

APPENDIX

For Chapter One:

ADDITIONAL NOTES ON THE SECOND ADVENT MOVEMENT

As noted on page 43, along with intense interest in time prophecies, the Second Advent movement was also characterized by a number of other distinctive factors.

Many of the Second Adventist splinter groups that branched off from the original Millerites rejected the immortal soul and hell doctrines (and even the trinity doctrine). This was due largely to the articles and tracts published in the 1820's, 1830's, and 1840's by a former Baptist pastor, *Henry Grew* of Hartford, Connecticut and later of Philadelphia, Pennsylvania.¹

The doctrine of “conditional immortality” was first introduced among the Millerites by George Storrs. It was the reading of one of Grew's tracts in 1837 that turned Storrs against the immortal soul and hell doctrines, and he was later to become the leading champion in the United States of conditionalism.

Typical of many Second Adventist periodicals, the *World's Crisis* advocated *conditionalism*, the doctrine of the conditional—not inherent—immortality of the human soul, with its corollary tenet that the ultimate destiny of those who are rejected by God is destruction or annihilation, not conscious torment. The *World's Crisis* had advocated the date of 1854 for Christ's second coming and when, like all the preceding dates, this date failed, the “immortality question” came strongly to the fore and caused a second major division within the original movement.

1 LeRoy Edwin Froom, *The Conditionalist Faith of Our Fathers*, Washington D.C.: Review and Herald, 1965, pp. 300-315. Grew's anti-trinitarian position, too, was adopted by a majority of the Second Adventists, including the three major Adventist groups that branched off from the “original” Adventists: 1) the Seventh-Day Adventists, 2) the Advent Christians, and 3) the “age to come” Adventists. In 1898 the SDA Church, on the authority of Ellen G. White, the “prophetess” of this movement, changed its position on the question. (Erwin Roy Gane, *The Arian or Anti-Trinitarian Views Presented in Seventh-Day Adventist Literature and the Ellen G. White Answer*, unpublished M.A. thesis, Andrews University, June 1963, pp. 1-110) Some decades later, the Advent Christian Church, too, began to reconsider its anti-trinitarian position.—See David Arnold Dean, *Echoes of the Midnight Cry: The Millerite Heritage in the Apologetics of the Advent Christian Denomination, 1860-1960* (unpublished Th.D. dissertation, Westminster Theological Seminary, 1976) pp. 406-416.

Although the doctrine of conditional immortality eventually was adopted by a majority of the Second Adventists, it was never accepted by the *leadership* of the original movement, which increasingly began to condemn it as a heresy in their periodical, the *Advent Herald*. Finally, in 1858, the original Second Adventists, or the “Evangelical Adventists,” as they now called themselves, openly broke with the “conditionalist” Adventists and formed a separate organization, *The American Evangelical Advent Conference*. The Evangelical Adventists, however, soon became a minority, as their members in increasing numbers sided with the “conditionalist” Adventists. The association finally died out in the early years of the 20th century.²

After the break with the Evangelical Adventists, the supporters of the *World's Crisis*, too, formed a separate denomination in 1860, *The Advent Christian Association* (later “The Advent Christian Church”), today the most important Adventist denomination aside from the Seventh-Day Adventists and Jehovah’s Witnesses.³

Many “conditionalist” Adventists did not join this association, however, partly because they were strongly opposed to all forms of structured church organization and would accept no names of their church but the “Church of God,” and partly also because of their distinctive “age to come” views, that is, that the Jews would be restored to Palestine before the coming of Christ, that his coming would usher in the millenium, and that the saints would reign with Christ for a thousand years, during which period his kingdom would be set up on earth. By the early 1860’s, these Adventists had been separated

- 2 David Tallmadge Arthur, “*Come out of Babylon*”: A Study of Millerite Separatism and Denominationalism, 1840-1865 (unpublished Ph.D. dissertation, University of Rochester, 1970), pp. 291-306; Isaac C. Wellcome, *History of the Second Advent Message* (Yarmouth [Maine], Boston, New York, London, 1874), pp. 597-600, 609, 610. See also the excellent overview by D. A. Dean, *op. cit.*, pp. 122-129. Even *Joshua V. Himes*, editor of the *Advent Herald* and the most influential leader of the original movement after the death of Miller in 1849, adopted the “conditionalist” position in 1862 and left the Evangelical Adventists.
- 3 Numerically, the membership of this church has remained at about 30,000-50,000 throughout its history. The two most influential leaders and writers at the formation of the association were H. L. Hastings and Miles Grant, the latter being editor of the *World's Crisis* from 1856 to 1876. Hastings left the association in 1865 and remained independent of all associations for the rest of his life, although he continued to advocate conditionalism and other teachings of the Advent Christian denomination. (See Dean, *op. cit.*, pp. 133-135, 142, 210-294.)

from the Advent Christians.⁴

In 1863 another group of “conditionalist” Adventists, headed by Rufus Wendell, George Storrs, R. E. Ladd, W. S. Campbell, and others, broke with the Advent Christian Association and formed a new denomination, *The Life and Advent Union*. This group promulgated the view that only the righteous would be resurrected at Christ’s coming. The wicked dead would remain in their graves forever. They also denied the personality of the holy spirit and even of the devil. For the promotion of these teachings, they started a new paper, *Herald of Life and of the Coming Kingdom*, with Storrs as editor.⁵ Storrs later changed his view of the resurrection and left the group in 1871, resuming the publishing of his earlier *Bible Examiner* magazine.

For Chapter Two:

METHODS OF RECKONING REGNAL YEARS

The accession and nonaccession year systems

Babylon, and later Medo-Persia, applied the *accession year system*, in which the year during which a king came to power was reckoned as his accession year, and the next year beginning on Nisan 1 (spring), was reckoned as his first year.

In Egypt the opposite method was applied: the year in which a king came to power was counted as his first year. There is evidence to show that the latter method, the *nonaccession year system*, was also applied in the kingdom of Judah. The evidence is as follows:

1. The battle of Carchemish in 605 B.C.E., when the army of Pharaoh Neco of Egypt was defeated by Nebuchadnezzar, is stated at Jeremiah 46:2 as having occurred “in the *fourth* year of Jehoiakim the

4 The leading advocate of these views was *Joseph Marsh* in Rochester, N.Y., editor of the *Advent Harbinger and Bible Advocate* (in 1854 changed to *Prophetic Expositor and Bible Advocate*). See also D. T. Arthur, *op. cit.*, pp. 224-227, 352-371. Henry Grew as well as Bible translator Benjamin Wilson both associated with this group. (*Historical Waymarks of the Church of God*, Oregon, Illinois: Church of God General Conference, 1976, pp. 51-53) Due to their opposition to all church organization, the “age to come” Adventists were very loosely associated. A more stable organization was not formed until 1921, when the *Church of God of the Abrahamic Faith* was organized with headquarters in Oregon, Illinois. – D. T. Arthur, *op. cit.*, p. 371.

5 D.A. Dean, *op. cit.*, pp. 135-138; D. T. Arthur, *op. cit.*, pp. 349-351. The Life and Advent Union lived on until 1964, when it merged again with the Advent Christian Church.

son of Josiah, king of Judah.” According to Jeremiah 25:1 “the fourth year of Jehoiakim . . . was the *first* year of Nebuchadnezzar.” But the Neo-Babylonian *Chronicle 5* (B.M. 21946) clearly states that this battle took place in Nebuchadnezzar’s *accession year*, not in his first year.⁶ The reason why Jeremiah reckons Nebuchadnezzar’s accession year as his first year seems to be that Judah did not apply the accession year system. Jeremiah, therefore, applied the Jewish non-accession year system not only to Jehoiakim, but also to Nebuchadnezzar.

2. In 2 Kings 24:12; 25:8, and Jeremiah 52:12 Jehoiachin’s deportation and the destruction of Jerusalem are said to have taken place in Nebuchadnezzar’s *eighth* and *nineteenth* regnal years, while Jeremiah 52:28-30 seems to put these events in Nebuchadnezzar’s *seventh* and *eighteenth* years, respectively. The difference in both cases is one year. The Neo-Babylonian *Chronicle 5* is in agreement with Jeremiah 52:28 in stating that Nebuchadnezzar seized Jerusalem and captured Jehoiachin in his seventh year.

There is evidence to show that the last chapter of Jeremiah, chapter 52, was not authored by Jeremiah himself. This is clearly indicated by the concluding statement of the preceding chapter (Jeremiah 51:64): “Thus far are the words of Jeremiah.” Chapter 52, in fact, is almost word for word taken from 2 Kings 24:18—25:30, *the only exception being Jeremiah 52:28-30*, the verses containing the divergence of one year in the reference to Nebuchadnezzar’s regnal years.⁷ Professor Albertus Pieters in all probability gives the correct explanation of this difference when he states:

This difference is perfectly explained if we assume that the section in question was added to the prophecies of Jeremiah by someone in Babylon who had access to an official report or record, in which the date would, of course, be set down according to the Babylonian reckoning.⁸

- 6 The Neo-Babylonian chronicles are discussed in Chapter Three, section B-1.
- 7 It cannot be determined whether chapter 52 was added by Jeremiah himself, his scribe Baruch, or some other person. The reason why this section from 2 Kings was included may have been “to show how Jeremiah’s prophecies were fulfilled.”—Dr. J. A. Thompson, *The Book of Jeremiah* (Grand Rapids: Wm. B. Eerdmans Publishing Co., 1980), pp. 773, 774.
- 8 Albertus Pieters, “The Third Year of Jehoiakim,” in *From the Pyramids to Paul*, ed. by Lewis Gaston Leary (New York: Thomas Nelson and Sons, 1935), p. 186. That the information in Jeremiah 52:28-30 may have been added to the book of Jeremiah in *Babylonia* is also supported by the fact that the Greek *Septuagint* (LXX) version of Jeremiah, which was produced in *Egypt* (perhaps from a manuscript preserved by the Jews in that country), does not include these verses.

The compiler of Jeremiah 52, then, faithfully reproduced the dates found in his two sources, even if those sources reflected two different ways of reckoning regnal years: the accession year system used by the Babylonians, and the nonaccession year system used by the Jews.

The last four verses of chapter 52 of Jeremiah (verses 31-34), although taken verbatim from 2 Kings 25:27-30, also reflects the accession year system, which may be explained by the fact that the passage reproduces information that originally must have been received from Babylonia. As stated in this passage, Evil-merodach (Awel-Marduk), “in the year of his becoming king,” released the Judean king Jehoiachin from prison in the 37th year of his exile. According to Professor Pieters the clause “in the year of his becoming king” (Jeremiah 52:31) “is the technically correct term for the year of the monarch’s accession,”⁹ the Babylonian documents using a similar expression when referring to the accession year.

That the writer of the passage in Jeremiah 52:28-34 used the accession year system is thus the conclusion of a number of modern Biblical scholars.¹⁰

3. The accession year system is most probably also employed by the prophet Daniel at Daniel 1:1, where he dates the first deportation of Jewish exiles to the “*third year*” of Jehoiakim. This deportation, however, must have followed upon the battle of Carchemish, the victory there paving the way for Nebuchadnezzar’s invasion and conquest of the countries in the west, including Judah.

As noted above, this battle is dated at Jeremiah 46:2 to the “*fourth year*” of Jehoiakim, not to his third. Most commentators, therefore, choose to regard the “*third year*” of Daniel 1:1 as a historical blunder by the author of the book, and as indicating that he was not contemporary with the event, but was writing hundreds of years afterwards. Some, including the Watch Tower Society, argue that the deportation mentioned in the text was identical with the one that occurred eight years later, after the end of Jehoiakim’s 11th year of reign, when his son and successor Jehoiachin was exiled to Babylon.¹¹

9 Pieters, *op. cit.*, p. 184.

10 See, for example, John Bright, *The Anchor Bible: Jeremiah* (N.Y.: Doubleday, 1965), p. 369; J. A. Thompson, *op. cit.*, p. 782, and J. Philip Hyatt, “New Light on Nebuchadnezzar and Judean History,” *Journal of Biblical Literature*, Vol. 75 (1956), p. 278.

11 *Insight on the Scriptures*, Vol. 1 (Brooklyn, New York: Watchtower Bible and Tract Society of New York, Inc., 1988), p. 1269. A detailed examination of this theory is presented in the Appendix for Chapter Five: “The ‘third year of Jehoiakim’ (Daniel 1:1, 2).”

However, if it is accepted that Daniel was living in Babylon in the Neo-Babylonian period and was occupying a high rank in its administration, it would have been natural for him to apply the Babylonian calendar and their system of reckoning regnal years, and to do this as well when referring to the reigns of non-Babylonian kings, including Jehoiakim, just as Jeremiah, living in Judea, conversely applied the Jewish nonaccession year system in referring to Nebuchadnezzar's reign.

4. The Babylonian calendar was also used (alongside the Egyptian civil calendar) by the Jewish colony at Elephantine in s. Egypt from the 5th century onward, as has been established by Dr. Bezalel Porten and others. Dr. Sacha Stern concludes that, "Non-Jewish or 'official' calendars were routinely used by Diaspora Jews throughout the whole of Antiquity."¹²

Several difficult problems in Biblical chronology are easily solved if the accession and nonaccession year systems are taken into consideration. A study of the chronological tables in the final section of this Appendix ("Chronological tables covering the seventy years") will make this clear.

Nisan and Tishri years

It is well established that the Assyrian, Babylonian and Persian calendar started on Nisan 1 (the first day of the month Nisan in the spring), which was also the beginning of the regnal years. The Jews, in later times, had two beginnings of their calendar years: Nisan 1 in the spring and Tishri 1 six months later in the autumn—Tishri 1 being the older new-year day.¹³ Although Nisan was the beginning of the *sacred* calendar year, and the months were always numbered from it,¹⁴ Tishri was retained as the beginning of the *secular* calendar year.

The problem is: Did the kings of Judah follow the custom of Babylon and other countries in reckoning the regnal years from Nisan 1, or did they reckon them from Tishri, the beginning of their secular year? Although scholars disagree on this, there is evidence to show that the kings of Judah reckoned their regnal years on a Tishri-to-Tishri basis.

12 Sacha Stern, "The Babylonian Calendar at Elephantine," *Zeitschrift für Papyrologie und Epigraphik*, Band 130 (2000), p. 159.

13 J. D. Douglas, ed., *New Bible Dictionary*, 2nd ed. (Leicester, England : Inter-Varsity Press, 1982), p. 159; compare *Insight on the Scriptures*, Vol. 1, p. 391.

14 "In the Hebrew Scriptures the months are numbered from Nisan, regardless of whether the reckoning of the year was from spring or fall." – Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings*, revised edition (Grand Rapids: Zondervan Publishing House, 1983), p. 52. In footnote 11 on the same page he gives many examples of this.

1. Jeremiah 1:3 states that the inhabitants of Jerusalem, after the desolation of the city, “went into exile in the *fifth* month,” which is also in agreement with the record in 2 Kings 25:8-12. Yet this fifth month is said to have been at “the *end* of the eleventh year of Zedekiah.”¹⁵ Only if the regnal years were reckoned as beginning from Tishri (the seventh month) could the fifth month be said to be at “the end of” Zedekiah’s eleventh regnal year, which then ended with the next month, Elul, the sixth month.

2. According to 2 Kings 22:3–10 King Josiah of Judah, in his *eighteenth* year, began repairs on the temple of Jerusalem. During these repairs High Priest Hilkiah found “the book of the law” in the temple.¹⁶ This discovery resulted in an extensive campaign against idolatry throughout the whole land. After that Josiah reinstated the passover on Nisan 14, two weeks after the beginning of the new year according to the sacred calendar. Very interestingly, this passover is said to have been celebrated “in the *eighteenth* year of King Josiah.” (2 Kings 23:21-23) As the repairs of the temple, the cleansing of the land from idolatry and many other things recorded in 2 Kings 22:3—23:23 could not reasonably have occurred within just two weeks, it seems obvious that Josiah’s eighteenth regnal year was not counted from Nisan 1, but from Tishri 1.

3. Another indication of a Tishri reckoning of regnal years in Judah is given in Jeremiah 36. In “the *fourth* year of Jehoiakim” (verse 1), Yahweh told Jeremiah to write in a book all the words he had spoken to him against Israel, Judah, and all the nations (verse 2). This Jeremiah did through Baruch, his secretary (verse 4). When Baruch had finished the work, Jeremiah asked him to “go, and from the scroll you wrote at my dictation, read all the words of Yahweh to the people in his Temple on the day of the fast.” (Jeremiah 36:5, 6, *JB*). Which fast?

This was evidently a special fast proclaimed for some unspecified reason. Most probably the reason was the battle of Carchemish in May-June that same year, “in the *fourth* year of Jehoiakim” (Jeremiah 46:2), and the subsequent events, including the siege laid

15 *KJV, ASV, NASB*, and other versions. The *New World Translation (NW)* uses the word “completion”: “until the *completion* of the eleventh year of Zedekiah the son of Josiah, the king of Judah, until Jerusalem went into exile in the *fifth* month.”

16 As argued by many commentators, the “book of the law” probably was the book of Deuteronomy, which may have been lost for some time, but was now rediscovered. Cf. Professor Donald J. Wiseman, *1 and 2 Kings* (Leicester: Inter-Varsity Press, 1993), pp. 294-296.

against Jerusalem in the same year according to Daniel 1:1. Though Nebuchadnezzar by now, due to the death of his father, had returned to Babylon (as recorded in the Neo-Babylonian *Chronicle 5*), the Jews had good reasons for fearing that he soon would return and continue his operations in Judah and the surrounding areas. Against this background, a “summons to a fast in the presence of Yahweh for the whole population of Jerusalem and for all the people who could come to Jerusalem from the towns of Judah” (Jeremiah 36:9, *JB*) is quite understandable. Very interestingly, this fast, at which Baruch was to read aloud from the scroll he had written, took place “in the *fifth* year of Jehoiakim the son of Josiah, the king of Judah, *in the ninth month*,” according to the same verse.

If Jehoiakim’s regnal years were counted from Nisan, the first month, Baruch began to write down Jeremiah’s prophecies about a year prior to this fast. Besides, it seems to have been *proclaimed* already in in the fourth year of Jehoiakim (verses 1, 6), and thus about nine months before it was held. All this seems very improbable. But if Jehoiakim’s regnal years were counted from Tishri, the seventh month, his fourth year ended with Elul, the sixth month (corresponding to parts of August-September, 605 B.C.E.), and the fast in the ninth month (parts of November-December, 605 B.C.E.) took place a little more than two months after the beginning of Jehoiakim’s fifth year.

