## Using Scriptural Data to Calculate a Range-Qualified Chronology from Adam to Abraham

## With Comments on Why the "Open"-or-"Closed" Genealogy Question Is Chronometrically Irrelevant

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Presented at the Southwest Regional Meeting of the Evangelical Theological Society at The Criswell College in Dallas, Texas on March 1, 2002.

And God said, "Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and for years...." (Genesis 1:14)

## I. Introductory Overview

God intended that His human creatures would be able to use the sun to calculate time on Earth, in years. ${ }^{1}$ The regular amount of time used when the Earth orbits around the sun is called a "year. ${ }^{2}$ Because earthly sun-orbits recur on a regular ${ }^{3}$ basis (and that is reliable and true because God made it to be so), years are a reliable and true time-unit for quantifying time on the Earth. ${ }^{4}$

The physical universe exists in space, time, and matter-energy (the latter category being a more technical name for "stuff"). God made time "in the beginning," at the same time when He made space and matter-energy. God works in time, not because He must but because He wanted to. God made mankind to live, on Earth, inside time (and space and stuff). The study of human events within their space-time context is usually known as the study of "history"-thus, the Bible contains a lot of "history," because the Bible often documents human events described in relation to their spacetime context, by identifying timeframes and geographical location information.

This paper is concerned about the Bible's quantitative records about time. God tells us many things in the Bible about time-often measuring such timeframes in days, months, and years. In particular, this paper is mostly concerned with instances when God has communicated historical chronology information in the Bible by perspicuously describing specific timeframes in "years."

Even though this paper will show that a strict analysis of the Adam-to-Abraham chronology does not require resolving the "open" or "closed" genealogy question, that question will nevertheless be discussed and resolved in Appendix A of this paper. Another labyrinthine puzzle of patriarchal chronology, involving the ages of Terah and Abraham in relation to various historical events, is given special attention in Appendix B. Also, a puzzling issue involving Shem, Ham, and Japheth is addressed in Appendix C.

It is not the purpose of this paper to reply to every critic who has ever challenged the inspired content of the book of Genesis, ${ }^{5}$ as to its chronological data or otherwise. It is the purpose of this paper to examine what God has actually said in Genesis, and to analyze what conclusions can be confidently determined from Genesis' content. In other words, this paper is limited in its scope: Scriptural data is herein used to calculate an absolute range for the timeframe from Adam's creation to the birth of Abraham. ${ }^{6}$

Interestingly, scholars of ancient history in general, and of Biblical history in particular (with the obvious exception of England's William R. Cooper, PhD, ThD), have mercilessly diminished the importance of genealogical records (and genealogy-oriented history scholarship), almost as if it were a fashionable fad or a gate-keeping shibboleth of the academic elite. ${ }^{7}$

After delineating (and sometimes qualifying) 19 specific sequential "links," this Adam-to-Abraham paper will conclude with four major conclusions:


#### Abstract

1. The timeframe of world history from Adam to Abraham is ascertainable, using data from the Holy Scripture's text, analyzed by simple arithmetic, with the calculations being contextually accuracy-qualified as to any translational alternatives and/or ambiguities (i.e., by using hermeneutics-permitted "oldest-toyoungest" scenarios), so that the reader of Scripture can know for a mathematical certainty, within an absolute precisional tolerance, how long the Adam's creation-to-Abraham's birth timeframe is, measured to the nearest year;


2. The "open"-or-"closed" genealogy controversy is expositionally irrelevant to the issue of calculating the timeframe from Adam to Abraham, especially after a textual solution is applied to the problem of the "second Cainan" (Greek: Kainam) who appears in Mary's genealogy (at Luke 3:36);

> 3. The confusion regarding some of the related events in the lives of Abraham and his father (Terah) do not present a true stumblingblock to the careful reader, since the supposedly "problematic" phrase (in Acts $7: 4$ ) permits more than one grammatically permissible interpretation, and one of the alternative interpretations of that ambiguous phrase harmonizes comfortably with the chronological data within the three related passages in Genesis (11:26; 11:32; and 12:4);
4. The range of the timeframe from Adam's creation to Abraham's birth (which represents almost onethird of all human history), even if calculated without any ultimate resolution to the "open" versus "closed" genealogy controversy, is between 1,948 and 1,984 years-i.e., almost yet not quite 2,000 years.

As noted above, the Holy Bible presents mankind with authoritatively accurate and perspicuously meaningful data about many Earth history timeframes. Roughly one-third of Earth history is the historical timeframe that reaches from the day when God (the Son) supernaturally created Adam, Creation Day \#6, unto the day when Abraham was given birth by one of the wives of Terah. That historical timeframe is specifically composed of 19 sub-timeframes (which are denoted, in turn, hereinbelow). ${ }^{8}$

It is critical to recognize that those 19 sub-timeframes (which serve as sequential "links") are "gap"-free, ${ }^{9}$ i.e., they provide a composite timeframe that is chronometrically "closed."

In other words, deductively speaking, there are no inferrable "gaps" (i.e., of "unknown" time-length) in the time between these Scripturally defined 19 sequenced sub-timeframes. Each of these 19 sub-timeframes is a "link" within the entire link-"chain" of sub-timeframes, in turn, so that the complete sequencing of all 19 sub-timeframes exactly equals the entire timeframe from Adam's creation unto Abraham's birth. This Adam-to-Abraham timeframe is measurable in years, because each of the 19 gap-free sequential "links" in that timeframe are measured in "years" (shanim), according to Genesis. ${ }^{10}$

## II. Methodological Qualifications regarding Biblical Chronology Exposition

This Adam-to-Abraham chronology study is a finite subset of the entire chronology of Biblical history, ${ }^{11}$ which is textually provided within the Holy Scriptures as the inerrant source of authoritative information on Old Testament timeframes.

In other words, the Holy Bible is not only the primary source of information regarding Earth history chronologies, it is the only chronology source which is divinely (and thus inerrantly and perspicuously) inspired to give us accurate chronology information. So, to the extent that the Scriptures provides us with such chronology information, that information is accurate and reliable. ${ }^{12}$ Thus, the chronology data to be used herein is the information within the Bible itself, most of which is contained in Genesis chapter 5 or Genesis chapter 11.

For illustrative examples of how Biblical chronology data is provided, see generally Genesis chapters 5 and 11, as well as Genesis 7:11; 21:5; 25:26; Exodus 12:40; Judges 11:26; 1st Kings 6:1; etc. Accordingly, Bible-based chronometry squarely relies upon special revelation information, as opposed to empirical science data and calculations.

This study is not intended to minimize the importance of observing and quantifying data in "nature" (i.e., empirical data
observable by natural scientists) -especially since "nature" demonstrates a God-ordained and excuse-defeating ${ }^{13}$ natural revelation function (e.g., astrophysical or geophysical studies that prove limits on the age of the solar system, or the Earth, etc., and thereby disprove old-Earth mythologies of the Big-Bangers who wax on and on about "billions" of years).

Likewise, this paper is not intended to minimize the value of scientific research and analysis that logically interprets the meaning and ramifications of the empirical information that God has provided as part of His general revelation of truth to mankind. ${ }^{14}$

Rather, this paper is intended to prove that God has chosen to inerrantly reveal enough quantitative chronology information, in Genesis, so as to enable us to confidently calculate a narrow range, in years, of about $1 / 3$ of Earth's history.

## If more than one calculation is permitted by the Bible's information, what then?

Scriptural text declarations, when correlated like links in a chain, with occasional Hebrew word studies (and with at least one cross-reference to a Greek phrase study), indicate that the timeframes of the Old Testament are knowable, qualified to a fairly narrow timeframe range, by calculating the Scripturally permissible interpretations which the Biblical data permit. However, if more than one permissible interpretation appears grammatically (and theologically) possible, the Biblical chronologist can nevertheless calculate the timeframe involved, by measuring the absolute range of each of the possible time-lengths, and thereby discover an interpretively legitimate range of the "youngest" -to- "oldest" alternative chronologies for that line-segment of Biblical history. Notice that such a "range-qualified" chronology is narrowly qualified and yet nevertheless provides an "absolute-within-narrow-qualifications" chronology for the Earth's history (or, for some sub-set thereof, e.g., the timeframe from Adam unto Abraham).

## If a time-segment is part-defined by a man being "begotten," what does that mean?

Bible exposition issues require analysis, and Biblical chronology terms are no exception.
For example, what is the proper translation of the Hebrew word for "beget" (yalad), which means to procreatively produce? Is that Hebrew word limited to fathering the very next (F1) generation-or can it also be used to denote being the forefather of a child who is a direct descendant of a later (F2, F3, F4, etc.) generation?

Also, does the Hebrew verb yalad denote the time of procreative conception, or must it denote the later time of childbirth? The answer to this question might require adding about 9 months at every point where a timeframe depends upon understanding the phrase, "and he begat...."

This paper will not attempt to rely upon one preferred interpretation of "begotten." Rather, this paper will recognize the interpretive possibilities, then qualify the arithmetic accordingly.

## What about fractions? (Do "sig-figs" apply? Or, how do you count partial years?)

Some Bible-revealed quantitative data (e.g., the dimensions of Noah's Ark) need to be interpreted according to "significant figures" (a/k/a "sig-figs"), i.e., the normal rules of mathematics that pertain to the limitations involved whenever measuring non-discreet dimensions. Thus, if a board is described as having a certain length, width, weight, etc., the applicable sig-fig level of precision being indicated (by the Scripture text's own context) needs to be recognized as such, in order to exegete the Scriptural text's intended meaning.

However, sig-fig "rounding" does not apply everywhere in Scripture. Other quantitative contexts involve counting whole numbers only, e.g., counting human population, since there are no half-people or other "fractions" that need upward or downward "rounding"!

In Biblical chronology contexts, the years of a human's life-span (and most other multi-year timeframes) are not expressed in sig-fig "rounding," i.e., a man aged 45 years and 10 months is usually called a "45-year-old," not a "46-year-old." Why? Perhaps because a "year" is a completed "lap" around the sun-so an earthbound man who is 45 years and 10 months old has, so far, only completed 45 laps around the sun (i.e., 45 sun-orbits) -although that same man, two months later (if he lives that long), will be called a "46-year-old," because by then he will have completed 46 laps around
the sun.
In short, the relevant quantitative methodology for this paper is counting the "years" of relevant human life-spans. So, when examining (and when quantifying) the pertinent Scriptural chronology data, this "discreet unit" calculation methodology needs to be kept in mind, in order to expositionally discern what the Bible is actually saying about timeframe facts, so as to provide a mathematically reliable "confidence range" of textually permissible "youngest" -to"oldest" possible scenarios for the Adam-to-Abraham timeframe.

## What about the "open"-vs.-"closed" genealogy question? (Does that ruin everything?)

Special hermeneutic, philological, and theological attention is given to the controversy of the so-called "open"-or"closed" genealogies of the Old Testament, specifically because popular theological literature reveals that many Bible scholars-even to this day-have stumbled (and continue to stumble) upon this controversy as a hermeneutical problem, if not a barrier, to a reliable calculation of an absolute age of the Earth (to within a range certain), based directly upon a correlation of the Bible texts which provide an informational opportunity for measuring the links in the Adam-toAbraham timeframe.

