Comment on the Chronological Table of the Holy Bible

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Abstract

This is a trial to prepare and set up the chronology of the Holy Bible for the calculation of data by a computer. The author has elaborated the calculation for the first time by hand and thus has reached at the end an automatic data processing by EDP¹. Meanwhile the program is calculating by four different ways each identical results. The calculation path (algorithm) therefore is completed. An electronic computer is an enormous simplification, when calculating chronological tables and can realize corrections of the chronological table within short time.

1 Aim

The aim of the HISTORY project is to enable calculating of each imaginable, historical chronology by EDP, thus all tolerances of a dating, which anyhow are forced by the source situation, can be determined as exact as possible. Now, if further sources occur, that leed to a need of changed dating, then the correction of all data, that has already been calculated, shall be enabled possibly comfortable and immediately understandable for *each* interested one.

Since with chronological tables there is a possibility of contradictions, if the tolerances are dealed with too narrowly or not at all, a corresponding "contradiction" can be deleted under certain circumstances by a simple change of the tolerance. Because the building up of a good chronological table needs much care and time above all, in all books of history, that are known to the author, only datings are presented without documented derivation out of the sources. Therefore, an immediate calculation check is impossible to the reader. Individual trials by hobby historians or amateurs now and then deviate from text book tables. Especially with the chronology of the Holy Bible, this leads to discussions.

With the chronological table of the Holy Bible, mainly the trials by A. Jepsen from Greifswald are considered to be important. He tried to harmonize the chronology of the Holy Bible with non-biblical chronologies. During his calculation, Jepsen detected especially with the Kings' books a lot of "contradictions" and thought, he had shown delivery mistakes. Based on this, a "historical critical text research" has been developed, which seduced to the view, that the books of the Holy Bible would be collections of legends.

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¹abbreviation for *electronic data processing*

A sample of this "theology" can be found at Fricke ([1972Fri], page 209 bottom), which reads in translation:

"But this verse must be considered to be the addition by a later one, who thereby based onto the present chronological statements, which however have already been in a mess." (Comment on 2^{nd} Kings' 15:37)

Unfortunately, in Wuerttemberg (Germany) there is no further exegesis on the Kings' books, that is known to the author. Instead of the theologian is asking, what God by his Holy Spirit is telling him through these scriptures, now is shown at almost 400 pages, that the author of the exegesis believes his lack of judgement on chronology. It would be better, that he would take the text seriously to be a historical document or even the word of God. The need of tolerance calculation seems to be totally unknown to the text critics.

The very zealous ones even find a "contradiction" between "on the third day" and "after three days and three nights", and they believe, that one could show, that the Messiah Jesus has not been crucified on a Friday and has risen already on Sunday morning. However, the correct description of the possibilities here is the interval between " ≥ 2 days" (partial days count fully!) and " ≤ 4 days". Here, the text of St. Matthew 12:40 even with literal interpretation of the duration gives more freedom, because "in the heart of the earth" from the physical view is "totally beneath" and describes the voluntary degradation of Christ Jesus, which begun the latest by washing the feet of his disciples.

Peter writes on this $(2^{nd} \text{ Peter } 1:16)$:

For we have not followed cunningly devised fables, when we made known unto you the power and coming of our Lord Jesus Christ, but were eyewitnesses of his majesty.

2 Procedure

For the first time, there was a need to set up an own mathematics for historians. Good historians anyhow can thoroughly calculate in this kind for long times, but an automatizable algorithm, how needed by a computer, was not yet found by the author. The main problem to be solved was how to arrange the data, which is enclosed in a prosaic or even poetic text, into summarizing tables, and how this summary fits the needs of an amateur to clearness, and also the advanced needs of the historian to correctness and proper source documentation.

The now available start seems to satisfy the needs:

• For each event, there is a possibility of each 6 singular datings, thus for example for a person the begin of life, the begin of his first periode, and of a second periode, and each end of them can be localized in the same line, this is in one corresponding data record only.

