# FROM ADAM TO NOAH: A RECONSIDERATION OF THE ANTEDILUVIAN PATRIARCHS' AGES 

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The narrative material of Gen 5:3-32, which catalogued the ages of the principal descendants of Adam through the line of Seth, has long been a matter for debate, if only because of the apparently exaggerated lifespans attributed to the individuals listed there.

Until the rise of rational Biblical criticism in the eighteenth century the lengthy ages were accepted much as they stood, out of deference to the sanctity of the divinely-revealed Hebrew tradition. But when literary critics disregarded the concepts of revelation and inspiration and began to treat the Hebrew Scriptures as nothing more than a collection of national records, often of uncertain provenance and riddled with mythology, a vastly different set of interpretative criteria came to the forefront.

Following certain European principles of literary criticism and influenced by the notion of supposed human biological evolution, the hypothesis developed by Julius Wellhausen (1844-1918) envisioned the growth of Biblical material from rudimentary beginnings until it attained its climax in the late postexilic period (about the second century bc). As far as the Pentateuch was concerned, this approach was worked out in great and often conflicting detail, resulting in the recognition of four supposed basic literary components. ${ }^{1}$

The developed hypothesis was entirely subjective in nature and, as was the case with Darwin's evolutionary views, was entirely untroubled by the exercise of any objective control. Nevertheless external data began to appear in the nineteenth century, and when archeological discoveries brought an entirely new perspective to bear upon ancient Near Eastern studies it became possible for literary-critical procedures to be scrutinized rigorously and to be shown to possess serious flaws in important areas.

It is now seen to be no longer appropriate to dismiss the early materials in Genesis as either legendary or mythological. Instead it has become important for investigators to recognize these sources as being in consonance with analogous Mesopotamian social traditions and records and to assess them accordingly in the light of what is now known about that cultural background.

[^0]For the literary record that preserved data about the antediluvian $\mathrm{He}-$ brew patriarchs (Gen 5:3-32) the most obvious object of comparison from Mesopotamia was the ancient Sumerian King List recovered from Kish, especially the predeluge portion of that source. ${ }^{2}$ Dated about 2000 Bc , the prism listed the rulers of certain Sumerian cities prior to a devastating flood and assigned to them reigns that were greatly exaggerated in length and that appeared to be of dubious rationality.

But when the Hebrew and the Sumerian sources are set side by side it becomes apparent that the large numbers reflect a common if poorlyunderstood Mesopotamian tradition and that the Genesis tabulation should accordingly be viewed against such a cultural background. Instead of dismissing it as myth or legend, therefore, the investigator is under an obligation to recognize it as a genuine ancient historical source that was one in intent with the king lists of Babylonia, Assyria, Egypt and the Hittites.

In ancient Near Eastern tradition, tabulations of this kind were invariably early rather than late in origin, as opposed to Wellhausen's hypothesis, and could have had their origins equally in the activities of scribes attached to royal courts, from priests or annalists connected with temple archives, or from privately-commissioned family records. According to the Wiseman-Harrison analysis ${ }^{3}$ Genesis 5 formed part of the proposed third compositional tablet (Gen 5:3-6:9a), which with a total of ten such sources comprised 1:1-37:2a.

That Gen 5:3-32 came ultimately into the possession of Noah and was augmented by contemporary records is indicated by a colophon: "These are the tôlĕdôt (narratives, records, family histories) of Noah" (6:9a). In Mesopotamian literary traditions a colophon, which contained material similar to what would occur on the title page of a modern book, formed the conclusion of a tablet. To discover the title (if one was extant) of the various tablets that are thought to constitute much of the book of Genesis, one had to look backwards to the end of the preceding colophon. Thus in the case of the proposed third tablet the title was probably quite simply "And Adam" (5:3). The chronological materials of Genesis 5 must thus be seen as distinctive to early Hebrew historical tradition, just as the records of the Sumerian King List were to the renowned colonists of ancient Iraq.

