THE PARIAN MARBLE AND OTHER SURPRISES FROM CHRONOLOGIST V. COUCKE

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I. Coucke's Work as a Surprise to Thiele

For those who study the history and chronology of the Hebrew kingdom period, the name of V. Coucke is usually only known from a footnote in Edwin Thiele's *Mysterious Numbers of the Hebrew Kings*. In the footnote, Thiele acknowledged Coucke's work as follows:

The author is happy to call attention to the existence of a number of striking parallels between the details of his chronological scheme and that of Prof. V. Coucke of the Grand Seminaire de Bruges. . . . Not until the author had worked out the details of his chronological scheme and the resultant dates for the kings of Israel and Judah, did he become aware of the earlier work of Professor Coucke. It is a matter of gratification to know that these two independent studies have produced essentially the same results on a number of important points, such as Tishrito-Tishri regnal years in Judah and Nisan-to-Nisan years in Israel (though Professor Coucke suggests that in the latter instance this might have been 1 Thoth instead of Nisan), and accession-year reckoning in Judah except for a period when a shift was made to the nonaccession-year system, and nonaccession-year reckoning in Israel with a later shift to the accession-year system.¹

Coucke and Thiele both recognized Judah's change to nonaccession reckoning in the ninth century B.C., although Coucke thought that the change started in the reign of Athaliah, while Thiele placed it a few years earlier in the reign of Jehoram. Both scholars concluded that Judah, after a few years, went back to accession reckoning, and eventually Israel also adopted this method. Although they differed in some of the details, their general agreement on the principles that governed the chronological methods of the authors of Kings and Chronicles, arrived at independently, is evidence in favor of the overall soundness of their respective approaches. One other principle discovered by these scholars in addition to those already mentioned was the counting of some

¹Edwin Thiele, *The Mysterious Numbers of the Hebrew Kings*, 3d ed. (Grand Rapids: Zondervan/Kregel, 1983), 59, n. 17. Earlier editions of *Mysterious Numbers* were published in 1951 (Chicago: University of Chicago Press) and 1965 (Grand Rapids: Eerdmans). Unless otherwise noted, page numbers cited in this article refer to the third edition. The works of Coucke are found in V. Coucke, "Chronologie des rois de Juda et d'Israël," *RBén* 37 (1925): 325-364, and "Chronologie biblique" in *Supplément au Dictionnaire de la Bible*, ed. Louis Pirot, vol. 1 (Paris: Librairie Letouzey et Ané, 1928), cols. 1245-1279.

regnal years according to coregencies, whether these coregencies are explicitly stated or implied. No subsequent study that ignores these basic principles has had the success in matching new inscriptional evidence when it appears as have the studies built on the foundation laid down by Coucke and Thiele.²

Thiele apparently was first informed of the work of Coucke by Siegfried Horn. Horn had begun his own study of the chronology of the kingdom period during his student days before World War II. In his investigations of the literature, Horn related that "[t]he most striking contribution in this field of study seemed to me the work of Professor V. Coucke of the Grand Séminaire de Bruges which appeared in 1925 in the form of an article in the Revue Bénédictine, and in an expanded form was republished in 1928 in Volume I of the Supplément au Dictionnaire de la Bible."3 Because of his German nationality, Horn was detained in Indonesia and later in India by the British during the war, during which time he had the leisure to develop his own ideas, influenced as they were by Coucke. He was not aware of the work of Thiele until he came to America in 1946, which was two years after Thiele had published an abridgment of the results of his doctoral dissertation. Horn then relates that "to my utter amazement I found my chronological scheme to be in almost complete agreement with that of Thiele."4 If Horn was amazed, then surely Thiele was also, and not just because of the many agreements between his work and that of Horn, but also because of the "striking parallels" that Horn introduced him to in the work of Coucke.

I had made some attempt, without success, to obtain Coucke's article in the *Supplément*, so that a comparison could be made between Thiele's chronology and that of Coucke. Then in the fall of 2009, Andrew Steinmann found a copy of the *Supplément* in the Wheaton College library, from which he duplicated Coucke's entry and shared it with me. We found that Coucke's chronology required more emendations of the text as compared to Thiele's system, and so Thiele's work should still be considered as the starting place for subsequent work in this field. At the same time we found several unanticipated and interesting ideas in Coucke's writing. These ideas form the subject of the present paper.

II. A Welcome Surprise: Coucke's Notation

In his article in the *Supplément*, and also in his earlier article in the *Revue Bénédictine*, Coucke presented his chronology for the kings of Judah and Israel in tabular form. Two tables, one for each kingdom, start on the third page of the *Supplément* article. In both publications the tables contain a welcome innovation,

²In support of this statement, see Kenneth A. Strand, "Thiele's Biblical Chronology As a Corrective for Extrabiblical Dates," *AUSS* 34 (1996): 295-317.

 3 Siegfried Horn, "The Chronology of King Hezekiah's Reign," AUSS 2 (1964): 41. Horn was the founding editor of AUSS.

⁴Ibid., 45.

namely, a notation that shows at a glance whether the years assigned to the king are determined according to Israel's Nisan-based year or Judah's Tishri-based year. To designate the year that began in Nisan of 931 B.C., Coucke wrote "n. 931." For a year that began in Tishri of the same year he wrote "t. 931." The six-month offset between the calendars used by the two kingdoms frequently allows narrowing the synchronisms between them to a six-month period, which could start in either Nisan or Tishri. Coucke wrote the first of these periods as "n. 931-t. 931," the second as "t. 931-n. 930." The first expression designates a period of time starting on Nisan 1 of 931 B.C. and ending the day before Tishri 1 of the same B.C. year. The second expression designates the time from Tishri 1 of 931 B.C. to the day before Nisan 1 of 930 B.C.

It is regrettable that Thiele did not see the need for a similar type of notation, and equally regrettable that, after he was introduced to Coucke's writings, he did not adopt Coucke's convention for his future work. As it was, Thiele continued to use the inexact "931/30 B.C." expressions in his writing. Does this term mean a year by the northern kingdom's calendar that started in Nisan of 931, or a Judean-type year starting in Tishri? Or does it mean that the author is uncertain of the date, and whatever is being referred to could have happened at any time from January 1, 931 B.C. to December 31, 930 B.C.? Thiele's notational system became even more inexact in the third edition of *Mysterious Numbers*, where he wrote: "In the interests of simplicity the date 930 is being used for the division of the kingdom instead of the dual symbol 931/30."⁵

It can be argued whether or not this "simplification" made things easier for the reader. It did nothing to clarify the ambiguity of the original system. That ambiguity has led to confusion, especially to anyone who wanted to look more carefully at the chronology of a given event. This was true for Thiele himself. In the first and second editions of *Mysterious Numbers*, Thiele had Jehoshaphat starting a coregency with his father Asa in 873/72 B.C., with his sole reign extending from 870/69 to 848 B.C. Thiele stated that the reason for the coregency was that Asa, in the thirty-ninth year of his reign, was stricken with a severe disease from which he eventually died (2 Chron 16:12-13), and so in that year he appointed his son as coregent. Thiele had also derived the starting year of the coregency by synchronizing the long reigns of Asa and Jehoshaphat with the reigns of their contemporaries on the throne of Israel.

In the first and second editions of *Mysterious Numbers*, Thiele expressed Asa's accession year as 911/10, his forty-first and last year as 870/69, and the start of the Asa/Jehoshaphat coregency in Asa's thirty-ninth year as 873/72. With an inexact notation like this, the casual reader may have surmised that it really was just two years from the latter part of the thirty-ninth year

⁵Mysterious Numbers, 79. The new system, however, coexisted along with the older convention in the third edition.

⁶Mysterious Numbers, 2d ed., 70; 3d ed., 97.

