Martin Rösel

The Chronological System of the Greek *Genesis* (Gen 5 and 11)¹

The genealogies in Genesis 5 and 11 give information for each patriarch about his lifespan and the age at which he begot his first son. Since the line begins with Adam, it is possible to come to an absolute, full chronology by adding the number of years leading up to the birth of each firstborn. One example (Gen 5:3-6): since Seth, who was begotten by Adam in his 130th year, fathers Enosh in his 105th year, the year of Enosh's begetting is the year 235 *anno mundi (a. m.)* in the overall chronology according to the Masoretic Text (cf. the chart below). Any date connected to information about the age of one of the patriarchs can therefore be converted into the absolute chronology. For example, in Gen 7:6, Noah was 600 years old when the flood came; this is year 1656 *a. m.* according to the MT. The information about the remaining lifetime of the respective patriarch is not relevant for the absolute chronology².

This simple procedure is hampered because the numbers which are given in the MT of Gen 5 show traces of revision. Moreover, all important textual witnesses (Masoretic Text [MT], Samaritan Pentateuch [SP] and LXX)

¹ This paper is an abridged and translated version of a chapter of my dissertation. (See Rösel 1994, 129–144 for the German version.) It has been slightly revised for the presentation at the conference in Greifswald. It was not attempted to include a full discussion of recently published articles on the topic. Many thanks to Cindy Dawson (Houston) for improving my English.

² But see Northcote 2007, who sums together the lifespan figures for the generations from Adam to Moses and ends up with a total of 12600.

differ considerably from each other. Therefore the problems posed by the chronology of the Greek Genesis have attracted attention early on, from the church fathers to modern exegetes³. In the following I will discuss the question of the chronological system that led to the diverging figures in the Greek version. The deviations in the MT and the SP cannot be discussed extensively, and the different systems of Josephus and the Book of Jubilees remain out of consideration because they offer no help for clarifying the data in the LXX. In the first section I will present the material of Gen 5 and 11; in the second, I discuss earlier attempts at solving the problem; and finally, I will present my own solution.

1. Chronological differences in Genesis 5

In Gen 5 the Greek version has the following differences when compared with the MT: From V. 3 on we can see the phenomenon that the LXX raises the age in which a patriarch begets his first son by 100 years in comparison with the MT and the SP. The same period of 100 years is subtracted when the remaining lifetime is specified, so that the total of the lifetime of a patriarch is the same in the Greek and the Hebrew versions. This schematic increase can be seen in the generations from Adam to Enoch (Gen 5:23), with the exception of Jared.

In the case of Jared (5:18), both LXX and MT give the date of him fathering Enoch as year 162. This fits to the usual figures in LXX but is too high for the MT. Since the SP gives the number 62, which corresponds to the regular numbers in MT, one can assume that this is the original date for Jared.

In the case of Methuselah (5:25–27), all versions differ from each other. SP gives the year 67 for Methuselah begetting Lamech. LXX raises this number as usual by 100 to 167^4 , while the MT raises it by 120 to 187. In the MT and the SP, Methuselah dies in the year of the flood or in the flood: 1656 a.m.

³ Basic literature in chronological order: Preuss 1859; Bousset 1900; Bosse 1908; Skinner 1910, 127–139 and 231–239; Jepsen 1929, and 1969; Murtonen 1954; de Vries 1962; Johnson 1969; Larsson 1973, and 1983; Klein 1974; Koch 1978, and 1983; Fraenkel 1984; Hughes 1990; Etz 1993.

⁴ Some Greek witnesses also attest to 187 years for Methuselah (cf. the apparatus of the Göttingen edition of the Septuagint), also Demetrius (see below) calculates with this number. But this reading must be regarded as harmonization with the MT and is therefore secondary.

according to the MT and 1307 *a.m.* according to the SP. Surprisingly, in the LXX Enoch survives the flood, which is in the year 2242 *a.m.*, and lives on until the year 2256 *a.m.*⁵

The situation is even more complicated in the case of Lamech (5:28–31), because the common basis of the calculation is no longer recognizable: MT gives the year 182 for fathering Noah, SP has the year 53 and LXX has 188. The numbers for the remaining lifetime and the total of the age of the patriarch also differ from each other. In the MT, Lamech dies before the flood in 1651 *a.m.*, while in the SP he dies like his father in the year of the flood, 1307 *a.m.* One can assume that this was the reason for changing the dates of his life.⁶ Moreover, it is noteworthy that the total length of Lamech's life according to the MT (777 years) is obviously connected with the notion about seven times vengeance by Cain and seventy times seven vengeance by Lamech in Gen 4:24.⁷

⁵ Cf. Harl 1986, 123–124, for solutions to solve this problem by early Church fathers.

