2

BIBLICAL AND SECULAR CHRONOLOGY

IN DEFENDING the date of 607 B.C.E. as the time of the desolation of Jerusalem and the starting point for calculating the length of the Gentile times, representatives of the Watch Tower Society claim that they are relying on the Bible. Those who date the desolation to 587 or 586 B.C.E. are said to rely on secular sources rather than the Bible. The anonymous author of the "Appendix to chapter 14" of the book "Let Your Kingdom Come," for instance, states:

We are willing to be guided primarily by God's Word rather than by a chronology that is based principally on secular evidence or that disagrees with the Scriptures.¹

Such statements obviously intend to create the impression that those who reject the 607 B.C.E. date for the desolation of Jerusalem have no real faith in the Bible. But do such statements give a fair description of the matter? Or are they just sanctimonious disparagement, aimed at defaming the Christian character of those who disagree, not with the Scriptures, but with the Watch Tower Society's datings? Or may it even be that the defenders of the Society's chronology have themselves not really understood the true nature of Biblical chronology?

The nature of the Biblical chronology

Today, people read or use the terms B.C. and A.D. (corresponding to B.C.E. and C.E.) and generally give no thought to the origin of these designations. Actually, the "Christian era," in which events are dated in

^{1 &}quot;Let Your Kingdom Come" (Brooklyn, New York: Watchtower Bible and Tract Society, 1981), p. 189.

relation to the year of the birth of Christ, is a rather late construction. As is well established, the system was not introduced until the sixth century C.E. by the Roman monk and scholar Dionysius Exiguus. Another 500 years would pass, however, before this new era had been generally accepted as a dating system in the Catholic world.

Since the Bible was written long before the time of Dionysius Exiguus, it does not, of course, give any dates according to our Christian era. Thus, although the Watch Tower Society dates the baptism of Jesus to 29 C.E., the 20th year of Artaxerxes I to 455 B.C.E., the fall of Babylon to 539 B.C.E., and the desolation of Jerusalem to 607 B.C.E., none of these dates are found in the Bible. The Bible gives *relative datings* only. What does that imply?

Consider this relevant example: In 2 Kings 25:2 the desolation of Jerusalem is dated to the "eleventh year of King Zedekiah," the last king of Judah. Verse 8 additionally tells us that this occurred in the "nineteenth year of King Nebuchadnezzar, king of Babylon."

But when was that? How far from our own time was it? How many years before the Christian era did it happen? The fact is that the Bible gives no information whatsoever that, of itself, links up these datings with our Christian era.

Similarly, the books of Kings and Chronicles tell about the kings who ruled in Israel and Judah from Saul, the first king, on to Zedekiah, the last one. We are told who succeeded whom, and for how many years each of them ruled. By summing up the lengths of reign from Saul to Zedekiah we can measure the approximate space of time (there are many uncertain points) between these two kings. In this way we find that the period of the Hebrew monarchies covered roughly 500 years. But still we have found no answer to the question: At what point on the stream of time did this period start and at what point did it end?

If the Bible had gone on to give a continuous and unbroken series of regnal years from Zedekiah all the way down to the beginning of the Christian era, the question would have been answered. But Zedekiah was the last of the Jewish line of kings and his reign ended centuries before Christ's coming. Nor does the Bible give any other information that directly identifies for us the length of the period from Zedekiah's "eleventh year" (when Jerusalem was desolated) to the beginning of the Christian era. Thus we have a period of roughly 500 years, the period of the Hebrew monarchies, but we are not told how far from our time this period was and how it can be fixed to our Christian era.

If the Bible had preserved dated and detailed descriptions of astronomical events, such as solar and lunar eclipses, or the positions of the planets in relation to different stars and constellations, this would have made our problem easier. Modern astronomers, with their knowledge of the regular movements of the moon and the planets, are able to calculate the positions these heavenly bodies held on the starry sky thousands of years ago. But the fact is that the Bible provides no information of this kind.

The Bible of itself, then, does not show how its chronological datings may be connected with our own era. A chronology that is in this sense "hanging in the air" is simply the type of chronology called a *relative chronology*. Only if the Biblical information supplied us with the exact distance from the time of Zedekiah up to our own era—either by the aid of a complete and coherent line of lengths of reign, or by detailed and dated astronomical observations—we would have had an *absolute chronology*, that is, a chronology that gives us the exact distance from the last year of Zedekiah to our own time.² It seems evident that the Bible writers themselves were not concerned about supplying this, their focus simply being on other matters. What source, then, can we look to to make the connection with our era reckoning?

Is there a "Bible chronology" without secular sources?

Despite the *relative* nature of the Biblical dates, it is nonetheless not impossible to date events mentioned in the Bible. If we were able to synchronize the chronology of the Bible with the chronology of another country, whose chronology in turn can be fixed to our Christian era, then it would be possible to convert the Bible's *relative* chronology into an *absolute* chronology. This means, however, that we would have to rely on *extra-Biblical*, that is, on *secular historical sources*, in order to date events in the Bible.