For example, some argue that Luke 3:36 introduces a "second Cainan" into the pre-Flood Messianic lineage, yet the Hebrew text of the Old Testament appears to disagree. (That problem is resolved by an analysis that combines textual transmission studies with a hermeneutic analysis-and is specifically examined in this paper's Appendix A, q.v.) However, the controversy is ultimately irrelevant to determining the Adam-to-Abraham timeframe, because that timeframe is provided to us in "linkable" sub-timeframes that are independent of whether "begat" refers to one or more than one generation (as discussed further hereinbelow).

In other words, because the timeframe calculations are independent of whether the genealogies are "open" or "closed," the "open"-or-"closed" genealogy controversy is shown to be a hermeneutical distraction. Thus, as to the argument of this paper's essential syllogism, the "open"-or-"closed" genealogy question merely functions as an irrelevant "red herring" to the fundamental Adam-to-Abraham chronometry issue, namely, what is the absolute timeframe of that portion of Earth history, according to the gap-free chronology information provided in the Holy Scriptures.

Of course, the presupposed hermeneutical approach used here is the Biblical inerrantist approach (since this paper's coauthors affirm that a Biblical inerrancy-grounded epistemology is beyond legitimate question ${ }^{15}$ ), with a special emphasis on the Scriptures' authoritativeness and its verbal perspicuity.

## Are there problems with Stephen's sermon as it recounts events in Terah's life-span?

Some have perceived inerrancy problems with chronology data regarding Terah's life-span, based upon a disproportionately high regard for variances in some of the texts of the Greek Septuagint and the Samaritan Pentateuch, which are juxtaposed against the original text of the Hebrew Bible (especially as it has been transmitted to us via the Masoretic Text), in conjunction with one of the possible interpretations of an ambiguous phrase within Stephen's final sermon.

Because this paper is limited to the timeframe from Adam's creation to Abraham's birth, the expositional issues related to Terah's life-span (i.e., Terah's years after Abraham was born) do not directly hinder the syllogistic logic of this paper's chain-link chronology analysis, so that issue is not treated in the main body of this paper. However, because Terah's lifespan has distracted so many, the chronological data involved-which largely consists of harmonizing the testimony of four Bible passages (1st, Genesis 11:26, which indicates that Terah was 70 years old when he begat Abram; 2nd, Genesis 11:32, which indicates Terah's entire life-span as 205 years; 3rd, Genesis 12:4, which indicates Abram's age as 75 when he left Haran to settle in Canaan; and 4th, Acts 7:4, which ambiguously refers to various historic events involving Abraham and Terah), should be identified as an issue worthy of study-and this issue is identified and resolved in Appendix B.

Moreover, the ubiquitous need for hermeneutic care whenever examining the Bible's genealogy-related information is illustrated by the indirectly genealogy-related "curse of Canaan" issues (in Genesis 9) involving Noah's three sons, a topic discussed in Appendix C.

In sum, what does Genesis actually teach about the timeframe of Adam-to-Abraham?

The ultimate conclusions of this hermeneutical and mathematical analysis-as analyzed hereinbelow-shows the Biblerevealed absolute timeframe from the time when Christ created Adam, to the birth of Abraham, is between 1,948 to 1,984 years, i.e., almost but not quite 2,000 solar years.

## III. The Adam-to-Abraham Timeframe Is Both Event-Sequential and Time-Quantifiable

The historic timeframe from Adam to Abraham can be subdivided into 19 sub-timeframes, with each of those 19 subtimeframes being framed (or "bookended") by an opening event and a closing event. As will be discussed (below), the ending event of one sub-timeframe is succeeded, after exactly one period human gestation, by the subsequent subtimeframe.

Theologically, it is critical to notice that Moses' chronology data is plenarily provided on the "links" in the prophecydocumented lineage "chain" of the Messiah, Christ Jesus. Perhaps the most important theological theme in this paper's argument is the Biblical truth that God has chosen to reveal the Messianic lineage "chain"-of-events as a supreme priority in His inerrant written revelation of human history, because the Bible focuses primarily on Jesus. Ultimately speaking, all of Earth history is His story. ${ }^{16}$

For example, the critical data on the life-spans and times of "begettings" are provided for Noah and Shem (both of whom are direct ancestors of Mary, the mother of Christ, according to His incarnate humanity), but not for Ham or Japheth (both of whom are not in the prophesied Abraham-to-David lineage of the Lord Jesus).

Mathematically, it is critical to notice that the 19 consecutive sub-timeframes are themselves event-defined line segments within the inclusive (yet finite) directional line of human history. In other words, it is important to recognize that the "bookend" events in each of those 19 sub-timeframes are "stand-alone" historical events, i.e., each "bookend" event is an event that occurred in space and time. Thus, each such "bookend"event is a truly historic event—regardless of whether Moses was prophetically documenting the Messianic line as an "open" or "closed" genealogy.

The 19 sub-timeframes (or "links" in the chain), alluded to above, are now examined in turn.

1. the time between the creation of Adam and the begetting of Adam's son Seth; ${ }^{17}$
2. the time between the birth of Adam's son Seth and the begetting of Seth's son Enosh; ${ }^{18}$
3. the time between the birth of Seth's son Enosh and the begetting of Enosh's son Cainan; ${ }^{19}$
4. the time between the birth of Enosh's son Cainan and the begetting of Cainan's son Mahalaleel; ${ }^{20}$
5. the time between the birth of Cainan's son Mahalaleel and the begetting of Mahalaleel's son Jared; ${ }^{21}$
6. the time between the birth of Mahalaleel's son Jared and the begetting of Jared's son Enoch; ${ }^{22}$
7. the time between the birth of Jared's Enoch and the begetting of Enoch's son Methuselah; ${ }^{23}$
8. the time between the birth of Enoch's Methuselah and the begetting of Methuselah's son Lamech; ${ }^{24}$
9. the time between the birth of Methuselah's son Lamech and the begetting of Lamech's son Noah; ${ }^{25}$
10. the time between the birth of Lamech's son Noah and the outbreak of the global Flood; ${ }^{26}$
11. the time between the outbreak of the global Flood and the begetting of Shem's son Arphaxad; ${ }^{27}$
12. the time between the birth of Shem's son Arphaxad and the begetting of Arphaxad's son Shelah; ${ }^{28}$
13. the time between the birth of Arphaxad's son Shelah and the begetting of Shelah's son Eber; ${ }^{29}$
14. the time between the birth of Shelah's son Eber and the begetting of Eber's son Peleg; ${ }^{30}$
15. the time between the birth of Eber's son Peleg and the begetting of Peleg's son Reu; ${ }^{31}$
16. the time between the birth of Peleg's son Reu and the begetting of Reu's son Serug; ${ }^{32}$
17. the time between the birth of Reu's son Serug and the begetting of Serug's son Nahor; ${ }^{33}$
18. the time between the birth of Serug's son Nahor and the begetting of Nahor's son Terah; ${ }^{34}$
19. the time between the birth of Nahor's son Terah and the begetting of Terah's son Abraham. ${ }^{35}$

These 19 sub-timeframes are consecutive "links" in the historic chain of events that together define the gigantic timeframe stretching from the day of Christ's creation of Adam (Day \# 6) unto the day when Terah's son Abraham was begotten. Each of the above-listed 19 sub-timeframes may be compared to bookends, with the years between identified events being analogous to "books," and with the 20 identified events being analogous to "bookends." However, except for the first and last "bookend" events, i.e., the creation of Adam and the birth of Abraham, each of the other 18
"bookend" events serves "double duty," since the 19 sub-timeframes are not only contiguous, they are connectively consecutive.

For example, the ending "bookend" event of sub-timeframe \#1 is the beginning "bookend" event of sub-timeframe \# 2 (the begetting of Adam's son Seth). Likewise, the ending "bookend" event of sub-timeframe \# 2 is the beginning "bookend" event of sub-timeframe \# 3 (the begetting of Seth's son Enos, a/k/a Enosh). Likewise, the ending "bookend" event of sub-timeframe \# 3 is the beginning "bookend" event of sub-timeframe \# 4 (the begetting of Enosh's son Cainan)—and so on-until the ending "bookend" event of sub-timeframe \# 18 becomes the beginning "bookend" event of sub-timeframe \# 19 (the begetting of Nahor's son Terah). Since this papers's study ends at the event of Abram (i.e., Abraham) being begotten of Terah, sub-timeframe \# 19 is the last "link" in this chronological "chain." Thus, the 19 consecutive sub-timeframes are not only listed in proper chronological sequence, they are also shown to be gap-free subtimeframes; when connected together, they completely define the Adam-to-Abraham timeframe.

To recapitulate, Genesis accurately reveals the sequence of these 19 sub-timeframes, as well as the fact that they are a "gap"-free definition of the Adam-to-Abraham timeframe. Accordingly, the events which define each sub-timeframe historically occurred in the sequence outlined above (which sequence is taken directly from the text of Scripture, mostly from Genesis chapters 5 and 11)-so, as a matter of logic, a challenge to Genesis' documentation of that historical sequence or even to its "gap"-free completeness would be, in theological effect, an unwarranted and unjustified challenge to Genesis' historical inerrancy.

## IV. Specific Observations of the Bible's Adam-to-Abraham Timeframe Data

The proper place to begin a study of the chronology from Adam to Abraham is with the primary source itself, the book of Genesis. Each of the above-listed sub-timeframes will now be examined, along with special attention to the "bookend" events which link those sub-timeframes together as a chain of historic events. Each such "bookend" event will be analyzed with certain qualifications, somewhat as if each such "bookend" event was a directional "cairn" along the Appalachian Trail. Also, attention will be given to how chronologically "thick" these "bookend"-events are-e.g., whether a qualifying "buffer" of extra time (i.e., of about 9 months) needs to be added to each instance of "begetting."

## 1. From the creation of Adam unto the begetting of Adam's son Seth.

As noted above, the only time that existed before Christ created Adam was exactly 5 days, since Adam and his wife (Woman, later re-named Eve) were both created by Christ on Day \# 6 .

The sculpture-like creation of Adam was not the result of a 9-month process, it occurred in less than one day (in fact, a matter of seconds to minutes is likely). ${ }^{36}$ Likewise, the quasi-surgical creation of Woman (later re-named "Eve") was not the result of a 9-month process, it occurred in less than one day (in fact, a matter of minutes to a couple hours is likely-since women are a bit more complex than men!). ${ }^{37}$ Accordingly, the front "bookend" event for this subtimeframe occurred so briefly that it does not add any extra weeks, much less months or years, to the sub-timeframe it begins.

The key verse defining this sub-timeframe is Genesis 5:3, which says: "And Adam lived an hundred and thirty [130] years, and [he] begat...Seth."

The "begetting" event of Adam's son Seth, however, either refers to Seth being procreatively conceived (please note that the divine Author of Genesis is pro-life! ${ }^{38}$ )-or else it refers to the time about 9 months later when Seth was born. The former is assumed herein, as the more literal translation of a hiphil verb "begat" (from vayyoled), as the better contextfitting interpretation, and as the better Scripture-harmonizing interpretation. Thus, the generational event of Adam procreating Seth-depending on the proper interpretation of the Hebrew word vayyoled ${ }^{39}$ - translated as "begat" in Genesis 5:3 (KJV)—perhaps requires a "cairn"-thickness (i.e., a "bookend" -to- "bookend" linkage precision-adjustment) of about 9 months, since the conception of Seth is about 9 months prior to Seth's birth, and Seth's age (which is the front "bookend"-event of the next sub-timeframe) is not "counted" until Seth is born.

