WHEN DID SOLOMON DIE?

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The work of Edwin Thiele has become the starting place for all subsequent studies of OT chronology that take seriously the text of the Hebrew Scriptures as preserved in the Masoretic tradition.¹ It is to be lamented that Thiele's original working hypothesis, that the text as received was without factual error when referring to these "mysterious numbers," was abandoned when he was unable to reconcile certain data related to the reign of Hezekiah. It was therefore left to later scholars to point out that the problems that led Thiele to reject the authenticity of the biblical synchronisms for the time of Hezekiah could be overcome by positing a coregency of Hezekiah and Ahaz, under which Hezekiah's sole reign began in 716 or 715 BC.²

Any study which is faithful to the text of Kings and Chronicles must be solidly based on an understanding of certain fundamental questions that must be addressed. Thiele presented these questions as five variables.³ They are: (1) Were the king's years counted according to the accession system, in which the year he came to the throne was his "accession" or zero year, and was thus not counted in the total years for his reign, or was the non-accession system in use, whereby that first partial year was counted in the sum? (2) In which month was the year considered to begin? (3) When reference is made to the years of a king in the rival kingdom, does such a reference reckon the time of reign according to the system of the rival kingdom, or according to the system used in the writer's homeland? (4) Is a coregency involved? (5) Did the same method of chronological procedure continue without change during the period in question?

Thiele resolved these issues to his satisfaction as follows. (1) For the first few kings, Judah applied accession reckoning and Israel non-accession reckoning for their own kings. (2) Judah always began its regnal years in Tishri

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¹ Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings* (2d ed.; Grand Rapids: Eerdmans, 1965). There was an earlier edition published in 1951, and a third edition published by Zondervan (Grand Rapids) in 1983. References to Thiele in the present article cite page numbers in the second edition.

² See, for example, K. A. Kitchen and T. C. Mitchell in *NBD* (ed. J. D. Douglas; Grand Rapids: Eerdmans, 1962) 217; Harold Stigers, "The Interphased Chronology of Jotham, Ahaz, Hezekiah, and Hoshea," *BETS* (1966) 81–90; R. K. Harrison, *Introduction to the Old Testament* (Grand Rapids: Eerdmans, 1969) 734; and Leslie McFall, "Did Thiele Overlook Hezekiah's Coregency?" *BSac* (1989) 393–404. McFall's article, by a careful study of the Hebrew texts related to the reigns of Ahaz and Hezekiah, showed that all synchronisms for these two monarchs are consistent with the ending of their coregency fourteen years before the invasion of Sennacherib in 701 BC.

³ Mysterious Numbers 17–22.

(the fall), while Israel always began its regnal years in Nisan (the spring). (3) Regarding references from one kingdom to another, Thiele wrote that "both Judah and Israel used their own systems for the years of the neighboring kings."⁴

Regarding item (4), a careful study of the dates given requires coregencies for certain kings. For item (5), the scriptural data requires and even signals that a change in reckoning methods occurred in the middle of the 9th century BC.

Thiele established the absolute chronology of the kings of Israel based on synchronisms with Assyria. He then combined this data with regnal years and synchronisms for the southern kingdom to produce the chronology of Judah, at the same time using the Judean synchronisms and reign lengths to refine the dates for Israel. The results of this process are shown in Table 1 for the first ten kings of Israel. The middle column shows the beginning year of the king according to the Nisan calendar employed in Israel. The third column shows how the dates are more exactly defined from the Judean synchronisms; in this column, a figure like 931t/930n means a time span beginning on the first of Tishri, 931, but ending before the first of Nisan, 930.

There are two problems related to Thiele's solution for issue number 3 (whether references to the rival kingdom used that kingdom's counting practices). The first is that, in Thiele's chronology, the two kingdoms only partially used the system of their own kingdom when referring to the other kingdom, because they used the starting month of the year that the other kingdom used while rejecting the method of counting years. The other problem is that although Thiele demonstrated that his assumption works, he did not show that no other assumption can give equally satisfactory answers.

The purpose of the present paper is to show that there is an alternate solution to issue 3 which makes sense of the biblical data just as well as, or better than, the approach used by Thiele. Before dealing with the details of this solution, however, there are some statements that can be made about what is affected and what is not affected by this alternate chronology.

(1) None of the accession times or reign lengths for the northern kingdom after Jeroboam will be changed in any way. These are firmly established by the Assyrian synchronisms, and to change them by as much as six months in either direction would wreak havoc in the whole chronological structure.

(2) The only dates that will be affected are the starting date for Jeroboam I and dates for the southern kingdom for the period from Solomon through Jehoshaphat. The chronology after Jehoshaphat will not be changed, because the alternate chronology and Thiele's chronology give the same dates for Jehoshaphat's successor Jehoram, and from that time onward both kingdoms used the same system, whether accession or non-accession, so that issue 3 is no longer relevant.

The thesis to be discussed is now the following: that Solomon died in the first half of the year that began in Nisan, 931 BC, rather than in the second

⁴ Ibid. 25.

