#### Dating the Biblical Chronology

Abstract. The transmission of many historical and chronological data (reigns, lifetimes, long periods, etc.) as well as many proper names, is necessarily flawed, unless one believing in an (unlikely) scribes infallibility. Thus, ancient texts, that are preserved in more than one copy, have been compared to determine how much variation occurs between manuscripts. This kind of study showed that the most stable texts surveyed are those containing ritual instructions, which have led, for example, to the exact transmission of the Torah in the late Second Temple period. The accuracy of the transmission of the text can be checked owing to the accuracy of its chronology and through the comparison between the sum of the intermediate values and the total value indicated in the text. Textual criticism now favours an anteriority of the Septuagint text Vorlage ( $H^*$ ) on the proto-Masoretic which comes from an overhaul of this Vorlage, including chronological data from the text of Genesis. According to the reconstruction of chronological data, Jewish corrections of the Hebrew text (preserved in the LXX) were performed in two steps: after the onset of the Book of Jubilees (c. -160) durations in Genesis 5:3-31 were reduced by 100 years and were adopted by a part of the Jews, as Eupolemus and by the Samaritans, and afterward, at the Synod of Yabneh (c. 90 CE), durations in Genesis 11:10-26 were also reduced by 100 years and were canonized by the rabbis (Pharisees). There was no dispute since the priests (Sadducees) no longer existed, as well as scrolls of the temple (except some of them which has been retrieved by Josephus thanks to emperor Titus in 70 CE).

The biblical and Sumerian accounts of the Deluge are very similar (which occurred in year 600 of Noah or Ziusudra) and suppose a dating 3170 BCE according to the Septuagint. Biblical chronology from Abraham (2038-1863) can be reconstituted starting from the Masoretic data, which are more reliable than those from the Septuagint for this period 2038-517. By convenience the total period was cut out in four periods link to the Patriarchs (2038-1493), the Judges (1493-1097), the Kings (1097-517) and the Second Temple (517 BCE to 133 CE).

### SCIENTIFIC APPROACH TO AN ABSOLUTE CHRONOLOGY THROUGH SYNCHRONISMS DATED BY ASTRONOMY

Some sceptics argue that the Bible carries lots of legendary data that would be incorrect. This recurrent accusation, often repeated by conformism, is based on texts which are misunderstood, taken out of context or in opposition to official teaching<sup>1</sup>. Thus, another indirect way to test the authenticity of biblical figures is to check if they induce chronological contradictions (inside the text itself / with absolute dates). First, a critical edition of the biblical text, free from errors and skilful corrections, is needed.

#### THE CHRONOLOGICAL VALUES IN THE BIBLE: ARE THEY EXACT?

The transmission of many historical and chronological data (reigns, lifetimes, long periods, etc.) as well as many proper names, is necessarily flawed, unless one believing in an (unlikely) scribes infallibility. The biblical text, although it has been exceptionally well transmitted, is no exception. Certain ancient Near Eastern texts develop over time towards a reasonably stable state of transmission. However, the development towards a single 'stabilised' transmitted form that marks the biblical manuscripts between the 2<sup>nd</sup> century BCE and 2<sup>nd</sup> century CE is often considered to permit the Hebrew bible a unique position in the ancient Near Eastern textual corpus. A study<sup>2</sup> compared the accuracy with which ancient texts of varying genres and languages were transmitted (texts from the Neo-Assyrian, Neo-Babylonian and Late Babylonian periods that range in date from the late 8th century BCE to the 3<sup>rd</sup> century BCE and Torah scrolls from the Dead Sea area that range in date from the 3<sup>rd</sup> century BCE to the 2<sup>nd</sup> century CE). Texts that are preserved in more than one ancient copy have been compared to determine how much variation occurs between manuscripts of the same text. The accuracy with which the cuneiform texts were transmitted has been then compared with the biblical evidence. This study showed that the most stable texts surveyed are those containing ritual instructions, which have led, for example, to the exact transmission of the Torah in the late Second Temple period.

Every people of the past used its own calendar to count years, months and days. Israelites were not an exception, and they were concerned about accurately placing events on the time scale, as it can be proved by long genealogical lists and frequent recordings of how many years kings or judges ruled. Jews even considered that their book, the Bible, was laying down history and there was no need to write any other specific book. The only exception was the Seder Olam written around 160 C.E. This book mostly was an attempt to reconstruct biblical chronology, and it tried to solve a problem occurring each time one works on chronology: When does one particular period of time begin and when does it end? A scientific chronology must fill two basic standards: it must be consistent with itself and also with every key historical date (i.e. dates based on accurately dated astronomical

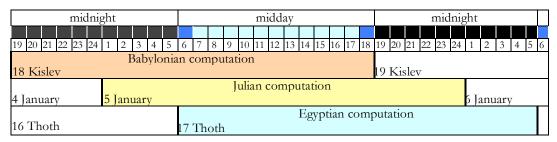
<sup>1</sup> Some examples of pseudo contradictions: The hare is classified as ruminants (Deuteronomy 14:7), yet it has only one stomach and according to modern science a ruminant digests its food in two stages with multiple stomachs. The contradiction exists in relation to the current definition of biologists but for an observer an animal ruminates if it digests its food twice, usual definition of rumination in dictionaries. François Bourlière, professor at the Faculty of Medicine of the University of Paris V who taught animal ecology at the Faculty of Science, writes: The habit of 'double digestion', which involves passing food twice by the intestine instead of one, seems to be a common phenomenon in rabbits and hares. In principle, domestic rabbits eat and swallow without chewing their droppings at night, which form in the morning up to half the volume of the stomach. In the case of the wild rabbit, double digestion takes place twice a day (...) It is believed that this habit gives the animal a significant contribution in B vitamins that are produced by the action of bacteria on food in the large intestine (The Natural History of Mammals, 1964, p. 41). The bat is ranked among the birds (Leviticus 11:19), but it is a mammal according to science. In fact, the Bible class just bats and birds among flying creatures (Leviticus 11:13). Teeming winged creatures with 4 legs should not be consumed, but the grasshopper (Leviticus 11:20), so that these insects have 6 legs. Yes, but the next verse says that the grasshopper has 4 legs for walking and 2 for jumping. The sun comes down (Isaiah 38:8), but it is the sun which revolves around the earth. The fact is presented as a miracle and not a normal phenomenon, again, the sun was down for a terrestrial observer (in the same way as the sun rises and sets). The Bible does exceptionally reference to an outside observer (God): He extends north on the empty place, he hangs the earth on nothing (Job 26:7). There is Someone who lives above the circle of the earth (Isaiah 40:22). The earth is placed prior to the stars (Genesis 1:1,16), but the stars appeared prior to the earth. Indeed but, according to the biblical text, God created the heavens and (then) the earth or the heavens are composed of the sun, moon and stars (Genesis 2:1). Light is created in the 1<sup>st</sup> day and then again at the 4<sup>th</sup> day (Genesis 1:3,14-16). The sun (greater light) is created at the 1st day (the duration of which is not specified), and is made or completed (not created) by the 4th day. According to the biblical text, a terrestrial observer could see the succession of night and day from the 1st day and then, from the 4th day, the two luminaries (the Sun and the Moon) became distinct in the sky.

<sup>&</sup>lt;sup>2</sup> R. HOBSON – The Exact Transmission of the Texts in the First Millenium B.C.E. Sydney 2009 Ed. University of Sydney (Thesis) pp. 1-538.

phenomena). Such standards get rid of the inconsistent Septuagint based chronology on the period 1000-500 BCE<sup>3</sup> and the Seder Olam chronology which dates reigns of Persian kings about 170 years backwards (e.g. Cyrus would have begun ruling in 369 BCE and would have died in 367 BCE)<sup>4</sup>. Current calculations of historical data are based on Thiele's biblical chronology which is about 45 years off near 900 BCE<sup>5</sup>.

As attested by Qumran texts, the Bible Masoretic text was very well preserved. This text is the one used to establish the scientific biblical chronology. Though it does not mention any astronomical phenomenon, it does mention reigns of several Egyptian, Babylonian and Persian rulers, as well as famous battles or the fall of well-known cities. This allows indirect comparisons with key dates. Moreover, the biblical text often contains a two-fold chronology: one by adding years of rules, and the other one by linking "anchor periods". These periods appear as spans (often hundreds of years) telling how much time elapsed between two major events. For example, Israelites were to be oppressed during 400 years (Genesis 15:13). According to the biblical text, this period begins with the persecution of Abraham's son Isaac (Genesis 21:8-9) and ends with the escape from Egypt and the end of slavery (Galatians 4:29).

Several important questions must be settled before any chronological calculation may be done: How long is a year, a month or a day? When does the year, the month or the day begin? Is the number of years inclusive or exclusive? For example, "the second year" of a rule may count for one year (if the second year is beginning) or for two years (if the second year is ending). At the very beginning of the Bible, time is already counted: Let luminaries come to be in the expanse of the heavens to make a division between the day and the night; and they must serve as signs and for seasons and for days and years (Genesis 1:14). Since the sun and the moon are mentioned, the year should be solar (365.24 days) and the months should be lunar (29.53 days). Only the beginning of the day is indicated: it began when the previous one ended (Genesis 1:5) like Babylonian computation. For example (in 474 BCE):



The beginning of the year is not stated, but it should be synchronized with agricultural activity, which ended after the crop, before winter colds (Genesis 8:22). Old Mesopotamian calendars all started at autumn equinox; the first month, the one of the renewal, was called Tishri, which means "beginning". The biblical text says that from Exodus onward (approximately 1500 BCE) years no longer had to begin in Tishri but in Nisan (Exodus 12:2), at the spring equinox. Josephus (Jewish Antiquities I:81) confirms that the Jews used to count from Nisan for religious or solemn (royal) activities, but continued counting from Tishri for commercial activities.

The transmission of the biblical text after the First Temple to the late Second Temple period will be examined hereafter.

<sup>&</sup>lt;sup>3</sup> J. HUGHES – Secrets of the Times. Myth and History in Biblical Chronology in: *Journal for the Study of the Old Testament Supplement Series* 66 (1990) pp. 57, 267-272.

F. NOLEN JONES - The Chronology of the Old Testament

Texas 2005 Ed. Master Books pp. 170-173, 326.

<sup>&</sup>lt;sup>4</sup> H. GOLDWURM, N. SCHERMAN - Daniel: la Bible commentée Paris 2001Éd. du Sceptre p. 334.

<sup>&</sup>lt;sup>5</sup> M.C. TETLEY – The Reconstructed Chronology of the Divided Kingdom Winona 2005 Ed. Eisenbrauns pp. 178-186.

There are several independent Jewish transmissions, those of the Septuagint (LXX), Josephus (FJ), the Masoretes (MT), Theophilus of Antioch (TA) and the Seder Olam (SO). Duplication of historical data<sup>6</sup> (first from Abraham) allows to find errors (highlighted in grey) and corrections (highlighted in orange):

N°	Chronology from:	МТ	LXX	FJ	TA	SO	Period	reference
-	Abraham in Ur	75	75	75	75	75	2038-1963	Genesis 12:4-5
	Canaan-Egypt stay	430*	430	430	430	430*	1963-1533	Exodus 12:40-41
	Moses (Exodus)	40	40	40	40	40	<b>1533</b> -1493	Exodus 16:35
1	Joshua		110 - 80					
1	0	110 - 80		110 - 80	27	28	1493-1463	Joshua 14:10;24:29
2	Without Judge	[11]	[11]	18	- [27]	0	1463-1452	Joshua 24:31
	Total N° 1-2	[41]	[41]	[48]	[27]	[28]	1493-1452	Numbers 32:13
3	Kushan-Rishataïm	8	8	8	8	0	1452-1444	Judges 3:8
4	Othniel	40	40/50	40	40	40	1444-1404	Judges 3:11
5	Eglon	18	18	18	18	18	1404-1386	Judges 3:14
6	Ehud	80	80 7	[80]	8	80	1386-1306	Judges 3:30
7	Madian	7		7	7	7	1306-1299	Judges 6:1
8	Gideon	40	40	40	40	40	1299-1259	Judges 8:28
9	Abimelech	3	3	3	3	3	1259-1256	Judges 9:22
10	Tola	23	23	[23]	23	23	1256-1233	Judges 10:2
11	Jair	22	22	22	22	22	1233-1211	Judges 10:3
12	Anarchy	18	18	18	18	18	1211-1193	Judges 10:8
10	Total N° 1-12	300	300	307	214	287	1493-1193	Judges 11:26,30
13	Jephthah	6	6/60	6	6	6	1193-1187	Judges 12:7
14		7	7	7	7	7	1187-1180	Judges 12:9
15	Elon	10	10	10	10	10	1180-1170	Judges 12:11
16	Abdon	8	[8]	[8]	8	8	1170-1162	Judges 12:14
17	[Eli] Philistines	40	20/40	40	40	40	1162-1122	1Samuel 4:18
18	Samson	20	20	20	20	20	1122-1102	Judges 16:31
19	Samuel's sons	[5]	[5]	12	12	10	1102-1097	1Samuel 8:1-3
20	Saul	[40]	[40]	20/40	20	3	1097-1057	Acts 13:21
21	David	40	40	40	40	40	1057-1017	1Kings 2:11
22	Solomon (y. 4)	4	4	4	4	4	1017-1013	1Kings 6:1
	Total N° 1-22	480	440*	474	467	448	1493-1013	1Kings 6:1
23	Salomon	40		80	40	40	1017 - 977	1Kings 11:42
24	Roboam	17	17	17	17	17	977-960	1Kings 14:21
25	Abiyam	3	6	3	7	3	960-957	1Kings 15:2
26	Asa	41	41	41	41	41	957-916	1Kings 15:10
27	Josaphat	25 - 2	25 - 2	25 - 2	25 - 2	25 - 2	916-893	1Kings 22:42
28	Joram	8	10	8	8	8	893-885	2Kings 8:17
29	[Athaliah]	7 - 1	7 - 1	7 - 1	6	7+1	885-879	2Kings 11:4
30	Joas	40	40	40	40	40	879-839	2Kings 12:2
31	Amasiah	29	29	29	39	22	839-810	2Kings 14:2
32	Uziah	52	52	52	52	52	810-758	2Kings 15:2
_	Yotham	16	16	16	16	16	758-742	2Kings 15:33
34	Achaz	16	16	16	17	16	742-726	2Kings 16:2
35	Hezekiah	29	29	29	29	29	726-697	2Kings 18:2
36	Manasseh	55	55	55	55	55	697-642	2Kings 21:1
37	Amon	2	2	2	2	2	642-640	2Kings 21:19
38	T = -1-1.	31	31	31	31	31	640-609	2Kings 22:1
	Josiah							I and the second
39	Joiaqim	11	11	11	11	11	<b>609</b> -598	2Kings 23:36
39 40	Joiaqim Zedekiah	11 11	11 11	11 11	11 11	11 11	<b>609</b> -598 598- <b>587</b>	2Kings 23:36 2Kings 24:18
_	Joiaqim	11 11	11 11					

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<sup>&</sup>lt;sup>6</sup> J. HUGHES – Secrets of the Times. Myth and History in Biblical Chronology in: *Journal for the Study of the Old Testament Supplement Series* 66 (1990) pp. 57, 267-272.

The chronology of Theophilus of Antioch<sup>7</sup> is considered of Hebrew origin because he used several figures closer to the Masoretic text and Seder Olam rather than to the Greek text of the Septuagint (as 6 years for Joram instead of 8 and 40 years for Eli instead of 20). There are two ways to check the accuracy of these numbers 1) events dated in several chronologies, do they give the same date? and 2) the sum of all the intermediate periods, does it correspond to the value indicated in the biblical text?

Date	Event dated in several chronologies	Reference
-1954	When Abraham is 84 years old, he killed King of Elam Kudur-Lagamar in his	Genesis 14:5,17
	14th year of reign corresponding to the 47th year of Shulgi, King of Ur.	,
-1533	Death of Pharaoh [Seqenenre Taa, year 11]: year 80 of Moses, during a total	Psalms 136:15
	solar eclipse over the north of the Red Sea (May 10, 1533 BCE).	Ezekiel 32:2-8
-1347	Barak killed Sisera the chief of army of Jabin II in his 20th year of reign after	Judge 4:2-3, 22-24
	the 40 years of Ehud. Sisera is mentioned in the El-Amarna letters just before	
	the war of Apiru in southern Syria which is dated year 6 of Shuppiluliuma I.	
-972	Shoshenq I [year 9] came against Jerusalem in the 5th year of Roboam.	2 Chronicles 12:2
-722	Shalmanazer V, in his 5th year, lay siege against Samaria for 3 years, from the	2 Kings 18:9-10
-720	4th to 6th year of Hezekiah. Samaria is captured in the 2nd year of Sargon II.	_
-609	Battle of Harran in the 31st and last year of Josiah, 1st year of Nechoh, 17th	2 Kings 22:1, 23:29
	year of Nabopolassar, 3 <sup>rd</sup> and last year of Assur-uballit II.	
-587	Destruction of the Temple year 11 of Zedekiah, year of 18 Nebuchadnezzar	Jeremiah 52:1,12,29
	II (but his 19th according to the previous Egyptian reckoning).	
-561	Year 1 of Amel-Marduk corresponds to year 37 of Jehoiachin's exile which	2 Kings 25:27
	began just after the attack on Jerusalem by Nebuchadnezzar II in the year 7	Jeremiah 52:28
	of his reign (in 598 BCE).	
-550	Persia and Media, form a double power in the 3 <sup>rd</sup> year of Belshazzar.	Daniel 8:1-4,20
-539	Fall of Babylon after 70 years of domination over all the nations in 14th year	Jeremiah 25:11-12
	of Belshazzar and year 0 of Cyrus the Persian and Darius the Mede (Ugbaru).	Daniel 5:30

When one knows the difficulty of establishing a reliable chronology, this agreement proves that the chronological data transmission has been remarkable. The second checking means is derived from the comparison between the sum of the intermediate values and the total value indicated in the text.

➤ Period of 390 years (Ezekiel 4:4-6) since the 1st year of Roboam to the 11th of Zedekiah. The Masoretic text has preserved the exact total value because the sum of all the reigns is actually 390 years which is not the case of the 190 years indicated in the Septuagint. This period begins when the 40-year reign of Solomon (1 Kings 11:42) ending by the schism of his kingdom into two rival entities: Israel and Judea. This rebellion (in 977 BCE) considered as a fault (1Kings 12:19) ended with the destruction of the Temple (in 587 BCE). Otherwise, the 190 years of the Septuagint would begin (?) when the northern kingdom disappears (at 720 BCE) and would end at the beginning of the rebuilding of the Temple (in 537 BCE). But in this case the calculation is: 720 - 537 = 183 years and not 190 years. Therefore this duration has been changed in the Greek text for theological reasons. Similarly, the period from Abiyam to Athaliah which is complex because of two co-regencies was also recalculated in the Septuagint has the Lews of that time were already producing chronological changes and not copy errors.

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<sup>7</sup> THÉOPHILE D'ANTIOCHE – Trois livres à Autolycus in: Sources chrétiennes 20 (1948 Cerf) pp. 49-53, 154-159.
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<sup>8</sup> D. BARTHÉLEMY – Critique textuelle de l'Ancien Testament Tome 3

Göttingen 1992 Éd. Universitaires Fribourg pp. 22-23.

<sup>9390 = 17 + 3 + 41 + (25 - 2) + 8 + (7 - 1) + 40 + 29 + 52 + 16 + 16 + 29 + 55 + 2 + 31 + 11 + 11.</sup> 

 $<sup>^{\</sup>rm 10}$  F. Nolen Jones – The Chronology of the Old Testament

Green Forest 2007 Ed. Master Books pp. 12-13.

<sup>&</sup>lt;sup>11</sup> M. HARL, G. DORIVAL, O. MUNNICH – La Bible grecque des Septante Paris 1988 Éd. Cerf p. 111.

- $\triangleright$  Period of 480 years since the departure from Egypt to the 4th year of Solomon (1Kings 6:1). The Masoretic text has preserved the exact value because the sum of all the reigns is actually 480 years 12 which is not the case of the 440 years indicated in the Septuagint. The value of Saul's reign in Acts 13:21, which was to appear in 1Samuel 13:1 can be deduced from the biography of Ishbaal, a son of Saul, who was born at the beginning of the reign of his father (1 Chronicles 8:33) since he was 40 years after the death of Saul (2 Samuel 2:10). Josephus hesitated between 20 and 40 years (Jewish Antiquities VI:378, X:143) also in the sum of reigns (Jewish Antiquities VIII:61, XX:230). The Sinai desert belonged to Egypt because it was located before the Wadi of Egypt, which marked the border (2 Kings 24:7). The Israelites are definitely out of Egypt when they passed this wadi and therefore after 40 years in the desert<sup>13</sup>. According to this scheme, we obtain: y +475 = 480, which gives y = 5 years. The translators of the Septuagint who knew this period of 480 years, beginning with the departure from Egypt after 40 years in the desert, subtracted it, instead of adding<sup>14</sup>, to obtain 440 years (= 480 - 40). According to the Jerusalem Talmud (Megilla 72cd), the duration of the conquest of Canaan would have been 7 years and the one of the sanctuary of Shiloh 369 years, which gives: 480 = 7\* + 369\* + 20 + 40 + 40 + 4 (in fact: 480 = 5 + 366 + 20 + 5 + 40 + 40 + 4)<sup>15</sup>.
- Period of 300 years since the departure from Egypt to the vow of Jephthah (Judges 11:26,30). The value of 300 years corresponds actually to the sum of all the reigns 16. Caleb and Joshua were 40 years old at the beginning of the exodus and therefore 80 years afterwards (Joshua 14:7). As Joshua died at the age of 110 (Joshua 24:29) he stayed 30 years in Canaan. The period that followed [11] is not specified, but can be estimated. Indeed, the generation that came into Canaan with Joshua had to take possession of the land (Judges 2:6-10). But as the previous generation had lasted 40 years (Numbers 32:13), this suggests that: [40] = 30 + x, x = 10. In fact the exact calculation gives x = 11.
- Period of 430 years for the stay in the land of Egypt and in the land of Canaan (Exodus 12:40-41). The last part "and in the land of Canaan" found in the Greek text of the Septuagint is missing in the Masoretic text. As it is also found in the Samaritan Pentateuch written in Paleo-hebrew, which is consistent with the context indicating that this period of 430 years is the whole stay of the son of Israel out of the Mosaic covenant (Galatians 3:17), it had to be in the original text. This period consists of two parts: the first beginning in Canaan by the Abrahamic covenant quickly followed by the bullying of Ishmael over Isaac (Genesis 21:9) and ending with the arrival of Jacob in Egypt and a second period starting with the bondage in Egypt and ending with the Exodus. This chronological account was known in antiquity, it is quoted by the Jewish chronograph Demetrius (in 220 BCE) who calculated that the stay in Egypt was 215 years (Evangelical Preparation IX:21). The same value appears in a book written in Hebrew (150-50 BCE) found at Qumran, called the Testament of Amram<sup>17</sup>. However according to Josephus (near 95 CE): the residence in Egypt lasted 400 years (Jewish Antiquities I:185), or: 205 years (Jewish Antiquities II:318). According to the Seder Olam<sup>18</sup> (written around 160 CE): the residence in Egypt lasted 210 years because of the lifetime of Job or maybe 400 years according to Genesis 15:13.