This approach to counting years, admittedly, appears awkward, but that is due to the human habit of not counting a person's age until he or she is born, alive, on his or her "birthday." The awkwardness in measuring ages comes from our tradition of counting a person's age from the day he or she is womb-born, despite the fact that he or she was alive from the day he or she was conceived (and thus became womb-borne). In other words, the genetic truth of the matter is that
one's life is "caused-to-be-begotten" on the day of conception in one's mother's womb, and the womb-borne child is quite alive-as Moses well knew when he recorded the intra-uterine competition between Esau and Jacob (see Genesis 25:21-26, especially $25: 23$ ). Thus, if we self-dubbed "modern" Bible readers stumble over the mathematical implications of human gestation periods (which are routinely 9 months, so estimating the time involved is not difficult), it is only because we count post-birth "age" numbers, as a convenience, and we largely ignore the less convenient need to count the preceding 9 months en ventre sa mere, whenever a Biblical text refers to a father's procreative act of "begetting." Ultimately, the human gestation period (or about 9 months) should be adjusted to this sub-timeframe, as well as to all the ones that follow-as a matter of precision-qualification, to provide an aggregate qualification to the absolute sum of years of the entire Adam-to-Abraham timeframe.

Also, a computational qualification needs to be recognized about Adam's age being measured then as 130; age-wise, he was somewhere between his 130th and 131st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year of days.

## 2. From the birth of Seth unto the begetting of Seth's son Enosh.

The key verse defining this sub-timeframe is Genesis 5:6, which says: "And Seth lived an hundred and five [105] years, and [he] begat Enos [a/k/a Enosh]."

As with the "begetting" of Seth, the "begetting" event of Seth's son Enosh either refers to Enosh being procreatively conceived, or else it refers to the time about 9 months later when Enosh was born. Thus, the need for a " 9 month buffer" may be required to join this sub-timeframe (which ends in the conception of Enosh) to the next sub-timeframe (which is counted from Enosh's birth).

Also, a computational qualification needs to be recognized about Seth's age being measured then as 105; age-wise, he may have been anywhere between his 105th and 106th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's worth of days.

## 3. From the birth of Enosh unto the begetting of Enosh's son Cainan.

The key verse defining this sub-timeframe is Genesis 5:9, which says: "And Enos [a/k/a Enosh] lived ninety [90] years, and [he] begat Cainan."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Cainan, yet the subsequent sub-timeframe is counted from the birth of Cainan.

Also, a computational qualification needs to be recognized about Enosh's age being measured then as 90; age-wise, he may have been anywhere between his 90th and 91st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

## 4. From the birth of Cainan and the begetting of Cainan's son Mahalaleel.

The key verse defining this sub-timeframe is Genesis 5:12, which says: "And Cainan lived seventy [70] years, and [he] begat Mahalaleel." "Cainan" is a name that, due to textual transmission process issues, appears in a controversy outlined within this paper's Appendix A.

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Mahalaleel, yet the subsequent sub-timeframe is counted from the birth of Mahalaleel.

Also, a computational qualification needs to be recognized about Cainan's age being measured then as 70; age-wise, he may have been anywhere between his 70th and 71st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

## 5. From the birth of Mahalaleel unto the begetting of Mahalaleel's son Jared.

The key verse defining this sub-timeframe is Genesis 5:15, which says: "And Mahahlaleel lived sixty and five [65]
years, and [he] begat Jared."
As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Jared, yet the subsequent sub-timeframe is counted from the birth of Jared.

Also, a computational qualification needs to be recognized about Mahalaleel's age being measured then as 65; age-wise, he may have been anywhere between his 65th and 66th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

## 6. From the birth of Jared unto the begetting of Jared's son Enoch.

The key verse defining this sub-timeframe is Genesis 5:18, which says: "And Jared lived an hundred sixty and two [162] years, and [he] begat Enoch."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Enoch, yet the subsequent sub-timeframe is counted from the birth of Enoch.

Also, a computational qualification needs to be recognized about Jared's age being measured then as 162; age-wise, he may have been anywhere between his 162nd and 163rd birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

Interestingly, the Epistle of Jude (in its verse 14) authoritatively refers to the prophet Enoch as the "seventh" from Adam, i.e., the 7th generation from the beginning. Adam is the 1st generation in the Messianic lineage ${ }^{40}$ (and in the human race, period, for that matter!), with the Messianic lineage continuing as follows: 2nd, Seth; 3rd, Enos (a/k/a Enosh); 4th, Cainan; 5th, Mahalaleel; 6th, Jared; and 7th, Enoch.

It is also worth noticing that Enoch's walk of faith "pleased God" (Hebrews 11:5), and he was eventually translated, like Elijah (later), to enter Heaven without having experienced an earthly death-a prototype of the raptured generation!

## 7. From the birth of Enoch unto the begetting of Enoch's son Methuselah.

The key verse defining this sub-timeframe is Genesis 5:21, which says: "And Enoch lived sixty and five [65] years, and [he] begat Methuselah." As footnotes in this paper indicate, the birth of Methuselah appears to have produced a spiritual crisis in the life of Enoch, resulting in him becoming a spiritual man who thereafter "walked with God."41

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Methuselah, yet the subsequent sub-timeframe is counted from the birth of Methuselah.

Also, a computational qualification needs to be recognized about Enoch's age being measured then as 65; age-wise, he may have been anywhere between his 65th and 66th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

## 8. From the birth of Methuselah unto the begetting of Methuselah's son Lamech.

The key verse defining this sub-timeframe is Genesis 5:25, which says: "And Methuselah lived an hundred eighty and seven [187] years, and [he] begat Lamech."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Lamech, yet the subsequent sub-timeframe is counted from the birth of Lamech.

Also, a computational qualification needs to be recognized about Methuselah's age being measured then as 187; agewise, he may have been anywhere between his 187th and 188th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

Notice that Methuselah dies in the same year that God sends the Flood. Why?

Methuselah lived 187 years until his son Lamech is born (Genesis 5:25), and Methuselah died at age 969 (see Genesis 5:27)—so Methuselah lived 782 years after his son Lamech was born (because 969-187=782).

Also, Lamech lived 182 years until his son Noah was born (Genesis 5:28-29), and the Flood was not sent until Noah was 600 (see Genesis 7:6)—so the Flood was sent 782 years after Lamech was born (because $182+600=782$ ). Since $782=$ 782, Methuselah died during the same year that the Flood was sent, which is the same year during which Noah was 600 years old.

If Dr. Max Coder is correct, ${ }^{42}$ in his thinking that God revealed to Enoch that God would not destroy the world with the Flood until Methuselah died, Methuselah's record-breaking longevity is a chronological proof of God's long-suffering mercy: God caused Methuselah to live longer on Earth than anyone else.

## 9. From the birth of Lamech unto the begetting of Lamech's son Noah.

The key verses defining this sub-timeframe is Genesis 5:28-29, which say: "And Lamech lived an hundred eighty and two [182] years, and [he] begat a son; and he called his name 'Noah,' saying, 'This same shall comfort us concerning our work and toil of our hands, because of the ground which the LORD hath cursed'."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Noah, yet the subsequent sub-timeframe is counted from the birth of Noah.

Also, a computational qualification needs to be recognized about Lamech's age being measured then as 182; age-wise, he may have been anywhere between his 182nd and 183rd birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year's days.

Interestingly, the only memorial the Holy Spirit provides regarding Lamech is not very complimentary of Lamech. It appears that Lamech is tired of farming, and he is quick to remember that the LORD is the [ultimate] One responsible for the cursing the ground for Adam's Edenic sin. In other words, the Scriptural picture of Lamech is one of a whiner whose only thought of God is negative, ${ }^{43}$ and whose only thought of his newborn son is something like: "Finally! After 182 years, I've finally got a son who can do the dirty work around here for us, so I can cut back and transition into retirement!" (No wonder God chose Noah as Ark's "captain," not Lamech.)

Of course, cross-referencing other data about his life-span (e.g., Genesis 5:30-31, in conjunction with Genesis 7:6), which count the years Lamech lived (i.e., 595) after he "begat" Noah, as well as the age of Noah (i.e., 600) when the Flood came, prove that Lamech died 5 years (or 5 years +/- 9 months) before God sent the Flood.

## 10. From the birth of Noah unto the outbreak of the global Flood.

The key verse defining this sub-timeframe is Genesis 7:6, which says: "And Noah was six hundred years old when the flood of waters was upon the earth."

The situation-descriptive phrase (in Genesis 7:6) "when the flood of waters was upon the earth" ${ }^{44}$ needs clarification. Does it refer to the beginning outbreak of the Flood? Or, does it refer to the end of the 40 days and nights of Flood-rain? Or, does it refer to the end of the Flood, i.e., after the flood-waters finally "abated," or when Noah's family finally exited the Ark? Or, does it refer to some other point in time along the continuum of getting into and later off of the Ark?

In light of the usage of the same phrase in Genesis 11:10, it appears that the exact timing of the point "when the flood of waters was upon the earth" may be moot (i.e., may be moot for the most immediate purpose of this paper), since the next sub-timeframe begins with a similar (if not equivalent, though verbally abbreviated) phrase "after the flood." 45

However, because Shem's paternal "begetting" of Arphaxad is cross-referenced to the age of Shem, ${ }^{46}$ and because Noah's "begetting" of Shem is cross-referenced Noah's age, ${ }^{47}$ the event denoted by the phrase "when the flood of waters was upon the earth" (which appears to match the shorter phrase "after the flood" in Genesis 11:10) will need to be identified (within whatever qualifications as are necessary). An argument is made below that the phrase refers to the point in time that the global Flood arrived, as opposed to when the Flood disappeared.

## 11. From the outbreak of the global Flood unto the begetting of Shem's son Arphaxad.

The key verse defining this sub-timeframe is Genesis 11:10, which says: "These are the generations of Shem: Shem was an hundred years old, and [he] begat Arpaxad [a/k/a Arphaxad] two years after the flood."

This sub-timeframe will be analyzed (for this paper's purpose) with greater attention than most, because it has presented a mathematical puzzle to many Biblical chronologists:

The genealogy of [Genesis] chapter 11 is not without its problems. According to verse 10 Seth was 100 years old "two years after the flood." But data appearing earlier in the book makes him 100 when the flood began (cf. 5:32 and 7:11). A variety of explanations has been offered, but the problem requires more investigation.

Quoting John J. Davis, Paradise to Prison: Studies in Genesis (Salem, Wisconsin: Sheffield Publishing, 1998 reprint), page 152.

Actually, a literal review of Genesis 5:32 indicates that Noah "begat" Shem when Noah was 500 years old, and that the Flood hit Earth when Noah was 600. If the causative verb "begat" here means the procreative act of fathering (and it is here emphasized that the verb "begat" in Genesis 5:32 translates a hiphil form of the Hebrew verb yalad), the intended meaning appears to be that Noah procreatively fathered Shem when Noah was 500 years old, so that it is very likely that Shem was not born until Noah was 501.

