

A NEW APPROACH
TO THE
Chronology
OF
BIBLICAL HISTORY
FROM ABRAHAM TO SAMUEL



GERALD E. AARDSMA, PH.D.

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AARDSMA
RESEARCH & PUBLISHING

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First edition 1993

Second edition 1995

Second printing 2017

Published by:

Aardsma Research & Publishing

412 N Mulberry St

Loda, Illinois 60948-9651

www.BiblicalChronologist.org

Printed in the United States of America

Library of Congress Catalog Card Number: 95-95068

ISBN 978-1-7372151-0-3

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PREFACE TO THE SECOND EDITION

The sociologists tell us that, for the most part, we believe things to be true, not because of the factual evidence demonstrating their veracity (which is the only reason why we *should* believe them), but because we have heard other “significant individuals” around us stating that they are true. This foible of human nature makes it rather difficult to get people – even highly educated people – to accept a radical new idea, even when the evidence in support of it is somewhat overwhelming. The difficulty is that very few will even bother to consider the evidence when what is being suggested departs radically from traditionally accepted ideas. In practice, it is generally necessary to first find and inform the few independent-minded individuals who are able to think for themselves and take a stand on the basis of factual evidence alone. These few can then function as “significant individuals” for others, and then these for yet others ... until what had seemed radical becomes respectably commonplace.

Having had the simple thesis which is presented in this book, and the new biblical chronology which it gives rise to, rejected as “too radical” by more than one of the standard archaeological and biblical journals, I, in desperation, settled on publication of my thesis through this little book. It exists to find and inform the few.

This is now the second edition of this book. I am hoping that enough “significant individuals” will soon exist for my thesis to seem sufficiently mundane to allow for its publication in the mainstream literature – a goal which I continue to pursue. I cannot help but feel that old views must very soon be swept away, so forcefully conclusive do the objective evidences in support of my new chronology now appear.

I have had some opportunity to publicize my thesis to limited audiences at several conferences. I presented it to a gathering of theologians at the 44th

annual meeting of the Evangelical Theological Society in San Francisco in November 1992. The response was quite positive. Last summer I presented it again, this time to a secular gathering of several hundred scientists at the 15th International Radiocarbon Conference in Scotland. The response of the majority of scientists gathered there was also favorable. These experiences have reinforced my conviction that hindrance to acceptance of my thesis is sociological only; objective individuals are generally quite impressed by the evidence when once they have been caused to consider it.

I find my experience (and reaction) with regard to criticism of the new chronology proposed by this book to be somewhat parallel to that experienced by Edwin R. Thiele, the biblical chronologist of the previous generation who untangled the chronology of the monarchic period. He reports, in the preface to the second edition of his important work:¹

Criticisms fall into two main categories. On the one hand, certain members of liberal groups do not regard it possible for these numbers to have been handed down through so many years and so many hands “without often becoming corrupt.” On the other, a few vigorously outspoken members of conservative groups view with horror any questions that may be raised concerning the absolute accuracy of any details in the Old Testament chronological data. Far apart though these two points of view may be, both rest on the same foundation of an a priori bias. Both categories have prejudged the questions at issue. Rather than permitting truth to be determined by objective investigation, both groups have pronounced a precursory judgment. Such, however, is not the attitude of true scholarship, nor is it in accord with biblical principles of religious faith and practice.

While reading through the first edition of this book, in preparation of this second edition, I was pleased to find that the form and substance of my argument did not need to be changed in any way. At the same time, I was struck by the fact that I had pared the argument to the bone in many places. I debated whether I should make this second edition a considerably fatter book than the first by fleshing out my argument and incorporating the new

¹Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings*. Academie Books, Zondervan Publishing House, Grand Rapids, 1983, page 20.

evidences I am now aware of. In the end I decided not to do so, for several reasons.

First, and foremost, I would like to preserve the unencumbered simplicity of the first edition. The thesis which I present in this book, though radical relative to traditional thinking, is not at all complicated, and its derivation and demonstration do not demand long-winded and contorted arguments. I am loath to give any other impression.

Second, I have moved on in my own research to the time before Abraham – the thesis of this book giving such research, for the first time, sufficient quantitative precision to hope to obtain reliable results and reach meaningful conclusions in this remote period. I find this work fascinating and absorbing; I am reluctant to set it aside even for the few weeks which would be required to add more material to the present book.

Third, I am now regularly publishing the results of my research through a bimonthly subscription newsletter called “The Biblical Chronologist.”² Additional evidences pertinent to the thesis of this book are slowly being compiled there; it seems unnecessary to duplicate them here.

Finally, this choice perpetuates and reinforces my initial intention; this little book is meant to be a *beginning* – the introduction of a new idea – not the final, exhaustive word regarding it. Authentic biblical chronology research is necessarily a very large, interdisciplinary activity today. Time is the thread which sews together all historical studies – from the archaeological remains at Jericho, to the annual layers found in the Greenland ice sheet . . . to the history narrated in the pages of the Old Testament – and each of these studies has a legitimate contribution to make toward our understanding of the chronology of the past. My claim is that we have got the thread a bit snarled in this piece of the fabric we call biblical history, with the result that the overall garment of history is wrinkled and distorted to our perception. I have only ever aspired, in this little book, to show how to untangle the thread – not how to smooth all the wrinkles.

Gerald E. Aardsma
May 12, 1995
Loda, IL

²For subscription information and back issues write to: The Biblical Chronologist, 412 N. Mulberry, Loda, IL 60948.

To my mother,
Margaret,
and my father,
Jacob,
whose lives have been an example of faith worth following,

and

with special appreciation
to all who have encouraged me in this work.
You share the eternal reward.

CHAPTER ONE



INTRODUCTION

The historicity of the Old Testament is currently facing a challenge of unprecedented severity. This challenge has arisen over the course of the past half-century, not from speculative theories, but from the hard data which have been dug from the earth by the spade of the archaeologist. Under attack is the veracity of the Old Testament books of Genesis, Exodus, Leviticus, Numbers, Deuteronomy, Joshua, and Judges.

Many conservative Christian scholars and laypersons (to whom this book is addressed) seem unaware of the seriousness of the present situation. They are unaware of the great quantity of archaeological data which has been obtained in the past few decades, and of the apparently uniformly negative implications of these data for the historicity of the early Old Testament books. Yet the assertion, arising from decades of research in biblical archaeology, that the biblical books from Genesis through Judges are not at all historically accurate is widespread and rapidly gaining adherents.

