ARTICLES

THE MEANING OF THE CHRONOGENEALOGIES OF GENESIS 5 AND 11

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WHAT THIS ARTICLE IS ABOUT

In Origins 7:23-37,Dr. Hasel presented arguments showing that the genealogies found in Genesis 5 and 11 were unique to biblical literature and that they should be read as given. This companion article further examines these chronogenealogies and the meaning of the literary figures used in the text. Using literary and archaeological-historical data, Dr. Hasel compares the biblical text to extrabiblical literature and history. Also included are analyses of other theories of interpretation.

I. INTRODUCTION

The study of Genesis 5 and 11 reveals that the question of the meaning of the genealogies is very complex. This complexity is highlighted by the fact that there are various textual recensions of the chronological data and numbers (Hasel 1980) and by the fact that "the principal sources" (Kitchen 1966, p 35) of the chronological data for both the antediluvian and postdiluvian periods are present only in these two chapters. Furthermore, the comparative material relating to genealogies within and outside Scripture renders Genesis 5 and 11 unique in the Bible and the ancient Near East (Hartman 1972; Hasel 1978), because in no other case is the literary form "genealogy" joined with chronological information as it is in these two chapters. This phenomenon has led scholarship to distinguish Genesis 5 and 11:10-26 from later genealogical lists (Johnson 1969, p 28) in both the Old (cf. 1 Chron 1-9; Ezra-Neh) and the New Testaments (cf. Matt 1:1-17; Luke 3:23-33). In recognition of this unique literary form with time specifications, these genealogies in Genesis 5 and 11 are designated as "chronogenealogies." The joining of the lines of descent with time aspects has had and still has a determining function in the discussions of the meaning of these chapters. This must continue to be important on methodological grounds, because a unilinear comparison of genealogies — whether biblical or nonbiblical — that lack the combination of line of descent and life spans with Genesis is an inadequate procedure for uncovering the true meaning of Genesis 5 and 11:10-26.

Today's scholarship has a radically new attitude toward chronological data provided in the Bible. The critical attitude of an earlier generation of scholars, such as was typical of Julius Wellhausen and his followers at

the turn of the century who viewed chronological information in the Bible as mere window dressing to enhance the verisimilitude of the historical vehicle of Bible writers for their expression of faith, is no longer in vogue. The change was caused by the fact that in the past five decades the accuracy of the chronological information in the Bible, particularly in the Old Testament, was verified repeatedly. "The most impressive example of this is seen in the work of E. R. Thiele on the records of the kings of Israel and Judah" (Oswalt 1979, p 673), who has demonstrated that the mysterious numbers of the Hebrew kings (Thiele 1965, 1977) reveal an "uncanny accuracy of the recorded figures" (Oswalt 1979, p 673) and provide correlations with dates and events in the history of the ancient Near East.

The fantastic breakthrough in the chronology of the Hebrew kings that had defied any kind of real solution for two millennia may serve as an encouragement not to dismiss too easily chronological data in other parts of Scripture, including the figures of Genesis 5 and 11. The chronological information in Genesis 5 and 11 is data that must not be completely disregarded (see Wilson 1977, p 158-168). It is one of three types of chronological data in the Old Testament. The other types consist of 1) royal annals and chronicles and 2) random chronological statements (e.g., Gen 15:13; Exod 12:40; and 1 Kings 6:1). This article will discuss the meaning of the chronological data in Genesis 5 and 11. A significant number of suggestions have been made about the meaning of the figures and thus about these two chapters, and we will strive to describe and evaluate these attempts. This will mean that both internal (the matters of line of descent and biblical genealogical lists) and external (various archaeological and historical phenomena) data will have to be considered. Once these types of data have received some attention, we will be able to describe briefly and to assess various prominent nonhistorical and historical interpretations of Genesis 5 and 11.

II. DATA RELATING TO THE LINE OF DESCENT

One of the most basic issues in the assessment of the meaning of Genesis 5 and 11 is the question of whether these chapters contain a continuous or discontinuous line of descent.

A. Internal Literary Data: the Formula of Descent

In the words of K. A. Kitchen the formula "A begat B' may often mean simply that 'A begat (the line culminating in) B'; in this case, one cannot use these genealogies to fix the date of the flood or of earliest Man" (Kitchen 1966, p 39). However, the biblical formula in Genesis 5 and 11 is not simply "A begat B." Instead, with the exception of a few minor variations, it is consistently, "When PN₁ had lived *x* years, he fathered

 PN_2 . And PN_1 lived after he fathered PN_2 y years, and he fathered other sons and daughters. And all the days of PN_1 were z years." A reduction of this stereotyped literary formula with its inseparable interconnection of line of descent and years before the birth of the named son followed by the subsequent years of life to simply "A begat B" is an oversimplification. It distorts drastically the components of the formula. This unwarranted procedure leads Kitchen and other interpreters (cf. Green 1979, p 49-50, and followers) to argue that the line of descent in Genesis 5 and 11 is discontinuous.

The formula of descent in Genesis 5 and 11 manifests a rather fixed literary structure that does not yield to a minimalist reduction. It manifests interlocking components such as descent information with spans of years that are correctly computed in each instance. Indeed, this interlocking nature of the information provided is forceful internal evidence that, instead of having a broken or discontinuous line of descent, the material in Genesis 5 and 11 presents a continuous line of descent. In view of this internal evidence, certain scholars seek time and again to bring external data to bear on the issue. It is mandatory to look at some of the argumentation from archaeology and history.