If Shem was conceived when Noah was 500, Shem would (most likely) have been about 99 when the Flood hit, and probably Shem turned 100 during the last months of living aboard the Ark, near the time when the Flood events were almost ready to enter the 2nd year (i.e., year \#2) after the day when the planet-encompassing Flood broke out.

Assuming, therefore, that Shem turned 100 near the end of his stay on the Ark, Shem could have procreatively fathered progeny immediately after exiting the Ark, when Shem was 100 years old, so that progeny (and it is Arphaxad we are interested in here) would have been conceived during Flood Year \#2, if we define Flood Year \#1 as the 12-months immediately following the day when the Flood struck this planet.

Consider the following data about the series of Genesis Flood events. Noah's family (and the animals) boarded the Ark exactly 7 days before the waters broke out above and below the Earth, according to Genesis $7: 4$ and $7: 10$. Interestingly, Genesis 7:6 and 8:13 record the fact that Noah was 600 when the Flood began, and that Noah turned 601 aboard the Ark. Also, during that same time, Genesis 7:11 and 8:14 respectively identify the calendar-indexed days when the Flood began, and when Noah's family (and the preserved-from-judgment animal kinds) disembarked the Ark:

Noah was 600 years old when the flood of waters was upon the earth. ${ }^{48}$
In the 600th year of Noah's life, in the 2nd month, the 17th day of the month, the same day were all the fountains of the great deep broken up, and the windows of heaven were opened. ${ }^{49}$

And it came to pass [literally, "and he was"] in the 601st year, in the 1st month, the 1st day of the month, the waters were dried up from off the earth; and Noah removed the covering of the ark, and looked, and, behold, the face of the ground was dry. ${ }^{50}$ And in the 2nd month, on the 27 th day of the month, was the earth dried. ${ }^{51}$

Between Genesis 7:11, when the Flood broke out, and Genesis $8: 14$, when the Earth was dry enough for Noah's family and their animals to exit the Ark, about a year's worth of events occurred. After the rainfall continued for 40 days and 40 nights (Genesis 7:12), the Flood waters increased and increased until the deluge covered the face of the Earth, with the flood-waters "prevailing" upon the Earth for several months, adding up to a full 150 days (Genesis 7:24-8:1) until they "assuaged," followed by the flood-waters continually "returning" for another 150 days, until they were "abated" (Genesis 8:3). After the Earth sufficiently dried, to the extent that vegetation began to reappear (Genesis 8:11), Noah's family and their animals remained in the Ark, which had settled somewhere in the Ararat mountain range (on the 17th day of the 7th month of the year during which Noah was 600 years old ${ }^{52}$ ). After Noah was sure the flood-waters were abated (see Genesis $8: 11$ ), he waited another 7 days (see Genesis $8: 12$ ), then removed the covering of the Ark, on New Year's Day of Noah's 601st year (see Genesis 8:13).

By mathematically analyzing the above quotations of Genesis $7: 6,11$ and $8: 13-14$, a couple of critical chronology observations are possible:

1. When the Flood struck Earth as an unprecedented never-to-be-forgotten cataclysm, Noah was within his 600th year, yet the Flood was not fully "abated" until sometime during Noah's 601st year; and
2. the Flood which began "in the 600th year of Noah's life, in the 2nd month, the 17 th day of the month," lasted slightly more than a year-and Noah's family and animals exited the Ark during the next calendar year (during which Noah's turned 601), on "in the 2nd month, on the 27th day of the month."

Recall that Noah's family (and the animals) boarded the Ark exactly 7 days before the Flood struck (see Genesis 7:4,10). Thus, the day of boarding the Ark must have occurred on the 10th day of the 2nd month of the year during which Noah was 600 years old. Accordingly, from the day when Noah's family boarded the Ark (i.e., Day \# 10 of Month \# 2 of Flood Year "1") until the day when Noah's family exited the Ark (i.e., Day \# 27 of Month \# 2 of Year "2") equals one year plus 17 days.

The text of Genesis 11:10 ("These are the generations of Shem: Shem was an hundred years old, and [he] begat Arphaxad two years after the flood") contains the phrase "after the flood," but does that phrase mean "after the flood came [i.e., arrived]" or "after the flood disappeared"? The phrase "after the flood," when correlated to contextual verses about the Flood and about the ages of Noah and Shem, which must harmonize with them inerrantly. It does so harmonize when that phrase is interpreted to denote a meaning of "after the Flood came," i.e., after it struck Earth.

Of course, the arrival of the Flood was a more dramatic point in time-never to be forgotten-whereas the assuaging and abating and drying-up of the flood-waters was an ongoing, anticlimactic, and somewhat gradual process. So, the wake of the Flood would be (and is) a less "math-friendly" event-marker for indexing chronological data than would the unprecedented and cataclysmic arrival of the greatest geophysical catastrophe of (literally) all time.

However, any guesswork on this point appears to be removed by a simple review of the following verses which effectively define the pivotal time-point (or chronological "watershed," pardon the pun) indicated by the phrase "after the Flood":

And Noah lived after the flood three hundred and fifty [350] years. And all the days of Noah were nine hundred and fifty [950] years.

Quoting Genesis 9:28-29. In other words, because 950-300 = 600, the "watershed" pivot-event defined within the phrase "after the flood" must mean the outbreak of the great Flood, which occurred when Noah was 600 years old, as opposed to the conclusion of the Flood, which occurred when Noah was 601 years old (as is indicated by comparing Genesis 7:6,11 with Genesis 8:13-14).

In fact, the Flood is a gargantuan and interruptive "watershed" (pardon the pun) of Earth's geologic time; in what otherwise could have been a fairly uniform history of geological processes, the Flood is such an Earth-splitting event that ignoring its historical occurrence (and its break in what otherwise might be called a "uniform" history of geologic processes) requires willful ignorance, ${ }^{53}$ what Dr. Kent Hovind calls being "stupid on purpose"! Actually, the Greek of 2nd Peter 3:5 suggests that the "ignorance" is even worse than knowing avoidance of truth, it involves hiding the truth.

The important point to remember here (i.e., for this paper's purpose) is that the Flood events exceed one full calendar year (but do not fill two calendar years), i.e., there are two different calendar years during which Flood events are happening. With that point in mind, one can better understand the sense of the somewhat awkward-to-the-English-ear Hebrew text of Genesis 11:10 which says: "shem ben-me'eth shanah vayyoled et-'arpakshad shenathaim 'achar hammabul"; literally meaning "Shem son-of 100-of year and he-caused-to-be-begotten Arphaxad 2 after the flood." So, Shem was 100 years old when he "caused-to-be-begotten" Arphaxad, and this occurred " 2 after the flood"-but what does " 2 after the flood" mean?

The chapter's (and even the verse's) context suggests that the number " 2 " relates to years, as opposed to months or days. The above-quoted verses (Genesis 7:6,11 and 8:13-14) include a correlation of calendar dates (telling which day of which month an event occurred) with the age of Noah (which is a moving target, since Noah is aging each day), probably because the chronology of the Messianic lineage is the ultimate focus of the inerrantly inspired writer, Moses. Here, it appears that the years (not "year") of the Flood are alluded to as a reference point to Shem fathering Arphaxad, but Moses is careful to index Arphaxad's "begetting" as occurring within Year \# 2 ["after the Flood" hit], and not during

Year \# 1 ["after the Flood" hit].
Please note the assumption, explained in a preceding paragraph, that the phrase "after the flood" means "after the flood arrived." If this assumption is correct, the meaning of Genesis 11:10 is that Shem fathered Arphaxad when Shem was 100, and the fathering event occurred in Year \# 2 of the years transpiring immediately after the Flood hit the planet.

At this point it is critical to notice that "he-caused-to-be-begotten" can mean the procreative (and thus genereational / genetic) act of fathering, as opposed to the confirmational event of a live childbirth nine months after the procreative act of begetting a next-generation child. God, Who inspired Moses to record these events inerrantly, is well aware of the human gestation process (including how long it takes ${ }^{54}$ ). In fact, there is no reason to doubt that Moses knew all about the importance of the [approximately] nine months that transpire between the procreative act of parenting and the confirmation of that event when childbirth is completed.

In other words, the Hebrew text is recounting that during Year \# 2, counting from the day when the worldwide Flood struck, Shem was 100 years old, and during his 100th year Shem procreatively fathered his son Arphaxad. An outline recaptitulating the step-by-step arithmetic of this explanation follows, suggesting this reconstruction of the Genesis record's event-sequence:
A. Noah procreatively fathers his son Shem when Noah was 500 -so that Shem is born when Noah is 501 ;
B. Noah and Shem (and the rest) board the Ark when Noah is 600, and Shem is $99-7$ days later the Flood strikes (a catastrophic event which we post-Flood humans cannot imagine);
C. During the 1st year after the Flood hit (i.e., during the first 12 months after the Flood struck), Noah turns 601, and during that same year (i.e., Flood Year \# 1) his son Shem turns 100;
D. During the 2nd year after the Flood hit (i.e., during the year immediately after one full year of flood-events), Noah and Shem (and the rest) stay aboard the Ark for 10 days beyond the first full year of the Flood, then they all exit the Ark during the second year after the Flood; in other words, Shem exits the Ark during the "second year after the Flood [hit]," when Shem is still 100 years of age [since Shem's age is calculated from the date of Shem's birth, not from the date of Shem's conception, which occurred on a date approximately 9 months prior thereto, back when Noah was 500 yeas old];
E. Soon after exiting the Ark—yet less than 355 days later (and more likely quite a bit less than 355 days thereafter)Shem procreatively knows his wife and she conceives-such that Arphaxad is thus conceived during the "second year [i.e., year \# 2] after the Flood," while Shem is still 100 years of age ${ }^{55}$ (i.e., before Shem completes his 101st postbirthday orbit around the sun).

Thus, a more literal translation of the hiphil [i.e., active causative] verb translated "begat" (vayyoled) provides a legitimate text-based interpretation that harmonizes all of the mathematical data in the Biblical passages which have often puzzled those who translated "begat" to mean the time of livebirth (i.e., Arphaxad's "birthday"), as opposed to meaning the prior time when Arphaxad was procreative fathered by Shem (who was himself "borne" on the Ark for more than a full year).

As noted in prior generational "bookend"-event linkages, one precision adjustment needs to be considered, namely, the roughly 9 month period of Arphaxad's gestation (since the period of Shem's gestation has already been accounted for, above), since the conception of Arphaxad ends this sub-timeframe-yet about 9 months later Arphaxad is born, the starting point for measuring Arphaxad's age, the reference point for the next sub-timeframe's front "bookend."

## 12. From the birth of Arphaxad unto the begetting of Arphaxad's son Shelah.

The key verse defining this sub-timeframe is Genesis 11:12, which says: "And Arphaxad lived five and thirty years, and [he] begat Salah."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Shelah (a/k/a Salah), yet the subsequent sub-timeframe is counted from the birth of Shelah.

Also, a computational qualification needs to be recognized about Arphaxad's age being measured then as 35 ; age-wise, he may have been anywhere between his 35th and 36th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 13. From the birth of Shelah unto the begetting of Shelah's son Eber.