Baruch’s writing down of Jeremiah’s prophecies, then, took only a few months, which is more probable, and the fast could have been proclaimed only two months before it was held, and not long after the battle of Carchemish and the subsequent Babylonian operations in Syria and Palestine in the summer and autumn of 605 B.C.E.¹⁷

4. There is evidence, too, that Jewish writers, when referring to foreign kings, at least sometimes reckoned their regnal years according to the Tishri year. This is done by Nehemiah for example. In Nehemiah 1:1 he refers to the month Chisleu (November-December)

17 According to the Neo-Babylonian *Chronicle 5* Nebuchadnezzar was enthroned in Babylon “on the first day of the month Elul,” corresponding to September 7, 605 B.C.E., Julian calendar. After that, and still in his accession year, “Nebuchadnezzar returned to Hattu [the Syro-Palestinian area in the west]. Until the month Shebat [parts of January-February, 604 B.C.E.] he marched about victorious in Hattu.” – A. K. Grayson, *Assyrian and Babylonian Chronicles*, (Locust Valley, New York: J.J. Augustin Publisher, 1975), p. 100. Thus Nebuchadnezzar may already have returned to the Hattu area at the time of the fast in November or December, 605 B.C.E. The danger of another invasion of Judah, therefore, seemed impending.

in the *twentieth* year of Artaxerxes. But the month of Nisan of the next year is still referred to as in Artaxerxes' *twentieth* year of rule. (Nehemiah 2:1) If Nehemiah reckoned Artaxerxes' regnal years from Nisan 1, he should have written *twenty-first* year at chapter 2, verse 1. Nehemiah, therefore, obviously reckoned the regnal years of the Persian king Artaxerxes according to the Jewish Tishri-to-Tishri calendar, not according to the Persian Nisan-to-Nisan count. This is also supported in the Watch Tower Society's Bible dictionary, *Insight on the Scriptures*, Vol. 2 (1988), pages 487, 488.¹⁸

That Judah followed a Tishri-to-Tishri reckoning of the regnal years, at least in this period of its history, is the conclusion of some of the best scholars and students of Bible chronology, for example, Sigmund Mowinckel, Julian Morgenstern, Friedrich Karl Kienitz, Abraham Malamat, and Edwin R. Thiele.¹⁹ Although this way of reckoning regnal years makes the synchronisms between Judah and Babylon somewhat more complicated, it clears up many problems when applied. In the chronological tables on pages 350-352 of this book, both kinds of regnal years are paralleled with our modern calendar.

18 Few scholars seem to hold that Judah in the seventh and sixth centuries B.C.E. employed this combination of *both* the nonaccession year system *and* the Tishri-to-Tishri count of the regnal years, as advocated in this work. Those who opt for the nonaccession year system usually hold that Judah applied the Nisan-to-Nisan reckoning, and those who argue that Tishri-to-Tishri regnal years were used generally believe that the accession year system was employed.

19 See for example J. Morgenstern's review of Parker and Dubberstein's *Babylonian Chronology 626 B.C.-A.D. 45* in the *Journal of Near Eastern Studies*, Vol. 2 (1943), pp. 125-130, and Dr. A. Malamat's article, "The Twilight of Judah: In the Egyptian-Babylonian Maelstrom," in *Supplements to Vetus Testamentum*, Vol. XXVII (Leiden: E.J. Brill, 1975), p. 124, including note 2; also K. S. Freedy and D. B. Redford, "The Dates in Ezekiel in Relation to Biblical, Babylonian and Egyptian Sources," *Journal of the American Oriental Society*, Vol. 90 (1970), pp. 464, 465. Dr. Edwin R. Thiele, however, assumes that while the books of Kings reckon the regnal years from Tishri, Jeremiah and Ezekiel both reckon them from Nisan. (E. R. Thiele, *The Mysterious Numbers of the Hebrew Kings*, Grand Rapids: Zondervan Publishing House, 1983, pp. 51-53, 182-191.) This seems a rather far-fetched speculation, and there is not need for it, if we allow for both Tishri regnal years and the nonaccession year system for this period.

For Chapter Three:

SOME COMMENTS ON COPYING, READING, AND SCRIBAL ERRORS IN CUNEIFORM TABLETS

If twenty years are to be added to the Neo-Babylonian era, *considerable numbers* of texts dated to *each* of these years should have been found. It would never do to come up with one or two oddly dated documents from the era. Like modern clerks, secretaries, and bookkeepers, the Babylonian scribes now and then made errors in writing. As the writing had to be done while the clay tablet was soft, some of the errors could be corrected before the tablet dried out. Many tablets bear traces of crossings-out and corrections. Usually, the errors found on the tablets concern minor details, repetitions, omissions, etc. Although the errors sometimes also concern the date, it is remarkable that most of the odd dates found in modern catalogues of Babylonian tablets turn out to be *modern* reading, copying, or printing errors, including misreading or misprinting of royal names.

In their attempts at defending the Watch Tower Society's chronology, some Witnesses, both in the United States and Norway, have exploited not only such copying, reading, and scribal errors in cuneiform texts, but also the dates on some documents that seem to create overlaps of a few weeks or months between the reigns of some of the Neo-Babylonian rulers. For this reason it seems necessary to take a closer look at these problems.

Modern copying and reading errors

As Mr. C. B. F. Walker at the British Museum points out, "modern readers frequently incorrectly read numbers and month names on Babylonian tablets."²⁰ Royal names, too, are sometimes misread by modern scholars. Since dating within the Babylonian period is based on *regnal years* (rather than an *era* dating) the name of the king involved is obviously crucial.

Thus on one published text the translation referred to Babylonian ruler "*Labashi-Marduk's 4th year.*"²¹ Later scholars realized that the

20 Letter Walker-Jonsson, October 1, 1987. This is also reflected in the *CBT* catalogues on the Sippar collection at the British Museum, referred to in chapter 3, note 60, which list some 40,000 texts. Quite a number of the odd dates are just printing errors, while many others on collation turn out to be reading errors. A list with corrections and additions is kept at the museum by Mr. Walker.

21 R. Campbell Thompson, *A Catalogue of the Late Babylonian Tablets in the Bodleian Library, Oxford IV* (London: Luzac and Co., 1927), tablet no. A 83.

text actually referred to Assyrian king *Shamash-shum-ukin*.²² (There is a wide difference in our *alphabetical* spelling of the two names, but one must remember these were written in *cuneiform signs* which, in this case, were much more easily mistakable.) A similar error in reading another tablet resulted in reference to the 21st year of Sinshar-ishkun, the next to the last Assyrian king.²³ Later reexamination of this damaged section led to the conclusion the reference was more probably to Babylonian king Nabu-apla-usur (Nabopolassar).²⁴

Scribal errors

Not all the odd dates are modern errors, however. It is well established that the Persian king *Cambyses*, the son of Cyrus, ruled for eight years (529/28-522/21 B.C.E.). Yet one text from his reign (BM 30650) seemed to be dated to Cambyses' "11th year". At first the text caused much discussion among scholars, but it was finally concluded that it refers to Cambyses' *first* year. The number "1" had been written over an original "10," which the scribe had not been able to completely erase, resulting in a number that easily could be misread as "11".²⁵

Another document was dated to the "10th year" of *Cyrus*, although it is known from all ancient sources that Cyrus ruled for nine years only. The problem was soon resolved. In the period involved, the scribes commonly made duplicate copies of an agreement, one for

22 Letter Dr. D. J. Wiseman-Jonsson, June 19, 1987.

23 G. Contenau in *Textes Cunéiformes, Tome XII, Contrats Néo-Babyloniens*, I (Paris: Librairie Orientaliste, 1927), p. 2 + Pl. X, tablet no. 16; *Archiv für Orientforschung*, Vol. 16, 1952-53, p. 308; *Journal of Cuneiform Studies*, Vol. 35:1-2, 1983, p. 59.

24 Letter from Dr. Béatrice André of the Louvre Museum to C. O. Jonsson, March 20, 1990. As Nabopolassar, the father of Nebuchadnezzar, ruled for 21 years, this reading of the royal name creates no problem. — In the early days of Assyriology the reading of royal names was an even more arduous task. In 1877, for example, Wt. St. Chad Boscawen found two tablets in the archive of the Babylonian Egibi banking house, which seemed to mention two previously unknown Neo-Babylonian kings: *Marduk-shar-uzur* and *La-khab-ba-si-kudur*. Later, however, it turned out that the two names were misreadings for *Nergal-shar-uzur* [Neriglissar] and *Labashi-Marduk*. According to the banker Bosanquet, who financially supported Boscawen's work on the tablets, there was also a tablet in the Egibi archive dated to the 11th year of Nergal-shar-uzur. However, no such tablet has since been found in the collection at the British Museum. It was most probably another misreading, and Bosanquet himself did not refer to it again when he later presented his own speculative and wholly untenable chronology of the Neo-Babylonian era.—*Transactions of the Society of Biblical Archaeology*, Vol. 6 (London 1878), pp. 11, 78, 92, 93, 108-111, 262, 263; S. M. Evers, "George Smith and the Egibi Tablets," *Iraq*, Vol. LV, 1993, p. 110.

25 F. H. Weissbach in *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Vol. LV, 1901, pp. 209, 210, with references.

each party. Numbers of such duplicates have been found, including one for this text. But instead of being dated to the *tenth year* of Cyrus, this copy is dated to the “*2nd year*” of Cyrus. The first copy evidently contained a scribal error.²⁶

The two above-mentioned examples are from the Persian era. What about the Neo-Babylonian period?

A few documents from this era with unusual dates have been found that create some problems. It is remarkable, however, that the problems have to do with *month numbers only, not with year numbers*. Some defenders of Watch Tower chronology in their extreme efforts to find at least some support for their position have illogically sought to transform these overlaps of *months* into evidence for differences involving *years*. As the evidence will show, none of the documents can be used in a valid way to question the chronology of the period.

Overlap Nebuchadnezzar/Awel-Marduk?

Two of the tablets containing problematic dates are from the accession-year of Awel-Marduk, the son and successor of Nebuchadnezzar.

The latest document from the reign of Nebuchadnezzar is dated VI/26/43 (month 6, day 26, year 43, corresponding to Oct. 8, 562 B.C.E.). According to Parker & Dubberstein’s *Babylonian Chronology*, published in 1956, the first text from the reign of his son and successor, Awel-Marduk, is dated VI/26/acc. (month 6, day 26, accession year), that is, *on the same day*.²⁷

Since 1956, however, a couple of tablets from Sippar have been found that are dated to Awel-Marduk’s accession-year *one month earlier*, that is in the *fifth month*. On one tablet (BM 58872) the day number is damaged and illegible, but the other tablet (BM 75322) is clearly dated V/20/acc.²⁸ These texts, then, indicate that there was an *overlap* of over one month between the reigns of the two kings:

26 Weissbach, *ibid.*, p. 210.

27 R. A. Parker and W. H. Dubberstein, *Babylonian Chronology: 626 B.C.-A.D. 75* (Providence: Brown University Press, 1956), p. 12.

28 A translation of the first text (BM 58872) was published by R. H. Sack in 1972 (no. 79 in Ronald H. Sack, *Amel-Marduk 562-560 B.C.*, Neukirchen-Vluyn: Neukirchener Verlag, 1972, pp. 3, 106). For the second text (BM 75322), see *CBT* (cf. p. 321, note 20), Vol. VIII, p. 31. Two other texts published by Sack (numbered 56 and 70 in his work) seem to be dated to the “*4th month*” of Awel-Marduk’s accession-year, which would imply an overlap of *two months* with the reign of his father. However, Mr. Walker, on collation, confirmed that no. 56 (= BM 80920) is dated to the “*7th month*”, as shown also in *CBT* VIII, p. 245. In Sack no. 70 (= UCBC 378), too, the month is damaged, and may be 7, not 4. (Collated by Prof. Niek Veldhuis at Berkeley, California, on October 2, 2007.) Also on BM 65270 (listed in *CBT* VII) the month name is difficult to read, and “it is perhaps most likely that the month is 7 rather than 4.” – Letter Walker-Jonsson, November 13, 1990. Cf. also D. J. Wiseman, *Nebuchadnezzar and Babylon* (Oxford: Oxford University Press, 1985), pp. 113, 114.

Nebuchadnezzar's 43rd year: _____ last text: VI/26/43
 Months: | month 4 | month 5 | month 6 | month 7 |
 Awel-Marduk's accession-year: first text: V/20/acc. _____

An explanation for this overlap may be that Nebuchadnezzar died earlier than October (the sixth month of the Babylonian calendar year included part of October) and that some scribes continued to date documents to his reign for a few weeks until it was fully clear who his successor would be. Berossus states that his son and successor Awel-Marduk “managed the affairs in a lawless and outrageous fashion,” and therefore “was plotted against and killed by Neriglisaros [Neriglissar], his sister’s husband,” after only two years of reign.²⁹ As argued by the Polish Assyriologist Stefan Zawadzki, the wicked character of Awel-Marduk was probably evident already before his becoming king, which may have provoked opposition to his succession to the throne in some influential quarters. This may have been the reason why some scribes for a few weeks continued to date their documents to the reign of his deceased father.³⁰ (It has been pointed out earlier that Nabonidus evidently viewed Awel-Marduk as a usurper.)

In order to add some years to the Neo-Babylonian period, someone might argue, as did one Norwegian source, that the dates above, rather than indicating an overlap, show that Nebuchadnezzar’s forty-third year was not the same as Awel-Marduk’s accession-year, and that either Nebuchadnezzar ruled for more than forty-three years or there was another, unknown king between them.

29 Stanley Mayer Burstein, *The Babyloniaca of Berossus. Sources from the Ancient Near East*, Vol. 1, fascicle 5 (Malibu, Calif.: Undena Publications, 1978), p. 28.

30 Stefan Zawadzki, “Political Situation in Babylonia During Amel-Marduk’s Reign,” in J. Zablocka and S. Zawadzki (eds.), *Shulmu IV: Everyday Life in Ancient Near East: Papers Presented at the International Conference, Poznan, 19-22 September, 1989* (Poznan: Adam Mickiewicz University Press, 1993), pp. 309-317. That Nebuchadnezzar probably had died before the sixth month of the 43rd year is also supported by a Neo-Babylonian text from Uruk, YBC 4071, dated to the 15th of Abu (the fifth month), 43rd year of “The Lady of Uruk, King of Babylon” (the “Lady of Uruk” being Ishtar, the goddess of war and love, a great temple of whom was located in Uruk). Dr. David B. Weisberg, who published this text in 1980, concludes that Nebuchadnezzar evidently was dead at this time, although “cautious scribes continued to date to him even after his death, waiting prudently to see who his successor would be. One, however, may have tipped his hand and opted for a dating to The Lady-of-Uruk, ‘King’ of Babylon.”—D. B. Weisberg, *Texts from the Time of Nebuchadnezzar*, Yale Oriental Series, Vol. XVII (New Haven and London: Yale University Press, 1980), p. xix. Cf. Zawadzki, *op. cit.*, p. 312.

Such assumptions, however, are disproved by the Bible itself. A comparison of 2 Kings 24:12 and 2 Chronicles 36:10 with Jeremiah 52:28 shows that Jehoiachin's exile began toward the end of Nebuchadnezzar's seventh regnal year. This would mean that at the death of Nebuchadnezzar in his forty-third year Jehoiachin had spent almost thirty-six years in exile ($43-7=36$), and that the *thirty-seventh* year of exile began later in that same year, in the accession-year of Awel-Marduk (Evil-Merodach). And this is *exactly* what we are told in Jeremiah 52:31:

But in the thirty-seventh year of the exile of Jehoiachin king of Judah, in the twelfth month, on the twenty-fifth day of the month, Evil-merodach king of Babylon, in the year he came to the throne, pardoned Jehoiachin king of Judah and released him from prison.—
Jerusalem Bible. (Compare 2 Kings 25:27.)

Clearly, the Bible does not allow for any additional years between the forty-third year of Nebuchadnezzar and the accession-year of Awel-Marduk.

Overlap Awel-Marduk/Neriglissar?

Before the publication of the *CBT* catalogues in 1986-88 (see p. 321, note 20), the *latest tablet* known from the reign of Awel-Marduk was dated V/17/2 (Aug. 7, 560 B.C.E.), while the *first tablet* from the reign of his successor Neriglissar was dated V/21/acc. (Aug. 11, 560 B.C.E.). Only four days, then, separated the latest tablet from Awel-Marduk's reign from the first tablet dated to Neriglissar.³¹

In the *CBT* catalogues, however, there are two texts that seem to create a considerable overlap between the reigns of Awel-Marduk and Neriglissar. The first (BM 61325) is from the reign of Awel-Marduk and is dated to the *tenth* month of his second regnal year (X/19/2), or about *five months later* than the latest tablet previously known from his reign.³²

This overlap of five months with the reign of Neriglissar is further extended by the second text, BM 75489, which is dated to the *second* month of Neriglissar's accession-year (II/4/acc.), or about *three months and a half earlier* than the earliest tablet previously known

31 Ronald H. Sack, "Nergal-sharra-usur, King of Babylon as seen in the Cuneiform, Greek, Latin and Hebrew Sources," *Zeitschrift für Assyriologie*, Vol. 68 (Berlin, 1978), p. 132.

32 *CBT* VII, p. 36. The catalogue has day "17", which is corrected to "19" in Walker's

from his reign.³³ Together, these two texts seem to create an overlap of eight and a half months:

Awel-Marduk's 2nd year:		last text: X/19/2
Months:	month 1 month 2 months 3-9 month 10	
Neriglissar's accession-year:		first text: II/4/acc.

How can this overlap be explained? Again, someone might argue that the dates above, rather than showing an overlap, indicate that Awel-Marduk's second year was *not* the same as Neriglissar's accession-year, and that either he ruled for *more* than two years or that there was *another, unknown ruler* between the two.

Any evidence, however, in support of such assumptions is completely lacking. It should be kept in mind that each of their *known* regnal years are covered by numerous dated tablets, both published and unpublished. If Awel-Marduk ruled for more than two years, we would have a large number of tablets, economic and other types, dated to each of those additional years.

It is of considerable interest in this connection that the *Uruk King List* (discussed in chapter 3, section B-1b) specifies the reign of Neriglissar as “‘3’ (years) 8 months”. As Neriglissar's reign ended in the first month (Nisanu) of his fourth year (see below), he acceded to the throne in the fifth month (Abu) three years and eight months earlier, according to this kinglist. *This is the same month as that established earlier for his accession, before the two odd dates mentioned above were discovered.*

There are good reasons to believe that the information given in the *Uruk King List* was based upon sources that go back to the Neo-Babylonian period itself, including the chronicles. The preserved figures are all in good agreement with those established by the contemporary documents. This seems to be true even when—in two cases—the number of *months* is given.

Thus the *Uruk King List* gives Labashi-Marduk a reign of only three months, and the contracts from Uruk dated to his reign also show that he was recognized in that city as king for (parts of) three months. When the same kinglist, therefore, indicates that Neriglissar

33 *CBT VIII*, p. 35. Walker, who collated both tablets on several occasions, points out that “the months are very clearly written in both cases.” — Letter Walker-Jonsson, October 26, 1990.

acceded to the throne in the month of Abu, this, too, may very well be correct. At this point of time he had firmly established his rule and was recognized as king in most parts of Babylonia.³⁴

If the two odd dates referred to earlier are not simply scribal errors, the reason for the overlap they create at the end of Awel-Marduk's reign may be the same as that suggested above for the overlap at the *beginning* of his reign, namely, the prevailing opposition against his rule, which culminated with Neriglissar's seizure of power through a *coup d'état*. This explanation has recently been argued in some detail by R. H. Sack in his book *Neriglissar-King of Babylon*.³⁵

Overlap Neriglissar/Labashi-Marduk?

The two last tablets known from the reign of Neriglissar are dated I/2/4 (April 12, 556 B.C.E.) and I?/6/4 (April 16). The first tablet known from the reign of his son and successor, Labashi-Marduk NBC 4534, is dated I/23/acc. (May 3, 556 B.C.E.), that is, twenty-one, or possibly only seventeen days later. These dates create no overlap between the two.

Overlap Labashi-Marduk/Nabonidus?

The latest tablet known from the reign of Labashi-Marduk is dated III/12/acc. (June 20, 556 B.C.E.), while the first tablet known from the reign of his successor, Nabonidus, is dated one month earlier, II/15/acc. (May 25, 556 B.C.E.). This overlap of somewhat less than a month is a real one.

It may be easily accounted for, however, by the *circumstances* that brought Nabonidus to the throne. As explained by Berossus, Labashi-Marduk was “only a child” at the time of Neriglissar's death.