B. Archaeological-Historical Data

In straightforward language it is noted that the date of the flood at ...about 2300 B.C....is excluded by the Mesopotamian evidence, because it would fall some 300 or 400 years after the period of Gilgamesh of Uruk for whom...the Flood was already an event in the distant past. Likewise the appearing of earliest men...in about 4000 B.C., would seem to clash rather badly with not just centuries but whole millennia of preliterate civilizations throughout the Ancient Near East...(Kitchen 1966, p 36-37).

Before we give attention to the "Mesopotamian evidence" it may be advisable to consider the suggestion that the flood took place at about 2300 B.C. The latter date roughly reflects a computation of the spans of time of the textual recension preserved in the Hebrew text as transmitted by the Masoretes. However, the Hebrew Masoretic text (MT), some major manuscripts of the Septuagint (LXX) versions (manuscripts Alexandrinus and Vaticanus), and the Samaritan Pentateuch have divergent figures. The Jewish historian Josephus of the first century is known to quote from the shorter Hebrew figures as well as from longer ones (Hasel 1980), testifying to the existence of both the Greek and "the Hebrew figures and their [the latter] being regarded as of value in the first century of our era" (Jones 1909, p 48). By adding up the ages of each patriarch at the time of the birth of the named son, the following figures are obtained in the respective textual versions (allowing one year for the flood and one year to the birth of Shem's son).

CHART A

	мт	LXX (Alex.)	LXX (Vat.)	Sam. Pent.	Josephus
Adam to Noah Shem to Abraham	1656 292	2262 1072	2242 1172	1307 942	2256 983
Adam to Abraham	1948	3334	3414	2249	3239

Some scholars add another 60 years to the time from Shem to Abraham, figuring that Terah was not 70 years old when Abraham was born (cf. Gen 11:26); rather, he was 130 years old, for Abraham was 75 when he left for Palestine after Terah's death at the age of 205 (Gen 11:32; 12:4; Acts 7:4). In order to determine the date of the flood, we must also know the date of Abraham's birth. Several items of chronological information in Scripture aid in arriving at his approximate birth date. The first appears in 1 Kings 6:1 where it is stated that Solomon's temple was begun 480 years after the Exodus. Since this occurred in the fourth year of Solomon in ca. 971/970 B.C. (on the basis of a four-year co-regency with David), the Exodus would be dated ca.1450 B.C. In the Hebrew text of Exodus 12:40 it is reported that the Israelites dwelt for 430 years in Egypt.

Let us parenthetically refer briefly to the textual variation in Exodus 12:40. Depending on whether one follows the reading of the Hebrew text (MT) for this verse ("the sons of Israel lived in Egypt 430 years") or the Greek (LXX) translation ("the sojournings of the sons of Israel in the land of Egypt and in the land of Canaan was 430 years"), an early or late chronology for the birth of Abraham can be determined. If one follows the Greek version, then one figures usually 215 years in Egypt and 215 years of Israel in Canaan. In other words, the Egyptian period is only 215 years long, whereas in the MT it is 430 years long. According to the Hebrew text Abraham's birth is 215 years earlier. If one takes the 430 years of an Egyptian sojourn of the MT and adds them to the year 1450 B.C. for the Exodus, one arrives at a date of ca. 1880 B.C. for the descent into Egypt. Then, by adding Jacob's age at the entry into Egypt (130 years, Gen 47:9), Isaac's age at Jacob's birth (60 years, Gen 25:26) and Abraham's age at Isaac's birth (100 years, Gen 21:5), the year of ca. 2170 B.C. is reached for the date of Abraham's birth. If one follows the Septuagint (LXX) reading of Exodus 12:40, one will arrive at a later time for Abraham's birth, because the Egyptian sojourn according to this text is 215 years shorter. Thus this shorter reckoning would lead to the birth of Abraham at ca. 1955 B.C. Without allowing for the co-regency of Solomon with David (1 Kings 6:1) one can arrive at the birth of Abraham at ca. 1950 (Horn 1960, p 8).

A reckoning of the date of the flood depends on the year of the birth of Abraham. If one selects the late date for the birth of Abraham at ca. 1955 B.C. and adds the 292 years from his birth to the flood according to the Hebrew text (MT), the flood would have occurred at ca. 2247 B.C. But if one follows the MT and calculates the birth of Abraham at ca. 2170 B.C., then the flood would have occurred in ca. 2462 B.C. on the basis of the 292 years in the MT between the birth of Abraham and the flood. Or, if one takes the figures of either 1072 or 1172 of the Septuagint manuscripts for the span of time between Abraham's birth in ca. 2170 B.C. and the flood, the date of the flood would be reckoned accordingly to have taken place either in ca. 3242 B.C. or 3342 B.C. The Samaritan Pentateuch and Josephus have slightly shorter time spans for the same periods, namely 942 years for the former and 983 years for the latter. These figures would lead to a date for the flood in either ca. 3112 B.C. for the Samaritan Pentateuch and ca. 3153 B.C. for Josephus (see Chart B).