 $<sup>\</sup>overline{}^{12} 480 = 300 + 6 + 7 + 10 + 8 + 40 + 20 + [5] + [40] + 40 + 4.$ 

<sup>13</sup> The Israelites who died in the wilderness (Numbers 26:65) had desired repeatedly to die in Egypt (Exodus 14:11; 16:3). This paradoxical desire has been fulfilled.

<sup>&</sup>lt;sup>14</sup> From the initial output of Egypt (in -1533) to the 4th year of Solomon (in -1013) there are 520 years (= 480 + 40).

<sup>15</sup> The duration of the conquest of Canaan is 5 years and the sanctuary of Shiloh is 366 years (= 1488 - 1122) because it is installed just after the conquest of Canaan (Joshua 18:1), in -1488, and disappeared at the death of the high priest Eli (1 Samuel 4:1-7:1) in -1122.

 $<sup>^{16}</sup>$  300 = (110 - 80) + [11] + 8 + 40 + 18 + 80 + 7 + 40 + 3 + 23 + 22 + 18.  $^{\rm 17}$  K. Berthelot, T. Legrand – La bibliothèque de Qumrân 2

Paris 2010 Éd. Cerf pp. 207-209.

<sup>&</sup>lt;sup>18</sup> H.W. GUGGENHEIMER - Seder Olam. The Rabbinic View of Biblical Chronology Lanham 2005 Ed. Roman & Littlefield Publishers, Inc pp.

As the books of Ezekiel and Kings were translated during the period 190-160 BCE<sup>19</sup>, the changes of durations in the Septuagint, 390 years (Ezekiel 4:4-6) and 480 years (1Kings 6:1), show that the Jews of that time were already doing chronological corrections for theological reasons in order to protect the "right understanding" of the biblical text.

The chronology of the period from the deluge to Abraham is based solely on the 17 verses of Genesis 11:10-26 (not found at Qumran) and has, moreover, only one synchronism with the Babylonian chronology, hard to date: the deluge (-3200 +/- 200). The Masoretic text of the Bible is used to establish the scientific chronology of the Bible, but there are significant differences (highlighted in red) among the various recensions of the Pentateuch (traditional dates of fixing are in brackets): Septuagint (LXX), Samaritan Pentateuch (SP), New Testament (NT), Flavius Pentateuch (FJ) and Masoretic Text (MT):

From the Deluge to	<b>LXX</b> (-280)	PS (-130)	NT (65)	<b>MT</b> (90)	FJ (95)	gap MT
Sem fathered	2	2	[2]	2	<b>1</b> 2	0
Arpakshad fathered	135	135	[135]	[-]35	135	100
Kainan fathered	130	-	[130]	-	-	130
Shelah fathered	130	130	[130]	[-]30	130	100
Eber fathered	134	134	[134]	[-]34	134	100
Peleg fathered	130	130	[130]	[-]30	130	100
Reu fathered	132	132	[132]	[-]32	132	100
Serug fathered	130	130	[130]	[-]30	130	100
Nahor I fathered	79	79	[79]	<b>2</b> 9	120	50
Terah fathered	70	70	[70]	70	70	0
Nahor II <sup>20</sup> fathered	(+60)	(+60)		(+60)	(+60)	
Abraham. Total:	1132 years	1002 years		352 years	1053 years	780 years
(Date of the deluge):	(-3170)	(-3040)		(-2390)	(-3030)	

Normally, according to the usual rules of textual criticism, when the Greek text of the Septuagint and the Hebrew Samaritan Pentateuch both agree against the Masoretic text, this common text has to be retained. This is even more true that there is a third important witness for weight: the Hebrew Pentateuch of Josephus<sup>21</sup>. It is obvious that the text of the Septuagint has kept the original Hebrew version because according to the Masoretic text the deluge took place towards 2390 BCE implying an absurd consequence: the pharaohs of Dynasties IV (2523-2385) and V (2385-2255), whose reigns can be dated by astronomy thanks to the alignment of their pyramids, not only never undergone any flood (if the Flood took place at that time all the Egyptians should have died!) but not even saw it.

The Masoretic text goes back to a Hebrew original<sup>22</sup> (H\* written c. 400 BCE) but was later canonized at the Synod of Yabneh (c. 90 CE). Christian quotes of the Old Testament are similar (90%) to the text of the Septuagint even when they have important theological implications<sup>23</sup>. The Masoretic text did not yet authority at that time (during 50-100 CE). The biblical manuscripts from Qumran<sup>24</sup> (all dated before 70 CE) are composed of 60% of pre-Masoretic texts, 20% Qumran style, 10% of non-aligned texts, 5% and

<sup>&</sup>lt;sup>19</sup> M. HARL, G. DORIVAL, O. MUNNICH – La Bible grecque des Septante Paris 1988 Éd. Cerf pp. 90-111.

 $<sup>^{20}</sup>$  Abraham was born 60 years after Nahor II (60 + 70 = 205 - 75), because when he left Haran at the age of 75, his father Terah had just died at the age of 205 years (Genesis 11:32-12:4).

<sup>&</sup>lt;sup>21</sup> E. NODET - Le Pentateuque de Josèphe

Paris 1996 Éd. Cerf pp. 72-83.

<sup>&</sup>lt;sup>22</sup> D.N. FREEDMAN – The Massoretic Text and the Qumran Scrolls. A Study in Orthography in: Textus 2 (1962) p. 91.

<sup>&</sup>lt;sup>23</sup> As the rank of Qaïnan (Luke 3:36 # Genesis 10:24). This Qaïnan (Kainam) also appears in the Book of Jubilees (Jub. 8:2) and is different from the other Kenan (Jub. 4:14). There are also angels who pay homage (Hebrews 1:6 Deuteronomy 32:43 #), a body to be sacrificed (Hebrews 10:5 Psalms 40:6 #), the nations that hope in His name (Matthew 12: # 21 Isaiah 42:4), etc.. There are also some cases contrary: my son (Hosea 11:1 = Matthew 2:15), whom they have pierced (Zechariah 12:10 = John 19:37), etc.

<sup>&</sup>lt;sup>24</sup> L.H. SCHIFFMAN – Les manuscrits de la mer Morte et le judaïsme

Paris 2003 Éd. Fides pp. 187-192.

Septuagint texts supporting the 5% based texts the Samaritan Pentateuch<sup>25</sup>. This statistic shows that the Masoretic text was the most prevalent (among the Essenes), but prior 70 CE other recensions existed. Masoretic version of chapters 1-11 of Genesis is currently preferred only because of Methuselah who would die 14 years after the flood, according to the chronology of the Septuagint, that is obviously absurd<sup>26</sup>. No Hebrew manuscript of this part of Genesis was found at Qumran, thus its pre-Masoretic version is not known, but the chronological reconstruction implies the existence of a Hebrew text (H\*) near the Septuagint. We know that this Hebrew text has been revised very soon<sup>27</sup>, but it is unclear whether the corrections made by the auditors have preserved the original or, in contrast, "canonized" an altered form. This analysis must be performed book by book, because the Hebrew rolls of Jeremiah (4QJer<sup>b</sup>) and Samuel (4QSam<sup>a</sup>), for example, and dated around 250-150 BCE, are closer to the text of the Septuagint than the Masoretic text<sup>28</sup>. It is the opposite for the Hebrew rolls of Exodus (4QpaléoEx<sup>m</sup>) and Numbers (4QNb<sup>b</sup>). Textual criticism<sup>29</sup> now favors an anteriority of the Septuagint text Vorlage (H\*) on the proto-Masoretic which comes from an overhaul of this Vorlage, including chronological data from the text of Genesis <sup>30</sup> (Genesis 5:3-31; 8:13-14, 11:10-26).

An essential element currently hampering textual criticism: if errors are detectable through overlapping it is not the case of corrections. We know that the Jewish copyists have corrected the Biblical text through Rabbinic lists (but on a list of 15 or 16 referred "alterations" only 4 or 5 remain in our manuscripts)<sup>31</sup>. The Jerusalem Talmud (Megilla 71d), for example, reported 13 amendments (including those of Genesis 2:2 and Exodus 12:40) made for King Ptolemy II (to 280 BCE). These verses have been changed in the Greek version either because they felt potentially offensive<sup>32</sup>, resulting in a reduction of meaning to "protect" the text, either because they were too difficult to understand<sup>33</sup> (sometimes these verses are explained in the Targums). There were also 18 scribes corrections<sup>34</sup> of the Hebrew text called: tiggun Sopherim<sup>35</sup>. What complicates things is that the process of corrections and copying was spread over several centuries. Although he preferred the Masoretic text, D. Barthélemy<sup>36</sup>, a leading scholar of textual criticism, warns: This is from an anti-apocalyptic, anti-sapiential, but especially anti-Christian controversial that is due the elimination of a crucial portion at the closing of the tradition in 100 CE, that is to say, a large part of sapiential and apocalyptic materials. Never a Christian theologian should adopt the Masoretic canon, because there is a significant break in the continuity which leads to the New Testament. It seems to me that among the

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<sup>25</sup> In fact, this statistic artificially lowers the proportion attributed to the Septuagint because only differences being characteristic, the Masoretic text being used as a reference (strictly speaking one should compare all the texts in relation to an original text restored).

<sup>26</sup> R. S. HENDEL – The Text of Genesis.
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<sup>1998,</sup> Oxford Ed. Oxford University Press, pp. 61-80.

<sup>&</sup>lt;sup>27</sup> E. TOV – Textual Criticism of the Hebrew Bible

Assen 1992 Ed. Fortress Press pp. 11, 32-35, 168, 190-197.

<sup>&</sup>lt;sup>28</sup> F. MÉBARKI, É. PUECH – Les Manuscrits de la mer Morte

Paris 2002 Éd. du Rouergue pp. 178-184.

<sup>&</sup>lt;sup>29</sup> M. RICHELLE – Le testament d'Élisée. Texte massorétique et Septante en 2Rois 13:10-14:16

in: Cahiers de la revue biblique n°76 (2010) pp. 70, 121-125.

 $<sup>^{\</sup>rm 30}$  E. Tov – Textual Criticism of the Hebrew Bible

Assen 1992 Ed. Fortress Press pp. 337-338.

<sup>&</sup>lt;sup>31</sup> M. HARL, G. DORIVAL, O. MUNNICH – La Bible grecque des Septante

Paris 1988 Éd. Cerf pp. 203-210.

<sup>&</sup>lt;sup>32</sup> Order not to offend the Greeks certain biblical passages have been changed: "son of God" (Genesis 6:2) becomes "angels", "Jehovah stood before Abraham" (Genesis 18:22) becomes "Abraham stood before Jehovah", "curse God" becomes "bless God", etc.

<sup>&</sup>lt;sup>35</sup> Thus the text of Genesis 2:2: God concluded the 7th day his work which he had made, and, on the 7th, he rested after all the work he had done (it seems paradoxical that God stops working at the beginning of the 7th day) has been simplified in the text of the Septuagint: And God ended the 6th day his work which he had done, and he rested on the 7th day from all his work which he had made.

<sup>&</sup>lt;sup>34</sup> W. EMERY BARNES – A Companion to Biblical Studies

Cambridge 1916 Ed. Cambridge University Press p. 42.

<sup>&</sup>lt;sup>35</sup> Masoretic note on Genesis 18:3 points out the 134 places where the Tetragrammaton YHWH was replaced by its substitute 'DNY "Lord". 14 theophoric names that includes the name *baal* "master", as Jerubbaal (2Samuel 11:21), were changed into *boshet* "shame", etc.
<sup>36</sup> D. BARTHÉLEMY – Critique textuelle de l'Ancien Testament

Göttingen 1982 Éd. Universitaires Fribourg pp. 110\*-111\*.

influences that humanism has exerted on the Reformation, one of the most far-reaching was the confusion that has been established between the Pharisaical reducing of the Canon and the Masoretic textual tradition in which one returned as a 'humanist' source. Gese before Origen had protested against the project that would, indeed, be one of Jerome (Africanus §4s): « Should we declare that it is time to scrap the copies in use in the churches and to order the brothers, repealing the copies are in use at home, they get in coaxing the Iews, that they supply us with copies clean, free of any interpolation? Should we therefore assume that Providence which has built all the Churches of Christ in the Scriptures did not take care of those who have been bought at a high price, those for whom Christ died, but he up for us all, so we donate all things with bim! ». This preliminary comment is used to justify the choice of the biblical Committee: When the Committee of the Alliance Biblique Universelle has specified that it was responsible for the textual analysis of the Hebrew Old Testament, it intended to leave the door open to a similar study which could focus on textual analysis of the Greek old Testament (...) It is out of fidelity to tradition that has dominated since Jerome in the Churches of the West that the Committee focused its efforts on the Hebrew text. It was indeed to help churches which have, since Jerome, used to translate their Old Testament from Hebrew. But the Committee felt more clearly the need not to spoil the Septuagint to edit the Masoretic Text. Thus the biblical Committee privileged (religious) tradition because of Churches, while recognizing that the text of the Septuagint should be better taken into account. Tov<sup>37</sup>, another leading scholar of textual criticism, also recognized that rolls from Qumran support, in many cases, the text of the Septuagint.

Differences in durations being 100 years they are not errors but (theological) corrections which are poorly understood<sup>38</sup>. The explanation usually given is as follows<sup>39</sup>: Jewish translators of the Septuagint, influenced by the work of Manetho, would have increased 100 years the numbers of the Hebrew text to conform their chronology to its prestigious Egyptian rival, but this is not consistent with the historical context. Indeed, at this time, Hellenism was triumphant and the initiative of Ptolemy II to enrich his famous library of Alexandria has encouraged foreign scholars to promote their own history. This is not a coincidence if at this time (280 BCE) the Egyptian priest Manetho, the Babylonian priest Berossus and the Israelite priests in Alexandria were all seized the opportunity offered to them to write their "national" history. Berosus accused the Greeks of his time (not the Egyptians) to ignore Babylonian history (Against Apion I:142). These historians wrote for Greeks not for Egyptians, they did not need to increase their chronology. The durations in Genesis were not corrected by the translators of the Septuagint since they existed in ancient Hebrew manuscripts from this period as evidenced by the text of the Samaritan Pentateuch<sup>40</sup> written in paleo-Hebrew around 150-100 BCE<sup>41</sup>. So Paul, a converted Jew and Hebrew-speaking (Acts 21:40), recognizing that some of his former coreligionists distrusted him, mostly cites in his letter to the Hebrews (written around 60 CE), a text close to the Septuagint (Hebrews 1:6; 10:27, 11:5, 12:13), not the Masoretic text, without arousing criticism from these former Jews. Genealogies were a sensitive issue for Jews of the first century (1 Timothy 1:4, Titus 3:9). Now all these recensions are consistent, with the exception of the Masoretic text. Luke and Josephus insist on the accuracy of their information. Luke specifies: I resolved also, because I have traced all things from the start with accuracy, to write them in logical order to you, most excellent Theophilus, that you may know fully the certainty of the things that you have been taught orally (Luke

<sup>&</sup>lt;sup>37</sup> E. TOV – Textual Criticism of the Hebrew Bible

Assen 1992 Ed. Fortress Press pp. 114-117.

<sup>38</sup> M. HARL – Genèse

in: Bible d'Alexandrie I (1986, Cerf) pp. 120-124.

<sup>&</sup>lt;sup>39</sup> G. LARSSON – The Chronology of the Pentateuch a Comparison of the MT and LXX in: *Journal of Biblical Literature* Vol. 102 (1983) pp. 401-409.

Origen points, towards 250 CE, the existence of a Greek version of the Samaritan Pentateuch, but according to E. Tov this Samariticon would be a translation of a Samaritan revision of the LXX rather than a translation (late) of the Samaritan text.
 E. Tov & Als – Emanuel: Studies in Hebrew Bible, Septuagint, and Dead Sea Scrolls in Honor of Emanuel Tov Leiden 2003 Ed. Brill p. 239.

1:3-4). However, he cites Qaïnan in his genealogy (Luke 3:36 = LXX Genesis 11:12). How these two famous writers could they use a different genealogy of the official Hebrew text without being roundly criticized? This was not the case. The comparison of some verses illustrates the existence of variants<sup>42</sup> of the Hebrew text in the first century, which were eliminated during later revisions (original in light green, modified in hatching orange). The Jews therefore revised early few verses for theological reasons (perhaps as early as the setting of the text by Ezra towards 400 BCE). Order:

1) to revise the text on variants favorable to the Jews (Isaiah 42:1-4 / Matthew 12:18-21):

LXX	4QDtq, 1Qa, 4QExodb	NT	MT
Jacob is my servant,	Look! My servant,	Look! My servant	Look! My servant,
1 will help him:	on whom I keep fast hold!	whom I chose,	on whom I keep fast hold!
Israel my choosen	My chosen one, [whom]	my beloved, whom	My chosen one, [whom]
my soul has accepted him	my soul has approved!	my soul approved!	my soul has approved!
I have put my spirit upon him.	I have put my spirit in him.	I will put my spirit upon him,	I have put my spirit in him.
he shall bring forth judgment	Justice to the nations is what	and what justice is he will	Justice to the nations is what
to the nations.	he will bring forth.	make clear to the nations.	he will bring forth.
He shall not cry, nor lift up	He will not cry out or raise	He will not wrangle,	He will not cry out or raise
his voice, nor shall his voice be	[his voice], and in the street	nor cry aloud, nor will anyone	[his voice], and in the street
heard without.	he will not let his voice be	hear his voice in the broad	he will not let his voice be
A bruised reed shall not	heard. No crushed reed will	ways. No bruised reed will he	heard. No crushed reed will
break, and	he break; and as for a dim	crush, and no	he break; and as for a dim
smoking flax shall he not	flaxen wick, he will not	smoldering flaxen wick will	flaxen wick, he will not
quench; but	extinguish it.	he extinguish,	extinguish it.
he shall bring forth judgment	In trueness he will bring forth		In trueness he will bring forth
to the truth. He shall shine	justice. He will not grow dim		justice. He will not grow dim
out, and shall not be	nor be crushed		nor be crushed
discouraged, until he have set	until he sets justice in the	until he sends out justice with	until he sets justice in the
judgment on the earth;	earth itself;	success.	earth itself;
Indeed, in his name nations	and for his law the islands	Indeed, in his name nations	and for his law the islands
will hope.	themselves will keep woiting	will hope.	themselves will keep waiting.

2) to prune some verses too favorable to Christians (Deuteronomy 32:43 / Romans 15:10; Hebrews 1:6) retaining only obscure variants (Psalm 40:6 / Hebrews 10:5):

LXX	4QDtq, 1Qa, 4QExodb	NT	МТ
Rejoice, YOU heavens, with	Rejoice, YOU heavens, with		
him,	him,		
and let all the angels of God	and let all the angels of God	and let all God's angels do	
worship him;	worship him;	obeisance to him	
Rejoice YOU nations, with	<b>13</b> 0	Be glad, YOU nations, with	Be glad, YOU nations, with
his people,	<b>14</b>	his people	his people,
and let all the sons of God	[-]		[-]
strengthen themselves in him;	[-]		[-]
For he will avenge the blood	For he will avenge the blood		For he will avenge the blood
of his sons, and he will render	of his sons, and he will render		of his servants,
vengeance, and recompense	vengeance, and recompense		And he will pay back
justice to his enemies,	justice to his enemies,		vengeance to his adversaries
and will reward them that	and will reward them that		
hate him;	hate him;		
and the Lord shall purge the	and the Lord shall purge the		and will indeed make
land of his people.	land of his people.		atonement for the ground of
			his people.
Sacrifice and offering you did		Sacrifice and offering you did	Sacrifice and offering you did
not want, but you prepared a		not want, but you prepared a	not delight in; These cars of
body for me.		body for me.	mine you opened up.

<sup>&</sup>lt;sup>42</sup> H. COUSIN – La Bible grecque. La Septante

in: Supplément au Cahier Évangiles 74 (1990 Cerf) pp. 24-25, 84-85.

3)	to simplify	v the t	evt or o	ive i	it a cr	mbol	ic valu	e (Ev	odue 1	1.5 /	/ Acts 7.14	).
9)	i to simpini	y uic i	cat or g	(100)	ii a s	ymbor	ic vaiu	C (LIA	ouus I	1.5 /	11015 /.14	) •

LXX	4QDtq, 1Qa, 4QExodb	NT	MT
And Joseph was already in	all the souls who issued out of	Joseph sent out and called	all the souls who issued out of
Egypt.	Jacob's upper thigh came to be	Jacob his father and all	Jacob's upper thigh came to be
And all the souls born of	75 souls, but Joseph was	his relatives from that place,	70 souls, but Joseph was
Jacob were 75.	already in Egypt	to the number of 75 souls.	already in Egypt

#### 4) to change some verses unfavorable to Judeans (Habakkuk 1:5 / Acts 13:41):

LXX	1QpHab	NT	МТ
Behold it, YOU despisers,	Behold it, YOU despisers,	Behold it, YOU despisers,	See, YOU people, among the
and wonder	and wonder at it,	and wonder at it,	nations, and look on, and stare
marvellously,			in amazement at one another.
and vanish,	and vanish away,	and vanish away,	Be amozed;
because I am working	because I am working	because I am working	for there is an activity that one
a work in YOUR days,	a work in YOUR days,	a work in YOUR days,	is carrying on in YOUR days,
a work that YOU people	a work that YOU people	a work that YOU will by no	[which] YOU people will not
will not believe although it	will not believe although it	means believe even if anyone	believe although it is
is related.	is related.	relates it to YOU in detail.	related.

