events took place if they occurred at all. Now let me check some things to see if this picture is accurate.

It is well established that the Ugarit texts (standard dating 1400-1200 BC; also called Ras Shamra) have much vocabulary in common with the Mosaic law1 offerings, including identical sacrifices such as the burnt offering, trespass offering, wave offering, first fruit offerings, as well as New Moon offering. It is also demonstrated that the covenant form in the book of the Law, especially Deuteronomy, follows Hittite suzerainty treaty model from the 14th century BC.² Given the secular archaeology opinion, we must accept the Mosaic law vocabulary for various offerings circulated orally among the Hebrews for 400 years or more before recorded, but the Canaanites had a written religious vocabulary as far back as 1400 BC.

The name Ahilud, 2 Samuel 8:16 and 20:24 during the time of David's kingdom turned on up on a storage jar handle found Raddana, close to Ai.³ The inscription is dated 11th century BC, the same time period as 2 Samuel 8:16 and 20:24. However, the archaeologists do not claim this is the same Ahilud as the Bible, but that the name was in use during the period. Here is evidence of Hebrew writing from the period which many claim is oral history.

In 1908, the Gezer calendar was found dated to 10th century BC, and was considered the oldest example of ancient Hebrew writing. At Isbet Sartah a more ancient inscription was uncovered.⁴ It is written left to right with the Hebrew alphabet, a practice inscription dated 1200 BC during the time of the Judges, and the letter Pe precedes the letter Ayin in the alphabet order. Again this comes from a period considered to be oral stories in the Bible.

I don't want to leave out Abraham. Genesis chapter 23 shows Abraham purchased a field and cave from the Hittites for a burial site.⁵ The NIV and NKJV render 'deeded' in verse 17 and 20 of this business transaction. Abraham could count and weigh according to the Bible, but if the

Hittites deeded the purchase in written form, poor Abraham could not read or write!

In my opinion Old Testament history, especially Solomon back to Adam in the Garden of Eden, contains many events that evolutionists cannot reconcile with their reconstruction of Earth history and so they expend considerable efforts at debunking the biblical record.⁶

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- The sad commentary on modern archaeology and Old Testament history, it appears many throw out plain references to writing in the Bible like the following:

(A common Hebrew word for book is 'sepher' and its first use is Genesis 5:1.

The LXX at Genesis 2:4 reads 'biblos', 'This is the book of the generation of heaven and earth.' There are other books mentioned in the Old Testament like Numbers 21:14, the Book of the Wars of the Lord also Joshua 10:13, the Book of Jasher. In 2 Samuel 1:18 the Book of Jasher existed in Joshua's time and also David. Perhaps the Book of Jasher was the Book of the Wars of the Lord referenced in Numbers 21:14. Exodus 17:14 may refer to this book.

Joshua 18:9 shows the men who surveyed the land in Canaan recorded the results in a book.

Samuel writes about the rules of kingship in I Samuel 10:25 after anointing Saul as king. There is a good note at 1 Chronicles 29:29 in the 2002 Scofield Study Bible edition concerning additional books mentioned in

the Old Testament but not in our canon or even found today. 1 Chronicles 29:29 uses the Hebrew 'dabar' for book and we see that the prophets Samuel, Nathan and Gad wrote books concerning the acts of king David. Another book was written about the acts of king Solomon see 1 Kings 11:41.

Moses writes in Exodus 17:14 and Deuteronomy 31:24, Joshua wrote see Joshua 24:26, as well as Samuel, Nathan and Gad. During the reign of David, Jehoshaphat was the professional 'recorder' of the king's deeds, see 2 Samuel 20:24. The NKJV translates the Hebrew 'hamazakir' as 'recorder'.

See passages like 2 Chronicles 34:8 and Isaiah 36:22. Gesenius' Hebrew and Chaldee Lexicon makes clear that this position was a historian who maintained official records of the Hebrew kings. Such official records from the time of David make sense of the archaeology record, e.g. the 1994 discovery of a reference to the 'House of David' at Tel Dan on a stele.)

'Short' sojourn comes up short?

Two of this journal's articles have recently argued for a 215-year sojourn of Israel in Egypt.¹ This is shorter by half than the 430 years stated in Exodus 12:40, where Moses writes: 'Now the length of time the Israelite people *lived in Egypt* was 430 years' (NIV, emphasis added).

For several reasons I believe that the plain sense of this passage should stand, and that the 'short' sojourn view, though held in good faith by a number of scholars, is unsatisfactory.