(873/72) to the first part of the forty-first year (870/69). An exact notation, however, shows it does not work. The years intended started in Tishri of 873 and Tishri of 870 B.C., respectively, and the first of these was Asa's thirty-eighth year, not his thirty-ninth as Thiele had it. Thiele eventually became aware of the problem (perhaps a colleague pointed it out), and so in his third edition he moved the beginning of the Asa/Jehoshaphat coregency one year later, to 872/71. At least this change would make the coregency start in the thirty-ninth year of Asa. But the move had a ripple effect: Jehoshaphat's twenty-five years, or twenty-four full years when taking into consideration the nonaccession reckoning usually used for coregencies, now ended in 848/47 instead of in 849/48 as in the previous editions. The ripple effect had to continue, so that Thiele's third edition moved the reigns of Jehoshaphat's successors, Jehoram, Ahaziah, and Athaliah, all down one year as compared to the previous editions. This change between editions is not mentioned in the text. It is almost completely obscured by Thiele's ambiguous notation. Thus the tables of the second and third editions both display Jehoram's sole reign as beginning in 848, but in the second edition (chart, 67) the more exact date is seen as starting in Tishri of 849, whereas in the third edition (chart, 97), the starting date is Tishri of 848. In the third edition, Ahaziah's one year of reign moves down from the year beginning in Tishri of 842 to the year beginning in Tishri of 841. Athaliah's seven years, which Thiele properly takes in a nonaccession sense (compare 2 Kgs 11:3 and 4) should then start in Ahaziah's ending (and starting) year, the year beginning in Tishri of 841, and end six years later in the year starting in Tishri of 835 B.C. However, this date is not compatible with Thiele's accession year for Joash, which the third edition starts in Tishri of 836,8

⁷The length of reign of a coregency is more often than not according to nonaccession reckoning, perhaps because the reigning king would have taken the start of a new year of his reign as the appropriate occasion for installing his son as the heir-apparent. This convention is to be used for the lengths of reign of Jotham and Jehoshaphat. The years of Ahaz, however, as measured from his coregency with Jotham, are measured in an accession sense. For a discussion of this anomaly for Ahaz, see Rodger C. Young, "When Was Samaria Captured? The Need for Precision in Biblical Chronologies," *JETS* 47 (2004): 588.

⁸Mysterious Numbers, 3d ed., chart on p. 101. The chart here shows Athaliah's reign as taking parts of only six calendar years, instead of the seven calendar years (six full years plus part of one year) that are required if she is to have six accession or seven nonaccession years. If the chart had shown Athaliah's years in both an accession sense and a nonaccession sense, as is done for the years of Joram of Israel immediately below in the same chart, the problem may have been noticed. As it is, this is an example of how these kinds of charts, no matter how elaborate, can be quite useless for the fine points of chronology, because most readers apparently did not recognize the basic flaw just described. If Thiele had used an exact notation in expressing his years of reign, the flaw should have become evident before his finished chronology was published.

that is, one year before the death of Athaliah, whom Joash succeeded on the throne. Thiele could not move Joash and the subsequent kings of Judah down one year because this would have caused conflict in the synchronisms with Jehu and his successors on the throne of Israel, whose dates are tied to Assyrian dates, and so we are left with a fundamental inconsistency in Thiele's dates for these early kings of Judah.

Even though I have discussed Thiele's discrepancies for the reigns of Jehoshaphat through Athaliah in previous publications, I have repeated the discussion here for two reasons. The first reason is to illustrate that Thiele's predicament could have been avoided if he had, like Coucke, adopted an exact notation that would clear up all confusion about the kind of year being discussed and then applied the appropriate arithmetic that should be used with that year. In the first two editions of Mysterious Numbers, if Asa's final year was written in Coucke's notation as "t. 870" instead of as 870/69, and the year in which Jehoshaphat became his coregent as "t. 873" instead of as 873/72, it would have been obvious that Thiele's year for the start of the coregency was three years before the death of Asa, not the two years that he said were compatible with the coregency starting in Asa's thirtyninth year. From personal experience, I can also say that it was easier to find Thiele's errors in his "corrections" of the third edition when I used an exact notation for the reigns of the monarchs, as compared to trying to reconcile Thiele's charts. Had Thiele written out things in an exact notation, his small arithmetic errors would not have remained obscured as long as they did. If Thiele, then, whom we readily acknowledge as the groundbreaking authority for the chronology of the kingdom period, was confused because he did not adopt a precise notation for his work, is it not clear that persevering in ambiguous notation schemes will continue to produce confusion?

Coucke saw that a well-defined, exact notation was a requirement for serious chronological study. Thiele learned of Coucke's work fairly early in his career, and if he had adopted Coucke's notation at that time, then by means of Thiele's subsequent writings, and the increasing recognition they received, he could have established an effective notation like this long ago. As it is, more than eighty years have passed since Coucke wrote his two treatises, and we still do not have any general agreement on the notational system to be used when writing in this field except for the old imprecise 931/30 B.C. convention. As compared with the methods and conventions for the strict definition of terms adopted by any of the exact sciences, this situation for chronological research is deplorable.

⁹If a writer did not agree that Judah's years began in Tishri, and Israel's in Nisan, but that all calendars are to be dated from Heshvan, he or she could write years as 931h and the meaning of the author would be clear, no matter how unreasonable the reader might think it is to start anything in Heshvan.

The second reason for going into detail on this small matter of a one-year discrepancy in Thiele's chronology is to mention that once the problem is understood, another solution can be explored: keep the start of the Asa/Jehoshaphat coregency where it was in the first and second editions (873/72), but move the years for Asa and his predecessors on the throne of Judah back one year. This produces harmony in all the reign lengths and synchronisms of the two kingdoms for the time from Solomon through Athaliah. It does away with Thiele's awkward supposition that the scribes of the two kingdoms superimposed their own method of accession years or nonaccession years on dates from the other kingdom, even though in all other respects they properly observed the system of the other kingdom.¹⁰ A further consequence, one with significant theological implications, is that it puts the calendar of Sabbatical and Jubilee cycles in agreement with the regnal dates of Solomon, in particular with the date when the foundation of the Temple was laid.¹¹

Anyone with a technical background who sets out to study the profuse and complex chronological data of the Hebrew kingdom period should soon recognize the need for the use of an exact notation in expressing the basic building blocks of the trade, namely Israel's Nisan-based year and Judah's Tishri-based year. When I began to write in this field in 2003, I made the rather obvious choice of attaching an "n" to the B.C. date to represent Nisan years or a "t" to represent Tishri years. Should these letters be capitalized or lower case? I decided on the latter as less likely to detract from the more important of the two expressions, the B.C. year. My choice for six-month intervals was 931n/931t and 931t/930n. The reader will notice the similarity of these expressions to those introduced by Coucke.

Daiqing Yuan saw this need when writing his Th.M. thesis at Dallas Theological Seminary.¹² Daiqing already had a Ph.D. in physics, and so he knew that terms must be defined exactly, and all ambiguities cleared up, before presenting the results of any technical research. The convention he derived is shown in Table 1, along with those of Coucke and myself, in order

¹⁰For the details, see Rodger C. Young, "When Did Solomon Die?" *JETS* 46 (2003): 589–603.

¹¹Rodger C. Young, "Ezekiel 40:1 As a Corrective for Seven Wrong Ideas in Biblical Interpretation," *AUSS* 44 (2006): 277–281; idem, "The Talmud's Two Jubilees and Their Relevance to the Date of the Exodus," *WTJ* 68 (2006): 71-83; idem, "Three Verifications of Thiele's Date for the Beginning of the Divided Kingdom," *AUSS* 45 (2007): 173-179; idem, "Evidence for Inerrancy from a Second Unexpected Source: The Jubilee and Sabbatical Cycles," *Bible and Spade* 21 (2008): 109-122; idem, with Bryant Wood, "A Critical Analysis of the Evidence from Ralph Hawkins for a Late-Date Exodus-Conquest," *JETS* 51 (2008): 234-239.

¹²Daiqing Yuan, "A Proposed Chronology for Judges" (Th.M. thesis, Dallas Theological Seminary, 2006).

to display their essential similarity. Coucke's notation for a year takes two extra characters, a space and a period, or two spaces and two periods extra for the six-month representation, so it is the least compact of the three. The method of expressing the year in all three conventions is simple enough that any reader who understands that ancient calendars did not all start on January 1 should quickly adapt to this usage. ^{13, 14, 15}

TABLE 1. FORMS OF THE NISAN/TISHRI NOTATION FOR THE YEAR 931 B.C., DEVELOPED INDEPENDENTLY BY THREE AUTHORS			
	Coucke	Young	Yuan
Year beginning Nisan 1	n. 931	931n	931N
Year beginning Tishri 1	t. 931	931t	931T
6 months beginning Nisan 1	n. 931-t. 931	931n/931t	N-T931
6 months beginning Tishri 1	t. 931-n. 930	931t/930n	T931-N930

For the six-month periods, however, the expression is less intuitive. 931n/931t means the period starting on Nisan 1 of 931 B.C., which is clear enough, but the second expression means that this period ends the day before Tishri 1 of the same B.C. year, and so its meaning is not so self-evident. In discussing this with Yuan, we agreed that the six-month period (ignoring intercalary months) might be written as 931n with a subscript 6, i.e., 931n₆, but for the present there are no plans to adopt this modification.