This verse allows to fix the date and the reasons for changes. The translators of the Bible d'Alexandrie influenced by textual criticism have assumed that the original text should be Masoretic and it had been misread by the translators of the Septuagint<sup>43</sup> but this contradicts the contextual and historical analysis of this verse<sup>44</sup>. The immediate context (Habakkuk 1:4) is clearly against the Judeans that God is going to punish by means of the Chaldeans (Habakkuk 1:6). This description is consistent with the historical context (Jeremiah 3:8-20). The meaning of this verse is different depending on whether one reads it in the Septuagint or in the Masoretic text. In the first case God will punish the Judeans because they are despisers, while in the other case nations will be spectators of a disaster. The Hebrew word "despise" is very sharp because it literally means "traitors" (Isaiah 24:16), exactly translated into Greek by καταφρονηταί. The change of meaning comes from a single letter read d (ס or ô (ו): bogedîm (בגדים) "traitors" or bagôyim (בגרים) "among the nations." Barthélemy assumed that a Greek manuscript of Habakkuk, dated the 1st century was a recension of the Septuagint from the Masoretic text. But if the recension of Aquila (129 CE) translates "among the nations", the manuscript 8HevXIIgr contains the words: tr]a[itors be am]azed, because a wo[rk in d]ays of you, that [you would not believe though it] was told. The Hebrew script used in the recension was therefore the word "traitors" and not "among the nations." The Pesher of Habakkuk (1QpHab II:1-6), dated the 1st century BCE, is written in Hebrew and comments on the text of Habakkuk 1:5: [... The explanation of the word is about] traitors with the man of lie, because they did not [believe to the words of the] Teacher of Righteousness (coming) from God's mouth, and about trai[tors of the new covenant] bec[ause] they did not believe in God's covenant [and have profaned] his holy na[me]. And similarly the explanation of the word [is about tr]aitors of the last days. The fact that the word "traitors", in full writing (בוגדים), is repeated three times indicates that the Essene writer focused on it. He explains that the traitors are the Judeans (of his time). The fact that the destruction of the Temple could be interpreted as a punishment from God against the Judeans because they had become traitors will be unbearable for most Jews after 70 CE. The Hebrew text has therefore been modified to be acceptable. In addition, changing a specific sanction into a dramatic general

<sup>&</sup>lt;sup>43</sup> M. HARI. & AL – Les douze prophètes 4 - 9 in: Bible d'Alexandrie 1999 Paris Éd. Cerf pp. 260-263.

<sup>&</sup>lt;sup>44</sup> I. HIMBAZA - Texte massorétique et Septante en Habaquq 1,5a. Réévaluation des témoins textuels en faveur de l'antériorité de la LXX in: Orbis biblicus et orientalis n° 233 (2007) pp. 45-57.

description is more logic than the reverse. Chronological corrections are more difficult to detect when they are isolated, as in the case of the text of 1 Samuel 2:22; 4:15,18<sup>45</sup>:

[H*] (-400)	4QSam <sup>a</sup> (-250)	LXX (-160)	MT (+90)
And Eli was very old, and	And Eli was very old, he	And Eli was very old	And Eli was very old, and
he had heard of all that	was 90 years old. And he	and he had heard of all	he had heard of all that
his sons kept doing to all	had heard of all that his	that his sons kept doing	his sons kept doing to all
Israel and how they would lie			Israel and how they would lie
down with the women that	Israel [-///////////	\\\/////////A	down with the women that
were serving at the entrance of			were serving at the entrance of
the tent of meeting.			the tent of meeting.
Eli was 98 years old, and	Eli was <b>90 years</b> old, and	Eli was <b>90 years</b> old, and	Eli was 98 years old, and
his eyes had set so that he	his eyes had set so that	his eyes were fixed and	his eyes had set so that he
was unable to see.	he was unable to see.	he saw not.	was unable to see.
he died, because the man	he died, because the	he died, because the	he died, because the man
was old and heavy; and he	man was old and heavy;	man was old and heavy;	was old and heavy; and he
himself had judged Israel	and he himself had	and he himself had	himself had judged Israel
40 years.	judged Israel 20 years.	judged Israel 20 years.	40 years.

These variants show that the text of the Septuagint is based on an ancient Hebrew text (around 250 BCE). Differences compared to the original (H\*) are explained by glosses, simplifications (often without ideological value as the "90 years" of Eli) and pruning. However, the "40 years" come from a change because with a period of "20 years" the total would be 460 years instead of 480 years (this value was also changed in 440 in the Septuagint). This period is confirmed, because after 8 years of judicature of Abdon there is a period of oppression of the Philistines (Judges 12:13-13:1) during which he acts as judge. At his death, the ark was captured by the Philistines and the Israelites went back after 7 months (1 Samuel 6:1-21), which marks the end of oppression. Samson is then judge for 20 years (Judges 13:5, 16:31). Eli the high priest has officiated throughout the duration of the oppression of the Philistines, 40 years, in agreement with the Masoretic text and data from Flavius Josephus (Jewish Antiquities V:359). As this duration was typically a reign of peace (David or Solomon) it was halved retrospectively by scribes of that time (Sadducees) in order to present priesthood in a more favorable way. This example (4QSam<sup>a</sup>) shows two points: 1) chronological changes in the Hebrew text have started very early (before 250 BCE) but also 2) the original text (H\*) is maintained until the end of the 1<sup>st</sup> century (in the temple of Jerusalem) because Josephus could see it.

To identify the origin of a text correction one must determine at what epoch it appears and then to understand "whose the crime benefits". For example the text of Deuteronomy 27 and translation is inherited by all Jews and Christians (Protestants, Roman Catholics, and others) in the world. The lone exception is the Samaritans because their text in 27:4 reads "Mount Gerizim". For non-Samaritans this passage is problematic. Why? The Mount of Blessing is the beautiful Mount Gerizim<sup>46</sup>; there Israel gathers to bless (Deuteronomy 27:12). But, our text records a very perplexing commandment: to build the altar on Mount Ebal, the Mountain of Cursing. Did some scribe mistakenly copy "Ebal" for "Gerizim"? Should we imagine that once the text read "Mount Gerizim." For centuries, experts have assumed that the Samaritans changed the text and that "the received text" is original. There are reasons to doubt these experts; and a recently discovered text may prove their argument ceases to be persuasive<sup>47</sup>. Text of Deuterinomy 27:4-5:

<sup>&</sup>lt;sup>45</sup> M. HARL – Premier livre des Règnes 9.1

in: Bible d'Alexandrie (1997 Paris) Éd. Cerf pp. 28-29, 167.

<sup>&</sup>lt;sup>46</sup> The beauty of Mount Gerizim is due to its fertility in contrast with rocky, largely barren Mount Ebal.

<sup>&</sup>lt;sup>47</sup> J. H. CHARLESWORTH – The Discovery of an Unknown Dead Sea Scroll: The Original Text of Deuteronomy 27? in: *Ohio Wesleyan Magazine*. Retrieved 29 July 2012.

LXX (-280)	PS (-130)	Qfrag (-30)	MT (+90)
[when YO]U [have	[when YO]U [have	[when YO]U [have	when YOU have crossed
crossed] the Jo[r]dan,	crossed] the Jo[r]dan,	crossed] the Jo[r]dan,	the Jordan, YOU should
YOU shall set up [these	YOU shall set up [these	YOU shall set up [these	set up these stones, just as
stones, about [which I	stones, about [which I	stones, about [which I	I am commanding YOU
charge YOU t]oday, on	charge YOU t]oday, on	charge YOU t]oday, on	today, in Mount Ebal, and
Mount Ebal, and coat	Mount Gerizim, and coat	Mount Gerizim, and coat	you must whitewash them
[them with plaster. (And	[them with plaster. (And	[them with plaster. (And	with lime. You must also
there, you shall build an	there, you shall build an	there, you shall build an	build an altar there to
altar to YHWH your	altar to YHWH your	altar to YHWH your	YHWH your God, an
God, an altar of stlones.	God, an altar of stlones.	God, an altar of stlones.	altar of stones. You must
[You must] not [wie]ld	[You must] not [wie]ld	[You must] not [wie]ld	not wield an iron tool
upon them an iron (tool).	upon them an iron (tool).	upon them an iron (tool).	upon them.

The fragment from Qumran of Deuteronomy 27:4-5 confirms the existence of two versions of the Pentateuch<sup>48</sup>. Two other manuscripts agree with this reading: the Old Latin Bible (Codex 100) has garzin and the Greek manuscript, Papyrus Giessen 19, has en ar(?) gar[i]sim "on Mount(?) Garizim". Furthermore it is written: When Jehovah your God has brought you into the land that you are entering to occupy, you shall set the blessing on Mount Gerizim and the curse on Mount Ebal (Deuteronomy 11:29). Thus, it is unthinkable that any text of Deuteronomy would report that God wanted Israel to build an altar on the Mount of Cursing, Ebal. King Abimelech (1259-1256), for instance, considered Mount Gerizim as a blessed mount (Judges 9:6-7) as the Samaritan woman who spoke to Jesus (John 4:19-20). On the other hand Non-Samaritans follow the Davidic tradition, stressed in Deuteronomy, that only on Zion is one to worship: Jehovah has chosen Zion; he has desired it for his habitation: This is my resting place forever; here I will reside, for I have desired it (...) It is like the dew of Hermon, which falls on the mountains of Zion. For there Jehovah ordained his blessing, life forevermore (Psalms 132:13-14, 133:3). According to Josephus, Sanballat said to Alexander (332 BCE) that he would build a temple similar to that in Jerusalem on Mount Gerizim (Jewish Antiquities XI:310-311). In order to discourage a parallel cult (1Kings 9:3), scribes of the Temple (Sadducees) have changed the text of Deuteronomy 27 to discredit the legitimacy of Mount Gerizim. The text of Joshua 8:33 in the Septuagint adds the following comment (to confirm the text of Deuteronomy 27:4): they erected an altar on Mount Ebal, which is not in the Massoretic text!

The above examples show that textual criticism, which relies only on existing texts, can not detect theological corrections. This is particularly evident for the Book of Daniel. Textual criticism<sup>49</sup> now considers that the Masoretic text of Daniel dates back around 165 BCE<sup>50</sup> and differences with the text of the Septuagint are generally in favor of the Hebrew text but with some exceptions (can not decide). These findings are generally accepted in the academic world, but are illogical for two reasons: 1) Daniel is always presented as a real person (Ezekiel 14:14,20; 28:3) who wrote and finished his account in the 3<sup>rd</sup> year of Cyrus' reign (Daniel 10:3), and 2) highly accurate prophecies of Daniel are essential to identify the Messiah and the end of times (1 Peter 1:21, Matthew 24:15). It is moreover the book of Daniel, which was used by Jews and Christians in the famous quarrel of Barcelona (1263 CE) to find out who was the Messiah through the debate organized by the King of Spain between Paul Christiani, Jewish convert to Catholicism, and Rabbi Moses ben Nahman (Ramban), one of the highest authorities of Spanish Jewry<sup>51</sup>. The book of Daniel is thus a

<sup>&</sup>lt;sup>48</sup> C. NIHAN – Garizim et Ébal dans le Pentateuque in: *Semitica* n°54 (2012) pp. 185-210.

<sup>&</sup>lt;sup>49</sup> D. BARTHÉLEMY – Critique textuelle de l'Ancien Testament Tome 3

Göttingen 1992 Éd. Universitaires Fribourg pp. 435-496.

<sup>50</sup> J. MARGAIN – Le Livre de Daniel. Commentaires philologique du texte araméen Paris 1994 Éd. Beauchesne pp. 7-8.

<sup>&</sup>lt;sup>51</sup> NAHMANIDE - La dispute de Barcelone

in: collection «Les Dix Paroles» 1984 Éd. Verdier pp. 45-47.

key book in the Bible, the prophetic book par excellence, hence the importance of its accuracy. Several Hebrew manuscripts of Daniel are dated around 100 BCE, however they are close to the Masoretic text but no identical to it 52. The Greek translation of the book of Daniel (LXX) is not literal and contains errors or corrections (highlighted), but it is unclear whether it would not be the case of the Hebrew text as well<sup>53</sup>. The only way to know is to do a chronological analysis of historical data inside the two texts<sup>54</sup>:

Old Greek LXX	Theodotion LXX	Daniel
O King, you made a feast for your friends, and	and you have exalted yourself against the Lord	5:23
	God of heaven, and the vessels of his house they	
	brought before you, and you and your nobles and	
and you were drinking with them, you and	your concubines and your consorts were drinking wine	
your nobles	with them	
Then Baltasar the king clothed Daniel in purple, and	And Baltasar spoke and they clothed Daniel in purple,	5:29-30
	and the gold torque they put around his neck, and he	
	proclaimed concerning him that he was 3 <sup>rd</sup> in the kingdom.	
	In that very night Baltasar the Chaldean king, was	
	killed and Darius the Mede received the kingdom, being	
Chadeans and was given to the Medes and to		
the Persians, and Xerxes who was king of the		
Medes, reveived the kingdom.		
() and shattered their bones, and Daniel mas	() and pulverized all their bones.	6:24
appointed over the whole kingdom of Darius.		
	And Daniel prospered in the reign of Darius and in the	6:28
Cstus the Petsian received the kingdom	reign of Cyrus the Persian	
	In the 3 <sup>rd</sup> year of the reign of King Baltasar a vision	7:1,20
was a vision, which I, Daniel, saw ()	appeared to me —I, Daniel ()	
	The ram that you saw, which had the horns, is the king of	
king of the Medes and Persians.	the Medes and Persians.	
	70 weeks have been cut short for your people and	9:24-27
	for the holy city: for sin to be consummated and	
	to seal sins and to atone for iniquities and to bring	
	everlasting righteousness and to seal vision and	
the vision and for everlasting righteousness to	÷	
be given and for the vision to be		
consummated and to gladden a holy of holies.	And you shall be on and shall an donet and from the soins	
	And you shall know and shall understand: from the going forth of the word to respond to and to rebuild Ierousalem	
	until an anointed [Messiah] leader, there will be 7 weeks	
	and 62 weeks, and it [Ierousalem] will return, and streets	
	and 62 weeks, and it serousaiems will return, and streets and a wall will be built, and the seasons will be emptied	
	out. And after the 62 weeks, an anointing will be	
	destroyed, and there is no judgment in it. And it will	
	destroy the city and the sanctuary along with the leader who	
	is to come. And they will be cut off by a flood, and	
	there will be annihilations to the finish of a	
	shortened war. And it will strengthen a covenant	
	with many, 1 week, and by half of the week sacrifice and	
	libation will cease, and in the temple there will be an	
and in the temple there will be an abomination of		
	consummation, and a consummation will be given	
	for the desolation.	
desolation.		

<sup>&</sup>lt;sup>52</sup> I.J. COLLINS, P.W. FLINT, C. VANEPPS – The Book of Daniel: Composition and Reception, Volume 2 Leiden 2002 Ed. Brill pp. 573-607.

53 S. PACE JEANSONNE - The Old Greek Translation of Daniel 7-12 in: The Catholic Biblical Quarterly Monograph Series 19 Washington 1988 pp. 103-133.

<sup>54</sup> R.T. McLAY - Daniel. Old Greek / Theodotion

in: New English Translation of the Septuagint (2007) Ed. Oxford University Press pp. 991-1022.

at a set time. And he will enter into Egypt, and	At the appointed time he will return and will 1	1:29-30
as the first so the last will be. And the Romans will	come into the south, and as the first even so the last	
come and will expel him and rebuke him the king of	will not be. And the Kitians who go forth will come against	
	him [the king of the north], and he will be humbled,	
against the covenant of the holy one	and he will return and will be enraged against the	
	holy covenant	
From the time that the [perpetual] sacrifice	From the time of the removal of the regular 1	12:11
	offering and the abomination of desolation will be	
desolation was prepared to be given, there are	given —1290 days.	
1290 days.		

The two Greek translations (LXX) are similar, but the original Hebrew text used (H\*) had to be very close to the Masoretic text (MT). The first translator has corrected the Hebrew text to match the desecration of the Temple of Jerusalem by Antiochus IV<sup>55</sup> that lasted about 3 years (from 15 Kislev in 167 BCE to 25 Kislev in 164 BCE). The name Kittim was formerly understood by the Jews as representing the Greeks, from Alexander to Antiochus IV (1 Maccabees 1:1, 8:5), then from Antichus IV (not before), according to the Pesher Nahum (4Q169)<sup>56</sup>, the Kittim were representing the Romans. As one can see the text of Daniel 9:24-27 is translated differently, several indicators show that the Hebrew text of reference was indeed the Masoretic text. A Qumran manuscript in Hebrew (11Q13), dated around 100 BCE, explains the text of Daniel 9:26<sup>57</sup>: He will proclaim to them the Jubilee, thereby releasing them from the debt of all their sins. He shall proclaim this decree in the 1st week of the jubilee period that follows 9 jubilee periods. Then the "Day of Atonement" shall follow after the 10th jubilee period, when he shall atone for all the Sons of Light, and the people who are predestined to Melchizedek (...) "The messengers" is the Anointed [Messiah] of the spirit, of whom Daniel spoke; "After the 62 weeks, an Anointed [Messiah] shall be cut off" (Daniel 9:26). The "messenger who brings good news, who announces Salvation" is the one of whom it is written; "to proclaim the year of YHWH's favor, the day of the vengeance of our God; to comfort all who mourn" (Isaiah 61:2). The quoted text is strictly that of the Masoretic text, while that of the Septuagint is (incomprehensible): And after 7 and 70 and 62 weeks, an anointing will be removed. The word Messiah has disappeared and the durations have been changed (those of the Masoretic text are logical since the total duration of 70 weeks is equal to the sum of the intermediary durations: 7 + 62 + 1 = 70).

The book of Daniel is little commented in the Qumran manuscripts with two exceptions: 1) when it is commented the Book of Jubilees serves as a reference and 2) the "son of man, chosen by God himself, who has to become the king of the coming world" (Daniel 7:9-14) is widely quoted and commented on the Book of Enoch (1 Enoch XLVI:1-4, XLVIII:2-7; LXII:6-16). These texts show that most of the first-century Jews were expecting a messianic king (rather than a messiah for salvation). For example, according to Tacitus: The majority [of the Jews] were convinced that the ancient scriptures of their priests alluded to the present as the very time when the Orient would triumph and from Judaea would go forth men destined to rule the world. This mysterious prophecy really referred to Vespasian and Titus, but the common people, true to the selfish ambitions of mankind, thought that this exalted destiny was reserved for them, and not even their calamities opened their eyes to the truth (Histories 5:13). According to Suetonius: There had spread over all the Orient an old and established belief, that it was fated at that time for men coming from Judaea to rule the world. This prediction, referring to the emperor of Rome, as afterwards appeared

<sup>&</sup>lt;sup>55</sup> M. HADAS-LEBEL – La révolte des Maccabées Clermont-Ferrand 2012 Éd. LEMME *edit* pp. 41-46.

<sup>&</sup>lt;sup>56</sup> [The interpretation of it concerns Jerusalem, which has become] a dwelling for the wicked ones of the nations. "Where the lion went to enter, the lion's cub [and no one to disturb". The interpretation of it concern Deme]trius, King of Greece, who sought to enter Jerusalem on the advice of the Seeker-After-Smooth-Things, [but God did not give Jerusalem] into the power of the kings of Greece from Antiochus until the rise of the rulers of the Kittim; but afterwards [the city] will be trampled [by the Gentiles ...]

<sup>&</sup>lt;sup>57</sup> M. WISE, M. ABEGG JR, E. COOK – Les manuscrits de la mer Morte Pari 2001 Éd. Plon pp. 257-260, 598-600.

from the event, the people of Judaea took to themselves (The Life of Vespasian IV:5). According to Dio Cassius: This prophecy about the tooth became a reality on the following day; and Nero himself in his dreams once thought that he had brought the car of Jupiter to Vespasian's house. These portents needed interpretation; but not so the saying of a Jew named Josephus: he, having earlier been captured by Vespasian and imprisoned, laughed and said: You may imprison me now [in 68 BCE], but a year from now, when you have become emperor, you will release me (Roman History LXV:1). According to Josephus: But now, what did the most elevate them in undertaking this war, was an ambiguous oracle that was also found in their sacred writings, how about that time, one from their country should become governor of the habitable earth. The Jews took this prediction to belong to themselves in particular, and many of the wise men were thereby deceived in their determination. Now this oracle certainly denoted the government of Vespasian, who was appointed emperor in Judea. However, it is not possible for men to avoid fate, although they see it beforehand. But these men interpreted some of these signals according to their own pleasure, and some of them they utterly despised, until their madness was demonstrated, both by the taking of their city and their own destruction (Jewish War VI:312-315).

The text of Daniel 7 was well known at that time, but if Josephus was able to apply the prophecy of the "Son of man" to Vespasian it is because he read and interpreted the Hebrew text (MT): And it will destroy the city and the sanctuary along with the leader who is to come [Roman ruler?], rather than the Greek text (LXX): And a king of nations will demolish the city and the sanctuary along with the anointed one [Messiah]. Despite he was reading the same text as Christians, Josephus understood it according to Jewish tradition, identifying the "disgusting thing that causes desolation standing in the holy place" with the armies of Antiochus Epiphanes<sup>58</sup> while Christians identified it with Roman armies (Matthew 24:15; Luke 21:20) and the "Son of man" with Jesus (Matthew 26:64), not Vespasian. The Jews expected the coming of a messianic king until the defeat of Bar Kochba in 135 CE.

What proves that the text of Daniel has been written in 535 BCE rather than 165 BCE? In fact, several very precise information inside could only be known prior to -535, which have been known only from the 19<sup>th</sup> century through archaeological discoveries:

- ➤ Babylonian kings were in the habit of drinking wine with their concubines and their consorts at royal banquets. Former historians did not know this strange custom.
- The inscriptions of Nabonidus<sup>59</sup> show that in his 3<sup>rd</sup> year of reign (in -553) he entrusted the kingdom to his eldest son, Belshazzar (Baltasar), and retired to Tema. According to these indications, the actual king of Babylon in -539 was therefore Belshazzar, (in his 14<sup>th</sup> year of reign), not Nabonidus. Prior to 1854, Belshazzar had been an enigma for historians and archeologists who knew nothing of him outside the book of Daniel. Both Xenophon (Cyropaedia VII:5;28-30) and Herodotus (The Histories I:191) recount the fall of Babylon to Cyrus the Great, yet neither of these writers give the name of the king of Babylon. Additionally, both Berossus' and Ptolemy's king lists have Nabonidus as the last king of Babylon with no mention of Belshazzar.