In an earlier phase of Near Eastern scholarship it was assumed that human culture had developed slowly from primitive beginnings and had reached its apex at a much later date. This notion has now been disabused by the study of ancient Egyptian culture, which arose without any evident precursors in a highly developed stage at the beginning of the Old Kingdom period (c. 2700-2200 Bc) and then degenerated until Egypt became part of the Roman empire in 30 BC with the suicide of Queen Cleopatra. While the

[^1]cultural decline was slowed temporarily by an occasional interval of revival, such as occurred in the New Kingdom period (c. 1570-1095), it was never actually reversed.

Similarly it is now known that the Sumerians were a highly intelligent people who made basic discoveries in astronomy, mathematics, and other areas of science, reduced speech to writing, and formulated religious concepts that influenced human life for many centuries. ${ }^{4}$ Again there are no attestable historical antecedents that would account for this brilliant outburst of culture upon human society. It is because of the labors of scholars in the present century that we are able to marvel at the range of Sumerian discoveries in the arts, religion and sciences. In connection with the latter, so vastly improved is our knowledge of scientific procedures in the ancient Near East in general that it is now possible for scholars to speak in terms of "exact sciences" in that remote period. ${ }^{5}$

On the basis of this background, therefore, it is now proper to assert the probability that the apparently unwieldy numbers of the Sumerian King List are in fact accredited schematic mathematical formulations that, when interpreted as such, reveal the means by which they were constructed. As has been indicated elsewhere, ${ }^{6}$ the large numbers can be broken down into the square of a specific base that has been multiplied by the number that indicated the years of actual rule by the various individuals.

By transferring this mathematical tradition to the list of the Hebrew patriarchs from Adam to Noah, I shall make an attempt to interpret the ages of the persons concerned on an analogous basis. The genealogical material contained in Genesis 5 are listed in Table 1 on p. $164 .{ }^{7}$

This genealogy is in linear format, but if the sons of Noah (6:10) are included the structure then becomes segmented. ${ }^{8}$ Considerable study has been expended upon the ancient Biblical genealogies ${ }^{9}$ with some significant results. These lists, it appears, did not always record continuity of descent but sometimes omitted generations-either because the individuals were deemed to be unworthy of consideration, or for purely stylistic reasons. With regard to the patriarchs listed above, principles of selectivity were evidently

[^2]Table 1. The Hebrew Patriarchs from Adam to Noah

| Name | Age at birth <br> of first son | Total years |
| :--- | :---: | :---: |
| Adam | 130 | 930 |
| Seth | 105 | 912 |
| Enosh | 90 | 905 |
| Kenan | 70 | 910 |
| Mahalalel | 65 | 895 |
| Jared | 162 | 962 |
| Enoch | 65 | 365 |
| Methuselah | 187 | 969 |
| Lamech | 182 | 777 |
| Noah | 500 | 950 |

at work to produce a table comprising ten generations prior to the flood and another ten generations subsequent to it. The same traditions were being followed as late as NT times, as in Matthew's gospel (1:1-17), which contained three series of fourteen generations with certain compressions, as in $1: 8 .{ }^{10}$ In the case of the patriarchal list the linear format may well conceal some omissions, such as the names of one or more female children who preceded the birth of the legitimate male heir. Notwithstanding such a possibility the genealogy traced the descent from Adam through Seth quite legitimately.

A mathematical approach will now be undertaken in an attempt to reassess the ages of the antediluvian Hebrew patriarchs in consonance with an early Mesopotamian tradition. The normal Sumerian base for calculation (base-60) is clearly contraindicated because the numbers in the MT are too small to make it feasible. In any event, base- 60 calculations appear to have been restricted mainly to the Sumerians since the later Babylonians, for example, seem to have employed base- 10 reckoning predominantly in what was probably an attempt to simplify the mathematical processes. Of the various possibilities available, base-2 appears to be the most satisfactory since it is simple to use and still reflects the ancient Near Eastern tradition of great lifespans in connection with prominent regal or patriarchal personages.