Dr. Michael C. Astour explains: "Absolute chronology means dating reigns, wars, treaties, destructions, rebuildings, and other events known from written and archaeological records, in terms of modern Western time reckoning, i.e., in years B.C." (Hittite History and Absolute Chronology of the Bronze Age, Partille, Sweden: Paul Åströms förlag, 1989, p. 1.) Such a chronology is usually best established by the aid of recorded ancient astronomical observations. As the renowned expert on ancient astronomy, Professor Otto Neugebauer, puts it, "an 'absolute chronology' [is] a chronology which is based on astronomically fixed dates in contrast to a 'relative chronology' which tells us only the length of certain intervals, e.g., the total of regnal years in a dynasty." — A History of Ancient Mathematical Astronomy, Book VI (Berlin-Heidelberg-New York: Springer-Verlag, 1975), p. 1071.

And we have no other alternative. If we want to know when, in relation to our own time, an event mentioned in the Bible took place—be it the date for the fall of Babylon, the date for the desolation of Jerusalem by Nebuchadnezzar, the date for the rebuilding of the temple in the reign of Darius I, or any other date whatever—then we are obliged to turn to the secular historical sources. This is the sober fact every Bible believer has to accept, whether he or she likes it or not. The simple truth is that—as relates to connecting with our Christian era reckoning—without secular sources there is no Bible chronology, no datings of Biblical events in terms of years "B.C.E." or "C.E."

This also means, of course, that to speak of using the "chronology of the Bible" as a unilateral, independent time-measurer by which the correctness of a certain date can be established, is simply to ignore reality. When, for instance, some Witnesses point to the fact that modern historians date the fall of Babylon to 539 B.C.E. and then claim that "the chronology of the Bible is *in agreement* with this date," they show they have not really understood what the *relative* nature of the Biblical chronology actually implies. Where does the Bible assign a *date* for the fall of Babylon? A Witness might refer to Jeremiah's prophecy of the "seventy years" leading up to Babylon's fall. But on what *date* did those seventy years *begin*, so as to count forward to their end? There is none supplied. Since the Bible does not give any date at all, not even a specific *relative* date, for the fall of Babylon, the statement that the Bible "*agrees*" with the secular dating of this event to 539 B.C.E. is completely meaningless.³ And

According to secular sources Babylon was captured by Persian king Cyrus' troops in the 17th year of Nabonidus, which was thus to become the "accession-year" of Cyrus. (For the Babylonian accession year system, see the Appendix for Chapter 2.) Although the fall of Babylon is referred to several times in the Bible, the event is not dated to any specific regnal year, neither that of Nabonidus (who is not even mentioned) nor of Cyrus. Isaiah (chapters 13, 14, 21, 45, 47, 48) and Jeremiah (chapters 25, 27, 50, 51) both predicted the fall of Babylon, but neither of them gave any date for the event. Daniel, in chapter 5, verses 26-28, predicted that the fall of Babylon was imminent. Then, in verses 30 and 31, he states that "in that very night" Belshazzar (the son of Nabonidus) was killed and was succeeded by "Darius the Mede." But who was "Darius the Mede"? The Watch Tower Society admits that the historical identification of this figure "is uncertain." The suggestion (of Professor D. J. Wiseman) that "Darius the Mede" is but another name for Cyrus himself is rejected. (*Insight on the Scriptures*, Vol. 1, Brooklyn, New York: Watchtower Bible and Tract Society, 1988, pp. 581-583.) Further, although Daniel 6:28 mentions "the reign of Darius" and "the reign of Cyrus the Persian," and although Daniel 9:1 mentions the "first year" of "Darius the Mede," the Bible neither gives the length of the reign of "Darius the Mede" nor does it indicate if his reign should be inserted between the fall of Babylon and the first year of Cyrus or not. Thus, although the Bible (in 2 Chronicles 36:22, 23 and Ezra 1:1-4) states that the Jewish exiles were released "in the first year of Cyrus," it does not show how long after the fall of Babylon this occurred. The Bible, then, does not give even a relative date for the fall of Babylon.

it is equally meaningless and misleading to state that the secular date for the desolation of Jerusalem, 587 or 586 B.C.E., *disagrees* with the chronology of the Bible, since the absolute date for that event is not given in the Bible either.

What of the 70 years of Jeremiah 25:11,12 and 29:10, on which Witnesses rely so heavily in their chronology? Witnesses quite naturally hold to the Watch Tower Society's claim that these 70 years refer to the period of Jerusalem's desolation, reckoned from the 18th year of Nebuchadnezzar to the return of the Jewish exiles in the 1st year of Cyrus (that is, his first full or *regnal* year, following his *accession* year, which began in 539 B.C.E.). As a result of this view, the time interval between the dates historians have established for these two events—587/86 and 538/37 B.C.E.—appears too short, by some 20 years. The Watch Tower Society, therefore, chooses to reject one of the two dates. They could reject the date for Nebuchadnezzar's 18th year (587/86 B.C.E.) or reject the date for Cyrus' first regnal year (538/37 B.C.E.). They reject the first date, 587/86 B.C.E. On what basis do they reject *that* date and not the *other*?

