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SEPTUAGINTAL VERSUS MASORETIC CHRONOLOGY IN GENESIS 5 AND 11

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ABSTRACT

As a result of analyzing the Dead Sea Scrolls, numerous scholars have concluded that before the first-century standardization of the Hebrew Masoretic text and the imposition of external rabbinical controls, some scribes employed text-correctional procedures, which are discoverable by comparing the extant textual witnesses. An analysis of three records indicates conscious harmonization of the chronological data rather than accidental error, perhaps in order to correct suspected errors or to conform to certain theological views. Patriarchal ages at death in Genesis 5 seem to have been recorded using the ancient sexagesimal numerical system, testifying to their great antiquity and providing a diagnostic test for reported ages in other biographical categories. Applying text-critical criteria to the evidence of the ages at paternity in the three traditions tends to the inference that the greater ages found in the Septuagint may be more independent, older, and possibly more original, with a stronger claim to authenticity than the lower ages reported in the Masoretic Text or the Samaritan Pentateuch.

INTRODUCTION

Our three major textual sources (the Masoretic Hebrew text [7; 38], here referred to as “M”; the Greek translation called the Septuagint or LXX [2; 20; 38; 39], here referred to as “G”; and the Samaritan Pentateuch [35; 38], here called “S”) differ in their presentations of pre- and post-Flood genealogical chronologies. M reports only 292 years from the Flood of Noah to Terah's 70th year. Mysteriously, S presents this period as 650 years longer than that, with an interval of 942 years; yet G reports even more time between these events: 1172 years. Thus, the Greek text presents a post-Flood period nearly 900 years longer than that reported by M. Is there any textual evidence that the greater ages of G of Genesis 5 and 11 could be more original than the younger ages of M? While we do not yet possess direct evidence that answers unequivocally, with extant texts from the pre-Christian era we can now engage this question.

Jesus Christ quoted Old Testament Scripture as being authoritative, and referred to it as “the word of God.” In affirming Ps. 82:6, He said, “The Scripture cannot be broken” (John 10:35). The same Holy Spirit who verbally inspired the Old Testament as originally given, also preserved it; but He did not superintend the transmission of the text in the same manner as He had its initial writing. The Bible, we are discovering, has had a complex history of transmission. The Lord Jesus and His apostles encountered Old Testament textual variants qualitatively similar to the ones we encounter. In Mark 7:10, our record of Jesus' quotation of Exodus 21:16 seems to use the Septuagint instead of the Masoretic (21:17). He was confronted with religious practice based on variants in the Samaritan Pentateuch (John 4:20) [35, Deuteronomy 27:4]. Yet He and His followers unhesitatingly affirmed the authority of Scripture [37]. In Matthew 5:18 (NASB), Jesus said, “For truly I say to you, until heaven and earth pass away, not the smallest letter or stroke shall pass away from the Law, until all is accomplished.” Unless He was here teaching scribal infallibility, He was surely not referring to the absolute perfection of the written copies. He used similar language in Matthew 24:35, declaring that His own words were as lasting as the heaven and the earth—yet not in written copies, for they were not then translated from the Aramaic and written down, and in any case, we have only a small part of His teaching. He is therefore probably referring to the truth, moral authority, and eternal force of His words, as enduring as those of the Old Testament [10, pp. 46-47].

With the discovery of the Dead Sea Scrolls (“DSS”), a new perspective has opened onto the history of the text of the Old Testament. We now have actual specimens of what have been called “proto-Masoretic,” “proto-Septuagint,” and debatably “proto-“ or “pre-Samaritan,” or “Samaritan-related” (here, “pre-S”) texts, from the centuries before Christ [31, pp. 80-1]. It seems that between Malachi and Paul there existed more than one textual tradition with complex relationships. Analysis and evaluation of the DSS have reinforced respect for M by demonstrating that it was handed down virtually unaltered for a

thousand years. Scholars have also gained a new esteem for G. Many now hold that the Greek translation was based on an *alternate Hebrew textual tradition*. The Greek translator of *Genesis* tried to stay as close as possible to his Hebrew *Vorlage*, the text before him, with a consistent word-equivalency translation technique [32, p. 76]. Other G translators also followed their texts far more closely than had previously been supposed [24, p. 14; 33, pp. 42, 101-2, 210]. The working assumption that G in general was a free-wheeling, innovative translation of proto-M has become something of a “scholarly anachronism.” Rather, G in many sections was a literalistic translation of a Hebrew text that differed in some details from M [11, pp. 16-17]. As James Davila wrote, “The most important general implication of the new Qumran material presented in this study is that we must take the LXX of *Genesis* very seriously as a source for a Hebrew textual tradition alternate to the MT. We have strong reason to believe that the translators of *Genesis* treated their *Vorlage* with respect and rendered the Hebrew text before them into Greek with great care and minimal interpretation” [quoted in 11, p. 17].

Manuscript evidence. The Old Greek was probably the earliest translation of the Old Testament. It is thought that a recension was made at the beginning of the first century before Christ, to harmonize it more with proto-M, which the central Jewish authorities preferred. G underwent a very complex history of transmission and is possibly not a unified entity, but originated in sections (the Pentateuch was translated first, sometimes put at c. 280 BC) [14; 33, p. 101]. The textual variation found in G manuscripts presents considerable difficulty and challenge. Neither the respected *Codex Vaticanus* nor the *Sinaiticus* is extant for the relevant parts of *Genesis*; the G chronology has to depend on the *Alexandrinus*, which in places carries textual corrections [44, p. 73]. But in spite of the new recognition of G’s value for critical reconstruction, M is usually thought to represent the best form of the text. The Hebrew *Codex Leningradensis*, the basis of the *Biblia Hebraica* [7], was copied in AD 1008 [44, p. 10]. The oldest extant Samaritan Pentateuch codex may be MS Add 1846 in the University Library in Cambridge, copied before AD 1150 [44, p. 47]. The preserved S texts reflect a form of the Hebrew script which dates from Hasmonean times [31, p. 82]. As has been fairly well established, the Samaritans adopted a text that had been commonly circulating in Palestine, which to a greater degree than either G or M, was characterized by expansion, insertion of parallel passages, and modernizing revisions [5, p. 141]. The three major sources, M, G, and S, are thought to be representatives of textual traditions perpetuated by three different scribal groups [11, pp. 79-80]. The construction of an adequate theoretical model explaining the relationships between these presumably Exilic or post-Exilic traditions has been a complex and contested issue. F.M. Cross proposed a theory of local texts, S. Talmon focused on groups that selected and conserved them, and E. Tov emphasized the complexity of the textual witnesses [6, p. 205-21; 11, p. 78; 44, p. 15; 26, p. 198; 29; 31, pp. 14-15; 33, p. 81-85].

TEXTUAL TRANSMISSION

The earliest compositional stage of the written text is not recoverable except by the conjectures of literary critics based on literary, archaeological, and philological considerations. *Literary criticism* has led to proposals purportedly dealing with stages in the composition of the original, such as the “Documentary Hypothesis,” with which we are not here concerned. Methodologically, *textual criticism* is distinct, as it deals with the subsequent transmission of completed literature, based on actual extant writings. Some textual critics propose reconstructions of the past, such as a pre-first-century Palestinian plethora of uncontrolled and unrelated texts, that are troubling to the ideal of a single inspired original that was providentially and carefully transmitted. More conservative thinkers shy away from proposing such textual multiplicity and instead propose grouping models to help explain the evidence of textual witnesses. Some feel that the combined evidence of major and minor sources points to only three recensions of *Genesis* having ever been made [11, p. 80].