The Hebrew text of Exodus 12:40– 41, which our English versions reflect, is constant in attesting to both the Egyptian locus, and the 430-year duration, of the sojourn. Twice (including v. 41) it says that the period in Egypt lasted 430 years ('lived in Egypt ... 430 years. At the end of the 430 years, to the very day, all ... left Egypt'). There is no hint of the distinctive diamond-shaped sign used by the Masoretic scribes to indicate any doubtful Hebrew reading (only 15 in the entire Old Testament, none in Exodus).2 The Exodus scroll found at Qumran preserved the same reading, leading The Dead Sea Scrolls Bible translators to observe that

'The Masoretic text and 4QExodc

- confine the period to the time in Egypt alone [emphasis added].'3
- The subject of the passage is 'the sons of Israel' (Heb., beney Israel), or, as the KJV and NKJV render it. 'the children of Israel'. This by definition excludes both Abraham. who was never called 'Israel', and Isaac, who was forbidden by God to enter Egypt (Gen. 26:2). Nor can it include Abraham's earlier temporary stay in Egypt during a famine, since this preceded the giving of the covenant, and hence its foreign sojourn—which in any case related to Abraham's 'descendants', not to himself (cf. Gen. 12:10; 15:13).
 - Israel as we know, was the name given by God to Jacob after his night of earnest prayer (Gen. 32:38), and the terms 'children of Israel' and 'descendants of Jacob' are accordingly interchangeable in Exodus (e.g. Exodus 1:1, 5). Thus *Encyclopaedia Judaica*, though favouring a different sojourn span, '... according to Exodus 12:40–41, 430 years elapsed from the descent of Jacob and his sons to Egypt until the Exodus.'
- 3. Against this clarity of the Hebrew text, is the confused revisionism of the Septuagint and Samaritan versions at this point. Both are well-known for their chronological tweakings,5 as Pete Williams has earlier highlighted in these pages,6 and here they are not even consistent. The Septuagint adds 'and the land of Canaan' after Egypt, while the Samaritan Pentateuch inserts 'Canaan' before. Both are obvious reworkings, as the medieval Jewish scholar Rashi concedes of the addition to the LXX:
 - 'This is one of the things that [the Sages, sic] *changed for King Ptolemy* [emphasis added].'⁷
 - That is, it was an acknowledged 'change' from the Hebrew—and more than a thousand years after the eyewitness Moses wrote the original!
- 4. The precise '430 years, to the very day' in Egypt (Exodus 12:41)

- is corroborated by the rounded four centuries' foreign sojourn foretold to Abraham concerning his descendants. God said they would be 'strangers in a country not their own, and they will be enslaved and mistreated four hundred years [emphasis mine]' (Genesis 15:13, NIV). Stephen too maintains the same four century time frame, declaring that Israel was 'enslaved and mistreated four hundred years' in a foreign country (Acts 7:6–7).
- 5. The ancestry of Moses' family in Exodus 6:16-20 is modestly abridged (just as Ezra, with similar humility, demonstrably abbreviates his own family line in Ezra 7:1-5, leaving out five known generations of his priestly forebears; cf. 1 Chron. 6:3–15). Confirming this is the fact that the Amramites by Moses' time numbered some 4,300 people (averaged from Num. 3:19, 27–28), which in just two, or even three, generations is simply impossible. Indeed, the growth of Israel from 70 people to some two million, while consistent (at the high birth rates Scripture mentions in Ex.1:7) with the 430vear sojourn, would have required an astronomical doubling every fourteen years for a 215-year sojourn, without even taking into account the killing for a time of the male babies!
 - Thus as Kenneth Kitchen has observed, the Exodus 6 genealogy of Aaron merely gives the tribe (Levi), the clan (Kohath), and the family (Amram).8 That Jochebed, Moses' mother, is called a 'daughter of Levi' (Exodus 2:1) simply denotes a *descendant*, even as Jesus is the 'Son of David'not by immediate generation, but by lineal descent. Even in Christ's own genealogy, after the flesh, three entire generations of kings are known to have been omitted, possibly because of their association with Ahab's house (cf. Matt. 1:7–8, 1 Chron. 3:11–12).
- 6. There were *eleven* generations from Joseph at the start of the