	CHARTB					
	MΤ	LXX (Alex.)	LXX (Vat.)	Sam.Pent.		
Flood	2462	3242	3342	3112		
Creation of Adam	4118	5504	5584	4419		

If Abraham was born when Terah was 130 years old, as may be indicated in Genesis 11:32; 12:4; Acts 7:4 (because Abraham was 75 years old when he left Haran after Terah had died at the age of 205), then one needs to add in each case 60 years to the B.C. years of the flood. Accordingly the flood would have occurred at ca. 2522 B.C. (MT), 3302 B.C. (LXX Alex.), 3402 B.C. (LXX Vat.), 3172 B.C. (Sam Pent.), and 3213 B.C. (Josephus) (see Chart C).

	CHART C					
	MT	LXX (Alex.)	LXX (Vat.)	Sam.Pent.		
Flood	2522	3302	3402	3172		
Creation of Adam	4178	5564	5644	4479		

The respective dates for the flood are figured on the information of the textual recensions of the biblical text (MT and two major LXX manuscripts) and the Samaritan Pentateuch as well as the ancient historian Josephus. The problem of the priority of the differing figures in these recensions has been discussed in an earlier essay (Hasel 1980). No simple solution is presently known.

Without doubt, the figure and dates obtained from the Septuagint texts are the most attractive from the viewpoint of currently known historical data from Egypt and Mesopotamia. An awareness of the problems of the shifting of Egyptian chronology (Horn 1959) is important:

Generally, the more distant the time, the more imprecise and inaccurate are the dates....Before about 2200 B.C. the margin of error is roughly ± fifty years and the date for the beginning of the dynastic period (First Dynasty) stills shows wide variation among historians (DeVries 1976, p 254).

Despite these immense problems, Egyptian history is generally believed to begin at about 3000 B.C., ± 100 years. The Egyptian chronology for this early period is but a "relative chronology." The same is true of the early chronology of Mesopotamia. R. D. Tindel remarks cogently, "It is not possible to establish a coherent chronology for the period prior to Sargon of Akkad" (Tindel 1976, p. 161), who founded the Akkadian Empire at ca. 2350 B.C. As far as Mesopotamia is concerned, "it is not until about 2500 B.C. that there are sufficient records to permit a coherent history" (Tindel 1976, p 158), because the cultures that employed the cuneiform (wedge-shaped) system of writing "never developed a uniform system of dating" (Tindel 1976, p 158). Scholars have to construct a coherent chronology from various systems and bits of information, then fit everything together and date the whole in terms of years B.C. These scholarly reconstructions are but relative. No absoluteness must be assigned to them. They are subject to change as new discoveries alter old relative chronological suggestions. Thus scholarship of the ancient Near East speaks of "relative" chronology" for this early period. An "absolute chronology" is not to be had before ca. 2000 B.C., depending on sightings of Venus or various eclipses and the like. Thus caution is in order so that biblical materials are not prematurely judged inaccurate or invalid on grounds which scholars are careful enough to regard as relative.

The reconstructions of prehistoric periods of time are even more relative and hypothetical. They lack scientific controls needed for absolute dating. Even refinements in radiocarbon dating methods have not achieved reliable correlations. "As a result, specimens whose age can be fixed beyond doubt historically have produced radiocarbon dates centuries outside the allowable margins of error" (Tindel 1976, p 158). A truly scientific approach to early world chronologies will not accord to "relative chronology" an absolute status which may serve as a sound basis for decisions concerning personal faith and confidence in the fidelity of the Bible.

Some students of Genesis have suggested that Genesis 5 and 11 are dependent upon ancient Near Eastern genealogies (Cassuto 1961, p 254-267; von Rad 1961, p 69; Speiser 1964, p 41; Johnson 1969, p 28-31; Wilson 1977, p 166). Recent discoveries of genealogies show that the Israelites were not the only ancient people who kept genealogical records. There are royal and nonroyal genealogies from Mesopotamia and genealogies of other peoples (Wilson 1977, p 56-136). Scholars are largely in agrrement that the closest parallel to Genesis 5 and 11 is the Sumerian

King List (SKL) which arranges dynasties in linear succession. The date of SKL is the first dynasty of Isin (ca. 2000 B.C.) or possibly earlier (Rowton 1960, p 158-162). Several scholars have claimed that Genesis 5 and 11 is dependent on SKL and thus cannot be regarded as a reliable index of time. Such claims have led to careful examinations of the relationship between SKL and Genesis 5 and 11.

The results of these investigations are summarized as follows: 1) Genesis 5 and 11 contain Semitic names, but SKL has non-Semitic names which cannot be harmonized with each other; 2) the biblical genealogies in Genesis 5 and 11 have numbers for "years of life," whereas SKL has numbers for "years of reign," i.e., the contrast is between longevity and years of rulership; 3) the line of descent in the genealogies in Genesis 5 and 11 is opposed by the succession of kings in SKL; 4) Genesis 5 has ten antediluvian patriarchs, whereas SKL in its various recensions has seven, eight, nine, or ten antediluvian kings; 5) Genesis 11 has nine postdiluvian patriarchs but SKL has thirty-nine postdiluvian kings; 6) Genesis 5 and 11 trace ancestors in terms of line of descent, while SKL emphasizes that kingship can reside in only one city at a time; 7) Genesis 5 and 11 are chronogenealogies, whereas SKL is a list of city dynasties with their respective rulers; 8) the structure of Genesis 5 and 11 is not identical with the structure of SKL; and 9) Genesis 5 and 11 are line of descent genealogies containing chronological information, but SKL is a list of (successive) dynasties to which genealogical notices are attached for several kings, usually for only two or three generations and only twice for five generations.

