indus script and all the others justify confidence in the claim that the Indus script really did arise independently from the scripts mentioned above, even though the idea of writing may have been borrowed. Most texts are on steatite seals,¹⁸ not written with a stylus on clay tablets. The inventory of signs or symbols is in the range of only 150 to 400. Some of these are stick figures or sketches of birds or fish, but most appear to be purely geometric figures.¹⁹

These features suggest that the signs mostly represent syllables, but it is far from certain what they are. Believing that the language should belong to the Dravidian family, which “is the most likely candidate historically,” one epigraphist has suggested a match with specific Proto-Dravidian syllables for at least some of the Indus script signs.²⁰ If that result can be sustained, the Indus script qualifies as yet another writing system testifying to a distinct language which was in use before 2500 B.C.

The Uncorrected Chronology

The traditional Biblical chronology shown in Table 1 and selected for special scrutiny differs from Aardsma’s chronology by only the disputed 1,000 years mentioned above. Both use the figures found in the Masoretic text, as opposed to the Septuagint and other textual witnesses, and both exclude ad hoc assumptions about gaps in the genealogies.

This uncorrected chronology seems fairly representative of conservative scholarship. The “time-

¹⁷Asko Parpola, “The Indus Script,” Section 11 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 165–166.

¹⁸Florian Coulmas, *The Writing Systems of the World* (New York, NY: Basil Blackwell, 1989), 180.

¹⁹Asko Parpola, “The Indus Script,” Section 11 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 167.

²⁰Asko Parpola, “The Indus Script,” Section 11 in *The World’s Writing Systems*, ed. Peter T. Daniels and William Bright, (New York, NY: Oxford University Press, 1996), 170. Florian Coulmas, *The Writing Systems of the World* (New York, NY: Basil Blackwell, 1989), 180, urges caution in accepting the claims of scholars who may be too eager to establish a link to a particular modern ethnic group in India, but Parpola’s tentative readings appear convincing.

line charts” at the back of the Ryrie Study Bible,²¹ for instance, agree with it rather nicely. The date for the beginning of the reign of King Saul is given there as 1050 B.C., and a note states, “Dates beyond this point are historically verifiable and relatively certain.” The starting date for the reign of King David is listed as 1010 B.C. Dates before 1050 but not before 1600 B.C. are called “[t]raditional dates,” and dates earlier than that are noted as “uncertain.” The earliest date charted is the birth of Abraham in 2166 B.C.; the birth of Esau and Jacob is given as 2006 B.C.; and the death of Joseph is shown as 1805 B.C. Such exact dates could have been provided in Table 1 as well, but for simplicity I have rounded them to the

Table 1: Traditional Biblical chronology relative to some events in the history of writing.

B.C.	Biblical History	History of Writing
1000	start of David’s reign	
1100	birth of Samuel	
1200	birth of Eli	
1300		
1400	conquest of Canaan	
1500	birth of Moses	
1600		
1700		
1800	death of Joseph	
1900	birth of Joseph	
2000	birth of Esau & Jacob	
2100		
2200	birth of Abraham	
2300	birth of Terah	
2400	birth of Peleg (Babel)	
2500	Noah’s Flood	Indus script
2600	birth of Shem	
2700		
2800		
2900		
3000		“proto-Elamite”
3100	birth of Noah	Egyptian hieroglyphs
3200		Sumerian cuneiform
3300	birth of Lamech	
3400		
3500	birth of Methuselah	complex tokens spread
3600		
3700	birth of Jared	
3800	birth of Mahalalel	
3900		
4000	birth of Seth	
4100		
4200	creation of Adam	

²¹Charles Caldwell Ryrie, *The Ryrie Study Bible: New American Standard Translation* (Chicago: Moody Press, 1978), 2108–2115.

nearest century.²²

Table 1 shows the problem clearly. Genesis 11:1 describes the setting for the tower of Babel episode as a time when “the whole world had one language and a common speech.” Indeed, if those living at the time had all descended from a single family that survived the Flood only a couple hundred years earlier, it is difficult to imagine how they could have developed any large differences in dialects in such a short time, given historically observable rates of language change. So how can one account for the documented coexistence of languages as diverse as Sumerian and Egyptian before Babel, and both before and after the Flood?

