Time and Prophecy
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A Harmony of Time Prophecy with History and Archaeology

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Inquiries: 8060 Wing Span, SD, CA 92119
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Preface

Notable among the treasures of present truth are the doctrines of chronology and time prophecy. Those who understand the presentation of these subjects in Volumes 2 and 3 realize how inter-twined they are with the subject of the Lord's Return. It is that relationship which imparts to them special importance.

They testify that we stand today at a transition of the ages. And they are not alone in this testimony. The Second Presence of the Lord, though unseen by the world, is evident to us also by the signs which have flooded around us. Dark-age creeds have yielded to the light of the Divine Plan. There has been a harvest work, and the sickle of truth has gathered many of the wheat from Christendom. Satan's kingdom has been struck with two World Wars, Israel is a nation again, and mankind everywhere have been aroused to look for something better.

Some brethren correctly reason that the abundance and force of these signs diminish our reliance on time prophecy, which necessarily was of greater importance early in the harvest. But others, also correctly, recognize that if time prophecy pointed brethren to the beginning of the harvest more than a century ago, its light should now shine even brighter, not dimmer, confirmed as it has been by the events it predicted.

It is therefore with apprehension that we meet the suggestion that the facts of history require a modification in the chronology we have applied to some time prophecies. Yet the force and depth of the evidence, both from history and (as we shall see) from scripture, compel us to face this possibility squarely. It is the conclusion of this writer, and others, that a change is required. History actually did unfold a little differently than we supposed. This paper has two purposes: (1) To present the evidence for that conclusion. (2) To demonstrate how history as it actually unfolded harmonizes with scripture and with time prophecy.

Truth is our friend. It is not our enemy. If the facts show clearly that we have an adjustment to make, we should not fear to let the facts exert their proper influence. Whatever the Lord testifies by time prophecy surely accords with the facts. By and by the many who lived through the ages of history will be back again, marvelling at the splendors of life in its perfect glory. Then the record of time will be known first hand, without question. Will the full light of day then show that we, who have present truth, have been noble in pursuit of the facts?

I wish you to know at the outset my prophetic conclusions, so that you know where this paper will lead. (1) I understand the Lord returned in or about 1874, that the seven times of gentile rule ended with World War I, that 1878 marked a return of favor to Israel, that the antitypical Jubilee has begun, that there are time parallels between the Jewish age harvest and the Gospel age harvest, and that we have entered the seventh millennium from Adam’s creation. (2) It is as true now as ever that the specific application of time prophecy requires a measure of reasoning and deduction which distinguishes this subject from other doctrines more explicitly defined. Nevertheless, (3) the intertwining harmony between the seven times, the 3½ times, and the 1845 years between the two advents is stronger and firmer than ever before. (4) Two options will be given regarding the Jewish double.
(5) A question remains about one span of chronology beginning in the patriarchal age during the life of Jacob.

The discussion of the desolation of the land, and of the period of the kings, I tender with strong personal conviction. It is here that the evidence is most explicit. And it is here that the harmonies of history with time prophecy sparkle the brightest. The remaining conclusions stem more or less naturally from these areas. For this reason we require to examine the recent periods of history first, and work back to the more distant periods.

Most of the information compiled in this study comes from others. Therefore if these pages are well received, the credit for their good belongs to others.¹ If you detect flaws of fact, evidence or conclusion, please let me know. May the Lord be praised for any light we may see on this subject.

-- Brother David Rice
Section One

The Value of Time Prophecy

The fulfillment of prophecy is a strong testimony that the scriptures are from God. When time is included in prophecy, it adds a specificity which is even more impressive. How many unbelievers would be surprised to know that Daniel predicted five centuries in advance the very year of Christ's baptism, and of his death?

That time prophecy exists in the Bible argues that some good will accrue to us from its study. And since much of it refers to the "time of the end," and we are in the time of the end, we have all the more reason to expect a special benefit from it. Here are two possible benefits.

First, time prophecies alert us to look for the signs that we are nearing the end of our Christian journey. It is like a man on a long voyage who passed the days reading, resting or strolling the decks enjoying the fresh sea air. But with the dawn of the last day he was eager for signs of his destination. He went to the bow and looked out through the fog, at first seeing nothing. But time passed and he noticed some kelp floating in the sea. The fog receded, and he noticed a few birds above. As he scanned the horizon he discerned the hazy outline of hills and mountains. He saw a vessel in the distance, then another. He spotted the shoreline, a lighthouse on a hill, then a variety of smaller boats. Soon he could make out the docks on the shore, and some activity in the background. Now the signs were clear, and all about him, and he prepared for his arrival.

Second, time prophecies help us interpret the meaning of the signs we see. It is like three farmers chatting in a field, who noticed a cloud of dust or smoke in the distance. As they mused of it together, one supposed it was a brush fire. Another ventured it could be dust in a whirlwind. But the third asserted with conviction, no, it was smoke from a passing train. With some surprise at his confidence, the others asked how he could be so sure. He answered "It is Monday, twelve noon. It's time for the train!"

Both of these benefits have been demonstrated in actual experience. Time prophecy alerted the brethren to anticipate what 1914 might bring, and helped explain the war that came. Time prophecy prompted the Miller movement in America, and others in Europe, to rouse the Christian world to look for the second coming, and to freshly examine the Scriptures. Even before the French Revolution, prophetic students were watching for a great shaking. "For more than a century before the [French] Revolution, a line of expositors of the Protestant Historical School not only had predicted from the prophecies of Daniel and the Apocalypse the approaching end of the 1260 years of the ecclesiastic supremacy of the Papacy, but had set forth France as the probable instrument, and infidelity as the possible means of the coming overthrow." (Froom II, 723)

Understandably, the various forecasts involved some imprecision and some over expectations. But now, through the unfolding of actual events, we can trace the intent of the prophecies more clearly. Papacy's reign of 1260 years has ended. The sanctuary class has been cleansed. The old kingdoms of Europe have been broken. The clouds of trouble do in fact mark a change of the ages.
The Time Prophecies of Daniel

Probably the most notable example of time prophecy appears in Daniel, at the end of a lengthy prophecy in chapters 11 and 12 which begins in the third year of Cyrus (10:1) and extends to the resurrection of the dead in Christ's kingdom (12:1, 2). The passage begins with a prediction of now ancient events. "There shall stand up yet three kings in Persia, and the fourth shall be far richer than they all: and by his strength through his riches he shall stir up all against the realm of Grecia" (11:2, 3). After Cyrus came Cambyses, Smerdis, Darius and Xerxes. Xerxes gathered a vast army to subdue Greece, and his unexpected defeat in this campaign is famous in history. Verse 3 refers to Alexander the Great, king of Greece, who rose some generations after Xerxes' failed campaign. When Alexander died his kingdom was split among four generals, "divided toward the four winds of heaven" (verse 4).

The remainder of the chapter takes us cryptically through history toward the kingdom. At the close of the vision Daniel was told to "shut up the words, and seal the book to the time of the end" (12:4). Then we encounter the time prophecies: of 1260 days (3½ times), 1290 days, and 1335 days. The first of these is mentioned seven times in the scriptures, once here, once in Daniel 7, and five times in Revelation 11, 12, 13. Its very frequency tells us it is important.

The prophecy is not a mystery to the brethren today. For centuries, Protestant interpreters have identified the 1260 days as 1260 years during which Papacy would exercise considerable power, while both the scriptures and the saints would be oppressed. The dates the brethren usually identify for this period are 539 to 1799 (Volume 3, Chapter 3). We will refer to this again in Sections Two, Three and Ten. But the points we wish to observe here are: when the prophecy would be understood, by whom, and for what purpose.

The vision was closed to Daniel. He was told "shut up the words, and seal the book" (12:4), and "the words are closed up and sealed till the time of the end" (12:9). But verse 4 says at the time of the end (when the things recorded would come to pass), "many shall run to and fro, and knowledge shall be increased." This is frequently applied to the rapid travel and general increase of knowledge which mark our day. However, in context, it probably has a more specific meaning. A parallel scripture which helps explain the meaning is Amos 8:11, 12. Amos refers to a famine for hearing the words of the Lord, and adds "They shall run to and fro to seek the word of the Lord, and shall not find it." Daniel, in contrast, speaks of a time when the word of the Lord will be revealed. At the time of the end "many shall run to and fro [seeking the knowledge which was sealed to Daniel], and knowledge [of the prophecy] shall be increased."

In Revelation 10, at the close of the 3½ times (compare Daniel 12:7, Revelation 10:6) when "there should be [those prophetic times] no longer [since they expired]," the sealed book of Daniel is now "open in the hand of the angel ... and he said ... take it, and eat it up" (Revelation 10:8). The time for understanding the prophecy was due. This was still before the Lord's return at the seventh trumpet, which does not sound until Revelation 11:15.

Daniel 12:10 also affirms that "none of the wicked shall understand, but the wise shall understand,"
and verse 11 implies that the understanding would become general among the wise ones at the end of the 1290 years.

All of this exactly matches the facts. As the time approached for the prophecy to run its course, more and more became aware of its import. But the Miller movement in America (and others in Europe), which was founded specially on an understanding of these prophecies, and explained their meaning broadly through the Christian world, developed about 30 years after the close of Papacy's 1260 years.

Daniel 12:12 implies that another 45 years will take us to a period of special "blessed"-ness. No other clue is given in the text to aid us in its interpretation. But the whole force and purpose of the movements stimulated by these prophecies was to look for the return of Christ. Might this last prophecy therefore take us to that long-sought event? This possibility is strengthened by a comparison with Matthew 24:46, and Luke 12:37. Both texts speak of the return of Christ, and both specify that those watching and diligent will be specially "blessed."

The blessing of Luke 12:37, and its parallel text Revelation 3:20, is spiritual nourishment -- truth that was lost in the famine of the dark ages (Revelation 6:5, 6). These texts show that this nourishment is provided after the Lord's return. When we note that the beauties of the Divine Plan opened up to the brethren from the 1870s forward, we observe that the events have confirmed the prophecy.

Clearly, therefore, time prophecy has accomplished its purpose. It predicted a long night, it marked its close, it alerted the watchers to look for the Lord's return, it now tells us we are at that blessed time, and it confirms that the signs about us point to a climax of the ages.

We therefore value time prophecy highly. We do not disparage it. The intent of this paper is not to diminish its luster, but to increase it.
Section Two

The Applications of William Miller

It may interest you, as it did me, to learn how William Miller applied time prophecy. Therefore we will briefly notice his views. Understanding them will also help us understand the background for the views published in Volume 2. Additionally, there is a point I wish to make about his views afterward.

This information comes from a book titled Evidence from Scripture and History of the Second Coming of Christ About the Year 1843. It contains transcripts of 19 lectures given by Bro. Miller. It was published in Boston in 1842 by Joshua V. Himes, a close associate of Bro. Miller.²

Chronology

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Prophecy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1656</td>
<td>Adam to Flood</td>
<td>1260 years -- 538 ad - 1798 (538, Pope controls Rome)</td>
</tr>
<tr>
<td>428</td>
<td>to Abraham</td>
<td>1290 years -- 508 ad - 1798 (1798, Berthier deposed Pope)</td>
</tr>
<tr>
<td>470</td>
<td>to Israel entering Canaan</td>
<td>1335 years -- 508 ad - 1843 (508, 10 kings converted)</td>
</tr>
<tr>
<td>581</td>
<td>to beginning of the Temple</td>
<td>2520 years -- 677 bc - 1843 (Israel's seven times)</td>
</tr>
<tr>
<td>345</td>
<td>to captivity of Manasseh</td>
<td>2450 years -- 607 bc - 1843 (49 jubilees)</td>
</tr>
<tr>
<td>677</td>
<td>to 1 ad</td>
<td>2300 years -- 457 bc - 1843 (Dan. 8:14, begin with 70 wks)³</td>
</tr>
<tr>
<td>1843</td>
<td>to complete 6000 years</td>
<td>490 years -- 457 bc - 33 (Jesus' ministry 26 to 33)</td>
</tr>
</tbody>
</table>

6000 years

1843

4157 bc

677 bc

607 bc

457 bc

508

538

1798

(6000 years)

(2520 years)

(2450 years)

(2300 years)⁴

(1335 years)

Two questions are raised by this review. (1) Did Bro. Miller concern himself with the absence of a zero year between bc and ad? (2) Was not the big disappointment in the fall of 1844 rather than 1843? The two issues are related.
(1) As you can observe, all the bc dates above really point to 1844 rather than 1843 when an adjustment for no zero year is made. However, I am not aware of any mention of this by Miller.

(2) As the time approached, Miller was urged by his followers to be more specific on the date when Christ would return. Bro. Miller concluded that Christ's return would be between March 21, 1843 and March 21, 1844 (presumably because March 21 is the date of the spring equinox, at which approximate time the Jewish month Nisan began). As time passed, many surmised that the Lord was giving them several months of that year to continue the work, to arouse others. By the spring of 1844, however, there was disappointment. Then in August, one Samuel Sheffield Snow, noticing the prominence of the 7th month in scripture, fastened upon October 22, 1844, which he concluded was the 10th day of the 7th Jewish month that year. He reset the end of the 2300 days from 1843 to 1844, and explained his views in a paper titled The True Midnight Cry. His thoughts were carefully reasoned and detailed. They spread rapidly and spontaneously. The movement revived, and the disappointment was even keener after the new date passed. (Knight, 126, 188)

Commenting on the shift to 1844, Froom says: "It was not until Miller's 'Jewish year 1843' ran out (in the spring of 1844) that the great majority of the Millerites began to pay serious heed to a few insistent voices in their midst. These had been trying to demonstrate that 2300 years from 457 bc would terminate over in the Jewish year '1844,' not within the year '1843' " (Froom IV, 791). These few had noticed the lack of a zero year and its implications.

Miller himself was reluctant to make the change, and did not do so based on the zero year question. "Miller was the last to approve, only capitulating on October 6. He still held, however, to '1843,' and even to his old terminal date at the equinox in March. But he made the 'tarrying time' of Habakkuk 2:13 and Matthew 25 extend from the equinox to October 22, which he took as the probable day of the advent on the basis of the autumnal types." (Froom IV, 819)

A Focus on One Date

The principal feature of Bro. Miller's arrangements is that one date, 1843, is the focus of five distinct time spans. Little wonder that he felt a conviction regarding this date. However, as impressive as his several testimonies may have seemed, clearly they were not all correct.

But neither were they all wrong. That is an important point to observe. Surely he was among the "wise" to whom the prophecies of Daniel did open their testimony. His understanding of the 1260 years was essentially correct. His application of the 2300 years is very close to what many brethren still embrace. Is it not possible that some of the other events were (incorrectly) adjusted to coincide with these good applications? This would explain how Bro. Miller could be off in several areas, and yet, because led of the Spirit to a grasp of some of the prophecies, he focused on the right area of history to rouse the Christian world to prepare for the second advent.

It is precisely this which holds the answer to the question which must be faced as we proceed. If there are (as I believe) adjustments to be made in the chronology we use, how is it that an imperfect
chronology has correctly brought us to (for example) the Lord's return when the signs confirm it began, to Israel's recovery since 1878, and to the end of the seven times marked by World War I? It is because we were not all wrong. Some correct applications formed the backbone of an arrangement to which other features were adjusted to fit. We will refer to this matter again in Section Thirteen.

Bro. Miller's Humble Confession

I cannot refrain from citing Bro. Miller's simple acknowledgment after the Spring disappointment. It speaks eloquently of his humility. "Father Miller has proved himself to you all to be only a poor fallible creature, and if you had trusted in him you would have given up your faith, and I don't know what would have become of you; but now you stand on the word of God, and that cannot fail you.' True to his initial counsel, Miller ever pointed people to the Bible rather than to [himself]" (Knight, 165, citing the Advent Herald of June 5, 1844, 140). No doubt the ages will rightly regard this humble servant as a Godly herald, and a pillar of faith.

An Improvement on Miller's Approach

Nelson Barbour was an associate of Bro. Miller. After the disappointment he went to Australia on a commercial venture, and in 1859 left there to return to America by way of England. On the voyage he was encouraged to review the prophecies of Daniel by an English chaplain. While doing this, the thought occurred to him that the 1260, 1290 and 1335 days should all begin at the same date. (Notice that Miller had concluded the 1260 and 1290 days at the same date, and naturally the 1335 days 45 years later.) This would end the 1290 at 1828, and the 1335 at 1873. When he arrived in London (in 1860) he found in the library Elliott's Horae Apocalypticae (which ventured 1866 as the date for the Lord's return). Included in Elliott's work was a table titled "The Scripture Chronology of the World," prepared by one Christopher Bowen, showing that 5979 years from man's creation ended in 1851. This means that 6000 years would end with 1872, which was in close agreement with the new end for the 1335 days (Jonsson, 25-26).7 Barbour was understandably encouraged by this confirmation.

Bro. Russell says of him: "A brother, Barbour of Rochester, was we believe, the chosen vessel of God through whom the 'Midnight Cry' issued to the sleeping virgins of Christ, announcing a discrepancy of thirty years in some of Miller's calculations, and giving a rearrangement of the same argument (and some additional), proving that ... the morning was in 1873, and the Bridegroom due in that morning in 1874." (R288)

Other Adventists adopted these views also. Bro. Russell wrote "I recalled certain arguments used by my friend Jonas Wendell and other Adventists to prove that 1873 would witness the burning of the world etc. -- the chronology of the world showing that the six thousand years from Adam ended with the beginning of 1873 -- and other arguments drawn from the Scriptures and supposed to coincide." (R3822)8
What other arguments or adjustments he added before 1873 I do not know. Bro. Barbour says his Jubilee calculations were first seen in the spring of 1874 (The Three Worlds, Harvest Gleanings I, 59). But 1873, and then 1874, passed without a visible return. They reviewed the prophecies again, but concluded "the jubilee argument and 1335 days of Daniel could not ... be prolonged beyond the fall of '74 or the spring of 1875 and these periods were both past." This caused Barbour and others to reconsider the manner, and also the object, of the Lord's Return. (R188)

In January of 1876 Bro. Russell received a copy of Barbour's paper The Herald of the Morning, which proposed "the Lord was already present ... unseen and invisible." Since Bro. Russell had understood the manner and object of the Lord's return for some years, this caught his attention.

But the time elements used by Barbour were not explained in print. Therefore Bro. Russell paid his expenses to meet him in Philadelphia in the summer of 1876 "to show me fully and Scripturally, if he could, that the prophecies indicated 1874 as the date at which the Lord's presence and the harvest began. He came, and the evidence satisfied me." He then financed Bro. Barbour to prepare The Three Worlds, which was published in 1877. This work combined for the first time Bro. Russell's fuller views on Restitution, with the time features from Bro. Barbour (R3822). With only minor variations these are the same time features we find in Volume 2, which we next examine.
**Section Three**

**Time Features in Volumes 2, 3**

These are the periods of chronology and time prophecy described in Volumes 2 and 3.

<table>
<thead>
<tr>
<th>Chronology</th>
<th>Prophecy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1656 -- Adam to Flood</td>
<td>1260 years -- 539 ad - 1799 (539, Ravenna falls)⁹</td>
</tr>
<tr>
<td>427 -- to Abraham</td>
<td>1290 years -- 539 ad - 1829 (1799, Pope dies in prison)</td>
</tr>
<tr>
<td>430 -- to Exodus</td>
<td>1335 years -- 539 ad - 1874 (1874, Jesus returned)</td>
</tr>
<tr>
<td>46 -- to Division of Canaan</td>
<td>2520 years -- 606 bc - 1914 (Israel's seven times)</td>
</tr>
<tr>
<td>450 -- period of Judges</td>
<td>2500 years -- 625 bc - 1875 (50 x 50 jubilee great cycle)</td>
</tr>
<tr>
<td>513 -- period of Kings</td>
<td>2499 years -- 625 bc - 1874 (49 x 51 jubilee cycles)</td>
</tr>
<tr>
<td>70 -- Desolation of Land</td>
<td>2300 years -- 454 bc - 1846 (Dan. 8:14, begin with 70 wks)</td>
</tr>
<tr>
<td>536 -- to ad 1</td>
<td>1845 years -- 33 ad - 1878 (Double to 1813 bc - 33 ad)</td>
</tr>
<tr>
<td>1872 -- to complete 6000 years</td>
<td>490 years -- 454 bc - 36 (Jesus' ministry 29 to 33)</td>
</tr>
</tbody>
</table>

6000 years

A significant difference between this arrangement and Miller's is that this approach points to a series of dates, rather than just one. The single date approach was not an unreasonable one for the Adventists who had a climactic view of the return of Christ. But since the second advent is actually for (1) the gathering of his church during a harvest period, (2) the deposing of present kingdoms, (3) the regathering of Israel preparatory to (4) the establishment of his Kingdom, a series of events actually conforms better to the manner and object of the Lord's return.

Still another observation gives particular force to this view: the pattern of dates at the end of this age matches the pattern of dates at the end of the Jewish age. "These wonderful parallelisms soon became one of the leading evidences that we are in the Harvest or end of the Gospel age" (R289, see also C132). Here are the parallels.

| 2 bc -- Wise men visited 30 years early | 1844 -- Wise of Dan. 12:10 were 30 years early |
| 29 -- First advent ministry began      | 1874 -- Second advent began                    |
| 33 -- Israel rejected, Jesus raised    | 1878 -- Babylon rejected, saints raised (Israel restored) |
| 36 -- End of exclusive call to Israel  | 1881 -- End of general call                     |
| 70 -- Trouble and Overthrow of Israel | 1915 -- Trouble and Overthrow of Christendom   |

An apparent difficulty is that 1915 is used in these parallels rather than the expected 1914. Also, many brethren notice that there is no observable demonstration (independent of the parallel) that the general call ended in the year 1881. Notwithstanding these objections, I believe there is good support for harvest time parallels. We will return to this subject in Sections Seven and Eight.
The Zero Year Issue

Apparently Bro. Russell did not concern himself with this issue when he wrote Volume 2. However, he did address the matter in 1912, in an article titled "The Ending of the Gentile Times" (R5141). In this article he explained that "the matter seemed less important thirty or forty years ago than it does today," and that he was previously content with the general computation 2520 - 606 = 1914. He cites Encyclopedia Britannica to affirm that "Astronomers denote the year which preceded the first of our era as 0 and the year previous to that as BC 1." (This is why astronomical tables give eclipse dates in the bc era 1 year differently than historians do.) He does not expressly state that historical dates are based on no zero year, but his arguments accord with that fact.

He affirms that the Jewish captivity ended in "October 536 bc," and cites a sermon of his published eight years earlier which put Zedekiah's captivity in "October, 605¾ years before ad 1" (perhaps a typographic error for 605¼), which means October 606 bc. These two dates are consistent with each other. However, as he acknowledges, this produces "October, 1915, as the date for the end of Gentile supremacy in the world -- the end of the lease of 2520 years." This date does fit as a parallel to 70 ad when Jerusalem was conquered by the Romans and the temple burned. Thus he observed: "The parallel between the Jewish harvest and the present harvest would corroborate the thought that the trouble to the full will be accomplished by October, 1915."

With the benefit of hindsight, however, most brethren accept 1914 as the end of the 2520 years rather than 1915. Evidently this was Bro. Russell's final conclusion as well (Ciii). Those who agree with this (and are concerned about this detail) therefore make an adjustment, and use the fall of 607 bc for the beginning of the 2520 years, and the fall of 537 bc as the end of the Jewish captivity.

As you examine the time spans listed above, you will notice that some do, and some do not, accord with the absence of a zero year. For the benefit of precision, we will restate that information with precise dates consistent with no zero year. We will refer to these dates during the remainder of our discussion. (The 1260, 1290, 1335 days do not require restating.)

<table>
<thead>
<tr>
<th>Chronology Dates</th>
<th>Prophecy</th>
</tr>
</thead>
<tbody>
<tr>
<td>4129 bc -- Adam Created</td>
<td>607 bc - 1914 -- 2520 years, Times of the Gentiles</td>
</tr>
<tr>
<td>2473 bc -- End of Flood</td>
<td>626 bc - 1875 -- 2500 years, Jubilee Great Cycle</td>
</tr>
<tr>
<td>2046 bc -- Abraham entered Canaan</td>
<td>626 bc - 1874 -- 2499 years, 51 cycles x 49 years ea.</td>
</tr>
<tr>
<td>1616 bc -- Exodus</td>
<td>455 bc - 1846 -- 2300 years, to cleansing of sanctuary</td>
</tr>
<tr>
<td>1576 bc -- Canaan Entered</td>
<td>455 bc - 36 -- 490 years, 70 weeks prophecy</td>
</tr>
<tr>
<td>1570 bc -- Canaan Divided</td>
<td>1813 bc - 33 -- 1845 years, Jewish favor</td>
</tr>
<tr>
<td>1120 bc -- 1st year of Saul begins</td>
<td>33 ad - 1878 -- 1845 years, Jewish disfavor</td>
</tr>
<tr>
<td>607 bc -- last year of Zedekiah ends</td>
<td></td>
</tr>
<tr>
<td>537 bc -- Jews released from Babylon</td>
<td></td>
</tr>
<tr>
<td>1872 ad -- end of 6000 years from Adam's Creation</td>
<td></td>
</tr>
</tbody>
</table>
Section Four

Connecting Bible Chronology to Secular History

The thread of chronology given in the Bible from Adam forward must at some point be joined to a fixed date of secular history. The date used by Bro. Russell (and others before him) is 536 bc. "The Bible record extends to the first year of Cyrus, B.C. 536, a well established and generally accepted date. There the thread of Bible chronology is dropped -- at a point where secular history is reliable." (B38, B42, B51, B80)

It is therefore appropriate to ask upon what evidence this date is established. The answer is that this date depends upon, and is calculated from, the date of the fall of Babylon. That date is 539 bc. We will look at the evidence which establishes this date later. For the moment we want to examine how 536 bc is derived from 539 bc.

How 536 bc is Derived from 539 bc

For this purpose it is useful to determine the season of the year when Babylon fell. The month and day of this event is recorded on a tablet known as the Nabonidus chronicle. "On the sixteenth day (of Tasritu), Ugbaru, governor of Gutium, and the army of Cyrus, entered Babylon without a battle" (Beaulieu, 224). Tasritu corresponds to Tishri, the 7th month. In 539 bc this day is identified as October 12 (Beaulieu, 230).

From this time forward Cyrus was acknowledged as "king of lands" (commercial tablets of that time acknowledge him as such). However, this was not the beginning of his "first year." Both Babylonian and Persian rulers used an accession year system, and they marked their regnal years from spring to spring. This means the year a king came to the throne was his "accession year," and year one of his reign began with the next spring. Therefore the first year of Cyrus as "king of lands" was from spring 538 bc to spring 537 bc.

However, someone other than Cyrus was assigned to direct the affairs of Babylon after its conquest. That person was Darius the Mede (Daniel 5:31, 9:1). One of the interesting puzzles of history is to identify who Darius the Mede was. He was probably Gubaru, who governed Babylon after its fall to the armies of Cyrus (see Appendix A). However, it is not necessary to settle this question to proceed with our discussion. What is necessary is to understand what writers of the last century thought about Darius.

In the literature of the 1800s it was common to suppose that Darius reigned as king of Babylon for two years, and was then succeeded in this capacity by Cyrus. Here are four examples of this view (emphasis mine in all cases).

"... Darius the Mede ... in the book of Daniel, for two years holds the government in Babylon,
after the capture of the city by the Medes and Persians" (Mc&S, "Cyrus," 636, col. 2). "... the decree in question appears to date from his personal supersedure of 'Darius the Mede' at Babylon, bc 536." (Mc&S, "Chronology," 304, col. 1)

"Darius the Mede, who received the kingdom, and reigned in Babylon till Cyrus took over, and under whose reign Daniel was cast into the den of lions ... reigned as king of Babylon, probably for about two years, 538-536 bc." (Halley's Bible Handbook, "Daniel")

"We must deduct the first two years of the co-rxeship of Cyrus with Darius the Mede. This leaves seven years to Cyrus as sole King, the first of which, bc 536, is 'the first year of Cyrus, King of Persia.' (2 Chronicles 36:22)." (Cooper, 385, citing Anstey)

"The Book of Daniel states, that after the conquest of Babylon, a monarch named Darius, the Mede, took the kingdom previous to the reign of Cyrus. This Darius has not been identified with any prince known to history, and his reign has been supposed to have been short, not exceeding two years; this would reduce the accession of Cyrus, as king of Babylon, to bc 537, his first year, in which the Jews were released from captivity, falling in bc 536. Ptolemy's canon omits the reign of Darius, and gives the whole period from the capture of Babylon to the accession of Cambyses to Cyrus." (Smith, 157)

Actually, the book of Daniel does not tell us how long Darius reigned. So why is he assigned two years? I have never read an answer to this question. However, it could be supposed in this way. Daniel dates one event to the first year of Darius (9:1, 11:1), and another event to the third year of Cyrus (10:1). If both reigns began at the same time, and Daniel switched the reference from Darius to Cyrus because Darius was then gone, one could postulate a two year reign for Darius.

It is true that this view was "generally accepted" by many authors when it was cited in Volume 2 (B38, B51, 2 Chronicles 36:22). However, most scholars today do not accept this view (see Appendix A). But that is not important here. What is important is to observe two things: (1) this view begins the first year of Cyrus as king of Babylon in the spring of 536 bc. (2) This view is based on 539 bc for the fall of Babylon. The consequences of these observations are:

(1) We cannot adjust the date when the Jews were liberated from 536 bc to 537 bc without violating the premise of this view. Yet without this adjustment the Gentile Times do not end in 1914, and the 6000 years do not end in 1872. Therefore there is no reason for fond attachment to this view.

(2) The crucial date is 539 bc. Therefore we will next examine the evidence for this date.

**The Evidence Establishing the Date 539 bc**

Our purpose in examining this date is not to defend it against attack. No one is attacking it. All the brethren hang their hat on this date, and it is a solid date. Our purpose is simply to understand the basis for it.13

To arrive at 539 bc, one could back-up through the lengthy history of the Persian empire, or work
forward from fixed dates of the Assyrian empire. But a more direct and reliable approach is to work from three dates fixed with astronomical evidence just before and just after the fall of Babylon. These three dates are 523 bc, 621 bc, and 568 bc. Here are the specifics.

(1) A lunar eclipse in the 7th year of Cambyses is dated to July 16, 523 bc. We know of this eclipse from two sources. (A) Ptolemy records it in the *Almagest* (this is not the so-called canon). He records that it occurred in the 7th year of Cambyses, on the Egyptian day Phamenoth 17/18, one hour before midnight, visible in Babylon, obscuring 6 digits (a total eclipse obscures 12 digits) of the northern portion of the moon (Pedersen, 408). This detail is sufficient to identify the eclipse unambiguously. (B) The same eclipse is also recorded in a tablet designated "Strm. Kambys 400," which records several astronomical observations from that year (Jonsson, 47, note 1, 204). Therefore by counting back the first 7 years of Cambyses’ reign, and the 9 years of Cyrus’ reign, one arrives at 539 bc for the accession year of Cyrus, which was the year of the fall of Babylon.

(2) A lunar eclipse in the 5th year of Nabopolassar is dated to April 22, 621 bc. The *Almagest* records that this eclipse occurred on the Egyptian day Athyr 27/28, towards the end of the 11th night hour, visible in Babylon, obscuring 3 digits of the southern portion of the moon (Pedersen, 409). Counting forward to the end of Nabapolassar's 21 years, Nebuchadnezzar's 43 years, Amel-Marduk's 2 years, Neriglissar's 4 years and Nabonidus' 17 years = 539 bc for the fall of Babylon.

(3) A tablet designated "VAT 4956," kept in the Berlin Museum, is an astronomical diary from Nisan to Nisan of Nebuchadnezzar's 37th year. It records a number of observations of the moon and five planets which date that year to 568 bc (Jonsson, 65). Because of the significance of this tablet, we reproduce a translation of it in Appendix C. Counting forward through Nebuchadnezzar's 43rd year, Amel-Marduk's 2 years, Neriglissar's 4 years, Nabonidus' 17 years = 539 bc for the fall of Babylon.

These three dated years, each astronomically fixed, each provide an independent basis for calculating the date of Babylon's fall to be 539 bc. Their combined testimony is very strong. It is little wonder that the date is considered an established one.
The Problem

But there is an obvious problem rising from this evidence. The last two of these three proofs for the date 539 bc also require that the 18th year of Nebuchadnezzar (when he destroyed the kingdom of Judah) was 587 bc. This is 20 years later than our usual 607 bc. This abridges chronology by 20 years. (The year at issue is Nebuchadnezzar's 18th year rather than his 19th year for reasons mentioned on pages 46, 93.)

Therefore, by rejecting 587 bc, we are cutting off two of the three limbs upon which 539 bc rests. Perhaps one could surmise that evidence (1) is correct, but (2) and (3) are somehow flawed. This would preserve 539 bc while removing the 587 bc threat. Of course, that would be handling the evidence in a very arbitrary way. And this evidence is not lightly dismissed. (We will discuss tablet VAT 4956 further in Section Five.)

But there is an even more formidable difficulty to be faced than explaining away this evidence. No matter how 539 bc is established, once it is, one can count backward through the years of the kings of Babylon to Nebuchadnezzar to verify that his 18th year was indeed 587 bc. And there is compelling independent evidence which documents the reigns of those kings. It is that evidence which we next examine.
Section Five

The Neo-Babylonian Kings

Babylon had a history not of centuries, but of millennia. In order to differentiate the Babylon in the 600's and 500's BC from previous times, historians use the term Neo-Babylonia. The native rulers of the Neo-Babylonian empire were six in number, and ruled for 87 years.

(1) Nabopolassar, the father of Nebuchadnezzar. During his reign Babylon broke free from their Assyrian overlords, and became independent. Reign: 21 years.

(2) Nebuchadnezzar. It was under his generalship in the waning years of his father, and during his own extensive reign, that the Empire was forged. Reign: 43 years.

(3) Amel-Marduk (Evil-Merodach of Scripture), son of Nebuchadnezzar. In the year he ascended the throne of Babylon, he elevated Jehoiachin from prison. Reign: 2 years.

(4) Neriglissar, son-in-law of Nebuchadnezzar, who usurped the throne from Amel-Marduk. He is probably Nergal-sharezer, the Rab-Mag (Jeremiah 39:3, 13). Reign: 4 years.

(5) Labashi-Marduk, son of Neriglissar. Young and evidently incompetent, he was replaced by leaders in Babylon after some months. He did not last out his accession year.

(6) Nabonidus, an aged statesman. He was frequently away from Babylon, and appointed his son Belshazzar to rule on his behalf. His wife Nitocris may have been a daughter of Nebuchadnezzar. Reign: 17 years.

A little arithmetic will show that if these figures are correct, then counting back from 539 BC means the 18th year of Nebuchadnezzar was 587 BC (539 + 17 + 0 + 4 + 2 + 25 = 587), rather than our conventional date of 607 BC. Therefore it is material to ask upon what evidence these figures are based.

The Scriptures

The scriptures confirm the length of reign of only one of these kings: Nebuchadnezzar. Jeremiah 52:31 says Jehoiachin was released from prison in the 37th year of his captivity, on the 25th day of the 12th month, by Evil-Merodach "in the year he began to reign" (Rotherham). This means the accession year of Amel-Marduk, which is the same as the last year of Nebuchadnezzar. Since Jehoiachin was taken in the 7th year of Nebuchadnezzar (52:28), and 36 years had elapsed, he was released in the 7 + 36 = 43rd year of Nebuchadnezzar, after that king’s death. (We will later discuss the disparity between Jeremiah 52:28 and 2 Kings 24:12 -- see pages 46, 93.)

Classical and Later Sources

Dougherty mentions information from the following: Megasthenes (312-280 BC), Berosus (ca. 250 BC), Polyhistor (first century BC), Ptolemy (second century AD), Jerome (4th century AD), and
Syncellus (eighth century ad). Their figures are in the main supportive of the listing above, but some of them include variant figures. We choose to bypass these as witnesses in favor of the ancient cuneiform records.

Cuneiform Tablet Sources

Here we itemize 12 points of evidence. We will encounter some strange tablet names, sometimes multiple names for the same tablet, labeled and catalogued by different researchers. We include these names not to impress the reader, but for precision and to enable the reader who may do some independent research to identify the sources we refer to.

(1) Babylonian Chronicles. This is the modern name of a series of tablets containing official records of the Babylonian kings. These chronicles were published as a whole for the first time in 1956 (my copy is of a 1961 edition), though some parts of these were published in prior years. The set is not complete, but the following years are represented:

- Nabopolassar: Accession-3, 10-21
- Nebuchadnezzar: Accession-10
- Neriglissar: 3
- Nabonidus: Accession-17 (this tablet is also called the Nabonidus Chronicle)

As you can see, these chronicles include the last years of only two kings, Nabopolassar and Nabonidus. However, where the number "17" no doubt appeared for the final year of Nabonidus, the tablet is chipped. Therefore we appeal to these tablets only to demonstrate the length of the reign of Nabopolassar. For his final year the tablet reads:

"In the 21st year the king of Akkad stayed in his own land, Nebuchadnezzar his eldest son, the crown-prince, mustered (the Babylonian army) and took command of his troops; he marched to Carchemish which is on the bank of the Euphrates, and crossed the river (to go) against the Egyptian army which lay in Carchemish ... [they] fought with each other and the Egyptian army withdrew before him. He accomplished their defeat and to non-existence [be at?] them. As for the rest of the Egyptian army which had escaped from the defeat (so quickly that) no weapon had reached them, in the district of Hamath the Babylonian troops overtook and defeated them so that not a single man [escaped] to his own country. At that time Nebuchadrezzar conquered the whole area of the Hatti-country. For 21 years Nabopolassar had been king of Babylon. On the 8th of the month of Ab he died (lit. 'the fates'); in the month of Elul Nebuchadnezzar returned to Babylon and on the first day of the month of Elul he sat on the royal throne in Babylon."

(Wiseman, 69)

This proves that Nabopolassar did reign 21 years. Incidentally, the account cited above is of the famous "battle of Carchemish" in which Babylon bested Egypt and became the dominant power in Palestine (2 Kings 24:7). It is explicitly mentioned in Jeremiah 46:2. We will speak of it again in Appendix E, page 91.
(2) **The Uruk King List.** This was discovered in an excavation campaign in 1959/60 at the site of ancient Uruk (modern Warka), about 125 miles southwest of Babylon. It was published in German in 1962. The last king in its lengthy list is Seleucus II (226 BC), which gives some indication of the date of this tablet. The portion covering the Neo-Babylonian period gives the following information:

- 21 years: Nabopolassar
- 43 years: Nebuchadnezzar
- 2 years: Amel-Marduk

This confirms the lengths of the reigns of Nabopolassar, Nebuchadnezzar and Amel-Marduk. This tablet also confirms that the next three kings were Neriglissar, Labashi-Marduk and Nabonidus. However, the numbers for their reigns are partially damaged. All that can be determined is that these reigns were not less than 2 years 8 months, 3 months, and 15 years respectively. (The Babylonian method of numbering was something like Roman numerals -- if some are chipped away, the remaining marks indicate a minimum number. See page 24 for an example of cuneiform numbers.) These numbers are consistent with the accepted reigns for these kings, but as they are not precise we will not rely on them.

(3) **The Adda-Guppi Stele.** A damaged copy (H1A) was discovered in 1906 at Eski Harran by H. Pognon. A duplicate copy (H1B) was discovered in 1956 at Harran by D. S. Rice, and a translation by C. J. Gadd was published in 1958. This inscription recites the long life of Adda-Guppi, the mother of Nabonidus. From Gadd's translation:

"From the 20th year of Ashurbanipal, king of Assyria, when I was born, until the 42nd year of Ashurbanipal, the 3rd year of his son Ashur-etil-ili, the 21st year of Nabopolassar, the 43rd year of Nebuchadnezzar, the 2nd year of Awel-Merodach, the 4th year of Neriglissar, during (all) these 95 years ... [her god] ... looked with favor upon my pious good works [etc.]..." (Pritchard, 561)"21

She then gives thanks that her son Nabonidus is king, omitting to mention only Labashi-Marduk whose brief reign did not enter its first year, and whom her son Nabonidus replaced after a coup. Later in the tablet there is mention again of "the 21 years in which Nabopolassar, the king of Babylon, the 43 years in which Nebuchadnezzar, the son of Nabopolassar, and the 4 years in which Neriglissar, the king of Babylon, exercised their kingship, (altogether) 68 years ..." (Pritchard, 561).22

The Adda-Guppi Stele directly confirms the years of Nabopolassar, Nebuchadnezzar, Amel-Marduk and Neriglissar. This is first-hand testimony of the highest caliber.

(4) **The Hillah Stele** (Nabon. No. 8, Beaulieu Inscription 1). Found near Hillah, southeast of Babylon, a transcription was first published in 1896 by Messerschmidt, and a translation (German) in 1912. In this stele Nabonidus refers to Ehulhul, temple of the moon god Sin, in Harran.

"As to the temple Ehulhul in Harran which was in ruins for 54 years -- through a devastation by the Manda-hordes these sanctuaries were laid waste -- the time (predestined) by the gods, the
moment for the appeasement ... 54 years, had come near, when Sin [the moon god] should have returned to his place." (Pritchard, 11)

The year this temple was afflicted by the "Manda-hordes" was 16 Nabopolassar. We know this from two sources. (1) The Babylonian Chronicle says "In the 16th year ... in the month of Marcheswan the Umman-manda ... {and Nabopolassar} ... united their armies ... The king of Akkad reached Har-ran ... the city was captured, they carried off much spoil from the city and temple" (Wiseman, 61, 63, braces show my comments). (2) The Adda-Guppi Stele says "in the 16th year of Nabopolassar, king of Babylon, ... Sin, the king of all gods, became angry with his city (i.e., Harran) and his temple, and went up to heaven and the city and the people in it became desolate" (Pritchard, 560).

The year when Nabonidus resolved to end the 54 years of Ehulhul's desecration was in his accession year. "In the beginning of my everlasting reign they (Marduk and Sin) caused me to see a dream ... they were standing together ... Marduk spoke to me: 'Nabonidus, king of Babylon, carry bricks on your horse, build the Ehulhul and establish the dwelling of Sin, the great lord, in its midst.' " (Beaulieu, 108) (Nabon. No. 1, Beaulieu Inscription 15) \(^{23}\)

Therefore there were 54 years from the 16th year of Nabopolassar to the accession year of Nabonidus. Indeed, \((21-16) + 43 + 2 + 4 = 54\) years. This confirms the reigns of Nabopolassar, Nebuchadnezzar, Amel-Marduk and Neriglissar.

(5) The Family of Egibi. This family ran a prominent financial concern, and left many business documents for the period we are examining. "From the firm the Sons of Egibi we possess such an abundance of documents that we are able to follow nearly all business transactions and personal experiences of its head from the time of Nebuchadnezzar up to the time of Darius I [of Persia]" (Jonsson, 61). \(^{24}\) Three or four thousand such documents were discovered by Arabs in the 1875-76 season near Hillah, and about 2500 of them were acquired by George Smith for the British Museum from a Baghdad dealer. They were examined in the following months by W. St. Chad Boscawen, who published a report in 1878. \(^{25}\) He traced the leaders of the firm through the years, and found:

Sula began in the 3rd year of Nebuchadnezzar,
headed the firm for 20 years, until
he died in the 23rd year of Nebuchadnezzar.

He was succeeded by his son Nabu-ahi-idina,
who headed the firm for 38 years and was
succeeded by his son in the 12th year of Nabonidus.

That son, Itti-Marduk-Balatu, headed the firm 23 years
until the first year of Darius Hystaspis (521 bc).

This means from the 3rd year of Nebuchadnezzar to the first year of Darius Hystaspis should be 20 + 38 + 23 = 81 years. This should total the same as the years of the kings who reigned during this period, and it does: \((43 - 3) + 2 + 4 + 0 + 17 + 9 + 8 + 1 = 81\) years. This confirms all the reigns from Nebuchadnezzar through Cambyses.
(6) Two Thousand Dated Cuneiform Tablets. After listing the kings and their reigns as we have them in this section, Dougherty affirms "the above Neo-Babylonian king-list ... is based upon more than 2000 dated cuneiform documents. It must therefore be accepted as the ultimate criterion in the determination of Neo-Babylonian chronological questions ... [so classical historians must be] judged by this unimpeachable standard" (Dougherty, page 10, 1929).

His confidence is well founded. Mathematically, 2000 tablets covering 87 years means an average of 23 tablets per year for each year of the period. (He does not specify the actual distribution.) If, for example, Amel-Marduk reigned 22 years rather than 2 years, where are the hundreds of tablets we should expect from years 3 to 22? We have not one. The reason is obvious: those years did not exist. Dougherty's evidence confirms the reigns of all kings from Nabopolassar through Nabonidus.

(7) 4500 Dated Commercial Tablets. From 1879 to 1895 the British Museum received tens of thousands of cuneiform tablets through the labors and excavations of Hormuzd Rassam. A catalog of these tablets was published only recently, in three volumes, from 1986 to 1988, as part of a greater series titled "Catalogue of the Babylonian Tablets in the British Museum, Volume VI (to VIII): Tablets from Sippar 1 (to 3)." I purchased these volumes from the British Museum and with the assistance of others have compiled from them an exhaustive list of all tablets in these volumes which are dated in the reigns of Nabopolassar through Darius Hystaspis. There are 7671 tablets which were dated unambiguously to a particular year during this period (about 4500 tablets for the Neo-Babylonian kings).

These volumes contain 5 columns of information: a catalog number, the British Museum tablet number, a date if one appears on the tablet, a note whether the tablet was complete or partial, and a one-line description of the contents of the tablet, for example "Receipt for sesame," "Account of Bitumen," "Contract for dates," etc. These were tablets marking business transactions in the course of daily life. The next page contains a tabulation of the number of tablets found for each year of each king during this period. Notice that not one year of this period is unrepresented. But even more importantly, no tablets were found for any extra years. This evidence is extremely compelling.

Suppose, for example, that one would postulate an extra twenty years for the reign of Nabonidus. Where are the hundreds of tablets which should appear for those years? And why are the missing years all contiguous? If there are unrepresented years, why are they not randomly distributed through the whole period? And why should the twenty missing years all happen to fall at the end of a king's reign, so that a telltale gap within his reign is not obvious? And how did fate arrange that such missing tablets represent only years which all the other evidence denies as well?

This strongly confirms the reigns of all the Neo-Babylonian kings from Nabopolassar to Nabonidus. It is difficult to overstate the convincing nature of this evidence. Indeed, it is so definitive it may seem anticlimactic to proceed to any other. However, there is more.