<sup>58</sup> Daniel was become so illustrious and famous, on account of the opinion men had that he was beloved of God (...) God showed to him that it should fight against his nation, and take their city by force, and bring the temple worship to confusion, and forbid the sacrifices to be offered for 1296 days. Daniel wrote that he saw these visions in the Plain of Susa; and he hath informed us that God interpreted the appearance of this vision after the following manner: He said that the ram signified the kingdoms of the Medes and Persians, and the horns those kings that were to reign in them; and that the last horn signified the last king, and that he should exceed all the kings in riches and glory: that the he-goat signified that one should come and reign from the Greeks, who should twice fight with the Persian, and overcome him in hattle, and should receive his entire dominion: that by the great horn which sprang out of the forehead of the he-goat was meant the first king; and that the springing up of four horns upon its falling off, and the conversion of every one of them to the four quarters of the earth, signified the successors that should arise after the death of the first king, and the partition of the kingdom among them, and that they should be neither his children, nor of his kindred, that should reign over the habitable earth for many years; and that from among them there should arise a certain king that should overcome our nation and their laws, and should take away their political government, and should spoil the temple, and forbid the sacrifices to be offered for 3 years' time. And indeed it so came to pass, that our nation suffered these things under Antiochus Epiphanes, according to Daniel's vision, and what he wrote many years before they came to pass. In the very same manner Daniel also wrote concerning the Roman government, and that our country should be made desolate by them. All these things did this man leave in writing, as God had showed them to him, insomuch that such as read his prophecies, and

<sup>&</sup>lt;sup>59</sup> J. BRIEND M.J. SEUX Les textes du Proche-Orient ancien et l'histoire d'Israël Paris 1977 Éd. Cerf pp. 147-150.

- According to Daniel 8:1-6,20 a ram with two horns appeared in the 3<sup>rd</sup> year of Belshazzar, in 550 BCE, representing the kings of Media and Persia. Indeed in 550 BCE Cyrus II became king of Persia and Harpagus, his coregent, was king of Media<sup>60</sup>.
- According to the Nabonidus Chronicle, Ugbaru (Gobryas) was the governor of Gutium, the Darius the Mede of Daniel, who actually led Cyrus the Great's army that captured Babylon on 17/VII/17 of Nabonidus (October 539 BCE), then Cyrus entered Babylon on 3/VIII/17. Ugbaru, his co-ruler, installed governors in Babylon (as he died on October 26, 538 BCE he can not be the Gubaru appearing 3 years later in November 535 BCE). According to the timeline of Nabonidus Chronicle the [actual] king of Babylon was Ugbaru (even if he was not formally enthroned) during the period from 3/VIII/00 to 11/VIII/01 of Cyrus. As Cyrus received the title of "King of Babylon" only after month X of the 1st year of his reign<sup>61</sup> (prior this date, he was only "King of Lands"), year 1 of Cambyses coincides with year 2 of Cyrus. Cyrus chose Cambyses as King of Babylon from [-]/X/01, who was enthroned by the Babylonians only from 4/I/02 (Akitu feast) 2 months later. The co-regency between Cyrus (actual King of Babylon) and Cambyses (official king of Babylon) has begun informally from [-]/X/01 of Cyrus as confirmed by a double dated document (TuM 2-3, 92)<sup>62</sup>: month XI, day 25, year 1 of [Cyrus] year of accession of kingship! of Ganzyse! King of Babylon and of Lands. It is interesting to notice that Ugbaru was likely 62 years old<sup>63</sup> in 539 BCE (Daniel 5:31).

The extraordinarily precise historical and chronological data from the Hebrew book of Daniel (MT) prove its authenticity and reliability. Chronology is essential for testing the accuracy of a document. First Jewish chronographs<sup>64</sup> as Demetrius (c. 220 BCE) and Eupolemus (c. 160 BCE) have dated all the major biblical events from the creation of Adam, or by age of the world (AM). However, in the Book of Jubilees<sup>65</sup> (c. 160-150) whole biblical story is dated by jubilees of 49 years instead of 50 (Leviticus 25:10-11). The Book of Biblical Antiquities<sup>66</sup> (LAB), written by a Jew (pseudo-Philo) between 80 BCE and 70 CE (c. 50 CE?), has yet chronological data in agreement with those of the Septuagint. Finally, the Seder Olam<sup>67</sup> (SO) permanently fixed (c. 160 CE) Jewish chronology, in agreement with the Masoretic text. The Septuagint (LXX), completed around 160-150 BCE, the Masoretic Text (TM), around 90 CE, and the work of Josephus (FJ), to 95 CE, have very different chronological data<sup>68</sup>. Those for the period from Adam to Deluge come from Genesis 5:3-31 and those from Deluge to Abraham in Genesis 11:10-26:

<sup>&</sup>lt;sup>60</sup> The chronology of Median kings comes from Herodotus (The Histories I:101-108) who mentions a total solar eclipse at the end of Cyaxares reign (dated May 28, 585 BCE according to astronomy). He wrote that Astyages, after a reign of 35 years, was defeated by Cyrus who thus became the ruler of Persia and Media, Harpagus becoming a coregent (The Histories I:127-130, 162, 177-178) called "Lieutenant of Cyrus" by Strabo (Geography VI:1) or "Commandant of Cyrus" by Diodorus Siculus (Historical Library IX:31:1). Harpagus is called Oibaras by Ctesias (Persica §13,36,45). According to Flavius Josephus, Cyrus took Babylon with the help of Darius the Mede, a "son of Astyages", at the epoch of Belshazzar, in the year 17 of Nabonidus (Jewish Antiquities X:247-249).

<sup>61</sup> S. ZAWADZKI - Gubaru: A Governor or a Vassal King of Babylonia?

in: Eos vol. LXXV (1987 Wrocław) pp.69-86.

<sup>62</sup> O. KRÜCKMANN – Neubabylonische Rechts- und Wervaltungstexte

in: Texte und materialien der Frau prof. Hilprecht collection of Babylonian antiquities II-III, Leipzig 1933, N°92.

<sup>&</sup>lt;sup>63</sup> One can suppose that Harpagus (Ugbaru) was at least 20 years old at the birth of Cyrus (The Histories I:108) who began to reign in 559 BCE, when he was probably 20 years old. Under this assumption, Harpagus was born in 599 BCE (= 559 + 20 + 20) and was around 60 years old at the time of the fall of Babylon in 539 BCE, that agrees with the biblical text.

<sup>&</sup>lt;sup>64</sup> J. FINEGAN - Handbook of Biblical Chronology

Massachusetts 1999 Ed. Hendrickson Publishers pp. 140-145.

<sup>65</sup> A. NYLAND - The Book of Jubilees

Uralla 2010 Ed. Smith and Stirling Publishers 5-122.

JAMES C. VANDERKAM -The Book of Jubilees

<sup>2001,</sup> Sheffield Academic Press pp. 17-21.

<sup>66</sup> C. PERROT, P.-M. BOGAERT – Les antiquités bibliques Tome II

Paris 1976 Éd. Cerf pp. 74, 81-92.

<sup>&</sup>lt;sup>67</sup> H.W. GUGGENHEIMER – Seder Olam. The Rabbinic View of Biblical Chronology Lanham 2005 Ed. Rowman & Littlefield Publishers Inc.

<sup>&</sup>lt;sup>68</sup> J. HUGHES – Secrets of the Times. Myth and History in Biblical Chronology

in: Journal for the Study of the Old Testament Supplement Series 66 (1990) pp. 57, 267-272.

	Н*	LXX	Jub.	PS	LAB	TM	FJ	SO
	(-400)	(-280)	(-160)	(-130)	(50?)	(90)	(95)	(160)
Adam	230/700	230/700	130/800	130/800	[ <b>1</b> 30]/ <b>700</b>	<b>130/800</b>	230/700	130/800
Seth	205/707	205/707	<b>1</b> 05/[]	<b>1</b> 05/ <b>8</b> 07	<b>1</b> 05/707	105/807	205/707	<b>108</b> /[]
Enosh	190/715	190/715	[-]90/[]	[-]90/ <mark>8</mark> 15	180/715	[-]90/ <mark>8</mark> 15	190/715	[-]90/[]
Qenan	170/740	170/740	[-]70/[]	[-]70/ <mark>8</mark> 40	170/7 <mark>3</mark> 0	[-]70/ <mark>8</mark> 40	170/740	[-]70/[]
Mahalaleel	165/730	165/730	[-]6 <mark>6</mark> /[]	[-]65/ <mark>8</mark> 30	165/730	[-]65/ <mark>8</mark> 30	165/730	[-]6 <mark>8</mark> /[]
Yered	162/800	162/800	[-]61/[]	[-]62/785	162/800	162/800	162/800	162/[]
Henok	165/200	165/200	[-]65/[]	[-]65/ <mark>3</mark> 00	165/200	[-]65/ <b>3</b> 00	165/200	[-]65/[]
Mathusalem	187/782	167/802	[-] <b>65</b> /[]	[-]67/653	187/782	187/782	187/782	187/782
Lamek	182/565	188/565	<b>152</b> /[]	[-]53/600	182/5 <mark>8</mark> 5	182/5 <mark>9</mark> 5	[-]82/ <mark>62</mark> 5	182/[]
Noah	600/350	600/350	608/342	600/350	<b>3</b> 00/[]	600/350	600/350	600/350
Adam-Deluge	-	-	1308	-	1652	-	1662	1656
[Total]	[2256]	[2242]	[1412]	[1307]	[1746]	[1656]	[2156]	[1662]
Sem	100/500	100/500	<b>103</b> /[-]	100/500	[-]/[-]	100/500	[100]/[-]	100/500
Deluge-Sem	2	2	2	2		2	<b>1</b> 2	2
Arpakshad	135/403	135/430	[-]35/[-]	135/303	[-]/[-]	[-]35/403	135/[-]	[-]35/[-]
Kainan	130/330	130/330	[-] <b>30</b> /[-]	-		-	-	-
Shelah	130/303	130/330	<b>57</b> /[-]	130/303	[-]/[-]	[-]30/403	130/[-]	[-]30/[-]
Eber	134/370	134/370	<b>71</b> /[-]	134/ <mark>2</mark> 70	[-]/[-]	[-]34/ <b>43</b> 0	134/[-]	[-]34/[-]
Peleg	130/209	130/209	<b>64</b> /[-]	130/209	[-]/[-]	[-]30/209	130/[-]	[-]30/[-]
Reu	132/207	132/207	<b>12</b> /[-]	132/207	[-]/ <b>119</b>	[-]32/207	132/[-]	[-]32/[-]
Serug	130/200	130/200	<b>108</b> /[-]	130/100	29/67	[-]30/200	130/[-]	[-]30/[-]
Nahor I	79/129	79/129	<b>57</b> /[-]	79/[-] <mark>6</mark> 9	34/200	<b>2</b> 9/1 <b>1</b> 9	<b>120</b> /[-]	<b>2</b> 9/[-]
Terah	70/135	70/135	<b>62</b> /[-]	70/65	70/[-]	70/135	70/135	70/135
Nahor II	(+60)	(+60)	<b>70</b> /[-]	(+60)		(+60)	(+60)	(+60)
Deluge-Abraham	-	-	-	-		-	992	-
[Total]	[1072]	[1072]	[568]	[942]		[292]	[993]	[292]

	H*	LXX	Dem.	Jub.	Eup.	PS	LAB	TM	FJ	SO
	(-400)	(-280)	(-220)	(-160)	(-158)	(-130)	(50?)	(90)	(95)	(160)
Deluge (AM)	[2256]	2242	2264	1308		[1307]	2146*	[1656]	2156*	1656
Abraham (AM)	[3328]	[3314]	3334	1876	2064	[2309]		[2008]	[3208]	[2008]
Abraham (BCE)		[2038]	[2038]	[2038]	3243	[2038]		[2038]	[2038]	[2038]
Adam (BCE)		5352	5372	4118	5307	4347		4046	5246	4046

According to this reconstruction of chronological data, corrections were performed in two steps: 1) after the onset of the Book of Jubilees (c. -160) durations in Genesis 5:3-31 are reduced by 100 years and are adopted by a part of the Jews, as Eupolemus, and by the Samaritans and 2) then, at the Synod of Yabneh (c. 90 CE), durations in Genesis 11:10-26 are also reduced by 100 years and are canonized by the rabbis<sup>69</sup> (Pharisees).

Errors (in red) are detectable because: 1) they are random and/or 2) they affect a total known and/or 3) create inconsistencies in the order of events. Methuselah is a good example: he would fathered Lamech at the age of 167 and would still lived 802 years, which generates chronological inconsistency, because in that case he would have survived the flood 14 years [= 802 - (188 + 600)]. It is indeed an error since Demetrius (c. -220) date the flood in 2264 AM (year of the world) instead of 2242 AM, 20 years longer than in the text of the Septuagint. The couple 167/802 therefore comes from a change: (187 - 20)/(782 + 20), Methuselah would be died the year of the flood (782 = 182 + 600). The Samaritan Pentateuch corrected this error by drawing on the Book of Jubilees making Lamech died at the time the flood as Methuselah (653 = 53+600, 600 = 565+35, 53 = 88 - 35). Similarly, as Abraham is mentioned first among the son of Nahor II, the copyists of the Samaritan Pentateuch assumed he would be the first-born and therefore decreased the age of Nahor from 135 to 65 (= 135 - 70).

<sup>&</sup>lt;sup>69</sup> There were disagreements between Pharisees and former Sadducees regarding "genuine" holy texts (M. Yadaim 4:6-8).

The first 100 years shifts appeared after the restoration of the Temple (c. -160), profaned by Antiochus IV Epiphanes, seen as a prophetic fulfillment of Daniel 9<sup>70</sup>. The Pentateuch (Temple) was copied by Sadducean scribes while those used in synagogues were copied by Pharisean scribes. Scribe (Pharisee) at this time had such prestige that it is called scribe of justice (1Enoch 12:4; 15:1). We note that the paternity greater than 130 years have all been reduced by 100 years, they have in fact been "Hellenized", in agreement with the text of Genesis 18:12 assuming a maximum of 100 years (prodigious age were accepted, because they corresponded to heroic times of Greek mythology). But in order not changing the final age of the characters, their remaining lifetime has been increased by 100 years. If the Jewish scribes of the Septuagint (c. -280) had corrected the text by increasing all ages 100 years, the age of Nahor should be 129 years instead of 79 and the ages of Yered, Methuselah, Lamech and Noah would have been 100 years higher.

Genesis 5:3-31	H* (-400)	LXX (-280)	Jub. (-160)	PS (-130)	TM (90)	FJ (95)
Adam	230/700	230/700	130/800	130/800	130/800	230/700
Seth	205/707	205/707	<b>105</b> /[]	105/ <mark>8</mark> 07	105/807	205/707
Enosh	190/715	190/715	[ <b>-]90</b> /[]	[-]90/ <mark>8</mark> 15	[-]90/ <mark>8</mark> 15	190/715
Qenan	170/740	170/740	[-]70/[]	[-]70/ <mark>8</mark> 40	[-]70/ <mark>8</mark> 40	170/740
Mahalaleel	165/730	165/730	[-]6 <mark>6</mark> /[]	[-]65/ <mark>8</mark> 30	[-]65/ <mark>8</mark> 30	165/730
Yered	162/800	162/800	[-]6 <b>1</b> /[]	[-]62/785	162/800	162/800
Henok	165/200	165/200	[ <b>-</b> ]65/[]	[-]65/ <mark>3</mark> 00	[-]65/ <b>3</b> 00	165/200
Mathusalem	187/782	167/802	[-] <b>65</b> /[]	[-]67/653	187/782	187/782
Lamek	182/565	188/565	152/[]	[-]53/600	182/595	[-]82/ <mark>62</mark> 5
Noah	600/350	600/350	608/342	600/350	600/350	600/350
Adam-Deluge	-	-	1308	-	-	1662
[sum]	[2256]	[2242]	[1412]	[1307]	[1656]	[2156]

The chronology of the Samaritan Pentateuch for the first period, from Adam to the Flood, is similar to that of the Book of Jubilees since the total is 1307 years in line with the 1308 years indicated in the Book of Jubilees (while the calculated sum is 1412 years!). This coincidence is not accidental because if the worship in the Temple had been restored thanks to the heroic sacrifices of the Maccabees, the choice of the high priest however had led to a disagreement about his legitimacy and various reactions of support or rejection (the great priest being considered impious) according to religious groups<sup>71</sup>: Pharisees, Sadducees, Essenes and Samaritans (Jewish Antiquities XIII:171-172) or political groups: Hasmoneans, Hellenists and Maccabeans. This split has had a significant impact on the copy of the biblical text. Indeed, while Ezra the priest had initiated the process copies of the Law (Ezra 7:6-12), this task was then assigned to the Levites (Nehemiah 13:13). Although the Samaritans are syncretic, like the Jews of Elephantine, they were not related to the Gentiles (2Kings 17:24-41). During the Jewish uprising Judah Maccabee used Samaria as rear base (2Maccabees 15:1) which means support in that region. Similarly, Jews and Samaritans were both associated because during the repression by the Greeks the temples of Jerusalem and Gerizim are both desecrated (2 Maccabees 6:2). The period 168-128 is extremely complex because the reports of different religious groups with the authorities have fluctuated between support and rejection regarding to the high priest chosen by the Greek power<sup>72</sup>. Thus, Antiochus IV deposed the high priest Onias III (185-175) and replaced it with Jason (175-172) who is also deposed and replaced by Menelaus (172-164) who was not Sadducee "son of Zadoc," that was a violation of biblical law

<sup>&</sup>lt;sup>70</sup> Josephus, who was a Pharisee, applied Daniel's prophecy to Antiochus IV for proving God's providence (Jewish Antiquities X:276).

<sup>&</sup>lt;sup>71</sup> J.P. MEIER - Un certain juif Jésus Les données de l'histoire III

Paris 2005 Éd. Cerf pp. 195-401.

<sup>&</sup>lt;sup>72</sup> S.C. MIMOUNI – Le judaïsme ancien du VI<sup>e</sup> siècle avant notre ère au III<sup>e</sup> siècle de notre ère Paris 2012 Éd. Presses Universitaires de France pp. 298-351, 585-595.

(Ezekiel 40:46). Menelaus then makes murdered Onias III (in -170) what led Jason going into Egypt (in -168) and Onias IV, the son of Onias III, founding a temple in Leontopolis (Isaiah 19:19). Antiochus V deposed Menelaus and replaced it with Alcimus (164-161) who was considered illegitimate and was replaced with Jonathan (161-143) by Judah Maccabee.

Confusion regarding the high priest climaxed in 161 BCE since Jason was accepted by the Sadducees but considered illegitimate by the Pharisees and Samaritans who only recognized Jonathan (the Essenes were more radical by rejecting this high priest as impious because of Onias IV the only high priest belonging to the legitimate branch). During the period 168-128 appeared a Rabbinic version of the Bible, copied by scribes of the Pharisees (Mark 2:16), alongside the priestly version copied by Saducees. These two versions differed only on theological issues such as the role of the temple, the legitimacy of the high priest and the eschatological chronology<sup>73</sup>. The rabbinical version appeared at the same time as the texts of Daniel (in Greek) and Sirach, which now applying the murder of the Messiah in Daniel 9:25-27 to Onias III<sup>74</sup> (1Maccabees 1:54). In addition, the legitimacy of high priests is no longer respected<sup>75</sup> and a new biblical chronology as it appears at the beginning of the Book of Jubilees<sup>76</sup>: This is the history of the division of the days of the law and of the testimony, of the events of the years, of their weeks, of their jubilees throughout all the world's years, which the Lord told Moses on Mount Sinai when he went up there to receive the tables of the law and the commandment (...) God said: Listen to everything that I'm going to tell you on this mountain, and write it in a book. This is so that their generations will know that I have not abandoned them despite all the evil which they do by disobeying the covenant which I will establish this day on Mount Sinai between you and me for their generations. So then when all these things happen to them, they will realize that I am more honorable than they are in all their judgments and their actions, and they will realize that I have been straightforward with them. Indeed, you are to write down everything I tell you this day. I know their rebellious, stubborn nature. I will bring them to the land I promised to their ancestors, Abraham, Isaac, and Jacob. I said to them: I am giving a land flowing with milk and honey to your descendants. They will eat and be full, and they will turn to strange gods, to gods which cannot rescue them from any of their troubles. This will be heard as a witness against them. They will forget all my commandments. They will forget everything that I commanded them. They will live like pagans, and be ritually unclean, and disgraceful, and will serve their gods. This will prove to be an offence, an ordeal, an affliction, and a trap to them. Many will die and many will be taken captive. Many will fall into the hands of the enemy, because they have abandoned my decrees, my commandments, the festivals of my covenant, my Sabbaths, and my sacred place which I consecrated for myself amongst them, and my tabernacle, my sanctuary which I consecrated for myself amongst them (...) I will send witnesses to them to bear witness against them. However, they will not listen to them, and furthermore will kill the witnesses too. They will persecute those who seek the law, and they will annul or change everything in order to do evil in my sight. I will turn my face from them, and I will hand them over as captives to the pagans, to be made victims, to be devoured. I will remove them from the land. I will scatter them among the pagans. They will forget all my laws, commandments, and judgments, and will go off the right path with regard to new moons. Sabbaths, festivals, jubilees, and decrees.

The Pharisees arose from Hasidim "pious" who fought for the survival of the cult. The Book of Jubilees was used to legitimize their rival religious institution compared to that one of the Sadducees too closely linked to Greek rulers. According to Josephus: Then a certain Jonathan, one of Hyrcanus' close friends, belonging to the school of Sadducees, who hold opinions opposed to those of the Pharisees, said that it had been with the general approval of all the Pharisees that

<sup>73</sup> The creation of the world, for example, is dated 2450 years prior to entry into Canaan (Jubilees 50:4), instead of 3604 years (LXX).

<sup>&</sup>lt;sup>74</sup> H. COUSIN – La Bible grecque. La Septante

in: Supplément au Cahier Évangiles 74 (1990 Cerf) pp. 109-111.

<sup>&</sup>lt;sup>75</sup> S.C. MIMOUNI – Le judaïsme ancien du VI<sup>e</sup> siècle avant notre ère au III<sup>e</sup> siècle de notre ère

Paris 2012 Éd. Presses Universitaires de France pp. 298-309.

<sup>&</sup>lt;sup>76</sup> A. NYLAND – The Book of Jubilees

Uralla 2010 Ed. Smith and Stirling Publishers 7-8.