Abbreviations:

*	=	birth
B ("Begin")	=	begin of 1^{st} periode, or a singular event
α ("Alpha")	=	begin of 2 nd periode
Ω ("Omega")	=	end of 2 nd periode
E ("End")	=	end of 1^{st} periode
+	=	end of life (' Ω ' and 'E' automatically are
		before, or take place the same time as '+'.)

• Each of the datings consists of an upper and a lower interval limit. The presentation of a mean, followed by " \pm ...", seduces to comparisons to measured data or statistical elaborations, where the mean also is the "most probable value" or "expected value". The preconditions of such measurements or probability calculations (repetition possibility, random scattering of the measured data by experimental inaccuracies, etc.) with historical problems do not fit. For the very calculation, a mean, followed by " \pm ...", would be possible, but this would cause 3 instead of 2 datings per event, and thus enlarge the calculation time by waste.

Anyway, it is convenient to discuss intervals instead of mathematical "exact" numbers. In a historical context, 1 + 1 = 1 is quite possible (addition of ordinary numbers).

• Relative datings can be fully considered—so Lamech must have died the latest at the begin of the Great Flood, because he was not in Noah's ark—and can be applied to each of the 6 possible events.

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Question:	Input Text:
"NAME /EVENT":	Great Flood
Before was at "1st PREDECESSOR":	+
Directly before ? (Yes / No)	Ν
Name of "1st PREDECESSOR":	Lamech
From then on was at "NAME /EVENT":	В
"SOURCE":	Genesis 5:28,30; 6:21

From this example, the following records result:

- Absolute datings can be given in both of the needed forms:
 - Direct sequence to an event before (for example succession of the throne, etc.)
 - Use of the year numbers, etc., that are mentioned in the source, for example: And in the second year of the reign of Nebuchadnezzar Nebuchadnezzar dreamed dreams, wherewith his spirit was troubled, and his sleep brake from him. (Daniel 2:1)
- With absolute datings by year numbers, there is a possibility to set the tolerance explicitly, that belongs to the dating:

'<' (less)	=	input of an ordinary number
'=' (equal)	=	input without tolerance
' \pm ' (plus-minus)	=	both upper and lower tolerance
>'>' (greater)	=	input of a Persian ordinary number

The notions "less" and "greater" could be misleading, therefore a small clarification is following:

In physics has been an agreement, that the absolute value of time increases by running of the time. The cause of this is, that a human cannot say, when telling the age, how long for example a thing will go on to exist, but only, how long it has been existing. Since the use of negative ages is considered to be "unlovely", a begin usually starts at time t = 0, while the end takes place at t > 0.

By this convention, the signs '<' and '>' in a historical context are to be understood in the above given manner.

• If the dating is mentioned for example with precision in months, then the tolerance is set to ±1 month, with years ±1 year, etc.

These tolerances surely are too large. By this results, that first the maximum of thinkable tolerance for a dating is exhausted, before a contradiction is reported. Therefore, the calculation becomes very exciting and often fits barely. With this kind of calculation, evidently less contradictions occur, than up to now has been supposed by the historians. For an example, one can compare the here yielded chronological table for the Holy Bible with the literature on history.

- The calculation runs in years, each with 12 months à 30 days. Thus, a distinguishing between "moon year" and "sun year", etc. is omitted. This convention is not severe, because most of the antiquity datings are with a tolerance of one year only. Here, intercalary months, days, or even seconds are of no importance.
- There is a possibility to mention for each statement the necessary sources. The space for each entry is maximally 21 characters, because each entry for "NAME /EVENT" must be presented clearly at a screen of 25×80 characters.
- The order of the date statement for the calculation is fixed by year.month.day. However, for the presentation of the datings can be considered, whether all 6 combinatorical combinations of order should be eligible.