(8) Lunar Eclipse Texts. Texts recording lunar eclipses from the Neo-Babylonian era are LBART 1418, 1419, 1420, 1421 (Abraham Sachs' designations). These contain eclipse observations assigned
to the regnal years of specific kings. Here are some of the dates which they yield (beginning Nisan of the year listed)

15 Nabopolassar 611 bc
17 Nabopolassar 609 bc
  1 Nebuchadnezzar 604 bc
12 Nebuchadnezzar 593 bc
13 Nebuchadnezzar 592 bc
14 Nebuchadnezzar 591 bc
15 Nebuchadnezzar 590 bc
30 Nebuchadnezzar 575 bc
31 Nebuchadnezzar 574 bc
32 Nebuchadnezzar 573 bc
41 Nebuchadnezzar 564 bc
42 Nebuchadnezzar 563 bc
  1 Nabonidus 555 bc

Notice that this list includes 10 absolute dates during the reign of Nebuchadnezzar. The reader who grasps the point of this cannot fail to wonder: if there are 10 absolute dates during the reign of Nebuchadnezzar -- and each of these requires the 18th year of Nebuchadnezzar to begin in 587 bc -- how can there be any doubt on the issue? Why, then, is there even a dispute at all about the proper date of 18 Nebuchadnezzar, when Zedekiah fell? The reader to whom these questions make sense is GETTING THE POINT. Little wonder that the academic / historical / scholarly / archaeological
### DATED COMMERCIAL TABLETS

<table>
<thead>
<tr>
<th>BABYLON</th>
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<tbody>
<tr>
<td>Nabopolassar</td>
<td>Nabonidus</td>
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<tr>
<td>Nebuchadnezzar</td>
<td>Cyrus</td>
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<tr>
<td>Amel-Marduk</td>
<td>Cambyses</td>
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<td>Neriglissar</td>
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<td>Labashi-Marduk</td>
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<td>23</td>
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</table>

The numbers in this chart represent numbers of tablets dated in a particular year of a particular king. For example, there are 162 tablets dated to the 6th year of Nabonidus.
world has neither dispute nor imprecision on this matter. Actually the dates for Nebuchadnezzar's reign are more sure, more solid, more founded, than even our starting date 539 bc.

One of the tablets, LBART 1419, runs from the 17th year of Nabopolassar to the 18th year of Artaxerxes. From this tablet is gleaned the following information at eighteen year intervals. (The discussion of item 12 explains why eighteen year intervals were used.)

<table>
<thead>
<tr>
<th>Year</th>
<th>King</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Nabopolassar</td>
<td>609 bc</td>
</tr>
<tr>
<td>+ 18 years</td>
<td>Nebuchadnezzar</td>
<td>591 bc</td>
</tr>
<tr>
<td>+ 18 years</td>
<td>Nebuchadnezzar</td>
<td>573 bc</td>
</tr>
<tr>
<td>+ 18 years</td>
<td>Nabonidus</td>
<td>555 bc</td>
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<tr>
<td>+ 18 years</td>
<td>Cyrus</td>
<td>537 bc</td>
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<tr>
<td>+ 18 years</td>
<td>Darius</td>
<td>519 bc</td>
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<td>+ 18 years</td>
<td>Darius</td>
<td>501 bc</td>
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<tr>
<td>+ 18 years</td>
<td>Xerxes</td>
<td>483 bc</td>
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<tr>
<td>+ 18 years</td>
<td>Xerxes</td>
<td>465 bc</td>
</tr>
<tr>
<td>+ 18 years</td>
<td>Artaxerxes</td>
<td>447 bc</td>
</tr>
</tbody>
</table>

These tablets thus not only confirm the lengths of all the Neo-Babylonian kings, but pin down a variety of absolute dates as well, all the way from Nabopolassar to Artaxerxes (Jonsson, 40-44).

This seals the integrity of the foregoing strands of evidence in a remarkable way.

(9) **VAT 4956.** This we mentioned in the last section, page 15, point (3). This tablet uniquely dates the 37th year of Nebuchadnezzar as 568 bc. (Notice that this tablet by itself requires that the 18th year of Nebuchadnezzar was 587 bc, since 568 + (37 - 18) = 587.) From 568 to 539 bc there are 29 years, and this is also the total we get counting through the years of the kings which follow: (43 - 37) + 2 + 4 + 0 + 17 = 29. This confirms the reigns of all kings from Nebuchadnezzar to Nabonidus. (For a good review of this tablet see Jonsson, 64-69. For a translation, see Appendix C.)

(10) **Nabon. No. 18** (Beaulieu Inscription 2), published in German in 1912. This is a clay cylinder inscription from an un-named year of Nabonidus. It mentions the consecration of a daughter of Nabonidus, En-nigaldi-Nanna, as high priestess of Nanna at Ur, and rebuilding of the Egipar, her residence. "It reports that the consecration of Nabonidus' daughter came as the result of an eclipse of the moon which was interpreted as an omen sent by the god Sin:

"On account of a wish for an entu princess, in the month Ululu, the month (whose Sumerian name means) 'work of the goddesses,' on the thirteenth day, the moon was eclipsed and set while eclipsed. Sin requested an entu priestess. Thus (were) his sign and his decision." (Beaulieu, 23, quoting the cylinder)

In what year of Nabonidus did this occur? "According to the Royal Chronicle, the consecration of En-nigaldi-Nanna took place in the second year of Nabonidus" (Beaulieu, 23). Supposing Nabonidus' 17th year ended in 539 bc, this would be 554 bc. Looking in that year the eclipse referred to was located. "H. Lewy pointed out that this eclipse is to be identified as that of September 26, 554 bc" (Beaulieu, 23). This is good confirmation for the 17 year reign of Nabonidus.

(11) **The "Dynastic Prophecy,"** a literary text written as prophecy, but evidently composed after the fact. Here is an extract:
"For seventeen years [he will exercise sovereignty]. He will oppress the land and the [fe]stival of the Es[agil he will cancel]. A fortress in Babylon [he will build]. He will plot evil against the land of Akkad ... A king of Elam will arise, the sceptre ... He will remove him (the preceding king) ... the king of Elam will cha[nge] his place and settle him in another land." (Beaulieu, 101, 231)

This is a clear reference to Nabonidus, the last king of Babylon, whom Cyrus, king of Persia (Elam was part of the Persian empire) removed and banished (Belshazzar was killed, but Nabonidus was not). As the text ascribes to him 17 years, this confirms the reign of Nabonidus.

(12) Eighteen-year King Lists. If there is an eclipse of the moon on a given day, there will be another eclipse 18 years, 10 days later (though it may or may not be visible from the same location on earth). This 18 year pattern was observed by the ancients, and was sometimes used to predict eclipses of the moon.30

"For example, VAT 4956 records an eclipse of the moon which occurred on the fifteenth day of the month Sivan. An astronomer or astronomers had calculated this eclipse with the help of a known eclipse period and therefore it is designated in the text as atalu Sin which means 'calculated lunar eclipse.' Then were probably added the words (the text is somewhat dam-aged): sa etelik (LU), 'which did not take place,' i.e. it was invisible in Babylon. This has been confirmed by modern computations: The eclipse took place on July 4, 568 bce (Julian calendar), but as it began in the afternoon it was not visible at Babylon." (Jonsson, 67)

This cycle led the ancients to concern themselves with lists of 18 year periods.31 One of these is Sp II, 955, first published in German in 1892. At the left is a facsimile with translation of a portion of an 18-year list (Jonsson, Supplement, 32-33). For our present discussion this verifies that Nabonidus reigned 17 years (18 - (17 - 7) = 8th of Cyrus).

<table>
<thead>
<tr>
<th>Year</th>
<th>King</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Nabonidus</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>Cyrus</td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>Darius</td>
<td>18</td>
</tr>
<tr>
<td>27</td>
<td>Darius</td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>Xerxes</td>
<td>18</td>
</tr>
<tr>
<td>6</td>
<td>Artaxerxes</td>
<td>18</td>
</tr>
<tr>
<td>24</td>
<td>Artaxerxes</td>
<td>18</td>
</tr>
<tr>
<td>1</td>
<td>Darius</td>
<td>18</td>
</tr>
</tbody>
</table>

The first part of the 18-year list, originally called the Saros Table by Prof. Julius Oppert. This list consists of two cuneiform tablets, Sp. II, 955 (above) and Sp. II, 48, both of which were found in Babylon in the 1870s and brought to the British Museum along with many other texts. They were subsequently published and discussed by J. N. Strassmaier.42 Another, similar list is Sp. II, 71 (the so-called Saros Canon), which covers the period from the 32nd year of Artaxerxes II (373 B.C.) to the 65th year of the Seleucid era (248 B.C.), furnishing another confirmation of Ptolemy’s canon for this period.43
A Summary of Evidence for the Neo-Babylonian Reigns

Below we list the 12 lines of evidence we have examined. Each round bullet means the evidence on the left confirms the reign of the king indicated.


(1) Scriptures & Chronicles ! !
(2) Uruk King List ! ! !
(3) Adda-Guppi Stele ! ! ! !
(4) Hillah Stele ! ! ! ! !
(5) House of Egibi ! ! ! ! ! !
(6) 2000 Tablets ! ! ! ! ! !
(7) 4500 Tablets ! ! ! ! ! !
(8) Eclipse Tablets ! ! ! ! ! !
(9) VAT 4956 ! ! ! ! !
(10) Nabon. 18 !
(11) Dynastic Prophecy !
(12) 18 Year List !

Remember that these several cords of evidence (other than the scriptural testimony for Nebuchadnezzar) are drawn from ancient cuneiform sources, and most of them from first-hand records. Please note that none of these several testimonies were published before the views of Volume 2 were formed. Clearly this updated information is valuable to those concerned with matching the truths of time prophecy to the facts of history.

Beyond any reasonable doubt, this evidence gives us the truth of history as it actually unfolded. Sometimes it is easier for the mind to grasp the weight of one or two strong arguments than the combined force of several. In this case we have a massive cable of testimony woven of many stout cords. Its testimony is clear and unambiguous. Unless we simply dismiss this evidence, or wholly misapprehend its force, we cannot avoid its benefit.

Dates of Neo-Babylonian Kings, and End of the Judean Kingdom

Below is a summary of the dates as the Neo-Babylonian kings.

539 bc -- Fall of Babylon to Persia
556 bc -- Beginning of 17 year reign of Nabonidus
556 bc -- Beginning of 0 year reign of Labashi-Marduk
560 bc -- Beginning of 4 year reign of Nerglissar
562 bc -- Beginning of 2 year reign of Amel-Marduk
605 bc -- Beginning of 43 year reign of Nebuchadnezzar
587 bc -- 18th year of Nebuchadnezzar, Zedekiah taken captive, Judea laid desolate.

Next we examine the scriptures, and note their harmony with these facts. We will then begin to resolve some of the issues of time prophecy which these facts influence.
Section Six

The Seventy Years for Babylon

In Section Five we found the Neo-Babylonian kings reigned for these years:

- 21 Nabopolassar
- 43 Nebuchadnezzar
- 2 Amel-Marduk
- 4 Neriglissar
- 0 Labashi-Marduk
- 17 Nabonidus

Since Babylon fell in October of 539 bc, the 18th year of Nebuchadnezzar, when he brought the kingdom of Judah to a close, was in 587 bc. \((539 + 17 + 0 + 4 + 2 + (43 - 18) = 587\) bc\)

If the Jews returned to Israel in 538 bc, then the desolation of the land would have lasted but 49 years -- or 50 years if the Jews returned a year later (see Appendix B). But do the scriptures not say that the desolation of the land lasted for 70 years? I think they do not. There are four passages in Chronicles, Daniel and Jeremiah which speak of the 70 years. We will examine each of them.

(A) 2 Chronicles 36:19-21. "Then they burned the house of God, and broke down the wall of Jerusalem and burned all its fortified buildings with fire, and destroyed all its valuable articles. (20) And those who had escaped from the sword he carried away to Babylon; and they were servants to him and to his sons until the rule of the kingdom of Persia, (21) to fulfill the word of the Lord by the mouth of Jeremiah, until the land had enjoyed its sabbaths. All the days of its desolation it kept sabbath until seventy years were complete." (nasb)

(B) Daniel 9:2. "In the first year of [Darius the Mede] I, Daniel, observed in the books the number of the years which was revealed as the word of the Lord to Jeremiah the prophet for the completion of the desolations of Jerusalem, namely, seventy years." (nasb)

Both of these passages give the impression that the desolation of Jerusalem lasted for seventy years. However, neither passage requires this. They do require that the desolation continued "until seventy years were complete." But they do not specify when the seventy years began -- whether at the fall of Jerusalem, or at some earlier date.

This observation is a crucial one. It is the simple but essential key to harmony between recorded fact on the one hand, and Jeremiah's prophetic testimony on the other. History clearly shows that the 70 years of Jeremiah's prophecy began some years before the desolation of the land. Therefore the desolation of the land did not endure for a complete 70 years. What 2 Chronicles 36 and Daniel 9 affirm is simply that the desolation of the land would not, and did not, end before the allotted 70 years for Babylon had run its course.

However, do not suppose this is merely an accommodation of scripture to fit history. In fact a close examination of the Jeremiah passages about the 70 years will lead us to the same conclusion.
(C) Jeremiah 25:9-12. "I will send ... Nebuchadnezzar, king of Babylon ... against this land ... and against all these nations round about; and I will utterly destroy them, and make them a horror, and a hissing, and an everlasting desolation ... and this whole land shall be a desolation and a horror, and these nations shall serve the king of Babylon seventy years. Then it will be when seventy years are completed I will punish the king of Babylon and that nation, declares the Lord, for their iniquity, and the land of the Chaldeans; and I will make it an everlasting desolation."

Jeremiah does predict a desolation. And he does predict a period of seventy years. He does not say the desolation will begin when the seventy years begin. (We could get other wrong impressions from this passage, too, if we are not careful. For example, it says that after the seventy years are complete, Babylon would become desolate. Who would have guessed that desolation would not come for centuries after Babylon's fall?)

The passage specifies two things: (1) "these nations shall serve the king of Babylon seventy years." (2) "when seventy years are completed, I will punish the king of Babylon and that nation." Let us consider each of these points carefully.

(1) Does this mean all the nations Jeremiah refers to will serve Babylon an entire seventy years from beginning to end? It cannot mean that, because included in Jeremiah's list are Tyre, Elam and the Medes (25:22-25) who clearly were not subject for an entire seventy years. Therefore it must mean a period of seventy years was allotted for Babylon, during which the various nations would become servile.

(2) This is specific that the punishment of the king of Babylon would not come until the seventy years are complete. When was the king of Babylon punished? Certainly by 539 bc when Belshazzar was slain, and Nabonidus lost his empire. Therefore the 70 years allotted for Babylon expired at least by 539 bc -- which means they began no later than 609 bc. Please note this point well. This text requires that the 70 years could not have begun in 607 bc.

(D) Jeremiah 29:10. "For thus says the Lord, When seventy years have been completed for Babylon, I will visit you and fulfill My good word to you, to bring you back to this place." (nasb)

This is an extract from a letter sent by Jeremiah to the Jewish captives who went to Babylon with Jehoiachin, in the 7th year of Nebuchadnezzar (Jeremiah 52:28). The letter was written some years before the fall of Zedekiah. There are two important things to observe from this text.

(1) The seventy years are "for Babylon" (nasb), rather than "at Babylon" (King James). These years defined the time God allotted for Babylon's rule over the nations -- not the time the captive Jews would be in Babylon.

(2) Certainly the Jews who received this letter understood that those seventy years for Babylon had already begun. That was the whole explanation of why they were in Babylon -- Babylon's allotted time had begun. That is why they were told to "seek the welfare of the city where I have sent you into exile" (29:7, nasb). Yet this was some years before the fall of Zedekiah.
Summary

The prophecies of Jeremiah give us the following information about the seventy years:

(1) It was a period during which various nations would serve Babylon.
(2) It ended no later than 539 bc when Babylon was punished.
(3) It was a period "for Babylon," not "at Babylon."
(4) The captives who received Jeremiah's letter no doubt supposed it had begun.

Thus the scriptures themselves require the same conclusion as the facts of history: the 70 years of Jeremiah's prophecies began some years before the end of Zedekiah's reign. These conclusions from Scripture are consistent with the emphatic historical evidence that the seventy years began well before the fall of Zedekiah.

When did the Seventy Years Begin and End?

Necessarily they began by 609 bc (70 years before 539), and possibly by 610 bc. These dates marked the collapse of the Assyrian empire. Nineveh, the capital of Assyria, had fallen in 612, but the Assyrians regrouped in Harran. In 610 the Babylonians "marched about victoriously in Assyria" (Grayson, 95) and later that year took Harran. An unsuccessful effort by the Assyrians to retake the city with Egyptian help failed in 609. The mighty empire had come to its end. Into the power vacuum rushed Babylon, which soon conquered all of Palestine.  

Seventy years forward brings us to 540 and 539 bc. By this time Cyrus had consolidated his power elsewhere, and set his sights on Babylon. "Croesus, the ... wealthy king of Lydia, refused to acknowledge the sovereignty of Persia. Therefore, Cyrus defeated him in battle and absorbed his kingdom into the empire. During the next six years, Cyrus prepared for his conquest of Babylonia" (Whitcomb, Chart of the Babylonian Captivity). Yamaiuchi dates the march against Lydia in 547 bc, citing the events for the 9th year of the Nabonidus Chronicle (Yamauchi, 82). Then "Cyrus spent the years between 546 and 540 bc consolidating his control over the eastern parts of his empire." (Yamauchi, 84)

Therefore we have two choices for the seventy years.
1. From 610 - 540, the fall of Harran to the end of Cyrus' power consolidation, or
2. From 609 - 539, the abortive Assyrian counter-offensive to the fall of Babylon.

Do the Seventy Years of Zechariah 1:12 or 7:5 Refer to Babylon's Seventy Years?

No. Both of these scriptures speak of later 70 year periods.

(1) The 70 years of indignation in 1:12 are mentioned in "the 24th day of the 11th month ... in the second year of Darius" (1:7), early in our year 519 bc. Seventy years back = 589 bc, two years before the fall of Zedekiah. Jeremiah 39:1 says this is when the siege of Jerusalem began (the 10th month of Zedekiah's 9th year = early in our year 589 bc). The message in Zechariah is that God has now returned to bless Jerusalem. Why on that particular year? Haggai 2:18 shows this was shortly after the foundation of the temple had been (re)laid a second time.

Indeed God did bless them, and the temple was completed four years later (Ezra 6:15). When the foundation had been first (re)laid in the second year of Cyrus, the project had languished for nearly
18 years (Ezra 3:8, 4:24).  

(2) The question posed in Zechariah 7 was about the fasts in the 5th and 7th months. Evidently those fasts were to commemorate the burning of the temple and the death of Gedeliah, respectively. Now that the Jews had returned, and the temple was being rebuilt, should the fasts continue? The question was posed in the fourth month, because the fast of the fifth month was approaching.

The temple was burned in 587 bc. If they fasted and mourned for it when it occurred, the 70th fast of the series was upcoming. (The fourth year of Darius was 539 - 9 - 8 - 4 = 518 bc). The expression "those seventy years" is rendered "these seventy years" in nasb. Since the Jewish year changed with the opening of the 7th month, the original 5th month fast and approaching 7th month fast would encompass portions of 70 years.
**Section Seven**

**The Seven Times of Gentile Rule**

In the last two sections we concluded that the fall of Zedekiah was in 587 BC, rather than 607 BC. This presents two challenges: (1) How do we handle the 20 year abridgement of chronology, (2) How do we apply the "seven times" of 2520 years? We will return to the issue of chronology later. Here we examine the second issue.

These seven times are drawn from two passages of scripture: Leviticus 26 and Daniel 4. In both cases "seven times" is mentioned four times, which at least serves to strengthen the link between the two passages. It is also worthy of note that there are four possible applications of the seven times:

1. Seven times upon Nebuchadnezzar -- whether years, months, or seasons is not specified.
2. Seven decades of Babylon's rule, during which Israel was subjected.
3. Seven prophetic times of 360 years each = 2520 years (the conventional approach).
4. Seven millenniums which pass over mankind before their lost dominion is restored.

Is this why the "seven times" is mentioned four times in both Leviticus and Daniel? Or is it because four empires would dominate Israel during the seven times of their national punishment? Perhaps both; or perhaps these are coincidences.

Two of these applications, numbers 2 and 3, refer to the time Israel was subject to foreign powers. No doubt the 70 years of Babylon's power, and their rule over Israel, was a small picture of the 2520 years of gentile power, and Israel's national punishment. Therefore it is reasonable to surmise that the smaller period was merely a short first part of the larger span. In other words, they began at the same time.

As we noticed in the last section, Babylon's seventy years may have begun as early as 610 BC, when they took the last Assyrian capital, Harran. However, the year in which Daniel directly interpreted Nebuchadnezzar to be the golden head of the image was 603 BC, the second year of Nebuchadnezzar (Daniel 2:1, 38). During this 7 year span, Babylon had become the master of the middle east.

The Babylonian Chronicles inform us year by year what happened during this period.

610 -- The Babylonian army "mached about victoriously in Assyria" and then took Harran.
609 -- The Assyrians counter attacked, but failed to retake Harran from the Babylonians.
608 -- Nabopolassar and his army campaigned up the Tigris in old Assyrian territory.
607 -- Nebuchadnezzar conquered northward; later crossed the Euphrates and took KimuHu.
606 -- Egypt sieged KimuHu; Nabopolassar took three cities west of the Euphrates.35
605 -- Nebu. wins at Carchemish, pursues Egyptians, returns for throne, returns to Palestine.
604 -- Victorious march in "Hattu" (Palestine), and all its kings yield him their tribute.
603 -- Daniel, captive in Babylon, interprets Nebuchadnezzar to be the head of gold.

Clearly, during the seven year span from 610 to 603 BC, Babylon became the dominant world power on the demise of Assyria. Within this span the Kingdom of Judah lost their national independence. In 609 the Assyrians were assisted in their abortive counter-attack by the Egyptian army under Pharaoh Necho. It was while the Egyptians were travelling northward for this engagement that good king Josiah intervened, but lost his life.36 On Necho's return three months later, he deposed Jehoahaz
and placed Jehoiakim on the throne. In 605, the "third year of Jehoiakim" by Daniel's accession-year reckoning (the 4th by Jeremiah's non-accession year reckoning), Nebuchadnezzar sieged Jerusalem. Jehoiakim was bound (but then released), and Daniel with some others went into captivity (Daniel 1:1, 3, 6, Jeremiah 46:2, 2 Chronicles 36:6). This occurred in what turned out to be Nebuchadnezzar's accession year, since during this campaign his father Nabopolassar died and Nebuchadnezzar raced back across the desert to claim the throne.

Let us now go down the stream of time 2520 years, and observe if there were events of significance marking a close of Israel's seven times. 2520 years forward from 610-603 bc is the seven year span 1911-1918. We are certainly at the right era of history, for this span of years witnessed the whole of World War I. The year 1918 is fitting, as it was the year which closed that war. But 1911?

In fact, it was a significant year. When Winston Churchill later composed a four volume history of the war, he cited its significance. A recent two volume edition of that work which omits the section on the aftermath of the war is titled *The World Crisis, 1911-1918*. After explaining in two chapters the historical background for the war, Churchill devotes chapter three to the Agadir Crisis of 1911. Agadir was the name of a harbor on the Atlantic coast of Morocco, in which country France had obtained considerable influence. "On the morning of July 1 ... it was announced that His Imperial Majesty the German Emperor had sent his gunboat Panther to Agadir to maintain and protect German interests." It was a time of confrontation between the major disputants of the impending war. "All the alarm bells throughout Europe began immediately to quiver" (Churchill, 29). "Apprehension lay heavy on the minds of all ... The War Office hummed ... every preparation by forethought was made and every detail was worked out ... I could not think of anything else but the peril of war" (Churchill, 46). The crisis was at last resolved peaceably, but from that time the nations began preparations for the coming debacle, and Churchill details several examples of the significance of that year as a turning point.

But there is another country to specially consider -- Turkey. The Ottoman Turkish empire had actual control of Palestine, so if Israel was to regain their national homeland, that empire would have to fall. And the seven year span from 1911 to 1918 clearly defines the seven years of the collapse of the Ottoman Empire. In 1911 Italy attacked their north African holdings. In 1912 Greece successfully engaged them in war. In 1913 Turkey ceded to the Great Powers her European territories. In 1914, to the great surprise of England, Turkey entered the war on the side of Germany. It was for this reason that England sent a force to the middle east, which wrested the holy land away from Turkey. By 1918, the Ottoman Empire had turned to dust. History marks 1918 as the end of an era for Turkey.

Meanwhile, England had issued the Balfour declaration in November of 1917, just prior to General Allenby's peaceable conquest of Jerusalem later that month. "Her majesty's government views with favor the establishment of Palestine as a national homeland for the Jewish people." As a result of the collapse of the Ottoman empire, England could now effect the new policy.

The Seven Times had come to a close. I therefore conclude that the 2520 years of Gentile Rule:

1. Began when Babylon's seven decades began.
2. Began in a series of seven years from 610 to 603 bc.
3. Closed in a series of seven years from 1911 to 1918.
Do the Harvest Parallels Support or Weaken this Conclusion?

They strongly support it. The Roman war against Judea, during which the Jewish state collapsed, was not a one year event but a seven year event. The war was from 66 ad (when Judea revolted) to 73 ad (when Masada fell). This seven year span precisely parallels the seven year span 1911 to 1918, 1845 years later.

This actually solves a difficulty that exists with the parallels when they are applied to only a single year. Jerusalem was taken, and the temple burned, in the year 70. But 1845 years later yields 1915, rather than the convenient date 1914 which most brethren accept as the close of Gentile Times. The correct time parallel to 1914 is the year 69, but that was the one year in the midst of the war in which hostilities with the Romans temporarily ceased.

Jesus implied that such a pause would come in Luke 21:20, 21. He indicated that after the initial siege of Jerusalem, the Jews would have an opportunity to flee. That occurred when Vespasian lifted the siege and returned to Rome to claim the empire after the death of Nero, in the year 68. His son Titus did not return to Judea until the spring of 70, and then Jerusalem fell.

So What About 1914?

The outbreak of World War I in the fall of 1914 gives special weight to that year. If we go back 2520 years before, the year is 607 bc. Notice in the listing on page 31 that this was evidently the first year of Babylon's campaign of conquest across the Euphrates, which from long ago marked the upper border of the promised land (cf. Genesis 15:18, Deut. 1:7, 11:24, Joshua 1:4, 1 Chronicles 18:3).

The entry in the Babylonian Chronicle for 19 Nabopolassar which describes this incursion follows. "In the month Tishri the king of Akkad mustered his army and marched [to] Kimuhu which is on the bank of the Euphrates. He crossed the river, did battle against the city, and in the month Kislev he captured the city. He sacked it (and) stationed a garrison of his in it. In the month Shebat he went home." (Grayson, 97, 98)
Section Eight

The Seventy Weeks of Daniel Chapter 9

Before returning to the investigation of chronology, we should address another consequence of the evidence discussed in Section Six. Both the 18 year king lists and the eclipse tablets extend well into the Persian period, where the seventy weeks of Daniel commence. Specifically, this evidence confirms that Xerxes reigned 21 years, and his son Artaxerxes 41 years. (The other reigns are not in dispute.) This in turn directly impacts the historical application of the seventy weeks, as we will show. Here is a list of the kings of the Persian Empire.

- 9 Cyrus
- 8 Cambyses
- 0 Smerdis (Bardiya) -- reigned some months, not past his accession year
- 36 Darius I, Hystaspis
- 21 Xerxes
- 41 Artaxerxes
- 19 Darius II
- 46 Artaxerxes II
- 21 Ochus
- 2 Arogos
- 4 Darius III (followed by Alexander the Great)

The seventy week prophecy begins to count "from the going forth of the commandment to restore and to build Jerusalem" (Daniel 9:25). There are three decrees which this could refer to. The first possibility is the decree of Cyrus in his first year. However 490 years from 538 BC do not reach to Messiah, so this cannot be the correct one.

The other two decrees were both issued by Artaxerxes, one to Ezra and one to Nehemiah. Bro. Miller used the first one, Bro. Russell used the second, and both views have had many adherents. We will examine both views.

The Nehemiah Decree

This was the second decree of Artaxerxes. It came in his 20th year, and is described in Nehemiah 2. We discuss it first because this is the decree most brethren choose as the one intended in Daniel 9. According to the list above, the date of this decree would be 445 BC (539 - 9 - 8 - 36 - 21 - 20 = 445 BC). This would mean the 70th week was from 39 to 46 AD. (490 - 445 + 1 = 46 AD -- when we cross the bc-ad line we must adjust by one to account for the absence of a zero year.) Yet that is too late for the ministry of Jesus.

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The solution for this problem -- evidently adopted by Hale, Priestley, Ussher, Hengstenberg and others -- is to reduce the reign of Xerxes several years, and extend the reign of Artaxerxes a like number of years to retain the same total. This does not change the length of the Persian Empire, but it does change the dates for the reign of Artaxerxes. Specifically, reducing the reign of Xerxes from 21 to 11 years would redate the 70th week from 29 to 36 AD, and these are the dates used in Volume
In this approach 69 weeks lead to Messiah at 29 ad, Jesus is cut off in the midst of the week in 33 ad, and the remaining last half week is explained as the full end of favor to the Jews before Gentile believers were admitted into Christ.

The essential question, therefore, is whether history will allow the abbreviation of Xerxes' reign from 21 years to 11 years. The Edgar article says "it is recognized that this period [the reign of Xerxes] is not astronomically fixed" (Edgar II, 295). However, that is no longer true. The eclipse tablets referred to in Section Five list two eclipses from the reign of Xerxes, one in his 3rd year and one in his 21st year. Even the direct reference to an event in his 21st year -- whether an eclipse or otherwise -- is evidence that his reign did extend beyond 11 years. The same thing is shown by the 18 year king list also mentioned in Section Five.

To this we add three additional pieces of evidence.

(1) The three volumes of commercial cuneiform tablets mentioned in Section Five include one tablet each for years 14, 16, 17 of Xerxes. Each of these is testimony that Xerxes reigned more than 11 years.

(2) Even the scriptures show this. The Hebrew form of the name Xerxes is Ahasuerus, and he is the Persian king in the book of Esther. Esther 3:7 refers to the first month of his 12th year, and 3:13 refers to the 12th month of his 12th year. The closing narrative of chapter 9 implies events proceeded beyond that, suggesting at least a 13th year. Therefore Xerxes reigned more than 11 years.

(3) Parker and Dubberstein list records for years 12, 15, 18 of Xerxes (P & D 8). Therefore Xerxes did not reign 11 years. Therefore the 20th year of Artaxerxes was not in 455 bc. Therefore that decree cannot be the one commencing the 70 weeks of Daniel 9. Therefore we turn to the remaining option.

The Ezra Decree

This decree was issued in the 7th year of Artaxerxes, and recorded in detail in Ezra 7. The year of this decree was 458 bc (539 - 9 - 8 - 36 - 21 - 7 = 458). Therefore 490 years later is 33 ad (490 - 458 + 1 = 33). The decree was in the month Nisan, so the seventy weeks end in Nisan 33 ad, the year (and month) of Christ's death.

An apparent problem with this view is that it does not allow Jesus to be "cut off in the midst of the week." But a close look at Daniel 9 shows this popular phrase actually does not appear in Daniel 9. The expression "cut off" is in verse 26, and "in the midst of the week" is in verse 27. What does happen in the middle of the week? "He shall cause the sacrifice and oblation [of the Law] to cease." This occurred at Jordan, when "He taketh away the first, that he may establish the second" (Hebrews 10:9). At Jordan the antitypical bullock was slain, put on the altar, and began to burn for the next 3½ years. The middle of the week was autumn of 29 ad, and that is when Jesus was baptized.

Since the prophecy is not dealing in prophetic days (one year increments), but in prophetic weeks (seven year increments), verse 25 is correct in saying that Messiah appears at the end of 69 weeks. Verse 26 is also correct in saying that after this time (1) Messiah will be cut off, and (2) the city and sanctuary will be destroyed, though that verse does not give a date for either event.
Another Qualification

But is this application rendered unsuitable on other grounds? Specifically, does the decree granted Ezra qualify as the "commandment to restore and to build Jerusalem? I believe any one of three decrees could satisfy this requirement: the decree by Cyrus, or either of those by Artaxerxes. But as this issue is sometimes disputed, let us spend some time on it.

Of Cyrus it was written, he "shall perform all my pleasure, even saying to Jerusalem, thou shalt be built, and to the temple, thy foundation shall be laid" (Isaiah 44:28). This text, without any other, is sufficient to qualify his decree. Of Cyrus it was written, he "shall perform all my pleasure, even saying to Jerusalem, thou shalt be built, and to the temple, thy foundation shall be laid" (Isaiah 44:28). This text, without any other, is sufficient to qualify his decree.43 It is true that under Cyrus the walls of the city were not restored. But walls are not equivalent to a city. A city is of many parts, and the building of houses, temples, streets, or walls all qualify as building a city.44

The Ezra decree also qualifies. Ezra was sent "to inquire concerning Judah and Jerusalem" (Ezra 7:14). The King apportioned him a lavish supply of gold, silver and other commodities for the temple, but his mandate was very broad. "Whatsoever shall seem good to thee, and to thy brethren, to do with the rest of the silver and the gold, that do after the will of your God" (Ezra 7:18). Ezra 4:12-13 shows they began rebuilding the city, until stopped by false accusations from the Samaritans.45

The Nehemiah decree also qualifies (Nehemiah 2:5). Therefore the selection depends on the inflexible requirement of time. Only the Ezra decree fits this requirement.

The Seventieth Week

This means the seventieth week was from 26 ad to 33 ad.46 Having resolved this by the hard evidence, we observe an interesting result. The seventieth week was exactly 40 years before the seven years of the Roman War against Judea. Forty in the scriptures pertains to a period of trial, or testing and these 40 years were just that for Israel. Perhaps this gives some sense to the observation forced on us by the evidence in previous sections, that the Gentiles Times both began and closed in a span of seven years rather than a single year.

In the last section we proposed that the seven year span which closed the Gentile Times had a parallel both 2520 years earlier (under the Babylonians) and 1845 years earlier (under the Romans). The Seventy week prophecy, which breaks time into just such seven year spans, actually forms a link between the episodes with the Babylonians and the Romans. In response to Daniel's query about the 70 years (when Babylon ruled), the answer was that 70 weeks would intervene before such devastation was repeated (next under the Romans).

Did any special event mark the beginning of the seventieth week? Perhaps nothing was necessary to mark it. The important times specified by Daniel were the midst of that week, and its end. But it is worthy of note that 26 ad was the year Pontius Pilate became Roman governor of Judea, setting the stage for the drama of the final week, and ultimately for the destruction of "the city and the sanctuary."

1845 years forward from the 70th week yields the parallel span 1871 to 1878. The key dates in this span, as at the first advent, would be the midst of the week -- 1874, the time of the second advent -- and the close of the week -- 1878, marking a return of favor to Israel, the fall of Christendom, and the Harvest call "Come out of her, my people." This means the date 1881 does not parallel the end of the 70th week, and therefore probably does not mark the close of a general call. (And as we
observed in Section Three, such a close was not marked by an observable event.)

Was there an event of particular significance in 1871? Perhaps so. As Churchill points out in the introductory chapters of *The World Crisis*, the backdrop for World War I was the Franco-Prussian War. The treaty which (unsatisfactorily) concluded that war was completed in 1871, and early in that year "William I of Prussia was proclaimed Emperor of Germany at Versailles. The German Empire had been born" (Milestones of History, Volume 9, 77). Just as the appointment of the Roman governor 1845 years earlier, this set the stage for the debacle to follow 40 years later.
Section Nine

The Period of the Kings

Section Six shows that 587 bc, rather than 607 bc, was the date of the fall of Zedekiah. Therefore all dates before this event need to be moved forward by 20 years. This naturally raises the question, will we find any period of chronology before the fall of Zedekiah which should be lengthened, which will make up the difference?

Yes -- ultimately -- but it will not be in the period of the kings. In fact, a close examination of the data in Kings and Chronicles actually requires a shortening of this period by 50 years, from 513 years to 463 years.

This temporarily increases our problem to 70 years, seemingly counterproductive to a solution. But our goal is to determine the facts. Certainly they will be consistent with whatever time prophecies or time parallels God has woven into the Divine Plan.

I warn the reader that the period we are about to examine is the most complex area of our entire subject. However, the rewards of our labor will be commensurate with the difficulty. The conclusions of this section allow the remarkable correlations described in the next, which gives us confidence we are reaching our goal: Truth.

How Does One Compute the Period of the Kings?

A straight-forward approach is to add up the lengths of the reigns of the kings of Israel, and this is done in Volume 2 on page 50. Starting with Saul, David and Solomon, then working through the kings of Judah till the end of the reign of Zedekiah, the total is 513 years.

However -- and this is the complicating issue -- there is other information in the scriptures which does not square with this total. To explain this, we need to recall the circumstances of Israel's history during this period.

After the reign of Solomon, Israel was split into two kingdoms. The kingdom in the north, ruled first from Tirzah and later from Samaria, was called "Israel." The kingdom in the south, ruled from Jerusalem, was called "Judah."

Israel was conquered by the Assyrian empire more than a century before Judah was taken by the Babylonian empire. If we total the years of the kings of the northern kingdom, from Jeroboam to their last king Hoshea, the total is 241 years (see Appendix D). Yet the same period in the kingdom of Judah, from Rehoboam to the 6th year of Hezekiah (2 Kings 18:10), totals 260 years.

Why this discrepancy? Does the error lie in the data for Israel, or the data for Judah? To simply assume an answer to this question is unsatisfactory. Both sets of data are from scripture, and to discard either without sound evidence is too arbitrary to found a solid conclusion.

In fact both sets of data are correct, and the actual period of the kings is shorter than either of the totals imply. There are two reasons for this. (1) At times each kingdom used a non-accession-year system, which means a straight total of years increments one too many at each transition of a king. (This is explained further below.)
(2) At times there were coregencies, during which a king associated his son and heir to co-reign with him. Frequently these co-regent years were numerically attributed to both the father and the son. In this case a straight total would give a larger sum of years than actually transpired.47

But can we actually sift through the tangle of numbers in a logically convincing way, to determine the correct answer? Pleasantly, yes. It is not an easy task. But when each scripture on the issue is allowed to contribute its proper influence, the resulting harmony is very convincing. And when the task is accomplished, we find that the precise history of the Assyrian kings, who ruled contemporary with the kings of Israel and Judah, confirms the result in a remarkable way.

First, the Answers

We will find that five adjustments are required. (1) A coregency of Jehoshaphat with his father reduces his sole reign by four years. (2) The reigns of Jehoram, Ahaziah and Joash were reckoned by the non-accession year system, which reduces the total by three years. (3) A coregency of Uzziah with his father reduces his sole reign 24 years. (4) Jotham's sole reign is reduced eight years. (5) A coregency of Manasseh with his father reduces his sole reign 11 years. The total reduction: 4 + 3 + 24 + 8 + 11 = 50 years.48

The Process

We must integrate into the actual pattern of the kings of Israel and Judah four sets of information. (1) The reigns of the Israelite kings. (2) The reigns of the Judean kings. (3) The synchronisms between Judah's kings and Israel's kings. (4) The synchronisms between Israel's kings and Judah's kings. These four sets of data can be found in Appendix D. The synchronisms are labeled 1-13 or A-T for ease of reference. This large amount of data will force us to recognize the method of reckoning used by each kingdom, if and when they changed their method of reckoning, and any coregencies which exist in either kingdom. When the numbers force us to recognize an unusual situation, frequently the textual information in Kings and Chronicles gives us a clue explaining or verifying the circumstances.

We will first examine the period from the division of the kingdom (after Solomon died) to the long reign of Uzziah, king of Judah, referring only to the four sets of data from the scriptures. This will give us considerable experience in dealing with all the factors which affect the period of the kings. We will then look at the perplexing period from Uzziah to Hezekiah, with the assistance of the precise record of Assyrian history. From that time to the end of the Judean kingdom we are without the benefit of the parallel record of the northern kingdom. Therefore the evidence for the remaining discrepancy, the 10 year coregency of Manasseh with Hezekiah (including portions of 11 regnal years) comes from comparing scripture with history.49

Following are some preliminary issues we need to mention before launching into the data.

Regnal Years and Methods of Reckoning

The ancient kingdoms of the Middle East reckoned their regnal years as calendar years. The Assyrians and Babylonians, for example, reckoned their calendar years from Nisan to Nisan, and their regnal years likewise.

Also, they used an accession-year method of reckoning. This means the part of a year from the time
a king came to the throne until the next Nisan was called his accession year. You can think of it as his "zero" year. His official year "one" began with the following spring. Numerically, the accession year was attributed to the previous king. For example, Nabopolassar died before the completion of his 21st year, but he is credited with a reign of 21 years. The remainder of that year was the accession year of his son Nebuchadnezzar, whose year "one" began with the following Nisan. By this method each calendar year was numbered to one and only one king. The advantage of this method is this: when you add up the reigns of consecutive kings, you get an accurate total of the years which have passed.

The other method of reckoning is called, logically, non-accession-year reckoning; this was often used by Egypt for example. In this method, as with the other, the year in which a king died was numbered to him. But it was also counted as year "one" of his successor (no "accession year" involved). Therefore that calendar year was numbered twice -- once for each king. So if you add up the reigns of consecutive kings, the total will exceed the actual years that have passed by the number of transitions from one king to another.

One of our tasks will be to determine how the kingdoms of Israel and Judah reckoned these issues. It is easy to know how the Babylonians did it, because the Babylonian Chronicles mark the events of each year unambiguously from Nisan to Nisan, and they speak explicitly of accession years. But for the kings of Israel and Judah, we must infer this information from the data.

From Solomon's Death to the Reign of Uzziah

We will examine this span in three parts.

(1) From the division of the Kingdom to Zimri
(2) From Zimri to Joash
(3) From Joash to Uzziah

(1) From the division of the Kingdom to Zimri. Since Zimri reigned only 7 days, and died in the 27th year of Asa, the reigns of the Judean kings through that year should total the same as the reigns of the Israelite kings through Elah, Zimri's predecessor. Let us see. For Judah: 17 + 3 + 27 = 47. For Israel: 22 + 2 + 24 + 2 = 50. We are off three years. But we notice that in Israel we have had three transitions of kings, and the apparent solution would be to suppose Judah used an accession-year system, and Israel a non-accession-year system. This would result in 47 actual years for each kingdom. A second evidence for this solution comes from the following chart. Note that the synchronisms of Israel to Judah accumulate an error of one additional year with each transition.
This implies both that Israel used the non-accession-year system, and that Judah did not. Below is a new chart for these kings using these conclusions. Notice that all the synchronisms of Israel with Judah (marked by arrows from Israel to Judah) now appear to work perfectly.

However, let us now add to the chart arrows going the other way, to show the synchronisms of the kings of Judah with the kings of Israel. (Keep in mind that a new king begins to reign the same year his father dies, even if that is not called "year one" -- as with the accession-year system used by the kings of Judah.) Apparently all is not well. The beginning of Asa's reign does synchronize with the 20th year of Jeroboam. But the beginning of Abijah's reign does not synchronize with the 18th year of Jeroboam -- it is one year too early.

This problem seems slight -- one might even be tempted to ignore it. But attention to these details is both useful and necessary to map out the history of these kingdoms precisely. The disparity we observe means one of two things. Either (1) there is a one year error in Abijah's synchronism, or (2) we have not accounted for all the details that prevailed in ancient times.

As it turns out, the latter is the case. All the charts above assume that the regnal years of Israel and Judah began at the same time. But perhaps they did not. When do we suppose the Hebrews began their regnal (calendar) years? There are two possibilities: either from Nisan to Nisan (since that was numbered month "one" in their calendar), or from Tishri to Tishri (since that month began their agricultural year, which governed sabbath and jubilee years).

As it turns out, Judah used the latter method -- Tishri to Tishri (see Appendix I). But if we assume Israel chose the other option -- just as they differed from Judah by choosing a non-accession-year system -- then the regnal years of the two nations were staggered by six months. Using this method, our chart looks like this.

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This chart appears a bit more complex because of the staggered years. But precision, not simplicity, is our goal. In this chart, all the synchronisms work exactly. This is not simply a clumsy expedient, for two arguments testify for the staggered years. (1) As we proceed through the synchronisms, you can observe that the evidence requires this stagger throughout the history of these two kingdoms. (2) There is a reasonable explanation for the disparity. When Jeroboam came to the throne, he feared that the sympathies of his subjects would gradually return to the Judean rulers when they remembered Jerusalem, the temple, and the Davidic promises. He was so concerned with this that he inaugurated unauthorized methods of worship to keep the two peoples separate (1 Kings 12:27-33). He even began a feast on the 15th day of the 8th month, to be at a different time than the feast of tabernacles which Judah observed. Clearly he wished to vary the customs of his kingdom from those of Judah, and adopting a different calendar year and regnal system was another way of doing so. Jeroboam did not need to invent these systems. He had taken asylum in Egypt before he was made king (1 Kings 11:40), and he merely adopted their non-accession-year system, and their spring regnal years.

(2) From Zimri to Joash. Zimri usurped the throne, and he was not the people's choice. When his deed was known, many followed Omri, captain of the host, who sieged Tirzah to take power. Zimri saw that all was lost, and burned down the palace in a suicide. His brief reign of seven days is absorbed in Elah's second year, and we will represent him on the following charts by only a "Z." Omri's 12 year reign began that year. However, synchronism E says he began to reign in the 31st year of Asa, rather than the 27th as we would expect. Why? Before this time he had a rival, for "half of the people followed Tibni" (1 Kings 16:21). Evidently the synchronism speaks of the time he became undisputed king over all Israel, rather than when he took Tirzah at the death of Zimri.

The scriptures do not tell us directly how long it was before Tibni was subdued. Judging from Synchronism E, this occurred in Asa's 31st year. Consistent with this is 1 Kings 16:23, which shows Omri moved from Tirzah to his new capital Samaria in year six. That move probably followed Tibni's defeat, which puts that in year five or early in year six. Both years lap upon 31 Asa, the year of Omri's synchronism. Chart 5 shows Tibni's death in year five to allow some time for building the new city of Samaria before moving there in year six.
Theoretically, it is possible the 12 years allotted to Omri began with his sole reign after Tibni's death. But two arguments are against this. (1) That would mean no ruler of Israel is numerically credited with the five or six years of the rival rules. (2) This is precluded by the synchronisms for Ahab, Jehoshaphat, and Ahaziah. As you can observe by a little experimenting, these synchronisms allow only a 12 year span for the complete reign of Omri.