Some who are familiar with the archaeological data have attempted to sidestep its seemingly unpleasant implications by asserting that the Bible needs no proof, its truths must be apprehended by faith. True though this may be, it misses the point rather badly. The current issue is not *proof*, it is *falsification*. The Bible clearly recounts the exodus of the children of Israel from Egypt and the conquest of Palestine under Joshua as if these were real space-time events which happened to real historical people. Those who are presently claiming that there never was either an Exodus or a Conquest – that the nation of Israel “emerged” in Palestine some other way – are at least implicitly claiming that the biblical record of these events is false. Now, we who call ourselves conservative Christians are not required to prove the Bible

true, but we most certainly must be able to launch a credible defense against claims that it is false (1 Peter 3:15).

Many Old Testament scholars and biblical archaeologists have noted the disharmony which presently exists between biblical history (i.e., the written account of the past which is found in the Bible) and biblical archaeology (i.e., the material remains from the past which are dug from the ground) in the pre-monarchical period (i.e., the period of time before the Israelite kings). In 1984, for example, the late Joseph A. Callaway of the Southern Baptist Theological Seminary – the director of a major excavation at the site of ancient Ai, among other accomplishments – observed [9, page 72]:

For many years, the primary source for the understanding of the settlement in Canaan of the first Israelites was the Hebrew Bible, but every reconstruction based upon the biblical traditions has foundered on the evidence from archaeological remains.

Callaway went on to conclude, somewhat tragically, in my opinion, that this lack of harmony warrants rejection of the historicity of the pre-monarchical biblical account.

Though I agree with Callaway’s premise that “every reconstruction based upon the biblical traditions has foundered on the evidence from archaeological remains” I strongly disagree with his conclusion. Rejection of biblical historicity is not logically mandated until every *possible* “reconstruction based upon the biblical traditions” has been shown to fail, and this most certainly has not been done, as the following chapters will demonstrate.

The reconstructions which have previously been proposed and/or seriously considered by various scholars can be placed in one of several possible categories, depending upon their treatment of data within the following four areas:

1. Biblical history,
2. Biblical archaeology,
3. Biblical chronology, and
4. Secular chronology.

Reconstructions which take a low view of (i.e., treat as mythological, untrue, or of no real significance) biblical history are popular at the present time in non-conservative circles. Individuals who hold to such reconstructions regard the present lack of harmony between pre-monarchical biblical

history and archaeology as proof of the legitimacy of this view. Having rejected the biblical account of the Exodus and Conquest they are busy trying to find alternative explanations of how the nation of Israel came into existence. (The Merneptah stela and the harmony of biblical history and archaeology after the origin of the monarchy prohibit them from supposing that the entire biblical account of Israel in the Old Testament is myth or late tradition.)

I believe that this view, though widely held, is mistaken. Since I have written this book as a biblical conservative to other conservatives, there is no point in discussing this non-conservative category any further here, except to note that the present volume is antithetical to it. The entire non-conservative synthesis of the pre-monarchical “history” of Israel, – with its concomitant negative implications for biblical historicity, inerrancy, and ultimately theology – will fail in direct proportion to the success of the ideas presented below.

Reconstructions which take a low view of standard biblical archaeology but a high view in the other three areas give rise to our first conservative category. Those who hold to the “early date” for the Exodus (*ca.* 1447 B.C.) fall into this category. It necessarily denies the archaeological evidences which have caused the majority of scholars to conclude, for example, that:

1. It is not possible to accommodate a truly *biblical* Exodus in secular Egyptian history anywhere near the traditional biblical date for this event,
2. No city existed at Jericho at the traditional biblical date for the Conquest, and
3. No city existed at Ai at the traditional biblical date for the destruction of that city by Joshua, nor had a city existed there for many centuries prior to that date.

Those who oppose this approach generally do so because they feel the archaeological *data* are legitimate and their meaning really quite plain, and they cannot see any hope of harmonizing any significant fraction of these data with the Bible within the traditional “early date” chronological framework.

The second conservative category takes a low view of biblical chronology, but a high view in the other three categories. Those who hold to the “late date” for the Exodus (i.e., 13th century B.C.) fall into this category. This approach treats the biblical chronological data in a somewhat cavalier, certainly non-literal, manner, and redates the biblical history more or less at

will to bring about what are felt to be better correlations with archaeology. This approach was much more popular in the past than it is today. Much archaeological work has been done since the “late date” theory was first proposed a number of decades ago, and many scholars now feel that these more recent data have falsified this theory. In addition, many conservative scholars have rejected this approach because they are uncomfortable with its non-literal treatment of the biblical text.

The third conservative category takes a low view of secular chronologies and a high view in the other areas. It attempts to correlate biblical history with archaeology by radically changing the structure of accepted secular chronologies. The chronology of Egypt is a favorite candidate for revision in most of these schemes. Those advocating such revisions have produced some interesting historical correlations. However, this approach has been rejected by nearly all scholars because they feel that available chronological data, both historical (e.g., king lists) and physical (e.g., radiocarbon), are meaningful and legitimate within the historical period (i.e., last 5,000 years), and they further feel that these data prohibit the revisions of secular chronology proposed by the advocates of this approach.

These last three categories cover the field of conservative thinking to the present time. They have given rise to three schools of thought, each of which contains many devout and dedicated Christian conservatives within its ranks. Nonetheless, the views of Old Testament chronology and, hence, history advanced by these three schools are mutually exclusive, so that the only harmony which has been possible between advocates of differing views to the present time has been of the sort in which people agree to disagree. There presently exists a standoff between these different schools of thought, which is, obviously, a less than satisfactory situation. Perhaps the time is right for something new.

I have been more or less totally preoccupied with the question of the proper relationship between biblical and secular chronologies of earth history for over fifteen years now. This question motivated my choice of Ph.D. program in the early eighties, and the ability to research this question without impediment has motivated all subsequent “career” decisions.

Several years ago I was led, somewhat circuitously, to suspect that the current disharmony between the Old Testament and secular studies prior to about 1000 B.C. might be a symptom of an underlying *biblical* chronological problem. Much subsequent research has confirmed my suspicion. In this

book I present a new approach to Old Testament chronology which restores harmony between the secular data and the sacred history bearing on the patriarchs and the founding of the nation of Israel. This approach is totally unique, and it cannot be fit into any of the four categories above. It initiates a fourth conservative category, which maintains a high view in all four of the above areas.