The key verse defining this sub-timeframe is Genesis $11: 14$, which says: "And Salah [ $\mathrm{a} / \mathrm{k} / \mathrm{a}$ Shelah] lived thirty years, and [he] begat Eber."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, which may practically cancel itself out at each new "chain-link" anyway.

Also, a computational qualification needs to be recognized about Shelah's age being measured then as 30 ; age-wise, he may have been anywhere between his 30th and 31st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 14. From the birth of Eber unto the begetting of Eber's son Peleg.

The key verse defining this sub-timeframe is Genesis 11:16, which says: "And Eber lived four and thirty years, and [he] begat Peleg."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Peleg, yet the subsequent sub-timeframe is counted from the birth of Peleg.

Also, a computational qualification needs to be recognized about Eber's age being measured then as 34; age-wise, he may have been anywhere between his 34th and 35th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 15. From the birth of Peleg unto the begetting of Peleg's son Reu.

The key verse defining this sub-timeframe is Genesis $11: 18$, which says: "And Peleg lived thirty years, and [he] begat Reu."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Reu, yet the subsequent sub-timeframe is counted from the birth of Reu.

Also, a computational qualification needs to be recognized about Peleg's age being measured then as 30; age-wise, he may have been anywhere between his 30th and 31st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 16. From the birth of Reu unto the begetting of Reu's son Serug.

The key verse defining this sub-timeframe is Genesis 11:20, which says: "And Reu lived two and thirty years, and [he] begat Serug."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Serug, yet the subsequent sub-timeframe is counted from the birth of Serug.

Also, a computational qualification needs to be recognized about Reu's age being measured then as 32; age-wise, he may have been anywhere between his 32nd and 33rd birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 17. From the birth of Serug unto the begetting of Serug's son Nahor.

The key verse defining this sub-timeframe is Genesis 11:22, which says: "And Serug lived thirty years, and [he] begat Nahor."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Nahor, yet the subsequent sub-timeframe is counted from the birth of Nahor.

Also, a computational qualification needs to be recognized about Serug's age being measured then as 30; age-wise, he may have been anywhere between his 30th and 31st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 18. From the birth of Nahor unto the begetting of Nahor's son Terah.

The key verse defining this sub-timeframe is Genesis $11: 24$, which says: "And Nahor lived nine and twenty years, and [he] begat Terah."

As noted above, one precision adjustment that needs to be considered is the roughly 9 month gestation period, since this sub-timeframe ends with the conception of Terah, yet the subsequent sub-timeframe is counted from the birth of Terah.

Also, a computational qualification needs to be recognized about Nahor's age being measured then as 29; age-wise, he may have been anywhere between his 29th and 30th birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

## 19. From the birth of Terah unto the begetting of Terah's son Abraham.

The key verse defining this sub-timeframe is Genesis 11:26, which says: "And Terah lived seventy years, and [he] begat Abram, Nahor, and Haran."

Assuming that this timeframe is delineated by the creation of Adam through the birth of Abram (as opposed to the generational / genetic conception of Abram), two precision adjustments that need to be considered are the roughly 9 month gestation periods for both Terah and Abraham (which "bookend" the endpoints of this sub-timeframe), since this sub-timeframe begins with the age of Terah and ends with the conception of Abram-yet this paper's ultimate timeframe is concerned with measuring the years between the creation of Adam and the birth of Abram, later re-named (by God Himself) as "Abraham."

Also, a computational qualification needs to be recognized about Terah's age being measured then as 70; age-wise, he may have been anywhere between his 70th and 71st birthdays, so a precision-adjustment allowance needs to be made for up to (but not quite) another year.

As mentioned above, important events in the life-span of Terah, especially as they relate to his son Abram (i.e., Abraham), have provided some controversy and confusion, especially due to some ambiguity in a statement by Stephen, recorded by Luke in Acts 7:4, as that compares with data in Genesis (11:26; 11:32; and 12:4). The statement in question, when translated into English, includes two less-than-clearly identified pronouns, which two pronouns can be interpreted-depending upon whom certain pronouns (a "he" and a "him") refer to-so Appendix B shows how one interpretation of those two unidentified pronouns comfortably harmonizes with Stephen's statement in Acts 7:4. Revealingly, some Bible critics have used those ambiguity interpretations as rationales for distrusting the literal accuracy of Genesis' chronology data regarding Terah and Abraham. ${ }^{56}$ For more on this matter, consider the brief description (and an inerrantist resolution) of this controversy as addressed in this paper's Appendix B.

## V. Mathematical Logic, Theological Conclusions, and Prayer

As noted above, each gestation period suggests the need to add about 9 months of time between the conception of a patriarch which ends a given sub-timeframe, since the beginning of the next timeframe involves using an age counted from that same patriarch's date of birth (which date of birth occurred about 9 months after the patriarch's conception). A generous qualification would be to add 1 year (but no more than 1 year!) to account for each pertinent gestation period, because the actual time involved would be less than 1 year per gestation.

Likewise, each listing of a patriarch's age could involve up to (but not as much as) 1 extra year for the number of (possible) days shy of that patriarch's next birthday-e.g., the day before Noah turned 601 he would have been called a "600 year old" man. Due to whole-number usage when counting one's age, each age quantification needs to have up to (but not as much as) 1 extra year added to the age records, to account to all "extra" days lived between respective birthdays.

Therefore, as shown below, each relevant sub-timeframe will have an extra 2 years added to account for the gestation periods and the age-calculation "remainders." (Obviously, there is no "relevant' human gestation period for Adam, since he was not conceived or born naturally.)

In sum (pardon the pun), the sum of the "raw" data from Genesis' 19 sub-timeframes provides the following aggregate timeframe computation, as qualified below:

1. Genesis $5: 3$ (130 years +1 year for Adam's "age") = not more than $\mathbf{1 3 1}$ years;
2. Genesis 5:6 (105 years +1 year for Seth's gestation +1 year for Seth's paternal "age" when he fathered Enosh) = not more than 107 years;
3. Genesis 5:9 (90 years + 1 year for Enosh's gestation +1 year for Enosh's paternal "age" when he fathered Cainan) $=$ not more than 92 years;
4. Genesis 5:12 (70 years +1 year for Cainan's gestation +1 year for Cainan's paternal "age" when he fathered Mahalaleel) = not more than 72 years;
5. Genesis $5: 15$ ( 65 years +1 year for Mahahlaleel's gestation +1 year for Mahalaleel's paternal "age" when he fathered Jared) = not more than 67 years;
6. Genesis 5:18 (162 years +1 year for Jared's gestation +1 year for Jared's paternal "age" when he fathered Enoch) $=$ not more than 164 years;
7. Genesis 5:21 (65 years + 1 year for Enoch's gestation +1 year for Enoch's paternal "age" when he fathered Methuselah) $=$ not more than 67 years;
8. Genesis 5:25 (187 years +1 year for Mehtuselah's gestation +1 year for Methuselah's paternal "age" when he fathered Lamech) = not more than 189 years;
9. Genesis 5:28-29 (182 years +1 year for Lamech's gestation +1 year for Lamech's paternal "age" when he fathered Noah) = not more than 184 years;
10. Genesis 7:6 (600 years + 1 year for Noah's gestation +1 year for paternal "age" when the worldwide Flood initially broke out) = not more than 602 years;
11. Genesis 11:10 (already discussed at length above) = not more than $\mathbf{2}$ years;
12. Genesis 11:12 (35 years +1 year for Arphaxad's gestation +1 year for Arphaxad's paternal "age" when he fathered Shelah) = not more than 37 years;
13. Genesis 11:14 (30 years +1 year for Shelah's gestation +1 year for Shelah's paternal "age" when he fathered Eber) = not more than 32 years;
14. Genesis 11:16 (34 years +1 year for Eber's gestation +1 year for Eber's paternal "age" when he fathered Peleg) $=$ not more than 36 years;
15. Genesis 11:18 (30 years + 1 year for Peleg's gestation +1 year for Peleg's paternal "age" when he fathered Reu) $=$ not more than 32 years;
16. Genesis 11:20 (32 years +1 year for Reu's gestation +1 year for Reu's paternal "age"when he fathered Serug) = not more than 34 years;
17. Genesis 11:22 (30 years +1 year for Serug's gestation +1 year for Serug's paternal "age" when he fathered Nahor) = not more than 32 years;
18. Genesis 11:24 (29 years +1 year for Nahor's gestation +1 year for Nahor's paternal "age" when he fathered Terah) = not more than 31 years;
19. Genesis 11:26 (70 years +1 year for Terah's gestation +1 year for Terah's paternal "age" when he fathered Abraham) +1 year for Abraham's gestation $=$ not more than 73 years.

Accordingly, using generous qualifications for gestation periods and for age "remainders," the qualified sub-timeframe addends become:
$131+107+92+72+67+164+67+189+184+602+2+37+32+36+32+34+32+31+73=$ not more than $\mathbf{1 , 9 8 4}$ years (roughly $1 / 3$ of all time!).

There does not appear to be any excuse for doubting this Biblical chronology data, especially in light of the fact that these sub-timeframes "link" sequentially together, so the "open" -versus- "closed" genealogy controversy is proven as irrelevant (as indicated in Appendix A).

Accordingly, using the qualifications discussed above, the timeframe from God's creation of Adam to the birth of Abraham:

1. cannot be more than $\mathbf{1 , 9 8 4}$ years, although it is likely ${ }^{57}$ somewhat less than that, albeit

## 2. it cannot be less than $\mathbf{1 , 9 4 8}$ years.

Of course, by adding 5 days to the above, the difference (in sig-fig calculations, since this study is limited to the nearest year) is mathematically negligible-so we can confidently assert that the book of Genesis teaches us that from the moment God first created anything to the day Abraham was born was no more than $\mathbf{1 , 9 8 4}$ years and no less than $\mathbf{1 , 9 4 8}$ years.

May the LORD God, Who gave us the sun on Day \# 4-to be used for measuring time in "years" (as well as for other creature benefits, including light and heat and a testimony of God's handiwork ${ }^{58}$ ) —be honored by this inerrantist work of Biblical chronology data, ${ }^{59}$ in order that God the Son be better recognized, better appreciated, and better worshipped as the glorious Creator of our Bible-chronicled (and relatively "young") Earth, to which planet He Himself came, incarnate, ${ }^{60}$ as the Redeemer Whose human lineage is perfectly documented (at the very least) from Adam to Abraham, through whose human lineage Christ came and blessed "all the families of the Earth."61

## Appendix A: Resolving the Luke 3:36/"Open"-vs.-"Closed" Genealogy Problem

## Summary of the Problem

The genealogy of Genesis 5 and its continuation in Genesis 11 (after some important "interruptions"-involving the worldwide Flood, the drunkenness-related scandal involving Noah, the Tower of Babel-related dispersal of mankind according to God-imposed languages, and the related Table of Nations catalog of linguistics-rooted ethnology data) appears to provide a "closed" listing of the Messianic lineage from Adam to Abraham; so, why does Luke 3:36 include a repeat of "Cainan" as a "link" in the Messianic lineage "chain," between Shelah and Arphaxad? Also, why do some of the Septuagint Greek translations of Genesis also include this double mentioning, in the same place in the Messianic genealogy? If the Genesis genealogy data has undisclosed generational "gaps," can the Genesis genealogical lists be trusted to provide reliable chronology data (or are they merely listings that include "highlights," representative of generations disclosed and undisclosed)?