These and other differences (Hasel 1978, p 361-374) confirm that SKL is not a source directly or indirectly for Genesis 5 and 11 (Hartman 1972, p 32). Indeed, Genesis 5 and 11:10-26 is without a parallel in the ancient world. Thus it is most precarious and methodologically unsound to interpret the biblical chronogenealogies on the basis of ancient Near Eastern materials. The proper function and meaning can be determined in their own contextual settings in Genesis 1-11 and the Bible as a whole.

C. Biblical-Genealogical Data

Is it true that the genealogical data in the Bible clearly prove that Genesis 5 and 11 has a discontinuous line of descent? A number of students of the genealogies of the Bible have used the discontinuous nature of certain biblical genealogies to argue that the same holds true for Genesis 5 and 11 (cf. Horn 1960, p 196; Kitchen 1966, p 37; Geraty 1974, p 9-12). There are several considerations that call for comment.

It is suggested that the structure of Genesis 5 and 11 with ten antediluvian and ten postdiluvian patriarchs is an intentional arrangement, just as the genealogy in Matthew 1:1-17 has three sets of fourteen ancestors

each. This symmetry is thought to suggest an intentional arrangement and not a true continuous line of descent.

As far as the genealogy in Matthew is concerned, the schematization is apparent and can be supported by comparison with genealogical data in the OT. Can the same be demonstrated for Genesis 5 and 11? Is there a ten-plus-ten scheme in Genesis 5 and 11? A simple counting of patriarchs in Genesis 5 and 11 reveals that there is no schematic ten-ten sequence. In Genesis 5 there is a line of ten patriarchs from Adam to Noah who had three sons, but in Genesis 11:26 the line of patriarchs consists of only nine members from Shem to Terah who "became the father of Abram, Nahor and Haran" (Gen 11:26, NASB). If Abraham is to be counted as the tenth patriarch in Genesis 11, then consistency requires that Shem is counted as the eleventh patriarch in Genesis 5, because each genealogy concludes with a patriarch for whom three sons are mentioned. It appears that a comparison of Genesis 5:32 and 11:26 reveals that there are no grounds to count one of the three sons in one instance and not in the other, when in fact the formula is the same. Thus, if one counts in Genesis 5 ten patriarchs, consistency demands the counting of nine patriarchs in Genesis 11, or, vice versa, if one counts eleven in Genesis 5, then one needs to count ten in Genesis 11. The figures 10/9 to 11/10 respectively can hardly qualify as an intentional arrangement or a symmetry. In short, the alleged "symmetry of ten generations before the Flood and ten generations after the Flood" (Kitchen 1966, p 37; cf. Geraty 1974, p 15) is non-existent in the Hebrew text. Thus the analogy with the three series of fourteen generations in Matthew 1:1-17 is a non sequitur.

Let us return briefly to the matter of the "second" Cainan (Kenan) which is found in certain Septuagint manuscripts, making ten generations in the Greek translation alone (and in the pseudepigraphical book of Jubilees). The Septuagint assigns to Cainan (Kenan) 130 years before the birth of his son and 330 years thereafter. The fact that these figures are identical with the ones of Selach who follows him makes the existence of this Cainan suspect. The question as to what text is original is assessed by J. Skinner as follows: "That this is a secondary alteration [in the LXX] is almost certain, because (a) it is wanting in 1 Ch 1:18,24 LXX; (b) Kenan already occurs in the former genealogy (5:9ff.); and (c) the figures [assigned to Kenan] simply duplicate those of Shelach" (Skinner 1930, p231). It seems reasonable to assume that this "second" Cainan (Kenan) is a later scribal addition in the Septuagint. It may be occasioned by an attempt to schematize, which is characteristic of the Septuagint version in Genesis 5 and 11.

The genealogy of Jesus in Matthew 1:1-17 is selective and discontinuous. For example, in Matthew 1:8 it is stated that "Joram begat Uzziah"

but passages such as 2 Kings 8:25,11:2; 14:1, 21 indicate that the continuous line of descent from Joram to Uzziah was Joram-Ahaziah-Joash-Amaziah-Uzziah. Three intermediary generations were omitted. The intent of Matthew 1:8 according to Kitchen is thus "Joram begat (the line culminating in) Uzziah" (Kitchen 1966, p 38). As far as Matthew is concerned, this is quite correct, but the chronological conclusion drawn from this genealogical data, namely that "A begat (the line culminating in) B" as far as "chronology is concerned" (Kitchen 1966, p 38) is unwarranted. The data of Matthew do not support a chronological argument because the Matthean genealogy lacks in toto any kind of chronological or time information. Matthew speaks of father-son or ancestor-descendant relationships, but it does not contain a genealogy with time specifications. The literary form of Matthew's genealogy is not that of a chronogenealogy. This point is too obvious for the careful reader and does not need to be belabored.