The three Nisan/Tishri conventions were instituted independently by writers who saw the need for an unambiguous way of expressing time periods. Although Coucke published his articles in 1925 and 1928, I had not read any of his writings until late 2009, by which time I had published several articles using the Nisan/Tishri notation, the first article appearing in 2003. When Yuan finished his Th.M. thesis in 2006, he had not seen my articles, so that this represents three writers who independently saw this need, and who independently came up with similar conventions to meet the need. There is no question, then, that there is a requirement for a better way of expressing dates than is currently found in most of the literature. How many times does the wheel need to be reinvented before it starts to roll?

¹³Coucke's notation is explained at the bottom of the tables in his "Chronologie" and *Supplément* articles.

¹⁴Young, "When Did Solomon Die?" 590-591, but the notation is explained more fully in idem, "When Was Samaria Captured?" 580.

¹⁵Yuan, v.

There is some hope on the horizon. In 2010 or 2011, Steinmann plans to publish his book on the biblical chronology from Abraham to Paul. ¹⁶ For the kingdom period, he will use the Nisan/Tishri notation in the form that I have advocated. This is also the form that will be used in discussing some fine points of chronology in the rest of this article.

III. Third Surprise: Coucke's Use of the Parian Marble to Date Solomon

Coucke was aware of the Assyrian inscription that mentioned Ahab as one of the foes of Shalmaneser III at the Battle of Qarqar, but he used it only as a general checkpoint, not as the starting point for assigning absolute dates to his chronology. His date for the battle, 854 B.C., was in keeping with the majority consensus of scholarship in his time. It was Thiele who was largely instrumental in modifying this to the date that is now almost universally accepted, 853 B.C., 17 although, as Thiele acknowledges, Emil Forrer and other scholars had previously advocated this date.¹⁸ Coucke had Ahab's death in 853n, the year after his date for the Battle of Qarqar, but he was unable to use it as a fixed point for his chronology because he failed to appreciate, as did Thiele, that the twelve years between the battle in Shalmaneser's sixth year, at which Ahab was present, and the tribute from Jehu that the Assyrian king received in his eighteenth year required that the first of these events was in Ahab's last year and the second in Jehu's first year. The reigns of Ahab's two successors, Ahaziah and Joram, then fit into the twelve intervening years. Not understanding this, Coucke instead chose to believe that the scriptural texts were in error, and so assigned seven years to Israel's Joram instead of the twelve years given him in 2 Kgs 3:1. The uncertainties in these speculations meant that the Battle of Qargar could not be used as a definitive anchor point to tie the reign lengths of the Hebrew kings to absolute (B.C.) dates, and he looked for some other date from antiquity to be used for this purpose. He was able to determine such a point in the reign of Solomon by combining three ancient sources: the state records of Tyre as recorded in Josephus, the writings of the Roman historian Pompeius Trogus as condensed in Justin's Epitome of Trogus's writings, and the chronological data found in the Parian Marble.

Coucke's use of the Parian Marble and these other sources to date Solomon is the most surprising element in all of his writings. It is apparently unique in studies of the chronology of the Hebrew kingdom period, and yet Coucke introduces it in a matter-of-fact way, as follows: "The first year of the construction of this edifice [Solomon's Temple] is determined in this way:

¹⁶Andrew E. Steinmann, From Abraham to Paul: A Biblical Chronology (St. Louis: Concordia, forthcoming).

¹⁷Mysterious Numbers, 67-78.

¹⁸Ibid., 73.

According to the Parian Marble, the capture of Troy was in the month of May 1207 B.C.; Tyre was founded a year earlier. . . . "19

Marble from the Greek island of Paros was prized in antiquity for its quality. It was used in making some of the most famous sculptures from the classical era. The term "Parian marble" can refer either to this marble, as excavated from Paros, or, with a capital "M," to a marble tablet that was originally located on the island, two fragments of which were brought to England in A.D. 1627. This tablet is also called the Parian Chronicle, or (Latin) the Marmor Parium. The smaller of the two fragments was lost in the English Civil War, but not before a transcription and translation had been made. The major fragment was presented to Oxford University in 1667, and it is now one of the foremost treasures of Oxford's Ashmolean Museum. A shorter third fragment was found in 1897 on Paros itself and now resides in a museum on the island. The full text of the three portions, along with an interlinear translation into English, is found on the Ashmolean's website.²⁰ The tablet is a chronological list that dates various events in the histories of Greece and other nations, starting with 1582/81 B.C. and ending with the year that began, according to the Macedonian calendar, in the fall of 264 B.C., i.e., 264/63 B.C. Since the Macedonian calendar used the same lunar month for the start of the year as did the Judean calendar, where the month name was Tishri, the basis for calculations using the Parian Marble may conveniently be written as 264t. Every event listed in the chronology is related to this date, which is therefore assumed to be the date of composition.

Coucke cited the Parian Marble in order to date the fall of Troy to 1207 B.C. as his first step in establishing the dates of Solomon's reign. A one-year correction should be made to this. The Parian Marble, entry 24, states that Troy was captured in the month of Thargelion (roughly May), and from the capture to the Marble's base date was 945 years. This would put the fall of Troy in (264t + 945) = 1209t, and more specifically in the late spring of 1208 B.C. Coucke either used inclusive numbering for the 945 years or took the base year of the Marble as 263t instead of 264t, and so derived 1207 B.C., instead of 1208. In what follows, the fall of Troy will be dated to the spring of 1208 B.C., the interpretation of the text that is taken on the Ashmolean website.

Coucke then cited Pompeius Trogus/Justin 18:3.5 as saying that Tyre was founded the year before the fall of Troy, that is, in the year 1210t when making the one-year correction that was just mentioned. However, there is a complication here. Trogus may have been using the Roman calendar as the basis for his statement. Before 153 B.C., the Roman calendar year started

¹⁹Supplément, col. 1251.

²⁰Ashmolean Museum (<www.ashmolean.org/ash/faqs/q004/q004006.html>, accessed 13 October 2010).

on March 1,²¹ so that the year before the fall of Troy in May of 1208 B.C. in the Roman system would be the year extending from March 1, 1209 B.C., to the last day of February 1208. Assuming, with Coucke, that the Phoenician calendar year was from Tishri to Tishri,²² the founding of Tyre could have been in either the latter part of 1210t or the first part of 1209t, and it still would have been in the year prior to the fall of Troy, according to the Roman March-based calendar. We therefore have two possible years to consider for the founding or Tyre, 1210t or 1209t, whereas Coucke only allowed for one year.

This would not be the original founding of Tyre, since there exists correspondence between Abu-Milki, king of Tyre, and the pharaoh of Egypt in the Amarna period, about 130 years prior to 1210t. The passage in Pompeius Trogus (18:3:5) cited by Coucke relates that the Phoenicians had been defeated by the king of Ascalon, "after which they took to their ships and founded the city of Tyre the year before the fall of Troy." Ascalon, more commonly written as Ashkelon, was a Philistine city, and Jacob Katzenstein²³ and W. F. Albright²⁴ relate this refounding of Tyre to the displacements caused by the invasion of the Sea Peoples about the time of Pharaoh Merneptah. Current scholarship identifies the Philistines as part of this Sea Peoples invasion.²⁵ The modern dating of the first Sea Peoples invasion to the short reign of Merneptah (ca. 1213–ca. 1203 B.C.) is in agreement with the statement of Pompeius Trogus that Tyre was founded the year before the capture of Troy, while at the same time it gives credibility to the Parian Marble's date of 1208 B.C. for the latter event.

Having calculated a year for the founding of Tyre, Coucke cited *Ant*. VIII.3.1/62, where Josephus refers to the court records of Tyre that mention

²¹Jack Finegan, Handbook of Biblical Chronology, rev. ed. (Peabody, MA: Hendrickson, 1998), 66.