Those three synchronisms also require: (1) that Judah used an accession-year reckoning, (2) that Israel did not, (3) that their regnal years were staggered. (Try any other possibility and you will see this.) This independently confirms the conclusions we were forced to by the data up through Zimri. This is highly satisfactory evidence that we are resolving the history of these kings correctly.

In the next segment, there is a difficulty in the Judean data. For this reason we will jump forward in time, and then work backward to bridge the gap. Focus now on synchronisms 7 and K: Joash begins in 7 Jehu, and Jehoahaz begins in 23 Joash, used below.

As shown on Chart 6 above, these synchronisms require (1) The regnal years of Judah and Israel are staggered (this is so common we will not specially note it hereafter), (2) The reign of Joash is reckoned by the non-accession-year method (since the year he began to reign must be "year one" to allow Jehoahaz to synchronize with 23 Joash). This is surprising -- but the data clearly require it. Somewhere between Jehoshaphat and Joash, the Judean kingdom has changed its method of reckoning! At first we might suppose an error. But as we work backward from Joash to Jehoshaphat, we will find we are not mistaken. A change of reckoning has indeed occurred. But why?

A reasonable explanation lies in the text. This period was one of reconciliation and treaty between the two kingdoms. Ahab and Jehoshaphat made an alliance together. The names of crown princes were common to both kingdoms (Joram/Jehoram, Ahaziah/Ahaziah). The royal families were linked by intermarriage (Athaliah, wife of Jehoshaphat's son Joram, was a daughter of Ahab and Jezebel, 2 Kings 8:26). So it is not too surprising that Judah adopted Israel's method of reckoning in the spirit of rapprochement. Indeed, Athaliah herself may have influenced this change when her husband Joram, or later her son Ahaziah, became king of Judah.

But whatever the cause, the numbers are clear that it did happen. Let us now connect king Ahab through king Jehu on Israel's side, leaving a gap for Judah for the time being.
Now let's fill in the gap -- working backward from Joash to Jehoshaphat (the reason will soon be clear). Since year one of Joash is the year he came to the throne, it is also the year his predecessor -- wicked Athaliah -- died. She lived into her seventh year (2 Chronicles 23:1), so 1 Joash is the same year as 7 Athaliah.

Counting back through her reign makes her year one overlap Jehu's year one -- and we know she came to power in Judah at the same time as Jehu did in Israel, since he killed the previous kings of both kingdoms on the same occasion (2 Kings 9:21-27). So far, so good. Let us continue counting back, still supposing the non-accession-year (NA Y) system for now. Ahaziah (Athaliah's son) was credited with one year, which by the NA Y system means that was the same as both the first year of his successor, and the last year of his predecessor. So year one of Athaliah was also year one of Ahaziah and also year eight of Jehoram -- an oddity, but nevertheless correct.

Counting back further, this means the last half of Jehoram's year one overlapped the first half of Joram's year five. Indeed, Jehoram's synchronism is with the 5th year of Joram. And, since Jehoram's year one is the same as the year he began to reign, this demonstrates his reign was reckoned by the NA Y system. Since Jehoshaphat's reign was not, we now know where the change of reckoning took place -- with the reign of Jehoram.

But another surprise appears. Since Jehoram used the NA Y system, his year one was the same as his father's last year. According to our chart, 1 Jehoram = 22 Jehoshaphat. Yet 2 Chronicles 20:31 says Jehoshaphat reigned 25 years. These numbers force us to one of two conclusions: (1) Jehoram's 8 year reign began as a coregency with his father for parts of four years -- 22, 23, 24, 25 Jehoshaphat -- or, (2) Jehoshaphat's 25 year reign began with a brief coregency with his father Asa. Option (1) is impossible (see next page, second paragraph). Option (2) must therefore be correct.

Since Asa reigned 41 years he was elderly, and he was sorely diseased in his last years (2 Chronicles 16:12). This makes a coregency credible. However, as Chart 5 shows, when Israel synchronized their kings to Judah, they counted the years of Jehoshaphat's sole reign. Chart 8 shows all these features, with the coregent years in parentheses.
Now notice another feature of Chart 8. Next to years 17 and 18 for Jehoshaphat are the numbers (1) and (2). These refer to a coregency of Jehoram with his father, well before his own eight year reign. The evidence for this is a rare double synchronism for Joram. He is synchronized once with 2 Jehoram, and once with 18 Jehoshaphat (2 Kings 1:17, 2 Kings 3:1), which means both terms describe the same year. Since this cannot refer to the 2nd year of Jehoram's sole reign, it evidently speaks of an earlier coregent year.

What would explain such a coregency? Notice (from Chart 8) that it began the same year Ahab died. He died in a battle in which Jehoshaphat -- who almost died -- was his ally. Apparently as an act of prudence Jehoshaphat elevated Jehoram to coregent before the battle, in case of disaster. (Also, since this coregency began in 20 Jehoshaphat, it precludes "Option 1" above which posits a coregency beginning in 22 Jehoshaphat).

A Real Problem

There is yet another observation to make on Chart 8 -- one with significant implications. The right column ends with year 17 Jehoahaz, his last year. Therefore his successor Jehoash came to the throne that year. But Jehoash's synchronism is with 37 Joash. So 17 Jehoahaz should overlap 37 Joash on the chart -- but it does not -- and the problem defies any simple solution. (Experiment ad infinitum.) Perhaps this is a good time to propose a scribal error?

No, that's not the answer. The momentary relief of that expedient would dissipate in the problems it would later allow. There is a solution. It is not an appealing one. But avoiding the real issue -- as so often in life -- will only prolong the pain. This impasse forces us to acknowledge a messy factor we overlooked. To illustrate this factor, note the following comparisons.

3rd year (Daniel 1:1) 7th year (Jer. 52:28) 18th year (Jer. 52:29)
4th year (Jer. 46:2) 8th year (2 Kings 24:12) 19th year (2 Kings 25:8)

Both scriptures in each pair actually refer to the same year, even though the number is one different in each case. The reason for these disparities is the difference of reckoning years by the accession-year method, or the non-accession-year method. Daniel, who wrote in Babylon, and Jeremiah 52:28-29, which was added by a later scribe in Babylon, employ the Babylonian accession-year system. The others employ the non-accession-year method resumed by Judah in the reign of Zedekiah.

The point is this: a scribe may impute his method of reckoning to another kingdom even though the other kingdom uses a different system. For example, though the Babylonians numbered the years of their king 7 and 18 (see above), the Judean scribe imputed the Judean method, and called those years 8 and 19 (see Appendix E).

In fact, that is what the Judean and Israelite scribes were doing right along -- each scribe of Judah applied his system to Israel, and vice versa. We were not forced to recognize this until now because so far the data could be consistently (even though not correctly) understood without recourse to this factor. Fear not -- we will integrate this factor in one fell swoop shortly. It will affect the part of the year a king came to the throne in some cases. But the only substantial change will be to acknowledge a four year coregency (Jehoshaphat with Asa), rather than a three year coregency.

But first let us see how this resolves the problem of Jehoash's synchronism to year 37 of Joash. Please look again at the bottom of Chart 8. The name Jehoash does not appear, but he began to reign -- as usual -- in the last year of his predecessor, 17 Jehoahaz. Both kingdoms have been using the same
system -- the non-accession-year system. Now assume for a moment the Kingdom of Israel at this point switches to the accession-year system. (Synchronisms P and Q show they made this switch at some time.) The scribe recording Jehoash's synchronism imputed to Judah his new accession-year system. That means the year numbered 38 Joash on Chart 8 -- by the non-accession-year system -- now becomes (in the mind of the Israelite scribe) year 37 Joash. This switch could not have come earlier, in Jehoahaz' reign, for a little reflection on Chart 6 shows the Israelite scribe who recorded Jehoahaz's synchronism was still using the non-accession-year system.

Our impasse, rightly solved, shows that Israel adopted the accession-year system for the first time with the reign of Jehoash (and, as it turns out, they maintained it to the end of their kingdom). In fact Judah also reverted to that system with their next king, as we will see when we consider Amaziah. Both Israel and Judah made the switch about the same time, and probably for the same reason.

Notice on Chart 8 the 8th year of Jehoram of Judah. In that box we put a bi-directional arrow, showing that Jehu and Athaliah began their reigns at the same time. But we did not comment specifically on Ahaziah's synchronism. In fact he had two -- 2 Kings 8:25 says 12 Joram, 2 Kings 9:29 says 11 Joram. (They really say Jehoram, but I am using Joram for Israel and Jehoram for Judah to avoid confusing these interchangeable names.) Now surely Ahaziah of Judah came to the throne in one year or the other -- not in both years! So why the variance? Evidently he came to the throne in 12 Joram. But as Judah had only recently deviated from the accession-year system, probably from the influence of wicked Athaliah, a scribe of the old school resisted the change, imputing to Joram the accession-year system when recording the synchronism of Ahaziah. Another scribe marked it by the new system. Loathe to discount either ancient record, the compiler of Kings dutifully included both. This not only accounts for the double synchronism, but affirms the practice of imputing to the other kingdom one's own system. (Compare Thiele, 68-69.)

We will not encounter another double synchronism until Hoshea, the last king of Israel, and that will be traceable to other causes.

We now rechart all the kings from the division of the kingdom through Joash and Jehoahaz, properly recognizing that each kingdom imputed to the other its own system when recording the synchronisms of its kings. Fortunately the two kingdoms share the same system hence forward, relieving us of this mental burden.

Since room permits we add to the chart Amaziah and Jehoash, which we will discuss next.
CHART 9

Numbers in Bold refer to years imputed by the other kingdom. Numbers in (parentheses) refer to coregency years.
(3) From Joash to Uzziah. In the last section we concluded Jehoash used the accession-year system. We also asserted that Amaziah did likewise, and now we give the evidence for that. Jeroboam, successor of Jehoash, is synchronized with 15 Amaziah, which means Jehoash died in that year (2 Kings 14:23). Also, Amaziah lived beyond the death of Jehoash 15 years (2 Kings 14:17, 2 Chronicles 25:25). This unusual information was probably noted because of their interchange in battle -- Jehoash captured Amaziah, who outlived his captor.

This information forces the last half of 16 Jehoash to overlap the first half of 15 Amaziah, as you can see from the end of Chart 9. This means year one of Amaziah followed year 40 of Joash, which means Amaziah used the accession-year reckoning. The synchronism of Amaziah is consistent with this.

The next task is to add the reigns of Uzziah (called Azariah in 2 Kings) and Jeroboam (II), who followed Amaziah and Jehoash respectively. Since both kingdoms are using the accession-year system, this should be easy. (But you probably know better by now.)

Since Amaziah outlived Jehoash 15 years, we would expect Uzziah to begin in 15 Jeroboam. But the synchronism (2 Kings 15:1) says 27 Jeroboam -- 12 years later! There are two possible explanations. (1) There was an interregnum between Amaziah and Uzziah of 12 years. (2) There was a coregency between Jehoash and Jeroboam of 12 years, and the synchronism counts from the beginning of the coregency. Charts 10 and 11 show these two options.

How shall we choose? We shall jump forward a generation, and then work backward. By this means we shall find the first option to be untenable. We proceed by focusing on synchronisms P and Q, which show the 10 year reign of Menahem, king of Israel, began in 39 Uzziah and ended in 50 Uzziah. This requires his accession year to overlap the last half of 39 Uzziah, and his 10th year to overlap the first half of 50 Uzziah. With that established, we can enter the one month reign of Shallum, the six month reign of Zechariah, and the last (41st) year of Jeroboam, the three predecessors of Menahem. That unambiguously links the long reign of Jeroboam to the long reign of Uzziah. Now we can back-fill those years, working upward on Chart 12.
Now we know how the reign of Uzziah relates to the reign of Jeroboam. To see how this impacts our two options, we must look again at charts 10 and 11, and add to them the reign of Uzziah. This we do in Charts 13 and 14.

Please look at Chart 13. Does a 12-year interregnum exist after the death of Amaziah? Clearly not. Since Uzziah began to reign as coregent before Amaziah died, he reigned all through the supposed interregnum! This leaves us with Option 2 -- Chart 14. We are thus forced to recognize not only the 12-year coregency of Jeroboam with Jehoash, but also a 24-year coregency of Uzziah with Amaziah. But their synchronisms, as with Jehoshaphat and Omri earlier, date the beginnings of their sole reigns.54

**From Uzziah to Hezekiah**

Heretofore we have relied solely on the interlocking testimony of scriptural data. Thus the scriptures themselves require the period of the kings to be abridged, so far, by 31 years. Unless we disregard or modify some of the scriptural facts, there is no remedy for this. I emphasize this to rebut any possible accusation that imperfect heathen chronologies are shearing us away from an otherwise clear scriptural record. Such an accusation would reflect a gross misunderstanding. Indeed, when I realized after considerable attention to these issues that the scriptures themselves require an abridgement to the period of the kings, and that this abridgement was in accord with the parallel history of Assyria
(as we shall later see), conviction formed within me that history truly did occur differently than we supposed. I subsequently became aware of the formidable evidence regarding Babylonian chronology. When I then realized the scriptural facts were consistent with this also, no reasonable doubt could endure. And when I saw that prophecy blended with the facts, concern dissipated into great thanks.

As we proceed next, however, it will prove useful to gain the assistance of contemporary Assyrian history, and no reasonable argument compels us to resist this advantage. We come to a time when the dominant Assyrians significantly impacted the kingdoms of Israel and Judah, during the reign of king Tiglath-pileser. This king was also known by the name Pul, no doubt drawn from the first syllable of the second part of his full name. The scriptures affirm that Menahem paid tribute to him, and the Assyrian records affirm that Tiglath-pileser received tribute from Menahem (2 Kings 15:19, 20, footnote 55). Therefore their reigns overlapped.

It is equally clear that Tiglath-pileser was contemporary with Hoshea, the last king of Israel. In the Assyrian records Tiglath-pileser says "Pakah [Pekah] their king they deposed and I placed Ausi' [Hoshea] over them as king" (Luckenbill I, §816). This is referred to also in 2 Kings 15:29, 30.

Tiglath-pileser reigned 18 years. This we know from two sources. (1) The SDAS King List, published in 1954, (2) The Assyrian Eponym list, which notes the accession of Shalmaneser 18 years after the accession of Tiglath-pileser.

Yet the kings of Israel from Menahem to Hoshea, as listed in Appendix D, reigned the following: 10 Menahem, 2 Pekahiah, 20 Pekah, 9 Hoshea. How can Tiglath-pileser's 18 years span the 22 year gap from Menahem to Hosea? It can only happen if some of these kings overlapped one another.

Let us investigate the circumstances. After Jeroboam, there were two short-lived kings, Zechariah his son (6 months), and Shallum a usurper (1 month). Menahem was also a usurper, who had no dynastic claim to the throne. Therefore he was not received by all (2 Kings 15:16). When Tiglath-pileser threatened he paid tribute "that his hand might be with him to confirm the kingdom in his hand" (2 Kings 15:19), which is at least consistent with there being a rival to the throne. Thiele proposes that Pekah was a rival, and exercised authority in Gilead, east of the Jordan river. (When he took Samaria by intrigue, it was with 50 men from Gilead, 2 Kings 15:25.) When the kingdom was confirmed in the hand of Menahem, evidently Pekah submitted and joined him, receiving in return a prominent post in the army. Then Menahem passed on and his son Pekahiah took the throne. After two years Pekah saw an opportunity, and "Pekah the son of Remaliah, a captain of his, conspired against him" (2 Kings 15:25). His accession synchronism (as usual) was from his sole reign, but he reckoned the years of his authority beginning with his first grab for power after the death of Shallum. Therefore the twenty years recorded for him began at the same time as Menahem. This collapses the sole reign of Pekah to eight years and completely solves the problem of Tiglath-pileser's reign.

There is also evidence from the synchronisms that the 20 years of Pekah began before the death of Pekahiah, and given this conclusion, the most reasonable time to begin them would be at the death of Shallum when the kingdom was in turmoil. This evidence can be explained by reference to Chart 15 below.
At first glance all seems in order. But notice the arrow showing the beginning of Jotham's reign in the 2nd year of Pekah (2 Kings 15:32). There are two problems with this. (1) It means Jotham did not have an accession year, though Judah has been using the accession-year reckoning just prior. Of course it is possible that Judah here changed their method, but as there is no apparent explanation for this, and more to the point since this does not solve the next problem, this is unlikely. (2) This means Jotham did not begin to reign until at least six months after his father died. This would be unexplainable in any event, but in this rare case we are expressly told that Jotham "was over the king's house, judging the people of the land" while Uzziah still lived, because of Uzziah's leprosy (2 Chronicles 26:21). This is evidence of a coregency, and it argues against any interregnum, however small, at the death of Uzziah.

The most reasonable explanation is that these 20 years of Jotham began when he became coregent with Uzziah. The year Jotham came to office is counted as his year one, since an accession year is not utilized in a normal coregency. But the 20 years of Jotham are tied indissolubly with the 20 years of Pekah by synchronisms 11 and S.\textsuperscript{57} Therefore overlapping Jotham with Uzziah necessarily requires overlapping Pekah with his predecessors, just as the evidence from Tiglath-pileser's reign requires.

Therefore, in Chart 16, we rechart these reigns to begin the 20 year reign of Pekah in the same year as the 10 year reign of Menahem. To this we append the 9 year reign of Hoshea, which ended in the overthrow of the 10 tribe kingdom of Israel.

Next to the last years of Hoshea we have added the five year reign of Shalmaneser, the Assyrian king who conquered Israel (2 Kings 17:3-6). The Babylonian Chronicle 1 also records this. "On the 25th day of the month Tebet Shalmaneser (V) ascended the throne in Assyria [and Akkad]. He ravaged Samaria. The fifth year: Shalmaneser (V) died in the month Tebet. For five years Shalmaneser (V) ruled Akkad and Assyria" (Grayson, 73).\textsuperscript{58}

From the scriptures we learn that he sieged Samaria for three years (2 Kings 17:3-6). The Assyrian eponym canon (Thiele, 213) records the following activities for Shalmaneser's reign:
Acc. year | Shalmaneser took his seat on the throne  
| Year 1 | in the land  
| Year 2 | against [Samaria]  
| Year 3 | against [Samaria]  
| Year 4 | against [Samaria]  
| Year 5 | [The foundation of the temple of Nabu was torn up (for repairs)]  

Years 2, 3, 4 were "against" somewhere, but the place name is chipped away on the tablet. It is generally restored as "Samaria" because of the scriptural record and the Babylonian Chronicle record. I am satisfied that this is correct, and it is this which allows us to pinpoint the 4th year of Shalmaneser with the 9th and last of Hoshea, during which the siege ended in its third year.

This gives us an excellent opportunity for checking our results to this point, for we can also establish a link between Israel and Assyria back in the time of Ahab. Coincidentally another Shalmaneser (III) was king of Assyria at that time. He recorded the following in a Monolith Inscription, now in the British Museum, first published in 1866. "In the eponym year of Daian-Asshur [which according to the Assyrian eponym canon was year six of Shalmaneser III] in the month of Airu, on the fourteenth day I departed from Nineveh, crossed the Tigris ... I approached Qarqar ... I plundered ... Bir-idri of Damascus ... Ahab the Israelite ... [and many others]" (Rogers, 295-296). This campaign is also mentioned on an Obelisk in the British Museum first published by Layard in London, 1851, and dated to "the sixth of my years of reign" (Rogers, 293-294). Therefore Ahab was king in the spring of year six of Shalmaneser III.

Later, in an "Obelisk Inscription," an "Annalistic Fragment," and an "Obelisk Legend Beneath the Reliefs," the same Assyrian king records a campaign in his 18th year. The following quote is from the Annalistic Fragment. "In the 18th of my years of reign I crossed, for the sixteenth time, the Euphrates ... Hazael of Damascus ... fled to save his life ... At that time I received the tribute of the Tyrians, Sidonians, and of Jehu, of the land of Omri" (Rogers, 303-304). Therefore Jehu was king in the spring of year 18 of Shalmaneser III.

Between these two campaigns were 12 years. As you can see from Chart 9, there were also 12 years from the last year of Ahab to the first year of Jehu. From this we draw two pertinent conclusions. (1) We were correct in concluding Israel used the non-accession-year system during this time, for otherwise the time from Ahab to Jehu would be greater than 12 years. (2) The sixth year of Shalmaneser III must be the same as the last (22nd) year of Ahab, and the 18th year of Shalmaneser III must be the same as the 1st year of Jehu. Therefore we have a firm link between Israel and Assyria for these two years.

It is the second conclusion which is specially important now, for it allows us to compare our results calculated from the scriptural synchronisms with the corresponding period in Assyrian history. From 22 Ahab to 9 Hoshea, according to Charts 9, 12, 14, 16 was 12 - 1 + 28 - 1 + 17 + 16 + 41 - 12 + 1 + 20 + 9 = 130 years. The reigns of the Assyrian kings for this time is clear and unambiguous. They are testified to by two Assyrian king lists, and by the Assyrian eponym canon, which mutually confirm each other (see Appendix H). The Assyrian kings for this time, and the years of their reigns, were:
Therefore the interval from 6 Shalmaneser III to 4 Shalmaneser V was $29 + 13 + 28 + 10 + 18 + 10 + 18 + 4 = 130$ years. This is a precise confirmation! Since the calendar years of both Israel and Assyria ran from Nisan to Nisan, there is not even a half-year ambiguity. This is highly satisfactory evidence that we have appraised the scriptural testimony correctly.

Ahaz

With this strong confirmation that we have so far correctly resolved the history of the kings, we approach the two remaining Judean kings who are synchronized with the kings of Israel. In Chart 17 we add the reign of Ahaz so that he began to reign in year 17 of Pekah (2 Kings 16:1), and so the 12th year of his reign coincides with the 9th and last of Hoshea's reign (2 Kings 17:1 -- we will discuss this scripture in a moment).

Theoretically Ahaz could be positioned down one year and still satisfy these requirements. However, the placement we have used gives Jotham 16 years of reign before Ahaz's accession, which is indicated in 2 Chronicles 27:1.

2 Kings 17:1 requires some comment. We have two synchronisms for Hoshea's reign, S and T. Taken at face value they imply that 20 Jotham was the same as 12 Ahaz, yet there is no credible way to equate these years. Have we here finally a scripture in error? I think not.

2 Kings 17:1, King James, reads: "In the twelfth year of Ahaz king of Judah began Hoshea the son of Elah to reign in Samaria over Israel nine years." However, in King James II, it is: "In the twelfth year of Ahaz the king of Judah, Hoshea the son of Elah reigned in Samaria, nine years over Israel."

This latter translation omits the word "began" and allows the meaning that 12 Ahaz marked the end of a nine-year reign by Hoshea over Israel, rather than the beginning. At issue is the Hebrew word "malak," Strong's 4427. It is frequently translated "began to reign," and frequently just "reigned," according to context. Young's Analytical Concordance defines it "To reign, be a king." Strong's says "to reign; incept. to ascend the throne; causat. to induct into royalty ..." Gesenius' Hebrew-Chaldee Lexicon to the Old Testament defines it "to reign, to be king ... (2) to become king."
These definitions allow both possibilities. The unusual circumstance which gave rise to 2 Kings 17:1 was that the kingdom of Israel had come to an end. There was no further king after Hoshea to synchronize with Ahaz of Judah, so to indicate the termination of Hoshea's nine years the scribe helpfully synchronized it with 12 Ahaz. The Hebrew allows this, and the numbers require it.

Another issue. Notice that Jotham in one sense had a reign of 16 years, and in another a reign of 20 years (2 Chronicles 27:1, 2 Kings 15:30). One might suppose the 20 years included his coregency with Uzziah and the 16 did not, but as Chart 17 and our previous discussion shows, that is not the correct explanation. When Ahaz came to the throne there was a marked change of policy from Jotham's reliance on God and resistance to Assyria, to a policy of appealing to foreign gods and alliance with Assyria. It is likely Ahaz was elevated to the throne by a pro-Assyrian faction who deposed Jotham, who nevertheless continued to live for another four years. (Similarly the Israelites later deposed (and killed) Pekah, who opposed Assyria, in favor of Hoshea who at first served Assyria.)

Notice that Chart 17 affirms an accession year for Ahaz, which is contrary to general practice for a normal coregency. It implies this was not a normal coregency, but a deposing of one king in favor of another. (Just as Uzziah's coregency was begun with an accession year when Amaziah became captive to Jehoash -- not a usual coregency situation.) This unique situation explains why Jotham's reign is limited to 16 years by Judean scribes -- because he was no longer in power -- while those in Israel chose to synchronize their new king Hoshea with the still-living Jotham.

As Chart 17 shows, Jotham was sole regent for only four years: 13, 14, 15, 16. This is at least consistent with (though not proven by) the mention of the Ammonite tribute during this time. King Uzziah had been very successful militarily, as the Lord prospered his campaigns. Among others, "the Ammonites gave gifts to Uzziah" (2 Chronicles 26:8), implying their subordination to Judah. Yet of Jotham it is said "He fought also with the king of the Ammonites, and prevailed against them. And the children of Ammon gave him the same year an hundred talents of silver, and ten thousand measures of wheat, and ten thousand of barley. So much did the children of Ammon pay unto him, both the second year, and the third" (2 Chronicles 27:5). As tributary nations often rebelled when a change of rulership occurred in the overlord nation, it is likely that Jotham did battle with the Ammonites after a rebellion following the death of Uzziah. Thereafter the Ammonites resumed tribute for three years, and likely discontinued this at the deposing of Jotham in his fourth sole year.

Hezekiah
There are three synchronisms between Hezekiah and various parts of the reign of Hoshea. (1) He began to reign in 3 Hoshea, (2) 4 Hezekiah = 7 Hoshea, (3) 6 Hezekiah = 9 Hoshea when the kingdom fell (2 Kings 18:1, 9, 10). Since Hoshea's kingdom fell in the 12th year of Ahaz (Chart 17), that year must also be the 6th of Hezekiah's reign. This requires that Hezekiah was a coregent with Ahaz, and that 1 Hezekiah = 7 Ahaz. This is shown on Chart 18 below.
Let us now check the ages of Ahaz and Hezekiah to see if these impact our conclusions. Ahaz was 20 years old when he began to reign, and Hezekiah was 25 years old when he began to reign (2 Chronicles 28:1, 29:1). The only way this can begin to make sense is if the first scripture refers to the age of Ahaz when Jotham was deposed in his 16th year, and if the second scripture refers to the age of Hezekiah when he began his sole reign, rather than his coregency. But even then we have a problem. If Ahaz was 20 in Jotham's 16th year, then according to Chart 18 he would have been 36 in his own 16th year. If Hezekiah there began his sole reign, and was 25, then he was born when Ahaz was 11! (36 - 25 = 11)

Clearly something is wrong. But suppose the 16 years attributed to Ahaz were exclusive of the four years he reigned while his father lived. That would allow him an age of 40 when he died in his 16th year, and 15 at the birth of Hezekiah. Even this seems young, but it is feasible. "In her study on marriage conditions in Palestine, Hilma Granqvist has a chapter on 'The Age of Marriage,' in which she calls attention to the fact that child marriage in Palestine is very general, girls being brides at ages from 12 to 14, and with the husbands at times being mere boys. The information revealed in the data concerning the Hebrew kings, that members of the royal family at times were parents at the early age of fifteen or sixteen, is an interesting revelation concerning social life in Palestine at the time of the divided monarchies" (Thiele, 128-130).

Let us then adopt the requirement of these numbers and remap the reign of Ahaz allowing 16 years for the part of his reign which followed the death of Jotham in his 20th year. To facilitate a check on this arrangement we also include the Assyrian kings from Shalmaneser to Sennacherib, who was contemporary with Hezekiah. (Remember that we are able to place these kings accurately with respect to the Hebrew kings because the three year siege of Samaria in years 7, 8, 9 of Hoshea synchronize with years 2, 3, 4 of Shalmaneser.) This is done in Chart 19 below.

The first year of Hezekiah described in 2 Chronicles 29-31 must be numbered from his sole reign, since Hezekiah is purging the wickedness of his father Ahaz. Also, these chapters must describe a time after the demise of the 10 tribe kingdom, as Hoshea would not have permitted Hezekiah's appeals to his subjects, nor the destruction of his altars and high places (2 Chronicles 31:1). Yet it is also clear that the three synchronisms of Hezekiah with Hoshea refer to an earlier coregency. Therefore we should expect, as Chart 19 shows, some of Hezekiah's years numbered from his coregency, and others numbered from his sole reign.

Notice that 14 Hezekiah synchronizes with 4 Sennacherib. The scriptures tell us Sennacherib sieged Jerusalem unsuccessfully in 14 Hezekiah (2 Kings 18:13, Isaiah 36:1), and the Assyrian records tell us this occurred in Sennacherib's third campaign, which was in his fourth year. As we no longer have a kingdom of Israel by which to check the sole reign of Hezekiah, it is most gratifying to see the
contemporary history of Assyria confirm the best deductions available from scripture.

It is true that charts 17 and 19 demonstrate some unusual peculiarities in the records of Judah and Israel. It is like wading through some odd accounting entries endeavoring to balance a set of books -- the entries all seemed logical when entered, even if confusing later. The scribes who recorded the original data no doubt considered their entries clear enough at the time. The odd situations they encountered led them to make choices which were not always consistent with the methods of previous scribes. Also, it is likely the scribes in each kingdom did not have regular access to the entries of their counterparts in the other kingdom. Indeed, we cannot place ourselves in their circumstances with sufficient precision to judge the reasons for all their choices. Nevertheless, unless we discard some of the data, or assume its corruption, **the numbers force us to an arrangement which precisely coincides with sound contemporary history.** This argues persuasively that we have found the correct solution.

**The Coregency of Hezekiah with Ahaz**

The numbers force the conclusion there was a coregency, as we have seen. But Hezekiah was surprisingly young at the time. Since his sole reign began at the age of 25, and his coregency began 13 years before, he was apparently 12 at the time. What motivated Ahaz to elevate his son at such a young age? Ahaz lived in perilous times. At the outset of his kingship Pekah and Rezin formed a coalition to remove him from the throne and set over Judah, a "son of Tabeal" -- possibly a man from the region of Tabeal -- certainly a breach in the line of David (Isaiah 7:6). (It was to preserve David's line that God saved Ahaz, wicked though he was.) No doubt one safeguard which came to the mind of Ahaz was to associate his son as coregent as early as reasonably possible, so that in the event of his demise there would be no question who his successor should be. As soon as Hezekiah reached the age of responsibility, which for a young Jewish boy was considered 12 years of age (so Jesus inquired of his duties at that age), Ahaz proceeded. This will be a useful observation in our next link.

**From Hezekiah to Josiah**

Let us next compute the time from Sennacherib's invasion, 14 Hezekiah, to the end of Josiah's 31 year reign. At the time of the invasion Hezekiah was promised 15 years more of life (Isaiah 38:5, 6) and the account affirms that his reign was 29 years long (therefore it refers to his sole reign). So our total is 15 + 55 (Manasseh) + 2 (Amon) + 31 (Josiah) = 103 years.

But is it possible there was a coregency during this period? Until now we could compare the Judean record with the Israelite record to determine such things. But as Israel no longer has a king, we need to compare Judean history to something else.

Fortunately we can also calculate this span through the kings of Assyria and Babylon. For Hezekiah: the invasion in 14 Hezekiah was in 4 Sennacherib, as mentioned earlier. For Josiah: he was killed when he opposed Pharaoh Necho's march to Carchemish to assist Assyria in their struggle against Babylon. (2 Chronicles 35:20, 2 Kings 23:29 -- see nasb, Necho was for Assyria, not against them.)

This was in the year 17 Nabopolassar, the father of Nebuchadnezzar, which we deduce as follows. Since (1) Josiah died 22 years before the fall of Zedekiah, (2) that occurred in 18 Nebuchadnezzar, (3) Nabopolassar reigned 21 years, therefore Josiah died in (21 - (22 - 18) = ) 17 Nabopolassar. This is confirmed by Babylonian Chronicle 3 (BM21901), which records for 17 Nabopolassar:
"In the month Tammuz [month 4] Ashur-uballit (II), king of Assyria, [and] a great Egyptian army ... crossed the river, marched against the city of Harran to conquer it ... The garrison which the king of Akkad had stationed in it they ... slew ... and he encamped against the city of Harran, until the month of Elul [month 6] they did battle against the city and took nothing but did not withdraw. The king of Akkad came to the help of his troops ..." (Wiseman, 63)

Carchemish was the city on the Euphrates where the Assyrians and Egyptians apparently met before crossing to Harran. A year earlier the Assyrian king was routed from Harran by Nabopolassar, and now Assyria with their ally Egypt was intent on retaking their former capital. It was on the way to this meeting that Pharaoh encountered and slew Josiah, and the Chronicle above affirms this campaign was in 17 Nabopolassar. We will speak of this campaign again later.

Now that we have fixed the year of Josiah's death, we need to know the kings which ruled from Sennacherib to Nabopolassar. As shown in Appendix G, they were:

24 Sennacherib (Assyria)
12 Essarhaddon (Assyria and Babylon)
1 Accession of Shamash-sum-ukin
20 Shamash-sum-ukin (Babylon)
21 Kandalanu (Babylon)
1 Two rivals, accession of Nabopolassar
21 Nabopolassar

Thus from 4 Sennacherib to 17 Nabopolassar were 20 + 12 + 1 + 20 + 21 + 1 + 17 = 92 years. But this is 11 years shorter than the 103 years calculated through the Judean kings. Can this be explained by a coregency in the Judean kings? Yes, it can. A coregency of 11 years would exactly account for the disparity.

The only possibility for a coregency of this length is between Hezekiah and Manasseh. Three things are consistent with this. (1) It helps explain the extraordinarily long reign of Manasseh. (2) It means Hezekiah was 31 rather than 42 at the birth of his successor. (3) It explains the unique age of 12 for the beginning of Manasseh's reign. Hezekiah knew the Lord had given him a 15 year extension on his life. Among other things, he would surely think how to prepare his son for the duties of the throne before his passing. How better than by associating him as coregent at the earliest reasonable time -- when he reached the age of responsibility, 12 years old -- just as Ahaz had done for Hezekiah himself.

As an 11 year coregency is consistent with the narrative, and required by the numbers, we accept it as historically correct and chart it below.
From Josiah to Zedekiah

The successors of Josiah were Jehoahaz, Jehoiakim, Jehoiachin, and Zedekiah. The first and third reigned but 3 months, the second and fourth 11 years each. Therefore 22 years passed from the end of Josiah's reign to the end of Zedekiah's.

However, the layout of those reigns is different than one might suppose. Babylonian Chronicle 3 cited above says the Assyrian and Egyptian armies crossed the Euphrates in the 4th month, and Josiah was killed shortly before this. Jehoahaz reigned 3 months when Necho, on his way back to Egypt, took him prisoner and placed Jehoiakim on the throne. That means Jehoiakim ascended the throne after the next regnal year (month seven) had begun. Thus that new regnal year became Jehoiakim's accession year. Jehoiachin's reign of 3 months 10 days was contained within Jehoiakim's 11th regnal year. Zedekiah did not reckon an accession year, perhaps because of his subsequent but fruitless affinity with Egypt, and was taken in the fifth month, shortly before the end of his 11th regnal year. We chart this below. Please see Appendix E where these conclusions are discussed in more detail.

Summary

The period of the kings from the accession of Rehoboam (in the 40th year of Solomon) through the reign of Zedekiah is herein shown to be 343 years in duration. Though the process of sifting through each scripture on the issue is tedious, the final solution -- which rejects not one synchronism nor length of reign -- is affirmed by a loud chorus, the voice of each fact blending with the others in a harmonious crescendo. And when each of these scriptures is heard, the intertwining network of history they reveal is exactly matched by the firm testimony of Assyrian and Babylonian chronology. It is thus with a sense of conviction that we proceed to the next step.
Section Ten

Seven Times from the Fall of Samaria

We noted in Section Seven that the Times of the Gentiles began with the empire of Babylon, and the fall of the independent kingdom of Judah. Now we also have a firm date for the fall of the ten-tribe kingdom in the north, 723 BC. And now we notice something of great interest. We observe that 2520 years forward from 723 BC takes us to 1798, the date used by Miller and his associates for the end of the 1260 years. Can it be that God arranged a parallel and secondary application of the seven times from the collapse of the northern kingdom?

This encouraging prospect is strengthened by the observation that the 3½ times of Daniel is nearly commensurate with the last half of the 7 times counting from Samaria's fall. This touch of compatibility in the time prophecies is very appealing, as order and symmetry always is. Its very charm suggests Divine intent, and compels us to investigate.

We also observe that World War I and the French Revolution, the ending points of the parallel seven times periods, produced similar consequences. The former dashed the church-state powers of Europe and opened the middle east for the Jews. The latter, and its aftermath under Napoleon, unsettled the church-state powers of Europe and produced increased liberties for the Jews. This parallel of consequences reinforces the likelihood that the parallel periods are of divine providence. So let us probe the years of history which would apply to these parallels to see what gems may lie there for our discovery.

1793 to 1800

In Section Seven we saw that the Gentile Times both opened and closed in a seven year span. In fact the episode breaking the power of Papacy at the end of the 1260 years also took a span of years, and it turns out just seven in number. The reign of terror we associate with the French Revolution occurred in the momentous year 1793. In that year Louis XVI was beheaded, and "Christianity itself was abolished by the National Convention." In 1796 Napoleon was placed in command of the French Army in Italy, and a humiliating armistice was forced upon the Papacy. This was formalized by treaty in 1797. In 1798 Berthier took the Pope a prisoner from Rome. Late in 1799 Napoleon took control of the French government. Earlier the same year the Pope died as a prisoner in France, and a successor was not immediately elected. Papacy, headless, was at her low ebb, and had not a new leader until Pius VII was crowned 21 March 1800. (C42, C55, Twilight of Princes 147-153, Mc&S "Pius" 246-247, Cheetham 246-247)

533 to 540

The seven year span from 1793 to 1800 finds a parallel 1260 years earlier from 533 to 540. 533 was the date of Justinian's decree granting the bishop of Rome the head position of all the Christian churches (C70). But as Italy was then dominated by the Ostrogoths, who were of Arian persuasion, the Pope's authority depended upon the subjugation of the Goths. To effect this, Justinian sent his general Belisarius with troops to Italy in 535. In 536 he sieged and entered Rome. In 537 the Goths endeavored to retake Rome, but later broke off the siege. Belisarius left Rome in 538, leaving it under the management of the Pope. In 539 Vittiges, king of the Goths, was taken at his capital, Ravenna.
The next spring, 540, Belisarius returned home with the laurels of victory. (See "A Little Horn," BT Aug. 1992. Also see note 64.) In that seven year span Papacy got its foothold in political power, which by fits and starts grew rapidly in the advancing years, as Catholic sources also affirm (C81-82). Let us next look for a seven year span at the fall of Samaria which would parallel these others.

728 bc to 721 bc

The necessary years would be 728 bc to 721 bc. The latter was the first regnal year of Sargon, king of Assyria, who claimed to have taken captive Israelites out of northern Israel at that time, established a governor, taken tribute and tax, and settled foreigners in "Hatti" [Palestine in its broad sense]. (Luckenbill II, §4). Working back, in 723 bc Samaria fell to Shalmaneser. In 725 bc the siege of Samaria began. At the end of 727 bc Shalmaneser ascended the throne at the death of Tiglath-pileser (Grayson, 72-73), thus Tiglath-pileser was still living during the campaign of 727. In this year he came west for the first time in five years (the eponym canon lists Damascus as the scene of activity that year). I am unaware of any Assyrian record of that year to explain the motivation for his western campaign. A reasonable surmise is that his absence had led to rebellion, which required his armed presence again. Presuming that rebellion was the year previous to his final western campaign, it would have been in 728 bc.

Rebellion was the motivating influence for the eventual reduction of the kingdom of Samaria. "And the king of Assyria found conspiracy in Hoshea: for he had sent messengers to So king of Egypt, and brought no present to the king of Assyria, as he had done year by year" (2 Kings 17:4). Was that rebellion in 728 bc? Was it part of a regional rebellion providing the catalyst for Tiglath-pileser's last western campaign?

Unfortunately the scriptures do not specify the year of that rebellion. But whatever occurred -- even if only the final wrap-up of affairs in Babylonia which had absorbed his interest in the intervening years -- Tiglath-pileser was motivated to turn his attention back to the west, which set the stage for the final extinction of the Kingdom of Israel.65

A Parallel 1260-Year Period?

The symmetry of these unfolding parallels causes us to wonder if there is a significant span of 1260 years ending in World War I, as a parallel to the 1260 years ending in Napoleon's time. The highly gratifying answer is yes. The false religious power in this case was Islam, who ruled the middle east and its residue of Jews, just as Papacy ruled Rome and spiritual Israel.66

Islam -- Mohammedism -- began of course with Mohammed. His memorable flight to Medina, known as the Hegira, was in 622, and his death in 632 (The Fires of Faith, 47). Following this were the first four caliphs: Abu-Bakr 632-634, Omar 634-644, Uthman 644-656, and Ali 656-661. By the end of Uthman's caliphate effectively the entire middle east was dominated by Islam, but a struggle for control of the empire was brewing.

"In 656 Uthman was assassinated and there followed a disputed succession that was to cause a schism in the faith of Islam which has not been healed to this day. Uthman was succeeded by Ali who, as son-in-law of Mohammed, had been expected by many to follow the prophet himself. In turn, Ali too was overthrown and the new Caliph, Muawiyah, is generally regarded as the founder of the Ummayad dynasty which held the Caliphate for the next hundred years. While the great
body of Islam, the Sunnites, accepted the succession of the first four Caliphs and the laws and traditions (or sunni) of the early period, a minority of sectarians (shiites) hold that ever since the murder of Ali, the line of the Caliphate has been in the hands of usurpers." (*The Fires of Faith*, 54)

It is during this time of outward conquest and internal ascension of the dominant faction of Islam that the time parallels point. Persia and Egypt were the large powers at the geographical extremities in the Moslem conquest of this period. The conquest of the former occurred in 651. "The Muslims complete their conquest of Mesopotamia by defeating the last Sassanian [Persian] king, Yazdagird III" (*Timetables*, 87).

Egypt had fallen previously, but it was retaken in 658 by Amr on behalf of Muawiyah, who in 657 had challenged Ali for the Caliphate and ultimately proved the victor and leader of the Sunni Moslems, whose power endured through the centuries.

The years 651 to 658 therefore not only marked a notable expansion of Islam's control over the middle east, but also identified the leading faction of the new power. In a similar way 533 to 540 not only marked the ascension of Papacy to temporal power, but also identified her as the appointed head of all Christian churches. The former span is a fitting parallel to the latter.
Another 1845 Year Parallel?

Notice the chart on page 33. It shows an 1845 year span within the 2520 years, beginning with the seven years of the Roman wars against Judea from 66 to 73 ad. If a parallel span of 1845 years exists in the 2520 years beginning with the fall of Samaria, it would begin with the seven years from 53 to 46 bc. Those were exactly the seven years which first formed the formidable Roman state into an empire, under its first emperor Julius Caesar. It had formerly been ruled by the Senate, and dominated by a Triumvirate.

The three men who comprised the first Triumvirate were Pompey, Crassus and Caesar. This was formed in the year 60 bc as a "private agreement of mutual support, without legal sanction" (Kinder and Hilgemann, 91). But as time passed only Caesar remained. Crassus was killed and his army defeated by the Parthians in the battle of Carrhae in 53 bc (Wells I, 372, Kinder and Hilgemann, 91). Then Caesar had only one rival, and they soon came into conflict. "For a time he worked in conjunction with Crassus and Pompey, but after the death of Crassus he and Pompey came into conflict" (Wells I, 375). By 49 bc they were fighting openly for control of the state. Pompey was defeated in 48 bc at the battle of Pharsalos in Thessaly, and fled to Egypt where he was murdered. But civil war continued until 46 bc, with Caesar's victory at Thapsus over those who formerly supported Pompey. Julius Caesar was then made dictator for ten years, and subsequently the term was changed to life (Wells I, 376, Kinder and Hilgemann, 91).

These seven years which forged the Roman state into the empire which later brought the Jewish polity to an end, are precisely the seven years required of the parallel 1845 year period in the first 2520 years.
Section Eleven

From the Exodus to the Divided Kingdom

There is a text in the Old Testament which nearly spans this period -- 1 Kings 6:1 -- but it is one many brethren suppose has been corrupted. We shall now examine the text, the reason it is disputed, and the resolution of the issue.

The text actually reaches from the Exodus to the fourth year of Solomon, but since we know he reigned 40 years (1 Kings 11:42, 2 Chronicles 9:30), and the kingdom was divided the year of his death, we can count forward 36 years and link up with the history of the divided kingdom.

"And it came to pass in the four hundred and eightieth year after the children of Israel were come out of the land of Egypt, in the fourth year of Solomon's reign over Israel, in the month Zif, which is the second month, that he began to build the house of the Lord." (1 Kings 6:1)

The Problem

If we deduct from these 480 years the wilderness wandering (40 years) and the conquering of the land (6 years) from the front end, and from the back end the reigns of Saul (40 years), David (40 years), and the four years of Solomon the text includes, this leaves 350 years remaining for the intervening period of the judges (480 - 40 - 6 - 40 - 40 - 4 = 350). But this is at variance with Acts 13:20 which assigns 450 years to the judges -- a difference of 100 years.

In a footnote to Acts 13:20, Benjamin Wilson, translator of the Diaglott, brings harmony to the texts by supposing 1 Kings 6:1 has been corrupted, one Hebrew digit being taken for another, so that the text originally read 580th, rather than 480th. Others counter that in the Hebrew text of all existing manuscripts, the number in 1 Kings 6:1 is written out long-hand, making such an error unlikely (Rutherford, 137-138). Yet again we have no assurance a short-hand form of numbering was not used in remote ages, which may have allowed such an error.

Those who maintain for the integrity of 1 Kings 6:1 sometimes appeal to the New American Standard Version of Acts 13:20 which identifies the 450 years with events prior to the judges, and thus removes the problem. (That version draws from a Greek text which differs from the one used by Benjamin Wilson -- you can note the difference by comparing the Greek in Marshall's Diaglott with that in Wilson's Diaglott.)

A Different Approach

I think neither of these resolutions is the correct one. I do maintain for the integrity of 1 Kings 6:1, but not for the usual reasons. I will give my reasons for this conclusion, and also my explanation of Acts 13:20. But before this, I would like to consider briefly the philosophy of the issue. The issue has been long discussed, and the lines of opinion have been sharply drawn. Those who are concerned with chronology and time prophecy, and realize their value and service to the harvest church, are naturally disposed to those arguments which support the conclusions found in Volume 2. An alteration of 100 years, without some compensating adjustment -- and what could that be? -- must appear of little
utility, and little appeal.