Eleazar had made his slanderous statement; and this, he added, would be clear to Hyrcanus if he inquired of them what punishment Eleazar deserved for what he had said. And so Hyrcanus asked the Pharisees what penalty they thought he deserved —for, he said, he would be convinced that the slanderous statement had not been made with their approval if they fixed a penalty commensurate with the crime—, and they replied that Eleazar deserved stripes and chains; for they did not think it right to sentence a man to death for calumny, and anyway the Pharisees are naturally lenient in the matter of punishments. At this Hyrcanus became very angry and began to believe that the fellow had slandered him with their approval. And Jonathan in particular inflamed his anger, anil so worked upon him that he brought him to join the Sadducaean party and desert the Pharisees, and to abrogate the regulations which they had established for the people, and punish those who observed them. Out of this, of course, grew the hatred of the masses for him and his sons, but of this we shall speak hereafter. For the present I wish merely to explain that the Pharisees had passed on to the people certain regulations handed down by former generations and not recorded in the Laws of Moses, for which reason they are rejected by the Sadducaean group, who hold that only those regulations should be considered valid which were written down (in Scripture), and that those which had been handed down by former generations need not be observed. And concerning these matters the two parties came to have controversies and serious differences, the Sadducees having the confidence of the wealthy alone but no following among the populace, while the Pharisees have the support of the masses (Jewish Antiquities XIII:293-298). The abundant literature of Maccabean inspiration will be adopted by Pharisaic tendencies, but also Samaritan and even Essenian. Chronology from the Book of Jubilees will replace that of chapter 5 of Genesis<sup>77</sup>. When John Hyrcanus destroyed the Samaritan temple on Mount Gerizim in 128 BCE (Jewish Antiquities XIII:254-256) Jews and Samaritans broke up, which freezed the Samaritan Pentateuch. When Roman armies destroyed the Jerusalem temple in 70 CE, Jews and Judeo-Christians separated. The rabbis (Pharisees), at the Synod of Yabneh<sup>78</sup> (c. 90 CE), harmonized the chronology of Genesis chapter 8 with that of chapter 5, but for some unknown reasons three durations are restored: those of Jared, Methuselah and Lamech. Sadducees disappeared after 70 CE as well as copies of the Bible from the temple. Most biblical texts found at Qumran are likely to be copies made by scribes who were Pharisees or Essenes.

A historical retrospect shows that many periods have strongly influenced the Jews: 1) Hellenism from 330 BCE, 2) religious nationalism from 160 BCE, 3) anti-Samaritan feeling from 128 BCE (destruction of the temple of Gerizim), 4) anti-Christian feeling from 70 CE (destruction of the Temple in Jerusalem), then total rejection after 135 CE (defeat of Bar Kochba). Chronologies from Jewish chronographs on the period from 220 BCE to 160 CE can track the evolution of biblical chronology:

Dated around 1500 BCE, administrative documents from Sealand (northern Sumer) contain the oldest epigraphs in paleo-Hebrew and Midianite/Temanites theophorous names in Ya(h)u. The name Ali-din-ili-UB-KU-[-], for example, written in cuneiform is transcribed 'LDN'L GB' in paleo-Hebrew<sup>79</sup>. It is at this time (1500 BCE) that Moses wrote the Pentateuch. This book should remain in the custody of the high priest and every future king had to write his own copy (Deuteronomy 17:18, 31:26). According to the Egyptian priest Manetho (ca. 280 BCE) Exodus took place under Ahmose (1530-1505) and he states: It was also reported that the priest, who ordained their polity and their laws, was by birth of Heliopolis, and his name Osarsiph (Aauserre-Apopi), but that when he was gone over to these people, his name was changed, and he was called Moses (Against Apion I:250).

<sup>&</sup>lt;sup>77</sup> A. LANGE – The Hebrew Bible in Light of the Dead Sea Scrolls

in: Forschungen zur Religion und Literatur des Alten und Neuen Testaments 209 (Vandenhoeck & Ruuprecht, 2012) p. 17.

<sup>78</sup> This Synod collected "legal" traditions/ prophecies (Tosefta Eduyot 1.1) and chose "genuine" holy books (M. Yadaim 4:6).

<sup>&</sup>lt;sup>79</sup> L. COLONNA D'ISTRIA – Épigraphes alphabétiques du pays de la Mer §48

in: Nouvelles Assyriologiques Brèves et Utilitaires 3 (2012) pp. 61-63.

S. DALLEY - Babylonian Tablets from the First Sealand Dynasty in the Schøyen Collection

in: Cornell University Studies in Assyriology and Sumerology Vol. 9 (CDL Press, 2009) pp. 1-4.

- ➤ Dated 1050-970 the Khirbet Qeiyafa ostracon<sup>80</sup> contains the oldest known biblical text (Leviticus 19:13). At that time, the Law of Moses (Pentateuch) was known outside Jerusalem only by oral teaching carried out by the priests (2 Chronicles 17:9; 34:15).
- ➤ In 622 BCE the Pentateuch of Moses is found in the 18<sup>th</sup> year of King Josiah (2 Kings 22:3-10). Notable coincidence two silver scrolls<sup>81</sup> dated to 650-600 BCE (found in Ketef Hinnom near Jerusalem) contain the text of Numbers 6:24-25.
- ➤ Jews in Elephantine (whom cult was syncretic) were given letters in Aramaic<sup>82</sup> (dated 419 BCE), which had been sent by the priests of Jerusalem, so they celebrate Easter in their temple according to the instructions of Exodus 12:18-19.
- In 406 BCE Jerusalem was completed and inaugurated late in the reign of Darius II (Nehemiah 12:22-43). According to the Mishna: Since the death of Haggai, Zechariah and Malachi, the last prophets, the Holy Spirit ceased in Israel (Tosephta Sota 13:2-4); when they deserved, under Ezra, it [the Torah] recovered in "modern Hebrew" (Megillah 71b; Tosephta Sanhedrin 4:7). The Babylonian Talmud states: Moses wrote his book and the section of Balaam and Joh, Joshua wrote his book and eight verses [completing] the Torah (...) [and finally] Ezra wrote his book and the genealogies of Chronicles (Baba Batra 14b). Ezra was a skilled copyist who has initiated a program of annual reading of the Bible (in the Jerusalem Temple) with explanations and comments, according to Nehemiah 8:1-9.
- From 400 to 330 BCE appear (partial?) Greek translations of the Law as that one of Theopompus (378-323) and Theodectes (375-334). These translations are disapproved by Jewish authorities (Letter of Aristeas XII:312-316). The mention of such translations illustrates the growing diffusion of Greek texts (Hebrew having become a liturgical language of the priesthood after returning from the Babylonian exile). During this period appears the technique of *qere/ketib* consisting in reading (*qere*) another word instead of what is written (*ketib*). For example, due to a formalistic reading of some verses: Adonay "Lord" is read instead of Yehowah (Exodus 20:7), *boshet* "shame" is read instead of Baal "Master" (Hosea 2:16) or Moloch "King" (Exose 23:13) etc. This reading technique will affect the subsequent copyists.
- ➤ In 331 BCE, after the victory of Alexander on Gaza, the Samaritans took advantage building their own temple on Mount Gerizim (Jewish Antiquities XI:324) without Jews oppose it, but the scribes of the Temple replaces "Mount Gerizim" by "Mount Ebal" (Deuteronomy 27:4) in their copies for places of prayer (former synagogues).
- Towards 315-305, Hecataeus of Abdera, a Greek historian, mentions the Law of Moses (Pentateuch), according to Diodorus Siculus (Historical Library I:28:94, XL:3).
- Around 280 BCE, Ptolemy II promoted historical writings in order to equip his library of Alexandria. At this time appeared official translation of the Pentateuch into Greek, known as the Septuagint, heavily influenced by Hellenism (as the text of Exodus 3:14). The Samaritans continued to use the old version of the Pentateuch in paleo-Hebrew.
- ➤ Greek prevailed very early in the synagogues, as proven by one of the earliest (c. 250 BCE) of the dedicatory inscriptions<sup>83</sup> from Schedia near Alexandria. The place of prayer was an elementary synagogue according to the text of Acts 16:13,16.
- ➤ Jewish chronograph Demetrius established (c. 220 BCE) a biblical chronology which agrees only with the text of the Septuagint.

<sup>80</sup> E. PUECH –L'Ostracon de Khirbet Qeyafa et les débuts de la royauté en Israël in: Revue Biblique 117 (2010) pp. 162-184.

<sup>81</sup> G. BARKAY – The Priestly Benediction on Silver Plaques From Ketef Hinnom in Jerusalem. in: Tel Aviv Vol. 19 n°2 (1992).

R. MARTIN-ACHARD – Remarques sur la bénédiction sacerdotale in: Études Théologiques & Religieuses tome 70 (1995/1) pp. 75-84.

<sup>82</sup> P. GRELOT – Documents araméens d'Égypte

in: Littératures Anciennes du Proche-Orient 5 (1972) Éd. Cerf pp. 95-96.

<sup>83</sup> W. HORBURY D. NOY - Jewish Inscriptions of Graeco-Roman Egypt

<sup>1992</sup> Ed. Cambridge University Press, Inscription n°22.

- ➤ Towards 190-180 BCE, the grandfather of Ben Sirach was reading the Bible in its traditional Jewish form: Law, Writings and Prophets (Ecclesiasticus prologue; 1:39). The Old Testament was widely circulated according to Ben Sirach.
- ➤ In 160 BCE, Simon Maccabeus inaugurated Hasmonean era after the victory of his brothers on the Greek forces of occupation which had desecrated the Temple in Jerusalem. Pharisees advocate religious legalism and Sadducees favour Hellenism. The Greek translation of the other books of the Bible, such as those of Samuel and Kings, is performed. The Book of Jubilees (160-150 BCE) appears developing a new chronology based on jubilees of 49 years commencing at the creation of the world dated 2450 years prior the entry into Canaan (Jubilees 50:4), instead of 3604 years (LXX).
- ➤ Jewish historian Eupolemus sets (c. 160 BCE) a biblical chronology which agrees only with the text of the Septuagint.
- ➤ Jewish writers of the 2<sup>nd</sup> century BCE considered that the Greek text (LXX) made exactly the Hebrew text, as explained Aristeas to 160-130 BCE (Letter of Aristeas §310-§311). Thus, towards 160-150, Scripture quoted by the Jews was in line with the text of the Septuagint as the text of 1 Maccabees 7:16-17 which quotes Psalm 79:2-3 (LXX).
- ➤ During a dispute concerning the temple on Mount Gerizim towards 150-145 (Jewish Antiquities XIII:72-79) the Jews never accuse the Samaritans having a falsified Pentateuch (2 Maccabees 6:2) while it keeps a text close to the Septuagint.
- ➤ In 128 BCE, John Hyrcanus destroyed the Samaritan temple on Mount Gerizim as well as Shechem (in 107 BCE) the capital of Samaria (Jewish Antiquities XIII:254-256). Jews and Samaritans separated (Sirach 50:25-26), that freezed the Samaritan Pentateuch<sup>84</sup> which agrees in 1900 places<sup>85</sup> with that of the Septuagint against the Masoretic text<sup>86</sup>.
- ➤ Jewish writers, until the end of the 1<sup>st</sup> century CE, are unanimous in saying that the Greek text of the Septuagint renders the Hebrew text exactly (from the Temple in Jerusalem). This is the case, towards 30-50, for Philo of Alexandria (Vita Mosis II:40), apostle Paul towards 50-60 (New Testament) and Josephus towards 90-100 (Jewish Antiquities XII:108-109). For all these Jewish authors, the text of the Septuagint (Pentateuch) was based on an authoritative Hebrew text and the latter was not considered different from its Greek version (at this time)
- Around 50 CE, according to Rabbi Hiyya ben Abba (190-220): The Targum of the Prophets was composed by Jonathan ben Uzziel under the guidance of Haggai, Zechariah and Malachi, and the land of Israel [thereupon] quaked over an area of 400 parasangs (= 2240 kilometers) by 400 parasangs, and a Bath Kol (voice from heaven) came forth and exclaimed, Who is this that has revealed My secrets to mankind? Jonathan ben Uzziel thereupon arose and said, It is I who have revealed Thy secrets to mankind. It is fully known to Thee that I have not done this for my own honour or for the honour of my father's house, but for Thy honour I have done it, that dissension may not increase in Israel. He further sought to reveal [by] a targum [the inner meaning] of the Hagiographa (of Daniel), but a Bath Kol went forth and said, Enough! What was the reason? Because the date of the Messiah is foretold in it (B. Megilla 3a).
- From 70 CE (destruction of the Temple and its archives), Rabbinic Judaism begins unifying and revising the texts of the Old Testament<sup>87</sup>, written in reaction against the Judeo-Christians who identified Jesus as the Messiah through the gospel of Matthew written in Hebrew (towards 41 CE according to Christian tradition).

Assen 1992 Ed. Fortress Press pp. 80-100.

<sup>84</sup> E. TOV – Textual Criticism of the Hebrew Bible

<sup>85</sup> K.-R. Kim counts merely 964, of which 493 are meaningful, and 328 are common harmonization.

<sup>86</sup> C.A. EVANS – Ancient Texts for New Testament Studies

Michigan 2005 Ed. Baker Academic pp. 156-158.

<sup>&</sup>lt;sup>87</sup> C. AMPHOUX – Le texte de la Bible

in: Dictionnaire encyclopédique de la Bible (Brepols 1987) pp. 1256-1258.

- Around 90 CE, the Synod of Yabneh led by Gamaliel II, Rabbis set the text of the Torah using three copies from the Temple. The Jerusalem Talmud states that these copies had variants in spelling (B. Taanit 68a). According to the Babylonian Talmud (B. Qiddushin 30a), the Pentateuch (H\*?) at the time contained 5888 verses, whereas there are 5853 according to current count (MT). Rabbis settled the canon of Torah and began to harmonize the text of the Septuagint on their new textus receptus (MT). This synod is dated towards 90 CE because Josephus mentions in 94 CE the existence of a canon of biblical books (Against Apion I:38-41) that did not exist prior this date (moreover the first codex of the Septuagint yet contained Jewish apocrypha next canonized books). Some corrections have also been used to discourage the calculations of Messianic time (B. Sanhedrin 97b) made by the Judeo-Christians (Luke 3:1,15; Acts 1:6).
- ▶ In 94 CE Josephus published his book Against Apion to defend the historicity of the biblical text including using its historical data. The Hebrew text he used is often close to that of the Septuagint, mainly the Pentateuch, but not identical. Josephus in order to defend Jewish history, through its chronology, wrote: So the exact data of the Scriptures which will be developed in this paper, each in its place, and I am committed to doing this in this book, without adding or omitting (Jewish Antiquities I:17,149). He was aware that some of his readers were hostile to him (most Jews considered him a traitor) and this is why he said: However, some despicable characters tried to attack my story (...) Archaeology, as I said [in Jewish Antiquities I:5], is translated from the holy books, because I hold the priesthood from my birth and I started philosophying [rabbinic interpretation] these books (Against Apion I:53-54). He added: I, after the fall of my hometown with nothing dearer to me keeping my own misfortunes console, I asked Titus release a number of prisoners of free birth, and I accepted, by gracious offer of Titus, [a collection of holy books (Autobiography §418). The Pentateuch of Josephus had to be made, in his time (70-90), of Hebrew scrolls<sup>88</sup> (written prior 70 CE) in accordance with those in the Temple. However, this Hebrew text was not identical to that of the Septuagint because it ignores, for example, Qainan in the Messianic genealogy, and on the other hand it knows the ancient Ur which is ignored in the Septuagint.
- From 110 CE, Rabbi Akiba (50-132) in person recommends using "corrected" biblical scrolls: when you teach your son, teach him from a corrected scroll (B. Pesahim 112a). Prior to its destruction the temple of Jerusalem employed professional<sup>89</sup> maggihim "correctors" or "revisers", whose task was to safeguard precision in the copying of the text: correctors [maggihim] of books in Jerusalem received their fees from the temple funds (B. Ketuboth 106a; Y. Sheqalim 4.48a). This description implies that the correcting procedure based on the master copy in the temple was financed from the temple resources which thus provided an imprematur. This was the only way to safeguard the proper distribution of precise copies of Scripture because: Three mistakes (in one column) may be corrected, but if there are four (in one column), it must be put into the Geniza (B. Menahot 29b). The pilgrims who came to Jerusalem had their text corrected by the temples scribes: on the middle days of the three regalim one is not allowed to correct even one single letter, not even from the scroll in the temple court (M. Moed Qatan 3.4). Another such precise copy was the scroll of the king, which accompagnied the king everywhere. The Talmud tell us that this scroll was corrected from the copy in the temple court in accordance with the court of 71 members [the Sanhedrin] (Y. Sanhedrin 2.20c; Sifre Deuteronomy 160). At the same time "a book that it is not corrected" which one could not have in his house any longer than 30 days (B. Ketuboth 19b). Prior to 70 CE the temple (Sadducees) provided the imprematur for corrected

<sup>&</sup>lt;sup>88</sup> É. NODET – Le pentateuque de Flavius Josèphe Paris 1996 Éd. Cerf pp. 6-10.

<sup>&</sup>lt;sup>89</sup> E. Tov – Hebrew Bible, Greek Bible and Qumran Tübingen 2008 Ed. Mohr Siebeck pp. 179-180.

scrolls but after 70 CE it was only from the Rabbis (Pharisees). If corrections have been validated by the rabbinical authorities, and are therefore difficult to detect, errors were noted by the Masoretes<sup>90</sup> (from 900 CE) in the margin of biblical manuscripts called the Masorah "tradition/transmission". Unfortunately, these errors lists themselves have been copied with errors<sup>91</sup> and there are also variants in the Babylonian Masorah itself<sup>92</sup>. The present *textus receptus* (MT) is therefore not true to the original, however it is an 'average text' which reliability in transmission exceeds 98%<sup>93</sup>. The choice among all the variants in the remaining 2% (especially for vocalization problems) depends on who is given his confidence<sup>94</sup> (Masoretes, Rabbis, Sopherim, Samaritans, Sadducees, Pharisees, Christians or Essenes) obtaining a eclectic *textus receptus* OT (as the one of the NT).

- ➤ In 129 CE, Aquila, a Jewish proselyte and former Christian, produced the first revision of the Septuagint to make it conform to the Masoretic text.
- ➤ Masada rebels (131-135) only used scrolls agreeing with the 'authorized text' (MT).
- According to Rabbi Yonathan, after Bar Kochba died (in 135 CE) as Messiah (Y. Taanit 68d): <u>Blasted be the bones of those who calculate the end</u>. For they would say, since the predetermined time has arrived, and yet he has not come, he will never come (B. Sanhedrin 97b)<sup>95</sup>.
- ➤ Justin, towards 152 CE, criticized the Jews of his time for having removed or modified some verses in the Hebrew text (Masoretic text instead of the original H\*) when they were favorable to Christians (Dialogue with Trypho §71-§72, §124, §137).
- Around 160 CE the *Seder Olam* fixed the official Jewish chronology in agreement with the Masoretic Text and the Book of Jubilees.
- ➤ Dated 165-200 CE, Eleazar ben Yacob II (or Simon) criticized the Samaritans for having falsified their Pentateuch (Y. Sotah 7:3; 21c). As the main disagreement concerned the legitimacy of Mount Gerizim (John 4:20) this belated criticism reveals so who was the real forger about this topic.

According to this historical retrospective, the original Hebrew text (Pentateuch) was considered by the Jews to be the same as the Septuagint, at least until the end of the 1<sup>st</sup> century CE, controversies over falsification appearing with Christians and Samaritans after 150 CE. A conclusion seems to impose: the Alexandrian Jews have generally well translated their Hebrew Pentateuch, then from the Hasmonean era an abundance of wisdom texts appeared (Apocrypha of the Old Testament). The Hebrew text, including its chronology, was influenced by this religious literature as evidenced by some differences with the Samaritan Pentateuch and the Septuagint. At the Synod of Yabneh (90 CE) the canon of the Old Testament was fixed (MT) by the Rabbis of this time (Pharisees). Afterwards texts in agreement with the Septuagint were not used anymore by Jewish authorities and were, from 90 to 135 CE, censored and ostracized<sup>96</sup>: The Law was written in Greek in the days of King Ptolemy. And for 3 days darkness came over the world (Megillat Taanit 13); The day the Law was translated was as hard for Israel as the day they made the golden calf (Masechet Sefer Torah I:8-9).

<sup>90</sup> G.R. DRIVER – Introduction to the Old Testament

in: The New English Bible (UK Penguin Books, 1974) p. XVI.

<sup>91</sup> M. COHEN - The Idea of the Sanctity of the Biblical Text and the Science of Textual Criticism

Tel-Aviv, 1979 in: HaMikrah V'anachnu (Ed. Uriel Simon, HaMachon L'Yahadut U'Machshava Bat-Z'mananu and Dvir).

<sup>&</sup>lt;sup>92</sup> P. KAHLE – Der Masoretische Text des Alten Testaments nach der Ueberlieferung der Babylonischen Juden Leipzig, 1902 Ed. Hildesheim, G. Olms pp. 13-18, 79-83.

<sup>93</sup> G.STUDENT – On the Text of the Torah 2002 http://www.aishdas.org/toratemet/en\_text.html

To compare texts (MT, SP, LXX and Qumran) see B. VAN ELDEREN -The Dead Sea Scrolls and the Text of the Hebrew Bible and History of Judaism http://www.angelfire.com/realm2/oracleofdelphi/DSS\_Bas\_afternoon.pdf

<sup>94</sup> E. TOV – Book review: The Pentateuch: The Samaritan Version and the Masoretic Version

in: Dead Sea Discoveries 18 (Brill 2011) pp. 385-391.

<sup>95</sup> In the same way Pope Leo X in his Constitution Supernae majestatis Praesidio (Session 11 of the V<sup>th</sup> Lateran Council, January 1516) has forbidden Catholic preachers, under pain of excommunication, to pretend to give a fixed date for the advent of the Antechrist and the end of the world (Cit. ap. Ferraris, Prompta bibl., verbo Praedicare. - Mansi, Sacrorum Conciliorum collectio, t. XXXII, p. 945-947).

<sup>&</sup>lt;sup>96</sup> D. BODI – Les problèmes de la version grecque du livre d'Ézéchiel in: *Semitica* 52-53 (2007) pp. 57-81.