- Sojourn, to Joshua at the Exodus (1 Chron. 7:22-27). Given that an average Jewish 'generation' is reckoned at around 40 years (e.g. the 22 generations between Aaron and to Babylonian captivity of c. 586 BC, 1 Chron. 6:3-15), this accords with a 430-year sojourn, but hardly with a short stay. God's promise to Abraham that 'in the fourth generation they will come back here' (Gen. 15:16), does not gainsay this, since here the 'fourth generation', clearly corresponding to the 'four hundred years' of the same passage, denotes a generation from Abraham's perspective, i.e., about 100 years.9
- 7. Paul's reference to the '430 years' between the promises and the law (Gal. 3:16–17), expressly uses the plural 'promises' (epangeliae). That is, it denotes the chain of promises to Abraham, Isaac, and Jacob, finally reaffirmed on Jacob's last night at Beersheba (Gen. 46:1–7). Thus Dr William Arndt, of Arndt-Gingrich Greek Lexicon note, declares that
 - '... the direct promissory declarations of God to the patriarchs ceased at the time when Jacob went to live with Joseph and ... Paul ... is figuring from this point of time. Under this view, *Paul, as well as Ex. 12:40, makes Israel's sojourn in Egypt last 430 years* [emphasis added]'¹⁰
 - The Talmud—hardly a solid guide, yet not without some evidentiary value—records a case won by Gebiha ben Pesisa at the time of Alexander the Great. Against some Egyptian plaintiffs who were demanding 'restitution' from Israel for the gold, etc. taken at the Exodus, ben Pesisa replied: 'Pay us for the toil of 600,000 men whom ye enslaved for 430 years.'11 His whole case, carried before Alexander or his judicial proxy, clearly depended on the 430-year Egyptian sojourn—otherwise his defence, whether real or stylised, was fraudulent!
 - This was also the position of the earliest Church 'Fathers' who

wrote on biblical chronology. Theophilus of Antioch and Clement of Alexandria, both second century writers esteemed for their orthodoxy, clearly upheld the 430-year sojourn in Egypt, as a quick check of their writings in the *Ante-Nicene Fathers* shows. ¹² Theophilus in particular, as Eusebius' sixth successor of the apostles at Antioch, would surely have reflected their mind on so important a Jewish epoch as the Egyptian sojourn.

With the greatest respect to those who advocate the shorter duration, their position (though in no sense their faith) literally comes up 'short'.

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Mike Viccary replies:

I would first like to say how good it is that although we may disagree on some points, it does seem to me that we are all very keen to demonstrate that Scripture is pure and perfect. The word of God to us is a sure foundation which not only stands the test of time but also will do its perfect work both in those who believe and in those who not believe. How good is our God! Now, in response to Brenton Minge's comments I would like to make the following points:

- 1. The text of Exodus 12:40, 41 seems to me to be informing us clearly about the 'sojourn' of the children of Israel not about how long they were in Egypt. If you read Genesis clearly it mentions on numerous occasions that the patriarchs 'sojourned' in the land. That is they were strangers in the land promised to them. (See for example: Genesis 15:13; 17:8; 19:9; 20:1; 21:23, 34; 23:4(x2); 26:3; 28:4; 32:4; 35:27; 36:7; 37:1; 47:4; Exodus 2:22—incidentally, note that the word 'sojourn' only appears after God's promise to Abraham in Genesis 15). I believe that Exodus 12:40, 41 is more concerned with the coming to an end of this prolonged sojourn, whether in Egypt or in the land of Ham where the Canaanites dwelt.
- 2. In view of what has been said in point (1) above, the phrase 'children of Israel' is used to represent what Abraham and his posterity have now become.

- 3. Brenton Minge suggests that the 400-year period mentioned in Genesis 15:13 is a 'rounded' up number which equates with the exact figure recorded in Exodus 12:40, 41 (i.e. 430 years). However this is not at all satisfactory. I find it difficult to imagine that God was giving Abraham a rough figure here. It seems to me that this figure which is mentioned also in connection with the phrase 'fourth generation' (Genesis 15:16) mean exactly what they say. Thus 400 years is 400 years and the fourth generation is four generations. A generation can be any figure depending on how old a father is at the time when his son is born.
- 4. By holding to the long chronology Brenton Minge has to resort to explaining away the detailed chronology and genealogy of Moses. Exodus 6:14-20 and Numbers 26:57-60 when taken together clearly indicate a literal four generation line from Moses to Jacob. It is to be noted that in the Exodus passage the ages of individuals are noted. Chronologies with ages and dates are literal and unbroken. Only those chronologies where no dates or ages are given have omissions in them
- 5. Brenton Minge suggests that the four generation line of Jacob to Moses would require a dramatic increase in the population. But isn't this what is found in the text? There are clear statements which imply a miraculous increase. See for example Genesis 47:27, Exodus 1:2 and Deuteronomy 1:10.
- 6. Minge finds it difficult to accept that four generations (to Moses) and eleven generations (through other sons of Levi) can be made to fit into a 215 year span. However, it is more difficult to imagine four generations covering 430 years. Eleven generations over 215 years comes out at an average of 19.5 years. If however we imagine a man to have a son when he just arrives in Egypt and then when the Israelites return the eleventh in the