Contrariwise, those who for any cause or by any process have concluded against the chronological views of our heritage are naturally disposed to see in this issue another evidence of miscalculation.

This is not to say that brethren form conclusions merely with end results in mind. But given reasonable options, who would not follow those which bring harmony to a persuasion rather than discord? For this reason I ask the reader to recall the things we have already found in our study. The bulwark of evidence, both from history and scripture, is convincing that we do have changes to make. And we have already observed with delight some harmonies and parallels otherwise closed to our view. It will prove of no advantage to blunt our investigation by preferences for one resolution or another which were formed in a context which now requires adjustment. This argues not for any specific conclusion, only for a candid examination.

Evidence on the Issue

I support the integrity of 1 Kings 6:1 for these reasons.

(1) We have just noticed, in Section Nine, the remarkable integrity of the Hebrew Masoretic text. Not one of the reigns or synchronisms of the many kings of Judah and Israel has been corrupted. Each one has contributed an accurate testimony. This speaks for the statistical likelihood (albeit not certitude) that 1 Kings 6:1 has also been correctly transmitted.

(2) 1 Kings 6:1 and Acts 13:20 actually differ by 101 years rather than 100 years. If we use the actual figures rather than rounded figures, the interval for the judges was (479 - 46½ - 83½ =) 349 years, rather than 350. Therefore a one digit error will not explain the difference. (Granted this is not decisive; since Acts 13:20 says "about 450," it could simply be a round number for 449, which would allow a one-digit error.)

(3) The key to Acts 13:20 is found in an expression on B49. "The record given in the books of Judges and 1 Samuel mentions nineteen periods, approximating a total of four hundred and fifty years; but they are disconnected, broken, lapped and tangled so much that we could arrive at no definite conclusion from them." Actually the total is precisely 450 (see Appendix K). Apparently Paul knew this, but realizing there were gaps and laps he said "about 450." He did not require precision, as his subject was not chronology, and this was only a passing comment. Thus Acts 13:20 is not an independent witness. It is merely a reflection of the narrative in Judges and 1 Samuel, whose testimony we next examine.

(4) The data in Judges and 1 Samuel does blend with 1 Kings 6:1, despite the initial appearance of disharmony. Judges 11:26 affirms that from the crossing of Arnon (7 years before the division of the land) to the beginning of Jephthah's judgeship was 300 years. Perhaps this is a round number, but we will compute it at face value and leave it to the reader to make whatever adjustment he pleases. Thus (349 + 7 - 300 =) 56 years remain for all judgeships from Jephthah to the first year of Saul. Can they all fit?

Yes, they can. The key to the issue is twofold: (1) to recognize that the Philistine oppression and the Ammonite oppression, both mentioned in Judges 10:7, began as contemporaneous episodes, each affecting a different portion of Israel; (2) that the writer of Judges, after detailing the briefer Ammonite affliction, its resolution, and the territorial judges which followed Jephthah, then proceeds to
the full explanation of the more protracted difficulty with the Philistines whose oppression of 40 years did not cease until the judgeship of Samuel. We will examine each narrative.

The Ammonite Oppression. This oppression was mostly upon the Israelites east of the Jordan River, which is natural since Ammon was east of the Jordan. However at times they passed over Jordan to afflict Judah, Benjamin and Ephraim also, but not the other tribes of Israel ( Judges 10:7, 8). Jephthah was from Gilead, east of Jordan, and those who recruited him to lead them were the "elders of Gilead" ( Judges 11:5). Jephthah first tried diplomacy. At its failure the battle was joined and Jephthah triumphed by the Lord's power ( Judges 11). The men of Ephraim, jealous of the victory and devoid of its spoils, wrongly challenged Jephthah and lost 42,000 men in the ensuing fray. Judges 12 then concludes by speaking of the judges which followed Jephthah in the east and north -- Ibzan of Bethlehem, Elon of Zebulon, and Abdon evidently of Ephraim, as he was buried there. Thus the chronicler traces this oppression and its aftermath as far as possible before returning to the Philistine oppression in the southwest.

Notice that chapters 11 and 12 do not mention the Philistine oppression, or explain its removal, even though 10:7 introduced it with the Ammonite oppression, even mentioning it first. But there is no real lapse. The narrator returns to the Philistine oppression with chapter 13. As the two oppressions began in different areas and involved different people, the associated narratives must be sequenced, and as the Philistine problem was more troublesome and far-reaching, its narration was deferred until the other. The judgeships of Ibzan, Elon and Abdon were appended to the first narrative both because they were not directly involved with the Philistines, and because their years were mostly within the 40 years of Philistine oppression.

The Philistine Oppression. Judges 13:1 says this lasted 40 years. Judges 10:7, 8 indicate it began about the same time as the Ammonite oppression, 18 years before Jephthah's judgeship. Judges 13:5 shows that Samson was born after this oppression began. He judged (in the sense of avenging Israel) for 20 years, but died before the Philistines were vanquished. Therefore he began his exploits at a young age, in his late teens. Shortly after his death the 40 years of Philistine oppression must have ended, but the narrator does not immediately explain the circumstances -- another apparent lapse. Actually we do have that account, but it follows in 1 Samuel. Meanwhile the chronicler interupts to include three essential stories which all occurred earlier in the period of the judges. Belong-ing to the period of the judges, they can be put off no further, and must precede the introduction of the kings of Israel. As those kings are introduced by Samuel, the narrative respecting him must be deferred. And if Samuel's narrative must be deferred, so must the intertwined story of Eli.

Those intervening stories described: (1) How the Danites sought an alternate inheritance, and established a false system of worship (Samson came from those who later possessed land in the original allotment near the Philistines). (2) The prominence of Judah in correcting a base sin in the tribe of Benjamin. (3) The story of Ruth, the progenitor of David. All three narratives involve Bethlehem, the birth city of David, and contain lessons pertinent to the coming Davidic dynasty which would replace Saul. Judges 17 through Ruth are devoted to these accounts.

The story of Samuel and Eli then follows. Eli was the priest (1 Samuel 1:9), and apparently judged as an ecclesiastical leader rather than a military leader. Even his sons were not serving as generals in the disastrous battle which ended their lives, but were attending the ark (1 Samuel 4:4). Chapters 1-3 narrate Samuel's early life, chapter 4 Israel's humiliating defeat and the death of Eli and his sons, chapters 5-6 the captivity of the ark among the Philistines for seven months (1 Samuel 6:1), and
chapter 7 the ark’s rest at Kirjath-jearim 20 years (1 Samuel 7:2), followed finally by the end of the Philistine oppression by God's intervention (1 Samuel 7:7-17). With that great deliverance the 40 years of oppression came to a close, and verses 13-14 show how complete was their liberation.\(^72\)

Now we can mesh the Eli-Samuel account with Samson. The disastrous battle of 1 Samuel 4 occurred about 21 years before the end of the oppression, therefore about 19 years after it began, which was about the time Samson began his exploits as a youth.\(^73\) This means Israel had already served the Philistines some years before Eli died, and 1 Samuel 4:9 implies this also. The death of Samson would have been not long before 1 Samuel 7. Possibly the remarkable episode of Samson's demise spurred Israel to rally under Samuel, and also encouraged the Philistines for revenge (1 Samuel 7:6, 7).

Jephthah, Ibzan, Elon and Abdon judged in areas outside of the Philistine oppression, and their 31 years extended beyond the Philistine oppression of the southwest perhaps (18 + 31 - 40 =) 9 years. Therefore they were contemporary with the priesthood of Eli, the exploits of Samson, and the first part of Samuel’s leadership. Samuel was the recognized religious and prophetical leader after Eli (1 Samuel 3:20-21), and also rallied the people against the Philistines militarily.

We previously computed that from Jephthah to Saul were 56 years. Since the Ammonite and therefore the Philistine oppression began 18 years before Jephthah, the gap from the end of the oppression to the anointing of Saul would be more than three decades. Samuel was “old” when Israel requested a king (1 Samuel 8:1), and Samuel lived to see David leading a band of men (1 Samuel 25:1-9). As David was 30 when he began to reign (2 Samuel 5:4), and Saul reigned 40 years, Samuel apparently lived to his late nineties as Eli had before him.

**Evidence from History and Archeology**

Thus 1 Kings 6:1 is sound scriptural testimony. It is not opposed by other scriptural evidence, and it accords with both Judges and 1 Samuel. Using 1 Kings 6:1, the date of the Exodus can be computed: 587 bc + 343 + 36 + 479 = 1445 bc, in the spring of the year. In addition to the strictly scriptural evidence, this date agrees with both history and archeology. (If the judges ruled 450 years the date would be 1545 bc, which fits no theory of dating.)

We will cite four examples of this agreement. Each case depends in some way on the history of ancient Egypt. That chronology is not as well founded as the chronology of Assyria and Neo-Babylonia, but for the dates of the 18th Egyptian Dynasty, which is the period of our interest, there is a growing consensus from both historical and astronomical evidence.\(^74\) The lists below date the rulers of the 18th and 19th Dynasties of Egypt (Merrill, 58).\(^75\)

<table>
<thead>
<tr>
<th>Dynasty 18</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammosis</td>
<td>1570-1546 bc 24 years</td>
</tr>
<tr>
<td>Amenhotep I</td>
<td>1546-1526 bc 20 years</td>
</tr>
<tr>
<td>Thutmose I</td>
<td>1526-1512 bc 14 years</td>
</tr>
<tr>
<td>Thutmose II</td>
<td>1512-1504 bc 8 years</td>
</tr>
<tr>
<td>Hatshepsut</td>
<td>1503-1483 bc 20 years</td>
</tr>
<tr>
<td>Thutmose III</td>
<td>1504-1450 bc 54 years</td>
</tr>
<tr>
<td>Amenhotep II</td>
<td>1450-1425 bc 25 years</td>
</tr>
<tr>
<td>Thutmose IV</td>
<td>1425-1417 bc 8 years</td>
</tr>
<tr>
<td>Amenhotep III</td>
<td>1417-1379 bc 38 years</td>
</tr>
<tr>
<td>Amenhotep IV (Ikhnaton)</td>
<td>1379-1362 bc 17 years</td>
</tr>
<tr>
<td>Smenkhkare</td>
<td>1364-1361 bc 3 years</td>
</tr>
</tbody>
</table>
Tutankhamon 1361-1352 bc 9 years
Ay 1352-1348 bc 4 years
Horemheb 1348-1320 bc 28 years

Dynasty 19
Rameses I 1320-1318 bc 2 years
Seti I 1318-1304 bc 14 years
Rameses II 1304-1236 bc 68 years
Merneptah 1236-1223 bc 13 years

(1) The Pharaoh of the Exodus. The list above means the Pharaoh of the Exodus (1445 bc) must have been Amenhotep II, who ruled from 1450-1425 bc. This means the Pharaoh from whom Moses fled was the mighty Thutmose III. Notice that he is the only one in the 18th Dynasty who ruled long enough to qualify, for Moses returned after an exile of 40 years only after the angel told him "all the men are dead which sought thy life" (Exodus 4:19).

Through his reign and conquests, which included Palestine, the Egyptian empire was brought to its zenith. It is both remarkable and fitting that God brought the empire low through the plagues shortly thereafter. It is little wonder that his successor, soon after taking the reigns of power, so stubbornly resisted freeing the Hebrews and forfeiting that much of the glory of the kingdom. Some other supportive observations:

"Kenneth Kitchen ... cites abundant evidence for slave labor, including Semites, in the manufacture of brick in the period of Dynasty 18" (Merrill, 59).

"Although most of the kings of Dynasty 18 made their principal residence at Thebes, far to the south of the Israelites in the Delta, Amenhotep was at home in Memphis and apparently reigned from there much of the time." (Merrill, 63)

"The best understanding suggests that Amenhotep's power did not pass to his eldest son, but rather to Thutmose IV, a younger son. This is at least implied in the so-called dream stela found at the base of the Great Sphinx near Memphis. This text, which records a dream in which Thutmose IV was promised that he would one day be king, suggests, as one historian says, that his reign came about 'through an unforeseen turn of fate, such as the premature death of an elder brother'" (Merrill 63, citing Hayes, "Internal Affairs," in CAH 2.1, p. 321). This circumstance is consistent with Exodus 12:29 that Pharaoh lost his firstborn in the last plague.

"Less sure, but worthy of note, are Merrill's conclusions that Amenhotep II conducted a major campaign in Canaan in 1450 bc, another in 1446 bc, and another "on a smaller scale" in 1444 bc. "One cannot help but wonder if the decimation of Pharaoh's army at the Sea of Reeds might not have followed this second campaign and had such demoralizing impact as to discourage further immediate adventurism, especially to the north" (Merrill, 63). It is also consistent with our dating that no campaign is mentioned for 1445 bc, the year of the Exodus and Pharaoh's humiliation.

"Amosis, the first king of the 18th dynasty, was the expeller of the Hyksos rulers who were so hated. As the Israelites were also semitic, it was natural for the Egyptians to be suspicious regarding their sympathies. He "might be concerned that the populous and rapidly multiplying Hebrews could become a threat to his newly established authority ... the repressive policies which followed ... included the reduction of the Hebrews to slave labor in construction of public-works projects ... when
that failed, there followed an edict of genocide." (Merrill, 59)

Amenhotep II took little interest in Canaan after the exodus. "His son Thutmose IV apparently undertook only one northern campaign ... while Israel was in the Sinai ... Amenhotep III was ruling during Israel's invasion and occupation of Canaan, but his attention was directed not toward defending his interests in Canaan, but ... toward hunting and the arts. This obviously was providential for Israel ... as ... the Mitannians, Hittites, and (later) the Assyrians were for the most part at loggerheads, unable to fill in the vacuum that Egypt's disinterest in Canaan had produced. Only the Canaanites, themselves totally disorganized, stood in the way" (Merrill, 99).

The consistency of these various circumstances with the date the scriptures require for the Exodus forms an impressive cord of testimony.

(2) The Tell el-Amarna Letters. These are a series of documents discovered in Egypt in 1887. They are letters of correspondence between the Pharaoh and foreign kings during the reigns of Amenhotep III and Amenhotep IV, and many of them are from the kings of Canaan. Several of the Canaanite letters refer to their enemies the "apiru," which some take to be the Hebrews invading under Joshua. Rutherford cites H. R. Hall of the British Museum, who said "we may definitely say that in the Tell el-Amarna Letters we have Joshua's conquest seen from the Egyptian point of view" (Rutherford, 118, citing H. R. Hall, "History of the Near East," 409). Rutherford concludes: "Thus the Tell el-Amarna tablets supply additional evidence that the Israelites entered Canaan from Egypt in the reign of Amenophis III. The various Palestinian cities mentioned on the ... tablets have all been identified and it is significant that there is no reference to Jericho, as that city was knocked out by Joshua at the very first blow at the beginning of his campaigns ... and hence was already destroyed before the Tell el-Amarna correspondence was begun" (Rutherford, 118).

However, it is commonly acknowledged today that the term "Apiru" was elsewhere used in contexts which predate the Israelites, and "apiru and ibri [Hebrews]... seem not to have a common etymology" (Merrill, 101). But the pejorative "apiru" may have been applied to Joshua's invading host by his Canaanite enemies. Merrill's interesting treatment of this subject concludes thus: "It is possible that the apiru who operated outside central Palestine are to be distinguished from those inside, who may have been the Israelites" (Merrill, 108). He argues that the Amarna correspondence is at least consistent with the Biblical conquest, and therefore supportive of our dating.

(3) The Destruction of Jericho. 1 Kings 6:1 would place the crossing of Jordan in the year 1405 bc. At that time Joshua destroyed and burned Jericho, which was not rebuilt until centuries later (Joshua 6:24, 26, 1 Kings 16:34). Jericho has been excavated, and the level of Joshua's day identified. "Garstang held to 1400 as the date of the conquest ... his conclusion [that this was the Jericho level of Joshua's day] was buttressed by his discovery of walls which, contrary to the normal results of battering, had fallen outward, down the slopes of the tell, rather than inward. This he associated with the biblical description which says that Jericho's walls fell down 'under it' ... that is, down the slopes of the city (Joshua 6:20)" (Merrill, 111).

On what basis did Garstang assign his dates? I have not read Garstang's work, but Adam Rutherford comments as follows. "In ad 1930-1936, during Professor Garstang's excavations ... hundreds of scarabs (seals) of the Pharaohs of the Hyksos and early 18th Dynasties were unearthed down to the reign of Amenophis III (Amenhotep III), but only two scarabs were found pertaining to his reign and none at all to any of the Egyptian kings that followed him" (Rutherford, 117). This would imply Jericho fell within his reign, consistent with our dating.
(4) The Destruction of Hazor. After Joshua crossed the Jordan and destroyed Jericho and Ai, one of the large cities of Palestine, Gibeon, secured a promise of peace from Israel through deceit (Joshua 9). As a result five other kings of Canaan unified and marched against Gibeon, who then called on Joshua for protection (Joshua 10). Joshua defeated those kings, and in alarm many of the remaining cities formed another coalition around the central power in the north, Hazor (Joshua 11, specially verse 10). Hazor was the third city that Joshua burned, after Jericho and Ai,80 which was contrary to the usual practice. "Israel burned none of them, save Hazor only; that did Joshua burn" (Joshua 11:13). When a city is burned, it leaves charred debris which archaeologists can date by the artifacts within and about the burn layer.

In his initial publications, the excavator Yigael Yadin argued that one of Hazor's conflagrations occurred in about 1400. He later revised his estimate forward by 150 years, but this revision has been challenged by others. "John Bimson, for example, in a meticulously researched analysis of the archaeological data from Hazor and elsewhere, has shown that Yadin's adjustment was not only unnecessary but completely unwarranted. The date Yadin originally proposed ... 1400 ... is in fact correct" (Merrill, 120). Clearly this date accords with Joshua's campaign in the few years following the Jordan crossing of 1405 bc.

Further Scriptural Evidence
(1) The book of Ruth concludes with a genealogy of David: Salmon, Boaz, Obed, Jesse, David. The mother of Boaz was Rahab (Matthew 1:5), which puts his birth sometime after the conquest. It has always been an acknowledged infeasibility for 450 years of the judges to be spanned by only these generations. But 350 years could be spanned, without supposing the existence of unrecorded generations.

(2) The count of Israel's jubilee cycles from the beginning of their conquest to the end of their kingdom is precisely confirmed with the total passage of years. This is a remarkable testimony for the integrity of 1 Kings 6:1, and it also confirms our conclusions about the period of the Kings. (Please see Appendix L for a full discussion of the jubilee.) Below we chart a grand cycle of 2500 years, from the last observed jubilee in 623 bc to 1878, marking the year of Israel's restoration to the land, and the restoration of the land to them. Ezekiel informed Israel they would not get their land in the jubilee then approaching, because of God's punishment, which caused the typical observance to cease (Ezekiel 7:13). But in the 2500th year of the grand cycle, from the fall of 1877 to the fall 1878, their privileges were due to return. And they did.
A period of 430 years terminating with the Exodus is mentioned in Exodus 12:40, 41. But the beginning of this span is not clearly defined, and that is the issue to resolve here.

"Now the sojourning of the children of Israel, who dwelt in Egypt, was 430 years. And it came to pass at the end of the 430 years, even the selfsame day it came to pass, that all the hosts of the Lord went out from the land of Egypt."

It is customary for the brethren to begin this period at the time Abraham entered Canaan at the age of 75 (Genesis 12:4-7), and suppose the "children of Israel" sojourned in Abraham in the sense of Hebrews 7:10. The reason for this view is that Paul's statement in Galatians 3:17 implies there were 430 years from Abraham's day to the Exodus.

Another widely held view is that the sojourn began when Jacob and his sons moved to Egypt during Joseph's rule. This is easier to reconcile with the statement that the sojourn was of the children of Israel. This view holds that Paul referred merely in a general way to the span from the patriarchs (to whom the Abrahamic covenant was made and repeated) to the Law, citing the only numerical value specified in the Old Testament -- 430 years -- not intending to mark any particular statement of the covenant, but simply to observe the great priority of the original covenant to the added covenant, which is the point of his argument.

**A Third Option**

Here I suggest a third option: that the "sojourn of the children of Israel" began at the time Jacob (Israel) began his family, with the birth of his firstborn, Reuben. This fits the requirement of Exodus 12:40, 41 because from that point forward there were children of Jacob to sojourn.

**The Evidence Examined**

Let us now examine the evidence that may distinguish which of these three views is correct. We will refer to them as view 1 (Abraham's day), view 2 (Jacob's move to Egypt), and view 3 (the birth of Reuben). The arguments we will discuss are these: (A) Hyksos Rulers. View 1 would place Joseph's experience during the reign of the Hyksos rulers, which is incompatible with the scriptural narrative. (B) Joseph's Pharaoh. View 2 would make the Pharaoh of Joseph's time Sesostris III, which is possible, but view 3 would make him Ammenemes III and provide an attractive historical link to the Joseph story. (C) Prophetic Harmony. It cannot fail to engage our attention that only view 3 accords with the Jewish double.

**Hyksos Rulers.** An excellent review of this issue is in Merrill, pages 49-55, from which the following is extracted and summarized. The Hyksos kings held effective control of Lower Egypt (the Delta) for about 150 years (1720-1570 BC). Manetho suggested the term Hyksos meant "shepherd kings," but modern studies favor something like "rulers of foreign lands." They are thought to have been semitic rulers from Canaan, whose names, habits and customs were therefore different from the native Egyptians. But the scriptural narrative implies the rulers Joseph dealt with were not semitic, but
Egyptian. (1) His first master was Potiphar, his wife was Asenath, daughter of Potiphera priest of On (Heliopolis), and Joseph's name was changed at his exaltation to Zaphenath-Paneah. All of these are good Egyptian names, rather than semitic Hyksos names. (2) When Joseph appeared before Pharaoh he shaved himself (Genesis 41:14). This was appropriate if he appeared before a shaven Egyptian Pharaoh, but inappropriate if he appeared before a bearded Hyksos Pharaoh. (3) When Joseph's brothers visited, they surmised their Egyptian host could not understand their language (Genesis 42:23). This would be a bad surmise if they thought they were appearing before Hyksos rulers. (4) It was considered an abomination for Egyptians to eat with Hebrews (Genesis 43:32). This would be a strange position for semitic Hyksos. (5) Shepherds were an abomination to the Egyptians (Genesis 46:34). But "if the Hyksos were anything, they were shepherds; they would not have despised the Hebrews for being shepherds" (Merrill, 53). "In conclusion, it is overwhelmingly evident that Joseph lived and held administrative office in a period of Egyptian rather than Hyksos control" (Merrill, 53). This is evidence against view 1.

**Joseph's Pharaoh.** Both view 2 and view 3 place Joseph's arrival in Egypt at the time of the 12th Dynasty. Merrill's dates for this Dynasty, from *Cambridge Ancient History*, are:

<table>
<thead>
<tr>
<th>Dynasty 12</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammenemes I</td>
<td>1991-1962 bc</td>
<td>29 years</td>
</tr>
<tr>
<td>Sesostris I</td>
<td>1971-1928 bc</td>
<td>43 years</td>
</tr>
<tr>
<td>Ammenemes II</td>
<td>1929-1895 bc</td>
<td>34 years</td>
</tr>
<tr>
<td>Sesostris II</td>
<td>1897-1878 bc</td>
<td>19 years</td>
</tr>
<tr>
<td>Sesostris III</td>
<td>1878-1843 bc</td>
<td>35 years</td>
</tr>
<tr>
<td>Ammenemes III</td>
<td>1842-1797 bc</td>
<td>45 years</td>
</tr>
<tr>
<td>Ammenemes IV</td>
<td>1798-1790 bc</td>
<td>8 years</td>
</tr>
<tr>
<td>Sobkneferu</td>
<td>1789-1786 bc</td>
<td>3 years</td>
</tr>
</tbody>
</table>

According to view 2, the date of Jacob's move to Egypt would be (1445 bc + 430 =) 1875 bc. This was 9 years after Joseph was elevated (Genesis 45:6), presuming the seven years of plenty dated from Joseph's elevation. Therefore Joseph was elevated in 1884 bc.

View 3 varies from view 2 by 45 years -- since Jacob was 130 years old when he moved to Egypt (Genesis 47:9), but 85 years old when Reuben was born (see Appendix N). So according to view 3 Joseph was elevated in (1884 bc - 45 =) 1839 bc.

This means view 2 puts Joseph's elevation in the reign of Sesostris II and Jacob's arrival in the reign of Sesostris III, while view 3 puts both in the reign of Ammenemes III. Merrill, who follows view 2, shows that the narrative of Joseph is consistent with the reigns of Sesostris II and III (Merrill, 49-51), but does not consider the other option. It is at least noteworthy that the scriptures do not reflect a change of Pharaoh during the time Joseph was in power, though this is not decisive against view 2 since neither do the scriptures clearly assert to the contrary. But for view 3 are these observations.

"1. Ammenemes III (bc 1842-1797) began his reign as a warring/conquering pharaoh, but most of his reign was peaceful. Yet he brought the Middle Kingdom of Egypt to the apex of its glory, and his monuments are found as far away as Byblos (in Lebanon). (2) The stone quarries at Hammamat were idled from the 4th through 18th years of Ammenemes III. (The basalt for making great monuments of the pharaohs came from these quarries.) (3) 90 km² of new farmland was opened up in the Fayum district southwest of the Nile delta (swampland from Lake Moeris was drained). (4) The nomarchs (regional rulers) became very wealthy early in the reign of..."
Ammenemes III, but were impoverished later on. (There is no sign of revolution or other civil unrest to cause it.)” (Parkinson, Discoveries) 85

All of these are consistent with the seven years of plenty followed by the seven years of famine which occurred during the rule of Joseph. Item (2) is specially significant, for the 15 seasons during which the quarries were idled began with 4 Ammenemes. If 1 Ammenemes began in 1842 bc, then 4 Ammenemes began in 1839 bc -- the same year Joseph was elevated. Probably in that year Joseph redirected the state resources to focus on raising and storing grain, which may explain why the quarries were temporarily abandoned. After the 14 years of plenty and famine, and another year of normal harvest to recover from the famine, the normal quarry work evidently resumed. Given a date for the Exodus of 1445 bc, this is very supportive of view 3.

Prophetic Harmony. View 3 means the date of Joseph's elevation was 1839 bc. As he was then 30 years of age (Genesis 41:46), and he was 91 years younger than Jacob (Appendix N), Jacob was then 121 years old. Jacob died at age 147 (47:28), which was therefore 26 years after Joseph's exaltation. This produces a date for Jacob's death of (1839 bc - 26 =) 1813 bc. This is exactly the year assigned to that event in Volume 2 (B232), and on this date depends the calculation of the Jewish double. 86

Other Evidence

Four other factors are significant here.

(1) The exceptional population growth of the Israelites in Egypt (Exodus 1:7). Shortly after the Exodus the men from 20 years and up numbered just over 600,000 (Exodus 38:26). Supposing there were an equal number of women, and adding children as well, we have a total population of probably more than 2,000,000. When Jacob entered Egypt there were 76 persons in his family (Genesis 46:26), and if we add 12 wives there were 88. This means an increase of (2,000,000 / 88 =) 22,727 times during their stay in Egypt. Therefore their population doubled about 14.47 times while in Egypt. As views 1, 2, 3 allocate respectively 215, 430, 385 years for this, it means the rate of population doubling would be about every 15, 30, 27 years respectively. All of these rates are rapid, but the last two are more credible than the first.

(2) The family line of Moses. Levi - Kohath - Amram - Moses (Exodus 6:16-19) may have spanned a 215 year stay in Egypt, but not so easily one of 385 or 430 years. Therefore this is for View 1, and against Views 2 and 3. Further, if indeed Moses' mother Jochebed was the literal daughter of Levi (Exodus 2:1), Views 2 and 3 would be proven wrong. But if Exodus 6 includes all the generations, then Moses had thousands of cousins, which seems unlikely. (Numbers 3:28 says there were 8,600 Kohathite males just after the Exodus -- all from only four sons of Kohath.) Joshua and Bezaleel, probably both younger contemporaries of Moses, were eleven and seven generations from Jacob respectively (1 Chronicles 7:22-27, 2:1-21). 87 This may imply some unrecorded generations in Moses' family line on both sides: that Amram's line was shortened, and that Jochebed was merely a descendant of Levi. 88

(3) Genesis 15:13. The text prophesies 400 years to climax with the Exodus in the fourth generation. I prefer the view that this refers to the Egyptian sojourn as approximately four centuries 89 (view 3 makes it 385 years counting from Jacob's move to Egypt, or 407 years from Joseph's abduction), the smaller last part of which was a period of affliction. But this text can be harmonized with all three views. 90
(4) **Genesis 14.** Who were the four kings from the east? (verse 1). After discussing some possibilities, Merrill concludes "It is most prudent to say at this time that ... the kings of the east cannot be identified" (Merrill, 37). However, Bro. Parkinson offers an excellent treatment of this question, and identifies Amraphel king of Shinar with history's Ur-nammu king of Sumer. Two things make this identification appealing. (1) The Bible shows Amraphel died 14 years after his first venture west (Genesis 14:5); history shows Ur-nammu reigned 18 years and may have come west in year 4. (2) Most other possible identifications are disqualified by some incompatibility of the known facts. According to Thorkild Jacobsen, Ur-nammu died 308 years before Hammurabi's first year, which allows a method of dating Ur-nammu. Bro. Parkinson posits a date for Ur-nammu's death of 2036 bc. If Abraham entered Canaan in 2046 bc (as we suggest), ten years later would be 2036 bc, when Sarah gave Hagar to Abraham to bear a son (Genesis 16:3). All of this is consistent with the narratives in Genesis 14, 15, 16 (Parkinson, 1-3, 13-14). If Bro. Parkinson's conclusions are correct, and if our conclusions about the Exodus are correct, then only View 3 would be compatible.

**From Abraham back to Adam's Creation**

The period from Abraham moving from Haran to Canaan at age 75, back to the flood, and from the flood back to Adam's creation, are 427 years and 1656 years respectively (B43-B44). Views 1, 2, 3 above require the following years to be added between Abraham at 75 and the beginning of the 430 years: 0, 215, 170 (consult Appendix N). As the terminus of the 430 years was in the spring, perhaps its beginning was in the spring. If Adam was created in the fall (a common assumption, albeit without specific evidence), shall we increase or decrease the span by ½ year? For the following calculations we will increase it. Views 1, 2, 3 in this case produce a terminus of 6000 years from creation in the fall of the years 2042, 1827, 1872 ad.
Section Thirteen

Summary and Conclusion

In the preceding sections, we have presented evidence for these periods of chronology:

<table>
<thead>
<tr>
<th>Event</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Adam to the Flood</td>
<td>1656</td>
</tr>
<tr>
<td>To Abraham, age 75</td>
<td>427</td>
</tr>
<tr>
<td>To Reuben's Birth</td>
<td>170</td>
</tr>
<tr>
<td>To the Exodus</td>
<td>430</td>
</tr>
<tr>
<td>To and Including 4 Solomon</td>
<td>480</td>
</tr>
<tr>
<td>To the Divided Kingdom</td>
<td>36</td>
</tr>
<tr>
<td>To Zedekiah's fall</td>
<td>343</td>
</tr>
<tr>
<td>To within 1 AD</td>
<td>587</td>
</tr>
<tr>
<td>To within 1872</td>
<td>1871</td>
</tr>
<tr>
<td>Total</td>
<td>6000</td>
</tr>
</tbody>
</table>

This is a direct result of four conclusions, each of which we will briefly review.

1. The desolation of Judea began in 587 BC (minus 20 years).
2. The period of the kings was 463 years (minus 50 years).
3. 1 Kings 6:1 is correct (minus 100 years).
4. The 430 years began with Jacob's firstborn (add 170 years, Abraham to Reuben).

Net difference: zero.

1. The weighty evidence of Babylonian chronology which requires this adjustment is overwhelming, and the scriptures support this evidence. The reader is now referred to Appendices F and H, which increase the evidence on this subject. The end of the period of the kings is bound and fixed by the chronology of its neighbors: Assyria, Babylon and Egypt. Each bears formidable testimony separately, and multiplied strength in unison. Zedekiah fell 20 years later than we supposed.

2. The period of the kings is reduced 50 years by the compelling web of information from the scriptures directly. The one arrangement which brings harmony out of the whole also precisely conforms to the well-defined history of Assyria, meshing at five points: the reigns of Ahab, Jehu, Hoshea, Hezekiah and Josiah. There is no feasible way to avoid the tight harmony between scripture and history in this period.

3. From the Exodus to 4 Solomon is reduced 100 years. This gives dates for the Exodus and the conquest which are consistent with the Scriptures, fit well the records of ancient Egypt and Palestine, and are confirmed by the count of jubilee cycles.

4. This period yields three possible options. The one adopted here reconciles both the Jewish double and the end of 6000 years. This is supported by (1) the probability that Joseph did not serve under Hyksos pharaohs, (2) a possible link between Joseph, the years of plenty and famine, and Pharaoh Ammenemes III, (3) a possible link between Amraphel king of Shinar, and Ur-nammu king of Sumer.
Has this been Forced to End in 1872?

That is a very understandable question. Is it not too great a coincidence that altering our chronology in so many particulars, we nevertheless arrive at the same ultimate conclusion? Let us see where this might have occurred. Working back from Cyrus to the death of Solomon, there is no credible possibility of manipulating to a fixed result. The scholars whose studies formed the basis for our views clearly did not conspire on our behalf. And most of the prophetic applications in this study rest on the sure and solid foundation of dates in this period.

Going further back, we are simply obliged to say yes or no to 1 Kings 6:1. There is not much opportunity for flexing here. The other popular option is 100 years different, and that is not a small nimble span susceptible of bending to a theory. In fact, for the reasons cited, we have accepted the scriptural number at face value, and therefore have flexed not at all.

This leaves but one area of suspicion: fixing the event beginning the 430 years of Exodus 12:40. Several possibilities were examined, and I investigated to find an event on the date which would reconcile the Jewish double. (See also note 86.) I found a credible beginning -- the birth of the first of the "children of Israel" who sojourned. I will leave it to the reader to judge this solution. In the section on this issue we tendered three possibilities and expressed our preference.

However, I will again press the issue that our choice is supported by two links to secular history, (1) Joseph with Ammenemes III, (2) Abraham and Amraphel with Ur-nammu. These are crucial links. If further examination either strengthens or weakens them, or the dates assigned to these rulers, this would be very material.

A Good Approach, with Improved Facts

With the fresh evidence of the last century, we have much advantage in sifting and sorting the facts of history. This does not mean our predecessors greatly erred. Bro. Miller was essentially correct in locating the 1260 days, and Bro. Barbour in locating the 1335 days. He reasonably began the Gentile Times nearly 70 years before Babylon's fall -- about right -- and applied the harvest parallels and other spans to blend. By the Lord's grace the wise, as Daniel clearly predicted would happen, were walking in the light of prophecy. The truths they did see induced them to shape other matters in the right direction. As the dust settles we find their general approach correct, though their facts improved.

Bro. Miller and others assumed the long cherished view that 6000 years would end with the Lord's return. Understandably, they looked for a chronology which would make it so, and it is not surprising that Bros. Miller and Barbour both found systems which satisfied this view. As their terminal dates differed, necessarily their chronology differed. Barbour found the right terminus (because of the 1335 days),93 fastened on Bowen's chronology as a close match, and other deductions followed. This does not mean Bowen's system was correct in its particulars. It was adopted for its result, not its parts.

Bro. Russell's Good Advice

Clearly time prophecy, given by God through inspired prophets, is intended for our benefit, and to strengthen faith. It has encouraged brethren throughout the age to reverently watch with one eye on transpiring events, and one eye on holy writ, to match as best they could the progress of events toward the consummation of their hopes. As the end of the age approached, the focus of prophetic
discernment grew wonderfully sharper, and with the advent of the harvest the rays of light congealed even more clearly. The sharper focus was used to great advantage by the messenger to the Laodicean church.

Nevertheless, though the light is much increased, we still see through a glass darkly. A sensible appreciation of this was very much part of the harvest message. The following good advice, in an article titled "Knowledge and Faith Regarding Chronology," twice published by Pastor Russell, clearly reflects this.

"We have never claimed our calculations to be infallibly correct; we have never claimed that they were knowledge, nor based upon indisputable evidence, facts, knowledge; our claim has always been that they are based on faith. We have set forth the evidences as plainly as possible and stated the conclusions of faith we draw from them, and have invited others to accept as much or as little of them as their hearts and heads could endorse.

"Many have examined these evidences and have accepted them; others equally bright do not endorse them. . . .

"Possibly some who had read the Dawns have presented our conclusions more strongly than we; but if so that is their own responsibility. We have urged and still urge that the dear children of God read studiously what we have presented -- the Scriptures, the applications and interpretations -- and then form their own judgments. We neither urge nor insist upon our view as infallible, nor do we smite or abuse those who disagree; but regard as brethren all sanctified believers in the precious blood." (R4067, R5367)

Today we have greater access to the facts of history than ever before. It is my persuasion that those facts conspire with the scriptures to a still finer focus of prophetic detail. All the more should we heed the prophetic word "as unto a light that shineth," "Till the shadows flee away" (2 Peter 1:19, SS 2:17).
Appendix A

Darius the Mede

Darius the Mede is the ruler who received the kingdom of Babylon when it fell. "In that night was Belshazzar the king of the Chaldeans slain. And Darius the Median took the kingdom, being about 62 years old" (Daniel 5:30, 31). But since none of the figures of history who could be this person are otherwise known by the name Darius, his identity has been a puzzle.

It is not necessary for us to solve this puzzle to settle the chronology which is the subject of our paper. However it is an engaging side issue, so we examine it in this appendix.

An excellent book on the subject is Darius the Mede, A Study in Historical Identification, by John C. Whitcomb (second printing 1963). More recent are two interesting articles by William Shea, published in Andrews University Seminary Studies, (1) "Darius the Mede: An Update" (AUSS Autumn 1982), (2) "Darius the Mede in his Persian-Babylonian Setting" (AUSS Autumn 1991). These articles present different views, and the latter serves to correct the former. Much of what follows is gleaned from these works.

Who Was Darius the Mede?

Those who challenge the accuracy of the book of Daniel surmise that he is confused with the later Darius I Hystaspes, who ruled the Persian empire from 522 to 486 bc. (He is the Darius of Ezra, Nehemiah, Haggai and Zechariah.) The classic statement of this position is in Darius the Mede and the Four World Empires in the Book of Daniel, by H. H. Rowley, 1935. His several objections to the historical integrity of the book of Daniel are answered ably and soundly by John Whitcomb, specially in chapter six of his book.

Among those who accept the narrative of Daniel, there are six persons known from history who may be credibly identified as Darius the Mede: Astyages and Cyaxares II (kings of Media), Cyrus and Cambyses (kings of Persia), and two persons named Ugbaru and Gubaru who were officials serving under Cyrus. (Sometimes they are taken to be the same person.)

As we examine each possibility, let us keep in mind the specifics which Daniel records. He was "Darius the Median" (5:31). He was "of the seed of the Medes" and his father was Ahasuerus (9:1). He was 62 when Babylon fell, and apparently was on the scene at the time (5:30, 31). He ruled through his accession year and into a "first year," but no later year is either affirmed or denied (9:1, 2, 11:1). He was "made king over the realm of the Chaldeans" (9:1). He set over the kingdom 120 princes and three presidents, of whom Daniel was the first, and thought to set Daniel "over the whole realm" (6:1-3). The episode of Daniel and the lion's den occurred during his rule (chapter 6). Finally, "Daniel prospered in the reign of Darius, and in the reign of Cyrus the Persian" (6:28)

Astyages. He is known from the Nabonidus Chronicle as the king of Media whom Cyrus defeated in 550 bc. In his second article Shea argues that Cyaxares (the father of Astyages) could be rendered Ahasuerus. "While the correspondence is not perfect ... there are enough resemblances so that the words can be recognized as related to one another, allowing for individual scribal differences" (Shea, 1991, 253). Cyaxares is close to Xerxes, which is rendered Ahasuerus in Esther and Ezra. Shea himself does not identify Astyages with Darius, but this is done in two other articles: (a) BSM, Sept/Oct 1980, "Darius the Mede," (b) Mc&S under "Astyages" and "Darius the Mede."
However, Whitcomb says "Astyages could have had no vital connection with Babylon" (Whitcomb, 43), and this view is broadly held. Also, he must have been more than 62 at the fall of Babylon -- if he was even still alive at all, which is dubious -- if Herodotus is correct that he was the maternal grandfather of Cyrus, for that means he was the great-grandfather of the adult Cambyses at the fall of Babylon.

Cyaxares II. Xenophon claims he was the son of Astyages, contrary to Herodotus and Ctesias who wrote that Astyages had no male heir. Accordingly Whitcomb says "the son of Astyages was a mere figment of the imagination" (Whitcomb, 43). Xenophon does not make him the ruler of Babylon, though he says Cyrus did "set a palace in Babylon aside for Cyaxares' use whenever he visited there (Cryopaedia, 1.5.2, 6.1 ff, 8.5.17-19). In Shea's second article he endorses the existence of this second Cyaxares, but does not identify him with Darius. (See Mc&S, "Cyaxares II.") The only source which testifies of his existence, Xenophon, at the same time says Cyrus visited him on Cyrus' return from the capture of Babylon, which implies Cyaxares had no active involvement in the rule of Babylon. I am unaware of any contemporary supporters of this identification, and Mc&S notwithstanding, my own surmises are against his being 62 when Babylon fell. (Isaac Newton makes Darius the Mede the son of Cyaxares, and the source of Daric coins, but makes Cyaxares the son of Astyages rather than his father, and does not speak of two Cyaxares. The Chronology of Ancient Kingdoms Amended, 307-312, 319. I know of no modern exponents for such a view.)

Cyrus. This was first suggested by Donald Wiseman in 1957. In its defense: (a) In Daniel 6:28 "and" could be translated "even" as in 1 Chronicles 5:26, nasb. (b) Nabonidus' reference to "the king of the Medes" seven years before the fall of Babylon may refer to Cyrus. (c) Herodotus says Cyrus had a Median mother. (d) Though Cyrus' father was Cambyses (same name as his son), Ahasuerus may have been a royal Iranian title. (e) Cyrus is known to have appointed subordinate rulers on other occasions.

Shea argues against this in his first article, but embraces it in his second. There he emphasizes Herodotus' claim that Cyrus was the maternal grandson of Astyages, therefore great-grandson of Cyaxares which might be rendered "Ahasuerus." Whitcomb remarks that Cyrus never referred to himself as "king of the Medes" in the inscriptions, and "Cyrus and the other Achaemenid kings were always careful to emphasize their distinctly Persian lineage" (Whitcomb, 48).

There are four other arguments against Cyrus being Darius. (1) Darius was "made king ..." (9:1), implying he had a superior, whereas Cyrus had none. (2) If Herodotus is correct, Cyrus was born after Astyages was king of the Medes. That could not have preceded 585 bc, when a solar eclipse interrupted a battle between the Medes and Lydians while Astyages' father Cyaxares was still Median king. Therefore Cyrus could not be older than 46 at the fall of Babylon. (3) A tablet referring to the 3rd year of Nabonidus (525 bc) says "when the third year arrived, he (Marduk) aroused Cyrus, king of Ansan, his young servant ..." (Beaulieu, 108). If Cyrus was 62 at Babylon's fall, he would be 48 in 525 bc. It is doubtful that would be considered "young." (Although Newton said "Cyrus lived 70 years according to Cicero," implying an age of 61 or 62 at the fall of Babylon. Newton, 309.)

Cambyses. It is generally acknowledged that Cambyses was appointed king of Babylon from Nisan 538 until about the 10th month of that year. Several tablets testify of this, and Dougherty gives one example: "the tenth day of the month Sivan, the first year of Cyrus, king of countries, Cambyses, the king of Babylon" (Dougherty, 95). But all admit that Cambyses was not 62 years old when Babylon fell. Unless this number has been corrupted, Cambyses cannot be Darius.
The real Darius must therefore be among the two candidates yet to be examined. But first let us focus on the obvious question:

**Who Was the Official King of Babylon After it Fell?**

The surprise answer is -- no one. The evidence for this comes from the titulares inscribed on the commercial tablets for the several months immediately following the fall of Babylon (Shea, AUSS, 1971, 107-108, contains the documentary evidence).

The Neo-Babylonian kings from Nabopolassar to Nabonidus were called simply "king of Babylon." The title used in Babylonia for Persian kings Cyrus through Darius I (not the Mede) was "king of Babylon, king of Lands." Xerxes dropped the first part because of rebellion in Babylon, and from Xerxes up to Alexander the title was simply "king of Lands."

"There is but one significant exception to this pattern, and that is the title employed for Cyrus during his accession year and first year of rule over Babylonia ... it is clear from the contract tablet evidence that Cyrus did not take up the title 'king of Babylon' during his accession year and most of his first year of rule there. Only late in his first year was 'king of Babylon' added to 'king of Lands' in titulares of tablets dated to Cyrus so as to make up the full titulary of the early Persian period." (Shea, 236)

"The pattern is clear. During the last four months of his accession year and the first ten months of his first year of rule over Babylonia, Cyrus carried only the title "king of Lands" and did not carry the additional title "king of Babylon" in the economic contract tablets written there. ... I can see ... only one logical explanation for this phenomenon: Cyrus was not the official king of Babylon during the first fourteen months of Persian control there." (Shea, 236)

Who, then, was the official king of Babylon during this interval? For part of it, the answer is Cambyses, son of Cyrus, but not until the Nisan following the conquest of Babylon. Thereafter a variety of tablets are dated to the 1st year of "Cambyses, King of Babylon, Cyrus, King of Lands," but not so for years 2, 3, 4 etc. (He was apparently lost this position in month 10 when Cyrus took the title. The reason for his deposing is not known.)

But this still leaves a gap from the conquest of Babylon until the following Nisan. Evidently there was no official appointment to the post "king of Babylon" during this period. How, then, do we explain Darius the Mede? I believe it is explained the same way Belshazzar is explained, whom Daniel calls "king of the Chaldeans" (Daniel 5:1, 30, 7:1, 8:1). Nabonidus was the official king, not Belshazzar, but his father was away and Belshazzar ruled on his behalf. Therefore Daniel termed him "king." Likewise when Cyrus delegated his governor Gubaru to rule Babylon, Daniel termed him "king" -- over Chaldea, not over the Persian empire.