King	Starting Year (Nisan years)	Refined Starting date
Jeroboam 1 (Thiele)	931	931t/930n
(J 1 advocated in this article)		931n/931t
Nadab	910	910t/909n
Baasha	909	909t/908n
Elah	886	886t/885n
Zimri	885	885t/884n
Tibni	885	885t/884n
Omri (rival to Tibni)	885	885t/884n
Ahab	874	874t/873n
Ahaziah	853	853n/853t
Joram	852	852n/852t

 Table 1. Starting years for first ten kings of Israel (after Thiele)

half of the year as assumed by Thiele. A corollary of this thesis is the requirement that Judah used the complete method of the other kingdom (not just the yearly starting time) when referring to reign lengths of the kings of Israel, in the time span from Rehoboam through Jehoshaphat.

Just when did Solomon die? Thiele established that the divided monarchy had to begin in the time period from Nisan 1, 931 BC to the day before Nisan 1, 930 BC. We may write this in a shorthand way as 931n or, more fully, 931n/930n, with the understanding that the time span ends at the end of the month before Nisan of the second number given. Without explaining why, Thiele assumed that Solomon died in the latter half of year 931n,⁵ which we may represent as 931t/930n, the "t" representing the month of Tishri. But there is nothing in the Scripture that would rule out his dying in the first half of 931n. For a natural death (that is, one not occurring in warfare), dying in the first six months of the year was just as likely as dying in the latter six months.

If Solomon died in the first six months of 931n, then according to the Judean method of starting the year in the fall (Tishri), his last year official year was 932t/931t, not the 931t/930t assumed by Thiele. This simple change will move back one year the regnal years of all Judean kings from Solomon through Jehoshaphat, except that Jehoshaphat's last year remains the same. It will be shown that this change is consistent with all the biblical data for the period, as long as we assume (contra Thiele) that Judean scribes of this period used Israel's non-accession method when referring to the kings of Israel.

Thus the present thesis is not really a contradiction of Thiele's monumental work in establishing the principles of Hebrew chronology. Instead, it

⁵ Ibid. 54.

may be regarded as the investigation of a possibility that Thiele, by an oversight, failed to consider. But that brings up another question: If such a thoroughgoing scholar as Thiele overlooked a viable alternative scheme, could we be doing the same? Could there be other ways to combine the basic data that also produce chronologies consistent with the biblical and extra-biblical data?

The answer to this question is "No." There are only two sets of assumptions for the time period in question that satisfy the data. These are either the assumptions made by Thiele, or the assumptions that Solomon died in 931n/931t and Judean scribes used non-accession reckoning for Israelite kings.

I. RULING OUT ALL COMBINATIONS EXCEPT TWO

In order to demonstrate that these two sets of assumptions, and only these two sets, satisfy the data, we can make use of Decision Tables. For those unfamiliar with Decision Tables, beyond what might be seen on the U.S. federal tax form, the next section could be quite tedious. If the reader does not care to see the demonstration that rules out the other alternatives he can skip forward to Table 3, which shows the comparative years of Judean kings based on the two sets of assumptions. In the table, "Rule 2" refers to the assumption that Solomon died in the first half of the year 931n and that Judean scribes used non-accession years for synchronisms with Israel. "Rule 3" refers to the assumption that Solomon died in the second half of the year and that Judean scribes used accession years for synchronisms with Israel (Thiele's assumption).

Decision tables are a method of considering all the parameters that affect an outcome or series of outcomes, and of making sure that no combination of conditions is overlooked. The top left section of a decision table lists all the conditions that affect the results of interest. The values that these conditions can assume are put in the top right section. A column number (also called rule number) is put at the top of the columns for easy reference.

The bottom left section of a decision table lists all the results that are affected by the conditions above them. The bottom right section has, in each column (rule), the value that the result will have if all the conditions in the top part of the column are satisfied.

When considering the chronology of Judean kings from Solomon through Asa, we look at the synchronisms given, from a Judean standpoint, in 1 Kgs 15, verses 1, 2, and 9. The conditions that affect the results are the following: (1) Did Judean chroniclers use Tishri or Nisan years when counting the regnal year of an Israelite monarch? (2) Did Solomon die in the first or second half of the year 931n? (3) Do the references use accession or non-accession years for Israelite reign lengths?