- line is just born as they leave, this would make the average about 24 years.
- To suggest that Paul telescopes the promise from Genesis 12 through to later chapters and that he is not specifically referring to Genesis 12 is, I believe, stretching things. Note that Paul only refers to Abraham not to Isaac or Jacob. The first time that the promise is made to Abraham and his 'seed' occurs in Genesis 12:7 and it is natural to take this as the reference alluded to by Paul in Galatians 3:16. It does in fact appear to be a direct quote. It is true that the reference to 'seed' is found elsewhere, but Genesis 15 and 22 do not have the phrase 'to your seed' whereas Genesis 12:7 does.

I hope this is satisfactory.

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David Austin replies:

I would like to thank Brenton for his response to the article, 'Chronology of the 430 years of Exodus 12:40'. However, I believe there are some problems in his reply.

Concerning translations

In Pete Williams' excellent article 'Some remarks preliminary to a biblical chronology' he states, in giving evidence 'which suggest that the Septuagint and Samaritan traditions have suffered chronological revision in the course of transmission', that 'differences existed in Hebrew texts from which the Greek was translated'. He gives an example where 'one of the Dead Sea Scrolls (4QJerb) is a Hebrew manuscript showing an omission of Jeremiah 10:6–8 and 10:10 just like the Septuagint.'

On the basis of the above, we would suspect that most if not all of Brenton's quotes of translations were subject to the above problems, e.g. those of The Ante-Nicene Fathers, *Encyclopaedia Judaica*, LXX, Samaritan Pentateuch

and The Dead Sea Scrolls Bible. A 'testing case' is that in the writings of Theophilus to Autolycus, mentioned by Brenton, (Book II, page 118, that where in Chap. XXIV—'Chronology from Adam'), a list of begetting ages, etc. are given, which are quite at variance with the Masoretic Text. I.e. the year of the Flood is given as 2242 AM, while the date of Ussher, Anstey, Philip Mauro, etc. is 1656 AM and agrees with the sum of the chronological periods in the KJV. Included in Theophilus' chronological list we find this: 'and the sojourning of the Hebrews in Egypt *lasted* 430 years [emphasis mine]'. The KJV on Exodus 12:40 does not say 'lasted' (Heb. # 1961—Strong,² see Judges 14:17) but 'dwelt' in Egypt (Heb. #3427—Strong = to sit down, to remain, to settle, to marry). 'Lasting' refers to time, while 'dwelling' relates to how they lived and where.

Brenton states that 'twice (including v. 41) it says that the period in Egypt lasted 430 years.' Neither say this. See above on v. 40 ('dwelt' not 'lasted'). In verse 41 it says 'at the end of 430 years', with no reference to Egypt.

On page 15 of Jonathan Sarfati's article,³ we find that 'the LXX times of the period, Adam to the Flood, are the same as Theophilus'.

Regarding the case won by Gehiba ben Pesisa, it is quite possible the court had in their possession a Hebrew 'conflicting manuscript' or an LXX, and not the Masoretic text. The Egyptian plaintiffs, in demand for restitution, would have gone for as much as was possible. We cannot build a case for 430 years on this trial.

In checking through 2 books on the Dead Sea Scrolls we find that in Cave 4, fragments (Greek texts) were found of 'Exegetical paraphrase on Exodus, 4Q 127/ 4Q papPara Ex gr (papyrus). Exodus proper and Genesis were not found.' If these fragments are those to which Brenton refers, i.e. 'leading The Dead Sea Scrolls Bible translators to observe that "The Masoretic text and 4QExode confine the period to the time in Egypt alone", and these fragments are in Greek (LXX?—see

above on manuscript variations to the Masoretic Text) and it is exegetical *paraphrase*, then we cannot be certain of their reliability.