The genealogy follows a distinctive pattern that comprises first of all naming the patriarch concerned and then recording his age at the birth of his first male successor. As noted previously, this person could well have been preceded by one or more female offspring who for the purposes of the genealogy remained unrecorded. After this the remaining years of the patriarch's

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## Table 2. Reassessment of Patriarchal Ages

|  | Age at birth of <br> successor in years <br> and months | Total age in <br> years and months |  |  |
| :--- | ---: | :--- | :--- | :--- |
| Name | 32 | 6 | 232 | 6 |
| Adam | 26 | 3 | 228 |  |
| Seth | 22 | 6 | 226 | 3 |
| Enosh | 17 | 6 | 227 | 6 |
| Kenan | 16 | 3 | 223 | 9 |
| Mahalalel | 40 | 6 | 240 | 6 |
| Jared | 16 | 3 |  |  |
| Enoch | 46 | 9 | 242 | 3 |
| Methuselah | 45 | 6 | 194 | 3 |
| Lamech | 125 |  | 237 | 6 |
| Noah |  |  |  |  |

life were noted, frequently accompanied by a reference to other offspring, and finally the total years of his life were calculated. A formal obituary statement followed each of the patriarchal entries except in the case of Enoch, where an explanation of the circumstances surrounding his departure from earthly life was furnished.

The numerical data of the ancient genealogical record can now be restated by employing a formula:

$$
\frac{\mathrm{T}_{\mathrm{r}}}{\mathrm{~B}^{2}}=\mathrm{A}_{\mathrm{t}}
$$

$T_{r}$ is the record of the MT, $B$ is base- 2 raised to the power of 2 to give base-2 squared, and $A_{t}$ is the actual time in years and months of the individuals' lives.

The statistics for Enoch in Table 2 have been left incomplete because of the special nature of his life circumstances, and this matter must now be given particular consideration. Enoch was the seventh in descent from Adam in the regular chronologies of the line of Seth ( $1 \mathrm{Chr} 1: 3$ ) and proved to be so memorable an individual that his relatively brief life was still being recalled vividly in NT times. For example, in the letter of Jude (vv. 1415) a prophecy attributed to him was cited approvingly.

Enoch was the son of Jared (Gen 5:16), being born when his father was 182 years old (according to the MT). There is no evidence to indicate that Enoch would not enjoy a normal, healthy life, and in his sixty-fifth year his son Methuselah was born, who was to become the grandfather of Noah. Subsequently Enoch procreated other children, but he became renowned for his close communion with God ( $5: 24$ ), a circumstance that seems to have arisen in earnest soon after the birth of Methuselah.

On account of his devout life Enoch was, in the words of the author of the epistle to the Hebrews ( $11: 5 \mathrm{KJV}$ ), "translated that he should not see death." He and Elijah ( $2 \mathrm{Kgs} 2: 11$ ) were the only persons in the OT to be taken up to heaven in this manner, and so lasting was the memory of this
phenomenon over the centuries that, according to early Christian ecclesiastical tradition, these men were the "two witnesses" alluded to in the book of Revelation (11:3). But quite aside from any other claims to fame, Enoch and Elijah demonstrated dramatically and incontrovertibly the fact of immortality to their Hebrew contemporaries and, by inference, to their successors.

When apocalyptic literature arose in the intertestamental period, Enoch's name was associated with writings that purported to reveal divine secrets concerning the future for the encouragement of believers in times of persecution. This literature maintained that Enoch possessed superior knowledge of evil powers, fallen angels, and the like, but at the same time the authors of these works cited Enoch as affirming that God's power would prevail over wickedness and that in the end the righteous would inherit the kingdom. ${ }^{11}$

For our present purposes, however, a rather closer look must be taken at his earthly life, brief though it proved to be when compared with those of the other patriarchs. According to the MT he was 65 years of age when his first son was born, which compares favorably with Kenan, who was 70 when Mahalalel was born, and also with Mahalalel himself, who fathered Jared at the age of 65 . But these two patriarchs lived to be 910 and 895 years of age respectively, bringing other children into the world, whereas Enoch, who also procreated additional offspring, was removed from human society suddenly and dramatically at the age of 365 years. By contrast Lamech lived more than twice as long as Enoch, and the other patriarchs exceeded even that achievement.

We are dealing, in short, with a life that was truncated significantly and deliberately by God (Gen 5:24). But notwithstanding this circumstance the ancient scribe still followed the same pattern of recording Enoch's life as that which had been established for the other patriarchs. Though this is perfectly proper from the scribe's perspective, it presents considerable difficulties for the modern scholar when attempting to evaluate it against the background of comparative study of the other individuals in the list. If the lifespan is accepted at face value without any other form of interpretation, it distorts the statistical picture significantly because in actual fact it only depicts a life that was approximately one-third the length in average of the other patriarchs.