The Corrected Chronology

Aardsma claims that 1 Kings 6:1 originally specified 1480, not 480, as the number of years from the Exodus to construction of the temple under King Solomon. He has demonstrated in numerous articles that restoring that millennium to the chronology of Table 1 produces excellent agreement with secular history, confirming his claim.²³ The emer-

²²Gerald E. Aardsma, “Toward Unification of Pre-Flood Chronology,” *The Biblical Chronologist* 4.4 (July/August 1998): 3 (Table 1), lists 29 passages forming the “[p]rimary chain of the Biblical computation, based on the Masoretic text,” stretching from King Solomon back to the creation of Adam. This chain includes only two links not documented by individual generational spans, 1 Kings 6:1 (480 or 1480 years) and Exodus 12:40 (430 years). Aardsma’s Table 1 includes unrounded figures covering the period shown in the present article in Table 1. Without the 1000-year correction, his dates for the creation of Adam and the birth of Noah, Abraham, and Jacob would be 4176±26, 3120±21, 2167±15, and 2007±13 B.C., respectively. The one-year discrepancy between Ryrie and the central dates charted by Aardsma is entirely due to their starting with 930 and 931 B.C., respectively, for the start of the reign of King Rehoboam in Judah. See Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings*, new revised edition, (Grand Rapids, MI: Kregel Publications, 1983), 79, to understand the discrepancy and why either date can be used.

²³See Gerald E. Aardsma, *A New Approach to the Chronology of Biblical History from Abraham to Samuel*, 2nd ed. (Loda, IL: Aardsma Research and Publishing, 1993), for an early publication of his claim. See also Gerald E. Aardsma, “Mount Sodom Confirms Missing Millennium,” *The Biblical Chronologist* 1.1 (January/February 1995): 1–4; Gerald E. Aardsma, “Noah’s Flood: The Irish Evidence,” *The Biblical Chronologist* 5.3 (May/June 1999): 1–7; and Gerald E. Aardsma, “Yeroham: the True Mount Sinai” *The Biblical Chronologist* 6.4 (July/August 2000): 1–11 for a representative selection of articles on synchro-

gence of writing in the corrected chronology, as shown in Table 2, is merely one more demonstration of the same kind.

Notice that the right column is practically the same in Tables 1 and 2, but the large correction has pushed all Biblical events earlier than the birth of Eli back in time, so that just in Table 2 both the

Table 2: Aardsma’s Biblical chronology relative to some events in the history of writing.

B.C.	Biblical History	History of Writing
1000	start of David’s reign	
1100	birth of Samuel	
1200	birth of Eli	
1300		
1400		
1500		
1600		
1700		
1800		
1900		
2000		
2100		
2200		
2300		
2400	conquest of Canaan	
2500	birth of Moses	Indus script
2600		
2700		
2800	death of Joseph	
2900	birth of Joseph	
3000	birth of Esau & Jacob	“proto-Elamite”
3100		Egyptian hieroglyphs
3200	birth of Abraham	Sumerian cuneiform
3300	birth of Terah	
3400	birth of Peleg (Babel)	
3500	Noah’s Flood	complex tokens spread
3600	birth of Shem	
3700		
3800		
3900		
4000		
4100	birth of Noah	
4200		
4300	birth of Lamech	
4400		complex tokens
4500	birth of Methuselah	
4600		
4700	birth of Jared	
4800	birth of Mahalalel	
4900		
5000	birth of Seth	
5100		
5200	creation of Adam	
5300		virtual history

nizations for the times of Abraham, Noah, and Moses, respectively.

birth of Peleg (the time of Babel) and the Flood occur well before the first emergence of writing and the earliest witness to the existence of multiple languages. The problem of multiple languages before Babel disappears.

Discussion

Aardsma has suggested that the presently accepted date for the collapse of the Old Kingdom in Egypt needs to be moved back by two to three hundred years.²⁴ This adjustment to secular chronology might possibly move the date of the first appearance of Egyptian hieroglyphs back two to three centuries as well. The net effect of such an adjustment would be to push the first appearance of Egyptian hieroglyphs back closer to, but still apparently later than Babel.

Aardsma has also suggested that presently accepted Uruk dates ought to be pushed back to earlier times, perhaps by as much as 400 years.²⁵ This adjustment to secular chronology would alter Table 2, moving the first appearance of Sumerian cuneiform into the century before the Flood. If this adjustment to secular chronology proves to be warranted, it still would not mean that multiple languages were necessarily being spoken before Babel in Aardsma's chronology, because Sumerian would then be the only language having documented evidence of an earlier existence. It would imply that Sumerian was the universal language spoken by Noah, his family, and the rest of the known world before the Flood and until Babel.