There is no *Biblical* reason for this choice. As pointed out earlier, the Bible itself neither agrees nor disagrees with either of these two dates, dates stated in terms of the Christian era reckoning. The Bible, therefore, simply does not provide the means for deciding which of the two dates is the better one, in terms of being firmly established. On what grounds, then, should the choice be made—provided that the Society's interpretation of the 70 years is correct?

The most logical, sound and scholarly method would be to accept the date that is most clearly established by the extra-Biblical historical sources. This is because these sources **do** supply the data needed to link up with our Christian era reckoning. And, as will be demonstrated in the next two chapters, these sources show very definitely that, of the two dates just considered, the chronology of Nebuchadnezzar's reign is much better established by astronomical and other documents than is the chronology of Cyrus' reign. If a choice were really necessary, and a Bible-believing Christian were faced with choosing, the natural choice, then, should be to retain the 587/86 B.C.E. date and reject the 538/37 B.C.E. date.

Yet the Watch Tower Society prefers the *opposite* choice. Since the reason for this is not because the Bible itself favors one of these dates over the other, and it is certainly not because the historical evidence does so, what is the *real* reason for their choice?

Loyalty to the Bible — or to a prophetic speculation?

If, according to their claims, the 70-year period of Jeremiah's prophecy really should be reckoned from the 18th year of Nebuchadnezzar to the 1st year of Cyrus, the Watch Tower Society should logically have started with 587/86 B.C.E. as historically *the more reliable* of the two dates. Counting 70 years forward from that date would point to 518/17 B.C.E. as the first year of Cyrus instead of 538/37. This would be *as Biblical* and actually *more scholarly* than to retain 538/37 B.C.E. and reject 587/86 (the date having the stronger documentary and astronomical support).

Why, then, does the Watch Tower Society reject 587/86 B.C.E. instead of rejecting 538/37?

The answer is obvious. The 587/86 B.C.E. date is in direct conflict with the Watch Tower Society's chronology for the "times of the Gentiles." In that chronology, their 607 B.C.E. date for the desolation of Jerusalem is the indispensable starting-point. Without the date of 607 B.C.E. the Society could not arrive at 1914 C.E. as the ending point. And as this date is the very *cornerstone* of the prophetic claims and message of the Watch Tower organization, nothing is allowed to upset it, *neither the Bible nor historical facts*. At heart, therefore, it is neither a question of loyalty to the Bible nor loyalty to historical facts. The choice of date has quite another motive: *Loyalty to a chronological speculation that has become a vital condition for the divine claims of the Watch Tower organization*.

In the next two chapters it will be demonstrated that the whole Neo-Babylonian chronology is firmly established by at least *seventeen different lines of evidence*. Thus the 587/86 date for the 18th year of Nebuchadnezzar (and the desolation of Jerusalem) and the 538/37 date for the first year of Cyrus are *both* correct. That none of these dates are in conflict with the 70 years of Jeremiah (Jeremiah 25:11, 12 and 29:10) will be demonstrated in a subsequent chapter.

The collapse of the original starting-point

To repeat: Without secular sources there is no absolute chronology for dating events in the Scriptures. The Watch Tower Society has itself had to yield to this inevitable, though embarrassing, fact. The very first thing the Society has been forced to do, therefore, in order to have any Bible chronology at all, is to turn to the secular sources and select a date on which its chronology can be based. The

date they have chosen is the date historians have established for the fall of Babylon, 539 B.C.E. This secular date, therefore, is the very foundation of what the Society presents as its "Bible chronology." Why did the Society choose this date as the basis for its chronology? And how did the historians arrive at this date?

When Charles Taze Russell first adopted Nelson H. Barbour's "Bible chronology," 536 B.C.E.—not 539 B.C.E.—was the secular basis on which that chronology had been established. This date was believed to be, not that of Babylon's fall, but *the first year of Cyrus*. By adding the "seventy years" to 536 they got 606 B.C.E. as the date for the desolation of Jerusalem, and by subtracting 606 from 2,520 (the supposed number of years in the Gentile times) they arrived at 1914.

Originally Barbour claimed that the 536 B.C.E. date was derived from the ancient kinglist known as "Ptolemy's Canon." In time, however, it was discovered that this was not the case. This kinglist not only points to 538 B.C.E. as the first full year of Cyrus, but also to 587 B.C.E. as the date for the 18th year of Nebuchadnezzar, the year of Jerusalem's desolation. When these facts dawned upon Russell he rejected the kinglist and started to attack its supposed originator, Claudius Ptolemy. He still believed, however, that 536 B.C.E. was a generally accepted date for the first year of Cyrus, stating:

All students of chronology may be said to be agreed that the first year of Cyrus was the year 536 before the beginning of our *Anno Domini* era.⁵