These three conditions allow for eight possible combinations among them. Possibilities 1 through 4 have been chosen to reflect the hypothesis that Judah recognized Nisan years for Israelite monarchs. The table for possibilities 5 through 8 is not shown here, but if the reader constructs it he will see that no combination of hypotheses will work when associated with the

	1	2	3	4
Did Solomon die before or after Tishri 1, 931?	Before	Before	After	After
Accession or non- accession years used for synchronisms of 1 Kgs 15:1,9?	acc.	non-acc.	acc.	non-acc.
A. Death of Solomon and accession of Rehoboam and Jeroboam	932t (=931n/931t)	932t (=931n/931t)	931t (=931t/930n)	931t (=931t/930n)
B. 17th year of Rehoboam— accession of Abijah (1 Kgs 14:21)	915t	915t	914t	914t
C. 3 years later (death of Abijah and accession of Asa, 1 Kgs 15:2,9)	912t	912t	911t	911t
D. Accession (or 1st) year of Jeroboam	931n	931n	931n	931n
E. "18th" year of Jeroboam (1 Kgs 15:1)	913n	914n	913n	914n
F. "20th" year of Jeroboam (1 Kgs 15:9)	911n	912n	911n	912n
G. Overlap between B and E: death of Rehoboam & accession of Abijah	none	914n/914t	913n/913t	914t/913n
H. Overlap between C and F: death of Abijah and accession of Asa	911n/911t	912t/911n	911t/910n	none

Table 2. Table which assumes the Judean chronicler used Nisan years in counting regnal years of Israelite kings in 1 Kgs 15:1, 2, 9.

hypothesis that Judah applied Tishri months to Israel for the synchronisms of 1 Kings 9.

In Table 2, Rule 3 corresponds to the conditions assumed by Thiele's chronology. To see this, start at the top of column (Rule) 3 and go down; Solomon is here assumed to die on or after Tishri 1, 931n, and the Judean scribe is assumed to use accession reckoning for the synchronisms of chap. 15. The results that follow, below the thick bar, are then the dates given by these assumptions of Thiele. The results in column (Rule) 2 are those that follow from assuming that Solomon died before Tishri 1, 931, and that the Judean scribes used non-accession years for Israelite monarchs.

Any hypothesis must be rejected which does not show an overlap between the months possible for the accession of Abijah (row B) and the "eighteenth" year of Jeroboam (row E), and another overlap between the accession of Asa (row C) and the "twentieth" year of Jeroboam (row F). Hypotheses 1 and 4 do not fulfill these conditions. The only viable hypotheses remaining are 2 and 3. (The corresponding table that assumes that the Judean chronicler used his own Tishri years in synchronisms with Israel would show that no columns have overlap in both Rows G and H.)

Before going further, we should consider the reverse side of this, that is, synchronisms from Israel to Judah. In this early period, did the Israelite scribes use accession years or non-accession years when referring to a Judean king? Thiele assumed they would use their own non-accession method, but there is no *a priori* reason for this assumption, except that it worked for Thiele.

Let us examine the possibilities. The first to be considered is the assumption that Rule 3 holds, and that Israel is using accession years when referring to a Judean king. Then consider the reference in 1 Kgs 15:25, which says that Nadab of Israel began his reign in the second year of Asa of Judah. Asa began in 911t (Rule 3), and his second year would be 909t/908t under the assumed accession reckoning. Nadab's accession year in terms of Nisan years is well established as 910n/909n, which is too early for the 909t/908t timeframe under these assumptions. We therefore conclude that the combination of Rule 3 with accession years used for the synchronisms from Israel to Judah is not possible. With Rule 3, Israel must use non-accession reckoning for Judean kings in this time period, as Thiele assumed.

Can Rule 2 be used with non-accession references for the synchronisms from Israel to Judah? To test this, consider the case of Ahaziah of Israel, who, according to the Israelite record, began in the seventeenth of Jehoshaphat (1 Kgs 22:51). Under Rule 2, the end of Asa's forty-one year reign and the beginning of the sole reign of Jehoshaphat occurred in 912t-41 = 871t. Jehoshaphat's seventeenth year, for an Israelite scribe using his own non-accession reckoning, was thus 871t-16 = 855t. But there is no overlap of this date with the known beginning for Ahaziah in 853n. For accession reckoning, the seventeenth year is 854t and there is an overlap, namely 853n/853t. We conclude that for Rule 2, Israel must use accession reckoning for Judean kings.⁶

From Table 2, we thus have only two alternatives. They are (1) Rule 2 with accession references by the Israelite scribe, and (2) Rule 3 with non-accession references by the Israelite scribe. A little thought will show that these have exactly the same results when it comes to examining a synchronism from

⁶ To exhaust all possibilities, the supposition that Israel used Nisan years when referring to the kings of Judah can be examined. It would be seen that this is not possible for Rule 2 in the case of Ahaziah, or for Rule 3 in the case of Nadab.

Israel to Judah; Rule 3 has the Judean kings start one year later, but the non-accession reference removes that year from the subtraction, so the end result is the same as for Rule 2. This means we will not be able to make a choice between Rules 2 and 3 based on simple synchronisms from Israel. This is also the reason that, if Rule 2 reflects the true state of affairs, Thiele would not have discovered any errors in his analysis, except the one that will be mentioned later regarding Jehoshaphat.

Although the use of Rule 3 with accession references gives the same starting dates for kings of Israel after Jeroboam as does Rule 2 with non-accession references, the rules have this fundamental difference: under Rule 2, the first Judean kings began their reigns one year earlier than in Thiele's chronology (Rule 3).