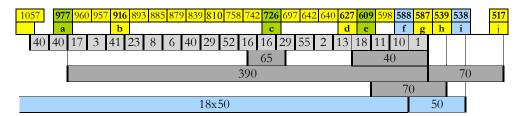
## SCIENTIFIC APPROACH TO AN ABSOLUTE CHRONOLOGY THROUGH SYNCHRONISMS DATED BY ASTRONOMY

The first way to evaluate the accuracy of chronological data from the Bible is to compare the consistency of results between the chronologies of the kings of Judah and Israel. The biblical chronology according to the Masoretic text is as follows (King Hoshea died at the fall of Samaria in 720 BCE, King Josias died at the battle of Haran in 609 BCE):

Event	Period	#				Reference
Abraham in Ur	2038- <b>1963</b>	75	From birth to depart		Genesis 12:4-5	
Israelites as foreigners	1963-1533	430	From Canaan stay to	Egypt deliverance		Exodus 12:40-41
Exodus in Sinai	1533-1493	40	From Egypt deliverance to entering Canaan			Exodus 16:35
Israelites in Canaan	1493- <b>1013</b>	480	From entering Canaan to year 4 of Solomo			1Kings 6:1
King of Judah	Reign		King of Israel	Reign		
Solomon	<b>1017</b> - 977	40				1Kings 11:42
Rehoboam	977-960	17	Jeroboam I	10/977 -	22	1Kings 14:20,21
Abiyam	960-957	3		-05/955		
Asa	957 -	41	Nadab	06/955-05/954	2	1Kings 15:10,25
			Baasha	06/954-04/931	24	1Kings 15:28,33
			Elah	05/931-04/930	2	1Kings 16:8
			Zimri	05/930	7 d.	1Kings 16:10-16
			Omri/	06/930-05/919/	12	1Kings 16:21-23
	-916		[Tibni]	[06/930-01/925]	6	
Jehoshaphat	916 -	25	Ahab	06/919-01/898	22	1Kings 16:29
	-891		Ahaziah	02/898-01/897	2	1Kings 22:51
Jehosaphat/Jehoram	[893-891]	[2]	Jehoram son Ahab	02/897-09/886	12	2Kings 3:1
Jehoram	893 -	8	[Ahaziah]/ Joram	[07/887-09/886]	1	2Kings 9:29
	-885		Ahaziah	10/886-09/885	1	2Kings 9:24,27
[Athaliah] Jehoyada	885-879	6	Jehu	10/885-03/856	28	2Kings 10:36
Joash	879 -	40	Jehoahaz	04/856-09/839	17	2Kings 10:35; 13:1
	-839		Jehoahaz/ Jehoash	[01/841-09/839]	2	2Kings 13:10
Amasiah	839 -	29	Jehoash	09/839-01/823	16	2Kings 13:10
	-810		Jeroboam II	01/823-05/782	41	2Kings 14:23
Uzziah	810 -	52	[Zechariah]	06/782-02/771	[11]	2Kings 14:29
[Azariah]	[796 -		Zechariah	03/771-08/771	6 m.	2Kings 15:8
			Shallum	09/771	1 m.	2Kings 15:13
			Menahem	10/771-03/760	10	2Kings 15:17
	-758		Peqayah	04/760-03/758	2	2Kings 15:23
Jotham	758-742	16	Peqah	04/758-05/738	20	2Kings 15:27
Ahaz	742-726	16	[Hoshea]	06/738-01/729	9	2Kings 15:27-30
Hezekiah	726-697	29	Hoshea	02/729-09/ <b>720</b>	9	2Kings 17:1,3
Manasseh	697-642	55				2Kings 21:1
Amon	642-640	2				2Kings 21:19
Josias	640- <b>609</b>	31				2Kings 22:1
Jehoachaz	-609	3 m.				2Chronicles 36:2
Jehoiaqim	609-598	11				2Chronicles 36:5
Jehoiachin	-598	3 m.				2Chronicles 36:9
Zedekiah	598-587	11				2Chronicles 36:11
Jehoiachin (exile)	587-561	26				2Kings 25:27-28
Nehemiah	455 -					Nehemiah 2:1-18
	455- 29	483				Daniel 9:25-26
Jesus	29					Luke 3:1-23
~			1			

The biblical chronology according to the Masoretic text is therefore accurate. The chronology reconstituted hereafter was starting from the Masoretic data. By convenience the total period 2038-517 BCE was cut out in three periods: 1) the patriarchal period 2038-1493 BCE, 2) the period of the Judges 1493-1097 BCE and finally 3) the Kings period 1097-517 BCE. The letters (a, b, c, etc.) in the table below refer to key dates marking the beginning or end of an event:

The Period of Kings (1097-517 BCE)



- a) End of Solomon's 40-year reign (1Kings 11:42). The splitting of his kingdom in two parts (Israel and Judah) marks the start of a 390-year period that will end with the destruction of Jerusalem (see further, paragraph c). His successors will be Rehoboam: 17 years of reign (1Kings 14:21), Abijam: 3 years of reign (1Kings 15:1-2) and Asa: 41 years of reign (1Kings 15:9-10).
- b) Jehoshaphat ruled for 25 years (1Kings 22:41-42), but we must remove the 2-year coregency with his son Jehoram who became king in Jehoshaphat's 23<sup>rd</sup> year of reign, and not after the 25<sup>th</sup> year. This can be checked: Jehoram, king of Judah, who ruled for 8 years, became king in the 5<sup>th</sup> year of Jehoram, king of Israel (2Kings 8:16-17), whose rule had begun in the 18<sup>th</sup> year of Jehoshaphat (2Kings 3:1); 18 + 5 do amount to 23. After the death of Jehoram, king of Judah, Athaliah ruled for 6 years (2Kings 11:3), then Jehoash for 40 years (2Kings 12:1), Jehoahaz for 17 years (2Kings 13:1), Amasiah for 29 years (2Kings 14:2), Uzziah for 52 years (2Chronicles 26:3), Jotham for 16 years (2Kings 15:32-33), Ahaz for 16 years (2Kings 16:2), Hezekiah for 29 years (2Kings 18:1-2), Manasseh for 55 years (2Kings 21:1), Amon for 2 years (2Kings 21:19), and Josiah for 31 (= 13 + 18) years (2Kings 22:1).
- c) The fall of Samaria began in year 4 of Hezekiah (2Kings 18:9-10) and ended in his year 6 corresponding to year 2 of Sargon II (in 720 BCE). There are 65 years between the annexation of Samaria (Isaiah 7:8-9), the death of King Pekah and the enthronement of King Hosea by Tiglath-pileser III during his 8th campaign (in 738 BCE) and the deportation of King Manasseh (2Chronicles 33:11; 2Kings 17:24) and the people of Samaria (Ezra 4:2) by Esarhaddon during the eponymy of Atarilu<sup>97</sup> (in 673 BCE).
- d) In Josiah's 13<sup>th</sup> year (Jeremiah 25:3,11), Jeremiah began proclaiming the destruction of Jerusalem, which happened 40 years later. This 40 years period, foretold in Ezekiel (Ezekiel 4:6), ends with the disappearance of the kingdom of Israel, that had been born 390 years before.
- e) Start of Babylonian's 70 years rule over all the nations. This rule starts at the beginning of Jehoiakim's reign (Jeremiah 27:1-7), after the battle of Haran during which king Josiah was killed (2Kings 23:29), 4 years before the battle of Carkemish (Jeremiah 46:2), and it terminates with the destruction of Babylon. After Josiah's death, Jehoahaz ruled 3 months (2Kings 23:31). Jehoiakim, brought on the throne by pharaoh Necho, reigned for 11 years (2Kings 23:34,36), and afterwards Zedekiah, enthroned by Nebuchadnezzar reigned for 11 years (2Kings 24:17-18) until the destruction of the temple.
- f) In Zedekiah's 10<sup>th</sup> year (Jeremiah 32:1) the temple was destroyed and the people were deported to Babylon because they deliberately broke a Jubilee, the liberation that should have occurred was postponed to the next Jubilee (Jeremiah 34:8-11, 13-22).
- g) Destruction of the temple on the 10<sup>th</sup> day of the 5<sup>th</sup> month of Nebuchadnezzar's 18<sup>th</sup> year according to Babylonian computation (Jeremiah 52:12-13, 29).
- h) Destruction of Babylon in 539 after 70 years of slavery (Jeremiah 25:11-12).

<sup>&</sup>lt;sup>97</sup> J. BRIEND M.J SEUX - Textes du Proche-Orient ancien et histoire d'Israël Paris 1977 Éd. Cerf pp. 99-102,128,129.

- i) 1<sup>st</sup> year of Cyrus, the liberation from Babylon occurred.
- i) End of the 70-year desolation period and of the exile (from Babylonia, but also from Assyria and Egypt); beginning of a new 50-year Jubilee cycle<sup>98</sup>.

The year of Nebuchadnezzar's rule during which the temple was destroyed and the 70-year period began is controversial: When the seventy years granted to Babylon are over (Jeremiah 29:10, Jerusalem Bible, London 1974). To set the beginning of Nebuchadnezzar's rule, it seems that the writer of Jeremiah's book, who lived under Egyptian and then Babylonian authority, used both a computation including the accession year (Egyptian system) and a computation not including the accession year (Babylonian system). This could explain several 1-year gaps. However, those dates can be fixed through a chronological reconstitution combining information given by other biblical writers and indications from Babylonian tablets (the start of the exile can be set between the 7th and the 23<sup>rd</sup> year of Nebuchadnezzar). Therefore, although Jeremiah's disconcerting dating sets the destruction of the temple in Zedekiah's 11th year, i.e. either in Nebuchadnezzar's 19th year (Egyptian computation) or in his 18th year, according to Babylonian computation (Jeremiah 52:12,29), it is of no consequence since this 18th year of Nebuchadnezzar is linked to Zedekiah's 10<sup>th</sup> year (Jeremiah 32:1). The 70-year period is abundantly described, and it first relates to Babylonian rule over all nations.

- According to the text of Jeremiah 25:1, 9-12, 17-26, Judea would be devastated, and all contemporary nations would serve the king of Babylon during 70 years: The word that occurred to Jeremiah concerning all the people of Judah in the 4th year of Jehoiakim the son of Josiah, the king of Judah, that is, the 1st year of Nebuchadrezzar the king of Babylon (...). And all this land must become a devastated place, an object of astonishment, and these nations will have to serve the king of Babylon 70 years. And it must occur that when 70 years have been fulfilled I shall call to account against the king of Babylon and against that nation, (...) even against the land of the Chaldeans, and I will make it desolate wastes to time indefinite. Then the Chaldeans' country would become desolated. It may be noted that this prediction was issued in the 1st year of Nebuchadnezzar. Babylonian rule had already begun, but the devastation of Judah was still to come. The period of slavery was to begin before the period of desolation. The 70-year period of slavery applied to all the nations including Egypt, and not only to Judah. This period starts after the victory of Babylonian forces over the armies of Assyria and Egypt at Haran, and then extends from 609 to 539.
- $\triangleright$  In the beginning of the kingdom of Jehoiakim the son of Josiah, the king of Judah (...). And now I myself have given all these lands into the hand of Nebuchadnezzar the king of Babylon (...). And all the nations must serve even him and his son and his grandson until the time even of his own land comes (...). And as for You men, do not listen to Your prophets (...) who are saying to You: "You men will not serve the king of Babylon (Jeremiah 27:1,6-9). As the start of Jehoiakim's rule can be dated to Tishri 609, the period of slavery is the same for Judah as for other nations.
- And it must occur in that day that Tyre must be forgotten 70 years, the same as the days of one king. At the end of 70 years it will happen to Tyre as in the song of a prostitute (...). And it must occur at the end of 70 years that Jehovah will turn his attention to Tyre, and she must return to her hire and commit prostitution with all the kingdoms of the earth upon the surface of the ground (Isaiah 23:15-17). The 70-year Babylonian domination [from 609 to 539] outshined Tyre's position. Because Tyre had rejoiced over the fall of Jerusalem, it was foretold that the city would be attacked by Nebuchadnezzar (Ezekiel 26:1-12) and completely destroyed (Zechariah 9:4). Josephus states (Against Apion I:156; Jewish antiquities X:228) that the siege of the city of Tyre by Nebuchadnezzar lasted 13 years [from 586 to 574]. Since

<sup>98</sup> J.-F. LEFEBVRE - Le jubilé biblique Göttingen 2003 Éd. Universitaires Fribourg pp. 369-370.

Nebuchadnezzar received no "wages", a text by Ezekiel (Ezekiel 29:17-20) dated to the 27<sup>th</sup> year of exile [571] says that the Babylonian monarch would receive the wealth of Egypt as a compensation for 40 years. This inheritance may begin with the reign of pharaoh Amasis [569] and last till the end of Cyrus' rule (Isaiah 43:1,3) in 530. After the fall of Babylon, Tyre resumed its immoral business (Nehemiah 13:6, 15-17), but it was finally destroyed by Alexander the Great in 332. However, there is a controversy over one word of Jeremiah's text about the 70 years.

- For thus said Jehovah, After 70 years are accomplished for Babylon, I will visit you, and perform my good word toward you, in causing you to return to this place (1947 Revised Standard Version). Some translations use the words "70 years at Babylon (Jeremiah 29:10)" instead of "70 years for Babylon<sup>99</sup>". This would mean that the Israelites dwelt in Babylon for 70 years. In the phrase "70 years for Babylon", the word "for" is used to translate the Hebraic particle le meaning "for, of (belonging to), to, toward (direction)". The translation "70 years at Babylon" is ambiguous, for the particle le commonly conveys the meaning of a direction (to, toward) and not of being "in" or inside. When "inside" is meant, the Hebrew language uses the particle be, as can be seen everywhere in Jeremiah's book. For example, le may be translated "I will send to [toward] Babylon (Jeremiah 51:2)", speaking of a direction, or "I will pay back to [for] Babylon (Jeremiah 51:24)", meaning that something belongs to someone. To mean "in" (inside), the particle be is used, as in "prophets in [inside] Babylon (Jeremiah 29:15)", "the body of exiles of Judah that is in [inside] Babylon (Jeremiah 29:22)". To be precise, those "70 years for Babylon" terminate on the 16 Tishri (12 October) 539.
- ➤ Daniel foretold the fall of Babylon just before it happened: ME'NE, God has numbered [the days of] your kingdom and has finished it. (...) PE'RES, your kingdom has been divided and given to the Medes and the Persians (Daniel 5:26-28). If the "70 years" ended in 539, they effectively began in 609<sup>100</sup>.

A Babylonian chronicle (BM 21901) dates the final part of the battle of Haran to the 17th year of Nabopolassar, in the month of Duzu<sup>101</sup> (June-July 609). During that year Assyrian king Ashur-uballit II was killed (as well as Josiah); as Jehoahaz reigned 3 months, Jehoiakim's rule must have begun around Tishri (September/October) 609. Since, the fall of Babylon happened in Tishri 539, Babylon dominated over the world for exactly 70 years. It can be noted that after king Josiah's death, pharaoh Necho II brought the Judean kingdom under subjection and changed the name of its king to Jehoiakim (2Chronicles 36:3-4). The 70 years period is delimitated by two events apparently providential: the death of king Josiah (1Kings 13:2; 2Chronicles 35:20-24) and the accession of king Cyrus (Isaiah 43:1, 45:1). Subjection to Egypt lasted for 8 years and was succeeded by subjection to Nebuchadnezzar after the battle of Carkemish. Babylonian domination began in 609 and was exerted on Judah first through Egypt and then directly, from king Jehoiakim's 8<sup>th</sup> year, 3 years before the end of his rule (2Kings 24:1). The biblical text makes a difference between Babylon's legal rule [starting in 609] and effective Babylonian rule [starting in 601].

King	Rule	Length	Reference				
Josiah	640- <b>609</b>	31 years	2Ch 34:1	Zedekiah	598-587	11 years	2Ch 36:11
Jehoahaz	-609	3 months	2Ch 36:2	[Gedaliah]* governor	-587	2 months?	2K 25:25
Jehoiakim	<b>609</b> -598	11 years	2Ch 36:5	Jehoiachin	587-561	26 years?	2K 25:27
Jehoiachin	-598	3 months	2Ch 36:9				

<sup>&</sup>lt;sup>99</sup> See the Danish (or Swedish) version on <a href="http://www.iw.org/en/publications/bible/jeremiah/29#v-10">http://www.iw.org/en/publications/bible/jeremiah/29#v-10</a>

<sup>100</sup> R.E. WINCKLE – Jeremiah's Seventy Years for Babylon: A Re-assessment

in: Andrews University Seminaries Studies 25:2 (1987) pp. 289-299.

<sup>&</sup>lt;sup>101</sup> J.B. PRITCHARD - Ancient Near Eastern Texts

Princeton 1969 Ed. Princeton University Press p. 305.

In the Hebrew Scriptures, Judean kingship legally represented God's authority (1Chronicles 29:23). We can read in the book of Ezekiel: "Remove the turban [symbolizing the priesthood], and lift off the crown [symbolizing the kingship]. This will not be the same. Put on high even what is low, and bring low even the high one. A ruin, a ruin, a ruin I shall make it. As for this also, it will certainly become no [one's] until he comes who has the legal right, and I must give [it] to him (Ezekiel 21:26-27) According to the Gospels, Jesus was "he who has the legal right", since we read (Luke1:32-33): God will give him the throne of David his father, and he will rule as king over the house of Jacob forever, and there will be no end of his kingdom. The Septuagint renders Shilo "it belongs to him (Genesis 49:10)" by "for him to which it is reserved". So, when Ezekiel says: "This will not be the same. Put on high even what is low [the pagan kingdoms], and bring low even the high one [Judean legal kingdom]. A ruin, a ruin, a ruin I shall make it [temple destroyed by Nebuchadnezzar]." He refers to pharaoh Necho II bringing the Judean kingdom under subjection. Josiah therefore was the last legal king.

In the Bible, a king is considered legal only if he is anointed by God or by one of His representatives (a prophet or a high-priest). All the "legal" kings were appointed in the same way (1Kings 1:39; 2Kings 11:9-12). Otherwise they were illegal and were consequently not buried in the city of David. All Judean kings, from David to Josiah included, were buried in the city of David, excepted Athaliah who was replaced by high-priest Jehoiada (2Chronicles 24:15-16). Athaliah had (illegally) appointed herself as king. She was executed 6 years later (2Kings 11:1-20) and was not buried. Kings after Josiah were illegal kings: Jehoahaz was appointed by the people, Jehoiakim by pharaoh Necho II, and Jehoiachin by Babylonian king Nebuchadnezzar (2Chronicles 36:1-8). These kings died in exile, excepted Jehoiakim, who nevertheless received "the burial of a he-ass (Jeremiah 22:18-19)". The text stipulates that from Jehoiakim included "he will come to have no one sitting upon the throne of David (Jeremiah 36:30)". Therefore, after Josiah 's death, the Judean kingdom legally felt under the control of the nations.

The period of slavery ended when the Babylonian power felt in 539 and Cyrus (in his 1<sup>st</sup> year (Ezra 1:7-8), i.e. 538 BCE, appointed Zerubbabel (Sheshbazzar) as governor, and not as king. According to the Bible, this appointment was legal because it was God's will. Though the Judean kingship was not restored in 538, it did be rehabilitated. Indeed, high-priest Joshua was remitted the turban, legal symbol of the priesthood, and the crown, legal symbol of the kingship (Zechariah 1:7; 3:5) in 518. We can understand that this kingship was put aside for a future high-priest (Zechariah 6:11-14), Jesus Christ, according to the Gospels, who was to receive the crown (Zechariah 9:9,16). Isaiah also tells about a kingly turban (Isaiah 62:3), thus confirming the paradoxical combination of kingship and priesthood (that was impossible under Mosaic Law, since kingship belonged to the tribe of Judah, and priesthood to the tribe of Levi).

Eusebius saw chronology as of great importance, writing: For with those authors whose record of times is inconsistent, the history cannot possibly be true (Preparatio evangelica X:11:5; X:9:3-5; X:10:5; IX:40:11). He compared Babylonian chronology to the biblical one, particularly regarding the 70-year period. He stated: The 2<sup>nd</sup> year of Darius coincides with the 1<sup>st</sup> year of the 65<sup>th</sup> Olympiad: and the 15<sup>th</sup> of the reign of Tiberius at Rome falls in with the 4<sup>th</sup> year of the 201<sup>st</sup> Olympiad (...) But since the 70<sup>th</sup> year of the desolation of the temple in Jerusalem was in the 2<sup>nd</sup> year of Darius. So, according to Eusebius, the 70 years "of the desolation of the temple" run from 590/589 to 520/519 and were different from the 70 years of Babylonian domination. He said: Cyrus in the 1<sup>st</sup> year of his reign, (...) made the first partial dismissal of the people by the hand of Zerubbabel, contemporary with whom was Jesus the son of Josedek, after the completion of the 70 years. According to Eusebius, the 70 years of Babylonian domination run from 609/608 to 539/538. He could

then add: Nebuchadnezzar in the 18<sup>th</sup> year of his reign laid waste our temple, and it remained unregarded 50 years. Those 50-year desolation of the temple run from 589/588 to 539/538.

There are therefore two periods of 70 years: the "70 years for Babylon", from 609 to 539, meaning that there would be no legal sovereignty in Judah; and the "70 years of desolation", from 587 to 517, meaning that there would be no worship in the temple at Jerusalem. The exile of the people reached its utmost in 587, then strongly decreased in 537 (end of the exile in Babylon) and ended in 517 (return from Egypt and Assyria).