The formulae used in Matthew and Genesis 5 and 11 are radically different. We have noted already that Genesis 5 has a consistent formula, with few minor exceptions, that reads, "When PN_1 had lived x years, he fathered PN_2 . And PN_1 lived after he fathered PN_2 y years, and he fathered other sons and daughters. And all the days of PN_1 were z years." Genesis 11 has essentially the same formula, but omits consistently the last clause, "And all the days of PN_1 were z years." The formula in Matthew on the contrary is simply, " PN_1 begat PN_2 " with slight variations when the mother of PN_2 is also mentioned.

Those who suggest an analogy between Genesis 5 and 11 and Matthew 1 (or other genealogies in the Bible) are faced with momentous difficulties: 1) Genesis 5 and 11 do not have a ten-ten schema that would correspond to Matthew's fourteen-fourteen-fourteen generation schema. Genesis 5 lists ten generations and Genesis 11 only nine. 2) The structures of the formulae in Genesis 5 and 11 are diverse from the ones in other genealogies. 3) Only Genesis 5 and 11 have time specifications, and they reflect the literary form of chronogenealogy. 4) The supposition that Genesis 5 and 11 are discontinuous "leaves the Bible's detailed list of figures as generally pointless and also posits an unusually high proportion of omitted links" (Payne 1976, p 831).

Our considerations of the biblical evidence regarding the question of the continuous line of descent in Genesis 5 and 11:10-26 has indicated that the arguments against the apparent continuous line of descent in these chapters are far from compelling. The fact that some biblical genealogies have a discontinuous line of descent and in turn lack any interlocking chronological information of spans of life can hardly function as a key to determine that Genesis 5 and 11 are also discontinuous. The internal nature

of Genesis 5 and 11, the usage of their own formula, and the interlocking nature of the time specifications do not allow that these chronogenealogies are anything but presenting a continuous line of descent. Where this is denied, it has to be frankly admitted that it is done at the expense of the unique nature of the material in Genesis 5 and 11 when compared to similar material in the Bible and the ancient Near East. In other words, the uniqueness of Genesis 5 and 11 in both their literary forms and contents must be disregarded and leveled out to bring these chapters to the place where a one-by-one correspondence with other genealogies or lists can be meaningful. We question the soundness of this methodological procedure.

As regards the archaeological-historical and prehistorical time frames that stand in tension with the computation of the chronological information of Genesis 5 and 11, the issues turn around the validity and force of one over the other. Here the question of the historicity of Genesis 5 and 11, the authority of the biblical materials when in conflict with historical reconstruction and/or scientific interpretations, and related matters appear in full force. There is a scholarly tradition that argues that wherever and whenever the conclusions of historians, scientists, sociologists, etc., are in disagreement with the Bible, the Bible will have to be reinterpreted to be brought into harmony with these conclusions. Another scholarly position is not so ready to yield everything outside of faith and conduct to the norms of the investigator, but maintains that where the Bible impinges on subjects such as history, geography, ethnology, botany, astronomy, etc., it is trustworthy. Thus the Word of God is seen to impinge on historical, scientific and other phenomena. For them the subordinating of biblical reports to modern scientific reconstructions and interpretations remains highly problematic and reverses the structure of authority.

III. INTERPRETATIONS OF CHRONOLOGICAL INFORMATION IN GENESIS 5 AND 11

There are two major types of interpretations of the chronological information in Genesis 5 and 11. These types of interpretation are closely associated with the stance taken by the respective interpreters on the textual, historical-archaeological, biblical-genealogical, and literary forms. It will be our attempt to describe succinctly positions for both the non-historical and the historical interpretations. In addition to being descriptive, we will attempt to be evaluative, indicating respective strengths and weaknesses wherever possible.

A. Non-Historical Interpretations

There are several interpretations of Genesis 5 and 11 which are non-historical. They share in common the view that the figures or time specifi-

cations have meaning, but that this meaning is found in either a system or schema and lacks any historical-chronological significance for the construction of a chronology.

1. The "Great Year" System

A schematization of Genesis 5 and 11 as well as all Old Testament chronology was popularized by the famous OT critic Julius Wellhausen. He, as with others before him (e.g., T. Noeldeke & A. Dillmann), suggested that the figures in Genesis 5 and 11 along with other OT chronological information reflect an artificial schema. These critics shared a generally low view of the historical value of the OT and particularly its chronological data which they believed reflected a schematization of exilic origins. Following earlier scholars, Wellhausen suggested that the schema of a "Great Year" of 4000 years is followed, i.e., the period from Adam to the Exodus is 2666 years or 26 ²/₂ generations of 100 years each. This is ²/₂ of a world cycle of 4000 years (Wellhausen 1965, p. 308). The remaining ¹/₂ of the "Great Year" of 4000 years is accounted for from the building of Solomon's temple 480 years after the Exodus (1 Kings 6:1), i.e., A.M. 3146, and an additional 430 years assigned to the kings of Judah reaching down to the fall of Jerusalem (see Curtis 1898, p 401-403). To this must be added 50 years for the exile. The computation of these years add up to A.M. 3626 which is correlated with the edict of Cyrus in 538 B.C. From there to the rededication of the Temple by the Maccabees in 164 B.C. is 374 years and completes the "Great Year" of 4000 years (cf. Johnson 1969, p 32; Kuhl 1961, p 62).