In summary: Rule 2 necessarily contains the further proviso that, in the early years of the divided monarchy, both kingdoms used the correct system from the other kingdom in synchronisms. Rule 3 necessarily contains the proviso that the two kingdoms were not entirely consistent in imposing their methods on data from the other kingdom; they used the other kingdom's starting month, but not its means of counting years.

II. REFINING THE DATES OF THE FIRST KINGS OF JUDAH

Let us look at what Table 2 tells us about the first few kings of Judah and Israel, comparing the results of assuming Rule 2 with the results of assuming Rule 3.

1. Rehoboam.

a. *Rehoboam, Rule 2.* This assumes that Rehoboam began in 931n/931t. His first official year was thus 932t. According to 1 Kgs 14:21, he ruled seventeen years, which is an accession (= acc.) figure, as are all reign-lengths for these first Judean kings. Therefore his ending year must be 932t-17 = 915t. He died in the eighteenth year of Jeroboam, which is treated as a non-accession number under the conditions of Rule 2, so the synchronism to Jeroboam's Nisan years is 931n-17 (acc.) = 914n. Overlap of 915t/914t and 914n/913n is 914n/914t, the time of death of Rehoboam and beginning of reign of Abijah if Rule 2 is true.

b. Rehoboam, Rule 3. Starting year is 931t and seventeen years later is 914t. Jeroboam's eighteenth year, under conditions of Rule 3, must be calculated on an accession basis, so we have 931n-18 = 913n. Overlap of 914t and 913n is 913n/913t, the date of Rehoboam's death and Abijah's start according to Rule 3.

2. Abijah.

a. *Abijah, Rule 2.* Start is 914n/914t (see above). 1 Kgs 15:2 gives him three (acc.) years, so subtracting this from his first official year, 915t, gives 912t for his death. This is correlated with the twentieth year of Jeroboam

(1 Kgs 15:9), which must be 931n-19 (acc.) = 912n under the conditions of Rule 2. Overlap with 912t is 912t/911n, the date of Abijah's death and Asa's start under Rule 2.

b. Abijah, Rule 3. He began in 913n/913t, so three years later is 914t-3 = 911t. Under conditions of Rule 3, the twentieth (acc.) year of Jeroboam is 931n-20 = 911n. The overlap of 911t and 911n is 911t/910n for Abijah's death and Asa's start.

3. Asa.

a. Asa, Rule 2. He began in 912t/911n and reigned forty-one years (1 Kgs 15:10), so his date of death is 912t-41 = 871t. This is called the fourth of Ahab (1 Kgs 22:41), which must be 874n-3 (acc.) = 871n under the assumptions of Rule 2. Overlap is 871t/870n for death of Asa and beginning of (sole) reign of Jehoshaphat.

b. Asa, Rule 3. Forty-one years after 911t is 870t. Overlap with fourth (acc.) year of Ahab, 870n, is 870t/869n for death of Asa.

Comparative results for Rules 2 and 3 are shown in Table 3. Dates for Jehoshaphat, Jehoram, and Ahaziah in this table are calculated in the text following the table.

III. COREGENCIES OF JEHOSHAPHAT

We can now use dates from the northern kingdom to shed light on the coregencies related to the reign of Jehoshaphat. We shall follow Thiele's method of going forward in time to the reign of Ahaziah of Judah and working backward from there.

Ahaziah of Judah and Joram of Israel were killed by Jehu at about the same time (2 Kings 9). Jehu's accession year, 841n, is thus the last year of Ahaziah and the twelfth (eleventh, acc.) and last of Joram. There are two texts in 2 Kings which give the time that Ahaziah reigned: 2 Kgs 8:25, 26 says he began in the twelfth year of Joram and reigned one year, whereas 2 Kgs 9:29 says he began to reign in the eleventh of Joram and no total of years is given. As Thiele pointed out, the first reference is by non-accession reckoning and the second by accession reckoning; both of them imply that he may have reigned for a few months but his reign did not cross a Tishri 1 boundary that would have assigned to him a year by accession counting or two years by non-accession counting. These two verses, which would seem to be a contradiction, are actually a red flag to the chronologist, as if to say "Warning! A change is taking place and previous assumptions may no longer be valid."