The derivation and subsequent application of my new chronology necessarily involves a significant excursion into the field of biblical archaeology. The reader needs to be aware that I am not a biblical archaeologist. I am a physicist, and my expertise lies only in the field of chronology, with emphasis particularly on physical methods of dating the past such as radiocarbon. Consequently, I must rely on what others, who are trained in biblical archaeology, have published about their field and its results. I have no first-hand access to the raw archaeological data, and lack the training necessary to draw reliable conclusions from it even if I did.

Fortunately, this is not a problem in the present study. Our excursion into biblical archaeology does not require or utilize detailed technical analyses of pottery fragments, awareness of subtle interpretive nuances, or anything of the sort, as we will see below. We are only interested in general trends and large-scale features.

Fundamentally, however, this is not a book about biblical archaeology; it is a book about biblical and secular chronologies, and this should not be lost sight of by the reader.

I am a Bible-believing conservative Christian, and have written this volume from a conservative evangelical presuppositional basis. I hold to the inerrancy of Scripture in the autographs, and in logical consequence of this belief this work *presupposes* the historicity of the Old Testament. That is, it is assumed that the Old Testament narratives, from Genesis onward, which purport to be recounting real history, are simply, accurately doing so. The problem to be solved, then, is why this is not immediately apparent when one compares pre-monarchical biblical history and archaeology. The solution to this problem is the subject of this book.

CHAPTER TWO



A PECULIAR PHENOMENON

A peculiar phenomenon presents itself when one compares the findings of modern archaeology to the record of the past found in the Old Testament. This phenomenon is best illustrated by the following exercise, which anyone who has access to a good set of Bible encyclopedias can carry out in a single afternoon.

2.1 Biblical People in Secular History

Exercise: *Find at least two dozen historical persons who are mentioned both in the Old Testament and in some ancient secular writing uncovered by the archaeologist. (Individuals of international significance, such as kings, are the most obvious candidates.) Do not include any individuals whose secular identification is disputed by conservative scholars. List these by name in order of their historical date.*

Here is a typical list, consisting of twenty-five kings of antiquity.

1. Shishak (Sheshonq I, king of Egypt: *ca.* 945-924 B.C.); raids Israel and Judah after Solomon's death (1 K 14:25-28)
2. Omri (king of Israel: *ca.* 885-874 B.C.); mentioned by Mesha king of Moab in the Moabite Stone which tells of Omri's oppression of Moab
3. Ahab (king of Israel: *ca.* 874-853 B.C.); mentioned in the Monolith Inscription of Shalmaneser III as participant in battle at Qarqar (854 B.C.)

4. Mesha (Mesha, king of Moab: *ca.* 850 B.C.); pays tribute to Ahab (2 K 3:4)
5. Ben-hadad (Ben-hadad II, king of Aram: *ca.* 860-843 B.C.); fights against Ahab (1 K 20:1)
6. Hazael (Hazael, king of Aram: *ca.* 843-798 B.C.); takes territory belonging to Israel (2 K 10:32)
7. Jehu (king of Israel: *ca.* 841-814 B.C.); pictured and named on Black Obelisk of Shalmaneser III as paying tribute
8. Ben-hadad (Ben-hadad III, king of Aram: *ca.* 796-770 B.C.); loses to Jehoash king of Israel three times in fulfillment of Elisha's prophecy (2 K 13:25)
9. Menahem (king of Israel: *ca.* 752-742 B.C.); mentioned in Tiglath-pileser III's annals as paying tribute
10. Pekah (king of Israel: *ca.* 752-732 B.C.); mentioned in Tiglath-pileser III's annals as being deposed
11. Pul (Tiglath-Pileser III, king of Assyria: *ca.* 745-727 B.C.); collects tribute from Menahem, king of Israel (2 K 15:19)
12. Rezin (Rezin, king of Aram: *ca.* 740-732 B.C.); wages war with Pekah king of Israel against Jerusalem (2 K 16:5)
13. Hoshea (king of Israel: *ca.* 732-723 B.C.); mentioned in Tiglath-pileser III's annals as replacing Pekah
14. Shalmaneser (Shalmaneser V, king of Assyria: *ca.* 727-722 B.C.); besieges Samaria (2 K 18:9)
15. Merodach-Baladin (Marduk-apla-iddina, king of Babylon: *ca.* 722-710 B.C.); sends envoys to congratulate Hezekiah on recovery from illness (2 K 20:12)
16. Hezekiah (king of Judah: *ca.* 715-686 B.C.); mentioned in Sennacherib's annals as besieged in Jerusalem
17. Sennacherib (Sennacherib, king of Assyria and Babylonia: *ca.* 705-681 B.C.); captures cities of Judah during reign of Hezekiah (2 K 18:13)

18. Manasseh (king of Judah: *ca.* 696-642 B.C.); mentioned in Ashurbanipal's annals as paying tribute
19. Pharaoh Neco (Neco II, king of Egypt: *ca.* 610-595 B.C.); kills king Josiah 609 B.C. (2 K 23:29)
20. Nebuchadnezzar (Nebuchadrezzar, king of Babylon: *ca.* 605-562 B.C.); took Jerusalem and captured king Jehoiachin March 16, 597 B.C. (2 K 24:10-16)
21. Evil-merodach (Awil-Marduk, king of Babylon: *ca.* 561-560 B.C.); treats king Jehoiachin kindly (2 K 25:27-30)
22. Cyrus (Cyrus the Great, king of Persia: *ca.* 559-530 B.C.); orders rebuilding of temple (Ezra 1:1-4)
23. Darius (Darius the Great, king of Persia: *ca.* 521-486 B.C.); authorizes resumption of work on temple (Ezra 6:1-12)
24. Ahasuerus (Xerxes I, king of Persia: *ca.* 486-465 B.C.); husband of queen Esther (Esther 1:1)
25. Artaxerxes (Artaxerxes I Longimanus, king of Persia: *ca.* 464-424 B.C.); authorizes Ezra to visit Jerusalem (Ezra 7)

This list does not exhaust every possibility, but it is sufficiently large for the present purpose. It illustrates two important things. First, archaeology apparently is completely capable of corroborating the existence of biblical historical persons. Each entry in this list provides one instance in which the results of archaeology (in this case, the unearthing of ancient stone monuments and wall coverings containing writing) have unambiguously confirmed biblical historicity.

Second, note that the dates of the historical individuals in this list span only a single period of time, roughly 500 years long, near the beginning of the first millennium B.C. This property will be observed in any such list. The reason for the absence of dates in most of the second half of the first millennium B.C. is no mystery, of course. This is due to the centuries-long biblical historical gap between the Old Testament and the New Testament. But the reason for the complete absence of archaeological confirmation of biblical persons for all times much before the first millennium B.C. is not at all obvious.