The dates of Artaxerxes' reign and of the 70-year desolation period are controversial. According to the Jubilee calendar, Artaxerxes' reign would have started in 475 and not in 465. This gap is of no consequence for biblical chronology. Moreover, the Persian chronology for this period is unsafe. The biblical text seems to make a distinction between two 70-year periods: one of slavery (the "70 years for Babylon"), and another one (the "70 years of desolation and exile"). Let us check:

- ➤ Isaiah 44:28-45:13 relates how this slavery period was to end. He points out five features: The future conqueror of Babylon was 1) to be called Cyrus; 2) to submit the nations; 3) to rebuild Jerusalem; 4) to lay the foundations of the temple; 5) and to free the Jews from their exile in Babylon. The One saying of Cyrus, 'He is my shepherd, and all that I delight in he will completely carry out'; even in [my] saying of Jerusalem, 'She will be rebuilt,' and of the temple, 'You will have your foundation laid. This is what Jehovah has said to his anointed one, to Cyrus, whose right hand I have taken hold of, to subdue before him nations (...) For the sake of my servant Jacob and of Israel my chosen one, I even proceeded to call you by your name; I proceeded to give you a name of honour, although you did not know me (...) I myself have roused up someone in righteousness, and all his ways I shall straighten out. He is the one that will build my city, and those of mine in exile he will let go. Babylonian domination began in 609 and ended in 539. Those "70 years for Babylon" are succeeded by a 2<sup>nd</sup> period that would close with the end of the exile and the rebuilding of the temple.
- According to Ezra 1:1-3: And in the first year of Cyrus the king of Persia, that Jehovah's word from the mouth of Jeremiah might be accomplished, Jehovah roused the spirit of Cyrus the king of Persia so that he caused a cry to pass through all his realm, and also in writing, saying: This is what Cyrus the king of Persia has said: All the kingdoms of the earth Jehovah the God of the heavens has given me, and he himself has commissioned me to build him a house in Jerusalem, which is in Judah. Whoever there is among You of all his people, may his God prove to be with him. So let him go up to Jerusalem, which is in Judah, and rebuild the house of Jehovah the God of Israel. A passage of the Chronicles explains that if the 70 years of slavery in Babylon ended at Cyrus time, the main reason for the desolation (that was still lasting at Cyrus time) was the breaking of the sabbaths.
- According to 2Chronicles 36:17-23: So he brought up against them the king of the Chaldeans, who (...) proceeded to burn the house of the [true] God and pull down the wall of Jerusalem (...). Furthermore, he carried off those remaining from the sword captive to Babylon (...) until the royalty of Persia began to reign [in 539]; to fulfil Jehovah's word by the mouth of Jeremiah, until the land had paid off its sabbaths. All the days of lying desolated it kept sabbath, to fulfil 70 years. And in the 1<sup>st</sup> year of Cyrus the king of Persia, that Jehovah's word by the mouth of Jeremiah might be accomplished (...) This is what Cyrus the king of Persia has said, 'All the kingdoms of the earth Jehovah the God of the heavens has given me, and he himself has commissioned me to build him a house in Jerusalem.
- According to Leviticus 26:31-44: I shall indeed give Your cities to the sword and lay Your sanctuaries desolate (...). And I, for my part, will lay the land desolate (...). And You I shall scatter among the nations (...). At that time the land will pay off its sabbaths [during] all the days of its lying desolated, while You are in the land of Your enemies. At that time the land will keep sabbath, as it must repay its sabbaths. [During all] the days of its lying desolated it will keep sabbath, for the reason that it did not keep sabbath during Your sabbaths when You were dwelling upon it. (...) Yet I, for my part, proceeded to walk in opposition to them, and I had to bring them into the land of their enemies.

"Perhaps at that time their uncircumcised heart will be humbled, and at that time they will pay off their error. And I shall indeed remember my covenant (...) and the land I shall remember. All the while the land was left abandoned by them and was paying off its sabbaths while it was lying desolated without them and they themselves were paying for their error (...). And yet for all this, while they continue in the land of their enemies, I shall certainly not reject them. According to this text, the desolation period starts with the destruction of the city and of its sanctuary. The land and its temple must stay desolated for 70 years, and this period includes a time of humiliation or of deportation in an enemy country. The exile is included in the 70 years, but its length is not stipulated. It is linked to the desolation, but it differs from it. The beginning of the exile at Babylon is dated to Jehoiachin's 1<sup>st</sup> year (Ezekiel 40:1), that is 11 years before the destruction of Jerusalem, and the last exile is dated to Nebuchadnezzar's 23<sup>rd</sup> year (Jeremiah 52:30), that is 4 years after the destruction of Jerusalem. However, the exile is at it maximum in 587, the year of the destruction of the temple (Jeremiah 52:28-30). According to the adopted chronology, the exile at Babylon ended in the 50<sup>th</sup> year of a Jubilee [588 to 538]. This is what Josephus says: [Berosus] comes down to Nabolassar, who was king of Babylon, and of the Chaldeans. And when he was relating the acts of this king, he describes to us how he sent his son Nabuchodonosor against Egypt, and against our land, with a great army, upon his being informed that they had revolted from him; and how, by that means, he subdued them all, and set our temple that was at Jerusalem on fire; nay, and removed our people entirely out of their own country, and transferred them to Babylon; when it so happened that our city was desolate during the interval of seventy years, until the days of Cyrus king of Persia. (...) These [Berosus] accounts agree with the true histories in our books; for in them it is written that Nebuchadnezzar, in the eighteenth year of his reign, laid our temple desolate, and so it lay in that state of obscurity for 50 years (Against Apion I:131-132, 154). Josephus makes a distinction between two periods: one [of slavery] of 70 years which starts at the end of Nabopolassar's reign and which ends at the beginning of Cyrus' reign, and another period of 50 years which starts at the destruction of the temple and ends with the liberation by Cyrus and his command to rebuild the temple (Ezra 1:1-2). Eusebius (Preparatio evangelica IX:40:11; X:9:3-5; X:10:3-6) also distinguishes between several periods: two periods of 70 years and another one lasting 50 years. There are the "70 years for Babylon" from 609 to 539 and the "70 years of desolation" when there was no cult rendered in the temple at Jerusalem from 587 to 537. Although Mordecai (Esther 2:6) was still called a son of the exile under Xerxes' reign around 470, the bulk of the exiles had gone back to Jerusalem between 537 and 517.

- ➤ Zechariah's book throws some light on the link between the "70 years for Babylon" which end with the fall of Babylon and the "70 years of desolation" which begin with the fall of Jerusalem and the destruction of the temple.
- According to Zechariah 1:7, 12, 16: On the 24th day of the 11th month, that is, the month Shebat, in the 2th year of Darius (...) the angel of Jehovah answered and said: "O Jehovah of armies, how long will you yourself not show mercy to Jerusalem and to the cities of Judah, whom you have denounced these 70 years? (...) I shall certainly return to Jerusalem with mercies. My own house will be built in her (...) and a measuring line itself will be stretched out over Jerusalem. This message (dated to January/February 520) announced the near end of the 70 years of desolation and the oncoming completion of the temple and rebuilding of Jerusalem.
- According to Zechariah 7:1-5: And it came to pass in the 4<sup>th</sup> year of king Darius, that the word of Jehovah came unto Zechariah in the 4<sup>th</sup> day of the 9<sup>th</sup> month, even in Chislev. (...) Should I weep in the 5<sup>th</sup> month, separating myself, as I have done these so many years?(...) Speak unto all the people of the land, and to the priests, saying, When ye fasted and mourned in the 5<sup>th</sup> and in the 7<sup>th</sup> month, even these 70 years, did ye at all fast unto me, even to me? (1901 American Standard Version). The words "these 70 years" in Zechariah 7:5 are the same as in Zechariah 1:12. They may be

understood in two ways: "[in relation with] those 70 years", or "[during] those 70 years". The first meaning goes better with the context of Zechariah 1:12, the declaration being dated to Darius' 4<sup>th</sup> year [518], soon before the end of the 70-year desolation. Moreover, the fast of the 5<sup>th</sup> month that marked the destruction of the temple in 587 (beginning of the desolation) was still observed in 518, since we read: "Shall I weep in the fifth month?" and not "Had I to weep in the 5<sup>th</sup> month?" This 70-years span was to end with the liberation of the captives (end of the Jubilee) and with the rebuilding of the temple, an expression of God's mercy according to Jeremiah. The temple was inaugurated soon thereafter, in Darius' 6<sup>th</sup> year (Ezra 6:15-16). The twofold period of 70 years is confirmed by a passage from Daniel.

According to Daniel 9:1,2,17-24: In the 1<sup>st</sup> year of Darius the son of Ahasuerus of the seed of the Medes, (...) I myself, Daniel, discerned by the books the number of the years concerning which the word of Jehovah had occurred to Jeremiah the prophet, for fulfilling the devastations of Jerusalem, [namely,] 70 years. (...) And now listen, O our God, to the prayer of your servant and to his entreaties, and cause your face to shine upon your sanctuary that is desolated (...). Do open your eyes and see our desolated conditions and the city that has been called by your name. Let us say first that Darius the Mede is called Ugbaru in a Babylonian tablet<sup>102</sup>; he ruled over Babylon and appointed governors (Daniel 6:1) during the 5 last months of his reign and died at the end of his 1<sup>st</sup> year of reign, on the 11 Arahsammu (November 538). So, one year after the destruction of Babylon, Daniel explains that the 70 years would also be the length of the desolation (which was to end in 517, since the temple was destroyed in 587).

The words "desolated and devastated land" are controversial, for they can mean either a "land deserted and without inhabitants" (literal meaning) or a "land without worshippers" (religious meaning). The biblical text favours the second meaning. Indeed, the start (as well as the end) of the literal exile cannot be dated accurately, since it expands between Nebuchadnezzar's 7th and 23rd year (Jeremiah 52:28-30) and the exile was still going on at Esther's time (Esther 2:6) around 470. However, the length of the religious exile (the period when there were "no worshippers") is easier to settle, since it runs from the destruction of the temple to the "liberation of the captives" on the 50th year of the Jubilee (religious meaning). The words "causing desolation (Daniel 9:27)" was understood by the Jews as the disappearance of the sacrifices in the temple (and consequently of the worshippers) and not as the disappearance of the inhabitants. When we read "by reason of my house that is waste, while you are on the run, each one in behalf of his own house (Haggai 1:1,9)", text written in Darius' 2<sup>nd</sup> year, that is on 520, we may understand also that the temple was waste of worshippers, not of people. This religious meaning is used in Ezekiel 29:10-12 where it is said that Egypt would be "desolate waste (...) for 40 years". This could not be understood in a literal way (a deporting of all Egyptian people in a foreign land would have left some traces). But the religious meaning "without worshippers (Ezekiel 30:7,13)" is appropriate, since Jeremiah states that the sign (the 40-year period was beginning) would be pharaoh Hophra's death (Jeremiah 44:29,30; Ezekiel 30:20-22), exactly as Zedekiah's death marked the end of the worship in the temple. Pharaoh Hophra (whom Egyptian were viewing as a living god) was replaced in 570 by Amasis, a mere general, who ruled from 569 to 526. Pharaoh Hophra died a few years after the beginning of Amasis' reign, probably in 566, his death being reported as occurring soon after Amasis' 3rd year [567]<sup>103</sup>. Egypt then had no visible god (Pharaoh) between 566 and 526. Herodotus wrote: It is said however that Amasis, even when he was in a private station, was a lover of drinking and of

<sup>&</sup>lt;sup>102</sup> J.B. PRITCHARD - Ancient Near Eastern Texts Princeton 1969 Ed. Princeton University Press p. 306.

<sup>103</sup> G. DARESSY - Stèle de l'an III d'Amasis

in: Recueil de travaux relatifs à la philologie et à l'archéologie. Paris, 1900, pp. 1-9.

## SCIENTIFIC APPROACH TO AN ABSOLUTE CHRONOLOGY THROUGH SYNCHRONISMS DATED BY ASTRONOMY

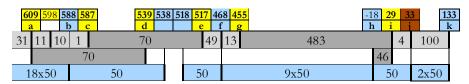
jesting, and not at all seriously disposed (...) when finally he became king he did as follows:-as many of the gods as had absolved him and pronounced him not to be a thief, to their temples he paid no regard, nor gave anything for the further adornment of them, nor even visited them to offer sacrifice, considering them to be worth nothing and to possess lying Oracles (The Histories II:174).

The role of the Jubilee to mark the end of a captivity is a recurrent theme in the Bible. When Zerubbabel was appointed, Ezra 1:1-3 says: And in the 1st year of Cyrus [538] (...) Whoever there is among YOU of all his people, may his God prove to be with him. So let him go up to Jerusalem, which is in Judah, and rebuild the house of Jehovah the God of Israel-he is the [true] Godwhich was in Jerusalem. Zerubbabel's mission was twofold: To gather the Jews (Nehemiah 1:8-9; 7:5) and to rebuild the temple (Ezra 3:1-2): And it must occur in that day that there will be the root of Jesse [Zerubbabel] that will be standing up as a signal for the peoples [in 538]. To him even the nations will turn inquiringly, and his resting-place must become glorious [the temple will be rebuilt]. (...)to acquire the remnant of his people who will remain over from Assyria and from Egypt and from Pathros and from Cush and from Elam and from Shinear and from Hamath and from the islands of the sea. And he will certainly raise up a signal for the nations and gather the dispersed ones of Israel; and the scattered ones of Judah he will collect together from the four extremities of the earth (Isaiah 11:10-12). The gathering of the dispersed ones would end by a Jubilee: "The spirit of the Sovereign Lord Jehovah is upon me [Zerubbabel according to Zechariah 4:6-14], for the reason that Jehovah has anointed me to tell good news to the meek ones. He has sent me to bind up the brokenhearted, to proclaim liberty to those taken captive [in 518/517 a Jubilee will put an end to the desolation] and the wide opening [of the eyes] even to the prisoners (...) And they must rebuild the long-standing devastated places; they will raise up even the desolated places of former times, and they will certainly make anew the devastated cities, the places desolate (Isaiah 61:1-4).

According to the Gospels, Zerubbabel's mission foretold in details Jesus' one. We read in Luke that Jesus proclaimed a year of liberation to come (Luke 4:18), and John reports that this liberation (Jubilee year) was to exceed a traditional Jubilee (John 8:36). This year of liberation is linked to Jesus' death (Romans 8:2) in 33 CE, which marked a Jubilee (see *Dating the death of Jesus*). The Biblical chronology, based on Jubilee cycles, then is independent from other chronologies.

#### PERIOD OF THE SECOND TEMPLE (517 BCE - 133 CE)

According to the biblical text, a jubilee was lasted 50 years and was ended with a release of the captives, regarded as a "jubilant" year. This system was codified after the Exodus, but as Maimonides says, even if the Sabbatical cycles (every 7 years) and Jubilee (every 50 years) were not observed, however, they were counted. The grayed areas mark periods of reigns or events in the life of a character, the dark gray areas indicate anchored periods and those coloured in blue refer to periods of 50 years of Jubilee cycle.



a) Beginning of the 70-year Babylonian domination (609 BCE) which ends with the seizure of Babylon by Cyrus (539 BCE). The death of King Josiah (2 Kings 23:29), 4 years before the battle of Carchemish (Jeremiah 46:2) in 605 BCE, marks the end of the Judean kingdom legitimately established. Jehoahaz was enthroned by the people and reigned only 3 months (2Kings 23:31). Pharaoh Necho II, satrap of Nebuchadnezzar from 609 BCE (Against Apion I:133-137), enthroned Jehoiakim who reigned 11 years

- (2Kings 23:34-36). Nebuchadnezzar then enthroned Zedekiah who reigned 11 years (2Kings 24:17-18) until the destruction of the Temple (587 BCE). Josiah's death marks the beginning of a period of 70 years of Babylonian domination (Jeremiah 25:11-12) beginning with the reign of Jehoiakim (Jeremiah 27:1-7) after the Battle of Harran (609 BCE) and ending with the destruction of Babylon. It is noteworthy that the text of Matthew sets the beginning of the captivity "of" Babylon (Βαβυλῶνος), not "at", after the reign of Josiah (Matthew 1:11,17).
- b) During the 10<sup>th</sup> year of Zedekiah a jubilee "to proclaim liberty" is deliberately violated (Jeremiah 32:1), resulting in the destruction of the Temple and deportation to Babylon. The release associated with this jubilee occurs 50 years later (Jeremiah 34:8-11, 13-22).
- c) Destruction of the Temple dated 10/V/18 of Nebuchadnezzar (Jeremiah 52:12,13) according to the Babylonian reckoning (October 587 BCE). This "devastation of the temple" would last 70 years (Daniel 9:2).
- d) Destruction of Babylon (539 BCE) and liberation of exiles in Babylon on Cyrus' 1<sup>st</sup> year (Ezra 1:1-4) in 538 BCE.
- e) End of the 70-year desolation period and of the exile (517 BCE); beginning of a new 50-year Jubilee cycle, from the 4<sup>th</sup> year of Darius (Zechariah 7:1-5) in 518 BCE.
- f) First Jubilee celebrated, dated to Artaxerxes' 7<sup>th</sup> year, because Ezra's text mentions that on this year there was a tax exemption (Ezra 7:1,8,24) and a liberation of captives (Ezra 8:35). Jewish authorities agree that the count of Jubilees must start on this year<sup>104</sup>.
- g) Start of the 483-year period leading to the appearance of the Messiah, according to Daniel 9:25. Nehemiah adds that the command to reestablish and to rebuild Jerusalem was issued by Artaxerxes I in the 20<sup>th</sup> year of his rule (Nehemiah 2:1,5,8). According to this calendar, the Messiah was to come 483 years after Artaxerxes' 1<sup>st</sup> year, i.e. on the 13<sup>th</sup> year (= 20 7) after the first Jubilee of Ezra dated to Artaxerxes' 7<sup>th</sup> year. The appearance of the Messiah foretold by Daniel then was to occur 4 years before the end of the 11<sup>th</sup> Jubilee. Eusebius had already noted this point in his *Chronicle*, where he said that Jesus started preaching on Olympiad 202:1 (29 CE), which corresponded to the 81<sup>st</sup> Jubilee according to Hebrews' tradition. Eusebius<sup>105</sup> dated the 71<sup>st</sup> Jubilee to 472/471 and noticed that 500 years (equivalent to 10 Jubilees) elapsed between -483 and -472.
- h) The sanctuary (*naos*) of the temple was completed in 46 years at the 1<sup>st</sup> Passover on April 30 CE (John 2:20), in agreement with Josephus (Jewish Antiquities XV:354, 380, 421).
- i) Appearance of the Messiah. According to Luke 3:1,23, Jesus the Messiah came on Tiberius' 15<sup>th</sup> year (29 CE).
- j) Messiah is cut off with nothing for himself at the half of the last week (Daniel 9:26-27) [of years], i.e. 3,5 years (7/2) after his appearance around October 29 CE.
- k) Some coins dated during the revolt of Bar Korkhba were minted for a jubilee dated 133 CE, because the Bar Kokhba revolt took place over a period from December 131 to September 135 during which the Jews have minted two coins dated: one of *year 1 for the redemption of Israel* (132 CE) and another one: *year 2 for the freedom of Israel* (133 CE).

Paris 2001 Éd. Fayard pp. 601-607.

<sup>104</sup> A. STROBEL - Ursprung und Geschichte des frühchristlichen Osterkalenders

in: Texte und Untersuchungen zur Geschichte der altehristlichen Literatur 121 (1977) pp. 92-95.

<sup>105</sup> EUSÈBE - S. Hieronymi interpretatio chronicæ Eusebii pamphili

Paris 1846 Éd. Migne Patrologia Latina XXVII pp. 438-442, 570-574

<sup>106</sup> M. SARTRE – D'Alexandre à Zénobie

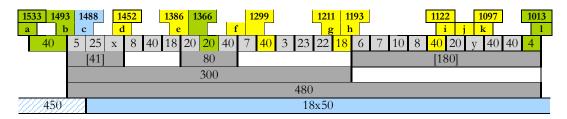
G. GOYAU - Chronologie de l'Empire romain

Paris 2007 Éd. Errances pp. 114-116.

<sup>&</sup>lt;sup>107</sup> D. HENDIN - Guide to Biblical Coins

New York 2001 Ed. Amphora pp. 273-302.

THE PERIOD OF THE JUDGES (1493-1097 BCE)



- a) Exodus from Egypt and start of 40-year wandering in the wilderness of Sinai before entering Canaan (Exodus 16:35).
- b) Israel comes out of the Sinai and enters Canaan; beginning of a 300-year period which will end with Jephthah's vow (Judges 11:26,30). Caleb enters Canaan when he is 80 years old and the country is pacified when he is 85 years old (Joshua 14:7,10).
- c) Joshua, as old as Caleb, died 110 years old (Joshua 13:1; 2Samuel 19:32; Joshua 24:29). The following period [x] is unknown, but it may be reckoned. Indeed, the generation which entered to Canaan with Joshua was to take possession of the country (Judges 2:6-10), now as the preceding generation had lasted 40 years (Numbers 32:13), that makes it possible to suppose that: [40] = 5 + (25) + x, with (25) = 110 85. Calculation gives x = 11 year: 300 = 5 + 25 + x + 8 + 40 + 18 + 20 + 20 + 40 + 7 + 40 + 3 + 23 + 22 + 18. Joshua gave Israelites the pacificated land of Canaan (Joshua 11:23); start of the Jubilee cycle to cancel the debts and free the captives every 50 years (Leviticus 25:8-11). The cycle starts when Canaan is given to Israelites, that is 5 years after they entered the Promised Land (Deuteronomy 6:10,11; Joshua 14:7,10).
- d) Cushan-rishataim, a king probably from Mitanni, oppressed Israel for 8 years, then Othniel judges for 40 years, then Eglon, a Moabite king, oppressed Israel for 18 years, then Ehud judges the country (Judges 3:8-15).
- e) Ehud starts a period of peace for 80 years (Judges 3:30) in the South (Judea), which ends by 40 years of full peace (Judges 5:31) preceded by 20 years of oppression in the North (Samaria) by Jabin II (Judges 4:3), a Canaanite king of Hazor. Ehud then Shamgar judge for the 20 first years of full peace and Barak the last 40 years (Judges 3:26-31, 4:22-24).
- f) Midian oppressed Israel for 7 years, then Gideon judged for 40 years, then Abimelech was king for 3 years, then Tola judged for 23 years and at the last, Jair judged for 22 years (Judges 6:1, 8:28, 9:22, 10:1-3).
- g) Jair judged Israel for 22 years, but after his death no judge succeeded him and the land was given over to oppression by Philistines, Ammonites, Egyptians, etc. This period of trouble began on 1211 BCE and got Israel in great distress for 18 years (Judges 10:3-13).
- h) Jephthah judged Israel for 6 years, Ibzan for 7 years, Elon for 10 years, Abdon for 8 years. Then follows a 40-year period of oppression by the Philistines (Judges 12:7-13:1).
- i) Samson, a judge for 20 years, puts an end to oppression by the Philistines (Judges 13:5; 16:31). The ark of the covenant captured by the Philistines is given back to Israelites 7 months later. It is moved to Kiriath-jearim where it will stay for 20 years (1Samuel 6:1; 7:2). This 20-year period corresponds to the judicature of Samson which was characterized by peace (1Samuel 7:13-15). During Saul's reign the arch is located in Nob (1Samuel 21:1, 22:19), a town near Kiriat-jearim north of Jerusalem (1Samuel 14:16-18). After 40 years of Saul's reign (1097-1057), David decided a few years after the beginning of his reign to bring it back from Kiriath-jearim to Jerusalem (1 Chronicles 13:5).
- j) Undetermined period (y) between the temporary end of idols use and Samuel defeating the Philistines. This period takes place before Saul's reign (1Samuel 7:4,13; 9:15-16). The

- period of 176 years from Jephthah to Solomon may be calculated by two ways: 176 = 480 300 4 or 176 = 6 + 7 + 10 + 8 + 40 + 20 + (5) + 40 + 40, thus: y = 5.
- k) Saul rules for 40 years (Acts 13:21), then David for 40 years (2Samuel 5:4). The length of the reign, which had to appear in 1Samuel 13:1, can be deduced from the biography of Ishbosheth, a son of Saul, who was born at the beginning of his father's reign (1Chronique 8:33), because he was 40 years at Saul's death (2Samuel 2:10). Josephus hesitated between 20 and 40 years (Jewish Antiquities VI:378, X:143) and also in the sum of reigns (Jewish Antiquities VIII:61, XX:230).
- l) Solomon rules for 40 years. A 480-year period that begins at the Exodus from Egypt terminates in his 4<sup>th</sup> year of reign (1Kings 6:1; 11:42).