It is also important when considering the reign of Ahaziah to assume that his death took place before Tishri 1, 841. This is rendered very likely because of the record of Shalmaneser III, who in his eighteenth year (841n) received tribute from Jehu of Israel. If Amaziah began after Tishri 1, 841, then all of his reign and at least part of Jehu's reign would have to occur before Jehu

King	Rule	Begin co-regency	Begin sole reign	End sole reign
Rehoboam	Rule 2		931n/931t	914n/914t
	Rule 3		931t/930n	913n/913t
Abijah	Rule 2		914n/914t	912t/911n
	Rule 3		913n/913t	911t/910n
Asa	Rule 2		912t/911n	871t/870n
	Rule 3		911t/910n	870t/869n
Jehoshaphat	Rule 2	873t/872t	871t/870n	848n/848t
	Rule 3	873t/872t	870t/869n	848n/848t
Jehoram	Rule 2	854t/853t	848n/848t	841n/841t
	Rule 3	854t/853t	848n/848t	841n/841t
Ahaziah	Rule 2		841n/841t	841n/841t
	Rule 3		841n/841t	841n/841t

Table 3.Chronology of Judean kings, Rehoboam through Ahaziah,
showing differences between Rules 2 and 3

paid tribute, which would put the synchronism between Jehu and Shalmaneser in the late fall or winter, contrary to the usual campaign season of the Assyrians. Thiele thus assumed that Ahaziah reigned for a few months between Nisan 1, 841, and Tishri 1, 841.

Ahaziah was preceded by his father Jehoram, who is given eight years in 2 Kgs 8:17. The entire passage in chap. 8 uses non-accession years for a Judean monarch, as is evident from a consideration that if Jehoram reigned eight years and ended in 841n/841t, his accession year would be 850t for accession counting. This does not overlap the fifth year of Joram of Israel (2 Kgs 8:16), which would be 848n under the non-accession counting assumed for Rule 2 or 847n for the accession counting assumed under Rule 3. Therefore Judah was using the non-accession method at this point, and we are safe in assuming that it was in effect for both kingdoms. Jehoram's first year of sole reign was thus 849t (842t + 7), and this overlapped the fifth (fourth, acc.) of Joram, 848n, in 848n/848t. This is independent of whether Rule 2 or Rule 3 is used for earlier dates. 848n/848t thus marks the death of Jehoram's father Jehoshaphat.

A coregency between Jehoram and Jehoshaphat is implied by 2 Kgs 1:17, where it is said that Joram of Israel began in the second year of Jehoram of Judah. This same year is called the eighteenth year of Jehoshaphat in 2 Kgs 3:1; the eighteenth year was 853t whether measured from the death of his father Asa in an accession sense (Rule 2) or non-accession sense (Rule 3). 853t overlaps Joram's known beginning year, 852n, in 852n/852t. The "second of Jehoram" (2 Kgs 1:17) is thus 852n/852t. If this number is to be taken in an accession sense, then the coregency of Jehoshaphat and Jehoram began in 855t; if a non-accession sense is assumed, it was 854t.

Thiele assumed that the years of a coregency are measured in a nonaccession sense.⁷ A reason for this might be that the reigning king was likely to install his son as coregent at the beginning of a new regnal year. Since the son shared rule for the full year, rather than the normal partial year of an accession year, that year may have been imputed to him as his first full year. We shall follow this rule also; it does not affect the beginning or ending dates of the monarch's sole reign. The beginning of the Jehoshaphat/Jehoram coregency is then 854t. For Jehoshaphat's "twenty-five" year (non-acc.) reign, we measure from his 848n/848t ending date as given above back to the beginning of his coregency with Asa in 849t + 24 (acc.) = 873t. This date is the same under both Rule 2 and Rule 3, but under Rule 2, in which Asa began in 912t, this would be Asa's thirty-ninth year, whereas under Rule 3 it would be his thirty-eighth year—a point that will be returned to shortly.

We have now filled in all the numbers for Table 3, showing comparative dates for the kings of Judah from Rehoboam through Amaziah, and demonstrating how the assumptions of Rules 2 and 3 affect the chronology of the period. Whether Rule 2 or Rule 3 is chosen does not affect any dates from the time of Jehoram and later.

IV. DECIDING BETWEEN RULES 2 AND 3

Table 3 shows the differences given by following Rules 2 or 3. How are we to decide between them? One way would be if a synchronism were found with an Assyrian king, such as were found for the kings of Israel. There are currently no similar exact synchronisms for these early kings of Judah, although it is possible that such might come to light in the future.⁸

There are, however, two considerations that can help in determining which rule is the more likely. The first consideration is a consequence of the dates we have already established. The second consideration examines an extra-biblical reference that offers an interesting and entirely independent piece of evidence. The two considerations are:

(1) The beginning of the coregency of Jehoshaphat, 873t under both Rule 2 and Rule 3, argues in favor of Rule 2. Thiele cited 2 Chr 16:12 as giving a very good reason for establishing Jehoshaphat as coregent in Asa's thirtyninth year; that was the year that Asa "became diseased in his feet. His disease was severe . . ." (NASB).⁹ Although Thiele gave this as a reason for the coregency, under his chronology (Rule 3) the year in which the coregency be-

⁷ Mysterious Numbers 159.

⁸ If Egyptian chronology for this period were well established independently of the scriptural tradition, and we knew from Egyptian records that the invasion of "Shishak" occurred in, say, the spring of 925 BC, then by referring to 1 Kgs 14:25 we could conclude that Rehoboam's accession year was 931t, establishing Rule 3 as correct. However, any textbook which says that Pharaoh Sheshonq of Egypt invaded Israel in 925 BC got this information from assuming that Shishak = Sheshonq, and the year is taken from a conjectural biblical chronology, not from any independent Egyptian chronology. Since Sheshonq is dated from the scriptural chronology, his dates cannot be used to establish biblical dates.