This schematic hypothesis is very problematic, because of difficulties in computing in order to arrive at certain spans of time needed for the "Great Year." Several such problems may be mentioned. 1) The year A.M. 2666 from Adam to the Exodus is incorrect. The Masoretic text provides from Adam to Abraham 1948 years to which must be added the 430 years of Exodus 12:40 and 290 years of Genesis 21:5; 25:26; 47:9. The total amounts to 2668 years and not 2666 years. In other words, the year of the flood is missing as is the time to the birth of Shem's son. 2) The period of the Judean kings from the building of the Temple in 970 B.C. down to 586 B.C., the destruction of Jerusalem, is 384 years and not 430 years. There is a discrepancy of 46 years. 3) The captivity did not last 50 years but 70 years (Jere 25:1), the first 19 years of captivity having begun in 605 B.C. (Dan 1:1), are concurrent with the period of Judean kings. From 586 B.C. to 538 B.C. there are but 48 years. 4) It does not fit the best chronological evidence at hand for the schema to come out to 164 B.C. 5) Furthermore, the assumption that the biblical chronology was revised in the Maccabean period is without textual and

historical support (Johnson 1969, p 32-33) and contradicted by the canonization of the OT (Leiman 1976). This and similar schematic systems (cf. Skinner 1930, p 234-235) hardly recommend themselves on the basis of the current state of archaeological and historical information.

2. The "Secret System"

Two Swedish scholars have attempted to correlate the entire OT chronology from creation to the return from Exile on the basis of what they consider to be a "secret system" which they believe Hebrew scribes devised. They believe that these scribes corrected the Hebrew text of the OT to suit their scribal schematization (Stenring 1966; Larsson 1973).

Stenring's study is influenced by Jewish cabalistic speculations. His hypothesis is built upon the view that there was originally a twelve-book canon of the OT which contained only the Pentateuch, the historical books (Former Prophets) and 1-2 Chronicles, including Ezra 1:1-3:7, and Jeremiah and Ezekiel. This supposedly original canon experienced a scribal redaction with a "chronology [that] seems to have been deliberately hidden" (Larsson 1973, p 3). The chronological dates were correct, "not always historically, of course, but as part of a system" (Larsson 1973, p 7). The secret system of the scribes consisted of the taking of the lunar calendar of 354 days, a solar calendar of 365 days, and the Canopus intercalated calendar of 366 days. These three calendars started from the first day of creation and ran parallel thereafter (Stenring 1966, p 8-10). The test for this hypothesis was applied by the mathematician Larsson on the basis of statistical probability.

The figures of Genesis 5 and 11 are part of the "secret system" of Hebrew scribes as is all chronological information in the OT. The figures that Stenring and Larsson have for Genesis 5 are 1657 years with the lunar calendar, 1607 with the solar calendar, and 1606 years with the standard (intercalated) calendar (Larsson 1973, p 104). The birth of Abraham took place respectively in the years 1880, 1823, and 1822 from creation (Larsson 1973, p 106). These figures are part of the "secret system" and are not to be correlated with historical dates.

Among advantages of this "secret system" is the fact that the chronological information in Genesis 5 and 11 as well as the entire OT is taken seriously and consecutively computed. Among the weaknesses are: 1) Its failure to correlate the information with extrabiblical data (DeVries 1976, p 162); 2) the lack of evidence for the large-scale revision of the chronological information of the OT by Hebrew scribes; 3) the lack of evidence for the supposed twelve book canon; 4) the alleged arbitrariness of Hebrew scribes with this type of information when the OT has by and large a strong sense of history; and 5) the fact that the most difficult chronological

area in the OT, i.e., the numbers of the Hebrew kings, has been successfully solved in recent years by sound correlations with extrabiblical literary and historical data. The Bible's chronology is not systematically schematic. It demonstrates itself to be historical time and again.

3. Systems of Figures

Various scholars attach meaning to the figures in Genesis 5 and 11 on the basis of a variety of systems. In some instances the systems of figures are part of numerology and in others they are not.

The famous Jewish exegete U. Cassuto suggests that the figures in Genesis 5 (and 11) "are multiples of five with the addition of seven" (Cassuto 1961, p 260). An earlier attempt notes that the figures for the antediluvian patriarchs can be computed by 39×42 years and the period of time from creation to Abraham's entry into Canaan by $6 \times 7 \times 7 \times 7$ or 42×49 years (Fischer 1911, p 242, 251). It is striking that in the latter case the textual information has to be adjusted to fit the scheme.

Another scholar builds his system on the sum of certain numbers such as 735 which is 15×49 , i.e., the ages of begetting Noah, Shem, and Arphachshad total 500 + 100 + 135 = 735 or 15 jubilees of 49 years (Meysing 1962, 1965). According to this system Abraham was born "exactly 40 jubilees after 1 A.M." (Meysing 1962, p 28). For this system to work, because there is a discrepancy of computation, the child needs to be born in each instance exactly nine months, or ¾ of one year, after it was fathered according to the biblical text. Even if this precision were granted — and the text knows nothing of this — there is still a computational discrepancy of several months that has to be left out of consideration. The text also gives no hint why one should add the ages of but three — and why these three — patriarchs to arrive at the $15 \times 49 = 735$ years.