The evidence presented here should not be regarded as incontrovertible. The dating of ancient texts already found can certainly be open to question and may require some adjustment as more

²⁴Gerald E. Aardsma, "The Chronology of Egypt in Relation to the Bible: 3000–1000 B.C.," *The Biblical Chronologist* 2.2 (March/April 1996): 1–9.

²⁵Based on reports of cultural discontinuities in the region, Gerald E. Aardsma, "Research in Progress," *The Biblical Chronologist* 1.4 (July/August 1995): 6–10, suggests that "[t]he Uruk period in South Mesopotamia was terminated by Noah's Flood," and "[t]he Jamdat Nasr period in South Mesopotamia was terminated by the Dispersion of mankind from Babel," making these periods 300 years earlier than dates "presently accepted" (page 8). The figure 400 comes from Gerald E. Aardsma, "Toward Unification of Pre-Flood Chronology," *The Biblical Chronologist* 4.4 (July/August 1998): 1–10 (especially page 6).

studies are completed. Also, new texts are still being found, and it is possible that some not yet carefully studied will prove to be older than any texts accurately dated so far. But the dates collected here are generally based on many thousands of well-studied texts, so large corrections, though admittedly possible, do not appear to be highly probable. For the time being, and until they are overturned by future developments, the currently widely accepted dates for the earliest writing fit into the growing body of evidence for the missing millennium.

Conclusion

It is important to take seriously the problem of multiple languages before Babel (and also before the Flood) which appears in traditional Biblical chronologies. Aardsma's corrected chronology offers a nice solution to this problem, and it does so without introducing new, insurmountable difficulties.

An important result of this solution is that the Genesis 11 specification of a universal language prior to Babel is upheld. It would take texts reliably dated before about 3400 B.C. showing at least two very different languages to cast serious doubt on the historical validity of the Genesis 11 record according to Aardsma's chronology. ◊

Readers Write

Dear Dr. Aardsma,

I am a new subscriber to *The Biblical Chronologist*. I concur wholeheartedly with your theory of the missing millennium in 1 Kings 6:1. After reading your article in the July/August 2000 issue²⁶ I have two questions:

1. Where did the Kenites get the copper from to make Israel's weapons? Is there a copper mine at Mt. Yeroham? In Exodus 12:35–36 the Bible says they borrowed silver and gold

²⁶Gerald E. Aardsma, "Yeroham: the True Mount Sinai" *The Biblical Chronologist* 6.4 (July/August 2000): 1–11.

from the Egyptians, but there is no mention of copper.

2. How does one reconcile the fact that inserting an extra thousand years in 1 Kings 6:1 throws off the entire prophetic scheme of the coinciding seven day week with the six one thousand year days and the seventh one thousand year day of the millennium or Kingdom of God? According to your theory it should be eight one thousand year days.

I would appreciate very much if you would answer these two questions for me.

J. Perry
Schenectady, NY

Dear J.,

Copper

No, there are no copper mines at Mount Yeroham. The copper ingots which were found at Yeroham would have been cast elsewhere and carried to Yeroham, possibly by Kenite tradesmen.

One possible source of the copper would have been Timna', located about 130 kilometers (80 miles) due south of Yeroham and 20 kilometers (12 miles) north of the Gulf of Aqaba. Timna' contains extensive mine workings from various periods, including EBIV, the period encompassing the Israelites' stay at Sinai. Here is a brief description of the mines and smelting site at Timna' from this period:²⁷

A group of mine workings in a low range of hills next to Giv'at Sasgon, in close proximity to Site 149, was the source of blue bisbeeite-chrysocolla ore. Site 250, discovered in 1967, was excavated in 1990. There were essentially two mines—250 and 250A—which were shelterlike “caves” with a thick vein of mineralization, mainly the blue-ore bisbeeite.

...

Mine 250A was a much larger mine, partly destroyed by a huge rockfall. It

was essentially also a mineralized, shelterlike cave created by following the mineral vein horizontally. . . .