- 4 On page 194 of his book *Three Worlds, or Plan of Redemption* (Rochester, N.Y., 1877), for instance, Barbour asserted: "The fact that the first year of Cyrus was B.C. 536, is based upon Ptolemy's canon, supported by the eclipses by which the dates of the Grecian and Persian era have been regulated. And the accuracy of Ptolemy's canon is now accepted by all the scientific and literary world."
- Zion's Watch Tower, May 15, 1896, pp. 104, 105, 113 (= Reprints, pp. 1975, 1980. Emphasis added). It is true that many earlier Christian chronologers, including archbishop James Ussher and Sir Isaac Newton, dated the first year of Cyrus to 536 instead of 538 B.C.E. The reason for this was their application of the "seventy years" of Jeremiah 25:11,12 and Daniel 9:2 to the period from the first year of Nebuchadnezzar to the capture of Babylon by Cyrus. This seemed to conflict with "Ptolemy's Canon," which gives only 66 years to this period (604-538 B.C.E.). To arrive at 70 years, Nebuchadnezzar's first year was often moved back from 604 to 606 B.C.E., while the first year of Cyrus was moved forward to 536 B.C.E. The two years from 538 to 536 B.C.E. were allotted to "Darius the Mede." The discovery of the thousands of cuneiform tablets from the Neo-Babylonian era in the 1870's completely overthrew these theories, as was pointed out already as far back as 1876 by Mr. George Smith. (See S. M. Evers, "George Smith and the Egibi Tablets," Iraq, Vol. LV 1993, p. 113.)

As time went by, some Bible Students discovered that this statement was not true, either. In a private letter to Russell dated June 7, 1914, one of his closest associates, Paul S. L. Johnson, pointed out to him that nearly all historians held 538 B.C.E. to be the first year of Cyrus. "I have consulted a dozen encyclopedias," he wrote, "and all except three give 538 B.C. as the date." Russell, however, ignored this information, and so did Joseph F. Rutherford, his successor as president of the Watch Tower Society.

Not until 1944, in the book "*The Kingdom Is at Hand*," did the Watch Tower Society finally abandon the 536 B.C.E. date. By steps, Cyrus' first year was moved backwards, first to 537 B.C.E. and then, five years later, to 538 B.C.E., the date pointed to by "Ptolemy's Canon."⁷

To retain 1914 as the termination date of the Gentile times, other "adjustments" had to be made. To begin with, even though the first year of Cyrus started in the spring of 538 B.C.E., the Watchtower argued that his edict permitting the Jews to return home from the exile (Ezra 1:1-4) was issued towards the end of his first regnal year, that is, early in 537 B.C.E. In that case the Jews departing from Babylon could not have reached Jerusalem until the autumn of that year. By adding 70 years to 537 the desolation of Jerusalem was then fixed to 607 B.C.E. instead of 606. Next, the fact that no "zero year" is included at the beginning of our Christian era was finally acknowledged.8 So from the autumn of 607 B.C.E. to the beginning of our era was only 606 years and three months; and if this period is subtracted from the 2,520 years, 1914 is still arrived at as the termination date. Hence, three separate "errors" were made to cancel each other out, and the upshot was the same! Each adjustment was made with the retention of 1914 as its goal.

Yet, to have the secular basis of the Watch Tower Society's "Bible chronology" moved around in this arbitrary way was hardly confidence-inspiring. For the future, therefore, Cyrus' first regnal year (538 B.C.E.) was not stressed as the "firmly established" starting-point. Instead, the stress was transferred to the date historians had established for the fall of Babylon, 539 B.C.E. This date was soon to

⁶ This letter was published as an Appendix to Paul S. L. Johnson's reprint of the second volume of *Studies in the Scriptures* (Philadelphia, PA., U.S.A., 1937), pp. 367-382. See especially p. 369.

^{7 &}quot;The Kingdom Is at Hand" (Brooklyn, New York: Watchtower Bible and Tract Society, 1944), p. 175; The Watchtower, Nov. 1, 1949, p. 326.

⁸ This problem had been noted as early as in 1904, but the error had never been corrected. See *The Watch Tower* of December 1, 1912, p. 377 (= *Reprints*, pp. 5141, 5142). See also above, page 53.

be termed an "absolute date" in the Watch Tower publications. But why was this particular date viewed as an "absolute date"?

539 B.C.E.—the "Absolute date for the Hebrew Scriptures"?

At first, beginning in 1952, the Watch Tower Society explained that the date 539 B.C.E. for the fall of Babylon had been "firmly established" by the cuneiform tablet known as the *Nabonidus Chronicle*. Evidently for this reason it was felt that this date could be used as the new basis for the Society's B.C.E. chronology. In the next two decades, therefore, the year 539 B.C.E. was not only described as an "absolute date," but as "the outstanding Absolute date for the B.C. period of the Hebrew Scriptures." What is the reality in this regard? Does the historical evidence justify this impressive language and what does it show as to the Watch Tower writers' understanding of secular chronology?

The Nabonidus Chronicle: This cuneiform document dates the fall of Babylon to the "16th day" of "the month of Tashritu," evidently in the 17th year of Nabonidus. Unfortunately, the text is damaged, and the words for "17th year" are illegible. But even if these words had been preserved, the chronicle would not have told us anything more than that Babylon was captured on the 16th day of Tishri (Baylonian *Tashritu*) in Nabonidus' 17th year. *This information in itself cannot be translated to 539 B.C.E.* It requires *additional* secular evidence to place Nabonidus' 17th year within our era reckoning and allow for our assigning it a date within that reckoning.