34 Documents from Uruk show that Labashi-Marduk was recognized as king in that city in the months of Nisanu, Ayyaru, and Simanu.—Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon 556-539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 86-88. The critical comments on the Uruk King List by Ronald H. Sack on page 3 of his work, *Neriglissar-King of Babylon (= Alter Orient und Altes Testament, Band 236, Neukirchen-Vluyn: Neukirchener Verlag, 1994)*, are mistaken, as they are based on an inadequate presentation of the list, which also disagrees with the sources referred to in his footnote.

35 R. H. Sack, *op. cit.*, pp. 25-31. There is some evidence that Neriglissar, before his seizure of power, held the highest office (*qipu*) at the Ebabbara temple in Sippar, and that his revolt started in that city. This would explain why the earliest texts dated to his reign are from Sippar, indicating he was first recognized in that area while Awel-Marduk was still recognized elsewhere for several months.—S. Zawadzki, *op. cit.* (note 30 above), also J. MacGinnis in *Journal of the American Oriental Society*, Vol. 120:1 (2000), p. 64.

“Because his wickedness became apparent in many ways he was plotted against and brutally killed by his friends. After he had been killed, the plotters met and jointly conferred the kingdom on Nabonnedus [Nabonidus], a Babylonian and a member of the conspiracy.”³⁶ This account agrees with the Hillah-stele, where Nabonidus gives a similar description of Labashi-Marduk’s character and of his own enthronement.³⁷

The evidence is that the rebellion that brought Nabonidus to power broke out almost immediately after Labashi-Marduk’s accession, and that both of them ruled simultaneously for a few weeks, *but at different places*. It should be noted that all tablets known from the reign of Labashi-Marduk are from three cities only, Babylon, Uruk, and Sippar, and that there was no overlap between the two reigns at any of these cities:

	Nippur	Babylon	Uruk	Sippar
Labashi-Marduk, latest tablet:	—	June 1	June 19	June 20
Nabonidus, earliest tablet:	May 25	July 14?	July 1	June 26

Dr. Paul-Alain Beaulieu discusses the available data at some length, concluding that, “In consideration of all this evidence the usual reconstruction of Nabonidus’ accession seems correct. He was probably recognized as king as early as May 25 in central Babylonia (Babylon and Nippur), but outlying regions would have recognized Labâshi-Marduk until the end of June.”³⁸

Thus, there is a well-founded explanation for the brief overlap between the reigns of Labashi-Marduk and Nabonidus. The accession of the young and—at least in some influential circles—unpopular Labashi-Marduk caused a rebellion and Nabonidus, strongly supported by leading strata in Babylonia, seized power and established a rival kingship. For a brief period there was a double kingship, although in different parts of the kingdom, until Labashi-Marduk finally was murdered and Nabonidus could be officially crowned as king.

In conclusion, the odd dates on a few tablets from the Neo-Babylonian period create no major problems. None of them add any *years*

36 Burstein, *op. cit.*, p. 28.

37 *Ancient Near Eastern Texts Relating to the Old Testament* [ANET], ed. by James B. Pritchard (Princeton, New Jersey: Princeton University Press, 1950), p. 309. For additional details, see chapter 3 above, section B-4-e.

38 Paul-Alain Beaulieu, *op. cit.* (note 34 above), pp. 86-88. Cf. also W. Röllig in *Reallexikon der Assyriologie und vorderasiatischen Archäologie*, ed. D. O. Edzard, Vol. VI (Berlin and New York: Walter de Gruyter, 1980), p. 409.

to the period, as the “overlaps” created by the odd dates concern *months only, not years*. And as has been shown above, it is possible to find reasonable explanations for all the three overlaps without giving oneself up to farfetched and demonstrably untenable theories about extra years and extra kings during the period.³⁹

ADDITIONAL COMMENTS ON THE ROYAL INSCRIPTIONS

The Hillah stele (Nabon. No. 8)

According to the Hillah stele, fifty-four years had passed from the desolation of the temple Éhulhul in Harran in the sixteenth year of Nabopolassar (610/609 B.C.E.) until the accession-year of Nabonidus (556/555 B.C.E.).

In an attempt to undermine the confidence in the information on this stele, at least one of the defenders of the Watch Tower Society’s chronology has claimed that the fifty-four years referred to the period of *desolation* of the Éhulhul temple, and that Nabonidus states it was rebuilt immediately after the end of this period. As the rebuilding of the temple was not actually completed until several years after the Hillah stele had been inscribed, the fifty-four year period is claimed to be a fiction.

Such an interpretation of the stele is a gross distortion of the matter. Although it is true that the temple had lain desolate for fifty-four years when Nabonidus, in his accession-year, concluded that the gods had commanded him to rebuild it, he does not say that it was rebuilt

39 If defenders of the Watch Tower Society’s chronology insist that such an “overlap” of some months between two Neo-Babylonian rulers indicates there were more years or maybe even an extra king between the two, they should—for the sake of consistency—give the same explanation to similar “overlaps” found between rulers of the *Persian* era. For example, the latest tablet from the reign of Cyrus is dated VIII/20/9 (December 5, 530 B.C.E.), while the earliest text from the reign of his successor, Cambyses, is dated VI/12/acc. (August 31, 530 B.C.E.). This would mean there was an overlap between the two rulers of over three months! (Jerome Peat, “Cyrus ‘king of lands,’ Cambyses ‘king of Babylon’: the disputed co-regency,” *Journal of Cuneiform Studies*, Vol. 41/2, Autumn 1989, p. 210; M. A. Dandamayev, *Iranians in Achaemenid Babylonia*, Cosa Mesa, California and New York: Mazda Publishers, 1992, pp. 92, 93.) As the Watch Tower Society dates the fall of Babylon to 539 B.C.E. *by counting backwards from the reign of Cambyses*, they would certainly not like to have any additional years inserted between Cyrus and Cambyses, as that would move the date for the fall of Babylon as many years backwards in time! (See *Insight on the Scriptures*, Vol. 1, 1988, p. 453.) Dandamayev (*op. cit.*, 1992, p. 93) gives the following very plausible explanation of the overlap: “It seems that Cyrus appointed Cambyses as joint ruler before his expedition against the Massagetae.” This is in agreement with Herodotus’ statement (VII, 3) that it was the custom of Persian kings to appoint their successors to the throne before they went out to war, in case they would be killed in the battles.

immediately. As indicated by a number of texts the restoration of the temple was evidently a drawn-out process that lasted for several years, perhaps until the thirteenth year of Nabonidus.

The fifty-four years, on the other hand, clearly ended in the accession-year of Nabonidus, when, according to the Adad-guppi' inscription, "the wrath of his [Sin's] heart calmed. Towards E-hul-hul the temple of Sin which (is) in Harran, the abode of his heart's delight, he was reconciled, he had regard. Sin, king of the gods, looked upon me and Nabu-na'id (my) only son, the issue of my womb, to the kingship he called."⁴⁰

The statement on the Hillah stele that Sin at this time "returned to his place" should not be taken to mean that the temple was rebuilt at this time. Rather, it may mean that Sin, the moon god, "returned to his place" *in the sky*, as suggested by Tadmor. The Babylonians not only knew that lunar phenomena such as eclipses often recurred after a period of eighteen years (the so-called "Saros cycle"), but that they also, and with a much higher degree of reliability, recurred after a period of *fifty-four* years (three "Saros cycles"). The Babylonian astronomers even used these and other cycles for predicting lunar eclipses. At the time Nabonidus acceded to the throne a complete cycle of the moon had passed since the destruction of the moon temple at Harran, and Nabonidus may have seen this as a remarkable coincidence and a favorable omen. As Sin had now "returned to his place" in the sky, had not the time arrived for him to return also to his earthly abode in Harran? So Nabonidus concluded that the temple had to be rebuilt.⁴¹

The Adad-guppi' inscription (Nabon. No. 24)

It is well known that the Adad-guppi' inscription at one point contains *an error of calculation*. As defenders of the Watch Tower Society's chronology have emphasized this error in an attempt to undermine the value of the inscription, a few comments on the problem seem necessary.

40 C. J. Gadd, "The Harran Inscriptions of Nabonidus," *Anatolian Studies*, Vol. VIII, 1958, pp. 47-49.

41 Hayim Tadmor, "The Inscriptions of Nabunaid: Historical Arrangement," in *Studies in Honor of Benno Landsberger on his Seventy-fifth Birthday* [*Assyriological Studies*, No. 16], ed. H. Güterbock & T. Jacobsen (Chicago: The Chicago University Press, 1965), p. 355.—For the superiority of the 54-year cycle, see Dr. W. Hartner, "Eclipse Periods and Thales' Prediction of a Solar Eclipse. Historical Truth and Modern Myth," in *Centaurus*, Vol. 14, 1969, pp. 60-71.

Ashurbanipal is generally believed to have begun his reign in Assyria in 668 B.C.E. His twentieth year, therefore, is dated to 649/48 B.C.E. If Adad-guppi' was born in that year, and if she lived on until the beginning of Nabonidus' ninth year, 547 B.C.E., she would have been 101 or 102 years old at her death, not 104 years as stated in the inscription. Scholars who have examined the inscription, therefore, have concluded that the stele contains a miscount of about two years. "All agree on this point," say scholars P. Garelli and V. Nikiprowetsky.⁴²

Further, the inscription seems to give the Assyrian king Assur-etil-ili a reign of three years, which has been regarded as a problem as there is a contract tablet dated to the fourth year of this king.⁴³ Since C. J. Gadd published his translation of the text, other scholars have examined these problems. Dr. Joan Oates offers a solution which has been accepted by other scholars as most probably the correct one:⁴⁴

As is evident from the inscription, Adad-guppi' first lived in Assyrian territory (perhaps in Harran) serving under Assyrian kings until the third year of Assur-etil-ili, when she moved to Babylon, serving under Babylonian kings from that time on. As Oates explains, this does not mean that Assur-etil-ili's third year was his last. If Assur-etil-ili began his rule in Assyria after his father's death in 627 B.C.E., his third year was 624/23 B.C.E. His second and third regnal years in Assyria, then, overlapped the first and second years of Nabopolassar in Babylon (625/24 and 624/23 B.C.E.). In calculating the age of Adad-guppi', Nabonidus (or the scribe who made the inscription) simply summed up the regnal years without taking into account this overlapping of Assur-etil-ili's reign with that of Nabopolassar.⁴⁵

Oates' solution was supported in 1983 by Erle Leichty. Discussing a new inscription from Assur-etil-ili's reign, he pointed out its agreement with Oates' conclusion that "the third year of Assur-etilli-ilani is the same as the second year of Nabopolassar," adding, "I believe

42 P. Garelli and V. Nikiprowetsky, *Le Proche-Orient Asiatique* (Paris: Presses Universitaires de France, 1974), p. 241. One exception is M. Gerber in *ZA* 88:1 (1998), pp. 72-93.

43 C. J. Gadd, *op. cit.*, pp. 70ff.

44 Joan Oates, "Assyrian Chronology, 631-612 B.C.," *Iraq*, Vol. 27, 1965, pp. 135-159.

45 Evidently Dr. Paul-Alain Beaulieu, in his discussion of these problems, was not aware of Oates' solution. His comments, therefore, are confusing, and his questioning of the accuracy of the chronological data of the stele clearly is unwarranted.—Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon 556-539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 139, 140.

that the Oates chronology will probably turn out to be the correct one, but final judgement must await the rest of the evidence.”⁴⁶

Whatever the case, the error in the inscription is a minor problem that does not affect the reigns of the *Neo-Babylonian* kings as given in the Adad-guppi’ inscription. It arose in the attempt to establish Adad-guppi’s age, which had to be *calculated*, because, as pointed out by Rykle Borger, the Babylonians (like Jehovah’s Witnesses today!) “never celebrated their birthdays, and hardly knew how old they were themselves.”⁴⁷

For Chapter Four:

1. ASTROLOGY AS A MOTIVE FOR BABYLONIAN ASTRONOMY

In order to depreciate the value of the astronomical texts, some defenders of the Watch Tower chronology have emphasized that the Babylonians’ interest in the celestial phenomena was *astrologically motivated*. Although it is true that this was an important object of their study of the sky, it actually contributed to the exactness of the observations.

In the great collection of ancient omens called *Enuma Anu Enlil* (the final form of which dates from the Neo-Assyrian period) the observer is given this instruction:

When the Moon is eclipsed you shall observe exactly month, day, night-watch, wind, course, and position of the stars in whose realm the eclipse takes place. The omens relative to its month, its day, its night-watch, its wind, its course, and its stars you shall indicate.

For the Babylonian “astrologers” eclipses played the most prominent role, and all details, therefore, were highly important. Dr. A. Pannekoek concludes that “the astrological motive, by demanding greater attention in observing the moon, provided for better foundations in chronology.”⁴⁸

Further, it would be a mistake to think that “astrology” in the sense this word is used today was practiced in the Neo-Babylonian period or earlier. The idea that a man’s fate is determined by the positions of the stars and planets at the date of birth or conception originated much later, during the Persian era. The oldest horoscope discovered dates to 410 B.C.E.⁴⁹ As pointed out by B. L. van der Waerden, the earlier

46 Erie Leichty in the *Journal of the American Oriental Society*, Vol. 103, 1983, p.220, note 2.

47 Rykle Borger, “Mesopotamien in den Jahren 629-621 v. Chr.,” *Wiener Zeitschrift für die Kunde des Morgenlandes*, Vol. 55, 1959, p. 73.

48 A. Pannekoek, *A History of Astronomy* (London: George Allen & Unwin Ltd, 1961), pp. 43, 44.

49 A. J. Sachs, “Babylonian horoscopes,” *Journal of Cuneiform Studies*, Vol. 6 (1952), p. 49.

astrology “had a quite different character: it aimed at *short-range predictions of general public events*, such as wars and harvests, from *striking phenomena* such as eclipses, clouds, annual rising and setting of planets, whereas the [later] Hellenistic ‘Chaldeans’ predicted *individual fates from positions of planets and zodiacal signs* at the date of *birth or conception*.”⁵⁰

Professor Otto Neugebauer, therefore, explains that “Mesopotamian ‘astrology’ can be much better compared with weather prediction from phenomena observed in the skies than with astrology in the modern sense of the word.” He also emphasizes that the origin of astronomy was not astrology but calendaric problems: “Determination of the season, measurement of time, lunar festivals—these are the problems which shaped astronomical development for many centuries,” and “even the last phase of Mesopotamian astronomy . . . was mainly devoted to problems of the lunar calendar.”⁵¹

2. SOME COMMENTS ON ANCIENT LUNAR ECLIPSES

How reliable are modern identifications of lunar eclipses described in ancient Babylonian astronomical texts from the eighth century B.C.E. onward? Pointing out one of the pitfalls, the Watch Tower Society quotes *The Encyclopædia Britannica* as saying that a particular town or city would, on the average, experience about forty lunar eclipses in fifty years.⁵² Although this is true, the frequency of eclipses falling in a specific month is much lower. Other factors, too, set limits to the alternatives.

Even when a lunar eclipse recurs in the same month one year later, it will not occur *at exactly the same time* of the day or be of *the same magnitude*. If it occurs during the daylight hours it will, of course, be invisible from that part of the earth. As the Babylonian astronomers often give specific data on lunar eclipses, such as date (regnal year, month, day),⁵³ time of the onset relative to sunrise or sunset, duration

50 B. L. van der Waerden, “History of the Zodiac,” *Archiv für Orientforschung*, Vol. 16 (1952/53), p. 224.

51 Otto Neugebauer, *Astronomy and History. Selected Essays* (New York: Springer-Verlag, 1983), p. 55.—For an extensive discussion of the nature of Babylonian astrology, see Francesca Rochberg-Halton, *Aspects of Babylonian Celestial Divination: The Lunar Eclipse Tablets of Enuma Anu Enlil* (= *Archiv für Orientforschung*, Beiheft 22), (Horn, Austria: Verlag Ferdinand Berger & Söhne Gesellschaft M.B.H., 1988), pp. 2-17.

52 *Insight on the Scriptures*, Vol. 1, p. 454.

53 The day number is often omitted in the texts, because, as each Babylonian month began at new moon, the full moon and therefore also any possible lunar eclipse always fell in or near to the middle of the month.

of partial and total phases, sometimes also magnitude and position relative to stars or constellations, the identification of the eclipses described in such texts usually creates no problems, provided that the texts are well preserved.

The Watchtower of March 15, 1969, pages 184 onward, refers to another factor, which, it is held, makes it difficult to identify ancient eclipses. It is pointed out that astronomers for a long time (for centuries, actually) have been aware of the fact that the tides produced by the moon and the sun in the oceans and body of the earth create a retardation of the earth's rotation, causing a gradual lengthening of the day. This, it is said in the article, affects the ancient records.

However, when it comes to identifying ancient lunar eclipses from the eighth century B.C.E. onward, this is not a major problem today. The great number of observations recorded on cuneiform tablets have, in fact, enabled modern astronomers to measure the exact rate of this change of the earth's rotation. It is known today that the length of the day increases at a rate of 1.7 milliseconds per century. The day in Late Babylonian time was thus about 43-44 milliseconds shorter than present.⁵⁴

Today astronomers, of course, make allowance for the variation in the earth's rotation in their calculations of the dates of ancient eclipses. *The Watchtower* article discussed *solar* eclipses only. But as very few reliable observations of *solar* eclipses are preserved from ancient times, and as none of them are connected with the chronology of the Neo-Babylonian period, they are irrelevant to our discussion.

As I wanted to know how ancient records of *lunar* eclipses are affected by this increasing of the solar day, I wrote to Professor Robert R. Newton, who at that time (in 1981) was a leading authority on this problem.⁵⁵ I wanted to know how much the lengthening of the solar day has affected ancient records of lunar eclipses and if we can still rely upon the older tables of calculations of lunar eclipses published by Oppolzer in 1887 and Ginzell in 1899.

54 This most recent value is the result of the very careful research performed by Richard Stephenson of the University of Durham and Leslie Morrison, formerly of the Royal Greenwich Observatory in Cambridge.—See *New Scientist*, January 30, 1999, pp. 30-33.

55 Newton's research in this area has since been improved upon by other scholars. See, now, the exhaustive discussion by F. Richard Stephenson in *Historical Eclipses and Earth's Rotation* (Cambridge: Cambridge University Press, 1997).

Newton, in his answer said:

I have not used Ginzler's canon much, and cannot speak specifically of the errors in it. However, I expect that his errors are about the same as those in Oppolzer's *Canon der Finsternisse*, which I have used extensively. The earliest lunar eclipse in his canon, for example, is that of -1206, April 21, which came at 20H 17M, Greenwich Mean Time, with a magnitude of 2.6 digits, according to his calculations. According to my calculations, it came on that date at 20H 32M, with a magnitude of 2.4 digits. *Thus it is perfectly safe to use Oppolzer's Canon in identifying ancient eclipses; his greatest errors are probably something like half an hour.*⁵⁶

As far as *lunar* eclipses are concerned, then, the argument that the lengthening of the solar day caused by tides makes it difficult to identify ancient eclipses is not valid. In modern eclipse catalogues, of course, the errors in the canons of Oppolzer and Ginzler have been corrected.⁵⁷

For Chapter Five:

THE "THIRD YEAR OF JEHOIAKIM" (DANIEL 1:1, 2)

Daniel 1:1f. dates the first deportation of Jewish prisoners by Nebuchadnezzar to the "third year of the reign of Jehoiakim." As was shown in the appendix for chapter two ("Methods of reckoning regnal years"), in this passage Daniel seems to follow the Babylonian method of counting regnal years, employing an accession year even for kings outside Babylon, including Jehoiakim. This makes Jehoiakim's fourth year (Jeremiah 46:2) his third year in the accession-year system, and this third year of Jehoiakim in turn corresponds to Nebuchadnezzar's accession year.