⁶ Wevers 1993, 72–73; Hendel 2012, 9–10; he assumes an error of a scribe for the year 53 in SP.

⁷ Hughes 1990, 14.

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characters are taken directly from the text of the respective version. Dates in *italics* were calculated. Underlined figures indicate the death of the The synopsis contains the genealogical data of MT* Samaritan Pentateuch (SP) and LXX on the chronology in Genesis 5. Dates in regular respective patriarch in the year of the flood or after the flood.

date of death in the last column is related to the absolute chronology. One example for clarification: According to the LXX Kenan fathers The first column (a.m. = anno mundi, year after creation) shows the dates according to the absolute chronology of this specific version. Also, the Mahalalel in the year 795 a.m. in the age of 170 years. He then lives on for 740 years and dies in the age of 910 in the year 1535 since creation

| | | | | | | | | 1. | L .= ! | | I | 1 |
|-----|-----------|------|------|-------|-------|-----------|------|-------|------------|--------|------|-----------|
| | death | 930 | 1142 | 1340 | 1535 | 1690 | 1922 | 1487 | 2256 | 2207 | | |
| | total d | 930 | 912 | 905 | 910 | 895 | 962 | 365 | 696 | 753 | | |
| X | rest t | 700 | 707 | 715 | 740 | 730 | 800 | 200 | 802 | 565 | | |
| ΓXX | begetting | 230 | 205 | 190 | 170 | 165 | 162 | 165 | 167 | 188 | 500 | |
| | m. | 230 | 435 | 625 | 795 | 960 | 1122 | 1287 | 1454 | 1642 | 2142 | 2242 |
| _ | uth a. | - | 042 | 140 | 235 | 290 | 1307 | 887 | 1307 | 1307 | | |
| | death | 930 | F | - | F | 17 | - | - | 0 | | | |
| | total | 930 | 912 | 905 | 910 | 895 | 847 | 365 | 720 | 653 | | |
| 0 | rest | 800 | 807 | 815 | 840 | 830 | 785 | 300 | 653 | 600 | | |
| SP | begetting | 130 | 105 | 06 | 70 | 65 | 62 | 65 | 67 | 53 | 500 | |
| | a.m. be | 130 | 235 | 325 | 395 | 460 | 522 | 587 | 654 | 707 | 1207 | 1307 |
| | | 0 | | 140 | 235 | 290 | 422 | 987) | 656 | 651 | | |
| | death | 930 | 104 | 2 | 2 | P | - | ~ | 1 | F | - | \square |
| | total | 930 | 912 | 905 | 016 | 895 | 962 | 365 | 696 | LLL | | |
| T | rest | 800 | 807 | 815 | 840 | 830 | 800 | 300 | 782 | 595 | | |
| MT | begetting | 130 | 105 | 06 | 70 | 65 | 162 | 65 | 187 | 182 | 500 | |
| | a.m. b | 130 | 235 | 325 | 395 | 460 | 622 | 687 | 874 | 1056 | 1556 | 1656 |
| | 0 | Adam | Seth | Enosh | Kenan | Mahalalel | | Enoch | Methuselah | Lamech | Noah | Flood |

If one now turns to the synopsis on the chronological data in Gen 5:3-32 and 7:6 (dating of the flood), the following observations can be noted:⁸

- MT and SP are in accordance until Mahalalel.
- From Jared on, the ages of begetting seem to be altered in the MT. The age of Enoch shows that begetting prior to the age of 100 seems to be original. Moreover, in the SP the ages of begetting decrease continually.
- LXX is in accordance with MT and SP until Mahalalel but raises the ages of begetting by 100 and subtracts the same figure from the remaining lifetime.
- With the exception of Methuselah and Lamech, the numbers in the three versions seem to stem from a common basis. In the case of Methuselah, LXX obviously had a *Vorlage* of the SP-type (see above), while in the case of Lamech there is no accordance at all.
- In the SP the patriarchs Jared, Methuselah and Lamech die in the year of the flood, but in the MT, only Methuselah perishes. According to the LXX, Methuselah survives the flood. While the other versions pay attention to the inner consistency of the chronology, LXX is more concerned with raising the figures of the absolute chronology than with the details.
- According to the MT, the flood took place in the year 1656 *a.m.*, according to the SP in 1307 *a.m.*, and according to the LXX in the year 2242.