In spite of this, Watch Tower publications continued to give the impression that the Nabonidus Chronicle of itself fixed the *absolute* date for the fall of Babylon. Not until 1971, in an article entitled "Testimony of the Nabonidus Chronicle," was it finally conceded that this tablet did not fix the year for the fall of Babylon. Quoting the

- 9 See The Watchtower of May 1, 1952, p. 271. "This date," said The Watchtower of February 1, 1955, on page 94, "is made Absolute by reason of the archaeological discovery and deciphering of the famous Nabunaid Chronicle, which itself gives a date for the fall of Babylon and which figure specialists have determined equals October 13, 539 B.C., according to the Julian calendar of the Romans."
- The Watchtower, February 1, 1955, p. 94. (Emphasis added.) The book "All Scripture Is Inspired by God and Beneficial" (Brooklyn, N.Y.: Watchtower Bible and Tract Society of New York, Inc., 1963) similarly designated 539 B.C.E. as the "Absolute Date for the Hebrew Scriptures." (p. 282)
 The Watchtower of August 15, 1968, p. 490, for instance, stated: "The fixing of 539
- 11 The Watchtower of August 15, 1968, p. 490, for instance, stated: "The fixing of 539 B.C.E. as the year when this historical event occurred is based on a stone document known as the Nabonidus (Nabunaid) Chronicle." (Emphasis added.) Compare also The Watchtower of May 1, 1968, p. 268.

date given in the chronicle (the 16th day of Tashritu), the writer of the article frankly states: "But does the Nabonidus Chronicle of itself provide the basis for establishing *the year* for this event? No."¹²

Although the principal witness in support of the "absolute date for the Hebrew Scriptures" was thus retracted, the Society was not prepared to make yet another change in the secular basis of its "Bible chronology." Other witnesses, therefore, had to be searched out and summoned to the stand. In the very same *Watchtower* article quoted above, a reference was made to two new sources which in the future would "sustain" the absolute date 539 B.C.E.:

Also other sources, including Ptolemy's Canon, point to the year 539 B.C.E. as the date for Babylon's fall. For example, *ancient historians such as Diodorus*, *Africanus and Eusebius* show that Cyrus' first year as king of Persia corresponded to *Olympiad 55*, *year 1* (560/59 B.C.E.), while Cyrus' last year is placed at *Olympiad 62*, *year 2* (531/30 B.C.E.). . . . Cuneiform tablets give Cyrus a rule of nine years over Babylon. This would harmonize with the accepted date for the start of his rule over Babylon in 539 B.C.E.¹³

Thus the new validating sources consisted of (1) *Ptolemy's Canon*, and (2) *dates from the Greek Olympiad Era quoted by ancient historians*. Can any of these sources establish 539 B.C.E. as an "absolute date" to which the Biblical chronology may be firmly fixed?

Ptolemy's Canon: As was shown earlier, Russell at first buttressed his chronology by reference to Ptolemy's Canon. But when he discovered that the 536 B.C.E. date for Cyrus' first year was not supported by it, he rejected the Canon. And although the Watch Tower finally pushed back Cyrus' 1st year to 538 B.C.E. in agreement with Ptolemy's Canon, the Society's chronology is still in conflict with the Canon at other points.

The sum total of the lengths of reign given by the Canon for the Neo-Babylonian kings prior to Cyrus, for example, point to 587

¹² The Watchtower, May 15, 1971, p. 316 (emphasis added). When it was discovered that the Nabonidus Chronicle did not establish 539 B.C.E. as an "absolute date," this term was dropped in the Watch Tower publications. In Aid to Bible Understanding, 539 is called "a pivotal point" (p. 333), a term also used in the 1988 revised edition. (Insight on the Scriptures, Vol. 1, p. 458) At other times it is just stated that "historians calculate" or "hold" that Babylon fell in 539 B.C.E.—See "Let Your Kingdom Come" (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1981), pp. 136, 186.

¹³ *The Watchtower*, May 15, 1971, p. 316. (Emphasis added.) This statement was also included in the Watch Tower Society's Bible dictionary, *Aid to Bible Understanding* (1971), p. 328. It is still retained in the revised 1988 edition (*Insight on the Scriptures*, Vol. 1, p. 454).

B.C.E., not 607 B.C.E., as the date for the desolation of Jerusalem in Nebu-chadnezzar's 18th regnal year. Further, the Watch Tower Society also rejects the figures given by Ptolemy's Canon for the reigns of Xerxes and Artaxerxes I.¹⁴ To use the Canon in support of the 539 B.C.E. date while at the same time *rejecting* its chronology for periods falling *prior to* and *after* this date would be totally inconsistent.