⁹ Mysterious Numbers 70.

gan, 873t, is the thirty-eighth year of Asa, not the thirty-ninth; the coregency began before the reason for it. Under Rule 2, the coregency also begins in 873t, but that year is indeed the thirty-ninth of Asa and the reason for the coregency and its beginning date are synchronized.¹⁰

(2) Rule 2 positions Solomon's first year as 972t, or 971t if his forty-year reign is to be taken in a non-accession sense, as for other coregencies. His fourth year, in which the construction of the Temple began (1 Kgs 6:1) was 968t, whether accession years (start in 972t and subtract 4) or non-accession years (start in 971t and subtract 3) are used for Solomon. Construction began in the second month of the year (months are always counted from Nisan), that is, the spring of 967 BC for Rule 2. Under Rule 3, this would be one year later, the spring of 966 BC. The next section will show why 967 BC for the start of the Temple is in exact agreement with an extra-biblical chronological reference that so far has not entered into most discussions of the chronology of the kings of Israel.

V. JUBILEES, THE EXODUS, AND THE CONQUEST

The chronologist, muddling his or her way through the seemingly discordant figures of Kings and Chronicles, must often wonder if there was not a better way to keep track of dates—even given the obvious fact that "BC" and "AD" had not yet been invented. Many have probably noted that there indeed was a much better way to measure time given in the Bible itself—in the Pentateuch. That was the institution of sabbath years and Jubilees.

According to the system of sabbath years, every seventh year was to be marked by leaving the ground fallow for that year. The seven-year cycle was short enough that there was no possibility of any confusion as to when the next sabbath year was to begin, and the events that were supposed to occur had such an impact on the life of the nation that the effect of these years could not be overlooked, even if observed in a half-hearted way. In addition to this seven-year cycle, there was a longer cycle called the Jubilee, described in Leviticus 25 and 27. For the Jubilee, there was even a more marked effect on the daily lives of the people; they were to leave the ground fallow for two years, and property that had been sold was to return to the ownership of the family that sold it. The value for which property could be sold was to be measured, at any time, according to the years remaining to the Jubilee.

¹⁰ Apparently Thiele later realized that the disparity he had glossed over in his second edition needed fixing. In the third edition, he moved the reign of Jehoshaphat, and with it those of Jehoram and Ahaziah, down one year, so that he was able to claim that the coregency of Jehoshaphat began in the same year that Asa's disease started. By doing so, however, he ran into an immovable rock, namely the first year of Athaliah, which is dated by its synchronism with the first year of Jeho 842t. Compare the chart on page 101 of the third edition, which shows Ahaziah beginning in 841t, with the statement on page 104 which places the beginning of Athaliah's reign in 842t. Since Athaliah seized the throne after the death of her husband Ahaziah, these dates cannot agree. Thiele must have been aware that things were not right, because the tables of starting years at the beginning of the third edition are consistent with those of the second edition for these monarchs. The proper solution to the problem is to move the starting year of Jehoshaphat's sole reign back one year, and with it the reigns of all the kings of Judah who preceded him.

Whatever the effect this must have had on the people, for the chronologist it is a system marvelously suited to keeping track of the years over a long period of time. Alas, that the people of Israel through their recorded history seemed to disobey the commands of the Lord to observe the sabbath years and the Jubilee cycle! How convenient it would be to have an occasional reference like this: "In year x of king Jehoshaphat, the Jubilee was observed," then about fifty years later "In year y of Joash the land was left fallow for two years because of the Jubilee." With these kind of checkpoints along the way, Hebrew chronology could have been put on a sound basis centuries, if not millennia, before the present time.

As it is, there seems to be only one reference to the observance of a sabbath year in the scriptural record. That is in Isa 37:30 and its parallel passage in 2 Kings, where the prophet says during the invasion of Sennacherib, "You shall eat this year what grows of itself, in the second year what springs from the same, and in the third year sow, reap, plant vineyards, and eat their fruit" (NASB). The crop of the current year apparently had been ruined by the besieging Assyrians; in spite of that the people were to observe a sabbath for the land in the fall of the next year.¹¹

There is evidence, nevertheless, that the people of Israel, or at least their priests, were aware of when the Jubilee should be observed, however lax the nation may have been in obeying its provisions. The Talmud records the occasion of two Jubilees: one in the eighteenth year of Josiah (*b. Meg.* 14b) and one which was announced on the Day of Atonement specified in Ezek 40:1 (*b. Arak.* 12a). The Jubilee associated with Ezek 40:1 is specifically called the seventeenth and last by the Talmud, which makes the one in the days of Josiah the sixteenth. The seventeenth Jubilee could not be observed because the people were in captivity.¹²