This is the peculiar phenomenon which was mentioned above. The fact is that not even one biblical person has ever been unambiguously identified in any secular historical writing much before the origin of the monarchy in Israel (which commences about 1000 B.C.). Why? How does it come about that one can easily find one archaeological confirmation of a biblical individual every twenty years on average in the first half of the first millennium B.C., and yet not be able to find even a single such confirmation in a thousand years much prior to the first millennium? Why should such a contrast exist between the first millennium B.C. and all earlier times?

We would not expect all of the people who are mentioned in the Bible before the first millennium B.C. to be found in secular historical source documents, of course, any more than we would expect every biblical person of the first millennium to be found. Archaeology does have its limitations. But surely at least one individual from these earlier millennia should have been positively and unambiguously identified by now.

It cannot be supposed that this contrast is due to a lack of secular written sources prior to the first millennium B.C. A very large number of ancient documents have been unearthed belonging to earlier millennia. Examples include those from Ugarit which date to the 13th and 14th centuries B.C., the Amarna tablets from the 14th century B.C., and the Ebla tablets from the third millennium B.C.

Nor is it reasonable to suppose that this problem is due to a lack of people of international significance in the Bible before 1000 B.C. Many examples to the contrary can be given. There is Joseph, for example, second only to the pharaoh of Egypt, as well as the pharaoh whom he served. There is the pharaoh who oppressed the Israelites in Egypt and the pharaoh of the Exodus. There is Moses, raised in pharaoh's house, and under whose leadership the mighty Egypt was brought to its knees and the nation of Israel born. There is Joshua, who destroyed seven nations in the land of Canaan. Numerous judges of the nation of Israel, such as Deborah and Samson, could be mentioned, and these had contacts with outside kings, of whom there were plenty at these earlier times in Egypt, Mesopotamia, and the other nations surrounding Palestine – biblical individuals such as Eglon king of Moab and Cushan-rishathaim king of Mesopotamia. The list of candidates is not lacking in regard to its number of prospects.

The problem is real, and it is truly peculiar. It is further accentuated by considering other aspects of biblical history. Generally speaking, it is not difficult to find unambiguous extra-biblical support for even minor biblical incidents in the first millennium B.C., while it seems impossible to find such

support for even the most major biblical incidents of the preceding millennia.

For example, the story has circulated widely of the ease with which Yigael Yadin discovered Solomon's gateway at Gezer. Yadin noted that 1 Kings 9:15 mentioned three cities together at which Solomon had conducted building projects – Hazor, Megiddo, and Gezer. Yadin had discovered a Solomonic period gateway at Hazor, and noted that its architecture was similar to Solomon's gateway at Megiddo. He reasoned, on the basis of 1 Kings 9:15, that a third similar gateway should be found at Gezer, and subsequent excavation proved him right.

This sort of discovery, not uncommon in the first millennium B.C., is entirely absent from the earlier millennia of biblical history. For example, the walls which fell before Joshua at Jericho have never been unambiguously identified. As mentioned earlier, the plain sense of the archaeological data at Jericho seems to say that no city even existed at Jericho at the dates scholars assign to the Conquest. And a similar problem holds at Ai, the second city of the Conquest. In fact, similar problems exist throughout the pre-monarchical period of biblical history. The contrast between the first millennium B.C. and all earlier times is striking.

Why should such a contrast exist? How is it possible to find the remains of all three, relatively insignificant gateways built by Solomon nearly 3,000 years ago, and not be able to find any remains of entire cities supposed to have existed less than 500 years earlier? Something is clearly wrong at a very fundamental level.

2.2 A Problem in Biblical Chronology

I believe this phenomenon is merely one of the more obvious manifestations of an underlying problem in the area of biblical chronology. Simply stated, it appears to me that a subtle error has consistently been incorporated into the calculations of all Christian scholars through the centuries who have used biblical numerical data to compute the dates of biblical historical events (men like Bishop Ussher, for example). This error occurs at a single point in biblical chronology, early in the first millennium B.C., causing the conventional dates of all biblical historical events and individuals prior to Eli and Samuel (i.e., prior to about 1100 B.C.) to be seriously incorrect. The natural result of this error is that biblical and secular history are not properly synchronized in the second millennium as well as at all earlier times, prohibiting the discovery of any real synchronisms between them – including archaeo-

logical confirmation of any biblical individuals. This is why the Exodus has never been located in secular Egyptian history, and why the Conquest has not been found at Jericho and Ai and a host of other sites in Palestine where it should be evident. Everybody has been looking at the wrong time.

I believe the potential presence of such a problem is discernible from evidence internal to the Bible alone, as will be shown in the next chapter. However, it is the amassed results of recent decades of archaeological research which make the problem and its solution most obvious (through comparisons of the sort we have carried out above), and the discussion will necessarily turn in the direction of biblical archaeology in subsequent chapters. The fact that much of the extra-biblical information which we will be considering was unavailable until recent decades is why this chronological problem has gone unnoticed and uncorrected for such a long time.

CHAPTER THREE



SOME BIBLICAL HINTS

3.1 A Chronological Conflict in the Bible

The biblical chronologist has always been confronted with conflicting biblical chronological data in the pre-monarchical time period (i.e., before the period of the Israelite kings, which commences with Saul *ca.* 1050 B.C.). The conflict is between 1 Kings 6:1, which states:

Now it came about in the four hundred and eightieth year after the sons of Israel came out of the land of Egypt, in the fourth year of Solomon's reign over Israel, in the month of Ziv which is the second month, that he began to build the house of the Lord.
(NASB)

and several other passages in Judges and 1 Samuel which seem to imply a *longer* time than 480 years between the Exodus and Solomon.

This conflict is easily seen by adding up the well-known 40 years of wilderness wandering, 410 years of alternating periods of oppression and deliverance recorded in the book of Judges, 40 years for the career of Eli, 40 years for the reign of Saul, and 40 years for the reign of David. This already totals 570 years, though it does not include the time during which Joshua led Israel, nor the career of Samuel, and these two, while not specified biblically, must certainly total to something greater than 30 years (they probably total close to 80 years, in fact). Thus, the biblical stipulation of 480 years from the Exodus to Solomon given in 1 Kings 6:1 conflicts with the greater than 600 year total for this same time period which one can calculate from chronological data given elsewhere in the Bible.

It is possible, of course, to get around this difficulty by assuming the chronological data given in Judges must refer to overlapping rather than consecutive time periods. This, in fact, has been the routine traditional approach since well before Ussher, and our familiarity with such an approach may cause us to overlook the *fact* that these two independent biblical chronological calculations do not give the same answer when both are simply taken at face value.