Thus it is seen that this first deportation took place in the same year as the famous battle at Carchemish, and evidently shortly after that battle, in the year 605 B.C.E. Daniel 1:1f., therefore, strongly supports

56 Letter Newton-Jonsson, dated May 11, 1981. Other scholars agree. Jean Meeus & Hermann Mucke, for example, in their *Canon of Lunar Eclipses — 2002 to + 2526* (Wien: Astronomisches Büro, 1979), page XII, explain that Oppolzer's monumental work "is accurate enough for historical research." This, of course, refers to ancient *lunar* eclipses, not ancient *solar* eclipses, on which the *Canon* is far from correct. See, for instance, the comments by Willy Hartner in *Centaurus*, Vol. 14 (1969), p. 65.

57 See, for example, Bao-Lin Liu and Alan D. Fiala, *Canon of Lunar Eclipses 1500 B.C.—A.D. 3000* (Richmond, Virginia: Willman-Bell, Inc., 1992).

the conclusion that Judah became a vassal to Babylon eighteen years before the destruction of Jerusalem in 587 B.C.E., in confirmation of the conclusion that the seventy years (Jeremiah 25:11; 29:10) should be understood as a period of *servitude*, not of desolation.

Reinterpretations of the “third year of Jehoiakim”

In order to undermine the strength of Daniel 1:1 several arguments have been advanced in the publications of the Watch Tower Society against a natural reading of this text. As early as 1896 Pastor Charles T. Russell, in writing in *Zion’s Watch Tower* of May 15, page 106 (*Reprints*, pp. 1975-76) argued against those who quoted Daniel 1:1 in support of the secular dates for Nebuchadnezzar’s reign:

For instance, they adopt the uncertain secular date for the beginning of Nebuchadnezzar’s reign; and then referring to Dan. 1:1, they *thus* fix the date of Jehoiakim’s reign and alter other matters to suit. Then again, they apply the “seventy years” as years of *captivity* and begin them in the third year of Jehoiakim; whereas the Scriptures unequivocally declare, repeatedly, that those were years of “desolation of the land,” “without an inhabitant.” (Jer. 25:11, 12; 29:10; 2 Chron. 36:21; Dan. 9:2.)

Several years later two prominent members of Russell’s movement, the Scottish brothers John and Morton Edgar, published the two-volume *Great Pyramid Passages*.⁵⁸ On page 31 of Volume II, they summarize their arguments against a natural reading of Daniel 1:1:

[1] It cannot be admitted that the 70 years desolation of Jerusalem and the land began in the 3rd year of Jehoiakim, for according to the Scriptures “desolation” implies “without an inhabitant,” and Jerusalem and the land were not without inhabitants until after the dethronement of Zedekiah. . . .

[2] [A natural reading of Daniel 1:1] conflicts with Daniel 2:1. In reading over the 1st chapter of Daniel it would appear that the Hebrew children were taken captive by Nebuchadnezzar in the 3rd year of Jehoiakim. They were trained in the learning and tongue of the Chaldeans for three years (verses 4, 5), and yet, according to Dan. 2:1, 25, they were brought into the presence of Nebuchadnezzar in

58 John and Morton Edgar, *Great Pyramid Passages* (London: The Marshall Press, Ltd., 1923-24). The first edition was published in 1912 and 1913 and was distributed by the Watch Tower Society. It was reissued with some additions in 1923 and 1924 by Morton Edgar, who also added a Vol. III. (His brother John Edgar died in 1910.) The quotations here are from the 1924 edition of Vol. II.

or before his *second* year, though verse 18 of the 1st chapter shows that the three years had completely expired.

How, then, is Daniel 1:1 to be understood? The Edgar brothers pointed out that “a number of commentators suggest that the 3rd year of Jehoiakim in Daniel 1:1 should be understood as meaning the 3rd year of his vassalage to Nebuchadnezzar,” which in effect was his eleventh and last regnal year.⁵⁹ In this way the deportation of Daniel and other Hebrew captives was made identical with the deportation of Jehoiachin in the *seventh year of Nebuchadnezzar*.

But this explanation did not negate the seeming conflict with Daniel 2:1, which dates the image dream of Nebuchadnezzar to his second year; in fact, that conflict was exacerbated. If Daniel was not deported to Babylon until the *seventh* year of Nebuchadnezzar, how could he be at his court interpreting his dreams in his *second* year, five years earlier?

So, in addition to the interpretation placed on Daniel 1:1 to explain its reference to the third year of Jehoiakim, there was also need for another interpretation of Daniel 2:1 to explain its reference to Nebuchadnezzar’s second year. The Edgar brothers suggested that the number “2” is an error, which “has evidently risen out of the number 12.”⁶⁰ Later these arguments were adopted by the Watch Tower Society. They were, for example, incorporated into the 1922 edition of the booklet *The Bible on Our Lord’s Return*, pages 84-88.

But the explanation that Daniel 1:1 refers to Jehoiakim’s third year of *vassalage* to Nebuchadnezzar, corresponding to Nebuchadnezzar’s seventh regnal year, creates yet another problem.

If this vassalage ended in the seventh year of Nebuchadnezzar, it must have begun *three years earlier* according to 2 Kings 24:1, or in Nebuchadnezzar’s *fourth* year, which was the eighth year of Jehoiakim. As is stated in 2 Kings 23:34-37, Jehoiakim was a tributary king *of Egypt* before he became a vassal to Babylon. If we accept the Watch Tower explanation, this would mean that his vassalage to

59 *Ibid.*, Vol. II, pp. 29 (fn. 4) and 31. This “solution,” found already in Josephus’ *Ant. X*, 6:1-3, was adopted by a number of later writers. Dr. E. W. Hengstenberg refers to it in his work *Die Authentie des Daniel und die Integrität des Sacharjah* (Berlin, 1831), p. 54. Hengstenberg rejects the idea because (1) there is no evidence indicating that Jehoiakim’s regnal years were counted in this curious way, (2) it is an unfounded hypothesis with no support in the Bible, or elsewhere, that Nebuchadnezzar’s first siege of Jerusalem occurred in Jehoiakim’s eighth year, and (3) the “solution” is in inextricable conflict with Daniel 2:1.

60 John and Morton Edgar, *op. cit.*, Vol. II, p. 32. This, too, is an old idea, suggested, for example, by Chrysostom in the fourth century. One ancient manuscript of the LXX version of Daniel (Papyrus 967), dating from the early third century C.E., also reads “twelfth” at Dan. 2:1. The reading is best explained as a scribal “correction”.—John J. Collins, *Daniel* (Minneapolis: Fortress Press, 1993), p. 154.

Egypt continued up to his eighth year. Yet both Jeremiah 46:2 and the Babylonian chronicle B.M. 21946 indicate that Jehoiakim's vassalage changed from Egypt to Babylon in the same year as the battle of Carchemish, or in the *fourth* year of Jehoiakim.

In the book *Equipped for Every Good Work*, published by the Watch Tower Society in 1946, the arguments against a natural reading of Daniel 1:1 are repeated on pages 225-227. But interestingly, the Egyptian vassalage is now discussed:

Jehoiakim was put on the throne by Egyptian decree and was tributary to Egypt for several years, but *when Babylon defeated Egypt Jehoiakim came under Babylonian control and so remained for three years*, after which three-year period as tributary to Babylon the Judean king rebelled.⁶¹

Here it is admitted that Jehoiakim's vassalage changed from Egypt to Babylon *when Babylon defeated Egypt*. The real problem, however, is concealed, as it is not mentioned that Egypt was defeated in the *fourth* year of Jehoiakim (Jeremiah 46:2), and not in his *eighth* year as the Watch Tower explanation would require!

Another interesting change may also be noted in *Equipped for Every Good Work*. Instead of holding to the earlier guess that the "second year" in Daniel 2:1 originally read "twelfth year," the following interpretation is presented:

The time of this dream and its interpretation is stated as the second year of Nebuchadnezzar's reign. . . . In the nineteenth year of his reign Nebuchadnezzar was used as God's executioner to destroy faithless Jerusalem and end Israel's history as an independent Theocratic nation. Then Nebuchadnezzar began reigning in a unique way, as the first of the world rulers of the Gentile times. In the second year of his reign *in this special capacity* the dream showing the end of Satan's organization and rule and the taking over of power by Christ's kingdom came to Nebuchadnezzar, as recorded at chapter 2.⁶²

According to this explanation, the "second year" of Daniel 2:1, or the second year of the Gentile times, reckoned from 607 B.C.E., was actually Nebuchadnezzar's *twentieth* regnal year! Why would

61 *Equipped for Every Good Work* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1946), pp. 225-226.

62 *Ibid.*, pp. 226-227. This, too, was an earlier idea, suggested already in the Jewish Talmud (*Seder 'Olam Rabbah*; see John J. Collins, *op. cit.*, p. 154). Hengstenberg (*op. cit.*, p. 54) rejects it because there is "not the slightest trace" of any such reckoning of Nebuchadnezzar's regnal years anywhere.

Daniel use this curious way of reckoning regnal years only in this passage of his book? No other arguments are proposed for this new position except this statement:

Here again, as at Daniel 1:1, the peculiarity which the writer of this book has of making a secondary reckoning of the years of a king's reign is demonstrated. He reckons by counting from epochal events within the reign that put the king in a new relationship.⁶³

There could hardly be a more obvious example of circular reasoning.

The date of Jehoiakim's rebellion

The latest discussion of these problems is found in the Watch Tower Society's Bible dictionary *Insight on the Scriptures*, Vol. 1 (1988), pages 1268-69. Daniel 1:1 is still interpreted as meaning the third year of Jehoiakim's *vassalage* to Babylon, beginning at the end of his eighth year of reign and ending in his eleventh and last year. On page 480 of Vol. 2 of the same work, an attempt is made to find support for this in the Babylonian chronicle B.M. 21946. After recording the battle of Carchemish in Nebuchadnezzar's accession year, this chronicle refers to several succeeding campaigns in the Hattu-area by Nebuchadnezzar, in his first, second, third and fourth years. Mentioning these campaigns, the Society's dictionary says that "evidently in the fourth year he made Judean King Jehoiakim his vassal. (2 Kings 24:1)"

This conclusion, however, is *not* supported by the Babylonian Chronicle. On the contrary, this chronicle indicates that Jehoiakim's vassalage to Babylon began in Nebuchadnezzar's accession-year, or possibly in his first year, and that in the fourth year Jehoiakim was already in open revolt against Babylon. To demonstrate this, it is necessary to quote important parts of the Babylonian Chronicle, from the accession year to the fourth year of Nebuchadnezzar:

Events from c. Sept./Oct. 605 to Jan./Feb. 604 B.C.E.:

"In (his) accession year Nebuchadnezzar (II) returned to Hattu. Until the month Shebat he marched about victoriously in Hattu. In the month Shebat he took the vast booty of Hattu to Babylon."

From May/June to Nov./Dec. 604:

"The first year of Nebuchadnezzar (II): In the month of Sivan he mustered his army and marched to Hattu. Until the month Kislev he

63 *Equipped for Every Good Work*, p. 227.

marched about victoriously in Hattu. All the kings of Hattu came into his presence and he received their vast tribute.”

From April/May 603 onwards:

“The se[cond year]: In the month of Iyyar the king of Akkad strenghtened his large army and [*marched to Hattu*]. He encamped [. . .] . . . large siege towers he moved acr[oss from the month] Iyyar until the month [. . . *he marched about victoriously in Hattu*].”

In 602:

“[The third year: In the month . . . , on] the thirteenth [day] Nabu-shumu-lishir [. . .] [*In the month . . . the king of Akka*]d mustered his army and [*marched*] to Hattu. [.] He brought the vast [*booty*] of Hattu into Akkad.”

In 601 (march against Egypt in Kislev = Nov./Dec.):

“The fourth year: The king of Akkad mustered his army and marched to Hattu. [*He marched about victoriously*] in Hattu. In the month Kislev he took his army’s lead and marched to Egypt. [*When*] the king of Egypt heard (the news) he *m[ustered]* his army. They fought one another in the battle-field and both sides suffered severe losses (literally, they inflicted a major defeat upon one another). The king of Akkad and his army [*went back*] to Babylon.”⁶⁴

From this chronicle it is seen that the *whole* Hattu-territory (primarily Syria-Lebanon but extending to Phoenicia and Palestine) became tributary to Nebuchadnezzar as of his accession year. And in Nebuchadnezzar’s first year it is explicitly stated that “all the kings of Hattu” were tributary to him, which reasonably cannot have excepted Jehoiakim.

Many scholars conclude that Nebuchadnezzar’s fourth year, in which *Insight on the Scriptures* supposes that Jehoiakim’s Babylonian vassalage *began*, was probably the year in which Jehoiakim *revolted* against Nebuchadnezzar, because in that year Nebuchadnezzar battled with Egypt, and both seem to have suffered great losses. Nebuchadnezzar had to return to Babylon, where he remained in the fifth year and “refitted his numerous horses and chariotry.”⁶⁵ This unsuccessful battle with Egypt may have encouraged Jehoiakim to throw off

64 A. K. Grayson, *Assyrian and Babylonian Chronicles* (New York: J. J. Augustin Publisher, 1975), pp. 100-101. The square brackets indicate damages in the text.

65 *Ibid.*, p. 101.

the Babylonian yoke, thus *ending* his three years of vassalage to Babylon.⁶⁶

2 Kings 24:1-7 seems to support the above conclusion. Verse 1 states that “in his (Jehoiakim’s) days Nebuchadnezzar the king of Babylon came up, and so Jehoiakim became his servant for three years. However, he turned back and rebelled against him.” As a result, Jehovah (through Nebuchadnezzar) “began to send against him marauder bands of Chaldeans and marauder bands of Syrians and marauder bands of Moabites and marauder bands of the sons of Ammon, and he kept sending them against Judah to destroy it, according to Jehovah’s word that he had spoken by means of his servants the prophets.”—2 Kings 24:1-2, *NW*.

The wording of this passage indicates that these marauder bands kept on raiding the territory of Judah for quite a time, evidently for some years. Jehovah “began” to send them, and, according to the *New World Translation*, “he *kept* sending them” against Judah. This was not one attack only, like that mentioned in Daniel 1:1, but it evidently came upon Judah in waves, time and again. Consequently, they could not have begun these attacks in the last year of Jehoiakim’s reign, and this also calls for an earlier beginning of Jehoiakim’s rebellion.

The three deportations to Babylon

Another line of evidence supporting a natural reading of Daniel 1:1, is that according to 2 Chronicles, chapter 36, verses 7, 10 and 18 the vessels of the temple were brought to Babylon in *three* successive installments:

(1) The first time, during *Jehoiakim’s* reign, “*some*” of the vessels were brought to Babylon. (Verse 7)

(2) The second time, together with *Jehoiachin*, the “*desirable*” (*NW*) or “*valuable*” (*NASB*) vessels were brought to Babylon. (Verse 10)

(3) The third time, together with *Zedekiah*, “*all*” the vessels were brought to Babylon. (Verse 18)

66 “This battle,” says J. P. Hyatt, “must lie back of Jehoiakim’s change of allegiance, when he withheld tribute from Babylonia, probably making an alliance with Egypt.” (“New Light on Nebuchadnezzar and Judean History,” *Journal of Biblical Literature*, Vol. 75, 1956, p. 281.) It is also possible that this change of allegiance occurred *some time before* Nebuchadnezzar’s war with Egypt. Nebuchadnezzar’s decision to march to Egypt in 601 B.C.E. may have been *caused* by the alliance between the Egyptians and Jehoiakim.—See Mark K. Mercer, “Daniel 1:1 and Jehoiakim’s three years of servitude,” *Andrews University Seminary Studies*, Vol. 27:3 (Autumn 1989), pp. 188-191.

From these texts we learn that *some* of the vessels were brought to Babylon *during Jehoiakim's reign*, the *valuable* vessels were brought *at the deportation of Jehoiachin*, and *all the rest* of the vessels were taken to Babylon *at the end of Zedekiah's reign*. Of the three deportations of vessels, the first is clearly referred to at Daniel 1:1, 2, as this text states that during the third year of Jehoiakim "*some*" of the vessels were brought to Babylon.⁶⁷

Again, this indicates that Daniel 1:1-2 refers to a deportation *different from and earlier than* that which took place at the end of Jehoiachin's short reign. This gives additional support to the conclusion that the phrase "the third year of the kingship of Jehoiakim" means what it says—Jehoiakim's third regnal year, not his eleventh.

Finally, if the deportation mentioned at Daniel 1:1-4 is equated with the one that took place at the end of Jehoiachin's three months of reign, why does Daniel state that "Jehovah gave into his hand *Jehoiakim*," instead of *Jehoiachin*? (Daniel 1:2) When Jehoiachin was taken captive, Jehoiakim had been dead for over three months. (2 Kings 24:8-17; 2 Chronicles 36:9-10) There is even evidence to show that Jehoiakim was already dead when Nebuchadnezzar, in his seventh year, left Babylon for the siege of Jerusalem that ended up in Jehoiachin's deportation. The evidence is as follows:

Nebuchadnezzar's siege of Jerusalem during the reign of Jehoiachin is also described in the Babylonian chronicle B.M. 21946. For the seventh year of Nebuchadnezzar this chronicle says:

From Dec. 598 (or Jan. 597) to March 597 B.C.E.:

"The seventh year: In the month Kislev the king of Akkad mustered his army and marched to Hattu. He encamped against the city of Judah and on the second day of the month Adar he captured the city (and) seized (its) king. A king of his own choice he appointed in the city (and) taking the vast tribute he brought it into Babylon."⁶⁸

67 It is interesting to note that in this first deportation Nebuchadnezzar brought only "some" of the vessels from the temple in Jerusalem to Babylon, and these were not even the "valuable" vessels. This strongly supports the conclusion that the siege of Jerusalem at this time did not end in the capture of the city. If it did, why did he not take the *valuable* vessels from the temple? If, on the other hand, the siege was raised because Jehoiakim capitulated and paid a tribute to Nebuchadnezzar, it is quite understandable that Jehoiakim did not include the most valuable vessels in the tribute.

68 A. K. Grayson, *op. cit.*, p. 102. The chronicle is in complete agreement with the description of this siege given in the Bible. (2 Kings 24:8-17; 2 Chronicles 36:9-10.)

Nebuchadnezzar's army left Babylon "in the month of Kislev," which was the *ninth* month, and seized Jehoiachin "on the second day of the month Adar," that is, the *twelfth* month.⁶⁹ This means that even if the army left Babylon in the *beginning* of Kislev (which this year began on December 18, 598 B.C.E., Julian calendar), the interval between the day it left Babylon until the city was captured and its king (Jehoiachin) seized, on the second Adar (which corresponded to March 16, 597), was *three months at the most*.⁷⁰

As Jehoiachin ruled for "three months and ten days" (2 Chronicles 36:9), he evidently had been ruling for some days *already when Nebuchadnezzar left Babylon in the month of Kislev!* If the siege of Jerusalem described at Daniel 1:1f. referred to this siege during the reign of Jehoiachin, how could it be said that it took place *during the reign of Jehoiakim* (Daniel 1:1), that Nebuchadnezzar came up "against *him*" (2 Chronicles 36:6), and that "Jehovah gave into his hand *Jehoiakim*" (Daniel 1:2), when Jehoiakim was already dead when Nebuchadnezzar left Babylon?