Other attempts suggest a symmetrical or symbolical system of the number "seven" (Makleot 1956/7, p 234-236) or claims that there is a "seventh generation" convention (Sasson 1976, p 355).

These systems of figures share in common the view that there is some kind of meaning behind the figures, the key of which has to be recovered. The suggested keys do not fit as easily as one thinks. At times the text is adjusted to make the key fit; at other times the suggestion is forced to add time information outside Genesis 5 and 11. The disparity between the various systems has not recommended them to many scholars. Yet they are serious attempts to find meaning in the figures of Genesis 5 and 11. The figures are not simply dismissed as meaningless.

4. The Discontinuous System

The discontinuous system holds that the lists of the patriarchs in Genesis 5 and 11 is discontinuous. It "assume[s] that a number of links

have dropped out and that only a number of patriarchs are listed" (Horn 1975, p 340). Based upon this assumption is the conclusion, "We see in the genealogical lists of Genesis 5 and 11 no absolutely complete records, but only selections or excerpts of longer lists of generations" (Horn 1975, p 341). Those who accept the hypothesis of a discontinuous system without a direct succession of one generation to another, from father to son, do so because the creation of man in the near past "is untenable in the light of attested archaeological facts" (Unger 1960, p 202) and/or because anthropological study does not support it (Kitchen 1966, p 35-36). Scholars adopting the hypothesis of a discontinuous system deny that the length between creation and flood can be determined by the figures provided in Genesis 5 (cf. Horn 1975, p 340) so that "a theory of disconnected patriarchs could thus allow Adam to be dated 100,000 B.C. or earlier" (Payne 1976, p 831).

Among the advantages of the discontinuous system of interpreting Genesis 5 and 11 is the unlimited freedom it gives to anthropology and archaeology for both historical and prehistorical periods and "the deductions of science" (Green 1979, p 50). There are also major problems. 1) The theory that Genesis 5 and 11 are selections or excerpts of longer lists of generations is built on historical and scientific premises not present within Scripture. 2) The alleged analogy with other biblical genealogies is dubious on account of the different forms, structures, and purposes of the genealogies in Scripture (see above II.A,C). 3) There is an inability to account for the meaning of the numbers to the birth of the named son. If the sole purpose of the figures had been to indicate the loss of vitality due to sin, then the fathering of the first-named son would be unnecessary. 4) The invitation to add up the numbers is implicit because in the case of each antediluvian patriarch the figures provided before the birth of the named son and the figures provided for the subsequent life-span is added up to provide the total life-span. It is not unreasonable to continue that lead and add up the numbers for the entire periods from Adam to Noah and then from Seth to Terah.

B. Historical Interpretations

At present there are two major historical interpretations, i.e., interpretations that do not dismiss the figures in Genesis 5 and 11 as non-historical. We will describe the more recent approach first and then depict the standard historical interpretation.

1. Successive Method of Reckoning

This method of reckoning counts the years of successive patriarchs. It follows an observation of W. F. Albright who suggested that ancient Near Eastern peoples "dated long periods of lifetimes, not by generations" (Albright 1961, p 50). An application of this "counting by 'successive'

patriarchs [in Genesis 5] would mean, e.g., that while Adam begat an ancestor of Seth when he was 130 (Gen. 5:3), Seth (5:6-8) actually arose as Scripture's next prominent figure only after Adam's full life of 930 years (5:4)" (Payne 1976, p 831). According to this "successive" reckoning the flood occurred 3284 years before Abraham and the creation of Adam 8225 years before the flood (Payne 1976, p 831), i.e., in 5458 B.C. and 13,683 B.C. respectively, if the birth of Abraham is dated to ca. 2170 B.C.

The successive method of reckoning is an accommodation to the needs of current historical study of the ancient world. History based on written records began in both Mesopotamia and Egypt at ca. 3000 B.C. This approach accounts admirably for the historical periods of the ancient Near East. However, the first indications of sedentary life in the Near East is presently dated between 9000 and 7000 B.C. The relative chronology also dates the beginnings of Jericho to ca. 7000 B.C. Thus a flood at about 5500 B.C. is of help, but if the dating procedures for the prehistoric period, i.e., before ca. 3000 B.C., are accepted, then this successive method of reckoning would still not be long enough.

A distinct difficulty of the successive method of reckoning is evident in the biblical text. The repeated phrase "and he fathered PN" (wayyôled et-PN) appears fifteen times in the OT — all of them in Genesis 5 and 11. In two additional instances the names of three sons are provided (Gen 5:32; 11:26). The same verbal form as in this phrase (i.e., wayyôled) is employed another sixteen times in the phrase "and he fathered (other) sons and daughters" (Genesis 5:4, 7, 10, etc.; 11:11, 13, 17, etc.). Remaining usages of this verbal form in the Hiphil in the book of Genesis reveal that the expression "and he fathered" (wayyôled) is used in the sense of a direct physical offspring (Gen 5:3; 6:10). A direct physical offspring is evident in each of the remaining usages of the Hiphil of wayyôled, "and he fathered," in the OT (Judg 11:1; 1 Chron 8:9; 14:3; 2 Chron 11:21; 13:21; 24:3). The same expression reappears twice in the genealogies in 1 Chronicles where the wording "and Abraham fathered Isaac" (1 Chron 1:34; cf. 5:37 [6:11]) rules out that the named son is but a distant descendant of the patriarch instead of a direct physical offspring. Thus the phrase "and he fathered PN" in Genesis 5 and 11 cannot mean Adam "begat an ancestor of Seth." The view that Seth and any named son in Genesis 5 and 11 is but a distant descendant falters in view of the evidence of the Hebrew language used.