²²Coucke explains why he assumes Tishri-based years for Judah in the *Chronologie* article, 327. Later, Thiele used 1 Kgs 6:37-38 and 2 Kgs 22:3–23:23 to show that Judah had a Tishri-based calendar (*Mysterious Numbers*, 51-52). Coucke remarks that three month-names used in the times of Solomon—Ziv (1 Kgs 6:1, 37), Bul (1 Kgs 6:38), and Ethanim (1 Kgs 8:2)—are found in Phoenician inscriptions, and so these are Phoenician month-names. He then infers that since the two kingdoms had the same month-names, Tyre's calendar would have the same starting month as was used in Judah.

²³H. Jacob Katzenstein, *The History of Tyre from the Second Millennium B.C.E until the Fall of the Neo-Babylonian Empire in 538 B.C.E.* (Jerusalem: Goldberg's Press, 1973), 59-61.

²⁴W. F. Albright, "The Role of the Canaanites in the History of Civilization," in G. E. Wright, ed., *The Bible and the Ancient Near East* (New York: Doubleday, 1961), 340.

²⁵The Philistines in the time of Abraham and Isaac (Gen 21:34, 26:1) may have been of this same ethnic stock, but representatives of an earlier migration.

the assistance given to Solomon by Hiram, king of Tyre, at the beginning of the construction of the Temple in Jerusalem. These records date Hiram's assistance as taking place in the eleventh year of his reign, which was also 240 years after the founding of Tyre. Josephus elsewhere (Ag. Ap. I.18/126) says that Hiram's assistance began in his twelfth year of reign, so Coucke allowed that this gave an alternate figure of 241 years after the founding of Tyre to the start of construction of Solomon's Temple. Using the two possible years for the founding of Tyre calculated above and the two periods of elapsed time postulated by Coucke, the construction of the Temple could have started in (1210t - 240) = 970t, (1210t - 241) = 969t, (1209t - 240) = 969t, or (1209t - 241) = 968t. Coucke's original calculation, which did not consider a Roman calendar, gave only 969t and 968t. By his use of the Tyrian King List (see next section), Coucke ruled out the first of these possibilities, and this would also rule out the 970t option. He thus settled on 968t as his fixed date from which to start his construction of the chronology of the Hebrew kings.

There are some remarkable concepts in all this. The first is that nothing in Coucke's reasoning is based on a biblical text. Everything is derived from classical authors. Only after he derived the date of the start of construction of Solomon's Temple from these sources did he refer to 1 Kgs 6:1 and 11:42 to say that since Temple construction began in Solomon's fourth year and he reigned forty years, therefore Solomon died in 932t. This is the year for the death of Solomon that I derived in my "Solomon" paper,26 without any knowledge of Coucke's reasoning. Coucke then placed the division of the kingdom in 931n, which is the same year for the division of the kingdom that Thiele derived by working with the biblical data, as tied to the 853 B.C. date for the Battle of Qarqar. There has been no need to change this date since Thiele first published it in 1944.27 It is therefore noteworthy that the dates of Solomon, which can be established with precision from the biblical and Assyrian data, agree so exactly with the date derived from Coucke's classical sources. The importance of this is not that the classical sources give credibility to the biblical data, but the other way around: the biblical data give credibility to the classical sources. In particular, they are evidence in favor of the factuality of (1) the dating of the fall of Troy to 1208 B.C. by the Parian Marble, (2) the statement of Pompeius Trogus that Tyre was founded the year before Troy fell, and (3) the 240 years from the founding of Tyre to the building of Solomon's Temple that Josephus derived from Tyrian court records.

These conclusions are controversial in their implications for the world of classical scholarship. In particular, the date for the fall of Troy that is usually derived from Greek authors is 1183 B.C., not the 1208 B.C. of the

²⁶Young, "When Did Solomon Die?" 589-603.

 $^{^{27}\}mbox{Edwin}$ R. Thiele, "The Chronology of the Kings of Judah and Israel," $\mbox{\it JNES}$ 3 (1944): 137-186.

Parian Marble. Any study therefore that seeks to establish the Parian Marble's date over the commonly accepted date needs to consider the question of the Parian Marble's overall trustworthiness. Sources such as the Canons of Eusebius that are used to justify the 1183 date should also be examined for their credibility. The issues involved are somewhat complex, and the fuller discussion that they require has been relegated to a separate article. For the present study, what is important to emphasize is that Coucke's derivation of the date when construction began on Solomon's Temple is entirely innovative. It relies on sources and basic data that no other scholar has put together when seeking to determine fixed dates in the chronology of the books of Kings and Chronicles. And its exactness in matching the dates for Solomon that can be independently derived from the biblical and Assyrian data argues strongly for the soundness of his reasoning.

IV. Coucke's Use of the Tyrian King List: A Surprise to Later Scholars

In 1953, J. Liver argued that an Assyrian inscription that was published in 1951 showed that Pompeius Trogus's date for the founding of Carthage, 825 B.C., was to be preferred to the date of 814 B.C. given in other classical sources.²⁹ Connecting this with the Tyrian King List in Josephus (*Ag. Ap.* I.17/108; I.18/117–126) that placed the start of work on Solomon's Temple 143 years before the founding of Carthage, he derived 968/67 B.C. as the date for the founding of the Temple. In 1972, F. M. Cross did a textual analysis of the names and lengths of reigns in the Tyrian King List from Hiram, contemporary of Solomon, to Pygmalion, whose sister Dido fled from Tyre in Pygmalion's seventh year of reign, after which she founded Carthage in North Africa.³⁰ Cross's textual analysis reinforced Liver's previous research, and he concluded that these extrabiblical sources showed that construction began on the Jerusalem Temple in 968 B.C., in agreement with Liver's date.

In 1991, William H. Barnes published the results of his Th.D. thesis on the chronology of the Hebrew kingdom period, for which Cross was his thesis advisor.³¹ Barnes devoted twenty-seven pages of his book to a textual study and critical analysis of the Tyrian King List, and found that the evidence supporting the historical trustworthiness of the 143 years between the founding

²⁸Andrew E. Steinmann and Rodger C. Young, "The Parian Marble, the Tyrian King List, and the Date of Construction of Solomon's Temple," forthcoming.

 $^{29}\mbox{J.}$ Liver, "The Chronology of Tyre at the Beginning of the First Millennium B.c.," IEJ 3 (1953):113-120.

 $^{30}\mathrm{Frank}$ M. Cross Jr., "An Interpretation of the Nora Stone," BASOR 208 (1972):17, n. 11.

³¹William H. Barnes, *Studies in the Chronology of the Divided Monarchy of Israel*, HSM 48 (Atlanta: Scholars Press, 1991).

of the Temple and the founding of Carthage was strong, reinforcing 968 B.C. as the date for the beginning of Temple construction. Barnes stated that for this date, "[a] variation of a year or two is possible, of course, especially in the light of our ignorance of Phoenician dating practices, but I seriously doubt that an error of more than two years either way is likely."³²

I surveyed the work of these scholars in a 2007 article in Seminary Studies.³³ Neither I nor the three authors just mentioned were aware of Coucke's study of the Tyrian King List. Coucke's conclusions were therefore independent of those of the later writers, yet everyone involved derived the same date for the beginning of Temple construction. In my article, the agreement of the studies of Liver, Cross, and Barnes on the date when construction began on Solomon's Temple was presented as the last of three major evidences for the factuality of Thiele's date for the division of the kingdom after the death of Solomon. The first line of evidence given for the correctness of Thiele's date was the internal and external consistency of the reasoning that was used to derive it. The second line of evidence was the exact agreement of this date with the related date for the beginning of construction on Solomon's Temple, as calculated from the chronology of the Jubilee and Sabbatical cycles. The paper demonstrated that these three lines of evidence are fundamentally independent. The chronology for the division as derived by Thiele did not use, and does not rely on, either the Tyrian King List or the calendar of Jubilee/ Sabbatical cycles. The Jubilee/Sabbatical calendar is shown as accurate by its agreement with the chronological data in 1 Kgs 6:1, but it does not rely on Thiele's derivation of the date of the division of the kingdom or on the Tyrian King List. The date for the foundation of the Temple as derived from the Tyrian King List relies on no biblical texts, nor does it rely on the Jubilee/ Sabbatical cycles. The agreement of these three fundamentally independent methods of chronological determination is sufficient to establish Thiele's date for the division of the kingdom, and the related date for the foundation of Solomon's Temple, as two of the most secure dates in the history of the early first millennium B.C.