2. Chronological differences in Genesis 11

When turning to the chronological data in Gen 11:10-32, an inconsistency within the text requires consideration: According to Gen 5:32, Noah begets his three sons, Shem, Ham and Japheth, in his 500th year, and according to Gen 7:6+11 Noah was six hundred years old when the flood came on the earth. This means that Noah's sons were 100 years old in the year of the flood. Therefore it is surprising to read in Gen 11:10 that Shem begot Arpach-shad in his 100th year, *the second year after the flood*. The source of this note is unclear,⁹ but since it is the first date which is given in Gen 11, one must take this date into account when calculating the dates of the absolute chronology of Gen 11.

As in Genesis 5, the Greek version of Gen 11 also displays the tendency to raise the ages in comparison with the MT: From Arpachshad (11:12) to

⁸ The following list is based on Jepsen 1929, and Hughes 1990, 5-43.

⁹ See Westermann 1983, 745, and Hughes 1990, 18-23, for a discussion of this problem.

Serug (11:22), the age at which a patriarch fathers his first son is raised schematically by 100. In the case of Nahor (11:24), it is raised by 50 years only. These differences are shared by the SP, indicating a common textual tradition which differs from the MT. For Terah, Abraham's father, all witnesses give the same age of 70 years for begetting his son.

Even more interesting is the fact that in the Greek version another patriarch is inserted: By the addition of Kainan in 11:13, LXX arrives at a total of 10 patriarchs fathered after the flood, from Arpachshad to Abram.¹⁰ In the other versions, there are 10 patriarchs fathering after the flood. This is the more original scheme. In LXX the name Kaivav is obviously taken from Gen 5:9, and the details of his life are copied from Shelah, the next patriarch in the list, who has now become Kainan's son.¹¹

¹⁰ Wevers 1993, 154, therefore in his view the insertion is »systematically determined«. He also offers the explanation that Kainan was included to come to a total of 1000 years between the birth of Shem's son and Abram's father. Also, in the Book of Jubilees 8:1-9 Kainan appears as Arpachshad's son; according to Berger 1981, 369, this is taken from Gen 11:13 in the Greek version.

¹¹ Rösel 1994, 223; Hughes 1990, 15–18.

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The synopsis contains the genealogical data of the MT, Samaritan Pentateuch (SP) and LXX on the chronology in Genesis 11. Dates in regular characters are taken directly from the text of the respective version. Dates in *italics* were calculated. The first column (a.m. = anno mundi, year after creation) shows the dates according to the absolute chronology of this specific version. The second column (p.d. for post diluvium, after the flood) gives the calculated figure of the year after the flood according to the chronology of the respective version. The calculations of the absolute chronology are based on Gen 11:10: Sem fathers Arpachshad two years after the flood

| | | Z | MT | | | | SP | | | L | LXX | |
|------------|------|------|-----------|------|------|------|-----------|------|------|------|-----------|------|
| | a.m. | p.d. | begetting | rest | a.m. | p.d. | begetting | rest | a.m. | p.d. | begetting | rest |
| Flood | 1656 | | | | 1307 | | | | 2242 | | | |
| Shem | 1658 | 2 | 100 | 500 | 1309 | 2 | 100 | 500 | 2244 | 2 | 100 | 500 |
| Arpachshad | 1693 | 37 | 35 | 403 | 1444 | 137 | 135 | 303 | 2379 | 137 | 135 | 430 |
| Kainan | | | | | | | | | 2509 | 267 | 130 | 330 |
| Shelah | 1723 | 67 | 30 | 403 | 1574 | 267 | 130 | 303 | 2639 | 397 | 130 | 330 |
| Eber | 1757 | 101 | 34 | 430 | 1708 | 401 | 134 | 270 | 2773 | 531 | 134 | 370 |
| Peleg | 1787 | 131 | 30 | 209 | 1838 | 531 | 130 | 109 | 2903 | 661 | 130 | 209 |
| Reu | 1819 | 163 | 32 | 207 | 1970 | 663 | 132 | 107 | 3035 | 793 | 132 | 207 |
| Serug | 1849 | 193 | 30 | 200 | 2100 | 793 | 130 | 100 | 3165 | 923 | 130 | 200 |
| Nahor | 1878 | 222 | 29 | 119 | 2179 | 872 | 79 | 69 | 3244 | 1002 | 79 | 129 |
| ſerah | 1948 | 292 | 70 | 135 | 2249 | 942 | 70 | 75 | 3314 | 1072 | 70 | 135 |
| Abram | 2048 | 392 | 100 | | 2349 | 1042 | 100 | | 3414 | 1172 | 100 | |