The *assumption* of overlapping judgeships is both extra-biblical and *ad hoc*. While it does the job of bringing about apparent harmony within the pages of Scripture, what assurance have we that it is the right way of doing so?

There are two other exclusively biblical considerations which seem to hint at a quite different solution.

3.1.1 A Judges – 1 Samuel Interlude

The fact that both Samson and Samuel are seen to be contending with Philistines is often presented as evidence in support of the continuity or contemporaneity of the careers of these two judges. But the Philistines are an enduring fixture in the biblical history of Palestine (they are present there from the time of Abraham through the time of Jeremiah), and armed conflict between the Philistines and the Israelites is hardly a unique phenomenon in the pages of Scripture.

Conflict with the Philistines is evident early in the book of Judges under the leadership of Shamgar (Judges 3:31). It appears again, over 100 years later, after the tenure of the judge Jair (Judges 10:7,8). And it is seen again, several generations later, in the time of Samson (Judges 13:1-16:31). The Philistine conflicts with Saul and David are generally familiar; much more so than the Philistine invasion of Judah over 100 years later in the time of Jehoram (2 Chronicles 21:16) or the Philistine wars conducted by Uzziah yet another 100 years later (2 Chronicles 26:6).

Conflict between the Israelites and Philistines is a recurring phenomenon in biblical history, with numerous incidents spanning many centuries by any reasonable chronology. Thus, the fact that both Samson and Samuel struggled with Philistines seems less than adequate grounds to judge them contemporaries.

Other internal biblical evidence argues for a clean break, historically speaking, between the end of Judges and the beginning of 1 Samuel. Notice that the judge, Eli, who appears in 1 Samuel, is not mentioned in Judges

– though he judged Israel 40 years (4:18) and lived to be ninety-eight years of age (4:15) – and neither is Samuel. Furthermore, Samson, the final judge found in the book of Judges, is not mentioned in 1 Samuel.

Indeed, there seems some indication that a fairly lengthy gap may separate these two books. In 1 Samuel we are immediately confronted with the fact that the tabernacle has evidently been built into a more permanent structure at Shiloh, with doorposts (1:9), doors (3:15), and sleeping quarters (3:3). It is no longer referred to as “tent” or “tabernacle” but is consistently called “the temple”. Though this seems the status quo in 1 Samuel, it is without introduction or precedent in Judges.

These facts do not favor a compression of the chronology of the period of the judges. Rather, they go in the opposite direction, suggesting the need for more time.

3.1.2 Acts 13

Another hint that a solution for this section of Old Testament chronology different from the traditional one mentioned above may be in order can be found in Acts 13, the only New Testament passage pertinent to this issue. In this passage Paul gives a recitation of Israel’s history (Acts 13:16-22) in which he includes a chronological outline. Here, if anywhere, one might hope to find unambiguous endorsement of the 480 years of 1 Kings 6:1. However, exactly the opposite appears. In the King James Version we find the following translation of a portion of this Acts passage:

And about the time of forty years suffered he their manners in the wilderness. And when he had destroyed seven nations in the land of Chanaan, he divided their land to them by lot. And after that he gave *unto them* judges about the space of four hundred and fifty years, until Samuel the prophet.

If this is taken literally it specifies 450 years as the span of time from Othniel, the first Judge, to Samuel, the final Judge. This works out very well in terms of the chronology of all of the known judges (including the tenure of Eli which is recorded in 1 Samuel) which totals to exactly 450 years. However, it clearly contradicts the 480 years from the Exodus to Solomon given in 1 Kings 6:1.

More ancient Greek manuscripts than those which the King James translation was based upon order the phrases differently in this passage, and this alters the chronology relative to that which the King James presents. (These more ancient manuscripts were unknown to the translators of the

King James Version.) Most modern translations follow the reading of the earlier manuscripts in this verse. For example, the American Standard Version of 1901 reads:

And for about the time of forty years as a nursing-father bare he them in the wilderness. And when he had destroyed seven nations in the land of Canaan, he gave *them* their land for an inheritance, for about four hundred and fifty years: and after these things he gave *them* judges until Samuel the prophet.

and the New English Bible reads:

For some forty years he bore with their conduct in the desert. Then in the Canaanite country he overthrew seven nations, whose lands he gave them to be their heritage for some four hundred and fifty years, and afterwards appointed judges for them until the time of the prophet Samuel.

These earlier manuscripts seem plainly to say that the Conquest initiated a 450 year period in which the Israelites possessed the promised land, and that this 450 year period was followed by a further period of time of unspecified duration in which judges ruled Israel until the time of Samuel. Thus, the witness of these earlier manuscripts also contradicts the 480 years of 1 Kings 6:1.

This lack of endorsement (or even blatant contradiction) of the 480 years of 1 Kings 6:1, regardless of choice of original Greek manuscript, is, at the very least, curious. It should caution us against an uncritical acceptance of the 480 years of 1 Kings 6:1.

There is yet another hint in this passage. It surfaces when we take the reading of the more ancient manuscripts literally.

The great weight of modern scholarship seems to side with the more ancient manuscripts in this instance (as is reflected in more modern translations and commentaries), so this earlier reading needs to be taken seriously. The reason why modern scholars side with the earlier reading is not only that the more ancient texts are earlier (though this is an important consideration), but also because the reading of these more ancient manuscripts is the more difficult of the two to understand. An important rule in textual criticism is that the more difficult of two readings is to be preferred. The rationale for this is that a scribe would be more likely to alter the text to

smooth an apparent difficulty for his audience than he would be to alter it to make an already smooth reading more difficult.

In the case of Acts 13:19&20 the earlier texts present the more difficult reading because they seem, to the mind conditioned by the traditional chronology, to be stating a chronological/historical absurdity. That is, they seem to be injecting 450 years between the Conquest and the beginning of the period of the Judges. That this is completely impossible is obvious in a number of ways, including, for example, the fact that Othniel, the first judge, was married to the daughter of Caleb (see Judges 1:11-15), who was, you will no doubt recall, one of the ten spies sent out by Moses to spy out the land of Canaan soon after the Exodus. It is reasonable to suppose that the 450 years may have been moved to the position in which it is found in the later manuscripts to avoid this apparent chronological absurdity.