Evidently realizing this, the Watch Tower Society in the very next year once again rejected Ptolemy's Canon, declaring that "the very purpose of the Canon makes absolute dating by means of it impossible." If this were true, the Society could not, of course, use the Canon in support of the 539 B.C.E. date.

With Ptolemy's Canon thus removed, the secular basis of the Society's "Bible chronology" now wholly depended on the trustworthiness of the second witness, *the Greek Olympiad Reckoning*. How about this era reckoning? In what way does it fix Babylon's fall to 539 B.C.E., and to what an extent can Olympic dates quoted by ancient historians be relied upon?

The Olympiad Era: The first year assigned to this era is 776 B.C.E. This year, therefore, is designated as "Ol. I,1," that is, the first year of the first Olympiad. Now this does not mean that the first Olympic *games* took place in 776 B.C.E. Ancient sources indicate that these games began to be held much earlier. Nor does it mean that already back in 776 B.C.E. the Greeks had started an era founded upon the Olympic games. As a matter of fact no reference to the Olympiad era may be found in all ancient literature until the third century B.C.E.! As Professor Elias J. Bickerman points out,

¹⁴ According to Ptolemy's Canon, Xerxes ruled for 21 years (485-464 B.C.E.) and Artaxerxes I for 41 years (464-423 B.C.E.). In order to have the 20th year of Artaxerxes I fixed to 455 instead of 445 B.C.E., the Society sets the beginning of his reign 10 years earlier, thus making it 51 years instead of 41. As this would displace all dates prior to Artaxerxes I by 10 years, including the date for the fall of Babylon, the Society has subtracted 10 years from Xerxes' sole reign, making it 11 years instead of 21! The only reason for these changes is that they are necessitated by the Society's particular application of the "seventy weeks" of Daniel 9:24-27. This application was originally suggested by the Jesuit theologian Dionysius Petavius in De Doctrina Temporum, a work published in 1627. Many others picked up the idea, including the Anglican archbishop James Ussher in the same century. In 1832 the German theologian E. W. Hengstenberg included a lengthy defense of it in his well-known work Christologie des Alten Testaments. Since then, however, the idea has been completely demolished by archaeological findings. This has been demonstrated in a separate study published on the web: http://user.tninet.se/~oof408u/fkf/english/artaxerxes.htm

¹⁵ Awake!, May 8, 1972, p. 26.

"the numbering of Olympiads was introduced by Timaeus or by Eratosthenes." And Dr. Alan E. Samuel specifies: "The Olympiad reckoning system, originated by Philistus, was subsequently used in an historical context by Timaeus, and from then on we find historical chronologies based on Olympiads." Timaeus Sicilus wrote a history of Sicily, his native country, in 264 B.C.E., and Eratosthenes, a librarian at the famous library in Alexandria in Egypt, published his *Chronographiae* some decades later.

The Olympiad reckoning, then, like the Christian era, was introduced *more than 500 years* after the year that was chosen as the starting-point for that era! How did the Greek historians manage to fix the date for the first Olympiad as well as other dates (for example, the first year of Cyrus) hundreds of years later? What kind of sources were at their disposal?

They studied *lists of victors* in the quadrennial games kept at Olympia. But unfortunately such lists had not been kept continuously all the way from the beginning. As Dr. Samuel points out, the first list was "drawn up by Hippias at the end of the fifth century B.C.," that is, around 400 B.C.E. ¹⁸ "By Hellenistic times the list of victors was complete and reasonably consistent and the framework for chronology was established and accepted." But was the list reliable? Samuel continues: "Whether all this was right, or whether events were assigned to years correctly, is another matter." Pointing out that "the shrewd Plutarch [c. 46—c. 120 C.E.] had his doubts," he goes on to caution that "we too should be very dubious about chronographic evidence from Olympiads much before the middle or beginning of the fifth century [i.e., before 450 or 500 B.C.E.]." ²⁰

The Watch Tower Society's confidence in the Olympiad reckoning is even more illusory, however. This is because, while they accept the Olympiad dates given by ancient historians for the reign of Cyrus, they reject the Olympiad dates given by these historians for the reign of Artaxerxes I, despite the fact his reign fell *much closer* to our time. Thus, when Julius Africanus, in his *Chronography* (published c. 221/22 C.E.), dates the 20th year of Artaxerxes to the "4th year

¹⁶ Elias J. Bickerman, *Chronology of the Ancient World*, revised edition (London: Thames and Hudson, 1980), p. 75.

¹⁷ Alan E. Samuel, Greek and Roman Chronology (München: C. H. Beck'sche Verlagsbuchhandlung, 1972), p. 189.

¹⁸ A. E. Samuel, op. cit., p. 189.

¹⁹ Ibid., p. 190.

²⁰ *Ibid.*, p. 190. Bickerman (*op. cit.*, p. 75) agrees: "The trustworthiness of the earlier part of the list of Olympic victors, which begins in 776 BC, is doubtful."

of the 83rd Olympiad," corresponding to 445 B.C.E., this date is rejected by the Watch Tower Society in preference of 455 B.C.E., as was noted earlier (footnote 14).²¹ As in the case of Ptolemy's Canon, then, the Society again uses a witness that at other times is completely rejected, and this for the sole reason that in those areas the evidence is unfavorable to its teachings.