Equating the siege described at Daniel 1:1f. with the one that took place during the reign of Jehoiachin (2 Kings 24:10-12; 2 Chronicles 36:10) is clearly impossible. Daniel and the Chronicler at 2 Chronicles 36:6 both obviously describe an *earlier* siege and an *earlier* deportation, during the reign of *Jehoiakim*. There is no reason to believe that the "third year" of Daniel 1:1 means anything else but his third year of reign. There is no evidence at all, either in the book of Daniel, in the other books in the Bible or in the contemporary Neo-Babylonian historical texts, that regnal years were reckoned from a king's vassalage, or from Nebuchadnezzar's rise to world dominion. Such theories are nothing more than unfounded guesses, adopted only in an attempt to defend an erroneous application of the seventy years of servitude predicted by Jeremiah.

69 The Babylonians had a second Ululu (an intercalary month) in the seventh year of Nebuchadnezzar, thus making Kislev and Adar the tenth and thirteenth months respectively that year, although they were normally the ninth and twelfth calendar months. This fact does not affect the discussion above.

70 If the Babylonian army left Babylon some time after Jehoiachin had ascended the throne, the siege was of very short duration, two months at most and probably less, as the time the army needed to march from Babylon to Jerusalem has to be subtracted from the three months from Kislev to Adar. Such a march took at least one month. It is possible, however, that a part of the army had left Babylon earlier, as 2 Kings 24:10-11 indicates that Nebuchadnezzar arrived at Jerusalem some time after the siege had begun. The reason for the short duration of the siege was Jehoiachin's surrender to Nebuchadnezzar on Adar 2 or March 16, 597 B.C.E., Julian calendar. (2 Kings 24:12) For an excellent discussion of this siege, see William H. Shea, "Nebuchadnezzar's Chronicle and the Date of the Destruction of Lachish III," in *Palestine Exploration Quarterly*, No. 111 (1979), pp. 113f.

The three years of training

But what about the three years of training referred to in Daniel 1:5, 18, which seem to conflict with a natural reading of Daniel 1:1 and 2:1? Is there no simpler way to solve this seeming conflict than to suppose that the prophet in Daniel 1:1 reckoned Jehoiakim's regnal years from the beginning of his *vassalage* to Babylon, and Nebuchadnezzar's regnal years in Daniel 2:1 from the year of his *rise to world dominion*? Why should Daniel reckon the regnal years of these two kings in such a confusing, abnormal manner when he knew that his readers no doubt would misunderstand him? And why does he not reckon the regnal years in this peculiar way *elsewhere* in his book, for instance in 7:1, 8:1, 9:1, and 10:1, where he follows the customary method of reckoning regnal years? Before such strained explanations are adopted, should not a simpler and more natural solution be sought?

It has already been demonstrated in the appendix for chapter two ("Methods of reckoning regnal years") that there is no real discrepancy between the *third* year of Jehoiakim in Daniel 1:1, and his *fourth* year in Jeremiah 25:1 and 46:2. When the existing accession and nonaccession year systems are taken into consideration, this difference of one year is easily understood.⁷¹

This solution also has bearing upon the seeming conflict between the three years of training and Daniel 2:1. If Daniel 1:1 refers to Nebuchadnezzar's accession year (in agreement with the Babylonian Chronicle), his "second year" at Daniel 2:1 may be regarded as the third year of the training of the Jewish captives. According to the Hebrew way of reckoning time periods, whereby fractions of time were reckoned as full units, this would make three years.⁷² The three

71 A brilliant discussion of this problem may be found in the article by Professor Albertus Pieters, "The Third Year of Jehoiakim," in *From the Pyramids to Paul*, a miscellany in honour of Dr. G. L. Robinson (New York: Thomas Nelson and Sons, 1935), pp. 180-193. Pieters concludes: "The 'third year' of Jehoiakim in Dan. 1:1 is the same as the 'fourth year' of Jehoiakim in Jer. 25:1 and 46:2, the former being reckoned according to the Babylonian and the latter according to the Palestinian method of computing the years of the king's reign."—*Ibid.*, p. 181.

72 This way of counting time periods is often termed "inclusive reckoning." The best example is the period of Jesus' death, from Friday afternoon to his resurrection on Sunday morning. Although, chronologically, this period was a little more than two nights and one day, Bible writers refer to it as "three days" (Matt. 27:63; Mark 10:34), even "three days and three nights." (Matt. 12:40) The Watch Tower Society correctly applies it to mean "a portion of each of three days." (*Insight on the Scriptures*, Vol. 1, p. 593) Another example is the period of the siege of Samaria, stated at 2 Kings 18:9-10 to have lasted from the seventh to the ninth year of Hoshea; yet the siege is said to have lasted for "three years." For additional examples, see Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings*, new revised edition (Grand Rapids: Zondervan Publishing House, 1983), p. 52, fn. 12.

years are not necessarily three full years. Dr. Young presents the following table:⁷³

<i>Years of training:</i>	<i>Nebuchadnezzar:</i>
First year	Year of accession
Second year	First year
Third year	Second year

Applying this simple and biblical method to the problem solves the seeming conflict without unfounded theories and strained explanations. Many modern Biblical scholars, who regard the book of Daniel as authentic, have adopted this simple solution. Gerhard F. Hasel, for one, says:

It is no longer necessary to explain the difficulty between Dan. 2:1 and 1:1, 18 through textual emendation (H. Ewald, A. Kamphausen, J. D. Prince, K. Marti, and J. Jahn) or double reckoning (C. B. Michaelis, G. Behrmann). The practice of inclusive reckoning, together with the recognition of the Babylonian usage of the king's accession year as not being counted, removes all difficulties.⁷⁴

CHRONOLOGICAL TABLES COVERING THE SEVENTY YEARS

The subsequent tables have been developed in order to facilitate an examination of the arguments set forth in this work. The Babylonian and Persian Nisan-to-Nisan regnal years and the Judean Tishri-to-Tishri regnal years have been paralleled with our modern calendar. Also, the Babylonian accession years and the Judean nonaccession years have been duly considered. The guiding principle has been to take the biblical dates as they stand, if nothing else is indicated by the context. The tables intend to demonstrate how the different biblical dates may be brought into a natural harmony with each other, and also with the Babylonian chronicles. A few points require special comments:

A. Josiah's death at Megiddo, summer 609 (2 Kings 23:29)

As related in Chapter 5 above (section G-2), the city of Harran, the last Assyrian stronghold, was captured and plundered by Babylonian and Median forces, either late in 610 or early in 609 B.C.E. Ashur-uballit, the last Assyrian king, fled. In the summer of 609 a large Egyptian

73 Edward J. Young, *The Prophecy of Daniel* (Grand Rapids: Wm. B. Eerdmans Publishing Co., 1949), pp. 55-56; cf. pp. 267-70.

74 Gerhard F. Hasel in *Andrews University Seminary Studies*, Vol. XV, No. 2, 1977, p.

force headed by Pharaoh Necho marched up to the Euphrates to help Ashur-uballit recapture Harran. For some unknown reason, the Judean king Josiah tried to stop the Egyptian forces at Megiddo, but was defeated and mortally wounded.—2 Kings 23:29-30; 2 Chronicles 35:20-25.

At one time it was debated whether Josiah's death took place in 609 or 608 B.C.E.⁷⁵ This question is now settled, since the Babylonian chronicle B.M. 21901 (first published by D. J. Wiseman, 1956) shows that the unsuccessful attempt to recapture Harran took place between Tammuz and Elul (c. July-September) in Nabopolassar's seventeenth regnal year (609/08).⁷⁶ As the Egyptian army needed almost a month to travel from Megiddo up to the Euphrates, the battle at Megiddo and Josiah's death took place early in the summer of 609 B.C.E.⁷⁷

As may be seen from the tables, this date is in good agreement with a Judean Tishri-to-Tishri reckoning of regnal years.

B. Jehoahaz' three months of reign and Jehoiakim's succession

After the death of Josiah, the Jews made Jehoahaz the son of Josiah king in Jerusalem. (2 Chronicles 36:1) After only three months of reign, Pharaoh Necho, on his return from the Euphrates, removed Jehoahaz and put his brother Jehoiakim on the throne in Jerusalem. From then on Judah was a vassal to Egypt. As the failed Egyptian-Assyrian attempt to recapture Harran ended in Elul (August-September), and the Egyptian retreat from Harran to Jerusalem took almost a month, the removal of Jehoahaz and installation of Jehoiakim must have occurred in the next month, Tishri (September-October).

According to the Judean nonaccession year system, Jehoiakim's first regnal year, then, should be counted from Tishri 1, 609 B.C.E. Jehoahaz' three months of reign were evidently included in Josiah's reign of 31 years, instead of being counted as a separate regnal year. (Jehoiachin's three months of reign, which ended on March 16,

75 Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings*. New revised edition (Grand Rapids, Michigan: The Zondervan Corporation, 1983), pp. 205-206.

76 D. J. Wiseman, *Chronicles of Chaldean Kings* (London: The Trustees of the British Museum, 1961; first published in 1956), pp. 63-67. See also Hayim Tadmor's article "Chronology of the Last Kings of Judah" in *Journal of Near Eastern Studies*, Vol. XV (1956), p. 228.

77 A. Malamat, "The Twilight of Judah: In the Egyptian-Babylonian Maelstrom" in *Supplements to Vetus Testamentum*, Vol. XXVIII (Leiden: E.J. Brill, 1975), p. 125, fn. 5.

597 B.C.E., was evidently treated in a similar way, being a part of Zedekiah's first regnal year.)

C. Zedekiah's first year, 598/97 B.C.E.

As was shown in the first section of the Appendix for Chapter 5, "The 'third year of Jehoiakim' (Daniel 1:1-2)," the Babylonian chronicle B.M. 21946 dates Jehoiachin's removal from the throne to the second Adar of Nebuchadnezzar's seventh regnal year, corresponding to March 16, 597, Julian calendar, after which Zedekiah was appointed king. Following the nonaccession year system, Zedekiah's first year, then, was reckoned from Tishri, 598, to Tishri, 597 B.C.E. Zedekiah's first regnal year was the same as Jehoiachin's first year of *exile*, which is seen from a comparison of Ezekiel 24:1-2 (the dates in Ezekiel are those of Jehoiachin's exile) with 2 Kings 25:1.

This is quite natural, as Jehoiachin's three months of reign began after Tishri 598. His first regnal year, therefore, would have been reckoned from Tishri 1, 598, had he not been removed from the throne. Now his three months had to be included in Zedekiah's first regnal year.

D. Hananiah's "prophecy", July-August 594 B.C.E. (Jeremiah 28:1)

In Nebuchadnezzar's tenth year a rebellion broke out in his army from the month of Kislev to the month of Tebet (c. November 595–January 594 B.C.E.), according to the Babylonian Chronicle B.M. 21946.⁷⁸ If this rebellion caused the revolt plans among the Jewish exiles, which also spread to Judah as reflected in Jeremiah, chapters 27-29, these plans must have developed soon after the Babylonian rebellion. The "prophecy" of Hananiah, that the yoke of Babylon would be broken and the exiles brought back within two years, is dated to the *fifth* month of the *fourth* year of Zedekiah. (Jeremiah 28:1-4) This fifth month (Ab, corresponding to July-August), therefore, must have fallen in July-August, 594 B.C.E., a few months after Nebuchadnezzar had crushed the rebellion. A look at the table shows that the fifth month of Zedekiah's fourth year actually fell in July-August, 594 B.C.E., thus indicating that the chronological system presented in the tables is correct.

78 Wiseman, *op. cit.*, p. 73. Cf. A. K. Grayson, *Assyrian and Babylonian Chronicles* (Locust Valley, New York: J.J. Augustin Publisher, 1975), p. 102.

E. The siege of Jerusalem, 589-587 B.C.E.

It has been debated whether the siege lasted for eighteen months, or for about two-and-a-half years.⁷⁹ According to a Nisan-to-Nisan regnal year the siege lasted for eighteen months (2 Kings 25:1-4), but this conflicts with the statement in Ezekiel 33:21, which says that an escapee from the destruction of Jerusalem reached Ezekiel “in the *twelfth year*, in the tenth month, on the fifth day of the month.” This would mean that the escapee reached Ezekiel with the message that the city had been taken about *one-and-a-half years after* the destruction of Jerusalem. This seems incredible.

Therefore, it is often argued that Ezekiel 33:21 originally read “*eleventh year*,” which is supported by the Syriac Version, the Greek *Septuagint* Version, and a few Hebrew manuscripts.⁸⁰ But if a Tishri-to-Tishri regnal year is applied, the well-attested reading of “*twelfth year*” may be retained, with the escapee reaching Ezekiel about six months after the capture of Jerusalem, which seems more natural. Further, it is shown by this reckoning that the siege lasted for about two-and-a-half years, instead of eighteen months.

F. Jehoiachin’s 37th year of exile, 562/61 B.C.E.

In 2 Kings 25:27 (=Jeremiah 52:31), Jehoiachin’s 37th year is equated with the accession year of Evil-Merodach. Here we have an excellent confirmation of the conclusion that the Judean kings applied a Tishri-to-Tishri regnal year.

Evil-Merodach ascended to the throne in the autumn of 562 B.C.E., and his accession-year ran to Nisan, 561 B.C.E. Jehoiachin’s release from prison took place in the *twelfth* month of Evil-Merodach’s accession year (Jeremiah 52:31), on the twenty-fourth day. This corresponded to March 30, 561 B.C.E. (Julian calendar).

If Nisan-to-Nisan regnal years are applied to Jehoiachin’s exile, his 37th year cannot be counted from Nisan, 561 B.C.E., as this month fell *after* his release from prison. But if his 37th year of exile is reckoned from Nisan, 562 B.C.E., in order to retain the synchronism to Evil-Merodach’s accession year, his *first* year of exile has to be reckoned from Nisan, 598, to Nisan, 597 B.C.E. Is this likely?

79 “*The Nations Shall Know that I Am Jehovah*”—*How?* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1971), pp. 285-287, argues for a siege of eighteen months.

80 *Ibid.*, p. 286.

As his deportation took place around Nisan 1, 597 B.C.E. (2 Kings 24:10-17; 2 Chronicles 36:10, and the Babylonian Chronicle B.M. 21946:11-13), this would mean that his first year of exile fell nearly exactly one year before he was deported! As this is impossible, his years of exile must have been reckoned according to Tishri-to-Tishri years.

THE CHRONOLOGY OF THE SEVENTY YEARS

	Tishri		Nisan			Fall of Nineveh, July-Aug., 612.		The capture of Harran, c. Oct. 610–March 609. End of Assyria, 609.			First deportation of captives. (Daniel 1:1-2)		
	Nabopolassar —										Nebuchadnezzar —		
BABYLON	12	13	14	15	16	17	18	19	20	21/acc.	1	2	
B.C.E.	614	613	612	611	610	609	608	607	606	605	604	603	
JUDAH	26	27	28	29	30	31	1	2	3	4	5	6	
	Josiah —					Jehoiakim —					The battle of Carchemish in summer, 605 BCE.		
						Josiah's death at Megiddo, summer, 609.							
						Jehoahaz, 3 months.							

THE 70 YEARS "FOR BABYLON" BEGIN —

	Tishri		Nisan			Second deportation of captives (2 Kings 24:10-17), "at the return of the year" (2 Chron. 36:10), i.e. end of Adar or beginning of Nisan, in spring, 597. (Cf. BM 21946)						
	Nebuchadnezzar —											
BABYLON	3	4	5	6	7	8	9	10	11	12	13	14
B.C.E.	602	601	600	599	598	597	596	595	594	593	592	591
JUDAH	7	8	9	10	11	1	2	3	4	5	6	7
	Jehoiakim —					Zedekiah — and years of Jehoiachin's exile — Jerusalem seized on March 16, 597. (2 Kings 24:10-12; BM 21946)						
						Jehoiachin, 3 months.						

	Tishri		Nisan			An escaped one reaches Ezekiel "in the twelfth year," i.e. in January, 586 BCE. (Ez. 33:21)			Fourth deportation of captives. (Jer. 52:30)			
	Nebuchadnezzar —											
BABYLON	15	16	17	18	19	20	21	22	23	24	25	26
B.C.E.	590	589	588	587	586	585	584	583	582	581	580	579
JUDAH	8	9	10	11	12	13	14	15	16	17	18	19
	Zedekiah — Jehoiachin's exile —					Years of Jehoiachin's exile — Jerusalem captured in July, 587 BCE. (2 Kings 25:2-4; Jer. 39:2; 52:5-11)						
	Jerusalem besieged, January, 589 BCE. (2 Kings 25:1)					Temple burned and Jerusalem destroyed in August, 587 BCE. (2 Kings 25:8-10)						
						Third deportation of captives.						

	Tishri		Nisan										Nebuchadnezzar —		Nebuchadnezzar's 37th year astronomically fixed. (VAT 4956)	
BABYLON	27	28	29	30	31	32	33	34	35	36	37	38				
B.C.E.	578	577	576	575	574	573	572	571	570	569	568	567				
JUDAH	20	21	22	23	24	25	26	27	28	29	30	31				

Years of Jehoiachin's exile —

	Tishri		Nisan										Cyrus king of Anshan.		Labashi-Marduk (c. 2 months)	
	Nebuchadnezzar —										Evil-Merodach —		Neriglissar —		Nabonidus —	
BABYLON	39	40	41	42	43/acc.	1	2/acc.	1	2	3	4/acc.	1				
B.C.E.	566	565	564	563	562	561	560	559	558	557	556	555				
JUDAH	32	33	34	35	36	37	49	50	51	52	53	54				

Years of Jehoiachin's exile — Years "for Babylon" (from 609 BCE) —

Jehoiachin released from prison in March, 561. (2 Kings 25:27)

	Tishri		Nisan										Belshazzar coregent with Nabonidus. (BM 38299)		Cyrus of Anshan defeats Astyages of Media. (BM 35382)		Cyrus defeats Lydia.	
	Nabonidus —																	
BABYLON	2	3	4	5	6	7	8	9	10	11	12	13						
B.C.E.	554	553	552	551	550	549	548	547	546	545	544	543						
JUDAH	55	56	57	58	59	60	61	62	63	64	65	66						

Years "for Babylon" (from 609 BCE) —

For Chapter Seven:

A REVIEW OF:

ROLF FURULI, *PERSIAN CHRONOLOGY AND THE LENGTH OF THE BABYLONIAN EXILE OF THE JEWS* (OSLO: ROLF FURULI A/S, 2003)

Persian Chronology and the Length of the Babylonian Exile of the Jews is the first of two volumes in which Rolf Furuli attempts to revise the traditional chronology for the Neo-Babylonian and Persian periods. Furuli states that the reason for this venture is that this chronology is in conflict with the Bible. He insists that the Bible “unambiguously,” “explicitly,” and “definitely” shows that Jerusalem and the land of Judah were desolate for 70 years, until the Jewish exiles in Babylon returned to Judah as a result of the decree Cyrus issued in his first regnal year, 538/37 B.C.E. (pp. 17, 89, 91). This implies that the desolation of Jerusalem in Nebuchadnezzar’s 18th regnal year took place 70 years earlier, in 607 B.C.E. As has been amply documented in the present work, this is contrary to modern historical research, which has fixed the 18th year of Nebuchadnezzar in 587/86 B.C.E. Furuli does not explicitly mention the 607 B.C.E. date in this volume, perhaps because a more detailed discussion of the Neo-Babylonian chronology is reserved for his not-yet-published second volume.

Most of the ten chapters in this first volume, therefore, contain a critical examination of the reigns of the Persian kings from Cyrus to Darius II. The principal claim of this discussion is that the first year of Artaxerxes I should be moved 10 years backward, from 464 to 474 B.C.E. Furuli does not mention that this is an old idea that can be traced back to the noted Jesuit theologian Denis Petau, better known as Dionysius Petavius, who first presented it in a work published in 1627. Petavius’ revision had a theological basis, because, if the “seventy weeks [of years],” or 490 years, of Daniel 9:24-27 are to be counted from the 20th regnal year of Artaxerxes (Neh. 2:1ff.) to 36 C.E. (his date for the end of the period), Artaxerxes’ 20th year must be moved from 445 back to 455 B.C.E. Furuli says nothing about this underlying motive for his proposed revision.