Shea cites a similar example from the work of A. R. Millard on an inscription from Tell Fekheriyah. "In the Assyrian version of this text the principal person involved is referred to only as a 'governor,' while in the Aramaic part of the text he is referred to as 'king' (mlk)." (AUSS, Spring 1988, page 69)

**Ugbaru and Gubaru**

These names are mentioned in the Nabonidus Chronicle (part of the series of Babylonian Chronicles referred to in Section Five), which continues beyond the capture of Babylon and details events in the
transfer of the empire to the Persians. Extracts of this Chronicle are reproduced below. (Six-dot ellipses mean my abbreviation, italics are translator restorations.)

[The seventeenth year ...... In the month Tebet] the king entered Eturkalamma ...... They performed the Akitu festival as in normal times. In the month .... [the gods] of Marad, Zababa ...... Kish, Ninlin, ...... Hursagkalamma entered Babylon. Until the end of the month Elul the gods of Akkad ... which are above the ... and below the ... were entering Babylon. The gods of Borsippa, Cuthah, and Sippar did not enter (Babylon). In the month Tishri when Cyrus did battle at Opis on the [bank of ] the Tigris against the army of Akkad, the people of Akkad retreated. He carried off the plunder (and) slaughtered the people. On the fourteenth day Sippar was captured without a battle. Nabonidus fled. On the sixteenth day Ugbaru, governor of the Guti, and the army of Cyrus entered Babylon without a battle. Afterwards, after Nabonidus retreated, he was captured in Babylon. Until the end of the month the shield-(bearing troops) of the Guti surrounded the gates of Esagil. (But) there was no interruption (or rites) in Esagil or the (other) temples and no date (for a performance) was missed. On the third day of the month Marchesvan Cyrus entered Babylon ... were filled before him. There was peace in the city while Cyrus spoke (his) greeting to all of Babylon. Gubaru, his district officer, appointed the district officers in Babylon. From the month Kislev to the month Adar the gods of Akkad which Nabonidus had brought down to Babylon returned to their places. On the night of the eleventh of the month Marchesvan Ugbaru died. In the month ... the king's wife died. From the twenty-seventh of the month Adar to the third of the month Nisan [there was] (an official) mourning period in Akkad. All of the people bared their heads. On the fourth day when Cambyses, son of C[yrus], went to ...... " (Grayson V, 109-111)

The names Ugbaru and Gubaru are very similar in the cuneiform (shown in AUSS, 1972, page 156), and some believe they refer to the same person. Whitcomb, however, distinguishes them. He concludes that Ugbaru died about 3 weeks after the fall of Babylon, and identifies Darius as Gubaru, the "district officer" or governor of Cyrus.

He also identifies him as the Gubaru, governor of Babylon, mentioned in tablets from the 4th year of Cyrus through the 5th year of Cambyses. Shea distinguishes those two Gubaru's, in part because there is a four year absence of cuneiform reference to Gubaru for years 0, 1, 2, 3. But the tablets are not that numerous -- we have no record for year five for example -- so this is not definitive.

**Why Does Daniel Change his Reference from Darius to Cyrus? (Daniel 9:1, 10:1)**

If the two Gubarus are not the same person, perhaps the change was triggered by the death of Darius. (Perhaps that also triggered Cyrus' assumption of the title "King of Babylon.")

If the two Gubarus are the same person, and therefore Darius (Gubaru) was around for several more years, the change of reference may have come when Cyrus (for whatever reason) took the title "King of Babylon" in year 1, month 10.

In either case Darius would not be referred to beyond his first year.
Final Details

One of the tasks the Chronicle ascribes to Gubaru is appointing other district officers under him. Daniel 6:1-3 shows this is what Darius did as well. The other criteria, his age, his father's name and his race, are not specified in the cuneiform record.

Summary

The following are excluded for these reasons. Astyages: no vital connection with Babylon, and much too old. Cyaxares II: Xenophon implies he did not rule Babylon. No one else says he existed. Cyrus: apparently distinguished from Darius, possibly not old enough, had no superior, and ruled more than the Chaldeans. Cambyses: too young. Ugbaru: not possible if he died after three weeks. Gubaru: the most likely candidate. Whitcomb's conclusions are probably correct.
Appendix B

The Decree of Cyrus

The decree of Cyrus freeing the Jews was in "the first year of Cyrus king of Persia" (2 Chronicles 36:22, Ezra 1:1). Almost certainly this refers to the year which all Babylonia was inscribing on their commercial tablets as "year 1" of Cyrus as "king of lands." That year was from the spring of 538 bc to the spring of 537 bc.

Daniel's prayer for this release was in the "first year of Darius" (Daniel 9:1), which also began in the spring of 538 bc. The decree probably followed soon after, before the heat of summer made travel difficult. If so, the returning Jews were resettled in Israel by the seventh month of 538 bc.

However, it is possible the decree was later in the year, or before spring in the next year. In this case the seventh month of Ezra 3:1 would have been in the year 537 bc.
Appendix C

VAT 4956 (37 Nebuchadnezzar)

Obverse: "Year 37 of Nebukadnezzar, king of Babylon. Month I (the 1st of which was identical with) the 30th (of the preceding month), the moon became visible behind the Bull of Heaven; [sunset to moonset:] ... Saturn was in front of the Swallow. The 2nd, in the morning, a rainbow stretched in the west. Night of the 3rd, the moon was 2 cubits in front of ... it rained. Night of the 9th (error for: 8th), beginning of the night, the moon stood 1 cubit in front of â Virginis. The 9th, the sun in the west [was surrounded] by a halo [... The 11th] or 12th, Jupiter's acronychal rising. On the 14th, one god was seen with the other; sunrise to moonset: 4°. The 15th, overcast. The 16th, Venus ... The 20th, in the morning, the sun was surrounded by a halo. Around noon ... rain PISAN. A rainbow stretched in the east ... From the 8th of month XII: to the 28th, the river level rose 3 cubits and 8 fingers, 6 cubits [were missing] to the high flood ... were killed on order of the king. That month, a fox entered the city. Coughing and a little risutu-disease ... Month II, the 1st (of which followed the 30th of the preceding month), the moon became visible while the sun stood there, 4 cubits below â Geminorum; it was thick; there was earthshine ... Saturn was in front of the Swallow; Mercury, which had set, was not visible. Night of the 1st, gusty storm from east and south. The 1st, all day ... stood [... in front] of Venus to the west. The 2nd, the north wind blew. The 3rd, Mars entered Praesepe. The 5th, it went out (of it). The 10th, Mercury [rose] in the west behind the [Little] Twins ... The 15th, ZI IR. The 18th, Venus was balanced 1 cubit 4 fingers above á Leonis. The 26th, (moonrise to sunrise) 23°; I did not observe the moon. The 27th, 20 + x ... Month III, (the 1st of which was identical with) the 30th (of the preceding month), the moon became visible behind Cancer; it was thick; sunset to moonset: 20°; the north wind blew. At that time, Mars and Mercury were 4 cubits in front of á [Leonis ...] Mercury passed below Mars to the East(?); Jupiter was above á Scorpii; Venus was in the west opposite ¢ Leonis ... 1 cubit. Night of the 5th, beginning of the night, the moon passed towards the east 1 cubit <above/below> the bright star of the end of the Lion's foot. Night of the 6th, beginning of the night, ... it was low. Night of the 8th, first part of the night, the moon stood 2½ cubits below á Librae. Night of the 9th, first part of the night, the moon [stood] 1 cubit in front of ... passed towards the east. The 9th, solstice. Night of the 10th, first part of the night, the moon was balanced 3½ cubits above á Scorpii. The 12th, Mars was b cubits above [á Leonis ...] The 15th, one god was seen with the other; sunrise to moonset: 7°30'. A lunar eclipse which was omitted ... [the moon was be]low the bright star at the end of the [Lion's] foot ..."

Reverse: "... first part [of the night ... the moon was] 1 cubit [above/below] the middle star of the elbow of Sagittarius ... When 5° of daytime had passed, the sun was surrounded by a halo. The 19th, Venus was 2½ cubits below â Capricorni. Night of the ... That month, the equivalent (of 1 shekel of silver was): barley, 1 kur 2 sut; dates, 1 kur 1 pan 4 sut; mustard, 1 kur ... Month XI, (the 1st of which was identical with) the 30th (of the preceding month), the moon became visible in the Swallow; sunset to moonset: 14°30'; the north wind blew. At that time, Jupiter was 1 cubit behind the elbow of Sagittarius ... The 4th, the river level rose. The 4th, Venus was balanced ½ cubit below (sic) Capricorn. Night of the 6th, first part of the night, the moon was surrounded by a halo; Pleiades, the Bull of Heaven, and the Chariot [stood in it ...] the moon was surrounded by a halo; Leo and Cancer were inside the halo; á Leonis was balanced 1 cubit below the moon. Last part of the night, 3° of night remaining ... sunrise to moonset: 17°; I did not watch. The sun was surrounded by a halo. From the 4th to the 15th, the river level rose 1½ cubits. On the 16th, it receded. Night of the 18th (and) the 18th, rain PISAN DIB ... when the ... of Bel was cut off from its place, two boats ... went away(?). The 22nd, overcast. Night of the 23rd, [... Mars(?)] was balanced above (sic) the small star which
stands 3½ cubits behind Capricorn. Night of the 29th, red glow flared up in the west; 2 double-[hours ...
barley, 1 kur(?); dates, 1 kur 1 pan 4 sut; mustard, 1 kur 1 pan; sesame, 4 sut; cress ... Month XII, the
1st (of which followed the 30th of the preceding month), the moon became visible behind Aries
while the sun stood there; sunset to moonset; 25°, measured; earthshine; the north wind blew. At that
time, Jupiter [... Mercury and Saturn, which had set,] were not visible. The 1st, the river level rose.
Night of the 2nd, the moon was balanced 4 cubits below ç Tauri. Night of the 3rd, beginning of the
night, 2½ cubits ... From the 1st to the 5th, the river level rose 8 fingers; on the 6th it receded. Night
of the 7th, the moon was surrounded by a halo; Praesepe and á Leonis [stood] in [it ...] the halo
surrounded Cancer and Leo, it was split towards the south. Inside the halo, the moon stood 1 cubit
in front of <á Leonis>, the moon being 1 cubit high. Night of the 10th, first [part of the night ...]
Night of the 11th, overcast. The 11th, rain DUL. Night of the 12th, a little rain ... The 12th, one god
was seen with the other; sunrise to moonset: 1°30′; ... [Mercury] was in front of the "band" of the
Swallow, ½ cubit below Venus, Mercury having passed 8 fingers to the east; when it became visible
it was bright and (already) high. 1°(?)[... Saturn] was balanced 6 fingers above Mercury and 3 fingers
below Venus, and Mars was balanced b cubits below the bright star of ... towards ... The 21st,
overcast; the river level rose. Around the 20th, Venus and Mercury entered the "band" of the
Swallow. From [... Jupiter,] which had passed to the east, became stationary. At the end of the
month, it went back to the west. Around the 26th, Mercury and Venus [came out] from the "band"
of Anunitu ... the river level receded 8 fingers. That month, on the 26th, a wolf entered Borsippa and
killed two dogs; it did not go out, it was killed ... Year 38 of Nebukadnezar, month I, the 1st (of
which followed the 30th of the preceding month): dense clouds so that [I did not see the moon ...]
Year 37 ... [Year 37 of Nebukad]nezar"

From Astronomical Diaries and Related Texts from Babylonia, Volume 1, Diaries from 652 bc to
## Appendix D

### Kings of Judah and Israel

#### Kings of Judah

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<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
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<td>6</td>
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<td>2 Chronicles 22:12</td>
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<tr>
<td>40</td>
<td>Joash</td>
<td>2 Chronicles 24:1</td>
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<tr>
<td>29</td>
<td>Amaziah</td>
<td>2 Chronicles 25:1</td>
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<td>52</td>
<td>Uzziah</td>
<td>2 Chronicles 26:3</td>
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<td>16</td>
<td>Jotham</td>
<td>2 Chronicles 27:1</td>
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<tr>
<td>16</td>
<td>Ahaz</td>
<td>2 Chronicles 28:1</td>
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<tr>
<td>29</td>
<td>Hezekiah</td>
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<td>55</td>
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<td>Amon</td>
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<td>31</td>
<td>Josiah</td>
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<td>Zedekiah</td>
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#### Synchronisms of Judah to Israel

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<td>Abijah began to reign</td>
<td>18 Jeroboam 1 Kings 15:1, 2 Chronicles 13:1</td>
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<td>20 Jeroboam 1 Kings 15:9</td>
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<td>Jehosh. began to reign</td>
<td>4 Ahab 1 Kings 22:41</td>
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<td>4</td>
<td>Jehoram began to reign</td>
<td>5 Jehoram 2 Kings 8:16</td>
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<td>5</td>
<td>Ahaziah began to reign</td>
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<td>6</td>
<td>Athaliah began to reign</td>
<td>11 Jehoram 2 Kings 9:29</td>
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<td>7</td>
<td>Joash began to reign</td>
<td>7 Jehu 2 Kings 12:1</td>
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<td>Athaliah began with</td>
<td>Jehu 2 Chronicles 22:8-12</td>
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<td>Amaziah began to reign</td>
<td>2 Ahab 2 Kings 14:23</td>
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<td>10</td>
<td>Uzziah began to reign</td>
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<td>11</td>
<td>Jotham began to reign</td>
<td>2 Pekah 2 Kings 15:32</td>
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<td>Ahaz began to reign</td>
<td>17 Pekah 2 Kings 16:1</td>
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<td>13</td>
<td>Hezekiah began to reign</td>
<td>3 Hoshea 2 Kings 18:1</td>
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<tr>
<td>14</td>
<td>Amon died</td>
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<tr>
<td>15</td>
<td>Josiah died</td>
<td>Amaziah outlived Jehoash 15 years 2 Chronicles 25:25</td>
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<tr>
<td>16</td>
<td>Jehoiakim died</td>
<td>Hezekiah 4 = Hoshea 7 2 Kings 18:9</td>
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<tr>
<td>17</td>
<td>Zedekiah died</td>
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#### Kings of Israel

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<td>24</td>
<td>Baasha</td>
<td>1 Kings 15:33</td>
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<td>1 Kings 16:6</td>
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<td>Zach., 6m</td>
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<td>Shall., 1m</td>
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#### Synchronisms of Israel to Judah

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<td>T</td>
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<td>12 Ahaz 2 Kings 17:1</td>
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</table>

Omri reigned 6 years in Tirzah 1 Kings 16:23
Appendix E

The End of the Judean Kingdom

In this Appendix we examine the specifics about the close of the Judean Kingdom, from the death of Josiah to the capture of Zedekiah. Josiah died when he engaged Pharaoh Necho at Megiddo on Necho's way north to help Assyria against Babylon, about month 4 of 17 Nabopolassar, as discussed in Section Nine. He was succeeded by Jehoahaz for 3 months, Jehoiakim for 11 years, and Jehoiachin for 3 months and 10 days (2 Chronicles 36:9).99

We can fix the end of Jehoiachin's short reign unambiguously from the Babylonian record. Then we can resolve some important details by working through the interval back to Josiah. Jehoiachin was taken by Nebuchadnezzar in the latter's 7th year, month 12, day 2.

"The seventh year: In the month Kislev [month 9] 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 [month 12] 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." (Babylonian Chronicle 5, Grayson, 102)

First, this allows us to dispense with Josephus' surmise that in this campaign Nebuchadnezzar sieged both Jehoiakim and Jehoiachin in successive attacks on Jerusalem (Ant. 10:6-7).100 Since Jehoiachin's reign was 3 months 10 days, and Nebuchadnezzar's trip from Babylon to Jerusalem to capture Jehoiachin was shorter than that, it is clear that Nebuchadnezzar was still in Babylon when Jehoiakim died and was replaced by his son. Also, this places the death of Jehoiakim in the last part of month 8, late in the fall when both the heat of day and the frost of night were possible (Jeremiah 36:30, 22:18-19).

Further, it places the death of Jehoiakim in his 11th year late in 7 Nebuchadnezzar. But Josiah died in the first part of 17 Nabopolassar. As the chart below shows, this means the accession year of Jehoiakim was not the same as the last year of Josiah.

This implies Jehoiakim did not come to the throne the same Tishri year Josiah died. Therefore the successor of Josiah, Jehoahaz, who reigned for 3 months, lapped beyond Tishri into the next regnal year. This well accords with a month 4 death of Josiah, and a 3 month reign of Jehoahaz which terminates sometime in month 7, after the Jewish new year. This is strong evidence that Kings and Chronicles (which give Jehoiakim 11 years) used the accession-year system for him (2 Kings 23:36, 2 Chronicles 36:5).

Still further, it resolves the issue about when during his reign he was sieged and bound by Nebuchadnezzar for deportation, before that sovereign relented and permitted him to stay. 2 Kings 24:1
and 2 Chronicles 36:6 both refer to this event. Since we know it did not happen at the end of Jehoiakim's reign -- for he was dead before Nebuchadnezzar even left Babylon on the campaign of that year -- it must have been, as Daniel clearly says it was, on a previous occasion -- in the 3rd year of Jehoiakim's reign (Daniel 1:1). This was the first assault by Babylon upon Judea. The second was at the capture of Jehoiachin 8 years later. The third was at the capture of Zedekiah in his 11th year. So there were indeed three attacks against Jerusalem, and any dispute on this issue can be laid to rest. This is explicitly affirmed by Ezekiel 21:14, "let the sword be doubled the third time," when speaking of the impending doom upon Zedekiah (verse 25).

**The Year of Jehoiakim's Capture by Nebuchadnezzar**

The first time the Neo-Babylonian empire brought its might to bear against Palestine was in the third year of Jehoiakim. This occurred just following the famous battle of Carchemish, which both the scriptures and the Babylonian Chronicles record. Following is the latter record.

"[The 21st year]: The king of Akkad stayed home (while) Nebuchadnezzar (II), his eldest son (and) crown prince, mustered [the army of Akkad]. He took his army's lead and marched to Carchemish which is on the bank of the Euphrates. He crossed the river [to encounter the army of Egypt] which was encamped at Carchemish. [...] They did battle together. The army of Egypt retreated before him. He inflicted a [defeat] upon them (and) finished them off completely. In the district of Hamath the army of Akkad overtook the remainder of the army of [Egypt which] managed to escape [from] the defeat and which was not overcome. They (the army of Akkad) inflicted a defeat upon them (so that) a single (Egyptian) man [did not return] home. At that time Nebuchadnezzar (II) conquered all of Ha[ma]th. For twenty-one years Nabopolassar ruled Babylon. On the eighth day of the month Ab {month 5} he died. In the month Elul Nebuchadnezzar (II) returned to Babylon and on the first day of the month Elul he ascended the royal throne in Babylon" (Grayson, 99-100).

Regarding this campaign Josephus cites the Babylonian historian Berosus as follows:

"Now Berosus makes mention of his actions in the third book of his Chaldaic History, where he says thus: -- 'When his father ... was not himself able any longer to undergo the hardships [of war], he committed to his son Nebuchadnezzar, who was still but a youth, some parts of his army ... So when Nebuchadnezzar had given battle, and fought with [Pharaoh], he beat him, and reduced the country from under his subjection, and made it a branch of his own kingdom; but about that time it happened that his father [Nabopolassar] fell ill, and ended his life in the city of Babylon, when he had reigned twenty-one years; and when he was made sensible, as he was in a little time, that his father ... was dead, and having settled the affairs of Egypt, and the other countries, as also those that concerned the captive Jews, and Phoenicians, and Syrians ... he went himself hastily, accompanied with a few others, over the desert and came to Babylon. So he took ... the kingdom which had been kept for him by one that was the principal of the Chaldeans ... and appointed that when the captives came, they should be placed as colonies, in the most proper places of Babylonia ...' " (Ant. 10:11:1)

Evidently those captive Jews included Daniel, who himself claims to have been taken captive in this very year. Daniel 1:1 says he was taken in the 3rd year of Jehoiakim, verse 5 says they had training for 3 years, and 2:1 onward shows that in the second year of Nebuchadnezzar Daniel was before that king interpreting his dream. This means Daniel was taken in the accession year of Nebuchadnezzar, and the three years of training were years Accession, 1, 2. Therefore Daniel's own testimony expressly confirms that of the Babylonian historian Berosus.

2 Chronicles 36:6 says Jehoiakim himself was bound for transport to Babylon. This must have been
at the same time Daniel 1:1 says Nebuchadnezzar took Jerusalem, in the third year of Jehoiakim. Evidently Nebuchadnezzar relented, and left Jehoiakim as king on promise of vassalage. (After all, who could he leave in his place? Jehoiachin was about 10 years, Zedekiah about 13.) But he took "certain of the children of Israel, and of the king's seed, and of the princes" as security in his place, along with "part of the vessels of the house of God." (Daniel 1:2, 3)

2 Kings 24:1 says Jehoiakim served Nebuchadnezzar three years. Since he was subdued near the end of his third year, this probably means years 4, 5, 6, overlapping years Acc, 1, 2, 3 of Nebuchadnezzar. In each of those years Nebuchadnezzar marched to Palestine and took tribute from its kings. But the next year he engaged Egypt, "they fought one another in the battle-field and both sides suffered severe losses." Nebuchadnezzar returned to Babylon, and stayed there during year 5. Year 6 he "marched to Hattu [Palestine]. He despatched his army from Hattu and they went off to the desert. They plundered extensively the possessions, animals, and gods of the numerous Arabs," and returned home in the month Adar at the end of 6 Nebuchadnezzar. The following year they sieged and took Jerusalem, and Jehoiachin was taken prisoner. (Grayson, 101-102)

It was probably in 4 Nebuchadnezzar that Jehoiakim rebelled, either as part of an Egyptian coalition or a result of the Babylonian losses, which were so severe Nebuchadnezzar stayed home the following year. He later "sent ... bands of the Chaldees, and bands of the Syrians, and bands of the Moabites, and bands of the children of Ammon ... against Judah to destroy it" (2 Kings 24:2). The land of the desert Arabs is just where Nebuchadnezzar advanced during year 6. Again, the scriptures and the Babylonian Chronicles agree.

**Jeremiah's Reckoning One Year Different**

Jeremiah dates these events one year differently than Daniel. Jeremiah 46:2 puts the battle of Carchemish in 4 Jehoiakim, which means Jeremiah used the non-accession year method for Jehoiakim. (This would imply he reckoned 12 years to Jehoiakim's reign, but Jeremiah never supplies a figure.) Therefore the prophecy of Jeremiah dictated to Baruch late in the fourth year of Jehoiakim, and read publicly in year 5, month 9, came just after Nebuchadnezzar had taken Judah as a vassal the first time (Jeremiah 36).

Since Jeremiah used non-accession-year reckoning he called this year the first of Nebuchadnezzar, though it was actually his accession year (Jeremiah 25:1). And he says this was the 23rd year starting from the 13th of Josiah (Jeremiah 25:3), so let us check the figures. Josiah reigned 31 years, so from year 13 to year 31 inclusive was 19 years. The following year Jeremiah counts as year one of Jehoiakim (rather than an accession year), then 2, 3, 4. And 19 + 4 = 23 years, just as Jeremiah said.

At that time Judah had newly become vassal to Nebuchadnezzar, but Jeremiah promised that if they repented and would "turn ... every one from his evil way ... I will do you no hurt" (Jeremiah 25:7). But knowing of their stubbornness he warned of the impending judgment. Eight years later Nebuchadnezzar invaded again, and 11 years after that he invaded a third time.

**Accession and Non-Accession Regnal Years**

Evidently the reason the scriptures sometimes designate the same year with numbers different by one is because one writer is using the accession-year system, while another is not. Here are three such examples.

| Daniel 1:1 | 7th year (Jer. 52:28) | 18th year (Jer. 52:29) |
| 3rd year | 4th year (Jer. 46:2) | 8th year (2 Kings 24:12) | 19th year (2 Kings 25:8) |

In each case the smaller number uses the accession-year system, and the larger number does not.
Specifically, the system used by each book/writer is as follows:

1. Kings and Chronicles, AY until Zedekiah
2. Jeremiah chapters 1-51, NAY for both Jehoiakim and Zedekiah
4. Jeremiah 52:28-34, AY
5. Daniel, AY
6. Ezekiel dated events by the year of Jehoiachin's captivity, counting year one as the Tishri year in which he was taken. Since Zedekiah had no accession year, his years and those of Jehoiachin's captivity ran concurrently.

About Jeremiah: we observed before that he used the non-accession-year system, but an exception to this is in the closing verses of chapter 52. Why this exception? Because Jeremiah 52 was not composed by Jeremiah. Jeremiah's own work ends with chapter 51. Note the closing expression of that chapter, "Thus far are the words of Jeremiah." Chapter 52 is a later appendage, and comes from two sources. (1) Verses 1-27 are picked up from 2 Kings 24:18-25:21, and verses 31-34 come from 2 Kings 25:27-30. Clearly these were appended years after Jeremiah's death, by someone in Babylon, for they mention the Jehoiachin's release in the accession year of Amel-Marduk. (2) Verses 28-30 are unique, and were evidently added from Babylonian records, as they use the Babylonian accession-year system.

About Kings, Chronicles: we already observed that they attribute 11 years to Jehoiakim, and therefore assign him an accession year. Daniel, who went captive early in Jehoiakim's reign, naturally used the same system in Daniel 1:1. But it is equally clear that by using 8 Nebuchadnezzar rather than 7, and 19 Nebuchadnezzar rather than 18, the final records of Kings and Chronicles use the non-accession-year system, and that this change must have occurred at the beginning of Zedekiah's reign. Why the switch? We can only surmise. It might be traced to Judah's attraction to Egypt, who used the non-accession-year system. This affinity no doubt began in the latter part of Jehoiakim's reign, and the decision to shift systems is at least consistent with his rebellion from Nebuchad-nezzar. (In Section Nine we found that both kingdoms of Israel adopted the accession-year system when Assyria became a dominant force in Palestine.) Of course when a change is made, it must be in abeyance until the end of the current reign to avoid confusion in the official records. A fortunate side effect of this change is that the years of Zedekiah's reign coincide exactly with the years of Jehoiachin's captivity, used by Ezekiel.101

Jeremiah probably composed his materials into the book of Jeremiah while he was in Egypt. He was accustomed to using the non-accession-year system most recently in vogue in Judah, and probably for consistency of reference within his book chose to render Jehoiakim's dates in the same system. In accord with the custom to impute one's own system to others, he rendered the years of Nebuchadnezzar by the non-accession-year system also.

Thus there are reasonable causes for what may otherwise seem to be randomly chosen systems. As always, we are forced from the numbers to conclude what systems were used -- afterward we observe from the circumstances the likely causes for the choices anciently made.102
Appendix F

Egyptian Pharaohs, 600s-500s bc

The Egyptian Pharaoh’s who ruled Egypt during the Neo-Babylonian empire also bear testimony to
the chronology of the last kings of Judah. For this reason we examine their history briefly. Those
Pharaohs, and the years of their reigns, are listed below (Yamauchi 97, Jonsson 78).

Psammetichus I 54 years 664 - 610 bc
Necho II 15 years 610 - 595 bc
Psammetichus II 6 years 595 - 589 bc
Apries (Hophra) 19 years 589 - 570 bc
Amasis 44 years 570 - 526 bc
Psammetichus III 1 year 526 - 525 bc
Cambyses' conquers Egypt May/June 525

Let us now see whether these reigns and dates conform with the mention of these Pharaohs in the
scriptures (three times), and in the Babylonian Chronicles (once). First we summarize two views of
the dates of the last kings of Judah. View A below shows the dates supposing 587 bc for the fall of
Zedekiah; View B supposes 607 bc.

<table>
<thead>
<tr>
<th>King</th>
<th>View A</th>
<th>View B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Josiah</td>
<td>Reign ended 609 bc</td>
<td>Reign ended 629 bc</td>
</tr>
<tr>
<td>Jehoiakim</td>
<td>Reign ended 597 bc</td>
<td>Reign ended 617 bc</td>
</tr>
<tr>
<td>Zedekiah</td>
<td>Reign ended 587 bc</td>
<td>Reign ended 607 bc</td>
</tr>
</tbody>
</table>

Next we notice the information in the four references mentioned above.

(1) 2 Kings 23:29 says Necho was Pharaoh when Josiah was killed.
(2) Jeremiah 46:2 says Necho was Pharaoh in 4 Jehoiakim.
(3) Jeremiah 44:30 shows Hophra was Pharaoh shortly after Zedekiah fell.
(4) The Babylonian Chronicle (BM 33041) says Amasis was Pharaoh in 37 Nebuchadnezzar --
nineteen years after the fall of Zedekiah.

In each case, these references are consistent with View A, and are inconsistent with View B.

The dates for these Egyptian Pharaohs were determined from evidence independent of the history of
Neo-Babylonia, and therefore form an independent witness. The reigns of the first four Pharaohs
are determined from a series of grave steles which date the births, years of life and deaths of Apis
bulls in the years of the reigning Pharaoh. The reigns of Amasis and Psammetichus III are attested
by both Herodotus and Manetho, and by deductions based on the Rylands IX papyrus, the Demotic
Chronicle, and some other ancient inscriptions. Fixed dates are assigned to these series of reigns by
the clear anchor in Persian history when Cambyses conquered Egypt in 625 bc, and supplemented by
deductions from papyrus No. 7848 of the Louvre dated to 12 Amasis, and a cryptic reference to a
solar eclipse when "heaven has devoured the sun disk" in the death year of a Psammetichus, evidently
number I, as such an eclipse occurred in 610 bc. For fuller details please see Jonsson, pages 72-80.
Appendix G

The Canon of Ptolemy

In the two pages at the end of this Appendix we reproduce Ptolemy's Canon with some explanatory remarks, copied from Britannica Great Books, Volume 16, "Ptolemy, Copernicus, Kepler." Notice that the Canon is in four parts, covering Babylon, Persia, Greece and Rome. (An interesting confirmation of the four world empires of Daniel 2 and 7.) Following those two pages is another listing which for ease of reference numbers the rulers (first column) and gives the year of the beginning of their first regnal year (last column).

This Canon of rulers has been widely received by historians as an accurate guide to ancient history, and is frequently cited as a basis for dating. However, for many years and even up to modern times, there have lingered some questions regarding its accuracy, specially for the rulers of the Babylonian period and to a lesser extent for the Persian period. It is for this reason that the reader will note we have been careful not to invoke this Canon as evidence for any of the chronological conclusions presented in this paper.

However, this does not mean we question its accuracy. On the contrary, the evidence from ancient sources confirms the Canon, and shows it to be reliable. We have already seen this to be the case for the 21 year reign of Xerxes (see Section Eight), and for all the rulers of Babylon from Nabopolassar through Nabonidus (see Section Five). But what of the first 15 Babylonian kings, from Nabonassar through Kandalanu? This is of interest, because the history covered by these kings spans the period from the demise of the 10 tribe Kingdom of Israel until the Neo-Babylonian empire, which is firmly dated.

Nabonassar to Nabopolassar

We will here show how this period can be reconstructed from ancient records, independent of -- though precisely confirming -- this Canon. For this purpose we draw upon six sources: the Babylonian Chronicles, the Assyrian Eponym Canon, the Sippar Tablets, Babylonian King List A, the Uruk King List, and an astronomical date. Of these the Babylonian Chronicles are invoked most frequently, and I give the page number from Grayson's translation of these Chronicles where the pertinent statements are found. The bold numbers in parentheses denote the first 16 entries in the Canon of Ptolemy. Babylonian Chronicle 1 is the source of information unless otherwise noted.

(1) Nabonassar died in his 14th year (Grayson, 71)

(2) He was succeeded by Nabu-nadinzer, who died in his 2nd year (Grayson, 72)

(3) The next king was Nabu-shuma-ukin, but his brief reign of 1 month and some days did not cross the new year, and therefore he is omitted in the Canon. His successor Nabu-mukin-zeri (Ukinzer of the Canon) reigned 3 years, and was succeeded by Tiglath-pileser, king of Assyria, who died in the 2nd year following his accession to the throne of Babylon. Therefore 3 + 2 = 5 years, which the Canon attributes to "Ukinzer & Pulu [Tiglath-pilesers]." (Grayson, 72)

(4) Tiglath-pileser was succeeded by Shalmaneser V, who died in his 5th year. His designation in the Canon is Ululai. (Grayson, 73)

(5) Shalmaneser was succeeded on the throne of Assyria by Sargon the same month he died (Tebet, month 10), and on the throne of Babylon by Merodach-Baladan the following Nisan, which the narrative implies began his first year. Merodach-Baladan ruled for 12 years when he was replaced by Sargon. (Grayson 73-75)
The Chronicle is broken at this point. The last year mentioned for Sargon is year seventeen, but this is a restoration (no doubt a correct one) by the translator. Lines 9 through 18 which probably record the end of Sargon's reign and the episodes following are too broken for translation, and the narrative next speaks of Sennacherib, who was Sargon's successor as king of Assyria. However, an Assyrian eponym list fragment for the eponym year of "Upakhkhir-Bel, governor of Amedi" includes this note: "On the twelfth day of the month of Ab, Sinakhe-erba (Sennacherib) took his seat on the throne" (Rogers, 238).\(^{103}\) As this is the 22nd year after a notation that Shalmaneser ascended the throne, and as he reigned 5 years, this gives to Sargon a reign of 17 years over Assyria. Since he replaced Merodach-Baladan in year 12, that leaves 5 years for Sargon to be king of Babylon.

These segments of Ptolemy's Canon all fit within the 24 year reign of Sennacherib. In the Chronicle we find this statement. "For [twenty-four] years Sennacherib ruled Assyria" (Grayson, 81). This number is a translator's restoration, but as Grayson's footnote says "It is known from the eponym lists that Sennacherib ruled for 24 years" (Grayson, 81). This is not apparent from Thiele's list (see footnote 103), but it is from the one published by Rogers. For the eponym year of Nabu-ake-eresh, 24 years after the accession of Sennacherib, is the notation "Esarhaddon took his seat on the throne" (Rogers 225, see also Smith 39, citing Canon I).

The Chronicle says Sennacherib appointed Bel-ibni to rule Babylon, and he ruled 3 years. Sennacherib removed him and placed his son Ashur-nadin-shumi on the throne for 6 years. He was removed by the king of Elam who elevated Nergal-ushezib to the throne. In his first year he was defeated by Assyrian forces and Mushezib-Marduk became king of Babylon. "For four years Mushezib-Marduk ruled Babylon" (Grayson, 81). No new king is then said to ascend the throne, and the next pertinent entry is "The eighth year of there not being a king in Babylon ... on the twentieth day of the month Tebet Sennacherib, king of Assyria, was killed by his son in a rebellion" (Grayson, 81, cf. Isaiah 37:38).

This accounts for 3 + 6 + 1 + 4 + 8 = 22 years of Sennacherib, leaving only 2 years unaccounted for preceding the reign of Bel-ibni, which were no doubt described in the broken portion of the Chronicle. For those two years the Canon of Ptolemy says "First interregnum,"\(^{104}\) and each succeeding portion through the end of Sennacherib's reign is reflected in the Canon just as in the Chronicle.

The rebellion which caused the demise of Sennacherib continued until the month Adar (month 12), and in that month "Esarhaddon, his son, ascended the throne in Assyria" (Grayson, 82). The Chronicle is clear that he reigned 12 years, and died in his 12th year. Though the Chronicle does not specify that he ascended the throne of Babylon, clearly his rule was acknowledged there and no other kings of Babylon are mentioned for that time. After his death the Chronicle adds "Shamash-shuma-ukin (and) Ashurbanipal, his two sons, ascended the throne in Babylon and Assyria respectively." However, there is next a line in the text, implying a change of year, and the next entry is "The accession year of Shamash-shuma-ukin: in the month Iyyar ..." (Grayson, 86). (I suppose the lines are original in the tablet, BM 92502, because a copy of the tablet at the end of Grayson's work, BM92502, shows many such lines.) Iyyar is the second month of the year, and the implication is that while Ashurbanipal ascended the throne of Assyria at his father's death, his brother did not ascend the throne of Babylon till after the next new year. Thus the accession year of Shamash-shuma-ukin was the year following his father's death. So who was numerically credited with that accession year in the Canon? To cover this the reign of Esarhaddon has been artificially extended one year to 13 years. Though this is not historically precise, it is numerically precise, and that was the motivating issue behind the Canon. (For this reason it also disregards kings whose reigns did not cross into a new year.)

Fortunately we are able to check this theory by a fuller rendition of this part in Chronicle 14, also
termed the Esarhaddon Chronicle. "For twelve years Esarhaddon ruled Assyria ... in the month Kislev [month 9] Ashurbanipal, [his] son, ascended the throne in Assyria. The accession year of Shamash-shuma-ukin: In the month Iyyar [month 2] Bel and the gods of ..." (Grayson, 127). This does not say the two kings ascended the throne at the same time. It stipulates that the next event, which happened after the next new year, was in the accession year of Shamash-shuma-ukin, which affirms that king did not ascend the throne until after the new year.

(14) Chronicles 1 and 14 end shortly thereafter, without mentioning the end of the reign of Shamash-shuma-ukin. Likewise Chronicle 14. Chronicle 15 specifically mentions years 4, 14, 15, 16, 17, 18, but closes without recording the end of his reign. Chronicle 16, the "Akitu Chronicle," speaks of years 16, 17, 18, 19, 20. Following this there is a line, and the next entry is "After Kandalanu, in the accession year of Nabopolassar, ..." (Grayson, 132). This implies the 20th year of Shamash was his last, and the Canon gives him exactly 20 years.

(15) The Uruk King List gives Kandalanu 21 years, followed by two combatants, Sin-shum-lišer and Sin-shar-ishkun (Pritchard, 566). The Sippar tablet collection which I tabulated from three volumes (Section Five, item seven) includes these numbers of tablets for each of his 21 years: 3 1 1 1 1 4 3 1 3 4 4 6 4 5 3 4 1 4 13 4. Though the numbers of tablets for each year are not large, this is at least consistent with the Uruk King List.

The Babylonian Chronicles do not specify the duration of Kandalanu's reign, but they do speak of the year following, apparently a year of turmoil without an established ruler. Chronicle 2 says "For one year there was no king in the land (Babylonia). On the twenty-sixth day of the month Marchesvan [month 8] Nabopolassar [the next king after Kandalanu] ascended the throne in Babylon" (Grayson, 88). Since that was the accession year of Nabopolassar, and not numbered to another ruler, the Canon credits it to Kandalanu and lists for him 22 years. Chronicle 16 refers to that year as "After Kandalanu, in the accession year of Nabopolassar" (Grayson, 132), which agrees with Chronicle 2 that this was after the last year of Kandalanu.

(16) Nabopolassar was treated in Section Five. His reign, and those through Nabonidus, are there shown to be the same as listed in the Canon.

Babylonian King List A

The pertinent portion of this list is reproduced below (Rogers, 201), numbered to correspond to the Canon, which it clearly supports.

(1) ... Nabu-nasir
(2) .2 Nabu-nadin-zer
(3) 3 Ukin-zer
   2 Pulu
(4) 5 Ululai
(5) 12 Marduk-aplu-iddin
(6) 5 Sharru-ukin
(7) 2 Sin-akhi-erba
    Marduk-zakir-shum, 1 month
    Marduk-aplu-iddin, 9 months
(8) 3 Bel-ibni
(9) 6 Asshur-nadin-shum
(10) 1 Nergal-ushezib
(11) 4 Mushezib-Marduk
(12) 8 Sin-aki-erba
(13) .... Asshur-akh-iddin
The Battle of Hirit

In Chronicle 16, the Akitu Chronicle, the following record is included for year 16 of Shamash-shum-ukin. "On the twenty-seventh day of Adar [month 12] the armies of Assyria and Akkad did battle in Hirit. The army of Akkad retreated from the battlefield and a major defeat was inflicted upon them" (Grayson, 132). It happens that a mention of a battle at Hirit involving a king of Babylon on day 27 of month 12 -- surely it is the same battle -- is also cited in an unpublished astronomical diary tablet (BM32312), on which the name of the king and the year of his reign have been broken away. (A.J. Sachs, Babylonian Observational Astronomy, in Philos. Trans. Royal Soc. London, ser. A. 276, 1974, pp. 43-50 -- from Jonsson, 213, note 95.) In a letter from Sachs to Jonsson regarding this, he says "the preserved astronomical events (Mercury's last visibility in the east behind Pisces, Saturn's last visibility behind Pisces, both around the 14th of month I; Mars' stationary point in Scorpio on the 17th of month I; Mercury's first visibility in Pisces on the 6th of month XII) uniquely determine the date" (Jonsson, 70-71).

The date Sachs applies to this year is spring 652 bc to spring 651 bc. Now we count from 539 bc (the last year of Nabonidus) back through the kings of Babylon to the beginning of 16 Shamash. 539 + 17 + 4 + 2 + 43 + 21 + 21 + 1 + (20 - 16) = 652 bc. This confirms the reigns of all kings from Shamash to Nabonidus, inclusive. When we discussed Shamash's reign from the Chronicle, we saw that it only implied 20 years for his reign. Any ambiguity is hereby removed.

How Did it Happen that Ptolemy Got it Right?

The question is no longer whether the Canon is correct -- we have verified each element of its testimony through the Babylonian section piece by piece from the ancient documents themselves. The question is how did he do it, living so long after the facts?

Probably the answer is that he did not do it -- i.e., he did not originate the Canon. The king list apparently was passed down through the scholarly world for many years. It "had evidently been worked out by one or more experts on the Babylonian astronomy and chronology, and through the use in theAlexandrian school successfully had passed scrupulous indirect tests" (Kugler 390, cited in Jonsson, Supplement, 29). "As it belonged to the traditional material of knowledge of the astronomers, it was inherited from scholar to scholar; not even Hipparchus [2nd century bc] could have gone without the Babylonian list" (Meyer 453-4, cited in Jonsson, Supplement, 29). Otto Neugebauer claims "Ptolemy's 'Almagest' never contained such a canon (in spite of assertions to the contrary often made in modern literature)," though a canon was included in his Handy Tables which are no longer extant. "There is no reason ... to think that royal canons for astronomical purposes did not exist long before Ptolemy" (Neugebauer 209-212, cited in Jonsson, Supplement, 30).

This is consistent with the following, from Toomer's introduction to the Almagest. "Sometimes ... [Ptolemy] gives, not the running date in the era Nabonassar, but only the regnal year of a king. It is clear that there already existed, in some form, a 'king-list' enabling one to relate the regnal year of a given king to a standard epoch. Later, in his 'Handy Tables,' Ptolemy published such a king-list (known as 'Canon Basileon'), and it survives, in a considerably augmented form, in Byzantine versions of Theon of Alexandria's revision of the Handy Tables" (Toomer, 10).

I suppose these eminent scholars are correct. Ptolemy himself does mention the Nabonassar era in the Almagest, and it is that era which is used in the Canon through the Babylonian and Persian periods. He refers "to the beginning of the reign of Nabonassar ... for we have ancient observations
completely preserved from that period to the present" (Almagest III:7, 103).

What is the Present Controversy About Ptolemy?

It is whether the astronomical events he cites in the Almagest were truly recorded observations, or were later computations claimed to be observations. In the Almagest Ptolemy cites 94 such events. Seven of them were events which occurred during the Babylonian period through Darius 1 of Persia, and therefore have been considered specially useful in affirming the canon for rulers in whose reigns these events are dated. These seven events are lunar eclipses, described below.

(1) Mardokempad 1 (Merodach-Baladan). Thoth 29-30. Eclipse began more than one hour after the rise of the moon, and was total. **March 19, 721 bc.** (Almagest IV:6)

(2) Mardokempad 2, Thoth 18-19. Eclipse of 3 digits (12 digits is total) from the southern end at midnight, visible at Babylon. **March 8, 720 bc.** (Almagest IV:6)

(3) Mardokempad 2, Phamenoth 15-16. Eclipse of more than half from the northern end, beginning after moonrise, visible in Babylon. **September 1, 720 bc.** (Almagest IV:6)

(4) Nabopolassar 5, Athyr 27-28. At the end of the 11th hour the moon began to be eclipsed in Babylon, 1/4 diameter from the south. **April 22, 621 bc.** (Almagest V:14)

(5) Cambyses 7, Phamenoth 17-18. One hour before midnight, eclipsed 1/2 diameter from the north, visible in Babylon. **July 16, 523 bc.** (Almagest V:14)

(6) Darius 20, Epiphi 28-29. 6 hours after nightfall, eclipsed 1/4 diameter from the southern side, visible in Babylon. **November 19, 502 bc.** (Almagest IV:9)

(7) Darius 31, Tybi 3-4. At the middle of the 6th hour the moon was eclipsed two digits from the southern side. **April 25, 491 bc.** (Almagest IV:9)

But what if, instead of really having records of these phenomena being anciently observed, Ptolemy simply calculated these events and placed them into a scheme of chronology he felt was correct? If his calculations were generally correct, he would know the number of years before his time the various eclipses should have occurred. Therefore he could place it in the reign of the king his chronology told him was that many years before his time. When modern astronomers date the event from his descriptions they find the correct year, but they cannot attest Ptolemy’s claim that someone observed and recorded that eclipse in such and such a year of this or that king.

Suspicion exists because modern computations imply the recorded descriptions are not precise, and therefore perhaps not based on a true observation. Apparently scholars are divided on this. I am in no position to judge the merits of the case astronomically. However, my opinion is that he did work from records of observations. Other than his simple claim that this was so, there are four reasons for this. (1) We now know from archeology that astronomical diaries from Babylon were abundant. It is reasonable to suppose that Ptolemy, a giant in the field, had access to some such records. (2) One of the eclipses listed above, the one in 7 Cambyses, certainly was recorded by the ancients, as the tablet record exists today (see page 15, item 2). (3) Of the eclipse in 20 Darius, Ptolemy specifically claims it "is the one Hipparchus used." I suppose this was not private information, and therefore he could be checked by anyone familiar with the subject -- and who else was he addressing in his very technical book? (4) There were other king lists whose numbers were incorrect, or corrupted, though much less detailed than the Canon (Dougherty, 7-10). How do we explain the purity of Ptolemy's list? It was a list for and by scientists, and its integrity was maintained by the utility to which it was subject. This implies there were ancient observations by which the Canon could be checked.
In any event, it is important to keep two things sharply in focus. (1) Ancient history does not depend on Ptolemy’s Canon. (2) Even Robert Newton, in whose book these concerns are raised, acknowledges "we have quite strong confirmation that Ptolemy's list is correct for Nebuchadnezzar" (Newton 375, cited from Jonsson 48). And the dates for Nebuchadnezzar control the date of the fall of Zedekiah and the kingdom of Judah.
PTOLEMY'S CANON (Britannica Great Books, Volume 16). Though the expression "Assyrians and Medes" heads the first list, the kingdom intended is Babylon, which was frequently ruled by Assyrians and Medes. Also, the word "Assyrian" was often applied to Babylonians, probably because they were of similar culture (cf. Genesis 10: 10, 11).