It would seem evident, therefore, that in order to avoid a statistical methodological error the remaining two-thirds or so of life that Enoch would have enjoyed under other circumstances must be factored into any calculation on a scaled or proportional basis. The situation can then be placed in proper mathematical perspective by the simple expedient of obtaining an average lifespan for the remaining patriarchs, excluding Enoch, and crediting the appropriate balance to him.

[^4]On the basis of the calculations in Table 2 the total years recorded amounted to about 2,052 for nine individuals. An average lifespan for those persons would be about 228 years. If this total is assigned for statistical purposes to Enoch, whose age at translation would have been approximately 91 years and 3 months, a span of some 137 years is "missing." Under normal circumstances Enoch would have completed a life of about 228 years and 3 months, which was quite close to the age of Seth. As a result of factoring in this "ideal" total in order to preserve methodological integrity, the data of the MT are shown to be correct in terms of an otherwise "whole-life" existence.

All of the foregoing notwithstanding, it is evident that the ages of the patriarchs, including the potential years of Enoch, are still considerably in excess of what would be considered "rational." In order to meet this situation fairly, it seems desirable to approach it from a sociological standpoint and to think as far as is possible in terms of the cultural factors that might be involved in the ancient oriental modes of reckoning years. This is necessary in order to forestall cross-cultural extrapolation, in which the dominant interpretative mode is specifically western rather than oriental. Such an approach, unfortunately, has led many investigators hopelessly astray.

Periodically there are reports from such diverse areas as Russia and South America of individuals claiming to be as old as 150 years. Occasionally some of these persons have submitted to physical examination by modern western physicians, who have assessed their ages at approximately one-half of what has been claimed. Two systems of reckoning are obviously being employed in such instances, and in consequence it is a serious cultural error for the local claim to be dismissed out of hand in favor of the considered opinions of occidental scientific medicine.

What is evidently needed is some sort of guide as to how and why such people have behaved regarding the calculation of their ages. One approach involves the recognition that some ancient forms of reckoning the years of a person's life need have no particular relationship to solar years, unlike the tradition entertained by western culture. One such cultural mode reported from ancient Chinese practice deemed a baby to be one year old on the day it was born. Some months later the baby was accorded its second birthday, and by the time that it was biologically about seven years of age by occidental reckoning it could be regarded locally as being fourteen or fifteen years old. On such a basis of computation it would be comparatively easy for a survivor of seventy biological years in western terms to be deemed by the traditional way of reckoning to be at least twice that age. What is important to recognize in such traditions of computation is that the "birthday" is a sociological phenomenon and not a biological one as in western society. As such it is not integrated with a solar calendar, and if this fact remains unrecognized, erroneous interpretative procedures will result.

Another explanation of allegedly long ages is seen in terms of demonstrably fraudulent reckoning. Recent reports from Russia indicate that, in order to escape the military draft, young men had actually added their fathers' ages to their own to produce totals that rendered them ineligible for
service in the armed forces. Again, in the absence of knowledge about this practice unwary occidental investigators could be misled completely, especially if they had also taken seriously the sometimes-conflicting recipes for longevity offered to them.

Aside from fraudulent purposes, the question as to why large ages should be a feature of some cultures has not been examined in significant detail by sociologists and anthropologists. As far as Genesis 5 is concerned, even if an allowance is made for the possible traditional reckonings of patriarchal ages, which should certainly be entertained, there is still an obvious element of enhancement characterizing the final computation.

Among possible explanations, two at least appear to have some bearing upon the situation. The first would regard the increasing of ages by the use of what appears to be a traditional formula as a worthy tribute to the memory of notable persons who had contributed meaningfully to the society of their time. This was customary in ancient Egypt, where the greatest accolade that could be bestowed upon a deceased man was the ascription: "He died aged 110" (cf. Gen 50:26; Josh 24:29; Judg 2:8).

The second and perhaps even more cogent suggestion has to do with the practice of ancestor worship in some ancient cultures, a custom that still survives in parts of the world. In this connection an impressive age accorded to a family patriarch would make his veneration all the more imperative. While there is no evidence whatever of ancestor worship in connection with the individuals listed from Adam to Noah, there is certainly no doubt that they commanded respect in their own time as well as forming the basis of an important early chronology. If only for these reasons they were immortalized for succeeding generations.