Terminology. The *original* Pentateuch could perhaps be thought of as a pre-Exilic text which we no longer possess. We have few authentic samples of pre-Exilic Scripture. Two tiny silver amulets were found in a tomb in Ketef Hinnom in 1979. They are generally dated late seventh- or early sixth-century BC, although an eighth-century date has now been proposed [36] and carry the earliest attested Biblical text, from Numbers, which is proto-M [22, p. 84; 31, pp. 118, 379]. The *archetype*, which could be much later than the original, is the non-extant state of the text that textual criticism tries to reconstruct by adjudicating between extant variants [31, p. 167]. This archetype is the supposed parent of the large branches, or *hyparchetypes*. A hyparchetype is then the ancestor of any sub-branches that ostensibly came from it. Sadly, in some cases, no decision can be made as to which variant is probably prior, so the archetype cannot be determined. In others, the deducible archetype may not reach far enough back into history; one can only say that something is “more original” or “superior.” In a very few, one can only say that the archetype, the oldest available reading, is still probably not the inspired original, for it has evidently suffered some corruption. Such situations are lamentable, for we have to remain in doubt about the original reading [11, pp. 113-4]. Nonetheless, this need not undermine our trust that the originals were divinely inspired.

In M, the Biblical Hebrew of the entire Old Testament changes little in character, from the texts of the oldest to the newest books. At some stages in transmission, it is thought that the text was smoothed out somewhat, rare constructions being replaced with more common ones. In some spots, scribes are thought to have supplemented phrases in order to clarify, and removed phrases referring to cursing God. Such alterations of the text were made with the aim of preventing misunderstandings. The observed editorial activity was in many respects official, and may be traced to an early period [44, p. 112]. Editorial activity was more pronounced in S and G than in M. *4QpaleoExod^m* shows us that most of the expansionistic characteristics associated with S were already present in the text they chose. An earlier recensional layer was subjected to later Samaritan sectarian alterations [33, pp. 38-41, 84, 103; 43, p. 101]. By the end of the first century AD, the textual traditions “had become firmly anchored in various socio-religious frameworks” [31, p. 187]. The preferred proto-M text became established as the canonical text of Rabbinic Judaism [6, p. 216-7; 14, p. 38]. The recovered Herodian Masada manuscripts [27] and phylacteries from the first revolt, copied before AD 73, all show evidence of external rabbinic controls in their copying details such as margins and spacing, and in their content, exhibiting in every case the standardized M (Rabbinic) text [5, p. 180]. The recovered Wadi Murabba‘at materials from the Second Revolt, copied before AD 135, as well as phylacteries from Naḥal Se‘elim, show standard rabbinically-prescribed forms [23, p. 200]. At least nineteen fragmentary manuscripts of Genesis have been recovered from Qumran. There are also several copies of Genesis from elsewhere in the Judean desert, which are later and conform more closely to the official MT as we know it [23, p. 299]. Unfortunately, the only DSS fragment directly recording the genealogies of Gen. 5 or 11 is a tiny piece from a Late Herodian or post-Herodian manuscript. *4QGen^b* has one word from Genesis 5:13 or 14, the name of Cainan (*qynn*). The text is proto-M [22, pp. 54, 141; 32, pp. 31-37].

Criteria. Once variants are collected and collated, textual criticism considers the intrinsic probability of the readings, using established criteria [1; 17; 28; 31]. Numerous sorts of changes, both conscious and unintentional, are considered. The reading is preferred which would have been more likely to give rise to the others. A more difficult reading, one which is unusual, unfamiliar, or distinctive, is probably prior, because a later change would tend to be in the direction of “correcting” it, making it more familiar and easier to understand (*lectio difficilior probabilior*) [1, p. xi; 11, p. 20; 17, pp. 17, 73]. Since difficult readings can occur by mistake as well, qualifications must be attached to this criterion [31, p. 302-5; 44, p. 119]. One type of textual processing that results in variant readings is called *harmonization*, where elements of two texts are brought into harmony with each other by importing or exporting details from one to the other [30, p. 4]. This is a widespread phenomenon in Biblical manuscripts. The differences in degree of harmonization among the three textual traditions probably reflect the textual hermeneutics of the respective scribal groups [11, p. 84]. The pre-S and the proto-G scribal communities promoted the insertion of harmonizing details far more than the proto-M scribal groups [30, p. 15]. In general, M is a conservative, persistent, and stable text, and has been shown repeatedly to be the best and most important witness to the ancient Hebrew Bible. But it is not perfect; in places it has suffered corruption. One example of a mistake that has been retained in M is in the age of Saul at his accession. I Samuel 13:1 literally says: “Saul was one year old when he began to reign; and he reigned two years over Israel” [7; 31, p. 10]. The uncorrupted original text would have had a realistic number for Saul’s age. The fact that this error persisted shows that M conscientiously handed down a text, even though parts of two numbers had dropped out. Since G in this verse is also corrupted [7], the problem presumably affected their common archetype. G has a tendency to change chronological notices that were viewed as problematic [43, p. 100], making things explicit that were vague, etc. Nevertheless, in some instances where M has been affected by scribal errors, it is now commonly thought that G may preserve superior readings, such as in Gen. 1:9 [11, p. 20].

Textual relationships. There is evidence to commend the idea that G and S are two sub-branches of one branch of the textual tree, where M is the other branch [11, p. 98; 43, p. 101]. In Genesis 1-11, there are no harmonizations in which M = G. There are about twice as many instances in which S equals G, as those in which S equals M [11, p. 97-100]. So, S has affinities to both M and G, but the affinities to G are more pronounced. S and G share major agreement on ages at paternity in Genesis 11. Arguably, S revises G numbers in Genesis 5. All this points to a common hyparchetype shared by G and S, proto-G-S; other data also indicate that M and G belong to two distinct hyparchetypes, major branches of the textual stemma [43, p. 101]. Sperber hypothesized two pre-Exilic, or Monarchic, branches: Judah (M) and Ephraim (S) [26, p. 180]. We might call the two discernible hyparchetypes proto-M and proto-G-S. A variant shared by S and G then plausibly preserves their common *hyparchetype*; while a variant shared by M and G plausibly preserves the Genesis *archetype*. [11, pp. 64, 97]. A variant shared by S and M, however, might well be construed as S having been assimilated toward the emergingly dominant proto-M. This suspicion means that M-S agreement is not as strong an indication of the archetype as instances where G = M [11, p. 99].