1. PTOLEMAIC DATES, THE ERA OF NABONASSAR, AND THE CHRISTIAN ERA

The following is a translation from the Greek of the Chronological Table of the Kings, published by Halma in his edition of the Almagest, and by F. K. Grünzel in his Handbuch der Mathemalischen und Technischen Chronologie (3 Vols., Leipzig, 1906).

<table>
<thead>
<tr>
<th>Years of the Kings before the Death of Alexander and the Years of Alexander¹</th>
<th>Years of the Macedonian Kings after the Death of Alexander the King</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of the Assyrians and Medes</td>
<td>Of the Macedonian Kings</td>
</tr>
<tr>
<td>Nabonassar</td>
<td>14</td>
</tr>
<tr>
<td>Nadius</td>
<td>2</td>
</tr>
<tr>
<td>Chinzer and Porus</td>
<td>5</td>
</tr>
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<td>Ilouiaius</td>
<td>5</td>
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<td>12</td>
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<tr>
<td>Arkean</td>
<td>5</td>
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<tr>
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<tr>
<td>Mesimordak</td>
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<tr>
<td>Second Interregnum</td>
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<tr>
<td>Asaradin</td>
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<tr>
<td>Saosdouchin</td>
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<tr>
<td>Kinelanadan</td>
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<tr>
<td>Illoaroudam</td>
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<td>17</td>
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<td>Of the Persians</td>
<td></td>
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<tr>
<td>Cyrus</td>
<td>9</td>
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<tr>
<td>Cambyses</td>
<td>8</td>
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<tr>
<td>Darius I</td>
<td>36</td>
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<td>Darius II</td>
<td>19</td>
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<tr>
<td>Artaxerxes II</td>
<td>46</td>
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<tr>
<td>Ochus</td>
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<tr>
<td>Arogus</td>
<td>2</td>
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<tr>
<td>Darius III</td>
<td>4</td>
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<tr>
<td>Alexander of Macedonia</td>
<td>8</td>
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</table>

Of the Roman Kings

<table>
<thead>
<tr>
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<td>Nabopolassar</td>
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<td>Illoaroudam</td>
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<td>Artaxerxes I</td>
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<td>Darius II</td>
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<td>Arogus</td>
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<tr>
<td>Darius III</td>
<td>4</td>
</tr>
<tr>
<td>Alexander of Macedonia</td>
<td>8</td>
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</tbody>
</table>

The Egyptian year used by Ptolemy consists of 365 days. This contains 12 months of 30 days each, followed by 5 intercalary days. This year, of course, changes with respect to the equinoxes and solstices. But it is simpler and more practical than any other. The months occur in the following order:

1. Thoth
2. Phaophi
3. Athyr
4. Choak
5. Tybi
6. Mechir
7. Phamenoth
8. Pharmouthi
9. Pachom
10. Payni
11. Epiphi
12. Mesore

FIVE INTERCALARY DAYS

The era used by Ptolemy is the so-called Era of Nabonassar, whose beginnings or epoch is Thoth 1, midday, the year I of the reign of Nabonassar. The table just given permits one to calculate the years from the epoch to the given date.

If one wishes to pass from the Era of Nabonassar to the Christian Era, certain complications arise. For the Christian Era is computed in two styles, the Julian and the Gregorian. The Christian Era up to October 4, 1582, is computed in terms of the Julian year, which is the year made up of 365 days ordinarily and every fourth year or leap year of 366 days; that is, the Julian year averages 365 1/4 days. Since, however, the solar year is approximately 365 days 14' 48" according to Ptolemy's calculations in Book III of the Almagest, the Julian year will fall behind the solar year. Thus in the year A.D. 325 (after the birth of Christ), the year of the Council of Nicea, the spring equinox fell on March 21. In the year A.D. 1582, the spring equinox fell on March 11.

And so, in order to make the calendar year more nearly equal to the solar year for liturgical reasons, Pope Gregory XIII ordered the day following October 4, 1582, to be counted as October 15, 1582. Further, the years ending in two zeros which were not divisible by 400 were no longer to be leap years. Thus the years A.D. 1700, 1800, 1900 would not be leap years. The Gregorian reform was followed at first only by southern Europe, but since the eighteenth century it has been followed by the whole of Europe and the New World.

The Christian Era, therefore, is counted by Julian Years before and after the birth of Christ, up until October 4, 1582; thereafter by the Julian year modified according to the reform instituted by Gregory, as just explained.

But the Christian Era is also counted in two ways: the historical and the astronomical. In the historical way, there is no year between the year 1 B.C. (before the birth of Christ) and the year A.D. 1 (after the birth of Christ). In the astronomical way, since the years before Christ are written as negative numbers, the first year before Christ or the year I B.C. (historical way) is the Year 0. And so, up until A.D. 1582, all years divisible by 4 are leap years both according to the historical and to the astronomical ways of counting. Respecting the years before Christ, those years are leap years which are divisible by 4 with a remainder of 1 in the historical way; in the astronomical way, those years which are divisible by 4 as for the years after Christ.

The Julian year is made up of 12 unequal months as follows:

1. January, 31 days 7. July, 31 days
2- February, 28 days (leap year 29 days) 8. August, 31 days
3. March, 31 days 9. September, 30 days
4- April, 30 days 10. October, 31 days
5. May, 31 days 11. November, 30 days
Appendix H

Assyrian Chronology

The history of years in the Assyrian kingdom is based on a two-fold testimony: the Assyrian Eponym Canon, and Assyrian King lists from Tiglath-pileser backward. The following quotes expand on each of these.

Eponym Canon. "From some period early in their history -- possibly from the very beginning of the kingdom -- to the end, the Assyrians followed the practice of each year appointing to the office of eponym, or limmu, some high official of the court, the governor of a province, or the king himself. The limmu held office for a calendar year, and to that year was given the name of the individual then occupying the position of limmu. Historical events in Assyria were usually dated in terms of these limmus, although at times they might be dated in terms of the year of the reign of the king, and on occasions both the year of reign and the eponymous year were given. It will thus be seen that if we have a list of eponyms we have a list of Assyrian years, and that for any period for which there might be available a complete and accurate list of eponyms, there would be available a device making possible an accurate reconstruction of the chronological outline of the period covered. Fortunately the Assyrians followed the custom of preserving lists of eponyms, many of which are available today" (Thiele, 41). A composite canon can be found in Thiele, pages 209-215, which covers years 892-648 bc. Two other classic but out of print sources on the canon are George Smith and Eberhard Schrader (see Bibliography).

King Lists. "There are two other Assyrian documents which are of great historical and chronological importance. These are the Khorsabad King list found at Khorsabad, the ancient site of Dur-Sarrukin, capital of Sargon, in excavations conducted there during the season of 1932/33 by the Oriental Institute of the University of Chicago, and the SDAS King List, brought to America in 1953. The Khorsabad List ... recorded a complete list of the kings of Assyria from the beginning to Assur-nirari V, 755-745 [bc], immediate predecessor of Tiglath-pileser III. For the earliest kings only the names are given, then comes a section giving the name of a king and of his father, and finally a third section giving also the number of years of the king's reign. The SDAS King List is practically identical ... [but] it gives the names of two kings at the end of the list ... Tiglath-pileser III, with eighteen years, 745-727 bc, and Shalmaneser V, with five years, 727-722. The two lists provide a number of checks upon each other." (Thiele, 42-43. For translation of these lists see I. J. Gelb, "Two Assyrian King Lists," JNES, XIII, 1954, 209-230. See also Rutherford, 525-526)

How Dates are Applied

Having an accurate series of years is the first step. Applying dates to the sequence is the second. As we discuss in Appendix G, Assyrian and Babylonian history and chronology are inextricably intertwined from the time of Tiglath-pileser III (Assyria) and Nabonassar (Babylon) forward. Therefore one pin to Assyrian chronology comes from absolute dates in the Babylonian chronology. Another comes from the mention of a solar eclipse in the eponym of Bur-Sagalae. The event listed for that year is: "revolt in the city of Assur. In the month of Simanu an eclipse of the sun took place." The fixed dates in Babylonian history require that year to be 763 bc, and in that year a dramatic solar eclipse was indeed visible in the middle east. This is an excellent confirmation both of the integrity of the canon and the accuracy of the dates assigned to it.

The Assyrian Eponym Canon

Below is an abbreviated version, extracted from Thiele, 209-215. All years and eponyms are represented, but for brevity the eponym's rank and the event notations are included only when significant.
(Bold indicates years of accession for a new king.)

<table>
<thead>
<tr>
<th>Year</th>
<th>King/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>892</td>
<td>... shar ...</td>
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<tr>
<td><strong>891</strong></td>
<td>Urta-zarme</td>
</tr>
<tr>
<td>890</td>
<td>Tab-etir-Assur</td>
</tr>
<tr>
<td>889</td>
<td>Assur la-Kinu</td>
</tr>
<tr>
<td>888</td>
<td>Tukulti-Urta (king)</td>
</tr>
<tr>
<td>887</td>
<td>Tak-lak-ana-bel-ia</td>
</tr>
<tr>
<td>886</td>
<td>Abi-ili-a-a</td>
</tr>
<tr>
<td>885</td>
<td>Ilu-milki</td>
</tr>
<tr>
<td><strong>884</strong></td>
<td>Iari</td>
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<tr>
<td>883</td>
<td>Assur-shezibani</td>
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<tr>
<td>882</td>
<td>Assur-nasir-apli (king)</td>
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<tr>
<td>881</td>
<td>Assur-iddin</td>
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<tr>
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<td>Shumutti-adur</td>
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<td>877</td>
<td>Urta-pia-usur</td>
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<tr>
<td>876</td>
<td>Urta-bel-usur</td>
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<tr>
<td>875</td>
<td>Shangu-Assur-lilbur</td>
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<tr>
<td>874</td>
<td>Shamash-upahir</td>
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<tr>
<td>873</td>
<td>Nergal-bel-kumua</td>
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<td><strong>872</strong></td>
<td>Kurdi-Assur</td>
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<td>Urta-iddina</td>
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<td>Assur-nirari (king)</td>
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<td>752</td>
<td>Shamshi-ilia</td>
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<td>751</td>
<td>Marduk-shallimani</td>
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<tr>
<td>750</td>
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<td>749</td>
<td>Shamash-ken-dugul</td>
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<td>748</td>
<td>Adad-bel-ukin</td>
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<tr>
<td>747</td>
<td>Sin-shallimani</td>
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<td>746</td>
<td>Nergal-nasir</td>
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745 Nabu-bel-usur (Tp ascnds) 694 Ilu-ittia
744 Bel-dan 693 Nadin-ahe
743 Tiglath-pileser (king) 692 Zazai
742 Nabu-daninani 691 Bel-emurani
741 Bel-harran-bel-usur 690 Nabu-mukin-ahi
740 Nabu-etirani 689 Gilhili
739 Sin-taklak 688 Nadin-ahe
738 Adad-bel-ukin 687 Sennacherib (king)
737 Bel-emurani 686 Bel-emuranni
736 Urta-ilia 685 Assur-daninanni
735 Assur-shallimani 684 Mannu-zirni
734 Bel-dan 683 Mannu-ki-Adad
733 Assur-daninani 682 Nabu-shar-usur
732 Nabu-bel-usur 681 Nabu-ah-eresh
731 Nergal-uballit 680 Dananu
730 Bel-ludalri 679 Iti-Adad-anin
729 Naphar-ilu 678 Nergal-shar-usur
728 Dur-Assur 677 Abi-rama
727 Bel-harran-bel-usur 676 Banba
726 Marduk-bel-usur 675 Nabu-ah-iddina
725 Mahde [Sam.] 674 Sharru-nuri
724 Assur-ishmeani [Sam.] 673 Atar-ilu
723 Shalmsnr (king) [Sam.] 672 Nabu-bel-usur
722 Urta-ilia 671 Kanunai
721 Nabutaris 670 Shulmul-bel-Iashme
720 Assur-iska-danin 669 Shamash-kashid-aibi
719 Sargon (king) 668 Mar-larim
718 Zer-ibni 667 Gabbar
717 Tab-shar-Assur 666 Kanunai
716 Tab-sil-esharra 665 Mannu-ki-sharri
715 Taklak-ana-bel 664 Sharru-ludari
714 Ishtar-duri 663 Bel-naid
713 Assur-bani 662 Tab-shar-Sin
712 Sharru-emurani 661 Arbailai
711 Urta-iliki-pani 660 Gir-zapuna
710 Shamash-bel-usur 659 Simil-Assur
709 Mannu-ki-Assur-li 658 Sha-Nabu-shu
708 Shamash-upahhir 657 Labasi
707 Sha-Assur-dubbi 656 Milki-ramu
706 Mutakkil-Assur 655 Amianu
705 Nashir-Bel 654 Assur-nasir
704 Nabu-din-epush 653 Assur-ilai
703 Kannunnai 652 Assur-dur-usur
702 Nabu-li 651 Sagabbu
701 Hananai 650 Bel-harran-shadua
700 Metunu 649 Ahu-ilai
699 Bel-sharani 648 Belshunu
698 Shulmu-shar
697 Nabu-dur-usur
696 Shulmu-bel
695 Assur-bel-usur
**Assyrian King List**

This king list is (uncritically) drawn from Rutherford, 525-526, "as represented in the Khorsabad, Nassouhi and SDAS Lists." I have appended Tiglath-pileser and Shalmaneser. The date column shows the year of accession. As the Assyrian years were from Nisan to Nisan, the indicated year of accession may be one too great if the accession occurred between our December and their Nisan.

<table>
<thead>
<tr>
<th>Date</th>
<th>Years</th>
<th>King</th>
<th>Son of</th>
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<tbody>
<tr>
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<td>6</td>
<td>Assur-dugul</td>
<td>&quot;nobody&quot;</td>
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<td>1648</td>
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<td>Assur-apla-idi</td>
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<tr>
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<td>Nasir-sin</td>
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<tr>
<td>1648</td>
<td>0</td>
<td>Sin-namir</td>
<td>&quot;nobody&quot;</td>
</tr>
<tr>
<td>1648</td>
<td>0</td>
<td>Ipqi-Istar</td>
<td>&quot;nobody&quot;</td>
</tr>
<tr>
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<td>0</td>
<td>Adad-salulu</td>
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<td>1648</td>
<td>10</td>
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<td>Adasi</td>
</tr>
<tr>
<td>1638</td>
<td>17</td>
<td>Libaiiu</td>
<td>12 Sarma-Adad I</td>
</tr>
<tr>
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<td>12</td>
<td>Sarma-Adad I</td>
<td>Sarma-Adad I</td>
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<td>1609</td>
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<td>En-Tar-Sin</td>
<td>Sarma-Adad I</td>
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<td>1597</td>
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<td>Bazzaiiu</td>
<td>Belu-bani</td>
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<td>1569</td>
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<td>Lullaiiu</td>
<td>&quot;nobody&quot;</td>
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<td>Su-Ninua</td>
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<td>Su-Ninua</td>
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<td>Enlil-nerari</td>
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<td>son of Arik-den-ili</td>
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<td>Adad-nerari I</td>
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<td>Sulmanu-asared I</td>
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<td>Assur-dan I</td>
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</table>
According to the Babylonian Chronicles, Nineveh fell in 612 bc. But there are difficulties between the accession of Ashurbanipal and the fall of Nineveh. The dates and lengths of reign used above are from Merrill, who acknowledges "The chronology of the last half century of Assyrian history is extremely problematic. The system accepted here is that of Joan Oates, 'Assyrian Chronology, 631-612 bc,' *Iraq* 27 (1965): 135-59" (Merrill, 438, footnote 19, see also Rutherford, 40-41). Merrill (page 438) gives Ashurbanipal's reign from 668 bc; whether a typo for 669 bc, or to mean the accession was just after December and thus early 668 bc, I do not know. I list it as 669 bc, when his father and predecessor Esarhaddon died.
Appendix I

The Calendar Years of Judah

In Section Nine on the Period of the Kings, the regnal years of the Judean kings are reckoned from Tishri to Tishri. Nevertheless, the months of the Jewish calendar are always numbered from the spring beginning with Nisan, so that Tishri is month seven. That peculiarity exists in the Jewish calendar even today: Rosh Hashanah, the Jewish New Year Day, is day one of month seven.

At the time of the Exodus God specified to Moses that the month of the Passover should be the beginning of their sequence of months. "This month shall be unto you the beginning of months: it shall be the first month of the year to you" (Exodus 12:2). In Exodus 13:4 that month is called Abib. Whether this marked a change in their custom, perhaps implied in the King James and NASB future tense, or whether it merely affirmed their practice, allowed by the Rotherham present tense, I am uncertain. Either way, the beginning of their months reminds Israel that God delivered them from Egyptian bondage.

Abib was in the spring, as the name implies. "Abib: from an unused root (mean. to be tender); green, i.e. a young ear of grain; hence the name of the month Abib ..." (Strong's Concordance). The name Nisan, also used for this month (Nehemiah 2:1, Esther 3:7) is from the Babylonian Nisanu. It is a designation the Jews picked up apparently during their Babylonian captivity. Below is a list of names for the various months (from Mc&S, "Calendar," and Thiele, 208).

<table>
<thead>
<tr>
<th>Ancient Hebrew</th>
<th>Modern Hebrew</th>
<th>Babylonian</th>
<th>Our Calendar (Alternate name)</th>
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<tr>
<td>(1) Abib</td>
<td>Nisan</td>
<td>Nisanu</td>
<td>March-April</td>
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<tr>
<td>(2) Zif</td>
<td>Iyyar</td>
<td>Aiaru</td>
<td>April-May</td>
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<td>(3) Sivan</td>
<td>Simanu</td>
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<td>May-June</td>
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<td>(4) Tammuz</td>
<td>Duzu</td>
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<td>June-July</td>
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<tr>
<td>(5) Ab</td>
<td>Abu</td>
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<td>July-August</td>
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<td>(6) Elul</td>
<td>Ululu</td>
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<td>August-September</td>
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<td>(7) Ethananim</td>
<td>Tishri</td>
<td>Tashritu</td>
<td>September-October</td>
</tr>
<tr>
<td>(8) Bul</td>
<td>Heshvan</td>
<td>Arahshmu</td>
<td>October-November (Marchesvan)</td>
</tr>
<tr>
<td>(9) Kislev</td>
<td>Kislimu</td>
<td></td>
<td>November-December (Chisleu)</td>
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<tr>
<td>(10) Tebeth</td>
<td>Tebetu</td>
<td></td>
<td>December-January</td>
</tr>
<tr>
<td>(11) Shebat</td>
<td>Shabatu</td>
<td></td>
<td>January-February</td>
</tr>
<tr>
<td>(12) Adar</td>
<td>Addaru</td>
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<td>February-March</td>
</tr>
<tr>
<td>(13) Ve-Adar</td>
<td></td>
<td></td>
<td>(intercalary month used as necessary)</td>
</tr>
</tbody>
</table>

Tishri to Tishri

There are several reasons for concluding that the Jews used Tishri calendar years long ago, and retained them through the end of their kingdom (and even today).

(1) The feast of ingathering in the seventh month is "in the end of the year" (Exodus 23:16, 34:22).

(2) King Josiah began an extensive reform in his 18th year, including the renovation of the temple. In the process, they found the book of the Law and realized how far they had strayed from the Lord's commands. Subsequently they observed a remarkable passover, still in the 18th year of Josiah. Evidently the year had not changed when they passed Nisan 1, implying that the year was kept on a Tishri-Tishri basis (2 Chronicles 34:8-35:19).
(3) 2 Kings 25:27 says Jehoiachin was released in the accession year of Amel-Marduk (Evil-Merodach), month 12, which is the same as the 43rd and last year of Nebuchadnezzar. The Babylonian Chronicle 5 (BM 21946) says he was captured in 7 Nebuchadnezzar, month 12, day 2. The span of his captivity was therefore almost exactly 36 years. But 2 Kings 25:27 says Jehoiachin was released in the 37th year of his captivity. If these were Nisan years, then "year one" would have entirely preceded his journey to Babylon as a captive which started just after Nisan began (2 Chronicles 36:10). As this is unlikely, it argues that the years of captivity were Tishri years. Thus his captivity began half-way through "year one."

(4) In the fourth year of Jehoiakim, Jeremiah dictated a prophecy to Baruch and instructed him to read the scroll publicly "upon the fasting day." This was done in the fifth year, month nine. If these were Nisan years then there was a delay of 8 or 9 months, which seems inordinately long. If these were Tishri years, the fourth year ended with month 6 and there may have been only a 2 or 3 month delay for an appropriate fast day (Jeremiah 36:1-10).

(5) A survivor of Jerusalem's fall came to Ezekiel in year 12, month 10 (Ezekiel 33:21). But the city fell in year 11, month 4 (2 Kings 24:3). If these were Nisan years, the messenger took 18 months to arrive; if Tishri years, a more reasonable 6 months. Even six months is longer than necessary for the trip, but the messenger may have left after the temple was burned in month 5, or after Governor Gedeliah was killed in month 7 (2 Kings 25:8, 25).

(6) Ezekiel 40:1 is dated "in the beginning of the year," day 10, but the month number is absent. Evidently either month 1 or month 7 is intended, but which? Other dates given in Ezekiel include these months: 4, 6, 5, 10, 1, 1, 3, 12, 10 (Ezekiel 1:1, 8:1, 20:1, 24:1, 29:1, 29:17, 30:20, 31:1, 32:1, 33:21 respectively). Since month 1 is explicitly mentioned twice, but month 7 never, Ezekiel probably used "the beginning of the year" to mean month 7, using Tishri years.

(7) Jeremiah 1:3 speaks of the fifth month as the "end" of Zedekiah's 11th year.

However, the spring did mark a turning point within the year, as mentioned in 2 Samuel 11:1, 1 Kings 20:22, 26, 1 Chronicles 20:1 and 2 Chronicles 36:10. In each case spring is clearly meant, but the King James rendering "the year was expired" used in three cases is misleading. All four texts use the same Hebrew word, "teshabah," Strong's 8666, "a recurrence (of time or place); a reply (as returned)." Perhaps it signifies a turning, as though a crest or middle was reached. It is a different word than "tequphah," 8622, "a revolution, i.e. (of the sun) course (of time) lapse," used in Exodus 34:22 for the end of the year in the fall. (Tequphah is also used in 2 Chronicles 24:23, where the context does not make it clear what time of year is intended. Gesenius notes a difference between its spelling there and in Exodus 34:22.)

Thus the "revolution [completion] of the year" is the fall, and the "turn of the year" is the spring. The former sometimes is called the agricultural year, sometimes the civil year. The latter sometimes is called the religious year because the cycle of the festivals of the law begins in the spring. These designations are helpful for clarity, but they are all recent designations not used in the scriptures.
Appendix J

Years Counting from the Exodus

In Appendix I we observed that the Tishri agricultural year was the normal year of reckoning. However, contrary to this practice, the years numbered shortly following the Exodus were evidently Nisan years. Aaron died at Mount Hor "in the fortieth year after the children of Israel were come out of the land of Egypt, in the first day of the fifth month" (Numbers 33:38). Some time after this Moses addressed the people of Israel "in the fortieth year, in the eleventh month, on the first day of the month" (Deut. 1:3). Supposing the "fortieth year" is reckoned the same way in each text, this means month 11 of that year followed month 5 of that year. This apparently trivial point is actually decisive that Nisan years were used, because in Tishri years month 11 precedes month 5 (since the months are always numbered from the spring).

Exodus 40:17 says the tabernacle was reared "in the first month, in the second year, on the first day of the month." Taken together with the context, this shows that "year one" was the year of the Exodus, and as Nisan years are intended that year one began 15 days before the Exodus. Numbers 1:1 and Numbers 10:11-13 use the same frame of reference.

Shortly after Moses addressed the Israelites he ascended Mount Nebo, opposite Jericho, and died. (Deut. 34:1-8. Numbers 27:12 calls it Mount Abarim.) Israel mourned for him 30 days, which would take us into month 12, and shortly before the following passover Israel crossed Jordan into Canaan (Joshua 3:17, 5:10). That Nisan, just before passover, the year would have changed to number 41. Therefore the 40 years of wilderness wandering (Numbers 14:33, 34, Deut. 29:5) were from spring to spring, 40 full years, starting at the Exodus and ending with the crossing of Jordan.

Consistent with this is that Aaron and Moses were 83 and 80 prior to the Exodus, and died at 123 and 120 prior to Jordan (Exodus 7:7, Numbers 33:39, Deut. 31:2, 34:7).

Sending of the Spies

"And it came to pass on the twentieth day of the second month, in the second year, that the cloud was taken up from off the tabernacle of the testimony. And the children of Israel took their journeys out of the wilderness of Sinai; and the cloud rested in the wilderness of Paran" (Numbers 10:29, 12). It was from this wilderness that the spies were sent (Numbers 13:3), after the intervening episodes of chapters 11 and 12.

When the spies were sent out it "was the time of the firstripe grapes" (Numbers 13:20). When do grapes ripen in Palestine? Here are two comments on the subject.

(1) "July -- Grapes are now ripe about Aleppo, but remain till November or December ... The vintage begins in favored situations ... August -- The first clusters of the vine, which blossomed at Antaradus in March, now come to maturity, and are ready for gathering ... the fig ... may now be gathered at Algiers ... pomegranates ripe." (Mc&S, "Calendar," 24, based on contemporary observations). Thus the firstripe grapes would appear in July-August, which is equivalent to the Jewish month Ab, month 5.

(2) An ancient comment comes from the following inscription, known as the Gezer Calendar. "It is on a school exercise tablet of soft limestone ... about 925 bc ... the language is good biblical Hebrew, in a very early spelling; it is written in verse and seems to have been a kind of mnemonic ditty for children" (Pritchard 209, ANET 320). Evidently it refers to the fall agricultural year beginning with Tishri. (The month numbers at the right were added by me.) This implies the normal vintage was in
month 6, but allows the early fruitage in month 5.

"His two months are (olive) harvest, 7, 8
  His two months are planting (grain), 9, 10
  His two months are late planting; 11, 12
His month is hoeing up of flax, 1
  His month is harvest of barley, 2
  His month is harvest and feasting; 3
His two months are vine-tending, 4, 5
  His month is summer fruit."

Therefore both of these point to month 5 as the time the spies were sent from Kadesh-Barnea. As the spies were out for 40 days, and returned with a large cluster of grapes, some pomegranates and figs (Numbers 13:23-25), probably gathered just before their return so they were fresh for display, it is likely their report was rendered some days before or possibly just after the opening of Tishri, month 7.

**Zered and Arnon**

Deut. 2:14 says "the space in which we came from Kadesh-barnea, until we were come over the brook Zered, was thirty and eight years." Therefore they crossed Zered in the fall of the year, presuming the "space" of 38 years means approximately full years, in the Nisan year numbered 40.

Aaron died shortly before this in month 5, day 1 of that year, and Israel mourned for him 30 days which therefore reach to early in month 6. Numbers 21:1-13 narrates the experiences from then until the crossing of Zered and then Arnon. The narrative is consistent with placing the crossing of Arnon in the fall of Nisan year 40.

It was at this point that Moses and the Israelites defeated Sihon, king of the Amorites, "and possessed his land from Arnon unto Jabbok, even unto the children of Ammon ... And Israel took all these cities: and Israel dwelt in all the cities of the Amorites, in Heshbon, and in all the villages thereof" (Numbers 21:24, 25). This was the first land Israel possessed, and this marked the first territory acquired as a lasting home. It was this territory that the king of Ammon later tried to take in his dispute with Jephthah (Judges 11:14-23).

**Year One of the Sabbath Cycle**

In Leviticus 25:2 God said "when ye come into the land which I give you, then shall the land keep a sabbath unto the Lord." Since they were counting Nisan years at the time, year one may have been the year in which they crossed Arnon and first possessed the land. When Nisan year 6 arrived, the fall planting of the following Tishri would be in abeyance for the sabbath year, and when Nisan year 49 arrived, on day 10 of month 7 it would be time to blow the trumpet of Jubilee. Since later on the numbered years were Tishri years, this would form the natural transition between the two systems -- year "6½" becoming number 7, and year "49½" becoming number 50. How immediate this transition came -- whether from the first sabbath year or sooner or later -- is not apparent. But as discussed in Appendix I, the numbered years during the period of the kings were Tishri years.

It is understandable that the Exodus event would have caused the initial numbering to identify Nisan years. It is also understandable that once settled in the promised land the farming cycle would induce the Israelites to identify numbered years from Tishri.
I Kings 6:1

An interesting question remains: which system was used in numbering the years of 1 Kings 6:1, Nisan or Tishri? It is hard to know. Since 1 Kings 6:1 uses the same mode of reference as Numbers 33:38, and that text used spring years, it is feasible to conclude 1 Kings 6:1 did also. Feasible, but not certain. Since the regnal years in Solomon's reign were fall years, the era referred to in 1 Kings 6:1 may have been adjusted to fall years.

But apparently it does not make a difference. The scripture states "And it came to pass in the four hundred and eightieth year after the children of Israel were come out of the land of Egypt, in the fourth year of Solomon's reign over Israel, in the month Zif, which is the second month, that he began to build the house of the Lord." 109

If spring years were intended, then the 480th spring year had just commenced since the text mentions month 2. If fall years were intended then year "one" would have been the fall year during which the Exodus occurred, and the 480th such year would have begun about one-half year before the spring of Solomon's fourth (Tishri) regnal year. Either way, the span from the Exodus to the spring of 4 Solomon would be the same -- 479 full years. 110
### Appendix K

**Nineteen Periods in Judges and 1 Samuel**

<table>
<thead>
<tr>
<th>Period</th>
<th>Years</th>
<th>Event or Ruler</th>
<th>Book and Verse</th>
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</thead>
<tbody>
<tr>
<td>1)</td>
<td>8</td>
<td>Servitude to King of Mesopotamia</td>
<td>Judges 3:8</td>
</tr>
<tr>
<td>2)</td>
<td>40</td>
<td>Rest under Othniel</td>
<td>Judges 3:11</td>
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<tr>
<td>3)</td>
<td>18</td>
<td>Servitude to Moab</td>
<td>Judges 3:14</td>
</tr>
<tr>
<td>4)</td>
<td>80</td>
<td>Rest under Ehud</td>
<td>Judges 3:15, 30</td>
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<tr>
<td>5)</td>
<td>20</td>
<td>Servitude to Jabin</td>
<td>Judges 4:2, 3</td>
</tr>
<tr>
<td>6)</td>
<td>40</td>
<td>Rest under Deborah</td>
<td>Judges 4:4, 5:31</td>
</tr>
<tr>
<td>7)</td>
<td>7</td>
<td>Bondage under Midian</td>
<td>Judges 6:1</td>
</tr>
<tr>
<td>8)</td>
<td>40</td>
<td>Rest under Gideon</td>
<td>Judges 8:28</td>
</tr>
<tr>
<td>9)</td>
<td>3</td>
<td>Reign of Abimelech</td>
<td>Judges 9:22</td>
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<tr>
<td>10)</td>
<td>23</td>
<td>Tola judged</td>
<td>Judges 10:1, 2</td>
</tr>
<tr>
<td>11)</td>
<td>22</td>
<td>Jair judged</td>
<td>Judges 10:3</td>
</tr>
<tr>
<td>12)</td>
<td>18</td>
<td>Oppression of Ammon</td>
<td>Judges 10:8</td>
</tr>
<tr>
<td>13)</td>
<td>6</td>
<td>Jephthah judged</td>
<td>Judges 12:7</td>
</tr>
<tr>
<td>14)</td>
<td>7</td>
<td>Ibzan judged</td>
<td>Judges 12:8, 9</td>
</tr>
<tr>
<td>15)</td>
<td>10</td>
<td>Elon judged</td>
<td>Judges 12:11</td>
</tr>
<tr>
<td>16)</td>
<td>8</td>
<td>Abdon judged</td>
<td>Judges 12:13, 14</td>
</tr>
<tr>
<td>17)</td>
<td>40</td>
<td>Oppression of Philistines</td>
<td>Judges 13:1</td>
</tr>
<tr>
<td>18)</td>
<td>20</td>
<td>Samson judged</td>
<td>Judges 15:20</td>
</tr>
<tr>
<td>19)</td>
<td>40</td>
<td>Eli judged</td>
<td>1 Samuel 4:18</td>
</tr>
</tbody>
</table>

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450 years
Appendix L

Sabbatic and Jubilee Cycles

Is it possible to synchronize Bible chronology with the Sabbatic or Jubilee cycles observed by ancient Israel? I think it is. However, success in this area will require two things: (1) that Israel continued to count these cycles, (2) that we can locate a particular sabbath year or jubilee year in the scriptural narrative.

That Israel was lax in observing sabbath years is implied by 2 Chronicles 36:21, and predicted in Leviticus 26:34, 35. But this does not mean the practice was abandoned, or the cycles not counted. Ruth 4:4-6, 1 Kings 21:3, Jeremiah 32:7-9 all refer to land rights, which were part of the Jubilee arrangement (Leviticus 25, Numbers 36:3, 4). Even more to the point is a late reference by Ezekiel. "Let not the buyer rejoice, nor the seller mourn ... For the seller shall not return to that which is sold, although they were yet alive" (Ezekiel 7:13, 14). Apparently this refers to the jubilee arrangement, and implies it was still effective among the Israelites as late as the close of the kingdom of Judah. Ezekiel was predicting "the end upon the four corners of the land" (verse 2), so it would be impossible for the seller to return to his possession "though he were yet alive" when the next jubilee came. Clearly the people were still counting jubilee cycles, and knew when to expect the next one.

But can we know when the next one was to be? I think so. I think Ezekiel gives us the information to calculate it. Ezekiel 1:1 dates the beginning of his prophecies "in the 30th year, in the fourth month," and equates this with "the fifth year of king Jehoiachin's captivity" (verse 2). But Ezekiel does not specify what is intended by "30th year." I am aware of three surmises on this question.

(1) The 30th year of Ezekiel's age. It is supposed that as Ezekiel was a priest, and they serve beginning at age 30, he here marks the beginning of his priestly age and that God used him thenceforth as a prophet as well. However, being in one's 30th year means one is 29 years old, not 30. If Ezekiel was referring to his age -- quite unusual for a prophet -- it is likely he would have precluded the obvious ambiguity by saying "my" rather than "the" 30th year.

(2) Perhaps it was the thirtieth year from the great reforms which marked Josiah's 18th year. It is true that this was the 30th year, counting 18 Josiah as 1. (31 - 17 + 11 + 5 = 30). And as we will see later, this is not a simple coincidence. But it is highly dubious that Ezekiel would introduce a new "era" without some explanation -- an era for which we have no other testimony -- and then use it but one time. The most plausible explanation is ...

(3) It was the 30th year of the current jubilee cycle. As we have already seen, Ezekiel directly refers to the next jubilee in his prophecy, which implies the cycle counting to it was well known. He did not need to explain to what cycle "the thirtieth year" referred because his contemporaries would have known that year five of Jehoiachin's captivity was year 30 in that cycle. But beyond this there are two other supporting reasons for this conclusion -- one interpretive, and one from the Talmud.

First, the interpretive reason. Ezekiel 40:1 dates his lengthy temple vision, which is symbolic of the kingdom, to year 25 of Jehoiachin's captivity, thus 20 years later than Ezekiel 1:2. Therefore it is in year 50 of the jubilee cycle -- the year of the very jubilee Ezekiel earlier implied ended the type -- and on the very day beginning that Jubilee, day 10 of month 7 (See Appendix I, point 6.) It is remarkably fitting that God would give this vision of the antitypical jubilee on just this date.

Second, the Jewish Talmud says there were 17 jubilees to Ezekiel's time, and the 17th (though impossible to observe) began the year of Ezekiel's temple vision. "... Seventeen jubilees ... the last jubilee occurred on the tenth day of the month [Tishri], in the fourteenth year after that the city was
smitten' (Ezek. 40:1), which was the New-Year's Day of the jubilee ('Ab. Zarah 9b; 'Ar. 11b-12b). ... The sixteenth jubilee occurred in the eighteenth year of Josiah ... " (Jewish Encyclopedia, 607).  

Was it coincidence that Josiah began his reforms in that year? Probably not. More likely it was because that year was the special year of Jubilee that renewed concern for the temple, the law and the services was stimulated.

A Test of this Conclusion

We can test this by counting back through the years from Ezekiel's vision and checking whether the sabbatic cycles are at least consistent with this approach in the few cases there is an opportunity to compare sabbath dates with historical circumstances. The first year after Jerusalem was smitten began with Tishri shortly following that event, still in 587 bc. So the beginning of the 14th year after the city was smitten would be 13 years farther, or Tishri 574 bc. The beginning of the previous year, Tishri 575 bc, would then begin the sabbath year preceding that jubilee, and 14 years before, Tishri 589 bc, would also mark the beginning of a sabbath year.

That is the year Nebuchadnezzar began his siege of Jerusalem, "in the ninth year ... tenth month ... tenth day" of Zedekiah (2 Kings 25:1). As a result of this, Zedekiah and the princes and the people made a covenant to free their servants, correctly supposing that if they began resolutely to obey such precepts of the law the Lord would ease their distress (Jeremiah 34:7-22). Perhaps, they reasoned, as they were in a sabbath year, it would be specially appropriate to free their servants because it was required in the law that "At the end of seven years let ye go every man his brother an Hebrew, which hath been sold unto thee; and when he hath served thee six years, thou shalt let him go free from thee" (Jeremiah 34:14, Deut. 14:28). If that is what they reasoned, then the existence of a sabbath year at that time is consistent with our conclusion about the last jubilee.

I think this is likely. However, it is not necessary to suppose their action occurred in a sabbath year for two reasons. (1) Their guilt could have been provoked in any extreme situation, without reference to a seventh year. (2) The law did not stipulate that freedom to servants was to be in the sabbath years. The year of freedom was to be the seventh year from the time the service began, and therefore was not conumerary with sabbatic years. (The expression "year of release" did apply to sabbath years, but it meant a release from monetary debts, not from bondservice. Bondservice did automatically cease during a jubilee year, and this requirement would have been meaningless if all bondservice had terminated in the sabbath year immediately preceding -- Deut. 15:1, 2, 12, 31:10, Lev. 25:10.) So though this line of investigation is consistent with our conclusion, it is not as strong a confirmation as might be supposed.

Test Number Two

To go further back, we need to resolve another issue. When a jubilee year comes, does the next sabbath cycle begin numbering after the jubilee, or with the jubilee. In other words is the year of jubilee also year one of the next cycle, or does it interrupt the consecutive count of seven year cycles. The former option means from jubilee to jubilee is 49 years, and the latter means from jubilee to jubilee is 50 years. (The jubilee is still year number 50 in either case.)

There have been different views on this question among Jewish sources for many years. "Both in the tannaïtic literature and in the Apocrypha two different systems of calculation for the Jubilee and the Sabbatical Year are found. A baraita declares that the Jubilee year is the 50th year, after the completion of the seven sabbatical cycles, the following year being the first of the ensuing shemittah ... Judah, however, holds that 'the Jubilee year enters into the calculation of the heptad,' i.e., the Jubilee Year is the 50th year after the previous Jubilee and thus also the first of the ensuing shemittah and Jubilee" (Encyclopedia Judaica, 579).
I think the correct approach is the latter method -- year 50 is also year one of the next cycle, thus from jubilee to jubilee is 49 years. There are two reasons for this. (1) There were exactly 49 years from 18 Josiah (Jubilee 16) to Ezekiel 40:1 (Jubilee 17). (2) An unbroken pattern of sabbath years matches the example of the unbroken pattern of sabbath days. Therefore we can count back in an unbroken series of sabbath year cycles to the next place which can provide a test for a sabbath year -- 14 Hezekiah. That regnal year began in the fall of 702 bc. But the attack from Sennacherib began at or after the following spring, 701 bc. From the fall of 701 bc to the fall of 575 bc was 126 years, or 18 sabbath cycles. Therefore if fall 575 bc began a sabbath year, then fall 701 bc also began a sabbath year. Is this indicated in the scriptural narrative for that year?

Yes, it is. When Isaiah assured Hezekiah God would deliver him from the Assyrians, he said "And this shall be a sign unto thee, Ye shall eat this year such as groweth of itself; and the second year that which springeth of the same: and in the third year sow ye, and reap, and plant vineyards, and eat the fruit thereof" (Isaiah 37:30). The year he spoke this was not a sabbath year, but the sieging army no doubt used or destroyed what crops had grown from the previous sowing. Thus God promised to provide sufficient from nature's own growth for that year. But as the Assyrian army subsequently retreated (after smitten by the Lord) Israel would normally sow as usual after the following Tishri. Yet Isaiah's message implied this would not happen. Why? Evidently that Tishri began a sabbath year, and therefore Israel could not sow again till the second Tishri following -- "the third year sow ye." This is good confirmation we are on the right track.

The Crucial Test

But the crucial test is, can we trace the jubilee cycles back to their origin? Let us see. The Exodus occurred in the spring of 1445 bc, which also began "year one" of their sequence of years counting from the Exodus (see Appendix J). They crossed the Arnon about Tishri of year 40, and immediately began to possess and settle the land (see Appendix J). That year 40 began in the spring of 1406 bc, and Jubilee number one began 49½ years later (see Appendix J), Tishri 1358 bc. Thence to the 17th jubilee would be 1358 - (16 x 49) = 574 bc. This is precisely the year of Ezekiel's vision. We therefore can trace the jubilees from their source to their conclusion. This is a highly satisfactory confirmation of our computations.

Other Sabbath Years of Record

Ben Zion Wacholder has identified the following as sabbatic years mentioned in historical records (presumably from Tishri of the year cited to Tishri of the following year): 331 bc, 163 bc, 135 bc, 37 bc, 41, 55, 69, 132, 433, 440. As you can observe, all of these fall at seven year intervals from each other. However, this series is not removed by seven year intervals from the sabbath year before the 17th jubilee, as that sabbath began Tishri 575 bc. If all these facts are correct it suggests the sabbath cycle began anew when the Jews returned to Jerusalem after their captivity in Babylon, and are not synchronous with the sabbath cycles in vogue before the desolation of Judea.
Appendix M

Route through the Wilderness
(Numbers 33)

(1) Rameses
(2) Succoth
(3) Etham, in the edge of the wilderness
(4) Pihahiroth, before Baalzephon, before Migdol
(5) Passed through sea, three days' journey into wilderness of Etham, to Marah
(6) Elim (12 fountains, 70 palms)
(7) Red sea
(8) Wilderness of Sin
(9) Dophkah
(10) Alush
(11) Rephidim, no water to drink
(12) Wilderness of Sinai
(13) Kibrothhattaavah
(14) Hazeroth
(15) Rithmah
(16) Rimmonparez
(17) Libnah
(18) Rissah
(19) Kehelathah
(20) Mount Shapher
(21) Haradah
(22) Makelhoth
(23) Tahath
(24) Tarah
(25) Mithcah
(26) Hashmonah
(27) Moseroth
(28) Benejaakan
(29) Horhagidgad
(30) Jotbathah
(31) Ebronah
(32) Eziongaber
(33) Wilderness of Zin, Kadesh
(34) Mount Hor, in edge of Edom
(35) Aaron died at Mount Hor day 1 month 5 year 40 at 123 years age
(36) King Arad, south Canaan, heard of them
(37) Zalmonah
(38) Punon
(39) Oboth
(40) Ijeabarim, in border of Moab
(41) Dibongad
(42) Almondiblathaim
(43) Mountains of Abarim, before Nebo
(44) Plains of Moab by Jordan near Jericho, from Bethjesimoth to Abelshittim
Appendix N

Chronology of the Patriarchs

(1) Abraham was 75 when he left Haran for Canaan (Genesis 12:4)
(2) The kings in the valley of Siddim served Chedorlaomer 12 years (Genesis 14:4)
(3) They rebelled in year 13, and Chedorlaomer smote them in year 14 (Genesis 14:4, 5)
(4) Abraham was 10 years in Canaan before taking Hagar (Genesis 16:3)
(5) Abraham was 86 when Ishmael was born (Genesis 16:16)
(6) Abraham was 99 when he was told Sarah would bear a child (Genesis 17:1, 16)
(7) Abraham was 99 when circumcised (Genesis 17:24)
(8) Ishmael was 13 when circumcised (Genesis 17:25)
(9) Abraham was 100 when Isaac was born (Genesis 21:5)
(10) Sarah lived 127 years (Genesis 23:1)
(11) Abraham lived 175 years (Genesis 25:7)
(12) Ishmael lived 137 years (Genesis 25:17)
(13) Isaac was 40 when he married Rebekah (Genesis 25:20)
(14) Isaac was 60 when Jacob and Esau were born (Genesis 25:26)
(15) Esau was 40 when he married (Judith and Basemath, Hittites) (Genesis 26:34)
(16) Jacob served 7 years for Rachel (but got Leah) (Genesis 29:18)
(17) Jacob served 7 years more (but got Rachel at the beginning) (Genesis 29:30)
(18) Joseph was born at the end of the last 7 years (Genesis 30:25)
(19) Jacob served 6 years more for cattle (Genesis 31:41)
(20) Jacob served 20 years in all (Genesis 31:38, 41)
(21) Isaac lived 180 years (Genesis 35:28)
(22) When Joseph was 17 he incurred the disfavor of his brothers (Genesis 37:2)
(23) Joseph remained in prison 2 years after the butler/baker dreams (Genesis 41:1)
(24) Joseph was 30 when released from prison (Genesis 41:46)
(25) Joseph's two sons were born before the years of famine (Genesis 41:50)
(26) 5 years of famine remained when Joseph disclosed himself (Genesis 45:6, 11)
(27) Jacob was 130 when he came before Pharaoh (Genesis 47:9)
(28) Jacob lived in Egypt 17 years (Genesis 47:28)
(29) Jacob lived 147 years (Genesis 47:28)
(30) Joseph lived 110 years, long enough to see great grandsons (Genesis 50:22-26)

Since Abraham was 75 when he moved from Haran to Canaan, and 100 at the birth of Isaac, this was 25 years after Abraham came into Canaan. Isaac was born 60 years later, and Jacob was 130 when he moved to Egypt. So the total from Abraham entering Canaan to Jacob entering Egypt was (25 + 60 + 130 =) 215 years.