Aside from the Watch Tower Society's inconsistency, the Olympiad datings preserved by Diodorus, Africanus and Eusebius indicating 539 B.C.E. to be the date for the fall of Babylon, cannot alone be used to establish that date as an absolute date on which the chronology of the Hebrew Scriptures can be based. This is due to the simple fact, already presented, that the Olympiad reckoning system was not actually instituted until the third century B.C.E.—or three centuries *after* the fall of Babylon.

Astronomy and the year 539 B.C.E.

The preceding discussion of the Society's fruitless attempts to establish a secular basis for its particular "Bible chronology" epitomizes the content of a booklet published in 1981, *The Watch Tower Society and Absolute Chronology*.²² Perhaps it was this exposure that—directly or indirectly—incited the Society's writers to make another attempt to establish the 539 B.C.E. date. At any rate, a new discussion of the date was published in 1988 in the Society's revised Bible dictionary, *Insight on the Scriptures*, in which the authors now try to fix the date *astronomically*.

As explained earlier (in footnote 2), an absolute chronology is usually best established with the assistance of astronomically-fixed dates. In the 1870s and 1880s, excavations in Babylonia unearthed a great number of cuneiform texts containing descriptions of astronomical events dating from the Babylonian, Persian and Greek eras. These texts provide numerous absolute dates from these periods.

The most important astronomical text from the Neo-Babylonian era is a so-called astronomical "diary," a record of about *thirty* astronomical observations dated to the 37th year of Nebuchadnezzar. This tablet, which is kept in the Berlin Museum (where it is designated *VAT 4956*), establishes 568/67 B.C.E. as the absolute date for the 37th year

²¹ The Ante-Nicene Fathers, ed. A. Roberts and J. Donaldson, Vol. VI (Grand Rapids, Michigan: Wm. B. Eerdmans Publishing Co., reprint of 1978), p. 135.

²² Karl Burganger, *The Watch Tower Society and Absolute Chronology* (Lethbridge, Canada: Christian Koinonia International, 1981), pp. 7-20. See above, p. 70, note 100.

of Nebuchadnezzar. This date obviously implies that his 18th year, during which he desolated Jerusalem, corresponds to 587/86 B.C.E. That is 20 years later than the 607 B.C.E. date assigned to that event by the Watch Tower Society. A detailed discussion of this and other astronomical texts is given in chapter four.

The Watch Tower Society's concern, then, is somehow to bypass the use of any such unfavorable ancient text and find a way to establish the date of 539 B.C.E. *independently* of it, thereby avoiding conflict with the corollary evidence the text supplies that undermines a 607 B.C.E. date for Jerusalem's fall. To what astronomical evidence do they resort?

Strm. Kambys. 400: The astronomical text, designated *Strm. Kambys. 400*, is the text now used by the Watch Tower Society to establish the 539 B.C.E. date. It is a tablet dated to the seventh year of Cambyses, the son of Cyrus.²³ Referring to two lunar eclipses mentioned in the text—eclipses which modern scholars have "identified with the lunar eclipses that were visible at Babylon on July 16, 523 B.C.E., and on January 10, 522 B.C.E.,"—the Society concludes:

Thus, this tablet establishes the seventh year of Cambyses II as beginning in the spring of 523 B.C.E. This is an astronomically confirmed date.²⁴

To what does this lead? If 523/22 B.C.E. was the seventh year of Cambyses, his *first year* must have been 529/28 B.C.E. and the preceding year, 530/29 B.C.E., must have been the *last year* of his predecessor, Cyrus. To arrive at the date for the fall of Babylon, however, we also need to know the length of Cyrus' reign. For this, the Society is forced to accept the information found in another type of cuneiform texts, the *contract tablets*, that is, dated business and administrative documents. Of these they state:

The latest tablet dated in the reign of Cyrus II is from the 5th month, 23rd day of his 9th year. . . . As the ninth year of Cyrus II as king of Babylon was 530 B.C.E., his first year according to that reckoning was 538 B.C.E. and his accession year was 539 B.C.E.²⁵

²³ This text, which is designated *Strm. Kambys.* 400, is not exactly a "diary" in the strict sense, although it is closely related to this group of texts.

²⁴ Insight on the Scriptures, Vol. 1 (Brooklyn, New York: Watchtower Bible and Tract Society of New York, Inc., 1988), p. 453.

²⁵ Ibid., p. 453.

To establish the date 539 B.C.E., then, the Society unreservedly accepts several ancient secular sources: (1) a Babylonian astronomical tablet, and (2) Babylonian contract tablets dated to the reign of Cyrus. Yet, on the following pages of the same article (pages 454-456) other documents of the very same type—astronomical texts and contract tablets—are rejected because of their support for the date 587 B.C.E. for the destruction of Jerusalem!