The hidden agenda

Furuli published this book at his own expense. On the back cover of the book he presents himself this way:

Rolf Furuli is a lecturer in Semitic languages at the University of Oslo. He is working on a doctoral thesis which suggests a new understanding of the verbal system of Classical Hebrew. He has for many years worked with translation theory, and has published two books on Bible translation; he also has experience as a translator. The present volume is a result of his study of the chronology of the Ancient world for more than two decades.

Furuli does not mention that he is a Jehovah's Witness, and that for a long time he has produced apologetic texts defending Watchtower exegesis against criticism. His two books on Bible translation are nothing more than defenses of the Witnesses' *New World Translation* of the Bible. He fails to mention that for many years he has tried to defend Watchtower chronology and that his revised chronology is essentially a defense of the Watchtower Society's traditional chronology. (See above, pages 308, 309.) He describes his chronology as "a new chronology," which he calls "the Oslo Chronology," (p. 14) when in fact the 607 B.C.E. date for the destruction of Jerusalem is the chronological foundation for the claims and apocalyptic messages of the Watchtower organization, and the 455 B.C.E. date for the 20th year of Artaxerxes I is its traditional starting point for its calculation of the "seventy weeks" of Daniel 9:24-27.

Despite these facts, Furuli nowhere mentions the Watchtower Society or its chronology. Nor does he mention my detailed refutation of this chronology in various editions of the present work, *The Gentile Times Reconsidered* (GTR), first published in 1983, despite the fact that in circulated "organized collections of notes" he has tried to refute the conclusions presented in its earlier editions. Furuli's silence on GTR is noteworthy because he discusses R. E. Winkle's 1987 study of the Biblical 70-year period which presents mostly the same arguments and conclusions as are found in the first edition of GTR (1983). (See above, p. 235, note 57.) As a Jehovah's Witness, Furuli is forbidden to interact with former members of his organization. If this is the reason for his feigned ignorance of my study, he is acting as a loyal Witness – not as a scholar.

Clearly, Furuli has an agenda, and he is hiding it.

ATTEMPTS TO REVISE THE NEO-BABYLONIAN CHRONOLOGY

Although Volume I of Furuli's work principally is an attempt at revising the Persian chronology, some parts of it also contain arguments for a lengthening of the Neo-Babylonian chronology:

(A) In chapter 6 Furuli claims there are dated business tablets from the 17th regnal year of Nabonidus that *overlap* Cyrus' reign, which, if they are correct, "suggest that Nabonid reigned longer" (p. 132).

(B) As the chronology of the Neo-Nabylonian period is fixed by a number of astronomical tablets, Furuli devotes much space on trying to undermine the reliability of these tablets, including the astronomical diary VAT 4956 from the 37th year of Nebuchadnezzar. In Chapter 1 he claims there are only two principal astronomical sources for the chronology of the Neo-Babylonian and Persian periods. In the same chapter he describes nine "potential sources of error" in the Babylonian astronomical tablets.

(C) In Chapter 2 Furuli argues that the astronomical texts probably mainly contain, not actual observations, but backward calculations performed during the Seleucid era (after 312 B.C.E.).

(D) In Chapter 4, finally, Furuli discusses Jeremiah's prophecy of the 70 years, arguing that the writers of Daniel 9:2 and 2 Chronicles 36:21 "unambiguously" applied the 70 years to the period of the desolate state of Jerusalem.

In this review I will critically examine these claims one by one. As the Persian chronology is not the subject of the present work, Furuli's chronological revision of that period will not be examined here. A more detailed review of Furuli's book that includes comments on his revised Persian chronology is found on this site: <http://user.tninet.se/~oof408u/fkf/english/furulirev.htm> .

For some works often referred to in the discussion below the following abbreviations are used:

ADT Abraham J. Sachs and Hermann Hunger, *Astronomical Diaries and Related Texts from Babylonia* (Wien: Verlag der Österreichischen Akademie der Wissenschaften. Vol. I – 1988, II – 1989, III – 1996, V – 2001).

CBT Erle Leichty et al, *Catalogue of the Babylonian Tablets in the British Museum*, Vols. 6, 7, and 8 (1986, 1987, and 1988). These volumes list the tablets from Sippar held at BM.

LBAT Abraham J. Sachs (ed.), *Late Babylonian Astronomical and Related Texts. Copied by T. G. Pinches and J. N. Strassmaier* (Providence, Rhode Island: Brown University Press, 1955).

PD Richard A. Parker and Waldo H. Dubberstein, *Babylonian Chronology 626 B.C. – A.D. 75* (Providence, Rhode Island: Brown University Press, 1956).

(A) The supposed “overlap” between the reigns of Nabonidus and Cyrus

An argument repeatedly used by Furuli is that the existence of dated business documents showing chronological “overlaps” of some days, weeks, or months between a king and his successor proves that “something is wrong with our chronological scheme. In that case it is likely that the successor did not succeed the previous king in the year when he died. There may be one or more years in between, or there may even be another ruler between the two kings in question. This way to test a chronology is very important because there are discrepancies between all the kings of the New Babylonian Empire and several of the early kings of the Persian Empire.” (p. 132)

This argument is critically examined and disproved in the Appendix of the present work, where the conceivable “overlaps” between the reigns of all the kings of the Neo-Babylonian period are examined in detail. (See above, pp. 321-329.) The only suggested “overlap” not discussed is that between the 17th year of Nabonidus and the accession-year of Cyrus. The reason for this is not just that there are no dated texts that show such an overlap between the two reigns, but also because there are a number of tablets that definitely prove that Cyrus succeeded Nabonidus in his 17th year. Five such texts are discussed in the present work on pages 135-139 above.

Nevertheless, Furuli claims that some business tablets show an overlap between Nabonidus’ 17th year and Cyrus’ accession-year. His “Table 18” on p. 132 shows that the earliest tablet extant from the reign of Cyrus (CT 57:717) is dated to day 19, month VII (Tishri) of his accession-year, i.e., three days after the fall of Babylon. This date is correct. But then Furuli goes on to list three tablets in his table that seem to be dated to Nabonidus *after* the earliest tablet dated to Cyrus, indicating an overlap of five months between the two kings:

<u>Month-day-year:</u>	<u>King:</u>
VII --19 – acc.	Cyrus
VIII -- 10 – 17	Nabonidus
IX -- xx – 17	Nabonidus
XII -- 19 –17	Nabonidus

Furuli concludes:

If one or more of the three tablets dated in months 8 and 12 of Nabonid are correct, this suggests that Nabonid reigned longer than 17 years. (p. 132)

But none of the three “overlapping dates” are real.

(A-1) Nabonidus “VIII – 10 – 17” (BM 74972):

As Furuli explains, PD rejected this date because “the month sign is shaded” in J. N. Strassmaier’s copy of the text published in 1889.⁸¹ They had good reasons for doing this because F. H. Weissbach, who collated the tablet in 1908, explained that the month name was highly uncertain and “in any case not Arahsamnu” (month VIII).⁸²

Actually, there is an even more serious error with the date. Back in 1990 I asked C. B. F. Walker at the British Museum to take another look at the date on the original tablet. He did this together with two other Assyriologists. They all agreed that the year is 16, not 17. Walker says:

On the Nabonidus text no. 1054 mentioned by Parker and Dubberstein p. 13 and Kugler, SSB II 388, I have collated that tablet (BM 74972) and am satisfied that the year is 16, not 17. It has also been checked by Dr. G. Van Driel and Mr. Bongenaar, and they both agree with me.⁸³

(A-2) Nabonidus “IX – xx – 17” (No. 1055 in Strassmaier, Nabonidus):

This text does not give any day number, the date above just being given as “Kislimu [= month IX], year 17 of Nabonidus”. The text, in fact, contains four different dates of this kind, in the following chronological disorder: Months IX, I, XII, and VI of “year 17 of Nabonidus”. None of these dates refers to the time when the tablet was drawn up. Such a date is actually missing on the tablet. As F. X.

81 PD (Parker & Dubberstein’s *Babylonian Chronology*, 1956), p. 13. The tablet is listed as No. 1054 in J. N. Strassmaier, *Inschriften von Nabonidus, König von Babylon* (Leipzig, 1889).

82 See F. X. Kugler, *Sternkunde und Sterndienst in Babel* [SSB], Vol. II:2 (1912), p. 388

83 Letter Walker to Jonsson, November 13, 1990.

Kugler explained, the tablet belongs to a category of texts containing installment dates or delivery dates (*mashshartum*).⁸⁴ Such dates were given at least one month, and often several months in advance. That is why PD states (p. 14) that “this tablet is useless for dating purposes.” As shown by its contents, No. 1055 is an administrative text giving the dates for deliveries of certain amounts of barley in year 17 of Nabonidus.⁸⁵

(A-3) Nabonidus “XII – 19 – 17” (BM 55694):

This tablet was copied by T. G. Pinches in the 1890’s and was finally published in 1982 as CT 57:168.⁸⁶ It is also listed in CBT 6, p. 184, where the date is given as “Nb(-) 19/12/13+” (= day 19, month 12, year 13+).⁸⁷ Evidently the royal name and the year number are both damaged and only partially legible. “Nb(-)” shows that the royal name begins with “Nabu-”. This could refer to either Nabopolassar, Nebuchadnezzar, or Nabonidus. If it is Nabonidus, the damaged year number, “13+”, may refer to any year between his 13th and 17th year. An examination of the original tablet might perhaps give some clues.

None of the three tablets listed by Furuli, then, can be used to prove that Nabonidus’ 17th year overlapped the accession-year of Cyrus, suggesting that “Nabonid reigned longer than 17 years.”

(B) Attempts at undermining the reliability of the astronomical tablets

(B-1) Only three principal sources for the chronology of the ancient world?

Furuli is well aware that the most damaging evidence against his so-called “Oslo Chronology” is provided by the astronomical cuneiform tablets. He therefore strives to belittle the importance of most of these tablets, stating that there are only two principal astronomical sources on which the chronology of the Neo-Babylonian and Persian periods can be based. (Pages 15, 24, 45) At least one of these, he claims, contradicts the third principal chronological source—the Bible:

84 F. X. Kugler, SSB II:2 (1912), pp. 388, 389.

85 P.-A. Beaulieu in the *Journal of Near Eastern Studies*, Vol. 52:4 (1993), pp. 256, 258.

86 CT 57:168 = *Cuneiform Texts from Babylonian Tablets in the British Museum*, Part 57 (1982), No. 168.

87 Erle Leichty, *Catalogue of the Babylonian Tablets in the British Museum* (CBT), Vol. 6 (1986), p. 184 (82-7-14, 51).

There are three principal sources with information regarding the chronology of the New Babylonian and Persian kings, namely, *Strm Kambys 400*, *VAT 4956* and the Bible. The information in these three sources cannot be harmonized. (p. 21)

Furuli knows, of course, that for the fixing of the absolute date for the fall of Babylon to 539 B.C.E., at least one astronomical text is needed. As the diary *VAT 4956* is disastrous for his Oslo Chronology, he is forced to choose *Strm Kambys 400* for this purpose, claiming that this is “the tablet that is most important for Persian chronology” (p. 128) and “the only source on the basis of which an absolute chronology can be made regarding the year Cyrus conquered Babylon.” (p. 134)

The poor quality of this tablet has already been pointed out in the present work. As was noticed already by F. X. Kugler in 1903, it is probably the least reliable of all astronomical tablets. (See above, pp. 84-88.) Modern scholars even question whether it contains any observations at all. Dr. John M. Steele, for example, explains:

It is also unwise to base any conclusions concerning the Babylonian records on this tablet alone, since it does not fall into any of the common categories of text. In particular, it is not certain whether this text contains observations or calculations of the phenomena it records. At least some of the data must be calculated. For instance, the full run of lunar six timings for the 7th year of Cambyses cannot all have been measured; clouds would surely have prevented their observation on at least some occasions. The lunar six data must therefore have been either all calculated, as suggested by Kugler (1907: 61-72), or be a mixture of observation and calculation. There is also debate concerning whether the two lunar eclipses were observed or calculated.⁸⁸

The fact is that the chronology of the Neo-Babylonian and Persian eras is fixed by nearly 50 astronomical observational tablets (diaries, eclipse texts, and planetary texts). Many of them are quite extensive and detailed and serve as principal sources for the absolute chronology of this period. Most of these tablets are published in vol-

88 John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers* (Dordrecht-Boston-London: Kluwer Academic Publishers, 2000), p. 98. C. B. F. Walker refers, for example, to the inaccurate magnitude reported for one the two eclipses in the text, “but,” he adds, “the Cambyses text is now understood to contain a series of predictions rather than observations.” – Walker in John Curtis (ed.), *Mesopotamia in the Persian Period* (London: The Trustees of the British Museum, 1997), p. 18.

umes I and V of Sachs & Hunger's ADT.⁸⁹ For example, there are about 25 diaries from the reign of Artaxerxes II (404-359 BCE), 11 of which have the royal name and regnal dates preserved. Most, if not all, of these appear to be, not later copies, but original compilations from the 46-year reign of Artaxerxes II.⁹⁰ Therefore, to fix the absolute chronology of the reign of Artaxerxes II or any other Persian king, *Strm Kamby's 400* is needless and irrelevant. Nor is it needed to fix the reigns of Cambyses and Cyrus, which can be more securely fixed by other texts.

(B-2) Potential "sources of errors" in the Babylonian astronomical tablets

Attempting to further weaken the reliability of the astronomical texts, Furuli, on pages 29-37, describes nine "potential sources of error" that might undermine the trustworthiness of tablets that conflict with his Oslo Chronology, such as VAT 4956. On closer inspection, however, the supposed "sources of error" turn out to be either (a) trivial and immaterial, (b) not applicable to the tablets used for fixing the Neo-Babylonian and Persian chronology and therefore irrelevant, or (c) mere figments of imagination. All of Furuli's "potential sources of errors" fall into one of these three categories. Some examples are given below.

(B-2a) Trivial and immaterial sources of error:

An example of (a) is Furuli's description of "the process of writing down the data." His discussion of this focuses on the astronomical diary VAT 4956, dated to the 37th year of the reign of Nebuchadnezzar. Furuli explains:

The tablet itself is a copy made a long time after the original was made, but even the original was not made at the time the observations were made. The tablet covers a whole year, and because clay hardly can be kept moist for 12 months, the observations must have been written down on quite a lot of smaller tablets, which were copied when the original was made. (pp. 30, 31)

As far as the *copying* and *compilation* procedure is concerned, Furuli's description is correct and well known to Assyriologists. Copying errors do exist, but they usually create few problems in tablets that are fairly well preserved and detailed enough to be useful

89 ADT = *Astronomical Diaries and Related Texts from Babylonia*.

90 Communication H. Hunger to C. O. Jonsson, dated January 26, 2001.

for chronological purposes. As discussed in chapter 4 of the present work (p. 162 above), the dated lunar and planetary positions recorded in VAT 4956 evidently contain a couple of scribal errors. These errors, however, are minor and easily detected by modern computations of the observations recorded.

Thus, on the obverse (front) side, line 3 has day “9”, which already P.V. Neugebauer and E. F. Weidner pointed out is a scribal error for day “8”.⁹¹ Similarly, obverse, line 14, has day “5”, which is obviously an error for day “4”. The remaining legible records of observed lunar and planetary positions, about 30, are correct, as is demonstrated by modern calculations. In their recent examination of VAT 4956, Professor F. R. Stephenson and Dr. D. M. Willis conclude:

The observations analyzed here are sufficiently diverse and accurate to enable the accepted date of the tablet—i.e. 568-567 B.C.—to be confidently confirmed.⁹²

(B-2b) Inapplicable and therefore irrelevant “sources of error”:

An example of (b) is Furuli’s reference to the gradual change in the speed of the earth’s rotation. (p. 33) As is pointed out in the present work (p. 334 above), this is no problem for the period under discussion, as the rate of the decrease in the earth’s rotation has been established back to, and even over a century beyond the Neo-Babylonian period. From the middle of the 8th century B.C.E. and on, therefore, we are on “safe ground” with respect to this source of error.

(B-2c) Imaginary “source of error”, no. 1:

An example of (c) is Furuli’s reference to the supposed “crudeness of observations” recorded on the astronomical tablets. On page 32 he claims:

One problem is the crudeness of the observations. Because the tablets probably were made for astrological reasons, it was enough to know the zodiacal sign in which the moon or a certain planet was found at a particular point of time. This does not give particularly accurate observations.

By this statement Furuli creates a false impression that the lunar and planetary positions recorded on the Babylonian astronomical tablets are given *only* in relation to zodiacal signs of 30 degrees each. He

91 A translation and discussion of the tablet by Neugebauer & Weidner was published in 1915. See above, p. 157, note 8.

92 F. R. Stephenson & D. M. Willis in J. M. Steele & A. Imhausen [eds.], *Under One Sky. Astronomy and Mathematics in the Ancient Near East* (Munster: Ugarit-Verlag, 2002), pp. 423-428. (Emphasis added)

supports this by quoting a scholar, Curtis Wilson, who in a review of a book by R. R. Newton made such a claim, stating that, “The position of the planet is specified only within an interval of 30°.”⁹³

But anyone with even a cursory acquaintance with the Babylonian astronomical tablets knows that Wilson’s claim – repeated by Furuli – is false. Although it is true that many positions recorded on the tablets are given with reference to constellations along the zodiacal belt, the great majority of the positions, even in the earliest diaries, are given with reference to stars or planets. The division of the zodiacal belt into signs of 30 degrees each took place later, during the Persian era, and it is not until “toward the end of the 3rd century B.C.” that “diaries begin to record the dates when a planet moved from one zodiacal sign to another.”⁹⁴ During the entire 800-year period from ca. 750 BCE to ca. 75 CE the Babylonian astronomers used a number of stars close to the ecliptic as reference points. As Professor Hermann Hunger explains in a work also used by Furuli:

In order to give the position of the moon and the planets *a number of stars close to the ecliptic are used for reference*. These have been called “Normalsterne” [*Normal Stars*] by Epping, and the term has remained in use ever since. (ADT, Vol. I, p. 17; emphasis added.)

On pages 17-19 of the same work, Hunger lists 32 such *normal stars* known from the tablets. Noel Swerdlow states: “By far the most numerous observations of planets in the Diaries are of their distances ‘above’ or ‘below’ and ‘in front of’ or ‘behind’ normal stars and each other, measured in cubits and fingers.”⁹⁵

Such detailed observations are shown by *VAT 4956*, in which about two-thirds of the lunar and planetary positions recorded are given *in relation to normal stars and planets*. And, in contrast to positions related to constellations, where the moon or a planet usually is just said to be “in front of,” “behind,” “above,” “below,” or “in” a certain constellation, the records of positions related to normal stars also give the *distances* to these stars in “cubits” (of ca. 2–2.5 degrees each) and “fingers” (1/24 of the cubit), as Swerdlow points out. Although the measurements are demonstrably not mathematically

93 C. Wilson in *Journal of the History of Astronomy* 15:1 (1984), p. 40.

94 H. Hunger in N. M. Swerdlow [ed.], *Ancient Astronomy and Celestial Divination* (London: The MIT Press, 1999), p. 77. Cf. B. L. Van der Waerden, “History of the Zodiac,” *Archiv für Orientforschung* 16 (1952/1953), pp. 216-230.

95 N. M. Swerdlow, *The Babylonian Theory of the Planets* (Princeton, New Jersey, 1998), p. 39.

exact, they are considerably more precise than positions related only to constellations.