Coucke used the Tyrian King List as follows. He allowed two possible dates for the founding of Rome: 752 B.C., following Dionysius of Halicarnassus, or 753 B.C., following Varro. He then used the statement of Pompeius Trogus/Justin (18.6.9) as saying that Carthage was founded seventy-two years before the founding of Rome. His dates for the founding of Carthage were therefore 825 or 824 B.C. Coucke assumed that Tyre used Tishri-based years, so that he used 825t and 824t for these dates. He did not explain why he preferred Trogus's date for the founding of Carthage over the 814 B.C. date given by

³²Ibid., 54.

³³Young, "Three Verifications," 179-187.

Timaeus.³⁴ When combined with the span of 143 years of the Tyrian King List from the foundation of Solomon's Temple until the founding of Carthage (or flight of Dido), this gave Coucke two possible dates, 968t or 967t for the foundation of Solomon's Temple. Only the first of these agreed with the dates of 969t and 968t he had derived when measuring downward 240 or 241 years from the founding of Tyre, so 968t was the year that Coucke settled on for the foundation of Solomon's Temple. Coucke's treatment of the Tyrian King List therefore arrived at the same conclusion, and exactly the same date, as reached later by Liver, Cross, and Barnes, none of whom was aware of Coucke's earlier research. This agreement between Coucke and the later scholars should be understood as strengthening this one leg of the three supports of the chronology of Solomon's reign, and hence, by extension, the credibility of the other two methods.

Three independent methods of calculating the dates of Solomon are more than sufficient. But Coucke gave us a fourth; this was the subject of the preceding section, dealing with the calculation of the date for the founding of the Temple based on the Parian Marble and citations from Pompeius Trogus and Josephus. There was nothing in the calculation that started with the Parian Marble that depended on the Jubilee and Sabbatical cycles, the Tyrian King List, or Thiele's calculation of the date for the division of the kingdom as derived from biblical and Assyrian texts. Coucke's fourth method is independent of all of these, yet its results are consistent with each of the other methods.

V. Fifth Surprise: Coucke's Correct Date for the Fall of Jerusalem to the Babylonians

In the *Supplement*, Coucke started his chronological reckonings for the Hebrew monarchies by determining from classical authors the date when construction began on the Temple at Jerusalem. At the lower end of the monarchic period, he determined a date for the fall of Jerusalem and the destruction of the Temple by recourse once again to an ancient literary work, in this case the Canon of Ptolemy. His interest was to derive a date from the Canon for the accession year of Amel-Marduk (biblical Evil-Merodach), the Babylonian king who released from prison Jehoiachin, the next-to-the-last king of Judah. According to 2 Kgs 25:27 and Jer 52:31, Jehoiachin's release was in his thirty-seventh year of captivity and in the accession year (בְּשִׁבֶּתְ מָלִבְּלָּבְּלָּבְּלָּבָּת) of Amel-Marduk. Coucke's plan was to

³⁴For a discussion of why there are two figures, 825 B.C. and 814 B.C., for the founding of Carthage, see Young, "Three Verifications," 180, particularly n. 42 that refers to J. M. Peñuela's argument that several years elapsed between the time that Dido fled Tyre until she and her companions founded Carthage. Peñuela maintains that Dido left Tyre in 825 B.C., but she and her companions did not receive permission from the indigenous residents of North Africa to found the city until 814 B.C. ("La Inscripción Asiria IM 55644 y la Cronología de los Reyes de Tiro," *Sefarad* 14 [1954]: 28-29 and nn. 164-167).

work backward from Jehoiachin's release in order to date other events relative to the years of captivity. There is a sufficient number of scriptural texts related to Jehoiachin's exile, and their meaning is clear enough, that Coucke's procedure provides a simple and legitimate means of determining the correct date for the fall of Jerusalem, as long as Ptolemy's date for the accession year of Amel-Marduk can be firmly established, and as long as no unusual interpretations are forced onto the biblical texts. From the Canon, Coucke determined that Amel-Marduk's accession year began on Nisan 1, 562 B.C.³⁵

This date has been verified by inscriptional evidence that shows that Amel-Marduk's reign began at some time in October of 562 B.C.³⁶ Jehoiachin was released near the end of the twelfth month (Adar) of the Babylonian king's accession year (2 Kgs 25:27; Jer 52:31), that is, in the first week of April, 561 B.C. Jehoiachin's thirty-seventh year of captivity is therefore well established as 562n by Babylon's Nisan-based years. If the biblical texts were based on Tishri-based years, Jehoiachin's release would be in 562t. Coucke then looked to Ezek 33:21 to determine the year in which Jerusalem fell. In this verse, Ezekiel states that he learned of the fall of Jerusalem on the fifth day of the tenth month of the twelfth year of "our exile," meaning the exile he shared with Jehoiachin (Ezek 1:2). Comparing this twelfth year with the thirty-seventh year of Jehoiachin's exile gives either (562n + 37 - 12) =587n or (562t + 37 - 12) = 587t for the year in which Ezekiel learned of thecatastrophe. Whether Ezekiel was reckoning by Nisan years or by Tishri years, the fifth day of the tenth month was the same either way, i.e., January 19, 586 B.C. ³⁷ This contradicts a fall of Jerusalem in the summer of 586 B.C. Coucke's only concern was whether the city fell in Tammuz (the fourth month, Jer 52:6) of 588 B.C. or Tammuz of 587. The former choice would have meant that nineteen months had elapsed before the news of the fall reached the exiles in Babylon,³⁸ an unreasonably long time compared to six months if

³⁵Coucke, Supplément, col. 1264.

³⁶Richard A. Parker and Waldo H. Dubberstein, *Babylonian Chronology 626* B.C.–A.D. *75* (Providence: Brown University Press, 1956), 12. Julian dates in the following discussion are taken from this resource.

³⁷Ibid., 28. Month numbering is always with Nisan as the first month, even if the years are reckoned from a starting point in Tishri, as explained by Thiele (*Mysterious Numbers*, 52), and as accepted without explanation by Coucke (*Supplement*, col. 1251). This well-known phenomenon means that months 7 through 12 of 587t would be the same as months 7 through 12 of 587n, while months 1 through 6 of 587t would be one year later than months 1 through 6 of 587n.

³⁸Coucke (*Supplément*, col. 1265) writes that sixteen or seventeen months would have elapsed. However, according to Parker and Dubberstein, 28, the Babylonians inserted an intercalary month on March 25 of 587 B.C., so that nineteen months passed from the fourth month of 588 B.C. to the tenth month of the next calendar year. The nineteen-month figure assumes that Judah, and specifically Ezekiel, also recognized an

Jerusalem fell in the summer of 587 B.C. Coucke therefore established 587 B.C. as the year of Jerusalem's fall.

Coucke's method in this determination used a straightforward exegesis of the scriptural texts involved. Furthermore, the method is in harmony with Babylonian history, since Ptolemy's date for the accession year of Amel-Marduk has been verified by inscriptional evidence. A further verification of the correctness of Coucke's procedure came with D. J. Wiseman's publication, in 1956, of a Babylonian text from the time of Nebuchadnezzar that stated that Nebuchadnezzar captured Jerusalem *and its king* on the second of Adar in Nebuchadnezzar's seventh year.³⁹ This was March 16, 597 B.C. The captured king was Jehoiachin, whom Nebuchadnezzar replaced by appointing as regent Jehoiachin's uncle, Zedekiah (2 Kgs 24:17). The date of the second of Adar in Nebuchadnezzar's seventh year was therefore a verification of the accuracy of 2 Kgs 25:27 and Jer 52:31, from which the first year of Jehoiachin's captivity, and therefore the accession year of Zedekiah, is calculated as either (562n + 36) = 598n or (562t + 36) = 598t. Both of these year-spans include Adar 2, 597 B.C.