Example of Deliberate Theological Correction

In order for us to appreciate the reality of scribal intervention for theological reasons that has extended even to the alteration of numbers, we can look at an example from the Pentateuch that has DSS attestation [24]. One intervention in the “Song of Moses,” Deuteronomy 32:1-43, has evidently given rise to five other inter-related corrections. In 32:8, M and S read: “When Elyon {the Most High} apportioned the nations, When He distributed humankind, He established the boundaries of the peoples, According to the number of the sons of Israel” (*b^eně yisrael*). Instead of reflecting “sons of Israel,” the Greek witnesses read either “angels of God” (*aggelon theoû*) or “sons of God,” (*huion theoû*, Aquila, Cod. z, Gött.) [28, p.194]. (The LXX sometimes translates “gods” {*ēlōhîm*} euphemistically as ‘angels’, as in Ps. 8:5; 96(97):7, and “sons of God” {*b^eně ʿēlîm*, or *b^eně ʿēlōhîm*} as ‘angels’, as in Job 38:7. Cf. also Job 1:6 and 2:1 {*oi aggeloi toû theoû*}, but Gen 6:2(3), Pss. 29:1, 89:7 {*dè huioi toû theoû*} and Ps. 82(81):6 [4, pp. 291-294; 8, p. 78; 40, pp. 75-76]). The reading *ēlōhîm*, “God,” rather than *yisrael*, “Israel,” is presupposed in several early sources and referred to as late as the medieval period. The Hebrew *Vorlage* of G is now confirmed by DSS 4QDeut^f, which preserves the phrase “sons of God” (*b^eně ʿēlōhîm*). This is held by some to be the prior reading [8, p. 78]. They think it more likely that a Hebrew reference to “sons of God” was later suppressed for theological reasons, than that “sons of God” would have been substituted for “sons of Israel” [1, p. 70; 23, p. 200]. The next verse, 32:9, does refer to Israel as a nation. The two verses may have originally alluded to the idea that although the nations have ‘sons of God’ as rulers over each one of them [18, p. 254], the children of Israel belong to Yahweh Himself; as *Ecclesiasticus (Ben Sira)* 17:17 says (c. 190 BC), “Over every nation he places a ruler, but the Lord’s own portion is Israel” [25, pp. 277-83]. However, instead of using the original term “sons of God,” which left the verse open to the polytheistic interpretation that Yahweh was one of the sons of Elyon or alluding to the popular idea that every nation had its own ruling angel (*Jubilees* 15:32)—it is thought that the pious scribe changed 32:8 to read “sons of Israel.” He decided to allude instead to the *people who had entered Egypt* with Jacob (**Israel**, and his family). It was commonly held that Genesis 10 had described *seventy* nations that had descended from the three sons of Noah [18, p. 254]. He could harmonize toward Deuteronomy 10:22, which put the number of souls who had entered Egypt with Jacob at the traditional seventy.

According to the Hebrew Old Testament Text Project, a committee of six Old Testament scholars under the direction of the late Dominique Barthélemy, sponsored by the United Bible Societies, this change to “sons of Israel” triggered a series of other changes. The proto-M scribe deleted half a verse in Genesis 46:20, where G includes the names of Joseph’s three grandsons and two great-grandsons, five in all. In verse 21, M presents Benjamin’s descendants in the same generation, whereas G has them in three generations. In verse 22, the presumably original 19 attested by G was reduced to 14 in M. The HOTTP decided that in verse 27, and in Exodus 1:5, M *reduced* the 75 people who entered Egypt with Jacob, down to 70 [1, pp. 70-72, 88, 302-303]. The G total in Genesis 46:27, and in Exodus 1:5, is 75 persons. In Acts 7:14, Stephen said, “After this, Joseph sent for his father Jacob and his whole family, seventy-five in all.” The DSS manuscript 4QExod^b also reads, “seventy-five” for Exodus 1:5 (*h̄mš wšbʿym*, ‘five and seventy’ [5, p. 136; 32, p. 85] as does 4QGen-Exod^b (*šbʿym w̄h̄mš*, ‘[seventy] and five’) [32, pp. 18-19]. Barthélemy noted that this complicated intervention was costly, but for a serious motive: suppressing possible polytheistic overtones that were contrary to the principles of monotheism. Observed text-editing efforts with this goal have come to be called, “demythologizing.” In this case, it affected a number; M has arrived at a reduced number. And in this case, G, propagated by a different community, preserves the more original, unedited texts.

BIOGRAPHICAL NUMBERS IN GENESIS 5

In Genesis 5 and 11, the three witnesses differ in their “chronogenealogies,” and the discrepancies have caused considerable perplexity. If it had been easy to discriminate between the textual traditions, a definitive solution and consensus would have been reached long ago; but it remains a thorny problem. Recent discussion has reflected varied positions and approaches [11, p. 62; 28, p. 302; 31, p. 337]. Larsson [16] and Williams [43] defend the priority of M. According to Klein, followed by Hendel, the systems of all three recensions are secondary and derive from an original which had implied that three patriarchs lived through the Flood [11, pp. 61-69; 15, pp. 262-263; 31, p. 337]. Whitcomb and Morris [41, p. 475] labeled G numbers as “obviously false,” referring to a study done by W. H. Green in 1890. But Honeyman [12] supported a prior status for the long chronology. Due to the systematic nature of the variations, it is apparent that the biographic data in the genealogies have been intentionally altered, and that the basic strategy was either adding or subtracting 100 years to/from life before paternity, and then subtracting or adding 100 years from/to life after paternity. To achieve this, a specific quantity, a hundred (the Hebrew word *mēʾá*), was switched from one biographical category to the other, leaving the total length of life unchanged. But the question is, in which direction was the switching? One way, from pre-paternal to post-paternal, would shorten the chronology; but the other way, from post-paternal to pre-paternal, would lengthen it. By comparing the three witnesses, we can try to decide which process was used.

	<u>Before son's birth</u>			<u>After son's birth</u>			<u>Length of life</u>		
	M	S	G	M	S	G	M	S	G
1 Adam	130	130	230	800	800	700	930	930	930
2 Seth	105	105	205	807	807	707	912	912	912
3 Enosh	90	90	190	815	815	715	905	905	905
4 Cainan	70	70	170	840	840	740	910	910	910
5 Maleleel	65	65	165	830	830	730	895	895	895
6 Jared	162	62	162	800	785	800	962	847	962

For the first five patriarchs in Genesis 5, there is a clear, consistent pattern among the three: M and S are 100 years shorter than G in years of life before paternity, 100 years longer than G in years after paternity, and agreed on the total length of the patriarchal life [2; 7; 20; 35; 38; 39]. However, in Genesis 5:18-20, the pattern seen in the first five patriarchs is broken for Jared. Here, uniquely, G and M agree on a number, and it is large: he lived 162 years up until the birth of Enoch [2; 7; 38; 39]. And they agree that there were 800 years remaining, for a total of 962 years. G and M therefore plausibly preserve the archetype: 162. But independently, S is still following its pattern. Regardless of M's witness, S alone (echoed by *Jubilees* 4:15, c.160-140 BC), is 100 years shorter for Jared. He was but 62 years old when his son Enoch was born. From this it is more probable that S is reducing, than that G was adding, and M *also decided to add*, in this particular instance. This is a clear example of the process of **subtraction** rather than addition. Here, where G and M *agree* (so the probability is that the received numbers have not been changed), a change was unilaterally made in S--*downward*. But now a problem was created. Jared lives so long that he survives the Flood. S subtracts both 100 years from the age before fatherhood and, unexpectedly, another 15 years from the life span after fatherhood, to get 785. Then, S re-calculates a different length of life, independently of M and G. So it is here that unanimity is broken, and *a length of total life* is changed, S reporting 15 years less than the others. A life span of 847, instead of 962, results in Jared dying in the same year as the S Flood, *Anno Mundi* (A.M.) 1307.

	<u>Before son's birth</u>			<u>After son's birth</u>			<u>Length of life</u>		
	M	S	G	M	S	G	M	S	G
7 Enoch	65	65	165	300	300	200	365	365	365
8 Methuselah	187	67	167	782	653	802	969	720	969
9 Lamech	182	53	188	595	600	565	777	653	753

In the seventh generation, Enoch's pattern matches that of the first five patriarchs (Genesis 5:18-24). Enoch had lived 65 years when Methuselah was born, according to M and S, but G has 165, a hundred years more. All three agree that he lived 365 years. The years after the birth of the son were 200 by G, but 300 by M and S, following the previous pattern. Up until this point, the chronologies of the three witnesses have been consistent except for Jared. However, as we come closer to the time of the Flood, the remaining patriarchs, Methuselah and Lamech, exhibit the greatest discrepancies of the genealogy in Genesis 5. M reports that Methuselah lived 187 years before Lamech was born: *wa-yehi metušelah ševa' ū-šemonîm šanâh u-mē'â šanâh* ('And lived Methuselah 7 and 80 years and 100 years', 5:25). J.W. Wevers, who edited the Göttingen Greek Pentateuch (an eclectic critical edition) believes, with many others, that the original G number was 167 (although—as his edition reports [39]—correctors and some manuscripts recorded 187, as he feels, to harmonize it with M) [15, p. 259; 20; 38; 43, p. 105, n.20]. The number 167 is preserved in the *Codex Alexandrinus* (although corrected to 187) and some subsidiary copies; but other copies report a G revision of 167 to 187 which is plausibly prehexaplaric [11, p. 69]. In passing, we note that if G had been looking at M's figures and changing them, it would not make sense for G to adjust 20 years here intentionally, from M 187 down to 167, when later correctors desired to put it back to 187 (and with good reason).