An important reason for believing that the Talmud account is authentic is the following: it is exactly forty-nine years from the eighteenth of Josiah to the Day of Atonement fourteen years after the city was conquered (Ezek 40:1), on which the seventeenth Jubilee was announced. Josiah began in 641t, so his eighteenth year was 623t. The Jubilee would have been announced on the Day of Atonement in Tishri, 623.¹³ Jerusalem fell on the

¹¹ The actual year involved is problematic. A cursory reading of the relevant passages in 2 Kings, Isaiah, and Chronicles would give the impression that there was only one invasion of Sennacherib that is described, in which Hezekiah first bought off the Assyrian monarch with a heavy tribute of gold and silver (2 Kgs 18:14–16), but then the Assyrian king immediately besieged Jerusalem anyway (2 Kgs 18:17–19:36). The tribute of gold and silver is supported by the annals of Sennacherib for the year 701 Bc. Many biblical scholars, however, believe that the siege of Jerusalem came a few years later than the tribute. They would date it some time between the beginning year of Pharaoh Tirhaka (2 Kgs 19:9), who began to reign in 690 or 689 BC, but before the death of Sennacherib in 681 Bc. See an excellent summary of the arguments for a second Assyrian invasion in the discussion by Harvey Finley, *Beacon Bible Commentary* (10 vols.; Kansas City: Beacon Hill Press, 1965) 2.478–81.

 12 The references to the Jubilees in the Talmud were first brought to the attention of the author by David Rice of San Diego in an internet forum.

¹³ The 623 date for the announcement of the sixteenth Jubilee explains a reference to the "thirtieth year" in Ezek 1:1 that has always puzzled commentators. According to some, it referred to ninth day of the fourth month, 587 BC. By Tishri reckoning this was the year 588t.¹⁴ Fourteen years later was 574t. In Tishri of that year the Jubilee was announced, according to the Talmud and its reference to Ezek 40:1. The difference between 623t and 574t is forty-nine years, which establishes that the fiftieth year, or Year of Jubilee, was counted as the first year of the next Jubilee cycle, thus keeping the seven-year cycle in harmony with the Jubilees, a point that is debated interminably in the Talmud. Further support for forty-nine years rather than fifty is found in the practice of the Samaritans, who kept the Jubilee as a forty-nine year cycle.¹⁵ The apocalyptic *Book of Jubilees*, usually dated to the Second Century BC, also used a Jubilee cycle of forty-nine years.

It is extremely unlikely that these pieces of information could have been contrived to establish someone's ideas of chronology. We thus have no reason to reject these important observations from the Talmud. They can be taken as a historical reference independent of the scriptural record, the same as if some ancient document from the Near East mentioned a date that could be tied independently to a biblical date. As such, the Talmud reference is of great historical value in corroborating the chronology that was worked out by Thiele and later scholars.

Once these dates for the sixteenth and seventeenth Jubilees are established, they can be used to determine when the Jubilee cycles began. Since the sixteenth cycle ended with a Jubilee that was announced in Tishri, 623, the first Jubilee must have been announced $15 \times 49 = 735$ years earlier, in 1358 BC. If Tishri of 1358 BC was in the forty-ninth year of the first cycle, then the first year, forty-eight years earlier, was 1406 BC.

According to Lev 25:2, 8–10, counting of the sabbath and Jubilee cycles was to start when Israel entered the Promised Land. Since the first year of the Jubilee cycle was observed in 1406, the beginning of the Conquest occurred in Nisan of that year (Josh 4:19). The exodus, forty years earlier, occurred in 1446 BC.

In 1 Kgs 6:1, it is said that the foundation of the Temple was laid in the fourth year of Solomon, in the second month of the year (the month after Nisan). As was shown above, this was the spring of 967 BC for Rule 2, or the

the thirtieth year of the prophet's life, but this is not the usual way to express such an idea. Various rabbis had speculated that it was the thirtieth year of a Jubilee cycle, while Jerome and the *Targum of Jonathan* interpreted it as the thirtieth year from the reforms of Josiah that re-instituted the Passover (Harrison, *Introduction* 837). By establishing this date as the fourth month of 594t (the fifth of the exile of Jehoiachin as measured from the start of exile in 598t, Ezek 1:1, 2), it is shown that both these last two opinions were correct; it was the thirtieth year measured from either the announcement of the Jubilee in 623t or from the reforms of Josiah in that same year.

¹⁴ That Ezekiel used Tishri years is shown by comparing Ezek 33:21 with 2 Kgs 25:2, 3. That the city fell in 587 BC, not a year later as is often assumed, can be seen by comparing the accession figure of the eighteenth year of Nebuchadnezzar in Jeremiah 52:29 with the non-accession nine-teenth year in 2 Kgs 25:8. Both of these calculate as 587n, so the fourth month was in the summer of 587 BC.