Those who support a 586 date for the fall of Jerusalem, and who recognize the problem that Ezek 33:21, coupled with 2 Kgs 25:27 and Jer 52:31, poses for the 586 date, attempt to utilize other means of measuring the years of captivity in order to give agreement with their chronology. Thus Thiele postulated that Jehoiachin's captivity or exile was not to be measured from the date he was captured by Nebuchadnezzar's forces, but from a supposed start of the trip to Babylon in the next month, Nisan of 597 B.C. Thiele then further supposed that Ezekiel's years of exile are measured according to a Nisan-based calendar. 40 In itself, it is not unreasonable that Ezekiel could have used Nisan reckoning, because this was according to the calendar system of Babylonia, where he lived, even though it would have been contrary to the usual Tishri-based calendar used in Judah. With Thiele's two presuppositions, the twelfth year of exile mentioned in Ezek 33:21 would be (597n - 11) =586n, and Ezekiel would have received news of the fall of the city on January 8, 585 B.C. This would place Jehoiachin's release in the thirty-sixth year of his captivity by Ezekiel's (supposed) Nisan-based reckoning, but in the thirtyseventh year by the Tishri-based reckoning of 2 Kgs 25:27 and Jer 52:31.

Another approach to this problem for those who hold to the 586 B.C. date was offered by Gershon Galil.⁴¹ In order to get Jehoiachin's captivity

intercalary month during this time period. If not, the elapsed time would have been eighteen months.

³⁹Donald J. Wiseman, *Chronicles of Chaldean Kings* (625-556 B.C.) in the British Museum (London: Trustees of the British Museum, 1956), 73.

⁴⁰Mysterious Numbers, 187.

⁴¹Gershon Galil, "The Babylonian Calendar and the Chronology of the Last Kings of Judah," *Bib* 72 (1991): 373, 376.

to start in Nisan, so that the arithmetic would come out for the 586 date, Galil proposed that although the Babylonian record dated the capture of Jerusalem and Jehoiachin to the month Adar, it was really Nisan in the Judean calendar because Galil presumed that Judah had not intercalated a month in the previous year as the Babylonians did. Adar for the Babylonians was therefore Nisan for the Judeans. The result is the same: Jehoiachin's captivity was assumed to start in Nisan, not in Adar as in the Babylonian record. Galil also presumed, as Thiele did, that Nisan-type years were used by Ezekiel in dating events according to the year of captivity.

Ezekiel 24:1-2 presents a problem for these assumptions of Thiele and Galil. In these verses, the beginning of the final siege of Jerusalem is dated to the ninth year, tenth month, and tenth day. This should be compared with 2 Kgs 25:1 and Jer 52:4, where the beginning of the siege is dated to the ninth year, tenth month, and tenth day of Zedekiah's reign. There are two ways of reconciling these verses. One is to assume that this demonstrates that Zedekiah's reign was measured in 2 Kings by nonaccession reckoning, the same as the years of exile of Jehoiachin. The Ezekiel passage is then in obvious agreement with the Kings and Jeremiah passages, whereas if Zedekiah's reign is by accession years, there is disagreement. This passage is glossed over by Thiele, who, although citing the texts related to the beginning of the siege, does not mention the problem this presents to his assumption that Zedekiah's years were by accession reckoning.⁴² Galil addressed the problem by assuming that because the phrase "of the exile" was not present in Ezek 24:1-2, Ezekiel switched his method of reckoning the years from the years of exile of Jehoiachin to the years of Zedekiah's reign, without giving any indication to the reader of this change in the mode of reckoning.⁴³

Other texts in Ezekiel are difficult to reconcile with this interpretation of Ezek 24:1-2. One of these is the revelation of Ezek 26:1-2, where Jerusalem's fall is spoken of as a past event. Neither Thiele (*Mysterious Numbers*) nor Galil (*Babylonian Calendar*) mentions the chronological implications of this verse. The revelation is dated to the eleventh year and the first day of the month,

⁴²On p. 189 of *Mysterious Numbers*, Thiele writes: "On the tenth day of the tenth month of the ninth year (15 Jan. 588), a solemn message came from God: 'Son of man, record this date, this very date, because the king of Babylon has laid siege to Jerusalem this very date. . . . Woe to the city of bloodshed' (Ezek. 24:1–2, 6). Thus on the very day that the final siege of Jerusalem began, the exiles in Babylon had word of that event. 'In the ninth year' of Zedekiah, 'on the tenth day of the tenth month, Nebuchadnezzar king of Babylon marched against Jerusalem with his whole army. He encamped outside the city and built siege works all around it' (2 Kings 25:1)." There is no mention here of the disparity between nonaccession dates measured by the years of captivity, which Thiele assumes elsewhere for Ezekiel, with the accession years that he assumes for Zedekiah in the Kings and Jeremiah passages.

⁴³Galil, 370.

with the month not specified. According to the hypotheses of either Thiele or Galil that have Ezekiel reckoning the first year of exile as 597n, the eleventh year would be 587n. The latest possible date for the revelation would be the first day of the twelfth month of 587n, which was March 15, 586 B.C. This was before, not after, Thiele's and Galil's date of July 18, 586 B.C., for the fall of Jerusalem. In order to rescue their chronologies, the assumption would have to be made that Ezekiel (or, according to the various fragmentary hypotheses, Ezekiel's editor) has again switched the method of reckoning, without informing the reader, to accession years based on the reign of Zedekiah. The eleventh year in Thiele's system would then be 598t - 11 = 587t, and the latest possible date for Ezekiel 26:1-2 would be first day of the sixth month (Elul) of 587t, which is September 7, 586 B.C. Galil's chronology also requires an unannounced switching of dates in Ezek 26:1-2, but his system differs from that of Thiele by assuming that regnal years in Judah were counted from 1 Nisan, and that Zedekiah's reign began on 2 Nisan 597 B.C.44 For Galil, the eleventh year in Ezek 26:1 was then 597n - 11 = 586n. Although the latter half of this year was after Galil's date for the fall of Jerusalem, his reckoning that Zedekiah's reign started in Nisan of 597 B.C. means that the thirty-seventh year of Jehoiachin's captivity would be 561n, not the 562n that Babylonian records establish as the accession year of Amel-Marduk. 45 Galil's system also cannot be reconciled with Ezek 40:1 (see below).

A normal reading of the entirety of Ezekiel's writings makes it difficult to accept such arbitrary switching to dating by the regnal years of Zedekiah. Ezekiel never mentions Zedekiah by name. He regarded Jehoiachin as his rightful ruler, and even when Zedekiah was still on the throne of Judah, he avoids measuring the years by anything to do with Zedekiah, referring the dates instead to Jehoiachin and his captivity. The introduction to Ezekiel's writing sets the tone by which later references to years, months, and days are to be understood: it was the fifth year of the exile of King Jehoiachin (Ezek 1:2). We have a right to expect that any one biblical author, such as Ezekiel,

⁴⁴In his book *The Chronology of the Kings of Israel and Judah* (Leiden: Brill, 1996), 9, Galil presents as the first postulate of his chronological system the idea that Judean regnal years started on the first of Nisan. Galil cites no evidence in support of his choice in this matter, although he may have derived this idea from *m. Roš Haš.* 1 and *b. Roš Haš.* 1a, which are late sources. In contrast, Thiele (*Mysterious Numbers*, 51-53) cites 1 Kgs 6:1, 37-38 and 2 Kgs 22:3; 23:23 as evidence that Judah's regnal years began in Tishri. As mentioned above, Galil also assumed that Nebuchadnezzar's capture of Jehoiachin, and his installation of Zedekiah in his place, occurred on 2 Nisan 597 B.C. according to the presumption that the month reckoned as Adar by the Babylonians was reckoned as Nisan by the Judeans.