However, when the reading of the earlier manuscripts is unconstrained by traditional assumptions, it is found that there is another, completely valid way of understanding this reading which does not encounter this absurdity. Notice that the earlier reading does not exclude the possibility that judges were also appointed over Israel *during* the 450 years which followed the Conquest. To illustrate this, suppose I say, "I went to the store and bought a loaf of bread, and afterwards I drove home." From this statement alone you cannot determine whether I drove to the store or walked to the store (where my car was already parked); both possibilities are left open. Similarly, when these earlier readings say "and afterwards appointed judges for them until the time of the prophet Samuel", we cannot say whether judges had also been appointed in the earlier 450 years or not; both possibilities are left open.

From other biblical information, discussed above, we find that it is impossible for this phrase to mean that judges only began to be appointed 450 years after the Conquest, so this possibility can be ruled out. The other possibility is that judges ruled throughout this 450 years as well as afterwards until the time of Samuel. In this possibility the 450 year figure is comprised of an estimated 40 years of leadership in Canaan under Joshua and "the elders that outlived Joshua" (see Judges 2:7) and the 410 years of oppressions and deliverances detailed in Judges. Thus, this possibility implies the existence of a biblical/historical gap between the end of the book of Judges and the beginning of 1 Samuel during which the period of the judges carried on.

This possibility, while certainly non-traditional, does not encounter any biblical historical/chronological absurdities, and it makes Paul's train of

thought quite easy to follow. It can now be outlined as shown below and in Figure 3.1.

1. There was a 40 year period of wandering in the desert, which we are told about in the closing books of the Pentateuch.
2. This was followed by the initial Conquest of the land under Joshua, which we are told about in the book of Joshua.
3. This was followed by the approximately 450 year period which we are told about in the book of Judges.
4. This was followed by a further period of time during which judges continued to rule the nation, the duration of which cannot be specified because the Old Testament doesn't record a history of this period in any book.
5. This interval of silence terminates with the beginning of 1 Samuel in which book we learn about the final judges, Eli and Samuel.

3.2 A New Approach

The fact that the chronology of Judges, the apparent gap between Judges and 1 Samuel evident in their respective historical narratives, and Paul's statements in Acts, can be regarded as presenting an internally cohesive view of this section of biblical history, different from the traditional view, seems adequate grounds to call into question the veracity of the traditional view. Each of these biblical considerations is consistent with a new chronology for this section in which the approximate 450 years of Joshua/Judges is followed by an unspecified number of years between Judges and 1 Samuel during which time judges whose careers are not recorded in the Old Testament continued to lead the nation of Israel. *All* that stands against this view biblically is a single number, the "480" of 1 Kings 6:1. Is it possible that this number may not be correct – that the text of 1 Kings 6:1 as it presently reads may not be a faithful copy of the original – and that this alternative view might, in fact, be the truth?

These biblical considerations certainly do not, by themselves, *demand* a new approach to this portion of biblical chronology. It is the results of biblical archaeology – such as the problem of the missing biblical persons of the

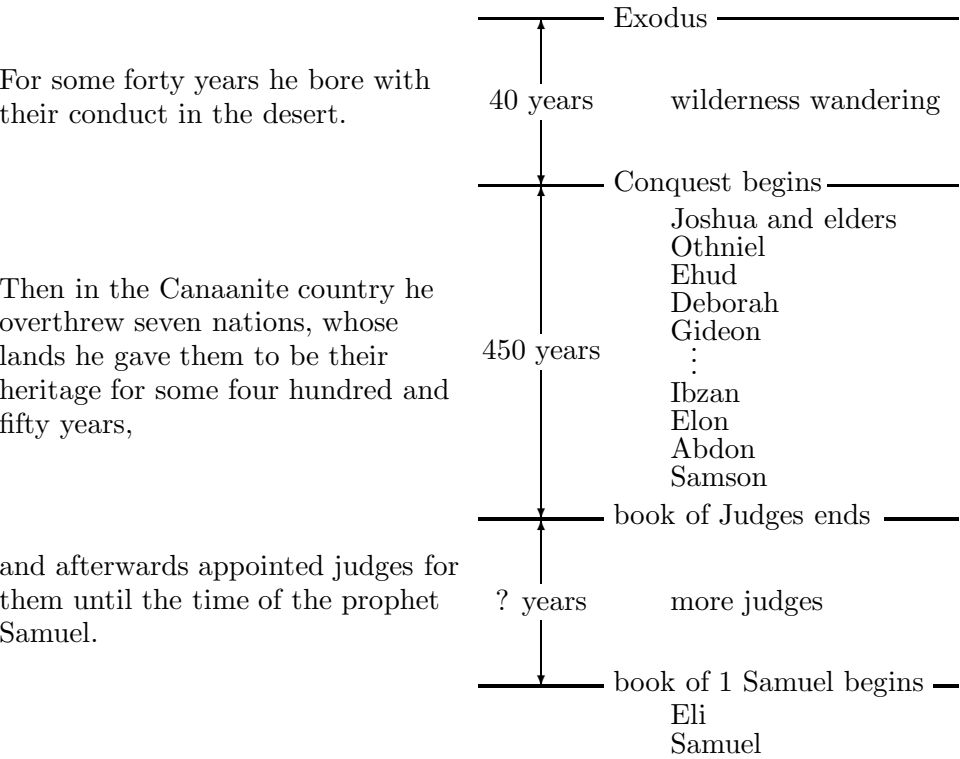


Figure 3.1: *Portion of Paul’s recitation of Israel’s history from Acts 13:18-20 (left) and outline of the rough chronology which it presents (right) when taken literally. (Vertical years are not to scale.)*

last chapter, and many additional problems which we will see in subsequent chapters – which demand a new approach. But they do hint, however gently, that a previously overlooked, non-traditional yet Bible-honoring alternative chronology may exist. Those who love the Word of God, find the fact of its historicity worth being a bit challenged over, and value the truth more than human tradition, will certainly wish to explore this possibility further.

CHAPTER FOUR



DEVELOPMENT OF A NEW PRE-MONARCHICAL CHRONOLOGY

4.1 Textual Matters

In the previous chapter we saw that certain biblical considerations suggest the possibility that there may be some problem with the 480 years of 1 Kings 6:1. Since God is the ultimate author of Scripture, and since God does not make mistakes, it follows that there was no problem with 1 Kings 6:1 as it was given originally. But is the number which presently appears in our modern Bibles in 1 Kings 6:1 a faithful copy of the original? Could a copy error have been made at some point in the past which changed the number in 1 Kings 6:1 so that the present “480 years” is not what was originally there?