By parsing all the astronomical diaries in the first two volumes of Sachs/Hunger's ADT, Professor Gerd Grasshoff "obtained descriptions of 3285 events, of which 2781 are complete without unreadable words or broken plates. Out of those are 1882 topographical events [i.e., positions related to stars and planets], 604 are lunar observations called *Lunar Six* ... and 295 are locations of a celestial object in a constellation."⁹⁶ Thus, two-thirds of the positions are related to stars or planets, whereas only about 10 percent are related to constellations.

(B-2c) Imaginary "source of error", no. 2:

Another example of (c) is Furuli's claim that the 12,000-foot mountain range to the east of Babylon might prevent or preclude observations:

To the east of Babylon there is a mountain range rising to about 12,000 feet above sea level, while the area to the west of the city is a flat desert. ... it is obvious that the high mountains to the east of Babylon would prevent some observations. (p. 29)

But the Zagros mountains to the east of Babylon create no serious problems. The higher parts of the range begin about 230 kilometers east of Babylon with *Kuh-e Varzarin* at about 9500 feet above sea level. Mountains "about 12,000 feet above sea level" lie considerably farther away. Due to the distance and the curvature of the earth, the Zagros mountains are not visible from Babylon, at least not from the ground, as can be testified by anyone who has been there. Professor Hermann Hunger, for example, says:

I have been there [in Iraq], three years, of which two months were spent in Babylon. There are no mountains visible from Babylon.⁹⁷

It is possible, of course, that an observer atop the 90-meter-high Etemenanki ziggurat in Babylon (if the observations could have been made from there) could have seen a very thin, irregular line of mountains far to the east, although this, too, is doubtful. This might have affected the *arcus visionis* to some degree (the smallest angular distance of the sun below the horizon at the first or last visibility of a

96 Gerd Grasshoff, "Normal Stars in Late Astronomical Babylonian Diaries," in Noel M. Swerdlow [ed.], *Ancient Astronomy and Celestial Divination* (London: The MIT Press, 1999), p. 107.

97 Communication Hunger to Jonsson, December 4, 2003.

heavenly body above the horizon), which in turn could have changed the date of the first and last visibility of a heavenly body by a day or two.

It should be emphasized that this might possibly be a problem with astronomical texts that report only phenomena close to the horizon. Observations of lunar and planetary positions related to specific stars and constellations higher in the sky would not be affected, and it is usually these that are the most useful for chronological purposes. Most of the about 30 lunar and planetary positions recorded on the astronomical tablet *VAT 4956* belong to this category.

None of Furuli's "potential sources of error" weakens the reliability of *VAT 4956*. I am aware of only one scholar who has tried to overcome the evidence provided by this diary, namely, E. W. Faulstich, founder and director of the Chronology-History Research Institute in Spencer, Iowa, USA. Faulstich believes it is possible to establish an absolute Bible chronology without the aid of extra-Biblical sources, based solely on the cyclical phenomena of the Mosaic law (sabbath days, sabbath and jubilee years) and the cycle of the 24 sections of the levitical priesthood. One consequence of his theory is that the whole Neo-Babylonian period has to be moved backward one year. Because this conflicts with the absolute dating of the period based on the astronomical tablets, Faulstich argues that *VAT 4956* contains information from two separate years mixed into one. This idea, however, is based on serious mistakes. I have thoroughly refuted Faulstich's thesis in the unpublished article, "A critique of E.W. Faulstich's Neo-Babylonian chronology" (1999), available from me upon request.

(C) Are most astronomical positions calculated rather than observed?

The "most acute problem for making an absolute chronology based on astronomical tablets," Furuli claims, is that many, "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed." (p. 15) Is this true?

As discussed in chapter 4 of the present work (pp. 154-156 above), Babylonian astronomers at an early stage were able to predict certain astronomical phenomena, such as the occurrences of lunar eclipses and certain planetary positions. These calculations presuppose that they had worked out theories for dating and locating such phenomena. In fact, about 300 texts have been found containing lists of lunar and

planetary positions at regular intervals. (See above, p. 156.) Such arithmetical tables were termed “ephemerides” by Professor Otto Neugebauer, who published all extant tablets of this kind in his three-volume work, *Astronomical Cuneiform Texts* (1955). All these tablets are late, almost all dating from the 3rd to the 1st centuries B.C.E.

Does this mean, then, that all or most of the phenomena recorded on the astronomical tablets might have been computed rather than observed, as Furuli claims? Were the Babylonian astronomers able to do this? Are there indications in the recorded data that they did just that?

(C-1) Phenomena the Babylonian astronomers were unable to calculate

Although the Babylonian astronomers were able to calculate and predict certain astronomical events, the observational texts – diaries, planetary texts, and eclipse texts – contain reports of several phenomena and circumstances connected with the observations that could not have been calculated.

That the diaries usually record *real observations* is shown by their reports of climatological phenomena. For example, the scribes repeatedly report when bad weather *prevented* astronomical observations. We often find reports about “clouds and rain of various sorts, described in detail by numerous technical terms, as well as fog, mist, hail, thunder, lightning, winds from all directions, often cold, and frequent ‘*pisan dib*’, of unknown meaning but always associated with rain.”⁹⁸ Other recorded phenomena were rainbows, solar halos and river levels. None of these could have been retrocalculated much later. What, then, about the astronomical phenomena?

As discussed in chapter 4 of the present work (p. 185 above), there were a number of *planetary phenomena* recorded in the texts that the Babylonian astronomers were unable to calculate. These included conjunctions of planets with the moon and other planets, with their distances. *VAT 4956* records a number of such – for the Babylonian astronomers – unpredictable and incalculable phenomena.

With respect to *lunar eclipses*, the Babylonian astronomers were certainly able to predict and retrocalculate the *occurrences* of lunar

98 N. M. Swerdlow, *The Babylonian Theory of the Planets* (1998), p. 18.

eclipses, but they were unable to predict or calculate a number of important details about them. (See above, p. 185.) This has been discussed in detail by Dr. John M. Steele.⁹⁹ Commenting on the claim that the eclipse records on the lunar eclipse tablets might be retrocalculations by Babylonian astronomers in the Seleucid era, Steele explains:

You were absolutely right when you argued that the Babylonians could not have retrocalculated the early eclipse records. The Saros cycle could have been used to determine the date of eclipses, even centuries earlier, but none of the Babylonian methods could have allowed them to calculate circumstances such as the direction of the eclipse shadow, the visibility of planets during the eclipse, and certainly not the direction of the wind during the eclipse, which we find in early reports ...

Although the Babylonians could calculate the time of the eclipses, they could not do so to the same level of accuracy as they could observe – there is a clear difference of accuracy between eclipses they said were observed and those they say were predicted (this is discussed in my book), which proves that the “observed” eclipses really were observed.¹⁰⁰

(C-2) Most of the contents of the observational texts are observations

Although the observational texts, due to particular circumstances such as bad weather, occasionally contain calculated events, most of the entries are demonstrably based on actual observations. That this is the case with the Diaries is directly indicated by the Akkadian name engraved at the end and on the edges of these tablets: *natsaru sha ginê*, which means “regular watching.” (ADT, Vol. I, p. 11)

Scholars who have examined these tablets in detail agree that they contain mostly genuine observations. Professor Hermann Hunger gives the following description of the various kinds of astronomical data recorded in the Diaries:

Lunar Six [i.e., the time differences between the settings and risings of the sun and the moon just before and after conjunction and opposition]; planetary phases, like first and last visibility ... conjunctions between planets and the so-called Normal Stars ... eclipses; solstices and equinoxes; phenomena of Sirius. Toward the end of the 3rd century B.C., Diaries begin

99 John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers* (Dordrecht-Boston-London: Kluwer Academic Publishers, 2000); also in his article, “Eclipse Prediction in Mesopotamia,” *Archive for History of Exact Sciences*, Vol. 54 (2000), pp. 421-454.

100 Communication Steele to Jonsson, March 27, 2003.

to record the dates when a planet moved from one zodiacal sign into another. The rest of the Diaries' contents is non-astronomical.

Hunger adds:

Almost all of these items are observations. Exceptions are the solstices, equinoxes, and Sirius data, which were computed according to a scheme ... furthermore, in many instances when Lunar Sixes, lunar or solar eclipses, or planetary phases could not be observed, a date or time is nevertheless given, marked as not observed. Expected passages of Normal Stars by the moon are sometimes recorded as missed because of bad weather, but never is a distance between moon and Normal Star given as computed.¹⁰¹

In summary, Furuli's claim that "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed" is groundless. It is refuted by statements in the tablets themselves and by the fact that they contain data that the Babylonians were unable to calculate. These circumstances are diametrically opposed to the suggestion that the data in the astronomical diary VAT 4956 might have been calculated later so that possibly "there never was an 'original tablet'." (Furuli, p. 30)

(C-3) A theory of desperation

If the entries on the observational tablets – diaries, and lunar and planetary tablets – record mostly demonstrably genuine observations, and if the Babylonian astronomers were unable to compute and retrocalculate many of the astronomical and other data reported, how, then, is it possible for anyone to wriggle out of the evidence provided by these tablets?

Because the tablets often contain so many detailed observations dated to specific regnal years that they can be safely fixed to particular Julian years, the only escape is to question the authenticity of the *regnal year numbers* found on the tablets.

This is what Furuli does. He imagines that "a scribe could sit down in the 2nd century and make a tablet partly of some phenomena covering many years, partly on the basis of theory (the three schemes) and partly on the basis of tablets from a library" that might show real observations. Then, upon discovery that the dates on the library tablets conflicted with the theoretical data, "these erroneous data could be used to 'correct' the correct data of his library tablet,

101 H. Hunger in Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (1999), pp. 77, 78. (Emphasis added)

to the effect that the tablet he was making would contain wrong data of regnal years.” (Furuli, p. 41)

Furuli indicates that not only the dates on the lunar and planetary tablets but also the dates on the diaries might have been tampered with by the Seleucid scholars in the same way. Referring again to the fact that the earliest extant diaries are copies, he says:

But what about the regnal year(s) of a king that are written on such tablets? Have they been calibrated to fit an incorrect theoretical chronological scheme, or have they been copied correctly? (Furuli, p. 42)

Furuli realizes, of course, that his Oslo Chronology is thoroughly contradicted by the Babylonian astronomical tablets. That is the reason he proposes, as a last resort, the theory that these tablets might have been redated by Seleucid scholars to bring them into agreement with their own supposed theoretical chronology for earlier times. Is this scenario likely? What does it imply?

(C-4) The scale of the supposed Seleucid chronological revisions

To what extent does Furuli’s Oslo Chronology differ from the traditional chronology? In a chronological table on pages 219-225 covering the 208 years of the Persian era (539–331 BCE), Furuli shows, reign by reign, the difference between his chronology and the traditional one. It turns out that the only agreement between the two is the dating of the reigns of Cyrus and Cambyses – the period from the fall of Babylon (539 BCE) to 522 BCE, a period of 17 years. By giving the usurper Bardiya one full year of reign after Cambyses, Furuli moves the whole 36-year reign of Darius I one year forward. Then he moves the reigns of Darius’ successors Xerxes and Artaxerxes I 10 years backward by adding 10 years to the reign of the latter, creating a coregency of 11 years between Darius I and Xerxes.

But Furuli also assigns a one-year reign to the usurper Sogdianus between Artaxerxes I and his successor Darius II. The effect of this is that the remaining reigns up to 331 BCE are all moved one year forward. The end result is that Furuli’s Oslo Chronology is at variance with the traditional chronology for the Persian era for 191 of its 208 years, or for 92 percent of the period.

But this is not all. As mentioned in the introduction, Furuli wants to add 20 extra years to the Neo-Babylonian period somewhere after the reign of Nebuchadnezzar – between 562 and 539 BCE. The effect of this – what Furuli calls the “domino effect” – is that not only the

reign of Nebuchadnezzar but all the reigns of his predecessors are moved backward 20 years.

Because the Babylonian astronomical archive starts with the reign of Nabonassar, 747-734 BCE, Furuli's Oslo Chronology is at variance with the traditional chronology for most, if not the whole, of the Babylonian era from 747 to 539 BCE. This means that the disagreement between the two runs to *more than 90 percent* of the 416-year period from 747 to 331 BCE. This also means that the Oslo Chronology is contradicted by more than 90 percent of the astronomical observational texts – diaries, eclipse texts, and planetary texts – dated to this period. Because these tablets record thousands of observations dated to particular regnal years, months, and days within this period, we begin to get some idea of the scale of the chronological revisions the Seleucid scholars must have engaged in – according to Furuli's theory. Yet, this is only a fraction of the full scope of the necessary revisions.

(C-5) The scope of the original astronomical archive

It should be kept in mind that the extant archive of ca. 1300 non-mathematical and principally observational astronomical cuneiform tablets is only a fraction of the scope of the original archive available to the Seleucid scholars. In a lecture held at a conference in 1994, Professor Hunger explained:

To give you an idea of how much was originally contained in that archive, and how much is still preserved, I made a few rough estimates. From well preserved Diaries, I found that in each month about 15 lunar and 5 planetary positions, both in relation to Normal Stars, are reported. Also, every month the so-called lunar Six are recorded. Each year will in addition contain 3 Sirius phases, 2 solstices and 2 equinoxes, at least 4 eclipse possibilities or eclipses, and about 25 planetary phases. Together, this results in about 350 astronomical observations per year. In 600 years, 210,000 observations are accumulated. Now I do not know whether the archive was ever complete to this extent. Sometimes copies of older Diaries indicate that things were missing in the original. *But on the whole, this is the order of magnitude.* By counting the number of reasonably (i.e., not completely, but more than half) preserved months, I arrived at ca. 400 months preserved in dated Diaries (undated fragments do not help for the purposes of this lecture). If we compare this to a duration of 600 years for the archive, we see that *we have preserved ca. 5% of the months in Diaries.*¹⁰²

102 H. Hunger in Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (1999), p. 82. (Emphasis added)

If only five percent of the original Babylonian astronomical archive is preserved today, the scale of the chronological revisions Furuli thinks Seleucid copyists engaged in becomes apparent. To bring their whole archive into harmony with their supposed theoretical chronology, they would have had to redate thousands of tablets and tens of thousands of observations. Is it likely that they believed so strongly in a supposed theoretical chronology that they bothered to redate four centuries' worth of archives containing thousands of tablets? The idea is absurd.

We can also ask why the Seleucid scholars would work out a theoretical chronology for earlier centuries when a reliable chronology for the whole period back to the middle of the 8th century could easily be extracted from the extensive astronomical archive at their disposal. Is it not much more realistic to conclude that their chronology was exactly the one found in the inherited archive of tablets, an archive that had been studied and expanded by successive generations of scholars up to and including their own?

It should be noted that, to make any claims at all about dates in his Oslo chronology, Furuli must rely on the dating of the tablets that the Seleucids supposedly revised. But if one assumes that his chronology is valid, then so must be the dates recorded on the tablets – which destroys his claim that the Seleucids revised the tablets. Thus, Furuli's argument is internally inconsistent and cannot be correct.

Another problem is what became of the original pre-Seleucid tablets. A necessary consequence of Furuli's theory is that almost all extant tablets should reflect only the erroneous theoretical chronology of the Seleucid scholars, not what Furuli regards as the original and true chronology – the Oslo Chronology. In his view, therefore, all or almost all extant tablets can only be the late revised copies of the Seleucid scholars. Thus, on page 64, he claims:

As in the case of the astronomical diaries on clay tablets, we do not have the autographs of the Biblical books, but only copies.

This is certainly true of the Biblical books, but is it true of the astronomical diaries? Is there any evidence to show that all the astronomical tablets preserved today are only copies from the Seleucid era?

(C-6) *Are all extant tablets late copies from the Seleucid era?*

It is certainly true that some of the earliest diaries, including *VAT 4956*, are later copies. As discussed in chapter 4 of the present work, they frequently reflect the struggle of the copyist to understand the ancient documents they were copying, some of which were broken or otherwise damaged. Twice in the text of *VAT 4956*, for example, the copyist added the comment “broken off,” indicating he was unable to decipher some word in the original. Often the documents used archaic terminology that the copyists tried to modernize. What about diaries from later times?

As an example, there are about 25 diaries from the 46-year reign of Artaxerxes II (404-358 B.C.E.), 11 of which not only preserve the dates (year, month, day) but also the name of the king. (ADT, Vol. I, pp. 66-141) Some of them are extensive and contain numerous observations (e.g., nos. –372 and –366). None of these tablets show any of the above-mentioned signs of being later copies. Is it likely, then, that they, or at least some of them, are originals?

This question was sent to Professor Hunger a few years ago. He answered:

In my opinion, the diaries from the time of Artaxerxes II can all be from his reign. You know that the larger diaries are all copies in the sense that they are collections of smaller tablets which covered shorter periods. But that does not mean that they were copied much later. To me it would make most sense if after every half a year the notes were copied into one nice exemplar. I had a quick look through the edition and did not find any remarks like “broken” which are an indication that the scribe copied an older original. So I would answer your question “is it likely” by “Yes”.¹⁰³

These tablets, therefore, do not reflect any “theoretical chronology” supposedly invented by the later Seleucid scholars. The tablets might very well be original documents. We cannot take it for granted that they are late copies from the Seleucid era. And the same holds true, not only for the diaries from the reign of Artaxerxes II but for most of the observational tablets dating from before the Seleucid era. Even if some of the diaries and other tablets dated to the earliest centuries are later copies, it is usually not known how late these copies are, or whether they were copied in the Seleucid period or earlier.

103 Communication Hunger to Jonsson, January 26, 2001.

In conclusion, the theory that Seleucid scholars worked out an erroneous hypothetical chronology for earlier times that they systematically embodied into the astronomical tablets they were copying cannot be supported by the available facts. It is not based on historical reality and is a desperate attempt to save cherished but false dates.

(D) Unfounded claims about the Biblical 70 years

As is discussed in chapter 5 of the present work, the prophet Jeremiah directly applies the 70 years to *the length of Babylon's dominion over the nations*, not to the length of the desolation of Jerusalem and the Jewish exile:

... these nations will serve the king of Babylon seventy years. (Jeremiah 25:11, NIV)

When seventy years are completed for Babylon, I will come back to you and fulfill my gracious promise to bring you back to this place. (Jeremiah 29:10, NIV)

These texts clearly apply the 70-year period to Babylon, not to Jerusalem. Quoting the above NIV rendering of the two verses, Furuli even admits this, stating that “the text does not say explicitly that it refers to an exile for the Jewish nation. If we make a grammatical analysis in 25:11, we find that ‘these nations’ is the grammatical subject, and in 29:10, ‘Babylon’ is the patient, that is, the nation that should experience the period of 70 years.” (p. 75)

(D-1) Is Furuli's view of the 70 years really supported by Daniel and the Chronicler?

Attempting to evade this undesirable conclusion, Furuli turns to the 70-year passages at Daniel 9:2 and 2 Chronicles 36:20, 21, stating that “the writers of Daniel and 2 Chronicles understood the words of Jeremiah to imply a 70-year exile for the Jewish nation.” After quoting the NIV for these two texts, he claims:

As the analysis below shows, the words of Daniel and the Chronicler are unambiguous. They show definitely that Daniel and the Chronicler understood Jeremiah to prophesy about a 70-year period for the Jewish people when the land was desolate. (p. 76)

The discussion of the two passages in chapter 5 above (pp. 215-225) shows this claim to be groundless. Both passages may easily be harmonized with the clear statements of Jeremiah.