The following can be inferred from the synopsis of the three versions in Gen 11:

- The MT preserves low ages of begetting, which fit the original dates in Gen 5. SP and LXX raise these figures by 100 and in the case of Nahor, by 50. If according to Gen 17:17 Abraham thinks that it is impossible that a child can be born to a man who is hundred years old, this statement only makes sense with the chronology of the MT. In the SP and the LXX, an age of 100 or more would be completely normal.
- As stated earlier, LXX has inserted over against the MT and the SP an additional patriarch, Kainan II. This addition can also be found in Gen 10:22+24, again in the Greek version only, indicating that the patriarch Kainan II is a secondary addition. Once more it seems as if the LXX is concerned with raising the dates of the absolute chronology.
- In Gen 11, several stages of the development of the chronology are discernable: One version of the MT-type was reworked by raising the ages of begetting by 100 or 50. This intermediate type can be seen in the SP. Traces of later, independent editing are evident: in the SP, for each patriarch a calculation of the total of his lifespan was added, together with a recalculation of the remaining years (which is not included in the synopsis); furthermore, the LXX inserts Kainan II.

3. IN SEARCH FOR A SYSTEM BEHIND THE NUMBERS

The discussion about the problem caused by the numbers in Gen 5 and 11 has mainly centered on the question of whether there are different periodicities or systems behind these differing ages or whether they are targeting historic dates. Moreover, since each of the three versions shows traces of redactional activity, attempts were made to reconstruct the original chronological framework that lies behind the texts. The results of prior research can be summarized as follows:

All solutions display a basic commonality: the figures of Gen 5 and 11 must be combined with other chronological data from the books of Genesis, Exodus, Kings and Ezra. The relevant texts are:

- Gen 21:5: Isaac was born in Abraham's 100th year (= 2048 a.m.: MT).
- Gen 25:26: Jacob is born in Isaac's 60th year (= 2108 a.m.: MT).
- Gen 47:9: Jacob is going to Egypt in his 130th year (= 2238 a.m.: MT).

- Exod 12:40: The Israelites live 430 years in Egypt (= 2668 *a.m.*: MT). According to the SP and the LXX, the Israelites live 430 years *in Canaan* and Egypt = 215 years in Egypt.
- 1 Kgs 6:1: The beginning of the construction of the Solomonic Temple in the 480th year after the Exodus (= 3148 *a.m.*: MT). Again, LXX records a different number: 440 years.
- The information in the book of Kings about the regnal years allow the reconstruction of 430 years after the beginning of the construction of the Temple until its destruction (= 3578 *a. m.*: MT).¹²
- Ezra 3:8 dates the beginning of the construction of the Second Temple to the year after the return to Jerusalem. Thus, the reconstruction has begun 50 years after the destruction of the First Temple, leading to the year 3628 *a. m.* in the MT (537 BCE).¹³

If these figures are combined with the data from the different versions of Gen 5 and 11, the following results can be obtained:¹⁴

- The chronological system of the MT has its reference point in the rededication of the Second Temple by the Maccabees in 164 BCE. If the chronological data of the MT are combined, they point to the year 4000 *a. m.* for this event.¹⁵ This theory fits the observation that the figures in the MT were obviously reworked after the translation of the LXX and the separation of the text type of the SP.
- The chronology of the SP obviously has its reference point in the dedication of the sanctuary on Mt. Garizim in the year 2800 *a.m.*¹⁶ This year seems plausible as a multiple of the numbers 40 and 7.¹⁷

¹² Cf. *inter alia* Jepsen 1929, 254, or Koch 1978, 435. Even Hendel 2012, 12 accepts this calculation.

¹³ Cf. Hughes 1990, 39, and de Vries 1962, 597, table 6, on the method of calculating and Hughes 1990, 53, for the question whether Ezra 3:8-9 is historically reliable.

¹⁴ See Northcote 2004, 3–7, for a survey of earlier attempts to solve the problem.