3 Historical Frame of this Elaboration

Already Adolf Schlatter, a theologian in Tuebingen, was overtaxed by the question, which of the three existing variants to Genesis 5 and Genesis 11 is the very original text. He adjourned this problem till later and imagined to be possible, that for example a mathematician would solve this problem². Therefore, he caused the German print of these variants within the Calw's Bible Encyclopedia, from where the author in his edition³ from 1924 found them at the keyword "Seth". In later editions⁴, these details are already missing at the keyword "Seth", there the problem is just hinted. Thus, for non-theologians today there is difficulty to receive reliable sources.

In 1978, the author was ordered by his primary teacher, Mrs. Ziegler, to solve this practical issue as his life–work. First, he had to understand the task, and not before 1985 he had just found an idea with initial results.

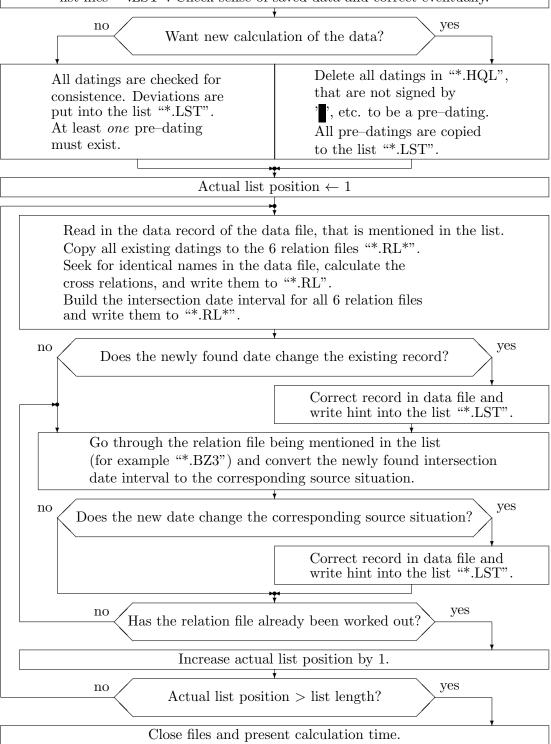
²[1995Bütt]

³[1924ZH]

 $^{^{4}}$ for example [1973GKS]

4 Flow-chart of the Coarse Program Algorithm

The program needs a data file "*.HQL" (German for "historical source situation"). Read in file names and data structure from a configuration file. Generate 6 working files "*.RL*" plus list files "*.LST". Check sense of saved data and correct eventually.



5 Historic Details

On January 30th, 1985, the author found out, that via 1st Kings' 6:1 a complete dating from Adam to Cyrus is possible. Thus it was sure, that the statement in the appendix of the revised Luther Bible of 1964 is wrong (reading in translation):

"The Old Testament is rich of chronological statements, but the time of the patriarchs cannot be fixed."

The fact, that Josephus uses other numbers in his repetition of Israel's history⁵, does not change anything, that the older books of the kings have been handed down better and thus are relevant due to Deuteronomy 19:15. Therefore, the author has started with the calculation of the chronological table for the Holy Bible and since then tinkered at the same as his hobby. In 1985, the author caused his religion teacher, pastor Gebhard Boehm, a later superior parish councillor, to check the numbers of [1924ZH], and received instead of the numbers of the Samaritan torah the numbers of the book of jubilee⁶, which agree extensively to the Samaritan torah, but nevertheless represent another source. Yet by this investigation, he could localize and avoid a printing mistake in [1924ZH] at the numbers of the Septuaginta (LXX). Also at the life dates of the kings of Israel resulted deviations between literature and own calculation. Furthermore, several "tables of chronology for the Holy Bible" exist, that deviate all at some detail.

The question, what then is correct now, has lead to the HISTORY program, by which a "neutral" calculation of chronological tables shall be possible. (A computer is so stubborn, that it does with absolute reliability exactly, what it is told to do. However, a guarantee for correctness this is not before all programming errors have been removed.)