Greek 167 or 187? Long before the Hexapla, the historian Demetrius (c. 220 BC) reported the Flood at A.M. 2264, 22 years later than a strictly G Flood at A.M. 2242 [9, p. 844; 40, pp. 72-3]. Demetrius probably lived in Alexandria, reasonably close to the time of the Greek Pentateuchal translation (c. 280 BC). Yet, he seems to have been working from a G manuscript that reported 20 extra years, and so read 187 rather than 167 for Methuselah's paternal age (similar to the Lucianic text which Josephus may have used in *Ant.* 1.80-88 [15, p. 259]), coupled with a 2-year tradition derived from Gen. 11:10 [9, p.852]. This early evidence for a G reading of 187 allows us to surmise either (a) that the G number 167 may have been harmonized upwards toward M at a very early point in its transmission; or, (b) that *at first* G might have reported 187, with M, and 167 could be a somewhat later *corruption* in G (so thinks the "Larger Cambridge" edition of G) [2, p. 12]. For the first and only time, M reports a greater age at paternity than G. The singularity of this event seems to point to M's 187 as the archetype, and to 167 as

perhaps a copyist's error, but it would be premature to accept that evaluation. Either proto-M already had 187 for Methuselah in his hyparchetype, or he had 167, and changed it to 187. He then would have had to subtract 20 years from 802, to get 782 in life after paternity, to maintain the life span unchanged. G reports 802. If G scribes had seen 167 as an accidental corruption, at some point when correcting to 187, they would have adjusted the original 782 upwards to 802, to keep the 969 life span. (Our possibly corrected G texts that report 187, also report 782 instead of 802 here). One of these two numbers, then, 182 or 802, is a secondary reading, derived from a correction.

Dating for pre-S changes. Now, G's Methuselah at 167 is still 100 years more than S's 67 years. S here shows its *dependence upon the G number*, which conjecturally is either a unique error that predated his work; or an inherited error that M also received; or else, the archetype. Pre-S was *not depending* on the proto-M's 187, or he would either have come up with 87, or have aligned himself with M (as he did with Adam and Seth) and not subtracted here at all, so retaining M's 187. This being so, we could infer that the composition of *Jubilees* 4:20, using the S chronology for Methuselah, would be a *terminus ad quem* witness as to when G's figure of 167 came into being, i.e., before c.160-140 BC. This, then, would outline the period when the pre-S scribe was making his Methuselah revisions as pre-Maccabean. These chronological changes were then part of the earlier recensional layer of pre-S produced well before the Hasmonean period when increasing Samaritan estrangement from Judaism encouraged their own sectarian redactions (and culminated in the destruction of the Samaritan temple by John Hyrcanus c. 128 BC) [6, pp. 200-201]. We will see some persuasive evidence that these pre-S pre-Maccabean chronological revisions were not made piecemeal, but in a single concerted effort.

Issues as the Flood Approaches

All of the witnesses agree that Noah lived 950 years and that the Flood came in Noah's 600th year. These unanimous numbers are archetypal. Now, according to M, Lamech was 182 years old at the birth of Noah. This plus 600 makes 782 years from Lamech's birth until the Flood. As this is exactly the number of years that Methuselah lived after Lamech's birth, Methuselah died in the year of the Flood. But Lamech lived 595 years after Noah's birth, so he died 5 years before the Flood. According to G, however, since Lamech only lived 565 years after Noah's birth, he died 35 years before the Flood.

A major problem in the Greek chronology. G's Lamech was 188 years old when Noah was born, so from Lamech's birth to the Flood was 188 + 600, or 788 years. *But*—G's Methuselah lived 802 years after Lamech's birth. This means he lived for 14 years after the Flood! Since he wasn't on the Ark, this obviously indicated an error. But where the error lay was not clear. For G, these were the received numbers, and these numbers were what G transmitted, come what may.

A dismal solution. In S, Jared, Methuselah, and Lamech, all die in the year of the Flood. Hendel, following Klein, proposes that the original of Genesis 5 had these three patriarchs all living through the Flood. Pre-S made the minimum adjustment necessary to solve these problems, independently of the solutions of G and M. Proto-M solved it well, adding 120 years to Methuselah and 100 years to Lamech; but, inflexibly pursuing his addition agenda, proto-G managed to solve it for only two of the three patriarchs [11, p. 69; 15]. But this solution is disturbing. It is not quite in keeping with the conservative character of M to impute large additions—20 perhaps, but 120? And, of course, it is manifestly unsatisfactory to conservative scholars to suppose that the *original* had *three patriarchs* who were not on the Ark, living through the Flood!

S on Lamech. Pre-S subtracted more than the usual 100 from Lamech's age at the birth of Noah in order to have him die in the Flood year. By this analysis, he was looking at his proto-G-S figure 188, and subtracted 135 years, to come up with 53. If he needed to further shorten Lamech's life, why did he subtract the amount of 35 in addition to the usual 100 years? Possibly, because G's Lamech had died 35 years before the Flood (pre-S harmonizing paternal age, by reminiscence of the proto-G-S period between his death and the Flood). Thus pre-S arrived at an age of 53 for Lamech when Noah was born, and an age of 653 when he died in the year of the Flood. Working backwards from Lamech, pre-S knew that the Flood would come 653 years after Lamech's birth. So Lamech's father Methuselah could live at most 653 more years after Lamech's birth. However, this meant changing Methuselah's total life span, for 67 before paternity + 653 after paternity gives 720 in all, not 969; and that is the age pre-S gives. In this derived life span S again stands alone, against the plausible archetype 969 of both M and G.

In the case of Methuselah, Klein and Hendel posit that the young age for Methuselah reported by S, 67, is the archetype, because they are expecting G to have added 100—but normally G would have presumably added to M, which has 187, not to S. They propose a similar situation for Jared, so that in spite of strong M-G agreement, S preserves the archetype. They propose that most of the archetypes were small numbers, on the basis of regularity of small numbers. Thus M added 120 years to an

originally small 67, to delay the onset of the Flood so that Methuselah would die in the year of the Flood [11, p. 66; 15, p.261]. But not only is it unsatisfactory to propose that the conservative M decided to add 120 years; one has to propose that G also independently decided to add 100 (and, arriving at 167, caused itself much grief). If M and G are both therefore secondary, implausibly, the strong and ancient M-G agreement on a larger number is be set aside in order to give archetype status to the much later pre-S.

Use of an Ancient System of Numeration

In addition to partially concurring with other ancient documents which weakly point to ancient longevity such as the *Sumerian King Lists* [4, vol. 1, pp. 257, 262], the great ages of the patriarchs dimly reveal the Sumerian sexagesimal numeration system. This was a very old system of counting, used during 3000-2000 BC and probably before, based on the number 60 (primarily thought of as 5 x 12). It would have been natural to count this way. The universe was created in 6 days. The year was thought to have 360 days, 12 months of 30 days, with more or less 12 hours of daylight and 12 hours of darkness. Five played a subsidiary role as a counting unit, since we have 5 fingers. From this system we have inherited 12 months in the years, 60 minutes in the hour, and 360 degrees in a circle. The practice of counting by 60's is akin to other groupings, or bases, by which things can be counted. For instance, we are still familiar with a "dozen", 12, and a "score", 20. According to the Sumerians, what we would call a "lustrum," five years, which is one-twelfth of sixty years, is a basic counting unit of sixty months. Sixty years (twelve periods of five years) form a time unit called a *šūš*; ten *šūš*, 600 years, equal a *nēr*; sixty *šūš*, 3600 years, equal a *šar*; and sixty *šar*, 216,000 years, equal a *great šar* (*šūš-šar*) [4, p. 258].