Since Joseph was 30 when elevated from prison, he was 39 after two years of famine when Jacob moved to Egypt at age 130. Therefore Jacob was 91 years when Joseph was born. This was 7 years after his marriage to Leah and Rachel, and as Joseph was born after the six sons born to Leah, and
Leah did cease to bear temporarily after her fourth child Judah, her first child Reuben must have been born as soon as reasonably possible after her marriage to Jacob. Thus Jacob was apparently \((91 - 6 =) 85\) when Reuben was born, 84 when he married, 77 when he secured his birthright blessing and fled to Laban, and 97 when he left Laban after 20 years.

As Joseph was apparently sold at age 17 and released at age 30, he was 13 years in Egypt before his elevation, 22 years in Egypt before Jacob joined him, and with Jacob again 17 years more.
Endnotes

1. Special thanks to Brothers James Parkinson, Larry Schneider, Stephen Suraci, Charles Ryba, Donald Holliday, and Sisters Bonnie Gaunt and Ruth Eldridge, who have all responded to my inquiries by sharing generously and freely their studies, researches and sources. Several suggestions original with them have been incorporated in this study, though I do not oblige them to my conclusions. Many books and articles were consulted in this study, but mention should be made of three books whose contributions were specially significant. They are The Mysterious Numbers of the Hebrew Kings by Edwin Thiele (1965 edition), The Gentile Times Reconsidered and its Supplement by Carl Olof Jonsson, and Kingdom of Priests, A History of Old Testament Israel, by Eugene H. Merrill.

SECTION 2

2. This edition was produced by copying. A title page says "reprinted 1979, 200 [edition], Leaves-of-Autumn Books, P.O. Box 440, Payson, AZ 85541." Regarding Joshua Himes, a history of the Miller movement titled Millennial Fever and the End of the World refers to him as the public relations mastermind behind the movement. See also Froom IV, 789, subhead "How Miller First Fixed Upon the Year 1843."

3. "Between Germany's Johann Petri (d. 1792) -- who was the first to enunciate the principle that the 70 weeks of years comprise the first part of the 2300 year-days, and that they begin synchronously -- and America's John Robinson (1843), some seventy expositors employed this principle and applied this procedure. Indeed, it came to be regarded as axiomatic, and was considered as perhaps the final factor essential to the unsealing of this portion of Daniel relating to the last things, which had not been clearly understood until the close of the eighteenth century. Then, at this point of time, many expositors, standing at the dawn of the nineteenth century, expressed the conviction that mankind had now entered the 'time of the end,' elsewhere denominated the 'latter days,' or 'last days.'" (Froom IV, 407)

4. The application of the 2300 days prophecy was a key ingredient of Miller's scheme. However, he was not the first to embrace it. Froom cites "seventy-five prominent and respected voices ... [who] all appeared prior to the publication of William Miller's first book on prophecy in 1836" who held these years would terminate "about 1843-1847." (Froom IV, 403)

5. Froom gives two footnotes on this matter. In the first he cites Bliss: "If, therefore, the 2300 years began at a given point in the year 457 bc they will not end until the same point is reached ad 1844. (Bliss, 'Chronology,' Signs of the Times, June 21, 1843, p. 123.)" In the second he explains "The reason for this subtraction fallacy [2300 - 457 = 1843] is that the year immediately before ad 1 is bc 1. There is no zero year. Hence, simple subtraction cannot be used in reckoning from bc to ad in chronology. Astronomers have a different method of computing that avoids this inconvenience" (Froom IV, 791). For a description of the "Seventh-Month Movement" see Froom IV, chapter 38, page 810 and following.

6. One might wonder why it was difficult for Miller to change from 1843 to 1844, if the reason for the change was as straightforward as accounting for no zero year. This reason is this. Miller judged that the 490 years of Daniel 9 were the first part of the 2300 years of Daniel 8. (Volume 3 uses the same approach.) Miller marked the end of the 490 years at the death of Christ, which he correctly placed in the year 33 ad. Therefore 1810 years more had to run from 33 ad to the end of the 2300 years (2300 - 490 = 1810). Thus the 2300 years end in 1843. (Harvest Gleanings I, 88)

So how did those who changed from 1843 to 1844 answer this difficulty? By differing with Miller on the end of the 70 weeks. "The scholarly associates who soon joined Miller adopted the A.D. 31 crucifixion date advocated by Chronologist William Hales, and reckoned this A.D. 31 date as the 'midst' of the seventieth week, thus ending the seventieth 'week' in the autumn of A.D. 34, and in consequence ending the connected 2300 years, from which it was 'cut off,' in the autumn of 1844" (Froom IV, 408). One factor which made this change appealing to them is that it allowed but 3½ years for Jesus' ministry, which is more consistent with the gospels than the seven years Miller allowed.
7. There is a one year disparity between 1872 and 1873. In *The Three Worlds*, in the chapter on Bible Chronology, Barbour is unambiguous in dating the end of the 70 years of desolation to the 7th (Jewish) month, 536 bc. Using this premise, he correctly reasons that "The six thousand years did not end in 1872, but in the autumn of 1873" (Harvest Gleanings I, 47). In this way he avoids the disparity. However, his treatment of the Times of the Gentiles in the following chapter does not continue this precision. There he states "2520 years from B.C. 606 will end in A.D. 1914, or forty years after 1874" (page 50), whereas precision would have brought him to autumn of 1915.

Other adventists evidently agreed with Barbour in ending the 6000 years in 1873. (Notice the references to this date in R188 thrice, R289 once.) Perhaps it was because of the familiarity of this date with some of his readers that Bro. Russell also frequently used this date (B39, B40, B41, B51, B54, B55, Cii). But he did not mean the same thing as Bro. Barbour did. When he said "from the creation of Adam to A.D. 1873 was six thousand years" (his emphasis), he meant "the year 1872 A.D. [was] the year of the world 6000, and 1873 A.D. the commencement of the seventh thousand period, the seventh millennium" (B39, 54). He is rounding off to whole years. This is clear from his precise statement in Volume 3. "The exact Bible Chronology points to October 1872 as the beginning of the seventh thousand years, or Millennium" (C127, see also his footnote on that page).

However, if you attach the thread of Volume 2 chronology to the autumn of 536 bc -- which he did -- and account for no zero year between bc 1 and ad 1 -- which he did not -- actually the end of 6000 years would be autumn of 1873. For more on the zero year issue see Section Three.

8. Bro. Russell was never an adventist, but many of his early associates had been, including Bros. Barbour, Paton, and Stoors. "Looking back to 1871, we see that many of our company were what are known as Second Adventists, and the light they held briefly stated, was that there would be a second advent of Jesus -- that he would come to bless and immortalize the saints, to judge the world and to burn up the world and all the wicked. This, they claimed would occur in 1873, because the 6,000 years from the creation of Adam were complete then." (R188)

SECTION 3

9. A one year change is introduced for the beginning of the 1260, 1290 and 1335 years. Rather than beginning them as Miller did in 538 (when General Belisarius left the Pope in control of Rome), Bro. Russell used the year 539 (the year the Gothic ruler Vitiges, and his capital Ravenna, were subdued). For an excellent review of these years see the article "A Little Horn," * Beauties of the Truth*, August 1992. On page 6 of that article the date of the return of Belisarius to Constantinople is correctly stated to be the spring of 540 (the chart on page 5 could be misunderstood). Procopius, who attended Belisarius to record his battles, wrote "And Belisarius took his way to Byzantium; and the winter drew to its close and the fifth year ended in this war, the history of which Procopius has written." The end of the winter following the fall of Ravenna was the spring of 540, as reflected in a marginal note in the book mentioned below. I mention this because I will later refer to 540 as a significant date. (Loeb Classical Library, *Procopius IV, Books VI and VII*, Harvard University Press, London, 1962 edition, page 147)

SECTION 4

10. There is a school of thought which considers this date off by more than 80 years, but it is not represented in our fellowship. The basis for the dispute is the wish to begin the 70 weeks prophecy with the decree of Cyrus, which requires a large reduction in Persian history. This view is championed by Martin Anstey in *The Romance of Bible Chronology*. Regarding this, and for a good rebuttal, see Adam Rutherford's lengthy footnote (Rutherford, 15-20).

11. According to Daniel 5, the Babylonians were in festival the evening of their capture. The tablet record of this event gives an interesting confirmation of Daniel's record. "According to the chronicle, Babylon was taken on the sixteenth of Tasritu. Accepting that Nabonidus imposed new features of the cult of Sin in the capital after his return from Teima, it is conceivable that festivals linked with the cult of Sin at Harran were transplanted to Babylon, perhaps even the akitu festival. This festival started on the seventeenth of Tasritu. As Babylon was captured on the eve of the seventeenth, the festivities mentioned by Herodotus and the Book of Daniel may have been those of the Harran akitu festival, as
celebrated in the capital by the supporters of Nabonidus." (Beaulieu, 226)

12. Cyrus entered the city about 3 weeks later, "on the third day of the month Arahsamnu, Cyrus entered Babylon" (the Nabonidus Chronicle, cited in Beaulieu, 224-225). However, he was recognized as the new emperor from the time Babylon fell. "A tablet from Uruk, GCCI 1:390, was still dated to Nabonidus' reign on Tasritu 17 (October 13), and this date must mark the official end of his reign. Two days later, on Tasritu 19 (October 15), a Sippar tablet, recently published as CT 57:717, was dated to the accession year of Cyrus." (Beaulieu, 230-231)

13. A small adjustment to this date was proposed by Bro. Adam Rutherford, whose devoted labors in this field are familiar to many brethren. He believed there should be a two-year shift in all the dates of the Neo-Babylonian empire, so that the fall of Babylon occurred in 537 bc. By this means he was able to mark the beginning of Babylon's 70 years at 607 bc, and thus end the Gentile Times at 1914, without disputing the historical testimony about the span of years between Nebuchadnezzar and Nabonidus. (For his interesting and thorough discussion see Rutherford, 25-67.)

However, these points should be noted regarding his presentation. (1) The observation that "no astronomical fixing has as yet been possible from the reign of Nebuchadnezzar to Cyrus inclusive" (526) is controverted by VAT 4956 which astronomically dates the 37th year of Nebuchadnezzar to 568 bc. (2) His suggestion of a two-year stagger between Cyrus and his son Cambyses (535) is disputed by the 18-year eclipse cycle tablets which span the period from Nabopolassar through Artaxerxes, and the evidence of over 1400 commercial tablets published in list form in the late 1980s which cover the reigns of Cyrus and Cambyses. The latter was published after Rutherford's death, and he may have been unaware of the former. (3) He remarks on the Adda-Guppi Stele to support a two-year stagger in linking Assyrian history with Babylonian (540-544). This tablet recites the long life of Adda-Guppi, who was the mother of Nabonidus, the last king of Babylon. It says she was born in the 20th year of Ashurbanipal (Assyrian king), and lived through his 42nd year, then 3 years of the reign of Ashur-etil-ilani (Assyrian king), 21 years of Nabopolassar (Babylonian king), 43 years of Nebuchadnezzar (Babylonian king), 2 years of Amel-Marduk (Babylonian king), 4 years of Neriglissar (Babylonian king), and to the ascension of her son Nabonidus to the throne of Babylon. The age given her in the tablet at that time is 95 years. Indeed, $22 + 3 + 21 + 43 + 2 + 4 = 95$ years. Yet conventional history assigns to this span 93 years. The answer? Evidently Adda-Guppi moved from the jurisdiction of the Assyrian kings to the jurisdiction of the Babylonian kings when she was 25 years old, during the 3rd year of the reign of Ashur-etil-ilani. This neither requires he died in his third year (in fact there is a tablet from his fourth year, see Jonsson 210, note 63), nor that she moved in the accession year of Nabopolassar (conventional history implies she made the move in his second year). Evidently the scribe merely added up the figures listed, and incorrectly inscribed an age for this matriarch of 95 years.

SECTION 5


15. Beaulieu argues from commercial tablet dating that Labashi-Marduk was recognized for 2 months in Babylon, and 3 months in outlying areas like Uruk. "According to Berossus, Labasi-Marduk reigned nine months, which is impossible according to dated documents. It is likely that, if Berossus' own manuscript used a numeral instead of the spelled-out number, confusion between 9 (theta) and 2 (beta) could easily have arisen, hence the original text may have said two months (Parker and Dubberstein 1956, 13). The Uruk king list credits him with a reign of three months (Grayson 1980, 97), data not at variance with documents from this city, especially YBC 3817, which shows that Labasi-Marduk was recognized as king there until at least June 19 (Goetze 1944, 44)." (Beaulieu, 86-87)

16. This relationship was confirmed from original tablets in the landmark work Nabonidus and Belshazzar, 1929, by Prof. Raymond Philip Dougherty of Yale University. He thus silenced the arguments of critics that Belshazzar was a fiction of Daniel's imagination. Daniel 5:16 is consistent with the finding that Belshazzar was second in command, as the highest prize he offered was "third ruler in the kingdom." Belshazzar was elevated to kingship evidently in the third year of Nabonidus, for Dougherty remarks that a tablet from that year says "He entrusted a camp to his eldest, firstborn son ... he entrusted the kingship to him" (Dougherty, 106).
17. Herodotus describes Nitocris, the Queen of Babylon, as an intelligent and accomplished woman. He concludes his review of her achievements with this sentence. "The expedition of Cyrus was directed against her son, who, like his father, was called Labyntetus and was king of Assyria" (Herodotus, section 190, page 117). Evidently he means Belshazzar, to whom he assigns the name of his father. ("Assyria" was frequently used for Babylon.) It is not difficult to see in his father's name Labyntetus the Nabonidus of history. Since Daniel 5:2, 11 refers to Nebuchadnezzar as father (grandfather) of Belshazzar, it is likely that Nitocris, the mother of Belshazzar and wife of Nabonidus, was a daughter of Nebuchadnezzar (since Nabonidus was not a son of Nebuchadnezzar). Dougherty expands at length on this possibility (Dougherty, 60-63). If Nitocris was a daughter of Nebuchadnezzar, then Jeremiah 27:7 is fulfilled, though in a way different than one might have supposed. "And all nations shall serve him [Nebuchadnezzar], and his son [Amel-Marduk], and his [Nebu's] son-in-law, Nabonidus']s son [Belshazzar], until the very time of his land come: and then many nations and great kings shall serve themselves of him."

18. Megasthenes and Jerome begin their lists with Nebuchadnezzar. Jerome gives 43 years for Nebuchadnezzar, but otherwise neither lists the years of reign. Polyhistor, Ptolemy and Syncellus omit Labashi-Marduk, whose few months are included chronologically in the last year of Neriglissar. The reigns allotted by Berossus, Polyhistor, Ptolemy and Syncellus (twice, different works) for Nabopolassar, Nebuchadnezzar, Amel-Marduk, Neriglissar and Nabonidus, respectively, are: 21 21 21 21, 43 43 43 43 43, 2 12 2 3 5, 4 4 4 5 3, 17 17 17 34 17 (Dougherty, 7-10). Josephus is not separately listed evidently because he cites others. There are four places where Josephus gives figures pertinent to our study. (#1, Ant. X, 11, 1-2): He gives 21, 43, 18, 40, 9 months. (#2, Ant. XI, 1, 1): He says "In the first year of the reign of Cyrus, which was the 70th from the day that our people were removed out of their own land into Babylon ..." (#3, Apion 1, 19): "... set our temple that was at Jerusalem on fire ... and removed our people entirely out of their own country, and transferred them to Babylon; when it so happened that our city was desolate during the interval of seventy years, until the days of Cyrus king of Persia." (#4, Apion 1, 20): He gives 29, 43, 2, 4, 9 months, 17. He then adds: "Nebuchadnezzar, in the nineteenth year of his reign, laid our temple desolate, and so it lay in that state of obscurity for fifty years ... in the second year of the reign of Cyrus, its foundations were laid and it was finished again in the second year of Darius." He adds a chronology of the kings of Tyre to verify his figures. (For a discussion of Tyrian chronology see Jonsson, Supplement, 25-27.) Clearly there are conflicting elements in Josephus' testimony. Whether the corruption of 18 for 2, 40 for 4, and 29 for 21 were in his sources, errors of his own, or copyist errors after he wrote, I do not know. I think he is drawing his comments about 70 years from an incorrect reading of the scriptures, and his comments about 50 years from a computation of the figures of Berosus, who is his authority. Josephus does not allude to the disparity in his figures.

19. Much of this information is found at greater length and in more detail in Jonsson, chapter 2, and in his Supplement.

20. Grayson's 1975 translation says Hamath rather than Hatti here. In a personal letter to me from Professor Wiseman on this detail (12 March 1990), he acknowledges that the tablet is damaged at this point and that Hamath is a likely reconstruction, though either is possible. Grayson says "Ha-[ma-a]-tu: A restoration Ha-[at]-tu is to be rejected on the grounds that otherwise it appears Hat-tu in this chronicle." (Grayson, 99)

21. See note 13 for comments on the Assyrian kings mentioned in this text, and on the 95 year total.

22. Amel-Marduk and his 2 years are not mentioned here. This is probably an evidence that she and her son Nabonidus were not specially favored by Amel-Marduk, rather than evidence of a faulty memory. Of Nebuchadnezzar and Neriglissar, she says her son Nabonidus "performed his duty for them day and night by doing always what was their pleasure. He also made me a good name before them and they gave me an elevated position as if I were their real daughter" (Pritchard, 561). In the same vein, Nabonidus elsewhere says: "I am the strong delegate of Nebuchadnezzar and Neriglissar, my royal predecessors ... I fulfill their wishes. Awel-Marduk, the son of Nebuchadnezzar, and Labasi-Marduk, the son of [Neri]glissar, [tablet then unclear]..." (Beaulieu, 110). Clearly his esteemed memory of the first two
did not mean he forgot the other two. Apparently AM and LM, who were both overturned in coups, were simply disesteemed.

23. Beaulieu concludes "there is little doubt that the king had this dream in his accession year" (Beaulieu, 108). However, the actual rebuilding did not commence for some time. Nabonidus goes on to explain that the powerful Medes controlled Harran until conquered by Cyrus, which Nabonidus said began in his third year (Beaulieu, 106-110). The Adda-Guppi Stele also mentions that Sin chose Nabonidus to "(re)build the temple Ehulhul and ... lead Sin ... into the temple." (Pritchard, 561)

24. This quote is an English rendering of the German from Bruno Meissner, "Babylonien und Assyrien," Heidelberg, 1925, Volume II, page 331. I assume the English rendering is by Jonsson, though he does not specify this.

25. W. St. Chad Boscawen, "Babylonian Dated Tablets, and the Canon of Ptolemy," in Transactions of the Society of Biblical Archeology (London, January 1878), Volume VI, 1-78. I have not seen this report. My summary is from Jonsson, 61-63, who quotes Boscawen: "there ought to be but little difficulty in establishing once and for ever the chronology of this important period of ancient history" (page 11 of his report).

As a second witness concerning these tablets, we gleaned the following from Martin Anstey, an English writer who published in 1913. "Table-case G in the Babylonian and Assyrian Room of the British Museum, contains a most important and valuable series of clay tablets, dating from the 1st year of Nebuchadnezzar to the 36th year of Darius. These are largely legal and commercial documents ... of the great mercantile house ... named Egibi or Sin-muballit ... Transactions are recorded in every one of the 43 years of Nebuchadnezzar ... the 2 years of Evil-Merodach ... the 4 years of Nergilissar ... the accession year of Labashi-Marduk ... the 17 years of Nabonidus ... the 9 years of Cyrus ... the 8 years of Cambyses ... “ (Anstey, 130)

26. One might wonder that the books did not at least include some odd dates due to typographical errors. In fact we did find several, but upon checking they were included in a list of errors published in Jonsson's Supplement, page 14. These had been rechecked for Jonsson by Donald Wiseman of the British Museum, and found to be either misreads or (more probably) simply typos. In most cases the error was in listing "Nbn" (for Nabonidus) rather than "Nbk" (for Nebuchadnezzar). There is a notable exception, but it affects a later king in the Persian period, after Darius Hystaspis.

27. I have not independently checked this material. Jonsson says "These observations are dated with the regnal years and the names of the kings. This tablet alone provides a completely reliable network of absolute dates for this period, settles the total length of the Neo-Babylonian era, and establishes the absolute chronology of this period" (Jonsson, 42). I do not dispute this claim. However, in any string of 10 eclipses, each separated by 18 years, 10b days, I suppose some of them would be in the daylight hours relative to Babylon, making them invisible. If the eclipses mentioned in this tablet were not all observed, it diminishes the strength of the absolute dates only a little.

In a telephone discussion 2/22/95 with Professor Arthur Young of SDSU, from whom I received a fascinating semester of beginning astronomy about 27 years ago, he pointed out what is evident enough from the numbers: that if an eclipse on an 18 year 10b day cycle appeared a given evening, the eclipse 18 years hence would be displaced about 16 hours, the eclipse 36 years out would be displaced 32 (therefore 8) hours, and the eclipse 54 years out would appear about the same time of day as the original eclipse. Therefore at least one, and possibly both of the following two eclipses would be during daylight hours for the original observer (and therefore invisible to him), but the one 54 years out would be visible again. (This he connected with the 54 Aubrey holes of Stonehenge which could be used as an eclipse predictor.) However, he continued, the ancients had sufficient awareness to know the circumstances which made a lunar eclipse impending, for example if one day the moon was just south of the ecliptic, and the next day just north of the ecliptic, they knew an eclipse had occurred whether it had been visible to them or not. (For more on the 18 year cycle, see notes 30, 31.)


30. This 18 year pattern of eclipses is not to be confused with the 19 year Metonic cycle of lunar months.

31. These lists are often called Saros Tables or Saros Tablets. Grayson calls them "Eighteen-year Interval Lists," and appends the following explanation. "When first published, the nature of this document was misunderstood and it was incorrectly called the Saros Tablet. The mistaken interpretation of the text and its misnomer arose from a misunderstanding of the term saros. O. Neugebauer has shown that although Berossus used the term saros (from Sumerian sa-ra) as a designation of a period of 3600 years, a later misunderstanding led to the erroneous conclusion that saros was the Babylonian designation for a period of 223 months (= 18 years, 10.8 days). When the present tablet was first discovered and published by Pinches, Oppert immediately connected this list of eighteen-year intervals with the idea that saros was the Babylonian designation for an eighteen-year period. Since it is now known that saros is not a term for an eighteen-year period, this text cannot possibly be a Saros Tablet." (Grayson, 195-196)

In a recent article by Paul-Alain Beaulieu and John P. Britton appear these comments on the cycle. "The use of the term 'Saros' to denote the eclipse cycle of 223 months is a modern anachronism which originated with Edmund Halley [Phil. Trans. (1691) 535-40] and was propagated by Simon Newcomb, despite efforts to correct it. For an account of its history see O. Neugebauer [1957, 141-43] and HAMA, 497 n 2. The Babylonian name for this interval was simply '18 years' " (footnote, page 78). Other comments from this article add the following information. "One Saros cycle reflects approximate returns in lunar velocity and longitude as well as nodal elongation, a fact which made the Saros a convenient interval for investigating lunar visibility phenomena as well as eclipses, and which ultimately gave the Saros a central role in the development of the mathematical lunar theory known as System A ... Reflecting the inaccuracy of the eclipse cycle, however, the magnitudes drop steadily with each Saros, and eclipses disappear altogether after seven Saros cycles." ('Rituals for an Eclipse Possibility in the 8th Year of Cyrus," Journal of Cuneiform Studies, Volume 46, 1994, 78, 79.)

SECTION 6

32. Josephus says Tyre was sieged for 13 years, beginning in the 7th year of Nebuchadnezzar (Apion 1, 21). According to this Tyre fell in the 20th year of Nebuchadnezzar, two years after Zedekiah. Ezekiel 26:1 and context confirms that Tyre fell sometime after Zedekiah. If this were the only exception, one might reason that Tyre was subordinate from the time the siege began, and escape the difficulty (but see next paragraph). But Elam and the Medes are not so easily dismissed. The Medes were independently battling the Lydians on May 28, 585 bc when the affair was interrupted by a solar eclipse (Herodotus 1:74, 103 / Beaulieu, 80), and Nabonidus was hindered by the Median power from restoring Elulhul in Harran early in his reign (Beaulieu, 241). Elam was ruled by Persia (Ezra 4:9, Daniel 8:2) and therefore controlled by Cyrus before the fall of Babylon. Cyrus conquered the Medes 11 years before the fall of Babylon according to the Nabonidus Chronicle. (Grayson, 106)

Actually, even the argument for Tyre is not easily dismissed, for Josephus was evidently incorrect in assigning the beginning of its siege to 7 Nebuchadnezzar. "The statement made by Josephus, that the 13-year siege of Tyre by Nebuchadnezzar started in his seventh year, is demonstrably wrong. This siege started shortly after the destruction of Jerusalem in the 19th year of Nebuchadnezzar, probably in 586 bc (see Ez. 26:1, 7, and Ez. 29:17, 18). Therefore, the siege of Tyre is usually dated to the period 586-573 bc. The seventh year of Nebuchadnezzar is either a mistake by Josephus, who was often confused on chronological matters and sometimes contradicted himself, or a corruption of the original text" (Jonsson, Supplement, 25-26). He then shows that the Phoenician record for Tyre is consistent with its siege starting in 19 Nebuchadnezzar, the year after the fall of Zedekiah.

33. These events are fully described and dated in the Babylonian Chronicles of the last years of Nabopolassar, the father of Nebuchadnezzar. The fall of Nineveh is recorded in the Chronicles for his 14th year, the fall of Harran in his 16th, and the abortive Assyrian-Egyptian counter offensive in his 17th. (On Pharaoh Necho's way to assist Assyria in this year, 609, he encountered and defeated Josiah.) The accounts appear in the works of both Wiseman and Grayson.
34. This assumes that Ezra 3:8 refers to the spring of 537 bc, which assumes the Jews had returned by the previous Tishri, 538 bc. If it was one year later, then the interval was nearly 17 years.

SECTION 7

35. Babylonian Chronicle 4 includes this mention for year 20 Nabopolassar: "the king of Akkad ... had his army cross the Euphrates and they captured Shunadiru, Elammu, and Dahammu, cities of Syria" (Grayson, 98). Wiseman says "These sites are unknown and their location depends on the position of Quramati. They must have been on the west of the Euphrates between Raqqa and Qara Membij ... the forms of these three names ... may be Hurrian and fit the geographical nomenclature of the upper Euphrates" (Wiseman, 84). Evidently it is not credible to identify Elammu with Jerusalem, a suggestion I once encountered but cannot now locate.

36. Necho claimed that "God commanded me to make haste" (2 Chronicles 35:21). Evidently this was not correct, for God did not give Necho the victory -- Necho and the Assyrians failed to retake Harran. Notice a similar fraudulent claim by Sennacherib in Isaiah 36:10.

SECTION 8

37. See B67. I do not have the works of Hale or Priestley, and I am therefore unable to know why they make a change of nine years. However, the necessary change is one of ten years, and this is supported by Hengstenberg in his extensive treatment of the subject in Christology of the Old Testament. For a statement of this position see Great Pyramid Passages, Volume 2, Section LIX, "The Twentieth Year of Artaxerxes," which draws on Hengstenberg's work.

38. That Ahasuerus was Xerxes is generally agreed (R3656, para. 7). Mc&S, "Ahasuerus, #3," strengthens the identification with these observations: (1) In the third year of Xerxes he made a great feast to plan the invasion of Greece (Herodotus vii, 7). In the third year of Ahasuerus he made a great feast of 180 days. (2) In the 7th year of Xerxes he returned from Greece, defeated, and consoled himself with the pleasures of the harem (Herodotus ix, 108). In the 7th year of Ahasuerus Esther was sought and brought before the king. His absence in the interim explains the four year gap between the deposing of Vashti and the selection of Esther. (3) Esther 10:1 says Ahasuerus "laid a tribute upon the land, and upon the isles of the sea." Perhaps this was to recoup the losses of his disastrous Grecian campaign (or to prepare for the campaign, if out of sequence).

Two other matters about Xerxes are noteworthy. (1) He is the king spoken of in Daniel 11:2. The prophecy was given during the reign of Cyrus (10:1), and the three kings who intervened were Cambyses, Smerdis, and Darius I. (2) Some are dubious about the Biblical narrative that Esther became his queen, because Herodotus names his queen Amestris, a cruel and vengeful person (Herodotus 9, 109-112). It may be that Vasthi and Esther were queens of the harem, rather than queens of state. This would explain (a) how the real queen of state could be the cruel Amestris, (b) why the main qualification for the position of Vashti and Esther evidently was great physical beauty, whereas pedigree was important to queens of state, (c) why Esther's access to the king was restricted, whereas Herodotus' account of Amestris implies no such restrictions, (d) the oddity for Persia to have no queen of state for four years from Vashti to Esther.

39. Those who have read the Hengstenberg arguments know they involve the experiences of Themistocles, the Athenian general (turned naval exponent) who was responsible for the Grecian sea victory over the Persians at the Battle of Salamais (480 bc), early in the reign of Xerxes. It is one of the most significant battles of history. Had not the comparatively small number of Greek ships put to shame the massive Persian fleet through remarkable circumstances, it is likely the Greeks would have been overwhelmed, the conquests by Alexander 1½ centuries later precluded, and the course of history substantially altered.

Notwithstanding the great debt of the Greeks to Themistocles, he later fell out of favor and was ostracized. One of his peers, Pausanias, began a treasonable correspondence with the Persians, and though initially acquitted for lack of evidence, such was afterwards supplied and he was condemned. Because of his association with Themistocles, the latter was also charged (such charges were common in those days). Therefore he fled, first to Admetus, king of the
Molossians, and subsequently to Persia where he appeared, according to Thucydides, before the newly-ascended Artaxerxes who granted him asylum. These episodes are narrated by both Thucydides (1, 130-146) and much later by Plutarch (Lives, “Themistocles”). I have read both accounts.

The arguments of Hengstenberg (sections 734-753) are difficult of apprehension, and many have to do with the circumstances of Themistocles’ flight. As Themistocles was a prominent person, references to him and to others with whom he interacted are included in the works of several classical authors. The problem is that not all these sources (which Hengstenberg sometimes quotes in Latin and Greek) are consistent. Hengstenberg builds his case by affirming those testimonies which blend to one solution, and denying those testimonies which blend to another. In some telling areas, disparate versions differ in the essential facts. The arguments are too varied and complex to reproduce here, nor do I claim to be their adequate judge. Talented scholars of the past have been divided on them.

But today we have first-hand evidence to resolve the issue without recourse to these involved arguments from secondary and conflicting sources. The first-hand evidence is emphatic that Xerxes reigned 21 rather than 11 years. With this in view, three items of the involved discussion are worthy of note. (1) No ancient source tells us Xerxes reigned 11 years. This is merely supposed from evidence which seemed against a 21 year reign, and a surmise that the Greek Æ (for 11) was mistaken for Æ (for 21) in the Canon of Ptolemy. (2) The date of the Athenian victory at the mouth of the river Eurymedon, which is material to the discussion, is given as 470 bc by Hengstenberg, but 466 bc by a modern source (Yamauchi, 249, who acknowledges the date is disputed). (3) Plutarch affirms that Themistocles was still young at the battle of Marathon (490 bc), whereas the 11-year view makes him about 45 at the time.

40. Bro. Adam Rutherford added two more items of evidence. "A cuneiform tablet from Persepolis is dated the 12th month of the 20th year of Xerxes (son of Darius Hystaspes). This tablet is now numbered: A23253 Oriental Institute of Chicago. When a document is dated the accession year of a king, the year of the reign of the former king who occupied the first part of the year is sometimes given (as it takes the portion of the last of the previous king and the accession portion of the new king to make the complete year). Fortunately a papyrus has been discovered which is dated the 18th day of the 9th month of year 21; accession year of Artaxerxes (son of Xerxes). It is Aramaic Papyrus No. 6 from Assuan. This is direct first-hand evidence that Xerxes reigned 21 years and that the accepted chronology is correct” (Rutherford, II, 437, footnote). This is excellent evidence. Bro. Rutherford cites Parker and Dubberstein's "Babylonian Chronology 626 bc - ad 45 [sic]." I do not find this in my copy, evidently a different edition.

41. One might suppose that the Nehemiah option can be saved by postulating a 10 year coregency between Xerxes and Artaxerxes. But other than the fact there is no evidence for it, there is forbidding evidence against it. (1) Artaxerxes was the third son of Xerxes and Amestris, Darius and Hystaspes being his elder brothers (not to be confused with Darius Hystaspes, who ruled before Xerxes). Therefore Artaxerxes was not the heir apparent. (2) Xerxes was killed by one Artabanus, who obtained the throne for himself for a few months. If Artaxerxes had been a coregent, he would have received the throne immediately. (3) "According to Ctesias, Artabanus deceived Artaxerxes into believing that Xerxes was killed by his brother Darius, the crown prince. After some months, Artaxerxes, who was but eighteen years old, managed to kill his brother Darius (Diodorus 11.69.1-5). Artabanus then tried to kill Artaxerxes, but was killed by Artaxerxes instead. Artaxerxes then defeated his brother Hystaspes in Bactria" (Yamauchi, 248). All of this speaks against a coregency; and specially a 10 year coregency, which would have begun at the tender age of 8.

42. It is worthy of note that the Ezra decree fits the prophecy to the proper season of the year. The Nehemiah decree does not. It was given in the month Nisan, so the midst of the last week was in the fall. Yet Jesus, who according to this view died in the middle of the week, died in the spring. Perhaps this is insisting on too much precision; we seldom press this issue on other prophetic dates. But the prophecy itself splits the last week and therefore raises the issue. One expedient is to assume the "going forth" of the command was some months after the king gave it, when Nehemiah made it public in Jerusalem -- an expedient made unnecessary when we adopt the Ezra decree.

43. The debate usually involves Isaiah 45:13, but Isaiah 44:28 renders this text expendable for this discussion. Nevertheless, a comment on it may be of interest. At issue is the word city: "he shall build my city." If this means Jerusalem, then this is a second testimony that the decree of Cyrus qualifies. But since the word can be rendered with
wide latitude, the argument is that "city" is not a necessary translation, and the Hebrew word "ir" in this text really means the court walls of the temple, something like 2 Kings 20:4 where the word is rendered "court." This of course may be correct. But it probably is not, for two reasons. (1) When the court of the temple is meant this word is never once elsewhere used in the Old Testament to refer to it (2 Kings 20:4 refers to court of the royal residence). (2) "Ir" was the normal and usual word for "city" in the Old Testament. "City" or "cities" appears over a thousand times, and 94% of the time it comes from the word "ir" (as it does for example in Nehemiah 2:5).

44. Hengstenberg (section 678) makes two observations which he takes to mean the 70 weeks began after the first rebuilding efforts. (1) "Seventy weeks are determined upon thy people and thy holy city" implies the city existed (and therefore some rebuilding occurred) before the 70 weeks. (2) The temple is not mentioned in the rebuilding (verse 25), though it is specified in the Roman destruction (verse 26). This omission hints that the temple rebuilding would precede the 70 weeks, and indeed it was completed in the reign of Darius a generation before Artaxerxes.

45. Ezra chapter 4 is a confusing passage because of a long parenthesis in verses 6-23. If you omit those verses, and read the 4th chapter joining verse 5 to verse 24, the passage is clear. After Cyrus (and Cambyses and Smerdis) came Darius I, who is mentioned in both verse 5 and verse 24. Verses 6 to 23 speak of events in the reigns of Ahasuerus (Xerxes) and Artaxerxes, who followed Darius. They are interposed out of sequence because they are linked to the subject of verse 5 -- tactics of the Samaritans to halt the rebuilding.

46. Today many fundamentalists hold the odd view that the 70th week of Daniel's prophecy is separated from the 69 by the centuries of what we call the Gospel age. Froom's comment on this innovation is of interest. "... While these 75 expositors began the 2300 years synchronously with the 70 weeks of years ... not one of these Old or New World scholars separated the seventieth week from the preceding 69 weeks. Such a procedure in Protestantism was a later development on the part of a single group, stemming out of the pro-Catholic positions espoused by James H. Todd (d. 1869) and William Burgh (d. 1866). This, in turn, was later championed by the Futurist Plymouth Brethren, and is presently held by most Fundamentalists.

"This comparatively recent isolation of the seventieth week, thrusting it forward into the future, has therefore neither warrant of Protestant Reformation exposition nor of post-Reformation interpretation, until one comes to Todd, who followed the historical critic Samuel R. Maitland, who in 1826 sought to counter or undermine the premillennial Advent Awakening witness in Britain. And this in time affected the American Dispensationalist and Fundamentalist groups." (Froom IV, 408)

SECTION 9

47. Theoretically there could also be interregnums between rulers which would expand the period of the kings. For example, although very rare, this did happen on occasion in Babylon during the time of the Assyrian dominance. However, neither the textual history nor the numerical data recorded in the scriptures for the Kings of Israel and Judah imply any interregnums. A little reflection suggests that in any independent kingdom, the lack of a sovereign would be an exceptional state of affairs.

48. Athaliah's period was also according to the non-accession-year system, but her reign went into a seventh year. Deducting one from seven leaves six, but as six years is the period assigned in Volume 2, no adjustment is required. The coregency of Manasseh with Hezekiah was 10 actual years, but it spanned portions of 11 regnal years. Therefore it means an eleven year adjustment. On some occasions I have said it required a ten year adjustment, but this was imprecise and therefore incorrect.

49. It is sometimes claimed that the scriptural synchronisms between Israel and Judah are late additions to the text rather than original information. This suggestion is rooted in two sources: (1) the apparent difficulty in reconciling these texts, or (2) a wish to render their testimony ineffective. In fact there is no evidence that these synchronisms are either late or contrived. They are as original and authentic as any of the numerical data in Kings and Chronicles. Their faithful reproduction is a credit to generations of Hebrew scribes who conscientiously transcribed numbers which were
confusing even to them.

The harmony of these scriptures and their relation to the Assyrian records is explained at length in the landmark work, *The Mysterious Numbers of the Hebrew Kings* by Edwin Thiele, copyrighted in 1951. His essential conclusions have been widely followed by scholars, and properly so. I have the 1965 edition -- which I prefer and recommend -- and the 1983 paperback edition, which presents the same conclusions in a restructured format. Thiele converged the testimony of all the synchronisms except for three at the end of the kingdom of Israel, which he therefore attributes to later editors. Those three synchronisms were harmonized in a subsequent article by Leslie McFall, "Did Thiele Overlook Hezekiah's Coregency?," *Bibliotheca Sacra*, October-December 1989, pages 393-404. That article gives technical support to my earlier surmise that 2 Kings 17:1 refers to the end of Hoshea's reign rather than its beginning.

50. Specifically, the following pairs of synchronisms require this: FG, 7K, PQ, 11S.

51. Jeremiah 51:64 tells us chapter 52 was not part of Jeremiah's record. Jeremiah 52:1-27 is appended from 2 Kings 24:18-25:1, and therefore uses the non-accession-year system during the reign of Zedekiah. Jeremiah 52:28-34 must come from a later Babylonian source, as it refers to things which happened in Babylon as late as 26 years after the fall of Zedekiah and the desolation of the land. Therefore those verses use the Babylonian accession-year method.

52. It would be nice to preserve only a three-year coregency, as that means it would begin in 39 Asa when 2 Chronicles 16:12 says Asa was diseased in his feet. It is possible that before the shift in the days of Jehoash and Amaziah each kingdom did not impute to the other their own system, in which case the coregency between Jehoshaphat and Asa would be three years. In this event the period of the kings would be one year longer. However, that would not solve the problem of the double synchronism of Ahaziah. Therefore it is more likely that Asa's declining health prompted him to associate his son as coregent a year before his foot affliction was severe enough to merit notice in the official annals.

53. The reason for this change was probably the increased influence of Assyria, who used the accession-year system. (And it is clearly the better system for chronological purposes.) The scriptures to not explicitly mention the Assyrian influence at this time, but Assyrian records do. The early part of Adad-Nirari III's reign fell during the reigns of Joash of Judah and Jehoahaz of Israel. Here are two records from his reign which show his influence in the holy land at that time. {Braces indicate my comments}.

"In (my) fifth year of reign, when I took my seat on the royal throne ... I mobilized (the forces of my) land, (to) the widespread armies of Assyria I gave the order to advance against Palashtu (Palestine). The Euphrates I crossed at its flood. The [widespread hostile] kings, who in the time of Shamshi-Adad, my father, had rebelled, and [withheld their tribute] [Shalmaneser III, the predecessor of Shamshi-Adad, received tribute from Jehu as we saw earlier], at the command of Assur, Sin, Shamash, Adad, Ishtar, the gods, my allies, [terror] overwhelmed them and they laid hold of my feet. Tribute and [tax, more than that of former days], they brought to Assyria, I [received it]" (Luckenbill I, §734).

"... up to the great sea of the rising sun; from above the Euphrates {this ends his description of the eastern countries, now he proceeds to the west}... Hatti, Amurru, in its totality, Tyre, Sidon, Humri (Omriland, Israel), Edom, Palastu {Palestine}, up to the great sea of the setting sun, -- I brought (these lands) in submission to my feet. Tribute and tax I imposed upon them" (Luckenbill I, §739).

54. These coregencies help explain the unusually long reigns of Uzziah and Jeroboam. As to the cause of the coregencies, Thiele (84-86) reasons from the scripture narratives that both resulted from the conflict in which Jehoash defeated Amaziah. Shortly before Nisan, a time "when kings go forth to battle" (2 Samuel 11:1), Jehoash elevated his son Jeroboam to coregent as an act of prudence in the face of approaching war. When Amaziah was taken prisoner, and Judah was without a king, "all the people of Judah took Uzziah, who was sixteen years old, and made him king in the room of his father Amaziah" (2 Chronicles 26:1). This may have occurred after Tishri of the same year Jeroboam had been elevated. Since the people did not know what might become of Amaziah, Uzziah was appointed full king rather than simply coregent. Therefore that year was not year one (which would be normal in a coregency), but an accession year (which would be normal with a new king). When Amaziah was later released, he of course was the real king, and the years of Uzziah which had already begun counting were considered coregent years.
55. Since some have questioned whether Pul and Tiglath-pileser were the same person, we will present some evidence for this.

(1) The Babylonian King List A lists: "Nabushumukin ... 3 Ukinzer, 2 Pulu, 5 Ululai," where the numbers are the years of reign for each king. The Babylonian Chronicle I says: "Shumukin ... three years Ukinzer ruled as king of Babylon. Tiglath-pileser seated himself on the throne in Babylon. The 2nd year Tiglath-pileser died in the month of Tebet ... Shalmaneser ascended the throne ... He ravaged Samaria ... For five years Shalmaneser ruled ..." (Thiele, 92, supplemented with Grayson, 73). Clearly Pulu is Tiglath-pileser (and Ululai is Shalmaneser, the king the Bible credits with the conquering of Samaria, 2 Kings 17:3, 5). In Ptolemy's lists he is called Poros.

(2) 2 Kings 15:19, 20 says Menahem paid tribute to Pul, king of Assyria. Tiglath-pileser, on the other hand, records tribute from "Menihimmu of Samerina," clearly Menahem of Samaria (Luckenbill I, §772).

(3) 1 Chronicles 5:26, "So the God of Israel stirred up the spirit of Pul, king of Assyria, even the spirit of Tiglath-pileser [sic] king of Assyria, and he carried them away into exile..." The King James version says "and," implying two persons, rather than "even," implying one. But Thiele remarks, "the singular pronoun 'he' cannot stand as the antecedent for the plural 'Pul and Tiglath-pileser,' but if the plural 'they' were used it would not agree with the singular Hebrew verb. Thus this verse ... becomes a valuable early documentary authority for the identification of Pul with Tiglath-pileser III" (Thiele, 92-93).

I am unaware of any dissension on this issue among scholars today.

56. For the SDAS King List see JNES, XIII, 1954, 209-230. (Referred to on Thiele, 42) For a complete Assyrian Eponym List see Thiele, pp. 209-215. The accessions of Tiglath-pileser and Shalmaneser are listed next to the date 745 bc and 727 bc respectively. (See Appendix H for a name-only list.)

Another testimony is the Babylonian Chronicle I (Grayson, 70-73). Where "eighteen" should appear the tablet is blank, and this number was restored by the translator. But that document does show Tiglath-pileser became king of Assyria during the reign of Nabu-nasir king of Babylon, before year five but evidently after the accession year (the translator has restored "year three"). The Chronicle then says Nabu-nasir reigned a total of 14 years, two more kings for 2 and 3 years, then Tiglath-pileser ruled Babylon for 2 years before he died. Therefore Tiglath-pileser was king of Assyria for at least 17 years but no more than 20, and the translator's restoration making it just 18 is no doubt correct.

57. Synchronism 11 ties Jotham to Pekah. It might be wondered why the synchronism is not between Jotham and Menahem, since the latter reigned from Samaria, and from hindsight it would seem he represented the kingdom of Israel better than Pekah. But it should be kept in mind that when Jotham became coregent it was early in the reigns of Menahem and Pekah, and perhaps it was not yet clear which would prevail. Also, as time showed, Pekah was disposed to withstand Assyrian might, as were Uzziah and Jotham. This may have joined Jotham's sympathies to Pekah closer than to Menahem. It was not until Jotham was deposed by his son Ahaz, no doubt through the intrigue of a pro-Assyrian faction, that Pekah (and his ally Rezin of Damascus) marked out a course of opposition to Judah.

It is also notable that Jotham's synchronism was with his coregency, rather than his sole regency as in previous cases. Perhaps this is because the full incapacity of Uzziah due to his leprosy made Jotham king in a fuller sense than previous coregents. Or perhaps the scribe was not aware of previous practice, not having deciphered the previous numbers of the Hebrew kings.

58. The word Samaria is in italics, as in Grayson's translation, to indicate it is an identification based on deduction. The word in the chronicle is transliterated "Sa-ma-ba-ra-in," and this is commonly, though not universally, taken to be Samaria. Grayson, Thiele and Tadmor all support this. Grayson's footnote says: "The long debated problem of whether or not this is Samaria has been recently discussed by Tadmor, JCS 12 (1958), pp. 39f., who came to the conclusion that it is Samaria" (Grayson, 73). As this is the only notable event the Chronicle records for Shalmaneser, and as both the scriptures and the Eponym Canon indicate the siege of Samaria took three of the five years of Shalmaneser's reign, it clearly qualifies as a significant achievement worthy of notice in the Chronicles.