2. Overlapping Method of Reckoning

This approach is one that is employed for about two millennia. It counts for each patriarch only the years prior to the birth of his named son. The most famous system of "overlapping" reckoning is that used by Archbishop James Ussher as advocated in his *Annales Veteris et Novi*

Testamenti (1650-54). His system met with so much success that the dates he presented have been entered into the margins of English Bibles since 1679. Ussher calculated the birth of Jesus to have occurred in 4 B.C. and fixed the date for creation at 4004 B.C. Although many NT scholars today subscribe to Ussher's date for the birth of Jesus, the fact that his chronology places the beginning of creation exactly 4000 years before the birth of Jesus has led to the suggestion that Ussher's calculation of 4004 B.C., although dependent upon his reconstruction of OT chronological material, may have been influenced by a Jewish midrash quoted twice in the Babylonian Talmud (Sanhedrin 97a; Abod. Zar. 9a). This midrash speaks of two times two millennia (i.e., 4000 years) before the age of the Messiah was to begin, an age that also is to last two millennia (Leeman 1977). However this may be, Ussher did not yet understand the period of the Hebrew kings and thus dated the building of the Temple in Solomon's fourth year (1 Kings 6:1) to 1012 B.C., whereas current knowledge makes it possible to pinpoint it to 970 B.C. He dated the Exodus to 1491 B.C., whereas we reckon it to have taken place in ca. 1450 B.C. The birth of Abraham is dated to ca. 1995 B.C. which means that Ussher followed the Septuagint reading for Exodus 12:40. Reckoning back from this date by means of Genesis 11, Ussher arrived at this date and at the date of 2349 B.C. for the flood. In arriving at this date and at the date of 4004 B.C. for creation, Ussher selected data from the Hebrew text and the Greek Septuagint translation. Ussher's date of 4004 B.C. can no longer stand, because there is no sound rationale for the selective use of chronological data from the Hebrew text (MT) and/or the Greek translation (LXX).

Approximate dates for the flood as derived from the overlapping method have already been shown in Charts B and C above. The figures and dates in Charts A-C have been presented to indicate the variations in the major textual recensions. The difficult matter of the priority of the respective figures has been discussed previously (Hasel 1980). Many Christians still believe that reckoning by the overlapping method is the one most consistent with the biblical text.

The major weakness of the overlapping method of reckoning is its head-on conflict with standard interpretations of time needed for prehistoric and historical reconstructions. These kinds of conflicts have led certain scholars to posit gaps in the chronogenealogies of Genesis 5 and 11 and to argue for a discontinuous line of descent. Serious problems in these approaches and the dubious nature of the arguments used in their support were analyzed above. In this writer's opinion the basic issue is whether modern reconstructions of ancient history and prehistory are an authoritative norm for the interpretation or reinterpretation of the Bible. If this is the case, then modern man's historical and scientific endeavors are raised

to the level of an absolute norm. It follows that the Bible must yield in these areas of conflict. A contrary view is that ultimate authority for knowledge and faith is provided in the superior revelation of God in the Bible, and whenever biblical information impinges on matters of history, age of the earth, origins, etc., the data observed must be interpreted and reconstructed in view of this superior divine revelation which is supremely embodied in the Bible.

Some would argue that Genesis 1-11, including the genealogies, are but theology and not history, that is, these chapters are primeval history in the sense that they do not provide us verifiable history, but rather testimonies that emphasize that God is Creator, Sustainer, Savior and Judge. This view is also an accommodation to the physical and life sciences and is the result of an acceptance of modernistic and/or evolutionary patterns of the origin and history of our planet and life thereon.

IV. CONCLUSION

There is no doubt that time and its progression functions in a most profound way in the Bible. This is evident from the beginning. Genesis creation is intended to be the beginning or opening of history. History begins with time and space and consists of functions in time and space. The Genesis creation account is part of a history which contains numbers and time sequences. The genealogies in Genesis 5 and 11:10-26 contribute to the progression of time in Scripture. They trace humankind in time and through time forward to two heroes: Noah, who survives the flood with his family, and Terah, who becomes the father of the progenitor of God's people. The succession from father to son together with the spans of time indicates God's blessing and grace in view of sin and death. People spread to the farthest reaches of time (Gen 5 and 11) and space (Gen 10). It was God's purpose that humankind proceed in an unbroken chain of generations in space and time. In this sense, Genesis 5 and 11:10-26 is both historical and theological, linking Adam with the rest of humankind and God with man in the realm of the reaches of space and time. Genesis 5 and 11:10-26 provide the time framework and human chain that link God's people with the man whom God created as the climax of the six-day creation event of this planet.

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