¹⁵ Thus *inter alia* Murtonen 1954, 133–137; Koch 1983, 423; Hughes 1990, 233–237, with a different way of calculation. But cf. Hendel 2012, who rejects this theory because he sees no convincing evidence for the existence of an overall chronological system (see below).

¹⁶ Cf. inter alia Jepsen 1929, 253, or Koch 1983, 424; Hughes 1990, 237-238.

¹⁷ See Koch 1983, 425–429, for the evidence of the multiple of seven, he speaks of »Sabbatstruktur« (sabbatical structure).

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Jeremy Hughes' attempt to reconstruct the original priestly chronology¹⁸ calculates the year 1600 *a.m.* as the first year of Abraham; 1200 years later, the temple was built according to the figures of the MT (pre-temple age). A second epoch of 1200 years (temple age) has to be assumed for the existence of both temples so that the post-Abrahamic age sums up to 2400 years. For the age of the First Temple, he calculates 480 years (including destruction), in parallelism to 480 years from the Exodus to the construction of the temple. For the Second Temple he assumes a duration of 720 years in parallelism to 720 years from Abraham to the Exodus. This reconstructed chronology is based on the idea of a world era of 4000 years; again, this multiple of 40 seems plausible as a symbolic age of an epoch.¹⁹

All these calculations presuppose that the year of begetting the firstborn is the same year as his birth. The biblical texts give no indication whether this assumption is correct. An alternative would be to add one year for each patriarch to the absolute chronology for the time between conception and birth. This can be inferred from a combination of Gen 17:1 (Abraham is 99 years, when the Lord appears to him) and 17:17 (»Can a child be born to a man who is a hundred years old?«).²⁰ But because this text also uses round numbers such as 100 for Abraham or 90 for Sarah, it is more plausible to calculate with round numbers in the chronologies of Gen 5 and 11 as well.

Until now, no obvious pattern behind the chronology of the Greek version has been detected.²¹ Most scholars are content with the explanation that the LXX has not had a specific chronological system, but rather the intent to bring the ages of begetting into a better relation to the overall lifespan. Therefore, these figures were raised and the corresponding numbers of the remain-

¹⁸ Hughes 1990, 21–54. The theory by Etz 1993 has very speculative assumptions of different steps of additions and multiplications, therefore I am not discussing it. Another explanation is offered by Ziemer 2009, who includes the theory of a divine day which lasts a thousand years, which in my view is not supported by the text of Gen 5 and 11. Moreover, Ziemer adds for each patriarch one year between fathering and birth (p. 3), therefore he reckons with different figures than scholars usually do.

¹⁹ This reconstruction matches the theory of Jepsen 1929, 253, who also comes to the year 2800 as the first year of Solomon's temple. But for him year 2800 is the target point of the chronology.

²⁰ Ziemer 2009, 3.

²¹ Cf. Koch 1983, 425.

ing lifetime lowered.²² The weak point of this argument is the fact that LXX has no simple schematic. In the case of Nahor in 11:24, the age is raised by 50, not by 100 as in most other cases, and in 5:28 the age of Lamech is raised by 135 in comparison with the SP. Moreover, the insertion of the patriarch Kenan II cannot be rationally explained if one is not content with the explanation that the LXX wanted to create »greater formal symmetry between antedeluvian and postdeluvian sections of the genealogy«.²³

Thus, it stands to reason that the deviating figures in the Greek version attest to a specific chronological model. But again, the proposals brought forward in the exegetical discussion are not convincing. Alfred Bosse has considered that the Greek dating of the foundation of the temple to the year 4260 *anno mundi* is the result from a calculation of 12 x 355, pointing to the idea of a great year consisting of great months with 355 days of a lunar year (*großes Jahr mit einem großen Monat von 355 Tagen [Mondjahr]*).²⁴ According to his theory, the chronology of the MT is based on the idea of a great solar year, and the LXX would have converted this scheme to a great lunar year. There are two weak points in Bosse's proposal. One, he has to add one year to the duration of the flood, a calculation not attested in the text. Two, besides the reconstructed length of the 355 days of the flood (Gen 7:11), there is no indication in the LXX pointing to a high esteem of the number 355. His theory was therefore not supported by later research.²⁵

Like A. Bosse, Jeremy Hughes calculates the year 4260 anno mundi as the first year of the temple.²⁰ He assumes that the LXX has used a system of postdating²⁷ that intentionally focuses on the year 4260 as the first full year. He therefore does not need to insert an additional year for the flood as required by Bosse. He then adds 430 years until the destruction, thus dating the first year of the destructed temple as 4690 *a. m.* From Zech 1:12, he adds 70 years to the rebuilding of the Second Temple (first year: 4760 *a. m.*), leaving 240 years to the year 5000. He then switches to a modern chronology of the era and arrives in 280 BCE, based on the year 520 BCE as the date of the founda-

²² E.g. Preuss 1859, 37; de Vries 1962, 581; Murtonen 1954, 136; Klein 1974, 263; Larsson 1973, 407.