## Solutions to the Problem

First, even if the sub-timeframe ${ }^{62}$ between the birth of Arphaxad and the begetting of his son Shelah is at least 35 (and not more than 36) years old, an amount of time which biologically could have included an intervening generation-i.e., it is genetically possible for Arphaxad as a grandfather to have "caused-to-be-begotten" a grandson (Shelah), such that the grandson was conceived at a time when the grandfather was 35 or 36 years old. Thus, this supposed evidence of a "open" genealogy "gap" is not a contradiction to the "closed" (i.e., "gap"-free) chronology of time involved.

Second, some serious Biblical research, in conjunction with insightful logic, has been provided by Larry Pierce, in the form of submissions in the Creation Ex Nihilo Technical Journal. The main arguments provided by Pierce have been cogently re-packaged into one website-posted paper by one of the scholars at Answers in Genesis ministry, Dr. Jonathan D. Sarfati. That extremely helpful website-posted analysis paper is accessible for viewing (and for printing) at www.answersingenesis.org. In sum, Pierce and Sarfati show that the extra phrase in Luke 3:36 is a scribal error that is easily identifiable as such, by utilizing textual transmission analysis norms.

## Appendix B: Confusion Regarding the Chronology of Terah, Abraham's Father

## Summary of the Problem

Most English translations of Acts 7:4 give the impression that Abraham was not physically led by God to enter Canaan until Abraham's father, Terah, died:

Then came he [i.e., Abraham] out of the land of the Chaldeans [i.e., out of Ur of the Chaldees], and dwelt in Charan [i.e., Haran]; and from thence [i.e., from Haran], when his father [since the first "he" means Abraham, "his father" here would mean Terah] was dead, he [some think "he" here means "God"] removed him [some think "him" here means "Abraham"] into this land, wherein ye now dwell.

Quoting Acts 7:4 (with editorial bracketing). If this interpretation of Acts 7:4 is followed, Terah dies in Haran before Abraham is led of God to emigrate from Haran into Canaan.

Genesis 11:26 indicates that Terah was 70 years old when Abraham was "begotten" (which means Terah was 70 or 71 when Abraham was physically born). Genesis 12:4 indicates that Abraham was 75 years old when he emigrated from his home in Haran (with Sarah and Lot and others) to enter Canaan, in response to God's leading. Yet, Genesis 11:32 documents that Terah died at age 205, i.e., 135 or 134 years after Abraham was born. Thus, Abraham was 134 or 135 when his father (Terah) died in Haran. If (and here is the big "if"), as chronology critic Pete Williams assumes, ${ }^{63}$ Abraham did not leave Haran for Canaan until Terah died, which did not occur until Abraham was 134 or 135, how can it be accurately said that Abraham was " 75 years old" when he left Haran for Canaan? This question has puzzled many, and some serious scholars have been unable to reconcile the Genesis chronology information (of Genesis 11:26; 11;32; 12:4) with the above-noted view of Acts 7:4 (which interprets "he" and "him" as "God" and "Abraham").

## Solutions to the Problem

The solution to the so-called "conflict" of chronology data about Terah and Abraham, as recorded in Genesis (11:26; 11:32; and 12:4), in comparison with information preached by Stephen in Acts (7:4) is resolvable by recognizing two main points:

1. Abraham left Haran while his father Terah was still alive, and returned later to retrieve Terah's body (after Terah was dead, of course!), in order to bury Terah's body in Canaan, probably in the same basic burial grounds which Abraham had purchase for burying Sarah's body (i.e., in the cave of Machpelah, which Abraham bought from Ephron the Hittite);
2. Luke's record of Stephen's final sermon-before Stephen was stoned to death—includes Stephen's narrative description of least three persons who were involved in Abraham's trek from Ur to Haran to Canaan-i.e., God was involved; Terah was involved; and Abraham was involved; so the "problem passage" portion of Acts 7:4 is only a problem if the sequentially ambiguous usages of the English pronouns "he" and "him" are taken to mean, respectively, "God" and "Abraham"-however, if the "he" and "him" respectivly mean "Abraham" and "Terah," there is no chronological conflict with Genesis' data regarding the correlated life-spans of Terah and Abraham (see Genesis 11:26; 11:32; and 12:4).

This kind of ambiguity sometimes occurs in Scripture (e.g., when a narrator is accurately quoting words spoken by someone else), but illogical interpretations of the ambiguity can be eliminated by cross-referencing related information elsewhere communicated by the same speaker. Moreover, if a statement is spoken as God's Word (and perhaps Stephen's final sermon was prophetically inspired by God, and thus must be inerrant itself), it must accord with all pre-existing Scriptures' content.

In other words, one should interpret ambiguous Scripture texts in light of the content of non-ambiguous Scripture texts (i.e., "interpret the unclear in light of the clear"), as well as in light of the theological standard that the Holy Scriptures themselves, which are inerrant (because God made them that way), must be internally consistent.

Therefore, consider the following solution to the ambiguity of Acts 7:4, with brackets showing both proposed and problematic alternatives for the English pronouns "he" and "him":

Then came he [i.e., Abraham] out of the land of the Chaldeans [i.e., Ur], and dwelt in Charan [Haran]; and from thence [from Haran], when his father [Terah] was dead, he [some think "he" here means "God," but "Abraham" is a better fit] removed him [some think "him" here means "Abraham," but "Abraham's father," i.e., Terah, is a better fit] into this land, wherein ye now dwell. [editorial bracketing supplied]

Quoting Acts 7:4. Surely the above-proposed solution (which accords with the Jews' concern for where someone is buried, as is illustrated in Genesis 50:25 and Exodus 13:19), with Abraham returning to Haran to fetch his (dead) father for burial in Canaan, is more likely to be true than some "let's-just-add-60-or-more-years-to-'correct'-the-Bible's-math" approach to Biblical chronology.

## Appendix C: Chronology Ramifications Related to the Curse of Canaan

## Summary of the Problem

The primary interpretive stumbling-block to recognizing the birth-order of Noah's three sons as being "Shem, Ham, and Japheth" (which is the only sequence used in Scripture for naming those three brothers), it appears, derives from the illadvised conclusion that the "youngest son" of Noah, who is mentioned in Genesis 9:24, is somehow Ham. For example,

Pete J. Williams baldly infers such a conclusion when he says: "Genesis 9:24 says that Ham was the youngest of Noah's sons." Part of the problem arises from a reluctance to recognize that the simplest and most literal reading of Genesis reflects that Noah's three sons-Shem, Ham, and Japheth - were born on the same day, i.e., they were triplets (and not the first or the last case of a multiple birth recorded in Genesis). ${ }^{64}$

This confusion is further compounded by the theological illogic of concluding that God would somehow curse Canaan for "what [Ham] had done to [Noah]," which presupposes that the name "Ham" should be inserted as the meaning of the phrase "his [i.e., Noah's] youngest son." This interpretive approach can (but does not always) result in a conclusion that Ham committed some kind of sin in concert with his son, Canaan, yet somehow it is Canaan who alone is mentioned by name as a curse recipient. Moreover, inserting Ham into Genesis 9:24 has been manipulated as a rationalization for antiblack racism, a historic tragedy that needs no lengthy documentation here. ${ }^{65}$ Further error used to support these conclusions include identifying Japheth as a brother who is "older" than Shem and/or Ham, based upon a quick reading of Genesis 10:21, where the English phrase "the elder" is used to translate the Hebrew word haggadol.

## Solutions to the Problem

The three sons of Noah are always named in the same order, and there is no textual basis for concluding that "Shem, Ham, and Japheth" is not their birth-order, ${ }^{66}$ as triplets (since they were begotten when Noah was 500 ). To Moses, the firstborn was the "oldest," yet Williams somehow thinks the usage of the word "elder" or "youngest" somehow negates a multiple birth, despite the clear example of Moses calling Esau "the elder" and Jacob "the younger" (Genesis 25:21-26, esp. 25:23). How Williams missed this philological / exegetical issue is anybody's guess. So, why accuse Ham? The only proper names used in Noah's post-drunkenness "cursing" verses (i.e., in Genesis 9:25-27) are, sequentially, Canaan, the LORD God, Shem, Canaan (again), God (again), Japheth, Shem (again), and Canaan (again). The only others mentioned, in a generic sense, are the "brethren" of Canaan (as opposed to the brethren of Ham) who are mentioned in Genesis $9: 25$, and the preceding verse (9:24) explicitly identifies the prophetic speaker as Noah. In fact, what does Genesis 9:24 literally say? Also, what does Genesis 9:24 not say?

And Noah awoke from his wine, and [he, i.e., Noah] knew what his younger [youngest] son had done to him.

It is critical to notice that the verse does not name Ham as the "youngest son" whom Noah was thinking about. The next 3 verses ( $9: 25-27$ ) record Noah's prophetic cursings and blessings:
(a) a curse on Canaan, that he will be a servant / slave to Canaan's brethren;
(b) a blessing to directly to Shem's God, as indirectly thereby to Shem, mixed with
(c) a curse on Canaan, that he will be a servant / slave to Shem;
(d) a blessing on Japheth-to "enlarge" and "dwell in the tents of Shem," mixed with
(e) a curse on Canaan, that he will be a servant / slave to Japheth.

Noticeably, the name "Ham" is not only not mentioned in Genesis 9:24, it is also not specifically mentioned anywhere at all within Genesis 9:24-27!

But why Canaan? Interestingly, after Noah realizes what his "youngest son" has done, he starts prophetically cursing Canaan, blessing God, blessing Shem, blessing Japheth, and indirectly blessing Canaan's brothers (i.e., Ham's other sons, Cush, Mizraim, and Put-see Genesis 10:6). From a theological perspective, it would be quite troublesome if Canaan is only an innocent grandson, who is somehow receiving the penal curse for an unmentionably vile deed performed by his guilty father-especially since that kind of curse would violate the Biblical principle of personal accountability in Deuteronomy $24: 16$ (which contrasts with the pagan practice of punishing children for the sins of their fathers, as is illustrated in Daniel 6:24).

Even more interestingly, Canaan is the "youngest" of Ham's sons, since in the birth-order of Ham's 4 sons Canaan is listed last (in Genesis 10:6). Historically speaking, there must have been a time when Canaan was not only the "youngest son" of Ham, but was also then the "youngest grandson" of Noah. How could Moses refer to Noah's "youngest grandson," if Moses wanted to mention him in relation to his grandfather? Since the Hebrew language does not have a separate word for "grandson," i.e., ben can mean an F1 "son," or an F2 "grandson," or an F3 "great-grandson," etc.-he could be called Noah's "son" or he could be called Noah's "son's son"-both are legitimate choices in Biblical Hebrew. This is the same logic as appears in the Hebrew word for "father," $a b$, which may mean a P1 "father," or a P2
"grandfather," or a P3 "great-grandfather," etc. (similar to the English word "forefather"). Of course, it is possible to say in Hebrew "father's father," to designate a grandfather. In other words, the Hebrew noun ben -routinely translated as "son"-literally means a direct lineal male descendant. Likewise, the Hebrew noun ab-routinely translated as "father"-literally means a direct lineal male ancestor. Because of this Hebrew language fact, there exists at least the legitimate possibility that the phrase "youngest son," as used in Genesis 9:24, may refer to someone who then was Noah's youngest grandson. If so, that "someone" could have been Canaan, who was born as the youngest of Ham's 4 sons.