Patriarchal life spans in Genesis appear to have been initially recorded using large sexagesimal numbers. This circumstance indicates the purity and antiquity of Moses' source of information. White notes, "The appearance of the large sexagesimal numbers in the early chapters of Genesis proves beyond a shadow of a doubt the antiquity of the text or literary tradition utilized by Moses" [42, p. 459]. We do not say here that an alien and artificial system was schematically imposed on the patriarchal data, invalidating their actual ages; but rather, that their true ages may initially have been based on this system of counting. The last vestige of counting by 60's was passed on in the Seleucid era, and then forgotten [42, p. 454].

For Judaism, the Creation number, *seven*, was a sacred number, signifying completeness, entirety, and sufficiency. Some groups considered it a holy number with cosmic significance. Interest in this number extends far back before the inter-testamental period (when we see it flowering in numerological schemes and apocalypticism) [13; 18; 34]. In the more distant past it was also special to other ancient Eastern civilizations. For instance, the Sumerian King List (W.B. 444) states that the total length of the monarchic period preceding the flood was a "*great šar plus seven šar*" (241,200 years). This section of the SKL came from a mythological epic from Eridu, so we see its great antiquity [4, vol. 1, pp. 257-8].

All numbers of 800 and over in the chronology are divisible by 60, with a remainder that is divisible by 5 or 6 (optionally, plus 7 or 14). All the numbers that are reported in the G chronology, with the exception of two, are either exact multiples of 5 ($5n$), or else multiples of 5 plus 7 ($5n + 7$), or in one case, plus 14 (2×7). The dual structure of the lustrums in the sexagesimal system, plus the perfective seven from the Creation story, is carefully maintained [4, vol.1, pp.12-15, 258-64]. One researcher says, "The scheme cannot possibly be accidental" [42, p. 459]. The numbers given in all biographical categories, all fit this pattern, with some notable exceptions.

The numbers for the life spans from Adam to Methuselah are identical for M and G. They are all either multiples of five, or multiples of five plus seven, or (in the case of 969) plus fourteen. In terms of probability, in any series of ten figures above 20 (e.g. 20... 29), five figures are going to conform with the formula (e.g. 20, 22, 24, 25, 27), so the probability of ten out of ten numbers conforming to the formula is $(1/2)^{10} = 1$ in 1024.

Adam, 930, is (5 x 186)	Seth, 912, is (5 x 181) + 7	Enosh, 905, is (5 x 181)
Cainan, 910, is (5 x 182)	Mahalaleel, 895, is (5 x 179)	Jared, 962, is (5 x 191) + 7
Enoch, 365, is (5 x 73)	Methuselah, 969, is (5 x 191) + (2 x 7)	Noah, 950, is (5 x 190)
BUT: Lamech at 753 doesn't work. Lamech at 777 is (5 x 154) + 7		

Of all the reported numbers in Genesis 5, in *any* biographical category, for *any* tradition (54 unique numbers), the only exceptions to this system are: (1) G's problem number **188** for Lamech's age before Noah's birth and (2) G's resultant **753** for Lamech's total age (which precipitated the unfortunate series **653** and **53** associated with the pre-S method of fixing Lamech and Methuselah). Setting these four numbers aside, the probability of 50 numbers out of 50 conforming to the formula is $(1/2)^{50}$. To one who understood this system, Lamech's failure to fit this pattern was another indication (along with the

problem of Methuselah outliving the Flood) that G numbers close to the Flood were somehow corrupted and inauthentic. The failure of 188 to fit the pattern could well have seemed diagnostic to a proto-M reviser, failing to support it as original. One who knew the system would reject 188, 753, 653, and 53. G, or proto-G, or proto-G-S, had made or encountered a blunder, and in trying to repair it did not recognize the number system being used. But we must also understand the possibility that a corruption had come into proto-G-M, the archetype, so that M also encountered the number 188 and attempted to repair it.

Objections. It could be objected that there are *several ways* of finding a system in the numbers, such as dividing by 40 combined with a multiple of 5 with some additions of 2, or two 2's. Although the factors can be combined in different ways, and, of course, there are several instances of the number 40 in Scripture—such as 40 years of wandering in the wilderness—there appears to be no historically demonstrable numeration system to the base 40, as opposed to 60, or intrinsic interest in 2 as opposed to the Torah's emphasis on 7. It is usually harder to devise a system with larger factors, such as 60, than with smaller factors, such as 40. And since $7 = 5 + 2$, one can easily divide a remainder of 7 by another 5, and get a remainder of 2. Interestingly, though, the number 188 fails that test as well: it is $(4 \times 40) + (5 \times 5) + 3$, not 2. We might conjecture that in the diagnostic system, a major authentic sexagesimal number (divisible by 60) is either perfectly divisible by 60 (such as 600), or if not, it should have a remainder which is at least 5 (large enough to be divided by 5, 6, or 7); so that a remainder of only 2 would be suspect.

Rounding. We can tell from a number such as the age of Enosh at 905 years, that rounding in our modern decimal sense, which seeks to avoid fives, was not used. But whether the ancients rounded towards sexagesimal numbers, or toward those plus 7, we are not in a position to determine with any assurance. However, it could be that when patriarchal ages were known precisely (so many years and so many months) the nearest number conforming to the $(5 \times z) + (7 \text{ or } 14)$ formula would be considered 'round'. To eliminate the months, one can either round up or down. Nearly all numbers could be rounded up or down to a whole number that would be in conformity with this formula.

Repairing 188. The hypothesis that M repaired Lamech's age by subtracting 6, is strengthened by seeing that such a move would have restored the basic pattern, making it a multiple of five, plus seven: 182, $(5 \times 35) + 7$, satisfies it. Alternatively, we have the possibility that 182 was the original number. We may still wonder, though, if G's 802 is a superior sexagesimal number: $60 \times 13 + (5 \times 3) + 7$. M's 782 is so close to a multiple of 60 ($60 \times 13 = 780$), that its remainder, 2, is not divisible by 5. Be that as it may, if we conclude that M worked from 188 to solve an inherited problem of Methuselah outliving the Flood, then we see that M's superior plan successfully repaired everything and maintained this ancient pattern. If anyone had invented a plan of subtracting or adding a number such as 99 or 103, the pattern would have been broken and the numbers would have been suspect. A simplifying suggestion is to think that M had the correct archetypal number for Methuselah, 187, which had not been corrupted in his hyparchetype; so that, supposing he had received 188 for Lamech, he only had to correct that one number (setting aside for the moment the possibility that he had tried to correct both 188 and 167). On what basis could we suspect that M corrected 188 to arrive at 182? Why not just assume that 182 is the original archetype? M's figure of 777 for Lamech's total age is composed of $182 + 595$, and we could doubt 595 on the grounds that 600 was reduced to save Lamech from the possible ignominy of it being surmised that he died in the Flood. We might also be slightly suspicious that M has also fiddled with 188 and adjusted Lamech's life after paternity. One reviewer suggested that this was done to reach a number, 182, divisible by 7 (which would indicate late editing). With these changes, Lamech's life span reaches the arresting figure of 777 (which fits the pattern). The values for Lamech's life span are arguably secondary in M and S. M and G agree on the figure 700. Of the two, we could prefer G's 753 years, surmising that most plausibly G preserves the archetype for Lamech's life span, as it has constantly done in every other total age [11, p. 67; 15, p. 261]. However, since 753, like 188, does not fit the pattern, we could regard it as corrupted.