⁴⁵Galil acknowledges this difficulty for his chronology, saying that the thirty-seventh year of Jehoiachin's captivity in 2 Kgs 25:27 and Jer 52:31 is only approximate ("Chronology," 377, n. 39).

would have been consistent throughout his writing in the way he measured the years, instead of switching between various methods without any clue to the reader, as maintained by scholars who support the 586 B.C. date for the fall of Jerusalem. There is no conflict, however, if Ezekiel was using Tishri years dated from 598t and the fall of Jerusalem was in the summer of 587 B.C. 46 Once the correct date is accepted for that event, no such switching is

⁴⁶The revelation would then be in the calendar year 588t, on the first day of either the fifth month (Ab) or the sixth month (Elul) in order to be after the fall of Jerusalem in the fourth month of 587. The latter of these dates (1 Elul = September 18, 587 B.C.) is to be preferred, since the city is said to be "laid waste" (חברות, Ezek 26:2), which implies a time after the destructions under Nebuzaradan had been carried out (2 Kgs 25:8-10; Jer 52:12-14). The various activities related to Nebuzaradan could not have all been done in one day. In particular, it is unreasonable to expect that as soon as he arrived at the site he would have hastily consulted with the commanders already stationed there, after which he and they together drew up plans, issued orders, and then moved into the city to implement their plans for the various phases of the destruction of the city, all on the same day of his arrival. Instead, the texts indicate that Nebuzaradan came to Jerusalem (בְּלֶּבֶוֹ . . . אֶבֶּי . . . אֶבֶּי . . . אָבָי . . . אָבָי ווייטואָל בי , that is, presumably to the Babylonian camp just outside the city, on the seventh day of the fifth month (2 Kgs 25:8; see the same grammatical construction in 2 Kgs 18:17b and Dan 1:1, where hostile forces came to Jerusalem, but had not yet entered it). After three days of resting from the journey and consulting with his field commanders, he entered into the city (בֵּירוֹשֶׁלָם . . . בִּירוֹשֶׁלָם) on the tenth of the month (Jer 52:12) to carry out the plans they had formulated. A parallel can be found in Jonah's coming to Nineveh on one day (נֵיֵלֶךְ אֶל־נִינְנֶהְ, Jonah 3:3) and then starting to come into the city (לְבוֹא בְעִיך, Jonah 3:4) on a subsequent day. Nebuzaradan's destructions—the demolishing of houses and public buildings, the tearing down of the city wall, and the burning of the Temple—then began on the tenth day of the fifth month (Ab). Consistent with this, Josephus (Wars, VI.4.5/250) relates that the First and Second Temples were both burnt on the tenth of Ab. A later Jewish tradition that placed the burning of the Temples on the ninth of Ab apparently originated with Rabbi Akiba, whose hopes that Bar-Koseba was the Messiah were dashed when Koseba's fortress fell to the Romans on the ninth of Ab, A.D. 135. Rabbi Akiba applied this day and month (ninth of Ab/Tisha B'Av) to the burning of both Temples. He or his followers also applied the Tisha B'Av date to other disasters, including the evil report of twelve spies in Num 13:26-33 and the Roman plowing of Jerusalem by command of Emperor Hadrian. However, as just shown from Jeremiah and 2 Kings, the destruction of the First Temple could not have occurred earlier than the tenth of Ab, and Josephus's eyewitness account of the burning of the Second Temple definitely dates that event to the tenth of Ab. This artificial "ninth of Ab" symmetry for several catastrophes has been discussed by Yuval Shahar, who has shown by citations from Dio Cassius and by recently discovered numismatic evidence that the rabbinic date of the ninth of Ab, A.D. 136, for the Roman plowing of Jerusalem cannot be supported historically. See Yuval Shahar, "The Destruction of the Temple in the Understanding of Rabbi Akiba and the Establishment of the Fasts of the Destruction," (in Hebrew) Zion 68 (2003): 145-165. Akiba's date of the ninth of Ab for the destruction of both Temples, which was set to match the month and day in A.D. 135 when his hopes in the false messiah were shattered,

necessary and all of Ezekiel's date-formulas will be seen to be consistent with his counting from the capture of Jehoiachin and the installation of Zedekiah in 598t, and also consistent with his reckoning the years according to the conventional Tishri-based years of Judah. There are no exceptions.⁴⁷

A further problem to those who hold to the 586 B.C. date for the fall of Jerusalem is presented by Ezek 40:1, which is dated to the twenty-fifth year of exile and also fourteen years after the city fell.⁴⁸ With Thiele's and Galil's start of Jehoiachin's exile in 597n, the twenty-fifth year of exile would be (597n - 24) = 573n, and the city's destruction, fourteen years previous, would be in 587n. This clearly contradicts their 586 B.C. date for Jerusalem's fall. Thiele's mishandling of the chronological markers in this verse is obscured by a trick of arithmetic whereby he subtracts the fourteen years from the twenty-five years to conclude that the city fell eleven years after his date for the beginning of the captivity in 597n, and hence in 586n (using the Nisan/ Tishri notation here for clarity). 49 This interpretation assumes that the twentyfive years and the fourteen years in the verse are of the same type-either both are accession years or both are nonaccession years. The grammar of the verse shows they are not the same. It was the twenty-fifth year "of our captivity" (לְנֵלוֹתְנוֹי), implying nonaccession reckoning, but fourteen years "after the city was smitten" (אָחַר אָשֶׁר הָבָּתָה הָעִיר), implying accession reckoning. Converting the twenty-fifth year of the captivity to an accessiontype number means that the subtraction should have been 24 - 14 = 10 years from 597n, yielding 587n instead of Thiele's 586n. This is one more incident that shows the need for a well-defined notation that lends itself to simple arithmetic calculations.

Using the proper starting date of 598t or 598n for Jehoiachin's captivity, the twenty-fifth year of exile (Ezek 40:1) was (598t - 24) = 574t or (598n - 24) = 574n. Fourteen years previous was (574t + 14) = 588t or (574n + 14) = 588n. Neither figure is compatible with Tammuz of 586 B.C. for the fall of Jerusalem. The first figure (588t) is compatible with the 587 B.C. date for the fall and the second (588n) is not, showing that Ezekiel was using Tishri-based

cannot take precedence over the testimony of the Scriptures for the earliest possible date for the burning of the First Temple (10 Ab, 587 B.C.) or the testimony of Josephus for the exact date of the burning of the Second (10 Ab, A.D. 70).

⁴⁷A study of all the scriptural texts related to the last days of the Judean monarchy in Jeremiah, Ezekiel, 2 Kings, and 2 Chronicles shows that all texts are in agreement with the fall of Jerusalem in 587 B.C. For the demonstration that each of these four books is internally consistent, and all are consistent with each other on the chronology of this time, see Rodger C. Young, "When Did Jerusalem Fall?" *JETS* 47 (2004): 21-38.

⁴⁸Ezek 40:1, when properly interpreted according to the Hebrew original, provides a rich source of chronological and theological information. See my study, "Ezekiel 40:1 As a Corrective," 265-283.

⁴⁹Mysterious Numbers, 191.

years. Placing the fall of Jerusalem in 588t, which was in the eleventh year of Zedekiah (2 Kgs 25:2-4; 2 Chron 36:11; Jer 52:5-6) means that his reign from 598t to 588t was ten complete years, so that the eleven years given to him in these texts are calculated by nonaccession reckoning.

Extreme interpretations like this are not necessary. A proper reading of all the chronological texts in Ezekiel shows their internal consistency, once *a priori* assumptions are abandoned in favor of letting the texts themselves demonstrate the chronological method of their author. Interpretations that demonstrate internal consistency should be given preference over interpretations that require the assumption of inconsistencies for a single author, especially if the inconsistency-producing systems require the kinds of strained exegesis demonstrated by advocates of the 586 B.C. date for the fall of Jerusalem.

In a certain sense, however, there will always be inconsistencies in the historical records regarding how the years of the kings of Israel and Judah were measured. These inconsistencies do not have their origin in the authors of Scripture, who had faithfully copied, apparently from court records,⁵¹ the years of their kings. The inconsistencies come instead from the kings themselves, who ultimately were the source for determining how their years of reign were to be recorded. That Ezekiel, Jeremiah, and the authors of the closing chapters of 2 Kings and 2 Chronicles all counted Zedekiah's reign by nonaccession reckoning is explained quite simply by one postulate: that is how Zedekiah ordered it to be done. The switching of the mode of reckoning for Zedekiah's years had a precedent in the switching in the middle of the ninth century B.C. Coucke and Thiele both recognized,

⁵⁰Leslie McFall, "Do the Sixty-nine Weeks of Daniel Date the Messianic Mission of Nehemiah or Jesus?" *JETS* 52 (2009): 695, n. 58.