On examining the ages listed in Table 2, therefore, it may be possible to discern two stages by which the numbers reached their ultimate form. In the first instance they were most probably enhanced by a process of reckoning within the families themselves, the nature of which has yet to be discovered. The second stage, represented by the total years of age, involved a final "grossing up" that consisted of schematic increments based on a mathematical formula as was done in the Sumerian King List. ${ }^{12}$ The bulk of this work had already been done by an ancient archivist, but he, like the compiler of the Sumerian King List, remained anonymous. The final totals would thus seem to stand in an ancient Near Eastern tradition whereby eminent individuals were glorified by being accorded larger-than-life existences.

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[^0]:    * The late R K Harrison was professor emeritus of Old Testament at Wycliffe College, Unıversity of Toronto, Canada
    ${ }^{1}$ For a comprehensive survey see R K Harrison, Introduction to the Old Testament (Grand Rapids Eerdmans, 1969) 11-32, 495-541

[^1]:    ${ }^{2}$ For the literature see K A Kıtchen, Anclent Orıent and Old Testament (London Tyndale, 1966) 38 n 13, V P Hamılton, Genesıs Chapters 1-17 (NICOT, Grand Rapıds Eerdmans, 1990) 251-254, R K Harrıson, "Reınvestıgatıng the Antedıluvıan Sumerıan Kıng Lıst," JETS 36 (1993) 3-8
    ${ }^{3}$ For a description of this view see Harrison, Introductıon 64, 542-552

[^2]:    ${ }^{4}$ See S N Kramer, The Sumerıans Theır History, Culture and Character (Chicago Unıversity of Chicago, 1963)
    ${ }^{5}$ O Neugebauer, The Exact Scıences in Antıquity (New York Harper, 1957)
    6 Harrıson, "Reınvestıgating"
    ${ }^{7}$ We are dealing with three textual traditions here the MT, the LXX and the Samaritan Pentateuch The latter two are secondary sources, though obviously based on ancient texts, and hence the presence of some variant figures has no bearing on the issues raised here Accordingly we shall be considering the MT exclusively For the full comparative table see Harrison, Introductıon 150 The number 868 attributed to the MT "total years" column for Methuselah is a typographical error that should actually read " 969 "
    ${ }^{8}$ Hamilton, Genesıs 249-250 It is irrelevant for the purposes of this paper to consider the shorter genealogy of Gen 417-22, which also becomes segmented with the mention of Lamech's offspring, because of the complete absence of any age estimates This deficit might well suggest that it was older than and independent of the record in 53-32
    ${ }^{9}$ Cf R A Bowman, IDB $2362-365$ and bibliography, T C Mitchell and A R Millard, The Illustrated Bıble Dıctıonary 1546-548 and bibliography, R K Harrison, ISBE 2424-428 and bıblıography, R R Wılson, The Abingdon Bible Dictıonary 2 929-932 and bibliography

[^3]:    10 The postdiluvian section of the Sumerian King List actually omitted individual rulers and even some dynasties Cf C J Gadd, Cambrıdge Ancıent History 113 (2d ed, 1962) 16, T Jacobsen, The Sumerian King List (Assyriological Studies 11, Chicago Oriental Institute, 1964 [1939]) 180-183 Simılarly the Abydos King List of Egypt employed selective processes to omit three complete groups of rulers Cf Kitchen, Ancıent Orient 38

[^4]:    ${ }^{11}$ G E Ladd, ISBE 1 151-161, J H Charlesworth, The Old Testament Pseudepıgrapha (New York Doubleday, 1983) 15-315

[^5]:    12 It should be noted that there are significant differences in the character of these two ancient historical sources The Sumerian King List concerned itself primarily in the antediluvian section with an apparent mathematical dignifying of the length of reign of kings Genesis 5 , however, set out a catalogue of the entire hife of individuals in terms of stated sequences and is thus much more personal as a record of preflood descent through Seth Nevertheless it is my contention that both lists are amenable to some form of mathematical analysis, hence the suggested approach in Table 2