Other points in Brenton's letter

- 1. The NIV translation of Exodus 12:40. The translators of this version give an eclectic import (meaning derived from various sources), thus leaving the translation uncertain. In the footnote it says, 'Masoretic Text. Samaritan Pentateuch and Septuagint Egypt and Canaan.' This was not mentioned by Brenton
- 2. In understanding the plain sense of Exodus 12:40 (KJV), careful note must be taken of the comma after 'Israel' and the comma after 'Egypt'. In Hebrew, these are called accent-symbols. These show the relation of a particular word to the rest of the sentence by acting as punctuation marks, and also serve to mark the tone syllable. Then the plain sense would be:
- (i) The 'sojourning' (i.e. the period where the children of Israel lived as strangers, with no inheritance, no citizenship, no land rights, etc.)⁵ was in Canaan and Egypt. It was the sojourning that 'lasted' 430 years. If the 400 years of affliction (Genesis 15:13) started about 85 years (Galatians 4:22–31; Genesis 21:8-10)6 before Jacob went down to Egypt in 2298 AM, and then Israel 'lasted' 430 years in Egypt, then we have 515 years affliction and not the 400 of Genesis 15. Israel sojourned both in Canaan— 'dwelling in tabernacles with Isaac and Jacob' (Hebrews 11:9)—and in Egypt (where they had no citizen rights). This is what the Samaritan Pentateuch and the LXX are trying to tell us even though they, perhaps, had no right to add words that were not in the original text.
- (ii) The relative clause, 'who dwelt (settled—Strong #3427) in Egypt' tells us where they had settled.

- Egypt was their place of habitation at the time of the Exodus.
- 3. The term 'children of Israel', in its Semantic use / shade of meaning. does not always refer to Jacob and his children as the only exclusive ones to be included in that term. Strong on 'children' or 'son' (Hebrew #1121), says its widest sense includes 'grandson, subject, nation, quality or condition, etc'. It is understood that Israel is referred to as a nation in Genesis 47:27, 'And Israel [singular] dwelt in the land of Egypt ... and they [plural] had possessions therein and grew and multiplied exceedingly [emphasis mine].'
- 4. An attempt is made by Brenton to find a 'plural' and a 'chain' of promises relating to the start of the 430 years. Each of these, he says, 'denotes a chain of promises to Abraham. Isaac and Jacob' in such a way that Abraham and Isaac are not included in the term 'children of Israel'. The critical problem is that the 430 years of Galatians 3:17 does not start with a promise or a 'chain' of promises but with the special confirmation (or ratification; see Genesis 15:8– 21) of that promise already given before in Mesopotamia (Acts 7:2). Remember Abram had spent some time in Haran—'and the souls they had gotten' (Genesis12:5)—so the 430 years could not start from the Ur of the Chaldees. This confirmation was given to Abraham soon after he entered Canaan at the age of 75, so that he would 'know [be certain; emphasis mine] that I shall inherit it' (Gen 15:8).

Twelve different Hebrew or Greek words were found to define 'confirm'. Only 3 times ('kupow' twice, 'prokupow' once; 2 Corinthians 2:8, Galatians 3:15, Galatians 3:17) are these words used in a legal sense. Philip Hughes⁷ says on 2 Corinthians 2:8:

'The verb *kupow*, "ratify" or "confirm", was commonly used

with a legal connotation, as is clear from Galatians 3:15 (the only other place in which it occurs in the N.T.) where Paul points out that a will which has been ratified ... can be neither set aside nor added to. Hence the likelihood that the use of this term here implies an official or formal ratification of the Corinthian's love by resolution of the congregation or church to re-admit the repentant offender to their fellowship.'8

In Galatians 3:17, the legal ratification of the promise(s) was made 'before' The Law, which came 430 years 'afterwards', and which cannot disannul (invalidate) the confirmation of the promise. John Brown⁹ says,

- "... to "confirm" is to sanction, ratify, make or declare valid. Such a transaction is confirmed when it is fully settled, and the appropriate evidence given that it is settled. The royal assent confirms or ratifies a law in this country, after it has received the approbation of the other branches of the legislature'. There is only one time in the whole of Scripture, i.e. Genesis 15:8-21, where such a special confirmation occurred, where God, anthropomorphically, would bring the judgement of dismemberment upon Himself if He did not fulfil His covenant. This is the 'confirmation' referred to in Galatians 3:17.
- 5. Please check the AM dates of the article, 'Chronology of the 430 years of Exodus12:40',7 which come not from secular dates, but from adding up the chronology in Scripture starting with Adam, and it will be found that if Israel 'lasted' 430 years in Egypt, then there would be 645 years between the confirmation of the promise and the giving of the Law. Therefore, we cannot start with Jacob or Isaac nor with 430 'lasting' years in Egypt. In Galatians chapter 3, neither Isaac nor Jacob get a 'starting' mention, only Abram.

I am happy to discuss with Brenton other matters not dealt with here

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Pioneer anomaly: still unsolved?

I was initially excited to read Humphreys' paper on how creationist cosmologies can explain the anomalous acceleration of the Pioneer spacecraft. However, after some reflection, it appears to me that the paper is fundamentally flawed.

The paper is essentially a tale of two coordinate systems, their physical interpretations and how they relate to each other. These two coordinate systems are (1) 'coordinate' time and