In autumn 1991, he had finally constructed the needed algorithm, thus he could start with the check calculation "by hand". During the year 1994, at last succeeded a program, that builds up and corrects the chronological table automatically. In the year 2003, a QBASIC program could be given to all interested ones. In 2009, an English translation of the program was completed. In 2016, output errors were detected, yet. Therefore in 2017, an expansion to 4 indepenent calculation paths with automatic comparison was completed. In 2018, the documentation was revised again. Since the task instruction to the author, 40 years have been passed.

The chronology of the Holy Bible is mostly spread of all published sources. Therefore, it was best fit for a general check of the program algorithm. It is interesting, that the datings of the Holy Bible are so complicated and many-sided, that for a long time it was not clear, whether a general representation of the chronology actually can be build up without any contradictions.

The result corresponds in each detail to the theoretical expections, that can be set to a respectably delivered chronology:

- Statements, that sound like ordinary numbers ("In the second year ..."), turn out by the tolerance shifts automatically to be also the same.
- The Israelian chronology, that begins in autumn 3761 before Christ, can rarely be harmonized with the chronology of the Holy Bible. By the existence of this until today used chronology, the absolute values of the tolerances do not go beyond 10

 $^{^5}$ [1994Mai], page 137, related to A VIII, 50 6 [1985Cha]

years within a time interval of more than 3000 years! Without control data, one would expect about 100 to 200 years tolerance.

- The use of "sure" datings of the non-biblical sources does not cause any problems, but reduces the absolute value of the tolerances also significantly.
- The motto of Luther: "The word of God shall firm abide" leads to a representation of the chronological table without any contradictions. If several delivery variants occur, then the one should be followed, which needs the smallest time interval (compare Jeremiah 8:8 with St. Matthew. 5:18). Obviously, it is easier to invent additional history (for example "205" in the Masoretic pentateuch instead of "145" in the Samaritan torah at Genesis 11:32), than to ignore it.
- A lot of prayer and patience was necessary, until the Lord Christ Jesus granted the success of the program and its calculation.

Now, the program generates by 4 independent calculation paths identical results. Therefore, the now available lists are to be classified as reliable. They must be considered as successful trial to have regarded to the willfulnesses and features of the sources, when calculating a chronological table.

The computer does not know of numerical errors. Therefore, each interested person is recommended to seek through the present chronological table for interpretation mistakes or too liberal tolerance statements. For correction and change proposals of any kind, the author is always grateful.

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The author thanks Mr. Eckhard Walter, who from 1996 until his death in 2005 worked unremittingly on the success of the project.

References

[1924ZH]	(Paul) Zeller, (Th.) Hermann: <i>Calwer Bibel–Lexikon (Calw's Bible Encyclopedia)</i> , Calwer Vereinsbuchhandlung, Stuttgart, 4 th edition, (1924)
[1972Fri]	(Klaus Dietrich) Fricke: Das 2. Buch von den Königen (The 2^{nd} Book of the Kings), Calwer Verlag, Stuttgart, 1 st edition, (1972)
[1973GKS]	(Karl) Gutbrod, (Reinhold) Kücklich, (Theodor) Schlatter: <i>Calwer Bibel-</i> <i>lexikon (Calw's Bible Encyclopedia)</i> , Calwer Verlag, Stuttgart, 5 th revision, 3 rd edition, (1973)
[1985Cha]	(James H.) Charlesworth: The Old Testament Pseudepigrapha, volume 2, The Book of Division or Jubilees, Doubleday, New York etc., (1985), 52–142
[1994Mai]	(Paul L.) Maier: <i>Josephus</i> , shortened edition of his main scriptures: "The Jew- ish Antiquities" and "The Jewish War", Hänssler–Verlag, Neuhausen, (1994)
[1995Bütt]	(Luise) Büttner, born as Vischer, daughter of Ferdinand Vischer, the only one, who received by Adolf Schlatter the certificate "satisfactory": <i>personal report</i> to the author, Ulm /Danube, (1995)

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