We could suppose that earlier than the time of the Maccabees, a proto-M reviser from the central Jewish authorities knew about the underlying system. He looked at the received proto-G-M, the archetype, and suspected that 188, Lamech's age at Noah's birth, was the corrupted number, the very one which resulted in Methuselah living through the Flood. Since he, with his hyparchetypal 187 already had, or had achieved, 20 more years for Methuselah, the problem he faced was not as severe as the problem that G had, on the basis of 167. Lamech's 188 plus Noah's 600 gave 788 years to the Flood, but the M Methuselah had lived 782 years after Lamech's birth. When M subtracted 6 years, shortening Lamech from 188 to 182, Methuselah, who still lived 969 years, died in the year of the Flood.

M on Lamech's life span. However, with Lamech, for the first and only time, the proto-M reviser broke the rule about not changing the total life span of a patriarch. All the other life span figures had been held in common with G. But now G had a problem that made its 753 unreliable. On the basis that 753 did not fit the pattern, M may have felt it had to differ. The net effect was to increase G's figure of 753 by 24 years to 777. It has been suggested that the possibly schematic figure of 777 was a secondary number influenced by reminiscence of the fate of the other Lamech in Genesis 4:24, whose vengeance is 77-fold compared to Cain's 7-fold [11, p. 66; 15, p. 261]. But perhaps the 24-year difference is not as arbitrary as it seems, and not the result of a single calculation. We could speculate that, having reduced 188 to 182, it may have been seen as necessary to reduce the G 753 years by 6 years to 747. Then, M may have gone to the years of Lamech's life after Noah's birth, and have raised the long chronology figure 565 by 30 to 595. 182 + 595 gave the perfect number 777 for the last of the pre-Flood patriarchs. The finality of Lamech's existence is emphatic and conspicuous by the way M states his age: "And all the days of Lamech were seven and seventy and seven hundred, and he died."

On the other hand, the pre-S reviser had, unsuspectingly, relied heavily on the G number **188** for the number of years Lamech had lived before the birth of Noah. He was probably unaware of the sexagesimal numerical system underlying all these numbers, for he ignored it. Subtracting 100 had kept within the system; but his revisions dealing with the Flood problem, presumably unknown to him, did not. S's subsequent derivations, 53 and 653, like the G 753 they derive from, fail the internal system's test for authenticity. But M's 182 passes the test. Instead of relying on 188, he *corrected* it toward the underlying system (i.e., he harmonized it), by subtracting 6, which otherwise seems an odd thing to do, unless he was accidentally or purposefully trying to assimilate toward Methuselah's remaining years, 782 [11, pp. 67-68]. We note that G would have had *little motivation* to intentionally add 6 to M's 182 and create or worsen a big problem, but M had *good reason* to subtract 6 from a received 188 for Lamech, and solve a problem that had led to a contradiction.

If this conjecture is right, the S revision was responding to a *prior and parallel process* of revision of M's Hebrew text. If M had *corrected* 188, then 188, the difficult reading, was prior to M's *solution*, 182, and G's hyparchetype here is prior. We could infer on that basis that G's 188 would be the *archetype*; but of course, if it is an error, as both S and M seemingly suspected it was (trying to fix it in two different ways), it is not the *original*. Our notion of *archetype*, however, can be separated from the *original* by hundreds of years. If so, this unfortunately corrupted archetype, similarly to that of I Samuel 1:13, would indicate that the transmitted text had suffered early accidental corruption in this particular number.

Various Solutions

Compared to G, the Samaritan is exactly 100 years lower for eight of the nine periods of life before paternity, and 135 years lower for Lamech, to result in being 935 years shorter in Genesis 5. S never *agrees* with G, but in Jared and Methuselah it evinces literary *dependence* on the Hebrew behind G, or on the prior proto-G-S, by subtracting from it. By identifying the process as one of *subtraction* from G, a picture emerges as to the textual situation with the chronologies which differs from what one sees when the presumption is that M's lower figures are prior to G's.

S changed toward M. Of course, *any* attempted solution, or historical reconstruction of events, is hazardous and conjectural. One proposal was that in the first century AD, M reduced its chronology, as a Pharisaic/Rabbinic reaction to the claim of Jesus to be the Messiah (so the time for the Messiah would not seem to be just then) [3, p. 57]. However, because of *Jubilees*, which is almost exactly like the S chronology from Adam to Methuselah (in the end, differing by only one year) [11, pp. 69-70], we know that S's chronology existed well before the first century. Rather than supposing that the preferred and dominant proto-M harmonized toward what could have been a somewhat less culturally esteemed pre-S, and at such a late date, pre-S is more likely to have earlier harmonized toward the ascendant proto-M, as can be seen in other sections of Scripture [11, p. 99; 33, pp.38-41, 103]. Thus in Genesis 5, S agrees with M in 6 cases over against G: for the first five patriarchs, and Enoch. The reductions that S made, and the scheme S used, were not randomly chosen. The S chronology became not merely shorter, but purposefully aligned more with M in this chapter. Pre-S was harmonizing toward the proto-M chronology in the choice of scheme. So M's numbers were already smaller well before the time of the Maccabees and *Jubilees*. Pre-S evidently tried to provide a *tertium quid* between the long chronology it had inherited and the prestigious, already shorter chronology of the central Jewish authorities. It may have been influenced in the invention of its system by the scribal and hermeneutical religious circles within Judaism who were meticulously perpetuating the proto-M.

Solutions with additional assumptions. Many who have thought about this question have incorporated an assumption in their thinking: that proto-G and proto-S revisers were quite concerned about how old someone should have been when they begot (instead of being concerned mainly about fidelity to a received text and making repairs in presumably damaged sections). On this assumption, many have proposed a process of G sporadically adding to M; for example, G adding 100 years whenever the

Hebrew states that a patriarch begat his first son before an age of, say, 150. They similarly propose that S reduces by 100 the three who begat after an age of, say, 150. These solutions are inadequate to explain features such as why in Genesis 11 G adds 50 only in the case of Nahor, how S arrives at odd numbers such as 67 and 53, or why S reports *smaller* paternal ages *before* the Flood than afterward.

Genesis 11. In Genesis 5 we saw (most easily with Methuselah and Jared) that the basic pattern was that pre-S systematically subtracted 100 from proto-G (or from their shared hyparchetype), and arrived at a figure for age at paternity aligned with M; then, with respect to proto-G, it added 100 in the life after paternity, so it could equal M there, and keep the total life span unchanged. But in *Genesis 11*, pre-S changes course, and does an about-face. Here S is aligned with G in every case, from Shem to Terah, for the age at paternity. Since we think that pre-S was working from proto-G, it appears that pre-S decided *not to change* its received hyparchetypal post-Flood numbers. In Genesis 11 M is precisely 100 years lower than both G and S from Arphaxad to Serug, and fifty years lower than both of them for Nahor. In the life after paternity category, however, the pre-S reviser not only stops, but reverses his approach completely, and instead of adding to G's figure, he *subtracts*; and not only from the parent, proto-G, but from both G and M, who are here in very close agreement, defiantly steering his own course. (If instead we supposed that pre-S had been dependent on proto-M, and added 100 to equal proto-G, he could have just retained the life after paternity numbers of M, which come close to or equal G. But clearly, he didn't *want* to equal G—he had a different agenda.) There are evidently a few copying problems in the ages of life after the birth of the son. Yet we can see the new approach: S aligns solidly with his hyparchetype G on age at paternity but tries to reduce his figures for life subsequent to fatherhood. However, we have to put into this picture the news that in Genesis 11, S has independently interpolated the category of life span, harmonizing the form of the genealogy towards Genesis 5. S calculated and inserted numbers for the total lengths of life in an expansion of the text that neither G nor M has. S adjustments to the lengths of life after paternity must therefore have much to do with a pre-S desire for the total life spans to be shorter than both M and G would have said if that category had been included.