Since this work is likely to be read by a number of Christian laypersons who have not had opportunity to study about the process by which the Old Testament was transmitted to the present, I feel it is necessary to make a few comments about copy errors in general before proceeding. First, please note that copy errors are a matter of *textual preservation* only; they have nothing to do with *biblical inerrancy*. Biblical inerrancy teaches that God supernaturally caused the autographs of Scripture to be composed without any error of fact or content in any area. Textual preservation is a different matter; its concern is with the process by which the Bible was hand copied by scribes from scroll to scroll down through the centuries and millennia following the giving of the original text. This copying process appears generally to have been carried out by meticulous and devout individuals, but

it was not supernaturally kept free of the sorts of inadvertent mistakes one would expect to find when documents are hand copied.

When first introduced to the possibility of copy errors in the present text of Scripture many people naturally wonder how we can be confident we have the original reading anywhere in the Bible. The most objective answer to this question comes from a study of the ancient copies of the Bible which we presently possess, such as the famous Dead Sea Scrolls. These reveal that, whereas differences do exist between these various ancient copies (that is, they show that copy errors were made by the scribes of the past), these differences are relatively few and generally very minor. There is no possibility of wholesale corruption of the original text; all of the available evidence testifies to the fact that the text as we have received it is remarkably faithful to the original.

Because this is the case it is a very good approximation to the truth to treat the modern text as if it were equivalent to the original, and it is not uncommon for Christians to do so. Only in rare instances, such as the present case, is it necessary to remind ourselves that this is an approximation only, and to set this assumed equivalence aside for the sake of a more complete understanding of a particular passage.

It is essential that we be willing to set this assumption aside in the present case, because it is nothing less than the historicity of the Bible which is at stake. If, for example, Ai was not, in fact, defeated by Joshua, as is now openly, unabashedly claimed on the basis of archaeological excavations at Ai (see, for example, [47]), then the Bible is not correct when it tells us about history. And if the Bible is not correct about history, then the doctrine of inerrancy falls to the ground. And with the loss of inerrancy true Christianity must also collapse. If we are to be able to offer an effective apologetic for the true gospel before knowledgeable twentieth century men and women we must be able to defend the historicity of the Bible, and to do this we must first get our chronology of the Bible right.

But not every claim that a copy error exists in the present text should be taken seriously, by any means. The question of when such a claim is justified has received careful consideration by conservative Bible scholars, partly in response to a cavalier attitude toward textual emendation apparent in some circles, especially during the previous generation. Archer [2, pages 60 and 61] lists five rules, credited to Ernst Würthwein, dealing with this matter and comments:

By means of this careful formula, Würthwein attempts to set up a

method of objectivity and scientific procedure that will eliminate much of the reckless and ill-considered emendation which has too often passed for bona fide textual criticism.

I now want to apply these rules to the case of this single number in 1 Kings 6:1 to show that, according to the usual rules, my suggestion that there may be a copy error in 1 Kings 6:1 should be regarded as a legitimate one and given serious consideration. Of these five rules, only the first and fourth are applicable in the current context. These two rules are:

1. Where the MT [Masoretic Text] and the other witnesses offer the same text and it is an intelligible and sensible reading, it is inadmissible to reject this reading and resort to conjecture (as too many critics have done).
4. Where neither the MT nor the other witnesses offer a possible or probable text, conjecture may legitimately be resorted to. But such a conjecture should try to restore a reading as close as possible to the corrupted one itself, with due consideration for the well-known causes of textual corruption.

In the case of 1 Kings 6:1 there is a Septuagint variant which reads “440” rather than “480”. Beyond this the “480” of 1 Kings 6:1 is well attested. No variant specifying any number *greater* than 480 (which is what this new approach requires) has so far come to light. The strong textual attestation of 480 years is, no doubt, the principal reason why the possibility of textual corruption at this point has never previously been seriously pursued. However, according to the rules given above, conjecture (with respect to the text) is permissible if the present text does not provide “an intelligible and sensible reading”. I suggest that the present reading of 1 Kings 6:1, while intelligible, is not sensible.

This is best illustrated by considering 1 Samuel 13:1, another problem passage having to do with chronology in the Old Testament. In the King James Version 1 Samuel 13:1 reads:

Saul reigned one year; and when he had reigned two years over Israel, ...

This seems smooth enough; one would hardly guess that the Hebrew text underlying this translation exhibits some serious difficulties. According to Green’s interlinear Hebrew and English Bible [21, page 740] the Hebrew text literally reads:

A son of a year (was) Saul when he became king and two years he reigned over Israel.

That is, the text literally says that Saul was a one year old baby when he became king, and that his reign lasted only two years.

Now we know this is not correct from the history afforded us in the Old Testament regarding the reign of Saul; he was at least a young man when he was made king, and his reign had to last much longer than just two years. However, there appears to be no doubt that this verse was intended to convey two important quantitative pieces of information to the reader: Saul's age when he became king, and the length of his reign. Taking all things into consideration modern scholarship is led to the conclusion that some numbers must have been accidentally dropped out of the text at some remote time in the past, shortening both Saul's age when he became king and the length of his reign. Gleason Archer [2, page 57] says regarding the first missing number in this verse, for example:

Unfortunately textual criticism does not help us, for both the LXX and the other versions have no numeral here. Apparently the correct number fell out so early in the history of the transmission of this particular text that it was already lost before the third century B.C.

Evidently, the correct translation of the Hebrew as it presently stands should be

Saul was ___ years old when he began to reign, and he reigned over Israel __two years.

The blanks are both inferred from the fact that the current reading is not sensible as it stands. In modern translations the "sensible reading" clause of rule 1 is, in fact, invoked, and conservative and nonconservative scholars alike do not hesitate to suggest that the text should be emended by the restoration of some appropriate numbers to the text *even though there is, in fact, no textual variant supporting the proposed emendations in this case*. Thus, the NASB translates this verse as

Saul was *forty* years old when he began to reign, and he reigned *thirty-two* years over Israel.

And the NEB renders it

Saul was fifty years old when he became king, and he reigned over Israel for twenty-two years.

(Both of these translations warn the reader of the underlying textual problems: through the use of italics in the case of the NASB, and through marginal notes in the case of the NEB.)

(Note that the second number in this verse is constrained by the surviving “two” in the present text to read “twenty-two” or “thirty-two”. Other historically feasible possibilities such as “twenty-nine” or “thirty-three” are prohibited by rule 4 above.)

I suggest that identical reasoning applies to 1 Kings 6:1. If we take the history which we are given in Scripture between the Exodus and Solomon at face value, it is far too long to fit in a mere 480 years, as was shown in the previous chapter. Thus, it is appropriate to suggest that 1 Kings 6:1 fails to provide a sensible reading, and, on this basis, to conjecture that the text may be corrupt at this point.