Although Daniel links or ties the 70 years to the desolate state of Jerusalem, this does not mean that he *equated* the two periods. To *link* and to *equate* are two different things. This was noticed, for example, by Dr. C. F. Keil, who in his grammatical analysis of Daniel 9:2 concluded that Daniel connected and yet distinguished the two periods, just as is done in Jeremiah's prophecy. Only after the completion of the 70 years "for Babylon," JHWH would visit the Jewish exiles and bring them back to Jerusalem to end its period of desolation. This is what had been predicted at Jeremiah 29:10, and Daniel's statement fully agrees with this, according to Keil. (See above, p. 219, note 31.)¹⁰⁴

In his discussion of 2 Chronicles 36:20, 21 Furuli ignores verse 20 and quotes only verse 21:

to fulfill Jehovah's words by the mouth of Jeremiah, until the land had paid off its sabbaths. All the days of lying desolate it kept sabbath, to fulfill seventy years.

It may be noted that this verse starts with a subordinate clause and, more specifically, with a purpose clause: to fulfill Furuli quotes the verse out of context. To know what event would fulfill "Jehovah's words by the mouth of Jeremiah," it is necessary to examine the main or principal clause, which is found in verse 20. This verse says:

Furthermore, he [Nebuchadnezzar] carried off those remaining from the sword captive to Babylon, and *they came to be servants to him and his sons until the royalty of Persia began to reign*;

The Chronicler states that the service to the kings of Babylon ended when "the royalty of Persia began to reign." This event took place, he goes on to say in the next verse (21), "to fulfill Jehovah's words by the mouth of Jeremiah, . . . to fulfill seventy years."

The obvious meaning is that the cessation of the servitude under Babylon by the Persian takeover in 539 BCE fulfilled the 70-year prophecy of Jeremiah. The Chronicler does not reinterpret Jeremiah's statements to mean 70 years of desolation for Jerusalem, as Furuli claims. On the contrary, he sticks very closely to Jeremiah's description of the 70 years as a period of servitude under Babylon, and he ends this period with the fall of Babylon, exactly as Jeremiah

¹⁰⁴ The rather free Bible translation by Eugene H. Peterson well expresses the distinction made in Jeremiah 29:10 between the end of the two periods, the 70 years for Babylon and Jerusalem's period of desolation: "As soon as Babylon's seventy years are up and not a day before, I'll show up and take care of you as I have promised and bring you back home." (*The Message. The Prophets*, 2000, p. 230)

had predicted at Jeremiah 25:12 and 27:7. (See chapter 5 above, pp. 220, 221.)

(D-2) Jeremiah 25:9-12: 70 years of servitude – for whom?

Returning to Jeremiah’s prophecy, Furuli first focuses on Jeremiah 25:11, which says:

And all this land must become a devastated place, an object of astonishment, and *these nations will serve the king of Babylon seventy years.* (NIV)

As was pointed out earlier, Furuli starts his discussion of the 70-year prophecy by admitting that Jeremiah applies the 70 years to Babylon, not to Jerusalem. Having concluded (falsely, as has been shown above and in chapter 5) that Daniel 9:2 and 2 Chronicles 36:21 unambiguously state that Judah and Jerusalem lay desolate for 70 years, Furuli realizes that the meaning of Jeremiah 25:11 has to be changed to be brought into agreement with his conclusion.

The clause “these nations will serve the king of Babylon seventy years” is very clear in Hebrew:

weâbdû haggôyîm hâêlleh et-melech bâbel shivîm shânâh
and-will-serve-they the-nations these king [of] Babel seventy year[s]

As Furuli points out (p. 82), the particle *et* before *melech bâbel* (“king of Babel”) is a marker indicating that *melech bâbel* is the object. The word order is typical in Hebrew: verb-subject-object. There are no grammatical problems with the clause. It simply and unambiguously says that “these nations will serve the king of Babel seventy years.” Furuli, too, admits that “this is the most natural translation.” (p. 84) How, then, can Furuli force it to say something else?

Furuli first claims that “the subject (‘these nations’) is vague and unspecified.” Actually, it is not. It simply refers back to “all these nations round about” referred to in verse 9. Furuli goes on to state that the subject in the clause might not be “these nations” in verse 11 but “this land” (Judah) and “its inhabitants” in verse 9. Verse 11, therefore, really says that it is only the inhabitants of Judah, not “these nations,” that will serve the king of Babylon 70 years. How, then, is the occurrence of “these nations” in the clause to be explained? Furuli suggests that they might be part of the object, the king of Babel, who “would be a specification of” these nations. The clause could

then be translated:

and they will serve these nations, the king of Babel, seventy years (p. 84)

Furuli also suggests that the particle *et* might not here be used as an object marker but as a preposition with the meaning “with.” Based on this explanation, the clause could even be translated:

and they will serve these nations *together with* the king of Babel seventy years (p. 84)

These reconstructions are not supported by any Bible translations. Not only are they far-fetched, they are refuted by the wider context. The prediction that the nations surrounding Judah would serve the king of Babylon is repeated in Jeremiah 27:7 in a way that is impossible to misunderstand:

And all the nations must serve him and his son and his grandson until the time even of his own land comes.

The immediate context of the verse proves conclusively that “the nations” referred to include all the non-Jewish nations in the Near East. Furuli’s linguistic acrobatics, therefore, are unnecessary, mistaken, and a case of special pleading.

Furuli’s far-fetched and forced reconstruction of the verse seems to be an attempt to bring it in agreement with the wording of the Septuagint version (LXX), to which he then refers in support. (p. 84) Some of the problems with the LXX version of Jeremiah are discussed in chapter 5 above, fn. 8 on pp. 195, 196.

(D-3) Jeremiah 29:10: The meaning of the 70 years for Babylon

Jeremiah 29:10 is discussed in chapter 5 above, pp. 209-214. The verse explicitly states that the 70 years refer to Babylon, not Jerusalem:

This is what the LORD says: ‘When seventy years are completed *for Babylon* [*ʿbâbel*] I will come to you and fulfill my gracious promise to bring you back to this place’ [i.e., to Jerusalem]. (NIV)

Furuli notes that most Bible translations render the preposition *le* as “to” or “for” and that only a very few (usually older) translations render it as “at” or “in.” (Furuli, p. 85) Of the latter, he mentions six: NWT, KJV, Harkavy, Spurrell, Lamsa, and the Swedish Church Bible of 1917.

Alexander Harkavy’s edition from 1939 contains the Hebrew text together with an English translation. Furuli does not seem to have

noticed that Harkavy states in the preface that the English text is that of the *Authorized Version*, that is, the KJV. George Lamsa's translation has been strongly criticized because of its heavy dependence on the KJV. Also in Jeremiah, chapter 29, he almost slavishly follows KJV. His "at Babylon," therefore, means nothing. I have not been able to check Helen Spurrell's translation. It was published in London in 1885, not 1985, as Furuli's Bibliography erroneously shows, so it is not a modern translation.

The Swedish Church Bible of 1917 has recently been "replaced" by two new translations, *Bibel-2000* and *Folkbibeln* (1998). Both have "for Babylon" at Jeremiah 29:10. In answer to my questions, the translators of both translations emphasized that *l'bâbel* at Jeremiah 29:10 means "for Babylon" not "at" or "in" Babylon. Remarkably, even the new revised Swedish edition of the NWT has changed the earlier "in Babylon" (Swedish "i Babylon") in the 1992 edition to "for Babylon" (Swedish: "föer Babylon") in the 2003 edition. (See above, p. 211, fn. 26)

Because the rendering "for Babylon" contradicts the theory that the 70 years refer to the period of Jerusalem's desolation, Furuli needs to defend the notably infrequent rendering "at" or "in" Babylon. He even claims that the preposition "for" gives the 70 years "a fuzzy meaning:"

If "for" is chosen, the result is fuzziness, because the number 70 then loses all specific meaning. There is no particular event marking their beginning nor their end, and the focus is wrong as well, because it is on Babylon rather than on the Jews. (p. 86)

This is an incredible statement and another example of Furuli's special pleading. It is difficult to believe that Furuli is totally ignorant of the fact that both the beginning and the end of Babylon's supremacy in the Near East were marked by revolutionary events – the beginning by the final crushing of the Assyrian empire and the end by the fall of Babylon itself in 539 BCE. Surely he must know that, according to secular chronology, exactly 70 years passed between these two events. Modern authorities on the history of this period agree that the definite end of Assyria occurred in 610/609 BCE. In the box on page 234 of chapter 5 above, for example, four leading scholars are quoted to this effect: viz. Professor John Bright and three leading Assyriologists, Donald J. Wiseman, M. A. Dandamaev, and Stefan Zawadzki. It would be easy to multiply the number. Another example is Professor Klas R. Veenhof. He describes how the last king

of Assyria, Assurballit II, after the destruction of the capital Nineveh in 612 BCE, retreated to the provincial capital Harran, the last Assyrian stronghold, where he succeeded in holding out for another three years, supported by Egypt. Veenhof writes:

It was to no advantage that Egypt supported Assyria; the Babylonian and Median armies took the city in 610 B.C., and in the following year [609] they warded off their last defensive attempt. Therewith a great empire was dissolved.¹⁰⁵

The same historical information is given by Professor Jack Finegan on page 252 (§430) in the new revised edition of his well-known *Handbook of Biblical Chronology*. Quoting Jeremiah 29:10 he concludes:

The “seventy years ... for Babylon,” of which Jeremiah speaks are therefore the seventy years of Babylonian rule, and the return of Judah from exile is contingent upon the end of that period. Since the final fall of the Assyrian empire was in 609 B.C. (§430), and the New Babylonian empire endured from then until Cyrus the Persian took Babylon in 539, the period of Babylonian domination was in fact seventy years (609 – 539 = 70).¹⁰⁶

Certainly, no one acquainted with Neo-Babylonian history can honestly claim that the 70 years “for Babylon” have a “fuzzy meaning” because no particular events mark the beginning and end of the period.

(D-4) Jeremiah 29:10: The Septuagint and Vulgate versions

Furuli next points out that “the Septuagint has the dative form *babylôni*” but with “the most natural meaning being ‘at Babylon.’” The statement reveals a surprising ignorance of ancient Greek. As every Greek scholar will point out, the natural meaning of the dative form *babylôni* is “for Babylon.” It is an exact, literal translation of the original Hebrew *l'babel*, which definitely means “for Babel” in this text, as discussed on pp. 213, 214 above. True, at Jeremiah 29:22 (LXX 36:22) the dative form *babylôni* is used in the local sense, “in Babel,” but it gets this sense only because of the preceding Greek preposition *en*, “in”:

And from them a malediction will certainly be taken on the part of the entire body of exiles of Judah that is in Babylon (*en babylôni*)

Furuli further refers to the rendering of the Latin Vulgate, *in Babylone*, which means, as he correctly explains, “in Babylon.” This

¹⁰⁵ Klas R. Veenhof, *Geschichte des Alten Orients bis zur Zeit Alexanders des Grossen* (Göttingen, 2001), pp. 275, 276. (Translated from German)

¹⁰⁶ Jack Finegan, *Handbook of Biblical Chronology* (Peabody, Mass.: Hendrickson Publishers, 1998), p. 255.

translation most probably influenced the KJV of 1611, which in turn has influenced several other earlier translations. The point is that all translations derived from or influenced by the Vulgate, such as the KJV, are not independent sources.

(D-5) Jeremiah 29:10: The Hebrew preposition *l̄* (lamed)

The preposition *l̄* is the most common preposition in the Hebrew Old Testament. According to a recent count, it occurs 20,725 times, 1352 of which are found in the book of Jeremiah.¹⁰⁷ What does it mean at Jeremiah 29:10? Since the first edition of the present work was published in 1983, this question has been asked of dozens of qualified Hebraists around the world. I contacted some and so did some of my correspondents. Although some of the Hebraists explained that *l̄* in a few expressions has a local sense (“in, at”), in most cases it does not, and they unanimously reject this meaning at Jeremiah 29:10. Some of them are quoted in chapter 5 above, pp. 213, 214.

Furuli disagrees with their view. He believes that because *l̄* is used in a local sense in some expressions at a few places it is likely used in this sense also in Jeremiah 29:10. He argues:

Can it really be used in the local sense “at”? It certainly can, and *The Dictionary of Classical Hebrew* lists about 30 examples of this meaning, one of which is Numbers 11:10, “each man *at* (*le*) the entrance of his tent”. So, in each case when *le* is used, it is the context that must decide its meaning. For example, in Jeremiah 51:2 the phrase *lebâbel* means “to Babylon”, because the preceding verb is “to send”. But *lirûshâlâm* [the letters *li* at the beginning of the word is a contraction of *le+yod*] in Jeremiah 3:17 in the clause, “all the nations will gather *in Jerusalem*” has the local meaning “*in Jerusalem*”, and the same is true with the phrase *lihûdâ* in Jeremiah 40:11 in the clause, “the king of Babylon had left a remnant *in Judah*”. (p. 86)

Well and good, but do these examples allow *l̄bâbel* at Jeremiah 29:10 to be translated “in” or “at Babylon”? Is this really a likely translation? Is it even a possible one? This question was sent to Professor Ernst Jenni in Basel, Switzerland, who is undoubtedly the leading authority today on Hebrew prepositions. So far, he has written three volumes on three of the most common Hebrew prepositions, *b̄* (beth), *k̄* (kaph), and *l̄* (lamed). In the volume on *l̄* (lamed) he devotes 350 pages to the examination of this preposition.¹⁰⁸ His

107 Ernst Jenni, *Die hebräischen Prepositionen. Band 3: Die Präposition Lamed* (Stuttgart, etc.: Verlag Kohlhammer, 2000), p. 17.

answer of October 1, 2003, quoted on page 214 above, is worth repeating here:

My treatment of this passage is found in the *Lamed*-book p. 109 (heading 4363). The rendering in all modern commentaries and translations is “for Babel” (Babel as world power, not city or land); this is clear from the language as well as also from the context.

By the “local meaning” a distinction is to be made between where? (“in, at”) and where to? (local directional “to, towards”). The basic meaning of *l* is “with reference to”, and with a following local specification it can be understood as local or local-directional *only in certain adverbial expressions* (e.g., Num. 11,10 [Clines DCH IV, 481b] “at the entrance”, cf. *Lamed* pp. 256, 260, heading 8151). At Jer. 51,2 *l* is a personal dative (“and send to Babel [as personified world power] winnowers, who will winnow it and empty its land [the land of the Babylonians]” (*Lamed* pp. 84f., 94)). On Jer. 3,17 “to Jerusalem” (local terminative), everything necessary is in *Lamed* pp. 256, 270 and ZAH 1, 1988, 107-111.

On the translations: LXX has with *babylōni* unambiguously a dative (“for Babylon”). Only Vulgata has, to be sure, *in Babylone*, “in Babylon”, thus King James Version “at Babylon”, and so probably also the New World Translation.

I hope to have served you with these informations and remain with kind regards,

E. Jenni.

[Translated from the German. Emphasis added.]

In view of this specific and authoritative information, Furuli’s arguments for a local meaning of *l^e* at Jeremiah 29:10 can be safely dismissed.

(D-6) What about the 70 years at Zechariah 1:12 and 7:5?

That the 70-year texts at Zechariah 1:12 and 7:5 refer to a period different from the one in Jeremiah, Daniel, and 2 Chronicles is demonstrated in detail in chapter 5 above, pp. 225-229. There is no need to repeat the argumentation here. Furuli’s attempt to equate the 70 years in Zechariah with the 70 years of Jeremiah, Daniel, and the Chronicler evades the real problem.

According to Zechariah 1:12, Jerusalem and the cities of Judah had been denounced for “these seventy years.” If this denunciation ended when the Jews returned from the exile after the fall of Baby-

lon, as Furuli holds, why does our text show that the cities still were being denounced in the second year of Darius, 520/519 BCE? Furuli has no explanation for this, and he prefers not to comment on the problem.

The same holds true of Zechariah 7:4, 5. How can the 70 years of fasting have ended in 537 BCE, as Furuli claims, when our text clearly shows that these fasts were still being held in the fourth year of Darius, 518/517 BCE? Furuli again ignores the problem. He just refers to the fact that the Hebrew verbs for “denounce,” “fast,” and “mourn” are all in the Hebrew perfect, stating that, “There is nothing in the verbs themselves which demands that the 70 years were still continuing at speech time.” (p. 88) True, but they do not demand the opposite, either. The verb forms in the passage prove nothing.

But the context does. It clearly shows that the cities were still being denounced “at speech time,” in 519 BCE, and that the fasts were still being held “at speech time,” in 517 BCE, about 70 years after the siege and destruction of Jerusalem in 589-587 BCE. That is why this question was raised in 519 BCE: Why is Jehovah *still* angry at Jerusalem and the cities? (Zechariah 1:7-12) And that is also why this question was raised in 517 BCE: Shall we *continue* to hold these fasts? (Zechariah 7:1-12) Furuli’s interpretation (which echoes the Watchtower Society’s) implies that the denunciation of the cities and the keeping of the fasts had been going on for about 90 – not 70 – years, directly contradicting the statements in the book of Zechariah.

Summary

In this review of Furuli’s book, we have seen a number of insurmountable difficulties that his Oslo Chronology creates not only with respect to the extra-Biblical historical sources but also with the Bible itself.

The amount of evidence against Furuli’s revised chronology provided by the cuneiform documents – in particular the astronomical tablets – is enormous. Furuli’s attempts to explain away this evidence are of no avail. His idea that most, if not all, of the astronomical data recorded on the tablets might have been retrocalculated in a later period is demonstrably false. Furuli’s final, desperate theory that the Seleucid astronomers – and there were many – systematically redated almost the whole astronomical archive inherited from earlier generations of scholars is divorced from reality.

With respect to the Biblical passages on the 70 years, we have seen to what extremes Furuli has been forced to go in his attempts to bring them in agreement with his theory. He has been unable to prove his repeated claim that the 70-year passages in Daniel and 2 Chronicles *unambiguously* state that Jerusalem was desolate for 70 years. His linguistic interpretation of 2 Chronicles 36:21 is misconstrued because he ignores the main clause in verse 20, which plainly makes the servitude end at the Persian conquest of Babylon in 539 BCE. Furuli's linguistic renderings of the passages in Jeremiah are no better. To reconcile Jeremiah 25:11 with his theory, he admits that he must discard "the most natural translation" of the verse. And to bring Jeremiah 29:10 into agreement with his theory, he must reject the near-universal rendering "for Babylon" in favor of the unsupported "in Babylon" or "at Babylon" – translations rejected by all competent modern Hebraists.

Furuli's approach, then, is not Biblical as he claims, but *sectarian*. As a conservative Jehovah's Witness scholar, he is prepared to go to any length to force the Biblical passages and the historical sources into agreement with the Watchtower Society's Gentile times chronology – a chronology that is the foundation cornerstone of the movement's claim to God-given authority. As I have amply documented in this review, this sectarian agenda forces Furuli to invent incredible explanations of the relevant sources, Biblical as well as extra-Biblical.

Addendum:

A critical essay review by this author of Rolf Furuli's attempt to revise the Persian chronology has been published in the British interdisciplinary journal *Chronology & Catastrophism Review* (www.knowledge.co.uk/sis/): "Can the Persian Chronology be Revised?" Part I is published in the volume of 2006, pp. 25-40, and Part II in the volume of 2007, pp. 38-57.

Rolf Furuli's second volume in defence of the chronology of the Watch Tower Society was published in 2007 as *Assyrian, Babylonian and Egyptian Chronology* (Awatu Publishers, Oslo), 368 pages. A critical review in several parts is being published on the web:

Part I: <http://kristenfrihet.se/kf2/review.htm>

Part II: <http://kristenfrihet.se/kf2/review2.htm>

and subsequent parts.