⁵¹Rodger C. Young, "Tables of Reign Lengths from the Hebrew Court Recorders," *JETS* 48 (2005): 225-248.

independently, the change at this time, and both gave the same reason for the change: it was a time of rapprochement and intermarriage between the two kingdoms. No such reason is immediately apparent to explain why Zedekiah used nonaccession reckoning for his reign. Although we cannot determine why this was done, it can be stated with certainty that it was done. Any chronology that does not recognize nonaccession years for Zedekiah will fall into serious internal contradictions, some of which were described in the foregoing discussion.

A demonstration of the arbitrariness of the king's choice in the question of accession or nonaccession years comes from the records of the kings of Assyria. For Assyrian kings, accession reckoning, with a calendar year starting in Nisan, was the rule. Yet Assyriologists do not seem to object to Hayim Tadmor's statement that Tiglath-Pileser III went against the general convention of his predecessors and counted his years in a nonaccession sense.⁵² That Tadmor is right in this matter is established by a comparison of the events given in Tiglath-Pileser's inscriptions, and dated to his regnal years, with the same events as listed in chronological order in the Assyrian Eponym Canon. This method of comparing a king's inscriptions with inscriptions from other sources is what should also determine the matter for the chronology of the last kings of Judah. If this procedure shows that Zedekiah did not follow the accession reckoning of the majority of his predecessors on the throne of Judah that should be sufficient to establish the matter. It is of no consequence that neither Tiglath-Pileser nor Zedekiah has left any record justifying their actions. They were kings, and they were under no obligation to explain these things to their court recorders, or to

Having come this far with Coucke, we must leave him, because after establishing the date of the fall of Jerusalem by sound historical and exegetical methods, he makes the unsupportable and unreasonable assumption that the years of Jehoiachin's exile were by accession reckoning, leading to a date for the beginning of the captivity and the first year of Zedekiah that is one year too early (599t). If the Babylonian Chronicle that gave the date when Jehoiachin was captured had been available to him, we could hope that he would have seen the error of this assumption and would have recognized that this new evidence requires that the eleven years of Zedekiah's reign are to be understood in a nonaccession sense. As it is, we can thank Professor Coucke for demonstrating that the use of chronological texts in Ezekiel, as tied to fixed Babylonian dates, is a proper way of dating the last year of the Judean monarchy, even if his assumption about accession years for

⁵²Hayim Tadmor, *The Inscriptions of Tiglath-Pileser III, King of Assyria* (Jerusalem: Israel Academy of Sciences and Humanities, 1994), 232, n. 3.

Jehoiachin's captivity and Zedekiah's reign led him astray in determining when these monarchs started their reigns.⁵³

Conclusion

At the time of writing of the present article, considerable attention was being given in the international news to the announcement of Eliat Mazar that she and her fellow archaeologists had uncovered a wall in Jerusalem that was believed to date from the time of Solomon. If the finding of a wall dating from Solomon's time has caused such a stir, what would be the reaction in the press and in the scholarly community if the continued excavations in Jerusalem unearth an inscription from this time, and even one that has Solomon's name on it? Judging from the interest shown in the Tel Dan inscription that names "the house of David" and the controversy over the reading of the Khirbet Qeiyafa ostracon, there would be quite intense interest in the discovery and the consequent interpretation of what this meant for the historicity of the books of Kings and Chronicles. What is ironic in all this is that we already have writings that come from the time of Solomon and before, and which name not only Solomon, but many other individuals as well. The work of Coucke, Liver, Cross, and Barnes has demonstrated that the Tyrian King List has every indication of being historical, and it names not only Solomon, but also a series of Tyrian kings from the time of Abibalus, father of Hiram, in about 1000 B.C., to Pygmalion, who died in the early eighth century B.C.⁵⁴ By means of literary analysis, F. C. Movers and Katzenstein⁵⁵ concluded that the passages in Josephus citing the records of Tyre strongly imply that these are actual translations of those records and not the invention of Josephus. To this must be added what might be called a mathematical demonstration

⁵³Coucke's wrong assumptions in this matter do not affect the accuracy of his dates when measuring backward from the thirty-seventh year of captivity to the twenty-fifth year of exile (Ezek 40:1) or to the twelfth year (Ezek 33:21), since the elapsed time is twelve years in the first case and twenty-five years in the second case for both accession and nonaccession reckoning. The two methods, however, differ in when they date the start of the captivity: 598t for nonaccession reckoning (the correct date) or 599t for accession reckoning.

⁵⁴If Hiram of Tyre was in his twelfth year of reign (*Ag. Ap.* I.18/126) in the year that construction started on Solomon's Temple, 968t, then his thirty-four-year reign (*Ag. Ap.* I.18/117) began in 980t and ended in 946t. The years of reign of his father Abibalus are not given, so we can estimate that he started his reign about 1000 B.C. The Tyrian King List (*Ag. Ap.* I.18/125) relates that Pygmalion ruled for forty-seven years, and his sister fled from Tyre in his seventh year (825 B.C.), so that Pygmalion's reign was from 832 to 785 B.C. Coucke (*Chronologie*, 328, n. 3) says that the figures of the Tyrian King List show that Tyre was using accession reckoning for its kings.

⁵⁵F. C. Movers, *Die Phönizier* (Bonn-Berlin: E. Weber, 1841-1856) 2/1:190 n. 4, cited in, and expanded on, by Katzenstein, *History of Tyre*, 79-80.

of their authenticity, because if these records were not both authentic and accurate, then the proper date for the beginning of construction of Solomon's Temple could never have been derived from them, as was done in the work of the scholars who have studied their chronological data. To this rather amazing demonstration of the authenticity of the Tyrian King List, we can add, thanks to Coucke, one other item from the archives of Tyre: the statement that construction began on Solomon's Temple 240 years after Tyre was (re)founded. As has been shown, this statement is in agreement with modern scholarship that relates this event to the dislocations caused by the Sea Peoples in the reign of Merneptah.

The Tyrian King List gives the names of twelve kings of Tyre over a span of two centuries, and although there are some textual problems related to the spelling of the various names and sometimes to their individual lengths of reign, the total number of years is well established. For the same period of time (Abibalus in about 1000 B.C. to the death of Pygmalion in 785 B.C.), the Scriptures name twelve monarchs who sat on the throne of Judah (David through the beginning of the Amaziah/Uzziah coregency) and seventeen who sat on the throne of Israel (Jeroboam I through Jeroboam II). In contrast to the Tyrian King List, there are no real problems in the forms of the names of the monarchs, nor in the figures for their lengths of reign as given in the MT.⁵⁶ More importantly, the many reign-length figures and synchronisms given for these twenty-nine monarchs have allowed the construction of a coherent and precise chronology for the entire period by those scholars who have followed the basic chronological principles laid down by Coucke and Thiele, with only the slight modifications to their systems that have been discussed in the present article. There are more that seventy items of a precise nature (reign lengths and synchronisms) for these twenty-nine monarchs given in Kings and Chronicles. For someone trained as a systems analyst, it is remarkable indeed surprising—that all seventy-plus of these statistics fit together into a system of chronology that has shown itself accurate by correlation with well-established dates in Assyrian history, with no emendation required for any of the texts. For chronological schemes that are not built on the general principles laid down by Coucke and Thiele, no such claim can be made. These schemes all require that the texts must be declared in error at various points because they do not conform to the modern scholar's theories. Such scholars sometimes complain that Thiele's theories are "artificial" or "too complicated," even though Thiele, and Coucke before him, were careful to document each

⁵⁶There are problems, however, in the LXX variants for some of these lengths of reign. The superiority of the MT in its chronological data for the kingdom period is argued extensively by Thiele in *Mysterious Numbers*, especially in the first edition, as well as in his original publication in *JNES* ("Kings of Judah and Israel"). No one has been able to construct a coherent chronology of the kingdom period that uses the variant readings of the LXX.

of the tenets underlying their systems as based on known practices in the ancient Near East. Thanks to the work of Coucke, we can now add to the "surprising success" of the system built on Thiele's principles the success of the resultant chronology in matching data not only from Assyrian history, but also from selected data in the history of the classical Mediterranean world. This includes the records for the kings of Tyre as preserved in the writings of Josephus, and the connection between the date of construction of Solomon's Temple, as given in Scripture, with the dates of the Trojan War given in the Parian Marble.

⁵⁷Barnes, 137, refers to the methodology of Thiele and its "surprising success in accounting for nearly all of the biblical chronological data," but then complains about "its resultant violence to the Dtr editing of those data."