59. The following is extracted from Leslie McFall's article "Did Thiele Overlook Hezekiah's Coregency?," Bibliotheca
"Second Kings 15:30 marks Hoshea's accession and 2 Kings 17:1 marks the end of his reign. Thiele understood [malak] in 2 Kings 17:1 as 'began to reign,' as the Revised Standard Version has consistently translated it 10 times out of 12 for Israel's kings, and 12 times out of 13 occurrences for Judah's kings. In three cases the RSV has translated it 'reigned' (1 Kings 14:21, 16:15, 2 Kings 15:8). However, in the case of Judah's kings there is a longer list of circumstances attached to the notice of accession in which a second [malak] is used of the duration of each king's reign. (The longer accession formula, Judah only, contains the following elements: A: Synchronism with Israel's king, B: Verb [malak] + Subject (Judah's king); C: Age of Judah's king on accession; D: The number of years he reigned; E: Verb [malak]; F: Capital city. The shorter formula for Israel omits elements C and E, and the elements D and F are reversed.) The RSV consistently translated this second [malak] as 'he reigned' (19 occurrences). This second [malak] has been omitted for all Israel's kings, but the RSV has unnecessarily introduced it in every instance to sum up each king's reign, and it has done so in the case under review, namely, 'In the twelfth year of Ahaz king of Judah, Hoshea son of Elah began to reign [malak] in Samaria over Israel, and he reigned [no verb in Hebrew text] nine years.' This verse should have been translated, 'In the twelfth year of Ahaz [Ahaz's coregency] king of Judah, Hoshea the son of Elah reigned in Samaria over Israel nine years.' Thus the 12th year of Ahaz's coregency -- 723 BC -- marked the end of Hoshea's nine-year reign, not its beginning. If the translation 'he reigned' is retained in all instances, then it is left to the historical context to determine in what sense the verb is to be understood." (McFall, 398)


61. That Sennacherib's third campaign was in the fourth year of his reign is generally acknowledged among scholars, though the logic is involved. Thiele cites Eberhard Schrader, The Cuneiform Inscriptions and the Old Testament, translated from the German by Owen C. Whitehouse (London, 1885), I, 307-10 for the evidence. I have reviewed those pages, and summarize them here. In this abbreviated recap of his arguments I do not specify absolute BC dates as he does. Also, when Schrader refers to the years of Sennacherib his implied usage is in non-accession-year terms. I rephrase them to so many years after Sennacherib's accession, to give the numbers in conventional accession-year terms.

Sennacherib numbers eight military campaigns during his reign. The Bellino-cylinder records campaigns 1 and 2, which implies campaign 3 had not yet occurred, and the cylinder is dated the seventh month of the eponym of Nabu-li, which was the 3rd year following the accession of Sennacherib. Therefore campaign three did not precede this year.

That was also the year of the accession of Belibus as king of Babylon, whom Sennacherib placed on the throne during his first campaign. Therefore campaign one occurred that year, and as the second campaign, against eastern peoples, intervened before the third which was in the west, the third campaign cannot feasibly be dated before year four after the accession of Sennacherib.

In year five after his accession Asur-nadin-sum ascended the throne of Babylon, and in the Taylor-cylinder this event is located in Sennacherib's fourth campaign. This is confirmed by a fragment "of the Canon of Rulers (Smith in Lepsius' Zeitschrift 1870 p. 38)" which says this occurred in the eponym of Metunu, which marks the same year.

Therefore the Palestinian campaign -- the third campaign -- can only have taken place in the preceding year, the fourth after the accession of Sennacherib. "This line of reasoning has lately been established by the still unedited clay cylinder of Sanherib [Sennacherib] no. 79 (7/8), which Rassam brought with him from Niniveh. In the superscription it appears dated with the eponym of 'Mitunu of the town Isana' ... At the same time it mentions as a last event the third campaign of the Great King, i.e. his expedition against Phoenicia-Palestine. Therefore for this campaign the only date which remains possible is the year 701 [bc, the fourth year after the accession of Sennacherib]" (Schrader, 310).

Schrader appeals to the Ptolemaic canon for the years of accession of Belibus and Asur-nadin-sum. For those unduly concerned about that canon, its testimony for this period can be supplied instead from Babylonian Chronicle I, together with the information that Sennacherib reigned 24 years, which "is known from the eponym lists" (Grayson, 81).
SECTION 10

62. These episodes are also related in scriptural pictures and types. 1 Kings 20-22 records three battles of Ahab, representing respectively the French Revolution, World War I, and Armageddon. The same are pictured in the demise of Abimelech, Judges 9. (Both Ahab and Abimelech represent Papacy, the Beast of Revelation.)

Respecting the increased liberty of the Jews, Mc&S says "The French Revolution ... also greatly benefited the Jews of Poland." Again, "The American and French revolutions, and the great European war of 1812-15, also contributed to this change ... [in France] Napoleon, in 1806, conferred upon them many privileges." (Mc&S, "Jew," 912).

63. (Mc&S, "Papacy," 633) This citation does not give the date of this action, but I assume it was the same action mentioned in the following quotation. "In 1793 a decree passed the French Assembly forbidding the Bible; and under that decree the Bibles were gathered and burned, every possible mark of contempt was heaped upon them.--Smith" (Finished Mystery, 174). This was a blow to Christians good and bad, true and nominal, though no doubt directed chiefly at Papacy, which to the French was Christianity. Thus in 533 Justinian decreed the Pope head of the Christian churches, and 1260 years later in 1793 came the decree effectively banning Papacy.

Mc&S continues: "though the Directory (1795-1799) again permitted the exercise of Christian worship, French armies proclaimed in Rome the Roman republic, and carried pope Pius VI as a prisoner to France, where he died. His successor, Pius VII (1800-1823), was the first pope for many centuries whose election did not take place in the city of Rome. A concordat concluded with Napoleon Bonaparte in 1801 restored to the pope his ecclesiastical and temporal power; but when he revived all the old hierarchical claims of the papacy, the emperor again (1808) occupied the papal territory, and revoked the donation of his predecessor Charlemagne (1809); and when he was excommunicated by the pope, he carried the latter as a prisoner to Fontainebleau" (Mc&S, "Papacy," 633).

The concordat of 1801 is referred to elsewhere with more precision. "Bonaparte, when first consul, concluded a concordat with Pius VII, July 15, 1801, which went into operation in April, 1802. It reestablished the Roman Catholic Church, which is declared to be the religion of the majority of Frenchmen, and has become the basis of the present ecclesiastical constitution of that country ... the concordat was published as a law of France in 1802" (Mc&S, "Concordat," 457). We supply this detail because the publication of this law perhaps had to do with the resurrection of the two witnesses (Revelation 11:11) after 3½ years of death, followed by their ascension "up to heaven" (verse 12) when various Bible Societies began the publication and distribution of Bibles by the millions.

64. This date is given as 534 on C76, but Procopius, the original on-the-scene historian, says "the emperor ... in the ninth year of his reign ... sent Belisarius" (Procopius III, V, v, 43). The year 9 Justinian was the year 535. Perhaps (this is only my guess) the variance is traceable to an error in Procopius. Elsewhere in his account 11 Justinian seems incorrectly equated with what must be 536, which would imply that 9 Justinian was 534. But as the correct historical year for 11 Justinian was 537, Clinton maintains Procopius intended 10 Justinian and a transcription error entered in. (See the footnote to "A Little Horn," Beauties of the Truth, Aug. 1992, 4-5.) Justinian came to the throne "after the death of his uncle, August 1, 527" (Mc&S, "Justinian," 1110), which means 527 is the earliest time his year one could begin. His year 9 could therefore not precede 535. The Outline of History gives his reign as 527-565 (Wells I, 442).

65. 729 bc (3 Ukinzer) was the year Tiglath-pileser defeated Ukinzer, king of Babylon, and ascended that throne (Grayson, 72). The next year's eponym entry says he "took the hand of Bel," which implies activities in Babylon, probably early in that spring year. We have no explicit record of the events for the remainder of that year, 728 bc, his seventeenth. It is likely he planned for his western campaign of the next year. (We do have tablets composed in year seventeen which review the events of his first seventeen years, but they are not clear in dividing events into their respective years -- Luckenbill I, §780, 805, 808).

There was another and more precise parallel to the French Revolution five years earlier, the last time "Damascus" (the west) was the scene of activity. On that occasion Tiglath-Pileser said of Samaria: "Pakaha [Pekah], their king they deposed and I placed Ausi' (Hoshea) over them as king ... tribute I received from them and to Assyria I carried them" (Luckenbill I, §816, cf. 2 Kings 15:29, 30). The year was 732 bc, the parallel date to the French Revolution in 1789.
66. This possibility was brought to my attention by Bro. Donald Holliday, who noted that the dates of Islam's rise over Palestine were at the right approximate time. The noted English prophetic writer of the last century, H. Grattan Guinness, also investigated this subject (The Approaching End of the Age, chart facing page 610). But only in the light of the fulfilled Seven Times ending in World War I can the parallel now be seen with clarity.

67. This date is also confirmed in Persia and the Bible, "No doubt much was destroyed with the Islamic conquest of Iran in ad 651" (Yamauchi, 404), and in the title of another book Persian Art, Parthian and Sassanian Dynasties, 249 bc - ad 651, Roman Ghirshman, 1962.

68. Of the reconquest of Egypt one source records: "Amr (658) wrested Egypt from Alid rulers" (History of Syria, 435).

Of the Sunni-Shiite split another source explains: "When the caliph Uthman was murdered in 656 and was succeeded by the Prophet's cousin and son-in-law Ali-ibn-Abu-Talib, Muawiya challenged the succession, denouncing Ali as the man chiefly responsible for the murder. In 657, he proclaimed himself caliph in Damascus, and when Ali was murdered in Iraq in 661, the rule of Muawiya was generally accepted." (Syria Under Islam, 21)

Of Ali's experiences in 658 the following is noted: "The caliph Ali-ibn-Talib is hailed by 70,000 or more Jews at his conquest of Firuz Shapur. Jews generally favor the new Arab rulers of what is now called Iraq." (Timetables, 87)

SECTION 11

69. Three unobvious things should be observed in the calculation. (1) The division of the land was really 46½ years after the Exodus, reasoned as follows. It was 45 years after the sending of the spies (Joshua 14:10), and the spies were sent out near Tishri, about 1½ years after the Exodus (see Appendix J). Supposing Caleb meant 45 approximately full years, the division of the land occurred near the fall of the year, 6½ years after crossing the Jordan, 46½ years after the Exodus. (Also it is reasonable to suppose the division of the land followed the conquests of the current year, and the spring-summer of the year was a common time for battle -- 2 Samuel 11:1). (2) Since the regnal years of Judah (and thus of Solomon, David and Saul) were Tishri years (see Appendix I), 1 Kings 6:1 points to a time 3½ years beyond the beginning of Solomon's first regnal year. (3) Since 1 Kings 6:1 says 480th year, not 480 years, the interval from the Exodus to the spring of Solomon's fourth year was 479 full years.

These three factors require that the interval remaining for the judges was 479 - 46½ - 83½ = 349 full years.

70. "This view is not vitiated by the standard translations of Judges 13:1a -- 'again the Israelites did evil' -- for the word translated 'again' does not actually appear as such in the Hebrew text. Literally the original reads, 'And the Israelites added to do evil,' an idiom which can indeed but need not mean 'to do again.' The verb yasil here certainly means 'to continue to do,' but only with the addition of the particle od would it mean 'to do again' (cf. Judges 11:14). Thus Israel continued to do evil, just as the narrator stated in Judges 10:6 when he first introduced the Philistine oppression. Verse 13:1a serves as a literary link to the earlier passage and does not intend to suggest a Jephthah-Samson sequence." (Merrill, 173)

71. See the interesting discussion of this "Bethlehem Trilogy" in Merrill, 178-188.

72. "The reference to peace with the Amorites (I Samuel 7:14) implies that Samuel's defeat of the Philistines also ushered in a period of peace with the indigenous Amorite populations of the hill country" (Merrill, 178).

73. "The attack on Israel at Aphek could well have been a reaction to the early maraudings of Samson against the Philistines, which began at about this time. Since Samson clearly was empowered miraculously by the God of Israel, what better way was there to address the problem than to attack the Israelite cult center at Shiloh?" (Merrill, 177).

74. The dating of the Egyptian 18th Dynasty involves the dating of Thutmose III, a Pharaoh of that dynasty and arguably the mightiest Pharaoh to hold the throne of Egypt. The following extracts are from "The Lunar Dates of Thutmose III," Journal of Near Eastern Studies, Vol. 45, No. 2, 1986, 139-150, by Lee Casperson. I have read both
his article and that of R.A. Parker to which Casperson refers. Casperson holds 1504 bc for the start of the reign of Thutmose III, Parker 1490 bc. In my layman's opinion, Casperson's arguments are preferred; I had some reservations about Parker's article when I first read it several years before Casperson's was written. Neither article is conclusive, but 1504 fits the Biblical date better.

Casperson begins his article with a review of other labors on the question. "The focal point for most modern discussions of the lunar dates of Thutmose III is R.A. Parker's article on this subject published in 1957 ... He concluded that although agreement was not exact, the king's first year was most probably 1490 bc ... W. C. Hayes in the third edition of The Cambridge Ancient History ... [says] 'A Sothic date and two lunar dates in the reign of Thutmose III allow the accession of that great pharaoh to be placed at either 1504 or 1490 bc, with the probabilities favoring the earlier of the two dates ... a sound chronology of the later Eighteenth and early Nineteenth Dynasties, obtained from independent sources, requires the earlier date. So also do the probable lengths of the reigns of Thutmosis I and II.' ... There have been several recent articles supporting the chronology which previously was advocated only by Hayes," and Casperson cites four scholars in this connection, as well as some alternate possibilities. "In view of the rather intense interest in this subject, it is striking that the actual astronomical calculations carried out by Parker seem not to have been re-examined. There are several respects in which those calculations may now be improved upon, and a discussion of such improvements in contained in sections II and III of this study." (Casperson, 139-141)

Casperson concludes with this summary. "Parker and others have argued that astronomical calculations require an accession year of 1490 bc. Hayes and others have held that in spite of any computation the higher date of 1504 bc is demanded by other historical evidence. Murname and others have suggested different interpretations of the texts so that Parker's calculations would favor the 1504 bc date. On the basis of new calculations, I have attempted to show that the texts, as understood by Parker, do not favor the 1490 bc date. If it is more likely for an observer to miss a crescent which is mathematically visible than to 'see' a crescent which is mathematically impossible, then the 1504 bc accession year is actually more probable." (Casperson, 148-150)

75. Merrill cites the highly respected Cambridge Ancient History, "like the dates we use elsewhere" (Merrill, 59).

76. See "From the Brickfields of Egypt," Tyn Bul 27 (1976): 139-40," by Kenneth Kitchen. He, however, accepts the late date for the exodus (1280 to 1260 bc) as do many. Suffice it to say that the late date for the Exodus involves a repudiation of the historical integrity of the Bible record about the Exodus, wandering, and conquest. Merrill deals with this view admirably (Merrill, 66-75). See also "Redating the Exodus," Biblical Archeology Review, September-October 1987, by John Bimson and David Livingston, whose conclusions support the scriptural narrative.

Kitchen also adds a comment on the price paid for Joseph. "The price of twenty shekels of silver paid for Joseph in Genesis 37:28 is the correct average price for a slave in about the eighteenth century bc: earlier than this, slaves were cheaper (average, ten to fifteen shekels), and later they became steadily dearer" (Ancient Orient and Old Testament, 52-53). Our dates show Joseph sold some decades before the eighteenth century.

77. Merrill uses the date 1446 bc (since he added 966 bc + 480, rather than 479), and so does not make this observation. Also, it is good to note that no scripture says Pharaoh drowned in the Red Sea. Exodus 15:19 does not say "horse of Pharaoh," as King James has it, but "horses of Pharaoh," nasb, Rotherham.

78. "Assur-uballit (1365-1330) ... wrote at least two letters requesting gold and other gifts from Amenhotep IV, and eventually ... gave his daughter as wife to that Egyptian monarch" (Merrill, 96). This king of Assyria, Assur-uballit, evidently can be dated from Assyrian king lists. (Adam Rutherford reproduces such a list, but assigns the dates 1362-1327, three years different than Merrill -- see Rutherford 526.) Therefore these letters are a witness that the reign of Amenhotep IV was on the throne for some of those years.

79. Later Kathleen Kenyon concluded Garstang erred. She supposed the Amenhotep scarabs belonged to a later burial; Garstang's level D was reassigned to 1300 (Merrill, 111). But if the Bible account be accepted, no theory allows a Jericho to exist in 1300 to be burned then. Therefore Kenyon's date cannot be correct, while Garstang's date conforms

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well to the time of Joshua's campaign using 1 Kings 6:1. Merrill comments: "If this reevaluation [by Kenyon] has caused problems for the early dates proposed for the exodus and conquest [the dates I support], it has hardly benefited the late dates, since conquest of Jericho in 1300 would place the exodus in 1340. Clearly, this fits no one's position." (Merrill, 111)

80. The location of Ai is in dispute; thus the silence on its archeological testimony (Merrill, 73).

**SECTION 12**

81. The expression "selfsame day" is taken by some writers to mean this period was precisely 430 years to a day. But the use of the term "selfsame day" in the greater context shows the term simply means the day of the Exodus was exactly the "selfsame day" as the much celebrated feast of unleavened bread -- namely Nisan 15 -- not the "selfsame day" of the calendar as an event 430 years earlier. The same term also appears in Exodus 12:17, where clearly it has no reference to an event 430 years earlier. See Genesis 7:13, 17; 23, 26, Exodus 12:51, Leviticus 23:14, 21, Deut. 32:48, Joshua 5:11, Ezekiel 40:1 for other examples of this term.

82. This statement is from Merrill, 54, and agrees with other sources. Merrill earlier said "the Hyksos kings ... were in power in the period from about 1661 to 1570" (Merrill, 49); I suppose by "in power" he means in some greater way than he intends on page 54.

83. From Appendix N, notice that from Abraham's entrance into Canaan until Jacob's move to Egypt was 215 years. According to view 1 that would leave another 215 years to complete the 430 until the Exodus, implying Jacob moved to Egypt in (1445 bc + 215 =) 1660 bc, within the Hyksos period.

84. On the other hand, it would not be surprising if there were a change of Pharaoh between Joseph's imprisonment and his elevation, which the chronology of view 3 does show.

85. Extracted from Parkinson, "Discoveries of Archaeology during the Middle Kingdom of Egypt," June 25, 1994 (a short quarter-page summary sheet). For a fuller discussion see Parkinson, *Resolving Chronology of the 2nd Millennium B.C.*, pages 3-4. "Joseph and the Pharaohs." Bro. Parkinson's valuable and technical 18 page treatment of issues regarding the chronology of the 2nd millennium bc may be had by request from its author, James Parkinson, 411-A Arden Avenue, Glendale, CA 91203. Notably, the date of the Exodus suggested in that work differs from ours.

86. The three scriptures appealed to as the basis of the Jewish double are Isaiah 40:2, Jeremiah 16:18, Zechariah 9:12. Some brethren have observed that the latter text probably means a double of favor, rather than disfavor as frequently supposed. (See nasb, Smith-Goodspeed, Rotherham as examples.) Nevertheless the death of the Messiah is the obvious place to assign the turning aside of favor from the Jewish nation who did not receive the Messiah.

None of these texts require a double of precise time, just as Revelation 18:6 clearly does not require a double of precise time. But as the Jewish age was in so many respects a shadow and example of the Gospel age, it is certainly a credible and appealing possibility that God arranged the length of one age to pattern the length of the other.

If Jacob indeed died in the spring of 1813 bc -- implied from view 3 (Section 12) -- then the death of the one who began the 12 tribes of natural Israel is exactly 1845 years before the spring of 33 ad, when Jesus died who began the 12 tribes of spiritual Israel (Rev. 7:4-8). The date 1878, 1845 years from 33 ad, has been noted by the brethren and even others such as David Ben Gurion as a turning point in the modern resettlement of the Jews in Palestine. That year the treaty resulting from the Berlin Congress of Nations gave all in Palestine -- thus including the Jews -- equal privilege and protection of the law (see also B218, para. 2 to B221, para. 1). The Jews used this to the greatest practical advantage.

There is another possible "double" flexing about the date of Jesus' death which has curiously gone unobserved until now. As several have noticed, 1878 is just 70 years before Israel became a nation again in 1948. I have wondered if this had any relevance to the 70 years of Babylon's power, during which Israel lost their nationhood. But I am unable to make a specific connection.

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But notice that Jacob obtained the blessing of the birthright (when by deceit he received it from Isaac) just 70 years before he died (see Appendix N). Therefore a double beginning with Jacob's birthright blessing would extend 70 years beyond 1878, ending in 1948. I cannot avoid the delightful impression that if we have correctly apprehended the facts of chronology, this extended double is also of divine design.

87. Ephraim, 2nd generation from Jacob, apparently had grown sons who died before Beriah was born, yet Joshua was still the 11th generation from Jacob. Following Beriah were Rephah, Telah, Tahan, Laadan, Ammihud, Elishama, Non, Jehoshua (cf. Numbers 13:16). Bezaleel's line also had room for more generations, as his forefather Judah already had grown sons before Bezaleel's ancestor Hezron was born.

88. Some suppose Amram was a descendant of Kohath (Merrill 77), others (Keil and Delitzsch) that Amram the father of Moses was of a later generation than Amram the son of Kohath (notice multiple Elkanahs, for example, in 1 Chronicles 6:34, 35, 36). In either case Amram's wife Jochebed, who was also his aunt or his cousin (Exodus 6:20, cf. Rotherham footnote, and the Septuagint translation), would have been the daughter of Levi in the sense that Elisabeth was a daughter of Aaron (Luke 1:5; Numbers 26:59, Exodus 2:1), and in the sense that Achan was the son of Zerah (Joshua 7:24; verse 18 shows the line was really Zerah, Zabdi, Carmi, Achan). Notice also that the "sons of Korah" in Exodus 6:24 may really have been successive generations (cf. 1 Chronicles 6:22, 23). However, notwithstanding these examples, I acknowledge the genealogy of Moses' parents as the single strongest argument against a long period in Egypt.

89. "The juxtaposition of 'four hundred years' and 'fourth generation' strongly suggests that generation here is to be understood as a century. William F. Albright argues the Hebrew word \textit{dor} (generation) meant 'lifetime' in early Hebrew, and so Genesis 15:16 is referring to four lifetimes of one hundred years each (\textit{The Biblical Period from Abraham to Ezra}, New York: Harper, 1963, p. 9). The cognate Akkadian \textit{daru} also has the meaning 'lifetime' (\textit{Assyrian Dictionary of the Oriental Institute of the University of Chicago}, D, p. 115). For the view that the sojourn was in fact four hundred years long see Harold Hoehner, "The Duration of the Egyptian Bondage," \textit{Bibliotheca Sacra}, 126 (1969): 306-16." (Merrill, 75)

Rutherford also holds the Egyptian sojourn was precisely four hundred years, but his arguments involve two other conclusions: (1) Jacob took three years to journey from Padan-Aram to Canaan, (2) ten years after crossing Jordan Joshua divided the land in a fuller way than Joshua 10:14 refers to. The first is required for his argument, the second is supplementary, but both points are dubious. (Rutherford, 139-150)

90. If the 430 years began with Abraham's entrance into Canaan, then 400 years could not be even approximately spent in Egypt. In this case the period would begin with Isaac, the first of Abraham's promised seed, either at his birth or when mocked by Ishmael.

91. Because of the significance of this identification, we quote at length from Bro. Parkinson's paper. "Lugal-zaggisi of Umma, perhaps two centuries before Ur-Nammu, is the first king known to have taken his army to the west and reached the Mediterranean Sea. [He conquered Larsa and can therefore hardly be the Amraphel who was allied with Larsa as a near equal.] The next century was dominated by Akkad; then for 93 years no Gutian ruler reigned as long as 14 years. Finally, Utu-khegal, king of Uruk and all Sumer and Akkad, conquered Gutium, and also squelched the territorial ambition of his vassal Ur-Nammu, king of Ur. When Utu-khegal died, Ur-Nammu claimed the kingship of Sumer and reigned 18 years. (Ur-Nammu composed the oldest known written code of laws and commenced construction of the great ziggurat at Ur, similar to the Tower of Babel.) A date-formula is preserved concerning his 4th year "which proclaims that 'he made straight the road from below to above,' which can be understood to mean a march from the lower sea [Persian Gulf] to the upper sea" [the Mediterranean, on the north Syrian coast]. (\textit{Cambridge Ancient History}, 3rd edition, vl, pt2, pg 597) Fourteen years later he apparently died in battle. Subjection of the West apparently ended with Ur-Nammu.
Ur-Nammu was succeeded by his son Shulgi for 48 years (not ruled out as Amraphel, but historically and linguistically less attractive) ... the following two kings reign only for 9 years each, while the 25 years of Ibni-Sin represent decline, rather than a time for distant offensives [in his 9th year he was at war with Elam, and Larsa successfully rebelled]. Thereafter, the kings of Larsa are known until the time of Hammurabi of Babylon (none linguistically akin to Arioch; nor would there have been separate kings of Larsa and Sumer during the Isin-Larsa period). Hammurabi's defeat of Elam removed them from the scene of Sumer and points west. Thus, only the Third Dynasty of Ur can likely answer to "Amraphel king of Shinar," and Ur-Nammu is the obvious choice. The death of Ur-Nammu was 308 years before Hammurabi's first year (or 307 years before his accession)" (Parkinson, 2). To secure this paper, see note 85.

92. It is possible that fractional years in these spans accumulated to a significant sum. On the other hand, if the patriarchs before and after the flood used the years of their lives for dating events (Genesis 7:6, 11), they may have used a system something like the accession year system of kings, rather than the system by which we count our ages, in order to make records which give an accurate count of years over many generations. Two elements of the ancient records imply a system different than our own: (1) Genesis 7:6, 11, 8:13 speak of Noah as 600 years old well before his 601st year. (2) The reference to months and days of the years marking Noah's life during the flood episode. I suspect they were months numbered in a calendar year, rather than months numbered from Noah's birth.

SECTION 13

93. Some brethren observe that in Volume 2 Bro. Russell's logic of presentation is that the Jubilees point to the "Times of Restitution," and therefore according to Acts 3:21 to the Lord's return directly. Certainly it is true that if one proves the antitypical Jubilee has begun, that would suffice to show the Lord had returned. However, that is not the logical process by which the early harvest brethren came to discern the Lord's return. Historically, a better understanding of the 1335 days was the key to it all. (See Section Two, page 9, "An Improvement on Miller's Approach.") A sequence of presentation should not be confused with the real-life chain of evidence which showed the brethren the Lord had returned.

I have heard this observation -- and its corollary that the 1335 days are not discussed until Volume 3 -- used to show that the Jubilees are a stronger argument for the Lord's return than the 1335 days, which in turn is used to disparage using the 1335 days as an anchor.

This is clearly wrong. The scriptures are emphatic and unambiguous that the 1260, 1290 and 1335 days are prophetic time spans marked by divine inspiration to guide the saints to the end of the age. Revelation's use of the 1260 days shows they were not fulfilled in the remote past, but marked a long duration of trial for the saints during the Gospel age.

There is no time prophecy in holy writ, extending past the Lord's first advent, more sure than the 1260 days which in one form or another appears seven times in scripture. By contrast, the jubilee calculations are among the most deduced and least provable of all the time prophecies of scripture. We are glad to receive of the Lord instruction by whatever method he chooses, and the reader will note our application of the grand jubilee cycle in Appendix L. But it will not serve us well to confuse deduced and reasoned applications with clearly given prophecies.

The prophecy of 1335 days (Daniel 12:12) is the last of three leading to the end of the age. So it is natural to suppose they point to the return of Christ, whose presence marks the end of the age and the resulting harvest. Beyond this but one clue is given -- "Blessed" is the one who reaches the end of the 1335 days. Therefore but one clue must be deciphered. We find this "blessed"-ness again in Matthew 24:44-46 and Luke 12:37. Both texts directly link this to the return of Christ.

APPENDIX A

94. Perhaps "Darius" was a royal title or a throne name used in Babylon. Shea cites other examples of kings who took other throne names when they extended their rule to Babylon. Tiglath-pileser III and Shalmaneser V, both Assyrian kings, also ruled Babylon where they were known by the throne names of Pulu and Ululai, respectively. He also believes it likely that Ashurbanipal (of Assyria) was the same as Kandalanu, ruler of Babylon. (Shea, 230, 231)
95. "The verb used here is in the Hophal or passive of the causative, which clearly implies the agency of someone appointing him to that office. Efforts to translate this verb as Hiphil have not been successful because of the absence of any object for the direct causative in this context." (Shea, 1982, 230).

96. Shea cites as evidence his earlier and more technical work "An Unrecognized Vassal King of Babylon in the Early Achaemenid Period, I," AUSS 9 (1971), 52-67. He also credits Charles Boutflower (In and Around the Book of Daniel, 142-155, reprinted 1963) with the conclusion "Cyrus did not carry the title 'king of Babylon' in the datelines from the economic texts that were written in Babylonia during the first year after his conquest of that land." Adam Rutherford says "In the Babylonian contract tablets Cyrus is designated 'king of countries' only, for two years after the capture of the city and then subsequently as 'king of Babylon' also (Rutherford, 34). He concludes from this that Darius the Mede reigned 2 years. However, the proper conclusion is that Darius the Mede reigned for an accession year and a first year, but did not complete the first year, and therefore did not enter a second year.

97. Babylon fell in the month Tishri. Cyrus entered the city early the next month. Not including Tishri, that means the remainder of that accession year included 5 months. Why Shea refers to the last four, rather than the last five months of the accession year, I do not know.

98. In the 1982 article Shea suggested Ugbaru died not 3 weeks after the conquest of Babylon, but 1 year and 3 weeks after (since the months Kislev to Adar are referred to between his death and the previous narrative). But in his 1991 article he withdrew that suggestion. As he holds Gubaru and Ugbaru are the same person, he concludes that person died too early to be Darius. He therefore turned to Wiseman's conclusion that Darius was Cyrus.

APPENDIX E

99. 2 Chronicles 36:9 gives Jehoiachin's age as 8, 2 Kings 24:8, 9 as 18. Most suppose 18 is the correct figure, since Jehoiachin "did that which was evil in the sight of the Lord" (2 Kings 24:9). At least one author holds that when 8 he began a coregency, and when 18 a sole regency (McFall, 403, footnote). It is conceivable that Jehoiakim, noticing his brother's demise after 3 months, wanted to ensure his son would be next in line in the event of an early demise, and therefore elevated Jehoiachin to coregent at the same tender age the young Joash had received the kingdom years earlier. Unfortunately there is not much intertwining evidence to decide the issue, as we have seen for the other coregencies.

100. Antiquities 10:6-7 has a variety of details not consistent with the Babylonian Chronicles. Nowhere in these sections does Josephus appeal to the Babylonian historian Berosus for support, as he does elsewhere. Many of the details are clearly gleaned from scripture, as the several numbers he uses are the same as the scriptures contain. A little reflection will show that these sections express Josephus' conclusions from the scripture narratives -- some of which are incorrect. At the heart of his misunderstanding is his conclusion that the three years Jehoiakim served Nebuchadnezzar were at the end of Jehoiakim's reign, and that that reign was terminated by Nebuchadnezzar. The Babylonian Chronicles forbid this, since Nebuchadnezzar was in Babylon with his army at the time Jehoiakim died in Jerusalem. He was probably led to his wrong conclusions by the understandable error of assuming 2 Chronicles 36:6 referred to the end of his three years' vassalage to Nebuchadnezzar rather than to its beginning.

101. Another evidence that Zedekiah did not have an accession year can be drawn from comparing Jeremiah 27, 28 with the Babylonian Chronicle. Chronicle 5 reports a rebellion in Nebuchadnezzar's army in his 10th year in Kislev and Tebet (months 9 and 10). As word of this spread to Palestine, it may have given rise to a general optimism among his vassals that his yoke would soon be broken. Jeremiah 27 (which refers to Zedekiah, not Jehoiakim, see nasb, cf. 27:6, 12; 28:1 show this was 4 Zedekiah) intimates this hope was growing in the fourth year of Zedekiah, which lapped upon 10-11 Nebuchadnezzar only if Zedekiah had no accession year. Jeremiah assured them it would not be so, and implored them to submit. Nevertheless, late in 4 Zedekiah, in the fifth month (just two months before the end of that year), Hananiah falsely predicted their approaching freedom (28:1-4). As though to quell the hope for liberation spawned by his domestic revolt, Nebuchadnezzar marched to "Hattu" (Palestine) both at the end of his 10th year and
in Kislev of his 11th year. If Zedekiah did have an accession year, Hananiah's false prophecy would have been after both of these incursions of Nebuchadnezzar, which is unlikely. (Jonsson, 178, assumes the non-accession-year system and uses this issue to argue for Tishri years in the Judean kingdom. Here we assume Tishri years, and use the issue to argue for the non-accession-year system -- two sides of the same coin.)

102. Thiele held that Judah used accession years to the end. To accommodate this theory he proposed that Ezekiel and Jeremiah (except 39:1-10, 52) used Nisan years (Thiele 161-163), while Kings, Chronicles and Daniel used Tishri years (see chart, Thiele 162, bottom). But points 4 and 6, Appendix I, suggest both Jeremiah and Ezekiel used Tishri years. Also, Thiele does not treat Jeremiah 52:29. If that text dates the fall of Zedekiah to year 18, as most think, it is not compatible with Thiele's approach.

Jonsson concludes that all writers used Tishri years for Judah, but that Jehoiakim and Zedekiah (but not Daniel) both used the non-accession-year system. But if so, Kings and Chronicles should give Jehoiakim 12 years. (The chart on Jonsson 182 indicates Jehoiakim died in the year following his 11th, which is therefore in his 12th year.)

Rutherford also reckons Tishri years for Judah, and he also does not assign Jehoiakim an accession year, which he surmises may have been because Jehoiakim came to the throne so close to (even though after) the start of Tishri (Rutherford, 29). His chart seems to obscure the 12th year problem, which nevertheless exists (Rutherford, 321). Further, he concludes that Daniel 1:1 also uses the non-accession-year system for Jehoiakim, and therefore adopts the unique but untenable position that the first conquest of Jerusalem preceded the battle of Carchemish.

That three such thoughtful reviewers differed slightly on such details hints of the complexity of harmonizing all the data. If the Babylonian Chronicles for the year Nebuchadnezzar took Jerusalem from Zedekiah were extant, giving the Babylonian month and year for that event, these technicalities would be resolved immediately. But there is a resolution which brings harmony to all the details: (1) all writers used Tishri years for Judah, (2) Kings and Chronicles allow an accession year for Jehoiakim, and so correctly assign him 11 years (3) Jeremiah uses the non-accession-year system for both Jehoiakim and Zedekiah, but never stipulates the length of Jehoiakim's reign, which would have been 12.

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APPENDIX G

103. The Assyrian Eponym Canon is actually a composite of several lists and fragments (see Appendix H), and for this reason the notations published with one list are not always the same as those found in other lists. The well-respected early work of George Smith, The Assyrian Eponym Canon (1875), gives a translation of four lists, designated I, II, III, IV. List II and IV respectively indicate "...ahi-riba the king" and "...ahi-riba king of Assyria" at the eponym of Pahara-bel, which suggests ...ahi-riba (Sennacherib) became king that year (Smith, 38). This is in harmony with the still more specific reference we cited from Rogers, 238 (in Appendix G on page 97). The composite Assyrian Eponym Canon found in Appendix F of Thiele's book renders the name of that eponym Nashir-Bel -- his title governor of Amedi and the contexts of both lists show him to be the same person as Pahara-Bel -- but that list omits the mention of "...ahi-riba."

104. What did happen during these two years? "The other two kings of this period, Marduk-zakir-sumi II and Marduk-apla-iddina II (Merodach-Baladan), each ruled for less than a year. See Babylonian King List A iv 12-14" (Grayson, 76). In that king list these two years are listed as 2 years Sin-akhi-erba (Sennacherib), 1 month Marduk-sakir-sum, 9 months Marduk-aplu-iddin (Merodach-Baladan). Evidently neither of the last two crossed the new year, thus their reigns occurred within the last part of year two of Sennacherib. Notice that during both of the interregnums listed in the Canon of Ptolemy Sennacherib was king of Assyria; perhaps he had not officially assumed the title "king of Babylon," but the king-list filled the gap by acknowledging his mastery.

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APPENDIX H

105. The various eponym tablets give a consistent record with one exception, which is discussed at length and resolved by Thiele on pages 46-52 of his book. It is this issue which leads some to date the death of Ahab, king of Israel, to 854
bc, whereas Thiele shows it to be 853 bc.

106. Respecting the close of the Assyrian Empire Merrill says this. "Assur-uballit (612-609) was an army officer who regrouped the Assyrian forces at Haran, but he had to abandon the city when it came under fierce attack from the Babylonians. Neco II of Egypt made a valiant attempt to come to the aid of Assyria, obviously fearing the growing might of the Medo-Babylonian axis. The Egyptian army was intercepted by the little host of Josiah of Judah, however, and might well have been detained long enough to ensure the Babylonian victory.

"Forced to abandon Haran, Assur-uballit moved west once more, this time to the important city of Carchemish on the upper Euphrates. Relentlessly the Babylonian armies took up the pursuit and in 605, under their brilliant commander and crown prince Nebuchadnezzar, crushed the Assyrian remnant once and for all. Again Egypt had sent reinforcements, but they too were defeated and driven out of Syria and Palestine altogether. And so Assyria passed off the stage of world history after more than twelve hundred years of national existence. The rod of Yahweh had accomplished his purposes and now was laid to rest" (Merrill, 441)

APPENDIX I

107. Thiele agrees that Kings and Chronicles used Tishri years, but says "Jeremiah, Ezekiel, Haggai, and Zechariah used Nisan years for Hebrew kings" (Thiele, 161). There are four issues which conspire together for his conclusion regarding Jeremiah and Ezekiel. (1) He does not comment on the argument from Jeremiah 36. (2) He does not comment on Jeremiah 1:3. (3) He does not comment on Jeremiah 52:19. (4) He assumes (I think incorrectly) both that Ezekiel 40:1 speaks of the anniversary day of Jehoiachin's captivity, and that Ezekiel 33:21 is incompatible with Tishri years (Thiele, 167). His conclusion that the fall of Zedekiah was in 586 bc depends upon his conclusion that both Jeremiah and Ezekiel used Nisan years. (The books Haggai and Zechariah refer to Persian rulers, whose reigns were Nisan to Nisan.)

108. This argument is valid if one assumes Kings and Ezekiel used the same calendar years. Thiele proposes Kings used Tishri years (correct), but Ezekiel used Nisan years (incorrect), and thereby escapes this difficulty. But see the previous note, and also point 6 in Appendix I.

APPENDIX J

109. In both 1 Kings 6:1 and Numbers 33:38 Strong's does not give any number for the word "after," suggesting it is an implied word. Smith Goodspeed, nasb and Leeser follow King James' "after," while Rotherham uses "by." For 1 Kings 6:1 The Interlinear Hebrew-Greek-English Bible by Jay Green in the interlinear says "from," as does the marginal rendering following the King James II version, but "after" in Numbers 33:38 though it appears to be the same Hebrew. In any case year one of this reckoning was the Nisan year in which Israel left Egypt.

110. My computations from 14 Hezekiah (the year of Sennacherib's invasion in the spring-summer of 701 bc) back to 4 Solomon are the same as Thiele's, and his have been broadly accepted by scholars. Therefore my date of spring 966 bc for the foundation of the temple mentioned in 1 Kings 6:1 is shared by many others. However, the date for the Exodus computed from this is often cited as 1446 bc, since 966 + 480 = 1446, as though the text meant it was 480 years from the Exodus -- which it does not -- rather than 480th year -- which it does.

APPENDIX L

111. It is true Noah was called 600 years old before the beginning of year 601 (cf. Genesis 7:6, 11). But this example probably testifies of a different mode of reckoning -- see note 92 -- rather than a precedent for reckoning ages more than 2000 years later.

112. The Talmud says other things about the Jubilees which are surely incorrect. Therefore we do not claim the Talmud
is proof that Jubilee 17 began at the time of Ezekiel's vision. But it is sensible that the scholars contributed to the Talmud something of credible record, rather than merely calculations and suppositions. Of all they record on this issue, the information most credible is the placement of the final jubilees, as it is the most likely to have been passed down as memorable information. The placement of the closing jubilees is not traced to previous conclusions. It seems rather to be the initial information from which the residue is extrapolated. Of course it is possible the rabbis simply reasoned from Ezekiel 1:1 and 40:1 as we have done. If so, then the Talmud does not yield independent evidence to support our conclusion. But even in this case we would at least find a rabbinical concurrence with our deductions.

Here is the fuller citation. "The exact year of the shemittah is in dispute, and different dates are given. According to Talmudic calculations the entrance of the Israelites into Palestine occurred in the year of Creation 2489, and 850 years, or seventeen jubilees, passed between that date and the destruction of the First Temple. The first cycle commenced after the conquest of the land and its distribution among the tribes, which occupied fourteen years, and the last jubilee occurred on the 'tenth day of the month [Tishri], in the fourteenth year after that the city was smitten' (Ezek. 40:1), which was the New-Year's Day of the jubilee ('Ab. Zarah 9b; 'Ar. 11b-12b). Joshua celebrated the first jubilee, and died just before the second (Seder 'Olam R., ed. Ratner, xi. 24b-25b, xxx. 69b, Wilna, 1895). ¶ The Samaritans in their 'Book of Joshua' date the first month of the first Sabbatical cycle and of the first jubilee cycle as beginning with the crossing of the Jordan and the entrance of the Israelites into their possession; and they insist that the date was 2794 of Creation, according to the chronology of the Torah 'and the true reckoning known to the sages since the Flood' ('Karme Shomeron,' ed. Raphael Kirchheim, §15, p. 63, Frankfort-on-the-Main, 1851). ¶ The First and the Second Temple, the Talmud says, were destroyed 'on the closing of the Sabbatical year' ('Moza'ei Shebi'it'). The sixteenth jubilee occurred in the eighteenth year of Josiah, who reigned thirty-one years; the remaining thirteen years of his reign, together with the eleven years of those of Jehoiakim and Jehoiachin and the eleven years of that of Zedekiah (2 Kings 25) fix the first exilic year as the thirty-six year of the jubilee cycle, or the twenty-fifth year of the captivity of Jehoiachin, or fourteen years from the destruction of the Holy City ('Ar. and 'Ab. Zarah l.c.; see Rashi ad loc.). ¶ The Babylonian captivity lasted seventy years. Ezra sanctified Palestine in the seventh year of the second entrance, after the sixth year of Darius, when the Temple was dedicated (Ezra 6:15, 16; 7:7). The first cycle of shemittah began with the sanctification of Ezra. The Second Temple stood 420 years, and was destroyed, like the First, in the 421st year, on the closing of the shemittah ('Ar 13a)." (Jewish Encyclopedia, 607)

Clearly the Talmudic rabbis did not understand the period of the kings, nor did they have a special insight into ancient chronology which we are lacking today. Their figures reaching back to Joshua and to the first Temple are simply their own (incorrect) attempts at calculation. But another Talmudic statement requires notice -- that the first and second temple were destroyed "on the closing of a sabbatical year." It is commonly accepted that Tishri of the year 69 ad began a sabbath year, and the second temple was destroyed the next spring. Not so the destruction of the first temple. But their claim that it fell in a sabbath year can be understood by supposing the rabbis deduced it using two faulty assumptions, (1) that the jubilee was year 49 rather than year 50 and therefore coincided with the 7th sabbath of a cycle (a view held by some rabbis -- "Judah ha-Nasi ... contends that the jubilee year was identical with the seventh Sabbatical year," Jewish Encyclopedia, 606), (2) that in counting "the 14th year after that the city was smitten" (Ezekiel 40:1), they counted as though it said "14 years" after. As the scriptures affirm the city fell in a time of famine (2 Kings 25:3) they may have incorrectly surmised it was a sabbath year. But the siege itself is sufficient to explain the famine. Likewise the comment about the 421st year is clearly based on false calculations.

113. Those who made this covenant reneged, and took their servants back when Nebuchadnezzar temporarily lifted the siege (Jeremiah 34:16, 21, 22, 37:7, 8).

114. Actually there was one class of servants released in the jubilee who did not receive freedom in the 7th year. "The Hebrew slave who refused to go free in his seventh year went free on the Jubilee (Mekh., Nezikin 2; cf. Jos., Ant. 4:273)." (Encyclopedia Judaica, 579)

115. For the same reason I hold the antitypical jubilee cycle to be 50 x 50. In the pattern of days there were 50 pentecost cycles (50 x 50 days) leading up to the 50th year. Therefore in the pattern of years there are 50 jubilee cycles (50 x 50 years) leading to the antitypical jubilee.
Another view supposes that years 14, 15, 16 could not involve a sabbath because during them the people were allowed to eat what grew of itself, whereas on sabbath years "all sowing and reaping of any kind was strictly forbidden and even the reaping of that which grew of itself was prohibited (Lev. 25:4-5, 11)" (Rutherford, 56). But the real distinction is in the intent of the word "reap." One could not harvest the natural growth as during a normal season, that is gather all the fruitage in and store it, but one could take of it according to need. The latter practice made the natural produce of the land available to all, even the poor and the animals. In Leviticus 25 notice that verses 6-7 show this to be the intent of verse 5, and verse 12 shows this to be the intent of verse 11. "One shall neither sow nor reap as hitherto for his private gain, but all members of the community -- the owner, his servants, and strangers -- as well as domestic and wild animals, shall share in consuming the natural or spontaneous yield of the soil." (Jewish Encyclopedia, 605)


I have not read Wacholder's article, but my preliminary investigation is consistent with his sabbatical list. Rutherford also gives dates, but they are one year earlier: 164 bc, 38 bc, 68 ad (Rutherford, 36-37).

At what time, and on what basis, the sabbatic cycles were resumed -- even whether they were asynchronous with the old cycles -- is a matter of dispute, as are the proper dates for the sabbatical cycle in modern times. "The exact year of the shemittah is in dispute, and different dates are given" (Jewish Encyclopedia, 607). As Jews began returning to the land in the late 1800s, the Ashkenazic rabbis in Jerusalem issued the following declaration: "As the year of the shemittah, 5649 [1888-1889], is drawing nigh, we inform our brethren the colonists that, according to our religion, they are not permitted to plow or sow or reap ... Inasmuch as the colonists have hitherto endeavored to obey God's law, they will, we trust, not violate this Biblical command. By order of the bet din of the Ashkenazim at Jerusalem" (Jewish Encyclopedia, 607). A sabbath year beginning 1888 is at seven year intervals from Rutherford's dates (see previous note), but one year off from Wacholder's dates. I do not know the correct resolution.
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