Site 149 is located on a small, solitary hillock in the middle of the wide estuary of Nahal Timna'. It was excavated in 1984. There was a workshop area on the lower slope of the hill. . . . Crushing anvils and mortars and many small stone hammers were found in small groups, as if workers had just left for a short break. Inside some of the mortars were chunks of blue ore and finely crushed blue ore. . . ; malachite ore was found dispersed in the workshop as well. The smelting charge was obviously prepared here. . . . Fragments of slagged clay crucibles, found on the floor of the workshop, are additional evidence for casting, perhaps of the bar ingots found at contemporary sites in the Negev.

Eight days

Traditional Biblical chronology since the time of Ussher (A.D. 1650) has tended to place the date of Creation near 4000 B.C. We are living roughly 2000 A.D. This works out nicely to 6000 years since Creation. If one assumes that God has modeled the plan of history on Creation Week, with six days of work and one day of rest, corresponding to six millennia of mundane history followed by a millennial reign of Christ, then it is easy to deduce that we must be poised at the brink of the return of Christ.

The trouble with this is both in the assumption that God has modeled the plan of history on the pattern exhibited in Creation Week—which idea is found nowhere in my Bible, at least—and in the facts of Biblical chronology, which fail to support the idea that there have been just six millennia of history since Creation, as you have noted.

This later problem is hardly unique to the Biblical chronology which results from restoration of the missing millennium to 1 Kings 6:1. There is a very respectable history of Christian chronological scholarship stretching back long before Ussher which tends, more or less uniformly, to settle on a date for Creation nearer to 5000 than to 4000 B.C.

²⁷Beno Rothenberg, “Timna',” *The New Encyclopaedia of Archaeological Excavations in the Holy Land*, vol. 4 (New York: Simon & Schuster, 1993), 1479.

You can easily check this out by consulting the portion of Hales' list of Creation dates reproduced in *The Biblical Chronologist*, Volume 6, Number 2.²⁸ There you will find, for example, that more than one thousand four hundred years before Ussher, Julius Africanus (A.D. 218) computed the date of Creation to be 5500 B.C., and of similar early-Christian antiquity, Eusebius (A.D. 315) placed it at 5200 B.C.

So early Christian chronologists would tend to concur with the missing millennium chronology in the conclusion that Christians today are living in the eighth millennium since Creation. That this conclusion destroys the whole (extra-Biblical) idea that God has modeled the plan of history on Creation Week they would probably regard with considerable indifference. And so should we.

God has given us chronological data in the Bible stretching back to Creation so we might accurately know the past, not so we might predict the future. The (ab)use of Biblical chronological data to predict the future is really no different than the (ab)use of astronomical data (e.g., the motions of planets) to predict the future. Such an abuse of Biblical chronological data is, in fact, just another form of astrology—and Christians have no business dabbling in astrology.

Christianity is uniquely a historical faith. It is rooted and grounded in verifiable claims about what God has done in history. Creation, the Flood, the Exodus, Jesus' Incarnation, Crucifixion, and Resurrection are all facts of history—events which took place in real time on this real earth. God has given us chronological data in the Bible stretching back to Creation because it is of paramount importance to legitimate faith that history should be accurately remembered.

No such importance attaches to a knowledge of the future—which is perhaps why God, having shared with us the absolute chronology of the past, has elected to keep to Himself the absolute chronology of the future (Mark 13:32).

Gerald E. Aardsma, Ph.D.
Loda, IL

²⁸Gerald E. Aardsma, "Biblical Chronology 101" *The Biblical Chronologist* 6.2 (March/April 2000): 12–13.

Research in Progress

Ark Search



Figure 1: August 2001 photo of IO3.

The second satellite image we had hoped for has not been acquired this summer, so we must wait again until next summer. Our contract calls for this image to be taken at a low angle, rather than overhead, which is proving to be more difficult for the commercial satellite company than we had anticipated. This has caused the long delay with this image. It may be necessary to renegotiate the parameters of this final shot before next summer. ◊

The Biblical Chronologist is a bimonthly subscription newsletter about Biblical chronology. It is written and edited by Gerald E. Aardsma, a Ph.D. scientist (nuclear physics) with special background in radioisotopic dating methods such as radiocarbon. *The Biblical Chronologist* has a threefold purpose:

1. to encourage, enrich, and strengthen the faith of conservative Christians through instruction in Biblical chronology,
2. to foster informed, up-to-date, scholarly research in this vital field within the conservative Christian community, and
3. to communicate current developments and discoveries in Biblical chronology in an easily understood manner.

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