²³ Hughes 1990, 9–10, who himself admits that the argument is not very strong.

²⁴ Bosse 1908, 31–36, citation from p. 33.

²⁵ As to my knowledge only Skinner 1910, 234–235, has reluctantly signaled approval of Bosse's theses.

²⁶ Hughes 1990, 238-241.

²⁷ Cf. Hughes 1990, 20-21; 181-182.

tion of the Second Temple.²⁸ While the figure 5000 presented by Hughes is reasonable for the idea of a world era, he is not able to explain why this world age should be related to this specific historical situation in the 3rd century BCE. He assumes that the system was adopted from the underlying Hebrew *Vorlage* which had an eschatological expectation for the year 5000 *a. m.*, an expectation no longer known to us. Since he cannot give a sound explanation for purpose and intent of this chronology, this theory seems inconclusive to me.²⁹

4. A NEW PROPOSAL

Up to now it is not clear whether the figures in the Greek version point to a specific historical date, whether an unknown period scheme lies behind them, or whether they serve to establish synchronisms with other chronological systems of the Hellenistic environment. For the sake of clarification, I will start with an overview of the absolute chronology, according to the LXX:

- 2242 Flood
- 3314 Birth of Abraham
- Abraham departs from Haran (Gen 12:4: 75th year)
- 3414 Birth of Isaac (Gen 21:5: Abraham's 100th year)
- 3474 Birth of Jacob (Gen 25:26: Isaac's 60th year)
- 3604 Jacob in Egypt (Gen 47:9: Jacob's 130th year)
- 3819 Exodus (Exod 12:40: The Israelites were dwelling 430 years in Canaan and Egypt = 215 years in Egypt. [MT: 430 years in Egypt])
- 4259 Foundation of the temple (3 Kgdms 6:1: 440 years after the Exodus [MT 1 Kgs 6:1: 480 years])
- 4689 Destruction of the temple (430 years, calculated from the regnal years in 3+4 Kgdms/1+2 Kgs)
- 4739 Rebuildung of the temple (Ezra 3:8: 2nd year after the return = 50 years after destruction)

²⁸ Cf. also Northcote 2004, 12–17, who corrects the chronology of the LXX with numbers from different sources, including later codices and reckons with the year 5000 *a.m.* in 292 BCE, »a few years after Palestine came under the control of Ptolemaic Egypt in 301 BCE and just a few years prior to the accession of Ptolemy II Philadelphus in 285 BCE« (p. 16).

²⁹ This also applies for his attempt to reconstruct the chronology of the Hebrew text underlying the LXX, which reckons with the year 4000 *a. m.* for the Exodus (p. 240-241), because he has to combine figures from several textual witnesses to arrive at this date.

It is obvious that the ages imply a system of postdating: from Abraham's birth forward, the year in focus is the *following* year. This is similar to regnal years, in which the beginning of a king's reign is dated from the new year after his ascension.³⁰ This leads to round numbers like »5« and »10«. Besides this observation, there is no indication of a specific scheme or periodicity centered on multiples of characteristic numbers such as 7, 12, 40 or a Jubilee-scheme. Moreover, none of the important events of the history of Israel can be dated to a symbolic figure like 2800, 3500 or 4000. It should be noticed, however, that the figures taken from the LXX are lower than those of the MT, beginning with the duration of the stay in Egypt until the foundation of the temple. This contradicts the tendency of LXX Genesis to raise the figures and to expand the chronology by inserting another patriarch.