Three time spans in this period are controversial: the 5 years after the departure from Egypt, the 480 years and the undetermined period (x). The 5-year period can be calculated from the age of Caleb. According to the book o Joshua, Caleb was 85 when the Israelites received the land of Canaan as their inheritance. This was what God had promised to Moses 45 years before. The account specifies that Caleb was 40 when he explored the country from Kadesh-Barnea (Joshua 14:1,7,10). This exploration is dated to the 1<sup>st</sup> month of the 2<sup>nd</sup> year after the departure from Egypt (Numbers 9:1, 13:25). Counting these years however proves difficult, because Caleb was born in Egypt and was counting his years according to the old calendar which began in Tishri, e.g. September/October. Then, after having come out of Egypt, years were counted from Nisan (Exodus 12:2, 23:15), e.g. March/April, and no longer from Tishri. There was therefore a 6-month discrepancy against the old system.

39 40 41	79	80	81 8	82 8	83 8	4	85
1 2 40	41	. 42	43	44	45		A
	1	2	3	4	5	1	2 49 50

The 50-year Jubilee system did not begin in the first year after entering Canaan, but only in Caleb's 85<sup>th</sup> year, because Israelites were given the land only after the pacification period (Joshua 1:15). It would have been impossible to cultivate the land and then to observe Jubilee prescriptions during the conquest war. The conquest was quick, and Israelites (circa –1490) only burnt three cities: Jericho, Ai and Hazor (Joshua 6:1,24, 8:19, 11:11-13). Confirming exactly the biblical account, the archaeology dates<sup>108</sup> the destruction of these three cities to the 15<sup>th</sup> century B.C.E. The first year of the 50-year Jubilee period starts in Nisan but is only celebrated on 10<sup>th</sup> Tishri of the same year (Leviticus 25:9-10).

The 480 years are controversial. It can be read: And it came about in the four hundred and eightieth year after the sons of Israel came out from the land of Egypt, in the fourth year, in the month of Ziv, that is, the second month, after Solomon became king over Israel (1Kings 6:1). We might conclude that the period began after Israel left the country of Goshen, in Egypt. But this would contradict other biblical data. Indeed, if we calculate the time starting before (and not after) the 40 years in the wilderness of Sinai, we find: 40 + 300 + 6 + 7 + 10 + 8 + 40 + 20 + 40 + 40 + 4 = 515 + x. If 515 + x = 480, x = -35! Actually, the wilderness of Sinai belonged to Egypt since it was located before the torrent valley of Egypt which marked its border (2Kings 24:7). Israelites therefore definitely leaved Egypt when they crossed this torrent valley (after having spent 40 years in the wilderness)<sup>109</sup>. According to this view, we can calculate: 475 + x = 480, and then x = 5 years. The translators of the Septuagint, who knew about this 480-year period beginning at the Exodus from Egypt and ending after (not

<sup>108</sup> B.G. WOOD - Let the Evidence Speak

in: Biblical Archaeology Review March/ April 2007 pp. 26,78.

<sup>&</sup>lt;sup>109</sup> The Israelites who died in the wilderness (Numbers 26:65) had desired to die in Egypt repeatedly (Exodus 14:11; 16:3). This paradoxical wish has been fulfilled.

before) the 40 years in the wilderness amended the figure to 440 years (= 480 - 40). From the output of Egypt (-1533) marking the beginning of Exodus to Solomon's 4<sup>th</sup> year (in -1013) there are 520 years (= 480 + 40). According to the Jerusalem Talmud (Megilla 72cd), the time of the conquest of Canaan would have been 7 years, and the sanctuary at Shiloh 369 years, which gives: 480 = 7 + 369 + 20 + 40 + 40 + 4 (in fact: 480 = 5 + 366 + 20 + 5 + 40 + 40 + 4). The duration of the conquest of Canaan is 5 years and the duration of the sanctuary at Shiloh is 366 years (= 1488 - 1122), because the sanctuary installed just after the conquest of Canaan (Joshua 18:1), in -1488, disappeared at the death of the high priest Eli (1 Samuel 4:1-7:1) in -1122.

Occurrence of different spans between two seemingly identical events can be found also about the ark when it was moved from Kiriath-jearim. The ark was brought in this city where it stayed for 20 years. We also read that David decided to bring the ark back from Kiriath-jearim to Jerusalem (1Chronicles 13:5) after Saul's 40-year reign. Where are those 40 years to be found? It may be that meanwhile the ark was moved to Baale-judah, a city near Kiriath-jearim (2Samuel 6:2), or to Gibeah (1Samuel 7:1) according to the Vulgate. The words "in the Hill (Joshua 24:33)" are strange indeed, because *ba-guibeah* generally is translated "in Gibeah (1Samuel 22:6)". The city of Gibeah was geographically near from Kiriath-jearim. Moreover, Saul requested the ark to be brought to him when he was in Gibeah (1Samuel 14:16-18).

According to the biblical chronology, the (anonymous) pharaoh who confronted Moses died in 1533. The departure from Egypt, which began in Ramses city, is dated to 15/I (Numbers 33:3). As the arrival in the Wilderness of Sin is dated 15/II (Exodus 16:1) and the final confrontation took place near Pihahiroth (Exodus 14:9), midway between Rameses and the Wilderness of Sin, pharaoh's death should have occurred on 1/II, i.e. 9/10th May 1533. A later biblical text (Ezechiel 32:2,7,8, Psalms 136:15) mentions pharaoh's tragic death and links it with a solar eclipse: Son of man, lift up a dirge concerning Pharaoh the king of Egypt, and you must say to him, 'As a maned young lion of nations you have been silenced. And you have been like the marine monster in the seas (...). And when you get extinguished Iwill cover [the] heavens (...). All the luminaries of light in the heavens – I shall darken them on your account, and I will put darkness upon your land. This text alludes to the Pharaoh of the Exodus, because the expression "marine monster" always appoints this leader (Isaiah 51:9-10). The expression "All the luminaries of light in the heavens [sun and moon]" has probably a symbolic meaning, but could not be understood by Jews only if it had also a literal meaning. Since pharaoh was considered a god by Egyptians, the son of the sun-god Ra, the eclipse (and also the moonless night) should have impressed the people. The only total solar eclipse in this part of the world and at this time 110 occurred on 9th May 1533. A total sun eclipse in a given area is very rare. Between -1500 and -100, for example, there were only 11 total eclipses on the territory of Israel during this period, that is to say on average every 120 years<sup>111</sup>. This eclipse of magnitude 1.08 (covering a strip of land 250 km wide) could be seen in Northern Egypt (at the level of Heracleopolis city) around 4.40 p.m. and lasted more than 6 minutes. The date of 1/II thus agrees perfectly with the eclipse date. The spring equinox fell on 3<sup>rd</sup> April 1533<sup>112</sup>; the following first crescent of the moon<sup>113</sup> is dated to  $10/11^{th}$  April, and the first crescent of the following month is dated to  $9/10^{th}$  May. Egyptian chronology, which is based on sothic rises, also dates to May 1533 the violent death of pharaoh Sequenerre after confronting Apopi, the Hyksos king who went off to Palestine. The other pivotal date comes from the book of Acts where heavenly phenomena are mentioned in connection with Jesus' death: The sun will be turned into darkness and the moon

<sup>110</sup> http://sunearth.gsfc.nasa.gov/eclipse/SEcat/SE-1599--1500.html

<sup>111</sup> F.R. STEPHENSON – Astronomical Verification and Dating of Old Testament

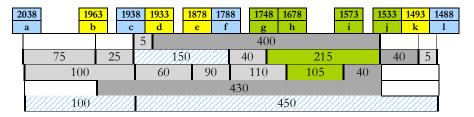
in: Palestine Exploration Quaterly 107 (1975) pp. 107-117

<sup>112</sup> http://www.imcce.fr/page.php?nav=fr/ephemerides/astronomie/saisons/index.php

http://portail.imcce.fr/fr/ephemerides/astronomie/Promenade/pages4/441.html

*into blood* (Actes 2:20). Usually, the moon does look blood-red during a lunar eclipse (the more natural explanation for the above passage<sup>114</sup>). The only lunar eclipse which was visible from Jerusalem on a Friday between 30 and 33 C.E. was the one dated Friday 3<sup>rd</sup> April 33.

THE PATRIARCAL PERIOD (2038-1493 BCE)



- a) Birth of Abraham.
- b) Abraham enters Canaan when he is 75 years old (Genesis 12:4-5); 430-year alien residence begins (Exodus 12:40-41).
- c) Birth of Isaac, ancestor of the people of Israel, when Abraham is 100 years old (Genesis 21:5); 450-year period begins (Acts 13:17-20).
- d) Isaac is weaned at 5 years old<sup>115</sup>; 400 years of affliction begin (Genesis 15:13). This period starts when Isaac is persecuted by Agar's son<sup>116</sup> (Genesis 21:8-9) and ends with the Exodus from Egypt and the end of slavery<sup>117</sup> (Galatians 4:25-29). The 400-year period begins with the oppression of Isaac and not from his birth.
- e) Birth of Jacob when Isaac is 60 years old (Genesis 25:26).
- f) Birth of Joseph in Jacob's 91<sup>st</sup> year since he is 130 years old (Genesis 41:46-47, 53-54; 45:11; 47:9) when Joseph is 39 (= 30 years + 7 years of plenty + 2 years of famine).
- g) Israelites (Jacob and his family, 75 individuals) come to Egypt in Joseph's 40<sup>th</sup> year (Genesis 45:11; 46:5-7); beginning of a 215-year dwelling.
- h) Joseph dies in 1678, when he is 110 years old. Israelite chiefs appointed by Joseph and later on by pharaohs as kings (Great Hyksos) administrate the land of Goshen for 105 years (Genesis 47:6; Exodus 5:14).
- i) Exodus from Egypt and beginning of 40-year wandering in the wilderness of Sinai before entering Canaan (Exodus 16:35). Moses stands as the last "great personality in Egypt", because although he was considered as "pharaoh's son" for 40 years until 1573 (Exodus 2:15; 11:3;; Deuteronomy 34:7).
- j) Moses was banished for 40 years before coming back to Egypt<sup>118</sup> (Hebrew 11:24; Acts 7:21-23, 29-36).
- k) Israel comes out of Sinai and enters Canaan; beginning of a 5-year pacification period (Joshua 14:7,10) ending in 1488 BCE and fixes the beginning of Jubilees (every 50 years). Moses died at 120 years (Deuteronomy 34:1-7).
- l) Joshua closes pacification of Canaan.

The 430-year period is controversial. We read: And the dwelling of the sons of Israel, who had dwelt in Egypt, was four hundred and thirty years (Exodus 12:40). Does that mean that Israel dwelt in Egypt for 430 years? This would contradict other biblical data. Jewish translators of the Septuagint were aware of this ambiguity and thus choose to add an interpolation in

<sup>&</sup>lt;sup>114</sup> J.P. PARISOT, F. SUAGHER - Calendriers et chronologie Paris 1996 Éd. Masson pp. 165, 166.

<sup>115</sup> According to 2Maccabees 7:27, breastfeeding usually lasted at least 3 years (see 2Chronicles 31:16).

<sup>116</sup> The meaning of the Hebrew verb is "mocking" and not "play". The Talmud (Sotah 6:6) even mentions of abuse.

<sup>&</sup>lt;sup>117</sup> According to Maimonides (Epistle to Yemen III) and Rashi, the 400 years run from birth of Isaac to the departure from Egypt.

<sup>118</sup> It is possible that Moses knowing the prophecy of Neferty stated under Amenemhat I (1975-1946), similar to the 400 years' prophecy of Genesis 15:13, wanted to achieve it in 1575 BCE (= 1975 - 400), 40 years too early.

## SCIENTIFIC APPROACH TO AN ABSOLUTE CHRONOLOGY THROUGH SYNCHRONISMS DATED BY ASTRONOMY

order to prevent any misunderstanding: The dwelling of the sons of Israel which they dwelt in the land of Egypt [and in the land of Canaan] was four hundred and thirty years long. This interpolation, that is also found in the Samaritan Pentateuch, is in keeping with the context which says that the 430-year period covers the total span of the painful dwelling of the sons of Israel outside the Mosaic covenant (Galatians 3:17). This period does include two parts: the first one starts in Canaan with the Abrahamic covenant rapidly followed by harassment of Isaac by Esau (Genesis 21:9), and ends when Jacob left for Egypt. The second one begins with the slavery in Egypt and terminates with the Exodus. The above verse should then be read as follows: And the dwelling of the sons of Israel, who had dwelt in Egypt [for 215 years], was 430 years long. Joshua's genealogy indirectly confirms this 215-year period (1Chronicles 7:23-28). Joshua was 40 years old when Israel fled Egypt (Joshua 14:7) in 1533 BCE. Then he should have been born about 1573 BCE. Assessing 20 years elapse between every generation, we get the following dates of birth:

Jacob	Father in				
Joseph	-1760	Resheph-Telah	-1680	Elishama	-1600
Ephraim	-1740	Tahan	-1660	Nun	-1580
Beriah	-1720	Ladan	-1640	Joshua	-1560
Rephah	-1700	Ammihud	-1620	(Exodus)	-1540

As Joseph was 17 years old when he came in Egypt (Genesis 37:2), the period of time from his marriage in -1758 (Genesis 41:45-46) to the Exodus in -1533 amounts to 225 years (= 1758 – 1533), which are fully consistent with the 215 years that have just been calculated. This chronological point was known in antiquity, since Josephus (Jewish Antiquities II:318) refers to it in its works. Demetrius, already knew (around 220 BCE) that the period in Canaan lasted 215 years (Prepraratio evangelica IX:21:16). The biblical chronology therefore sets rather precisely the date of the Exodus from Egypt in -1533.

Synchronisms with some biblical characters have been highlighted (see *Dating the death of Chedorlaomer* and *Dating the war of the Hyksos*):

SUM	ŒR	AKK	\D	Elam					
URUK IV				Awan II					
Ur-Nigin			2062-2055	Hita	2065 -	11 <sup>th</sup>			
Ur-Gigir			2055-2049						
Kuda			2049-2043						
Puzur-ili			2043-2038		-2040				
Ur-Utu			2038-2032	Puzur-Inšuši.	2040 -	12 <sup>th</sup>			
Utu-hegal			2032-2021						
Ur III		Awan I				Simaski			
Ur-Nammu	2020 -	Puzur-Inšuši.		1 <sup>st</sup>	-2015	[unammed]	2020 -		
	-2002	[-]-lu	2015 -	2 <sup>nd</sup>					
Šulgi	2002 -		-1990		Oth		-1990		
	-1954	Chedorlaomer	1990-1954	3 <sup>rd</sup>	1st	Girnamme	1990-1955		
Amar-Sîn	1954-1945			]	2 <sup>nd</sup>	Tazitta I	1955-1940		
Šu-Sîn	1945-1936				3rd	Ebarat I	-1935		
Ibbi-Sîn	1936 -	Isin			4 <sup>th</sup>	Tazitta II	1935-1925		
		Išbi-Erra	1923 -	1	5 <sup>th</sup>	Lurrakluḫḫan	1925-1915		
	-1912				6 <sup>th</sup>	Kindadu	1915-1905		
			-1890		7 <sup>th</sup>	Idadu I	1905-1890		
		Šû-ilîšu	1890-1880		8th	TanRuḫuratir	1890-1875		

HEBREW RULER	period	#	12th Dynasty	reign	#	synchronism
Abraham	2038 -		Amenemhat I	1975 -		
11014114111	1963-1957	170		-1946		Founding of Tanis
	- 1863			17,10		1 oming of 1 mile
Jacob	1878 -	147	Neferusebek	1782-1778		
, acos	-1731	1 . ,	13 <sup>th</sup> Dynasty	1702 1770		
Joseph	1788 -	110	15 Dynasty	1778-1573		
(vizier)	1758-1744	110	Asiatics son of Hetepibre	1765-1750		Hyksos
(VIZICI)	1730 1711		14 <sup>th</sup> Dynasty			119/03/03
	-1678		11 Dynasty	1750-1679		
	1070		15th Dynasty		400	Stele of year 400
Chiefs of cattle	<b>1678</b> -1613	65	Great Hyksos	<b>1679</b> -1613	100	The Histories II:128
Moses (pharaoh)	1613-1573	40	Apopi	1613-1573		<b>106</b> years
Moses (in Madian)	1573 -	40	17 <sup>th</sup> Dynasty / 16 <sup>th</sup> Dynasty	1015-1575		100 years
Wioses (III Wadiaii)	13/3	10	Rahotep	1573-1569		
			Sobekemsaf I	1569-1567		
			Sobekemsaf II	1567-1557		
				1557-1555		
			Antef VI Antef VII			
				1555-1545		
			Antef VIII	1545-1545		
	1522		Senakhtenre	1545-1544		
3.5 (7)	-1533	40	Seqenenre Taa	1544- <b>1533</b>		1777 C 1 T T 1
Moses (Exodus)	1533 -	40	Kamose	<b>1533</b> -1530		War of the Hyksos
	1.402		18th Dynasty	4520 4505		
· 1	-1493		Ahmose	1530-1505		
Joshua	1493 -	30	Amenhotep I	<b>1505</b> -1484		
			Thutmose I	1484-1472		
	-1463		Thutmose II	1472-1469		
Without Judge	1463-1452	11	[Hatshepsut]	[1469-1450]		
Cushan-Rishataim	1452-1444	8	Thutmose III	1469-1418		
Othniel	1444-1404	40	Amenhotep II	1420-1392		
Eglon	1404-1386	18	Thutmose IV	1392-1383		
Ehud/ Shamgar	1386-1366	20	Amenhotep III	1383- <b>1345</b>		
Jabin/ (Sisera)	1366- <b>1346</b>	20	Akhenaton	1356 -		War of Apirus
Barak	1346 -	40		-1340		
			Semenkhkare	1340- <b>1338</b>		
			-Ankhkheperure	1338-1336		
			Tutankhamon	1336- <b>1327</b>		
	-1306		Αÿ	1327-1323		
Madian	1306-1299	7	Horemheb	1323-1295		
			19th Dynasty			
Gedeon	1299 -	40	Ramses I	1295-1294		
			Sety I	<b>1294</b> -1283		
	-1259		Ramses II	1283 -		
Abimelek	1259-1256	3		(-1279)		
Tola	1256-1233	23				
Jair	1233-1211	22		-1216		
Anarchy	1211 -	18	Merenptah	1216-1207		Stele of Israel
			Sety II	1207-1202		
			[Amenmes]	[1206-1202]		
			Siptah	<b>1202</b> -1196		
			-Tausert	1196-1194		
	-1193		20th Dynasty			
Jephthah	1193-1187	6	Sethnakht	1196-1192		
Ibzan	1187-1180	7	Ramses III	1192 -		
Elon	1180-1170	10	1			
			-1	-1161		I

# SCIENTIFIC APPROACH TO AN ABSOLUTE CHRONOLOGY THROUGH SYNCHRONISMS DATED BY ASTRONOMY

[Eli] Philistines	1162 -	40	Ramses IV	<b>1161</b> -1155	
[]			Ramses V	1154-1151	
			Ramses VI	1151-1144	
			Ramses VII	1144-1137	
			Ramses VIII	1137-1137	
	-1122		Ramses IX	1137-1119	
Samson	1122-1102	20	Ramses X	1119-1116	
Samuel's sons		_	Ramses XI		
	1102-1097	5		1116-1090	
Saul	1097 -	40	[Herihor]	[1098-1085]	
			21th Dynasty	1000 1061	
			Smendes	1090-1064	
	-1057		Amenemnesut	[1064-1060]	
David	1057-1017	40	Psusennes I	1064-1018	
Solomon	1017 -	40	Amenemope	1018-1009	
			Osorkon the Elder	1009-1003	
	(-993)		Siamon	1003 - 984	Gezer attacked
			Psusennes II/III	994-980	
	-977		22th Dynasty		
Rehoboam	977-960	17	Shoshenq I	980-959	Campaign in Palestine
Abiyam	960-957	3	Osorkon I	959 -	1 0
Asa	957 -	41	-	-924	
<del></del>		'`	Shoshenq II	924-922	
			Shoshenq IIb	-922	
	-916		Takelot I	922 -	
Jehoshaphat	916 -	25	Takefot 1	-909	
Jenosnaphat	-891	25	Osorkon II	909 -	
Jehosaphat/Jehoram		[2]	OSOIKOII II	909 -	
Jehosaphat/Jehoram Jehoram	[893-891]	[2]	_		
J	893-885	8	_		
[Athaliah] Jehoyada	885-879	6	_	0.45	
Joash	879 -	40	77 1 1 . TT	-865	
	-839		Takelot II	<b>865</b> -840	
Amasiah	839-810	29	Shoshenq III	840 -	
Uzziah	810 -	52		-800	
[Azariah]	[796 -		Shoshenq IV	800-788	
			Pamiu	788-782	
	-758		Shoshenq V	782 -	
Jotham	758-742	16		-745	
Ahaz	742-726	16	Osorkon IV	745 -	Alliance with Sô
Hezekiah	726 -	29		-712	
			25th Dynasty		
	-697		Chabataka	712 -	
Manasseh	697 -	55	-	-689	
			Taharqa	689- <b>663</b>	
			26th Dynasty	10, 100	
	-642		Psammetichus I	663 -	
Amon	642-640	2	1 sammetenus 1		
Josias	640 -	31	-	-609	
J08188	-609	31	Necho II	609 -	Death of Issies
Lob oio gire		11	INCCITO II	-594	Death of Josias
Jehoiaqim	609-598	11	D		
Zedekiah	598-587	11	Psammetichus I	594-588	
Jehoiachin (exile)	587 -	26	Apries	588-570	
			Apries/ Amasis	569-567	
	-561		Amasis	569-526	
			Psammetichus III	526- <b>525</b>	
			27th Dynasty	525 -	
			31th Dynasty		