If the Society's criticism of these astronomical diaries (mainly their being later copies of an original) were valid, that criticism would apply with equal force to their favored *Strm. Kambys. 400*. Like *VAT 4956*, *Strm. Kambys. 400* is a copy of an earlier original. In fact, it may hardly even be termed a copy. The eminent expert on astronomical texts, F. X. Kugler, pointed out as early as 1903 that this tablet is only partly a copy. The copyist was evidently working from a very defective text, and therefore tried to fill in the *lacunae* or gaps in the text by his own calculations. Thus only a portion of *Strm. Kambys. 400* at best contains observations. The rest are additions by a rather unskilled copyist from a much later period. Kugler commented that "not one of the astronomical texts I know of offers so many contradictions and unsolved riddles as *Strm. Kambys. 400*."²⁶

By contrast, *VAT 4956* is one of the best preserved diaries. Although it is also a later copy, experts agree that it is a faithful reproduction of the original.

There is some evidence that the lunar eclipses shown on *Strm. Kambys*. 400, referred to in the book *Insight on the Scriptures* were calculated rather than observed.²⁷ The point here made, though, is not the validity or lack of validity of those particular observations, but that, while applying certain criteria as a basis for *rejecting* the evidence of *VAT* 4956, the Watch Tower Society does not let *the same criteria* affect its *acceptance* of *Strm. Kambys*. 400 because it views

- 26 Franz Xaver Kugler, "Eine rätselvolle astronomische Keilinschrift (Strm. Kambys. 400)," Zeitschrift für Assyriologie, Vol. 17 (Strassburg: Verlag von Karl J. Trübner, 1903), p. 203. For a transcription and translation of the text, see F. X. Kugler, Sternkunde und Sterndienst in Babel, Buch I (Münster in Westfalen: Aschendorffsche Verlagsbuchhandlung, 1907), pp. 61-75.
- 27 Dr. John M. Steele summarizes the present scholarly view of Strm. Kambys. 400 in the following words: "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.... There is also debate concerning whether the two lunar eclipses were observed or calculated."—John M. Steele, Observations and Predictions of Eclipse Times by Early Astronomers (= Archimedes, Vol. 4. Dordrecht/Boston/London: Kluwer Academic Publishers, 2000), p. 98.

this document as giving apparent support to its claims. This repeated inconsistency results from the same "hidden agenda" of seeking to protect a historically unsupported date.

Actually, to fix the date for the fall of Babylon, it is much safer to start with the reign of Nebuchadnezzar and count *forward*, instead of beginning with the reign of Cambyses and counting *backward*. The date 539 B.C.E. for the fall of Babylon was, in fact, first determined this way, as pointed out by Dr. R. Campbell Thompson in *The Cambridge Ancient History*:

The date 539 for the Fall of Babylon has been reckoned from the latest dates on the contracts of each king in this period, counting from the end of Nabopolassar's reign in 605 B.C., *viz.*, Nebuchadrezzar, 43: Amel-Marduk, 2: Nergal-shar-usur, 4: Labashi-Marduk (accession only): Nabonidus, 17 = 66.²⁸

The Watch Tower Society, however, accepts only *the end product* of this reckoning (539 B.C.E.), but rejects the reckoning itself and its starting point, because these contradict the date 607 B.C.E. The Society rejects the astronomical texts in general and *VAT 4956* in particular; on the other hand, it is forced to accept the most problematic one—*Strm. Kambys. 400*. Surely, it would be difficult to find a more striking example of inconsistent, misleading scholarship.

As has been demonstrated above, 539 B.C.E. is not a logical starting-point for establishing the date for the desolation of Jerusalem. The most reliable dates in this period (in the 6th century B.C.E.) that may be established as absolute fall much earlier, within the reign of Nebuchadnezzar, a reign that is directly fixed to our era by *VAT 4956* and other astronomical texts.

Further, the Bible provides a *direct synchronism* between the reign of Nebuchadnezzar and the desolation of Jerusalem. As pointed out earlier, 2 Kings 25:8 explicitly states that this desolation occurred in the "nineteenth year of King Nebuchadnezzar."²⁹ By contrast, no such

²⁸ R. Campbell Thompson, "The New Babylonian Empire," *The Cambridge Ancient History*, ed. J.B. Bury, S.A. Cook, F. E. Adcock, Vol. III (Cambridge: Cambridge University Press, 1925), p. 224, ftn. 1.

²⁹ The "19th" year here evidently corresponds to the "18th" year according to the Babylonian system of reckoning the regnal years of kings. In Assyria and Babylonia, the year in which a king came to power was reckoned as his "accession-year," while his first year always started on Nisan 1, the first day of the next year. As will be discussed later, Judah at this time did not apply the "accession-year system," but counted the accession-year as the first year. See the Appendix for Chapter 2.

direct synchronism is given in the Bible for the fall of Babylon.³⁰

But this is not all. The lengths of reigns of the Neo-Babylonian kings (as quoted from the contract tablets by Dr. R. Thompson above) from the first king, Nabopolassar, to the last one, Nabonidus, may be firmly established in a number of different ways. In fact, the chronology of this period may be established by at least *seventeen* different lines of evidence! This evidence will be presented in the next two chapters.