However, another (perhaps even simpler) explanation is available: that the "youngest son" referred to in Genesis 9:24 may have done something heroic, in order to mitigate the vile deed done by Canaan. Perhaps Noah "awoke from his wine" to realize that his "youngest [F1] son," i.e., Japheth, was the one primarily responsible for the dual action of Japheth and Shem protectively cloaking Noah (see Genesis 9:23), in order to mitigate the shame and indignity of something done to Noah while Noah was drunk. (Also, perhaps Noah's drunkenness was an unforeseeable predicament, for which Noah should not be blamed, resulting from Noah being unaccustomed to the grape fermentation process, since many geophysical changes resulted from the forces and processes of the global Flood events and its aftermath—but that creationism topic is not now before us.)

One gets the impression that the Holy Spirit chose to inspire Moses to record this sordid tragedy in a way that, in literary effect, "cloaks" the details so as to provide some modesty to what otherwise would be the "naked truth" of what was apparently a very heinous crime committed against Noah. If so, in pondering the heroic act of protecting Noah's dignity, Noah may have mentally contrasted the unmentionably shameful deed, which injured Noah's patriarchal dignity, with Japheth's heroic conduct (aided by Shem). Thus, the contrast of Japheth's heroic protectionism and Canaan's vile prurience may have triggered a righteous indignation in Noah's mind, with the immediate consequence being a Godinspired pronouncement of future trends in ethnological history.

Other Scriptures (e.g., Leviticus 18:6-23 and 20:11-21) support the suggestion that the kind of "nakedness" that was exposed in the tent was something worse than the mere uncovering of Noah's body when he somehow became unclad. In the example of Lot's daughters (see Genesis 19:32-38), their father was twice made drunk by them, in order that they might incestuously know him sexually, with the consequences thereof being two daughters pregnant by their own father, and two babies born therefrom, Moab and Ben-Ammi. (Using drunkenness as a ploy to take advantage of another's "nakedness" also occurs in Habakkuk 2:15.) In fact, the theme of protectively cloaking Noah's shamefully exposed nakedness may be intentionally associated, by Noah (in Genesis 9:27) with some vile sin that apparently occurred in the tent (i.e., a sin that involved exposing Noah's "nakedness" in an ominously shameful manner) may be related to Noah's choice of words that Japheth's blessing is related to Shem's tents, so there is a possible hint that Japheth's blessing is associated with his good deed inside a tent, in contrast to Canaan's. In any case, the birth-order passages (listed in Footnote \# 66 above) suggest that Ham was not the "youngest son" who had done something right or wrong to Noah, for which Canaan and the Canaanites would be punished (but not the Hamites who descended from Ham through his older 3 sons Cush, Mizraim, and Put).

As noted above, some have concluded that the oft-repeated Scriptural birth-order information is unreliable, due to mention of Japheth as an "elder" brother to Shem, based upon a quick reading of Genesis 10:21, where the English phrase "the elder" is used to translate the Hebrew word haggadol, which literally means "the greater." Thus, Japheth appears to have been the "bigger brother" (due to size, not birth-order). In order to appreciate how the root idea of gadol means "great" in size or height, consider that the noun used to denote the Tower of Babel (in Genesis 11:4) is migdal, meaning a thing that is characterized by "greatness" in size or height, not age or longevity.

In sum, careful reading of Genesis, with careful philological scholarship, prove there is no real chronological "problem" with Genesis' record of the Adam-to-Abraham timeframe; also, other "family history" errors (such as mis-readings of Noah's prophetic curses, and perpetuating that error to justify a form of racism) can be avoided-by simply believing what God has said in His Word. ${ }^{67}$