The overarching pre-S agenda. Whereas the S antediluvian chronology was 349 years *shorter* than M (1307 compared to 1656 years), its chronology from Arphaxad to Terah's 70th year, in Genesis 11, is about 650 years *longer* (940 to 290 years). In the matter of ages at paternity, why did pre-S decide to stop harmonizing toward M, and simply adopt the G chronology wholesale (except for Cainan)? Perhaps he was working backwards. Perhaps he was not worried about trying to change the length of the post-diluvial period in Genesis 11 at all, but, looking back, he was concerned about Genesis 5. He wanted to harmonize the ages toward M, but shorten that period to a pre-determined extent. The total of the S antediluvian period (1307 years) plus 2 years after the Flood until the birth of Arphaxad (Genesis 11:10) [43, p. 98], plus the S post-diluvial period (940 years) is 2249 years. According to *Jubilees* (which in other respects depends on the pre-S chronology, so, perhaps here also), we learn that Adam was in the Garden of Eden for seven years (*Jub.* 3:17). If we subtract 7 from 2249 we arrive at the precise G figure for the date of the Flood, A.M. 2242. There is a carefully-established relationship of S to G. Pre-S did not want to change paternal ages in chapter 11, but considered lowering them in chapter 5. If pre-S had started with proto-G-S's total of 2242, added 7 years for Eden, and subtracted his 942 years for chapter 11, he would have known that he could make exactly 1307 years' worth of subtractions in paternal ages in chapter 5 to establish this relationship between his new chronology and the proto-G-S that it developed from. Now we see *why* pre-S determinedly subtracted 100 from Jared anyway, even though M did not; he had another agenda in the background that propelled him onward. But in achieving his overarching agenda, he was remarkably successful, and all concerned may have felt quite satisfied. We, too, may feel satisfied with this clarity in seeing what pre-S was doing. There was just one imperfection: the system failed to meet the strict requirements of the hexadecimal-plus-seven system. Since neither pre-S nor proto-G seem to have tried to meet those requirements, I suggest that only the keepers of the scrolls in Jerusalem really understood it. G had thrown up its proverbial hands and just decided to keep its ancient error. Pre-S had valiantly and brilliantly fixed it, yet there was something amiss. But when M made its adjustments, they were closer to perfection, just like Lamech's total age; and rather difficult to trace.

Did proto-M reduce? But what, then, about the proto-M? It is thought to have followed a separate hyparchetype. Just because pre-S lowered its proto-G-S ages to align itself more with proto-M's lower ages, does not *necessarily* mean that earlier M had done exactly the same thing, and invented that *mē'â*-switching system; although we could wonder. Whereas S consciously and demonstrably reduced the larger numbers, and we find M matching the *same pattern* in some of its numbers, we *could* be suspicious of those smaller numbers, *a posteriori*. It is just possible that pre-S could have borrowed M's formula and partaken of M's motives in Genesis 5. Two possibilities seem to be the best candidates. (a) M's mostly lower, inconsistent ages at paternity are *original*, but in the distant past, perhaps at the point when these two hyparchetypes diverged, an effort at textual inflation created the G-S hyparchetype chronology, which pre-S subsequently partially deflated. (b) The proto-G larger ages at paternity reflect

the original, which first proto-M reduced, in stages, and then pre-S, echoing M's precedent, also reduced, but all at once and even more systematically.

Irregular order. The argument for (a) may be stated as follows. Of the three traditions for which we possess witnesses, M is the most inconsistent. Ages at the birth of a son fluctuate wildly, varying by approximately a hundred years: M reports Mahalaleel, 65; Jared, 162; Enoch, 65; Methuselah, 187; Lamech, 182. It seems to combine some of the large figures with some of the smaller ones, but haphazardly, not in an immediately obvious, rational order [40, p. 73]. This irregularity leads some scholars to surmise that no schema *can* be detected. They feel that because the order is irregular, no schematizing alterations were superimposed; it bespeaks originality. This perception of a difficult reading links with an inability to think of any compelling reason why something irregular should have replaced something that was already fairly regular. But sometimes, irregularities lead to the recognition of disturbances in a text, such as interpolations or displacements [44, p. 117]. When faced with the contrast of a harder and an easier reading, with certain caveats (hesitating to give preference to a reading that makes no sense, for instance), one prefers the reading that is more *difficult*, from a viewpoint of subject matter or linguistics [1, p. xi; 17; 31, pp. 302-5]. Accordingly, unresolved problems or irregularities can indicate originality. The invocation of *inconsistency*, though, as an argument for originality, tries to make a virtue out of what would otherwise be problematic, namely, that in real life, sons tend to have grandsons at more or less the same ages in life as their fathers did. The burden of proof on those who claim irregularity as one of their best arguments for originality, is to show that no disturbances have taken place in the text. The proposition of several different recensional efforts applied to specific patriarchs for specific reasons, but leaving others untouched, would produce irregularity; so the argument of inconsistency is weakened.

Various recensional efforts. We could conjecture that proto-M's process of subtracting 100 years was possibly individually applied to Enoch, the 7th from Adam. Even before the Maccabean period, much effort was put into transcribing the many traditions about Enoch, heavily influenced by Babylonian astronomical and cosmological lore re-contacted in the Exile [13; 18; 19; 25, p. 498-9; 34; 40, pp. 71-2]. We also know that the position of the seventh generation was very important [21]. Separately, a reduction may have been applied to the first five patriarchs *en masse*, conceivably as a precautionary measure to suppress any potential polytheistic inferences. A two-step process for Genesis 5 would explain how it managed to skip the 6th generation, Jared. In M, Jared retained his original large age at paternity. He was not reduced because there was no pressing reason to reduce him that could overcome a natural strong reluctance to emendation. The M conservative reluctance to change also stopped the 100-year-reduction process from being applied to the last two, Methuselah and Lamech, thus preserving the evidence for us.

Problem and motive. M's extremely short chronology in chapter 11 has what could be seen as a problem of overlapping generations. All of the post-diluvial patriarchs including Noah are alive when Abraham is born. Noah does not die until Abraham is nearly 60. Three of them (Shem, Shelah, and Eber) live longer than Abraham does, and Shem is still alive when Jacob is an old man. If this is accepted as having constituted a real problem, there is no easily-identifiable motive for proto-M to have reduced the numbers and created it, so that argues for M's authenticity. However, if it is seen as a *real* problem, and if it is proposed that M's numbers are the original ones, then the archetype as a whole is deeply flawed [11, p. 71], which is not very flattering to the Biblical text. On the other hand, if it was not seen as a problem, proto-M could have actually liked that situation. He may have wished to have them seem more normal, and bring post-Flood patriarchs closer to the present day. From the outset post-diluvial ages at paternity in M are young, starting with Arphaxad: 35, 30, 34, 30, 32, 30, 29. In complete contrast to chapter 5, these M numbers are, humanly speaking, reasonable paternal ages, and show *great* consistency (and so, conjecturally, could be schematized)—except for Terah, who suddenly seems unaccountably old. But then, the age of 70 years has unanimous support, and therefore was probably not tampered with. A strong motive for wanting younger ages at paternity, wherever that could be done (and it could not be done with Terah, who figures in the next story), is that Genesis is just about to launch into the story of Abraham. A key element in his story is that it is unusual and difficult to sire a child at an old age, especially with an old wife. So in Genesis 11, there was a strong motive for reduction for M, and the argument from irregularity cannot be employed.