¹⁵ A. Neubauer, *Chronique Samairitaine* (1873) 3, 8 ff., cited in *Encyclopedia Judaica* (Jerusalem: Keter, 1972) 14.579.

spring of 966 BC for Rule 3. The Kings passage also says that it was the 480th year of the departure from Egypt, a phrase that has long been recognized (often in an attempt to discredit it) as establishing the biblical date of the exodus. Since this is an important phrase, it bears careful exegesis.

Literally, the verse says, "In the 480th year 'of the going-out' (לצאת) of the descendants of Israel from the land of Egypt . . ." The phrase לצאת refers, in the language we have become familiar with, to non-accession reckoning. It is similar, in English, to speaking of our first year of college, meaning the time before we had been there one full year. To show that it is to be taken in a non-accession sense, consider first Exod 16:1, which says that the people came to the wilderness of Sin "on the fifteenth day of the second month 'of their going-out' (לְצֵאתָם) from the land of Egypt." Most commentators would agree that only one month had passed, not two. More conclusive is the repetition of the same phrase in Num 33:38, regarding the death of Aaron. Aaron died "in the fortieth year 'of the going-out' (לצאת) of the descendants of Israel from the land of Egypt, on the first day of the fifth month." The forty years in the wilderness had not yet expired, as is evident from Josh 5:6. If the date of the exodus were to be calculated from the date that Aaron died, in the "fortieth year of the going-out," we would have to subtract thirty-nine years, not forty, to get the correct date for the departure from Egypt.¹⁶

The proper way to derive the date of the exodus from 1 Kgs 6:1 is therefore to add 479 years, not 480, to the year in which the foundation of the Temple was laid. For Rule 2, this gives 967 + 479 = 1446 BC, with the beginning of the Conquest in Nisan, 1406. Rule 3, starting from 966 BC, gives 1445 BC and 1405 BC for these two dates. The Jubilee cycles affirm the earlier of these two sets of dates: 1446 for the exodus, 1406 for the Conquest, and the beginning of the Temple in 967 BC. They also help us to answer the question, "When did Solomon die?" by saying that these figures support a date between Nisan 1 and Tishri 1 of 931, rather than between Tishri 1 of 931 and Nisan 1 of 930, as assumed by Thiele.

The correspondence between the date for the exodus, as derived from the Jubilee cycles, and the date as derived from the text of 1 Kgs 6:1, is so remarkable that it can hardly be assigned to coincidence. If the date for laying the foundation of the Temple is not exactly right, and if the 480 years of 1 Kgs 6:1 is also not exactly right, then it is extremely unlikely that these two figures would produce precisely the same date for the beginning of the exodus as calculated from the Jubilee cycles. Conversely, if the years remembered in the Talmud for the last two observances of the Jubilee were not exactly right, it would be extremely unlikely that these years would somehow mysteriously match the dates for the exodus as derived from 1 and 2 Kings.

¹⁶ It is unfortunate that most English translations use the word "after" in 1 Kgs 6:1, which suggests that a full 480 years had elapsed since the exodus. The Hebrew preposition used, 2, does not bear the meaning "after," but is better translated "of," which yields the literal translation "In the 480th year of the departure . . ." This is consistent with phrases such as, "In the twenty-fifth year of our exile" (Ezek 40:1), but it is somewhat ambiguous in English. A translation which resolves the ambiguity and brings out the proper sense of the verse is, "In the 480th year, as measured from the departure of the people of Israel from the land of Egypt, . . ."

Neither can the correspondence of these two witnesses to the dates of the exodus and Conquest be assigned to the conniving of a Talmudic redactor who was trying to doctor the data so that, hundreds of years later when the principles of OT chronology were finally understood, everything would come out right. Even the forty-nine year difference between the sixteenth and seventeenth Jubilees bears testimony to the authenticity of the Talmudic tradition, because the lack of understanding of how to interpret the dates of the kings weighs against this being contrived.

The 'coincidence,' then, is due to the fact that both traditions are authentic. In the case of the Scriptures, this means that 1 Kgs 6:1 is not the corrupt and mistaken guess of a later tradition which had forgotten the true time spans involved.¹⁷

A date for the exodus in the mid-fifteenth century BC has been much maligned because of favorite theories that identified various pharaohs of a later date with the pharaohs of the oppression and exodus. There has always been difficulty with such theories, and some scholars, finding little evidence to substantiate the biblical exodus in the annals of whichever thirteenth-century pharaoh is currently favored, end up casting doubts that the exodus ever occurred. It is hoped that the present study has strengthened the case for the accuracy of the chronological numbers as preserved in the Masoretic text, and at the same time has helped to discredit theories which put the exodus anywhere but in the middle of the fifteenth century BC.

¹⁷ Jubilees were possibly the means, from a practical human standpoint, why the number of years was remembered exactly from the time of the exodus to the days of Solomon. This "natural explanation" of the reason for the Bible's accuracy in this matter is not meant to detract from the wisdom of God in instituting the Jubilees in the first place, thereby providing one method for preserving accurate chronological data for his inerrant word.