## References

## Genesis 1:14 (quoted above).

Astronomically, the Earth is running laps around the sun; each completed lap is a "year."
The Earth's repetitious habit of orbiting the sun is so quantitatively regular that it is, for all practical purposes, a virtually perfect standard for measuring time on Earth. Donald B. DeYoung, Astronomy and the Bible (Grand Rapids: Baker Books, 2000), 2nd ed., pp. 17-18, as well as p. 15, citing Genesis 1:14.
5. However, by way of illustration only, this paper does provide a few counter-arguments to some recent assertions by a Pete J. Williams-who has asserted several positions in conflict with the Genesis record's literal presentation of various chronology-relevant data (e.g., Williams is willing to add an extra 60 years, or more, where Genesis appears to "need" them, etc.), in his article "Some Remarks Preliminary to a Biblical Chronology", in Volume 12 of Creation Ex Nihilo Technical Journal, pages 98-106, a part of which has been convincingly impeached in 2000 via two "Letters to the Editor" by Larry Pierce, published in Volume 14(1), page 51, and in Volume 14(2), page 55-56 of that same journal. Further refutation of Williams' transmogrified treatment of Biblical chronology data is provided herein-mostly in the appendices of this paper-to illustrate how the Biblical record's
chronology "problems" are quite resolvable, within inerrantist hermeneutics, by focusing careful attention to the actual inspired text of Genesis. Thus, Williams' unwarranted inferences and incorrect translations regarding various Old Testament Hebrew words (e.g., haggadol, ben, vayyoled, etc.), as well as a New Testament Greek phrase (e.g., metokisen auton) provide a telling reminder of the need to do primary source research, like the Bereans did (see Acts 17:11), prior to consulting non-authoritative opinions and impressions from mere secondary sources, e.g., the "church fathers", commentators, the Septuagint, the Samaritan Pentateuch, etc.
6. This approach recalls the focused example of the Scriptural geologist John Murray, of the 1800s, who declined the scholarly distraction of correcting and refuting every anti-Biblical remark by every pseudo-intellectual scoffer who decided to opine on a given topic. Dr. Terry Mortenson observed Scriptural geologist Murray's refusal to contradict every skeptical theory asserted by scoffer who breeds a new hybrid of anti-Biblical skepticism: "Murray believed the Word of God was the only infallible source of truth, so [he] did not feel compelled to accept [a certain skeptic]'s and any other old-Earth geologist's interpretation of the geological evidence, since those interpretations were based on anti-Biblical philosophical assumptions." Terry Mortenson, "Glenn Morton: A Misrepresentation of History?-A Short Rebuttal", website posting at www.answersingenesis.org.
7. See generally Dr. Bill Cooper's After the Flood: the Early Post-Flood History of Europe Traced Back to Noah (Chichester, West Sussex, England: New Wine Press, 1995; available via www.answersingenesis.org), pages 10-252, especially at pages 36-129. Dr. Cooper analyzes not only ancient chronology-relevant records of the ancient British Celts, the Irish Celts, and the Anglo-Saxons, but also the amazing chronometry expertise (and records) of the Yucatec Mayas.
8. For sake of consistency, this paper routinely uses the word "timeframe" to denote the time from Adam's creation to Abraham's birth; all line-segments or time that of sub-sets of that timeframe are herein called "sub-timeframes."
9. The only "gaps" are approximately 9-month-long periods of human gestation, and these occur (at most) only once at each end of each of the 19 sub-timeframes. Since each of these is clearly identifiable, and since it is not a mathematical problem to generously add up to an extra year to account for each of theses, the precisional tolerance for the ultimate timeframe (which recognizes that a year is longer than the en ventre sa mere gestation time) is nevertheless sound. In other words, by adding human gestation periods where Scriptures indicates they are needed, and this is straight-forward enough, the ultimate chronology result is truly "gap"-free.
10. In order to count the time from the absolute beginning of creation (i.e., Christ's fiat act of ex nihilo creation of all the stuff which He differentiated into the heavens and the Earth) unto the time when Abraham was begotten, simple arithmetic is required: count the years from Adam's creation through the time when Terah begat Abraham., then add 5 calendar days!
This simple arithmetic computation is done by comparing the first act of creation (which occurred on Day \# 1) with the later creation of Adam and Woman (which occurred on Day \# 6). It is amazing how many chronologists have difficulty with this arithmetic. (See Hebrews 11:3.)
11. Dr. John C. Whitcombs' "Chart of the Period from the Creation to Abraham" has been an extremely helpful source of Genesis chronology information in chart form, with some very insightful comments footnoted to important points in the Adam-to-Abraham timeframe. It is hoped that this paper's argument will clarify, for those interested in what God Himself has had to say (via His written Word) about Biblical chronology, that the entire timeframe from Adam to Abraham is almost (but less than) 2,000 years-and thus almost (but less than) 2,000 years is the true time measurement for that segment of our universe's history.
12. One logical ramification of this Bibliological / epistemological point is that extrabiblical data or scholarly speculations that contradict the Bible's chronology data should be recognized (and labeled) as "science falsely so-called" (see 1st Timothy 6:20).
13. See Romans chapter 1, especially Romans 1:20.
14. May the YEC (young-Earth-creationist) scientists be lauded for all their chronology-related research, analysis, and scholarship! E.g., may God increase the tribes of Drs. Henry Morris, John Morris, Steve Austin, Duane Gish, Harold Slusher, Michael Oard, and the like!
15. See, e.g., Psalm 1:1-3; 19:7; Isaiah 8:20; Matthew 4:4; 5:18; Mark 12:24; Luke 24:44; John 5:39; 5:46 ("For had ye believed Moses..."); 17:17; 2nd Timothy 3:16; 2nd Peter 1:20-21.
16. See Colossians chapter 1, John chapter 1, and Revelation chapters 1-22.
17. This sub-timeframe of 130 years is defined by Genesis 5:3.
18. This sub-timeframe of 105 years is defined by Genesis 5:6.
19. This sub-timeframe of 90 years is defined by Genesis 5:9.
20. This sub-timeframe of 70 years is defined by Genesis 5:12.
21. This sub-timeframe of 65 years is defined by Genesis 5:15.
22. This sub-timeframe of 162 years is defined by Genesis 5:18.
23. This sub-timeframe of 65 years is defined by Genesis 5:21.
24. This sub-timeframe of 187 years is defined by Genesis $5: 25$.
25. This sub-timeframe of 182 years is defined by Genesis 5:28-29.
26. This sub-timeframe of 600 years is defined by Genesis $7: 6$ (and 7:10-11).
27. This sub-timeframe of 2 years is defined by Genesis 11:10 (and 7:10-11).
28. This sub-timeframe of 35 years is defined by Genesis 11:12.
29. This sub-timeframe of 30 years is defined by Genesis 11:14.
30. This sub-timeframe of 34 years is defined by Genesis 11:16.
31. This sub-timeframe of 30 years is defined by Genesis 11:18.
32. This sub-timeframe of 32 years is defined by Genesis 11:20.
33. This sub-timeframe of 30 years is defined by Genesis 11:22.
34. This sub-timeframe of 29 years is defined by Genesis 11:24.
35. This sub-timeframe of 70 years is defined by Genesis 11:26.
36. See Genesis 1:26-27 in conjunction with Genesis 2:7.
37. See Genesis 1:26-27 in conjunction with Genesis 2:18 and 2:21-25.
38. See Psalm 139.
39. The word vayyoled, translated in Genesis $5: 3(\mathrm{KJV})$ as "begat," is a form of the root verb yalad, which root verb can appear in contexts of procreative conception and also in contexts of live childbirth. Here, vayyoled is a vav-consecutive conjunction-modified hiphil imperfect 3rd person singular masculine, functioning as a hiphil perfect verb, i.e., meaning "and he [i.e., Adam] caused-to-be-begotten / born" his son (in the Messianic line) Seth. Usage of a hiphil verb form is quite consistent with, if not the best way to denote, the genetic act of fatherly procreation.
40. In the Hebrew view of things, the count starts at \#1. In other words, there was no "0th" generation of humanity: Adam was the 1st generation, so Enoch was the "7th" (from Adam).
41. Of course, Enoch warned of divine judgment prior to Enoch being translated to heaven, but Enoch went to Heaven prior to Noah being born (!), so there was no need to preserve Enoch's life aboard the Ark. Enoch was a man who "walked with God" (Genesis 5:22), as Adam and Woman once did (before Adam sinned). Enoch's witness was likely transmitted to Noah by one or more of six of his ancestors in the Messianic lineage (e.g., Enosh, Cainan, Mahalaleel, Jared, Methuselah, and Lamech) -all six of whose lives overlapped with both Enoch and Noah.
Noah also "walked with God" (Genesis 6:9), as the only righteous man in Noah's own generation (Genesis 7:1). Methuselah (whose spiritual condition we don't know) died within the year that the Flood is sent, but Dr. Coder argues that his death was immediately before the Flood struck, as is discussed in Sub-timeframe Point \# 8 (below). A pre-trib
dispensationalist could make a decent typology-dependent argument (e.g., linking Genesis 18:32; 19:16, 22 with 2nd Thessalonians 2:3) that the doom-delaying Methuselah was most likely a saved man!
42. Methuselah (whose spiritual condition we don't know for sure) dies within the year that the Flood is sent, but it is theologically likely that he died just before the Flood (e.g., perhaps a week before), and not because of the Flood. For an excellent treatment of this point (which is beyond the scope of this paper), see generally S. Maxwell Coder's Jude, the Acts of the Apostates (Chicago: Moody Press, 1958), at pages 84-93, in conjunction with 2nd Peter 3:9.
In essence, Dr. Coder suggests that Jude 1:14-15 and Genesis 5:22 provide the clues for why Enoch only began to "walk with God" after the birth of his longevity-record-breaking son, Methuselah: Methuselah's very name was a prophecy meaning that when Methuselah dies, God will send death to virtually the entire world! The Hebrew meaning of Methuselah's name can be interpeted as meaning "when he dies, it is sent"-with the "it" apparently referring to the global Flood as God's vector for destroying all of planet Earth's terrestrial creatures except God's elect "remnant" of air-breathers (i.e., 8 humans, and literally all " kinds" of animals) on the Ark.
43. One remembers how Adam was quick to remind God that the wife whose influence Adam followed, as Adam knowingly sinned by eating the forbidden fruit, was a wife whom God Himself had given to Adam. This is not a worshipful attitude of gratitude toward one's Creator;rather, both Adam and Lamech appear to be effectively blaming God for their earthly troubles.
44. The Hebrew text of Genesis 6:7 translated (in KJV) as "...when the flood of waters was upon the earth" is vehammabul hayah mayim 'al ha'arets. That phrase translates more literally as: "and the flood, it was waters upon the earth"-balancing the parallelism of Genesis 6:7's sentence, which began: "and Noah was a son of 600 years..." Thus, Noah was 600 years old whenever this descriptive phrase applied to the condition of the globally flooded world.
45. The Hebrew text of Genesis $11: 10$ translated (in KJV) as "two years after the flood" is shenathaim 'achar hammabul. That phrase translates more literally as: "[year] two after the flood" or "two [years] after the flood"—with the word "year[s]" being contextually implied to balance the fact that Shem was then a "son of a hundred-of-year[s]." The key observation here is that it was during year \#2 "after the flood" when Shem "begat" [vayyoled] his son Arphaxad. (Arphaxad was in the Messianic lineage, so the chronology data about him is more important to Moses than that of Shem's other sons who are listed in Genesis 10:22.) Interestingly, Shem was 100 years old whenever this descriptive phrase "after the flood" applies, but Shem's actual age at that time is not an essential "bookend" event to either the 10th or the 11th sub-timeframes (within the Adam-to-Abraham timeframe), although Shem's 100th year can be used to mathematically cross-reference other chronological data indexed to other Flood-related events.
46. Genesis 11:10.
47. Genesis 5:32.
48. Quoting Genesis 7:6.
49. Quoting Genesis 7:11.
50. Quoting Genesis 8:13.
51. Quoting Genesis 8:14.
52. See generally Genesis chapters 7 and 8 , especially Genesis $8: 4,11$.
53. The Greek translated "for this they willingly are ignorant of" in 2nd Peter 3:5 is lanthanei gar autous touto thelontas; i.e., the historic truth / evidence of the catastrophic worldwide Flood during Noah's lifetime is a fact that the scoffers willingly hide-as a deliberate "cover-up" (to an extent that evolutionist uniformitarians make the Watergate-related activities of Chuck Colson and his cronies look, by comparison, like innocent men who inadvertently misplaced some data!).
54. Consider Psalm 139.
55. Two reasons for rejecting the first 10 days of "year \# 2" (counted from the day that the Flood broke out) are: (a) the 10 days before exiting the Ark were not very conducive for Shem and Mrs. Shem to conceive a child; and (b) from a pro-life perspective, if a child were conceived aboard the Ark, which began with eight humans aboard, the Scriptures would need to count the number of humans who exited as the Ark as more than eight. Intriguingly, the ancient Chinese language preserved this memory of the 8 Ark passengers in its ancient pictograph meaning "large boat" (which is a combination of the pictographic elements of "vessel," "8," and "people." See C. H. Kang and Ethel Nelson, The Discovery of Genesis (St. Louis: Concordia Publishing, 1979), page 55, reproduced at www.answersingenesis.org (example \#1). A similar example is the ancient Chinese pictograph for "[big]-flood," which is a composite of the Chinese pictographic elements for "water," "8," and "universal/comprehensive" (confirmed by Shen "Abraham" Tong, a native of mainland China, who resided in Austin, Texas during 1995).
56. E.g., Pete Williams' chronology article, "Some Remarks Preliminary to a Biblical Chronology," supra, at page 104, where he opines "...we cannot simply use Terah's age of 70 at Genesis 11:26, as just one more 'begetting' age to be used in our addition." Williams is not only willing to add an extra 60 years (to "correct" Genesis 11:26), but appears willing to add even more years to "fit" his expanded chronology theory:
"We are left then with the question of whether to add 60 years to our chronology [or more]. The problem here is that I cannot find any Biblical reason that demands that Abraham left Haran as soon as his father died......If [Abraham] had stayed in Haran much longer,...a period of more than 60 years would be added to Biblical chronology. At any rate, we can say that the addition of 60 years is the minimum...."
Quoting from page 104 of Creation Ex Nihilo Technical Journal, Volume 12(issue \#1, 1998).
57. The range-qualified high is extra high, since adding a "buffer" of 1 extra year for every period of human gestation is overly generous-no mother would want a 12 -month pregnancy!
58. See Psalm 19:1-7.
59. This paper's big-picture logic, and its argument's infra-structural syllogism, originated from this paper's primary author, Thomas D. Ice, who initially explained it to the second coauthor, James J. S. Johnson, during A.D. 2001 (at Dr. John Whitcomb's biblical creationism seminar hosted by Dr. Paul Lee Tan's church). Dr. Ice, as Executive Director of the PreTrib Research Center (which he co-founded in 1992 with Dr. Tim LaHaye), has been seriously involved in Biblical chronology research for many years, as is illustrated by the recently published Charting the End Times: A Visual Guide to Understanding Bible Prophecy (Eugene, Oregon: Harvest House, 2001).
Drs. Ice and Johnson have repeatedly met during 2001-2002, and have utilized various helpful Biblical chronology materials (e.g., those of Dr. Harold Hoehner, Dr. John Whitcomb, and others), while collaborating on this Biblical chronology project, so that this paper has been a work in progress ever since-in hopes that it will be expanded (God willing) to the Exodus, to King David's reign, and ultimately to the First Advent of our Lord Jesus Christ.
Since the scribal word-processing, mathematical calculations, appendices, and Hebrew word studies (and related analysis detail-work) in this study were done by the second coauthor, please note that all typographical errors (and other detail-related errors) are wholly the fault of that second co-author, James J. S. Johnson.
60. See John chapter 1 .
61. See Genesis 12:3 in conjunction with Galatians 3:14-16 and 3:29.
62. The Arphaxad-to-Shelah "link" in the Messianic lineage "chain" is sub-timeframe \# 12.
63. See, e.g., Pete J. Williams, "Some Remarks Preliminary to a Biblical Chronology," in Volume 12 of Creation Ex Nihilo Technical Journal (issue \#1, 1998), pages 98-106, esp. 104.
64. Pete J. Williams, "Some Remarks Preliminary to a Biblical Chronology," in Volume 12 of Creation Ex Nihilo Technical Journal (issue \#1, 1998), pp. 98-106, at page 104. Williams, illustrates this reluctance to recognize a case of multiple birth, at page 104, when he says:
We have four indications from the text of Genesis that when one person begets three sons at a certain age, it is not necessarily to be supposed that all three were begotten simultaneously:
(1) Nahor marries his brother's daughter (Genesis 11:29).
(2) Ham was the youngest of Noah's sons (Genesis 9:24).
(3) Japheth is the oldest of Noah's sons (Genesis 10:21).
(4) Shem was not 102/103 but 100 when he begat Arphaxad (Genesis 5:32, 7:6, 11:10).

Although it would be possible for scholars who believe in a source-critical approach to Genesis (that is, J and P) to divide these up into different sources, the similarity of the material suggests that any division would be a much more expensive [\$ ?] hypothesis than simply to suppose that Genesis 5:32 and Genesis 11:26 do not have to talk of the begetting of triplets.
In other words, Williams is concerned about JEDP-related speculations moreso than with crucial Hebrew words, when examining chronology data in Genesis. Later within this Appendix C, Williams' 2nd and 3rd assumptions about "oldest" and "youngest" are debunked.
Also, Williams' 4th assumption (about the chronology of Shem's fathering of Arphaxad) is debunked in this paper's main body, in its analysis of sub-timeframes \#10 and \# 11.
As to Williams' 1st point, it is biologically quite possible for an uncle who is 30 years old to marry a 14-year-old niece—such as when Nahor eventually married Haran's daughter. So what? Moses routinely records, in Genesis, marriages between half-siblings, cousins, and the like.
65. See, e.g., John J. Davis, Paradise to Prison: Studies in Genesis (Salem, Wisconsin: Sheffield Publishing, 1998 reprint), pages 128-129.
66. See Genesis 5:32; 6:10; 7:13; 9:18; 10:1; and 1st Chronicles 1:4.
67. See Paul's reminder, in Hebrews 11:6 (and 11:4), that we please God by believing Him.