G presents the archetype? The arguments for (b), i.e. in favor of G embodying the archetype, might be as follows. Adam, Seth, Noah, and Shem are unanimously attested at 100 or more; and Terah also has unanimous support at 70. *Not one age under 70* has unanimous support. However, there are several great ages at paternity of 100 or more, meaning that they share the Hebrew word *mē'ā*), which by M-G agreement are probably archetypes: for Jared, Methuselah and Lamech they agree on the 100 (differing only in the units or the tens figures). *None* of the younger ages enjoy that mutual agreement and are thus clearly archetypal, until one arrives at the very end of the two lists (and 70 is not very young). With

seven clearly archetypal ages including *mē'ā* compared to *one* archetypal small number lacking it (and that *not very young*, and at the *end*), it would seem unwise to rule out the possibility that the rest of the archetypal numbers are also large, not small. In favor of G is the fact that for nine out of ten life spans in Genesis 5, possibly ten out of ten, G preserves the archetype. G seems more natural in ages at paternity that don't radically bob up and down. The greater ages more majestically reflect the sexagesimally-oriented milieu of ancient times, saying more effectively, "Long ago, they lived longer than you do, but they were not gods."

An early G inflation? Suppose, though, that we wanted to argue that proto-G-S changed most of its numbers upwards from small originals. If this inflation occurred at all, it would have had to be in the far distant past. It would have had to be well before the time of the Maccabees, because S depends on it, and that is attested by *Jubilees*. But any inflation could have been much older than that. It would be precarious to surmise that G translators introduced a wholesale change in numbers *at the time of translation*. (1) It has been shown by DSS studies that they were normally faithful to their Hebrew text, even literalistic, and careful. (2) The dependence of *Hebrew* S on the longer chronology as evinced in Jared and Methuselah, and Genesis 11, indicates the existence of the longer chronology in *Hebrew*, which tells us it was probably in the pre-Greek phase of G. It also seems clear from the DSS that after the G translation was made in Alexandria, its Hebrew *Vorlage*, proto-G, continued to circulate in Palestine, for it appears at Qumran. Such a major discrepancy between the Hebrew and its Greek translation would have been noted and would have cast doubt on the translation, but it enjoyed popularity among Greek-speaking Jews (including the apostles). (3) To solve the problem of Methuselah outliving the Flood, in a simple manner, G's Lamech could have been at least 14 years older at the birth of Noah, thus making the Flood later; or, Methuselah could have lived 14 years less after Noah's birth. J. W. Wevers wrote: "It can be safely concluded that Gen [the LXX Genesis translator] had another chronology in the background. It was not the product of his imagination, since he would obviously have made one that was exactly right" [40, p. 73]. G's chronology certainly existed in the third century BC, and may have existed in the fourth. We have some direct evidence for the existence of the proto-G text perhaps not long after 400 BC. The Chronicler often used an edition of Samuel which was closer to the tradition of 4QSam^a, related more to the Hebrew text underlying G than to that which survived in M [5, p. 139]. Since the Chronicler used proto-G or proto-G-S, we could conjecturally push its arrival back into the fifth century BC, or even earlier than that.

The Superior Reading

The solution of a textual problem indicates secondary revision. Applying this view, we can see that at least in the case of Lamech, proto-G was faithfully preserving an ancient error. This can be seen as having been successfully corrected by proto-M, and somewhat inadequately corrected by pre-S. If that is accepted, G's figure for Lamech is more likely to have been prior, and likely preserves the damaged archetype. Although damaged, it is still clearly a large number, the 100, the Hebrew word *mē'ā*, being preserved. There remains the possibility that in very early times, the paternal ages of numerous patriarchs of proto-G-S, including the first five, were inflated, each by a hundred, but proto-M's were not. In the sixth patriarch, though, the fog lifts: G and M both preserve the archetype, and it is a larger number, not a smaller one. M also agrees that the archetypal ages for Methuselah and Lamech, even though at the end of the Genesis 5 list, were great, not small; in fact, oddly, *even greater* than the ages closest to Creation for Adam and Seth. M's longevity and age at paternity (improbably) increased rather than decreased as time went on. But M's ages for Methuselah and Lamech are not larger than G's numbers for Adam and Seth. The numbers with mutual M-G support are the larger numbers.

If we apply the criterion that of several readings, the one which best explains the development of the others is to be preferred, we will regard late, conscious reductions of S as secondary. We have several reasons to be suspicious also of some of M's figures, and to doubt some arguments adduced in their support. We have no evidence as to whether proto-G-S inflated numbers or not in the distant past; but we do have reasons to support the greater ages as more original than the smaller ones. The readings of M and S may seem satisfactory. But if this contentment is actually due to attempts to cope with prior difficult readings, wanting to demythologize what may have been seen as paganistic inflations, repair corruptions, or provide explanations, then those M or S readings, far from being truly satisfactory, actually offer nothing more original than early conjectural emendations. If that be so, these readings do not preserve the archetypal text.

Original age for Lamech. But what of the original, then? We ought to think that a reading that contains a mistake, even if early, is not *original*, because we should assume a *flawless* original. A mistaken reading, though, is logically prior to a correction, at a hyparchetypal or archetypal level. If the earliest available reading for Lamech's age at paternity is a mistake; if the archetype was somehow corrupted toward the end of Genesis 5, and the original reading is in no extant sources, we could either say that we do not know what the original age of Lamech was at the birth of Noah (similar to I Samuel 13:1); or that we accept M's emendation, and propose 182 as the best conjecture for the original number.

Augustine defended G as inspired, but added, "One thing remains certain: Methuselah did not live on after the Flood!" [quoted in 11, p.61]. He followed M at this point. But another option is to propose an emendation. If we are persuaded that the G 167 for Methuselah's paternal age is correct, then, so is the G figure of 802 years of remaining life, rather than M's 782. Then we have to add at least 14 years; G's presumably faulty 188 + 14 gives 202 as a conjectural emendation of an age for Lamech at the birth of his son (202+ 600 years to the Flood, = 802). So the long-chronology Methuselah dies in the year of the Flood.

Original Ur-text. The total life spans of the pre-Flood patriarchs are for the most part identical, and attested in all three extant traditions. This is strong presumptive evidence for the existence of an original Ur-text, a very ancient genealogy, carefully guarded, from which they all descended. It is not unreasonable to surmise that those original ages were the larger rather than the smaller numbers, yielding the longer chronology. Thus G in the *Codex Alexandrinus*, although slightly flawed, is arguably, in the main, our best witness to the original chronology for Genesis 5. We may also regard the larger numbers in Genesis 11, presenting a chronology from the Flood to Abraham, as the archetypal, more original numbers.

CONCLUSION

While the paucity of direct evidence limits our ability to obtain a complete and certain solution, there is reason to believe that revisers of what would be the Samaritan Pentateuch systematically reduced the prior ages of the patriarchs at paternity now mainly preserved in the Septuagint. The revisers of the proto-Masoretic text may have invented the reductive technique, but, being more conservative and purpose-directed, only applied the reduction where they thought it was needed, not across the board. We may conjecture that this process provided the pattern and stimulus for the pre-S revision. The evidence suggests that our extant Genesis 5 texts may be somewhat stratified, containing original readings, possibly a unique error, an inherited error, and perhaps more than one layer of revision during their long history of transmission. Although evidently slightly corrupted, the long chronology of the Septuagint may be closest to the archetype, the best exponent of the data transmitted to us from antiquity.

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