Another explanation of the dates is that specific events of the history of Israel are synchronized with well-known chronological systems in the translator's own environment. This would fit into a special effort in the scientific discussions of that time to obtain reliable chronological data and to formulate a framework for mythological and historical data.³¹ It may suffice to mention the *Babyloniaca* by Berossos, Manetho's *Aigyptiaca*, or the Greek chronology by Eratosthenes from Cyrene, all of them from the third century.³²

It is clear that Jewish Hellenistic writers of this time period were interested in matters of chronology. Thus, the fragments by Demetrios from Alexandria display the attempt to synchronize biblical dates from the time of Israel's monarchy with the regnal years of Ptolemy IV (fragment 6,1-2). Moreover, fragment 2 reveals Demetrios' interest in Israel's sojourn in Egypt, which is dated according to the numbers of the Septuagint (frg. 2, 18-19).³³ Shortly after, Pseudo Eupolemus draws connections between extra-biblical traditions (probably Berossos, Hesiod, and Ktesias) and biblical texts; in his emphasis on deriving identifications, chronological considerations are not preserved. About 50 years later (around 158/7 BCE), Eupolemus attempts to prove the antiquity of the biblical history. According to his calculations, Adam dates to the year 5149 before his days and the Exodus to 2580 years before (fragment 5).³⁴

³⁰ Cf. Hughes 1990, 20, for this system.

³¹ For what follows cf. Kubitschek 1928; Bickermann 1980; Wacholder 1968; Hermann / Schmidtke/Koep 1956.

³² Cf. Adler 1989, 15-30.

³³ Holladay 1983, 87; cf. Walter 1980, 281. 289.

³⁴ Cf. Holladay 1983, 155, for the reading 2580.

It is therefore evident that from beginning of the third century, there was vivid interest in establishing a common historical and chronological framework.³⁵ In the beginning, this was primarily directed at the history of the calculators' own people, as in Berossos' or Manetho's work. Jewish writers then attempted to combine events and characters known from biblical and foreign sources and to calculate synchronisms. By about 250 BCE, then, when LXX Genesis presumably was translated, there was already a great interest in chronology. However, obviously no synchronism existed that could also account for the primeval dates of the flood story. This coincides with the observation that none of the dates in the LXX can be related to known extra-biblical dates of contemporary historians.

In light of this background, it is possible to go one step further and to come to a solution regarding the chronology of the Greek Genesis: As stated earlier, the Greek version has lower figures than the MT from Ex 12 on, while in Genesis the figures were raised. But if one remembers that Genesis was translated first, one can consider that the translator was calculating with figures still unchanged by later writers/translators. If this alternative is taken into account, the following picture emerges:

Until the year 3604 (the beginning of Jacob's stay in Egypt), I follow the chronology of Genesis. Then I add 430 years until the Exodus (MT-figure from Exod 12:40) and 480 years until the temple is built (MT-figure from 1 Kgs 6:1). The statement in Exod 12:40 in the MT is obviously more original, because it has to be judged as *lectio brevior et difficilior.*³⁶ SP and LXX (or their antecessor) have tried to solve the problem of the long duration of the stay in Egypt by inserting *and Canaan*. In 1 Kgs 6:1, LXX has changed the original MT-figure of 480 to 440, probably to attain a period of 40 years for each of the priestly generations from Aaron to Zadok according to 1 Chr 5:27–34 (6:1–8).³⁷

The question of the calculation of the time for existence of the First Temple is more difficult to answer. In the MT, the regnal years of the kings of Judah after the foundation of the temple total 430 years.³⁸ However, the Lucianic/Antiochene version of the Greek text records different figures for Abijam (3 Kgdms 15:2: 6 years instead of 3 in the MT) and Joram (4 Kgdms 8:17: 10 instead of 8 years). Thus the chronology of the Lucianic version is five

³⁵ Cf. Fraser 1972, I, 457. 510.

³⁶ Kreuzer 1991. The figure 430 which is attested to in LXX and SP has also been used by Paul in Gal 3:17, cf. Lührmann 1988.

³⁷ Thus Montgomery/Gehman 1951, 143.

³⁸ Cf. the chart in Koch 1978, 435, and tables 4-6 in de Vries 1962.

years longer than that of the MT; moreover, the number 435 is atypical and could therefore be a remnant of a more original, unreworked chronology.³⁹ In the books of the Kings, the Lucianic version has in many instances more original readings⁴⁰, especially in texts related to chronological problems.⁴¹ Moreover, it can be safely considered that Josephus has used a text of the (proto-)Lucianic type in his rewriting of the narrative material from Samuel and Kings.⁴² Thus there is ample reason to assume that the figure 435 for the time from the foundation of the temple until the exile goes back to an old tradition which could have been known by the translator. The last step is then to add 50 years from the beginning of the exile until the foundation of the Second Temple, a figure computed from Ezra 3:8. The calculation utilizing these alternative figures arrives at a surprising result for the chronology of the Septuagint:

- 2242 Flood
- 3604 Jacob in Egypt
- 4034 Exodus (MT: Ex 12:40: The Israelites were dwelling 430 years in Egypt)
- 4514 Foundation of the temple (MT: 1 Kgs 6:1: 480 years after the Exodus)
- 4949 Destruction of the temple (LXX¹: 435 years of Judean kings from the foundation of the First Temple until its destruction
- 4999 Rebuilding of the temple (Ezra 3:8: 2nd year after the return = 50 years after destruction)

According to this reconstruction, the translator of the Greek Genesis has dated the first year of the Second Temple to the year 5000 *anno mundi*. The beginning of the existence of the new temple is obviously seen as the beginning of a new era, comparable to the rededication of the temple in the year 4000 *a.m.*, if this reconstruction of the chronology of the MT is correct.

Against this proposal, Ronald Hendel has objected that I have commingled chronological data from LXX, MT and modern calculations.⁴³ Unfortunately, Hendel does not cite my work correctly, because I have not tried to yield the modern date of 515 BCE for the rededication of the temple. As stated

³⁹ Hughes 1990, 38.

⁴⁰ Swete 1914, 237–241; Kreuzer 2015.

⁴¹ Shenkel 1968, 110, who concludes that the Lucianic text did preserve the original chronology of the Hebrew *Vorlage* of the first translation of the books of Kings into Greek. Cf. also Larsson 2002, 511–514, with a similar result.

⁴² Harl/Dorival/Munnich 1988, 170.

⁴³ Hendel 2012, 15.

above, I am not working with modern data but with the chronology of Ezra 3:8, which refers to the start of the construction of the temple under Sheshbazzar in the 2^{nd} year after the return to Jerusalem, which is year 50 after the destruction of the temple (537 BCE). This period of 50 years is generally accepted as representing the priestly chronology which prefers a schematic pattern of 2 x 480 years (1 Kgs 6:1): 480 years from the Exodus to the foundation of the First Temple, 430 years of the First Temple's existence, plus 50 years until the foundation of the Second Temple.⁴⁴

Hendel's own suggestion that the chronologies in Genesis and Kings are more easily explained as »responses to local exegetical problems« is not convincing, because he does not attempt to explain why in the Greek version the numbers in Gen 11 are raised and the patriarch Kainan is inserted. This obvious interest in raising the numbers is contrary to the fact that in the books translated *after* Genesis, the numbers are lowered. Therefore, in my view it is permissible to calculate with the oldest extant dates which could have been known to the translator. Moreover, one must take a systematic reworking of the numbers into account, because in my view the differences between the versions or their respective *Vorlage* cannot be explained by scribal errors.

The question remains why the translator – or the tradition he mirrors – has chosen this date, resulting in the calculation of such a long chronology. One can easily imagine that the figure 5000, a multiple of 50, relates this chronology with the idea of the Jubilees: every 50^{th} year must be hallowed according to Lev $25:10.^{45}$ Thus a new cycle of sabbath-years would have begun with the new temple.

One can also consider influence by the work of Manetho or the Egyptian tradition on which his work is based. According to the *Aigyptiaca*, the historical pharaohs reigned for approximately 3000 years. This figure would contradict a short and medium chronology of the biblical history, because according to Gen 10:6, Mizrajim, the son of Ham, founded Egypt only after the flood. According to the chronology of the LXX as it is reconstructed above, the flood happened 2857 years prior to the foundation of the Second Temple. If the translator's date of authorship was about 280 years after the foundation of the temple, this assumption would place his lifetime approximately 3135–3140 years after the flood, thus avoiding any contradiction between Egyptian and biblical traditions. This explanation might fit the early attempts to synchro-

⁴⁴ Hughes 1990, 39.

⁴⁵ Ringe 2008, 418.

nize chronological data in Hellenistic times I have outlined above⁴⁶. Thus, the combination of the figures taken from the LXX of Genesis and older Hebrew sources makes it possible to solve the problem of the chronology underlying Genesis 5 and 11.⁴⁷

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⁴⁶ If later Byzantine theologians date the birth of the redeemer to the year 5500 *anno mundi*, their calculations must have been quite similar to the theory advanced here, cf. Petkov 2016, 145.

⁴⁷ This paper is also included in my collected articles: Rösel, M., Tradition and Innovation: English and German Studies on the Septuagint (= Septuagint and Cognate Studies 70), Atlanta 2018, 89–107.

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