Some may be tempted at this point to object that the “480 years” of 1 Kings 6:1 is perfectly sensible as it stands; all that is required is that the chronology of the book of Judges be compressed. But this would obviously be to beg the question. It is the *assumption* that the “480 years” of 1 Kings 6:1 is correct which is the whole motivation for the compression of Judges, and this assumption cannot be granted since it is, in fact, the question under consideration.

Of course, the lack of textual attestation for a suitable 1 Kings 6:1 variant puts a much larger burden of proof upon other evidence for this postulated textual problem than would normally be the case. Furthermore, it demands that a plausible explanation of how the text came to its present form be supplied, and any suggested restoration of the text must conform to rule 4 above. We hope to meet these requirements adequately below.

However, the important point to grasp at this stage is simply that the suggestion that 1 Kings 6:1 may be corrupt is a legitimate one according to the usual rules of deciding such matters. The text as it currently reads *is* at odds with other Old Testament chronological information, and just as this opens the door to the possibility of textual corruption in 1 Samuel 13:1, so it does in 1 Kings 6:1. The fact that this other Old Testament chronological information can be arbitrarily rearranged in such a way as to bring about an apparent (though, I would argue, contrived and unnatural) solution to the problem with 1 Kings 6:1 does not mean that this is what *should* be done, and does not guarantee the validity of the present reading of 1 Kings 6:1 by

any means. Responsible scholarship demands that the possibility of textual corruption in 1 Kings 6:1 be taken seriously and explored objectively – to which task we now turn.

4.2 Finding an Anchor

The biblical considerations of the previous chapter hinted that the elapsed time between the Exodus and Solomon may be significantly longer than the 480 years presently found in 1 Kings 6:1, and that there may be a portion of Israel’s history during the period of the judges between Judges and 1 Samuel for which the Old Testament does not supply any historical record (see Figure 3.1, page 33). The net effect of these two ideas is to loose biblical chronology prior to 1 Samuel from its traditional mooring on the absolute (i.e., B.C./A.D.) time scale and set it adrift. In chronological jargon we say that this section of biblical chronology is “floating”. The fundamental problem which needs to be solved in the present chapter is how to re-anchor this floating chronology.

This problem cannot be solved using biblical chronological data alone, as the traditional approach allowed. The anchor for the traditional chronology was the 480 years of 1 Kings 6:1, but this number is specifically suspect in this new approach and must be set aside pending further independent investigation; it cannot be used as an anchor in the present case. The only other possible biblical approach would be to work back through biblical history from Solomon to the Exodus piece by piece, but this route is also blocked in this new approach since we anticipate a gap of unknown length between Judges and 1 Samuel. We can specify a *minimum* figure of 600 years between the Exodus and Solomon this way, if we assume the numerical data of Judges was meant to provide a straightforward chronology for that book, but this is as far as we can go on biblical data alone. We must turn to some extra-biblical aid to make further quantitative progress.

In principle, any one of several methods might have been employed to provide the anchor point which we are seeking; in practice, only one method can be used in this case. For example, if the Old Testament had recorded certain astronomical observations in this floating, early portion of biblical history we might have been able to use these to compute an absolute date. This method has been used successfully to anchor floating chronologies from some near-eastern countries, but the God-fearing Hebrews did not share the astrological propensities of their neighbors, and the Old Testament is devoid

of any such observations.

If we had a piece of a wheel from one of the chariots which was lost in the Red Sea at the time of the Exodus, or Aaron's rod which budded, or any other clearly identified biblical artifact from this early period, the anchor point might be provided by applying radiocarbon dating to this artifact. Though it is not at all impossible that such objects will some day be discovered, we have none at the present time, so this door is also closed to us.

The only method which presently seems possible consists of matching a biblical historical event or sequence of events with its counterpart from biblical archaeology. This is the route which we will follow below.

4.2.1 Biblical Archaeology

Biblical archaeology is a vast field today. Some attention must be given to how we can best achieve our goal by an excursion into this field before we launch into it.

Our purpose in turning to biblical archaeology is clear; we wish to correlate some finding from biblical archaeology with its historical counterpart from the book of Judges or some earlier biblical book. This archaeological finding must have a secure absolute date so it can be used as an anchor-point for the early section of biblical chronology we are studying.

It is obvious that some biblical historical events will be more suitable for this purpose than others. The provision of manna in the wilderness is not a good candidate, for example, chiefly because manna was a perishable food item for which no contemporary remains can be expected. Of highest priority then is the matter of *preservation*. We are, after all, looking for telltale material remains of events which happened more than three and a half millennia ago. Clearly, items made of stone, for example, will be greatly favored for preservation over items made of organic materials such as wood or leather.

A second matter to be taken into account in deciding which biblical historical event we should attempt to locate archaeologically is that of *uniqueness*. Consider the pitchers which Gideon and his men smashed as they came against the forces of Midian (Judges 7:16-20), for example. These, no doubt, were pottery vessels. The broken fragments from these vessels would be well preserved. Unfortunately, so would fragments of nearly every other pottery vessel which has ever been broken in Palestine. The remains of Gideon's pitchers would be difficult, if not impossible, to distinguish from all of the

other potsherds which one would find in the same geographical location, so would not be suitable for our purpose.

A third concern is archaeological *prominence*. Ancient cities tend to leave behind conspicuous ruins which can be located with relative ease, while the ancient campsites of an army on the move would be much less pronounced and, hence, more difficult to locate and identify unambiguously, as well as less likely to attract archaeological investigation in the first place.

Another criterion we need to consider is *biblical detail*. Obviously, the more detail we are given about an event biblically, the better. This is especially important when it comes to correct identification of archaeological remains with their corresponding biblical event. The more detail we are given biblically, the greater will be the uniqueness of our archaeological search, and the less ambiguous its results. Returning to Gideon's pitchers, if the Bible had recorded the size, shape, color, etc. of these pitchers the chance of their accurate, unambiguous archaeological identification would obviously have been greatly enhanced.

Finally, we must choose a biblical event whose relative biblical date – within the floating chronology which we are seeking to anchor – is sufficiently well known. It would not do to choose some event from the end of the book of Judges, for example. The historical accounts in Judges 17-21 are given without any clear chronological framework; all we know about these is that they happened sometime during the period when judges ruled over Israel.

Given the above factors as a guide to selection, the choices of the sort of thing we should look for can be narrowed as follows. One would prefer to look for the remains of an ancient city because of the large archaeological prominence of this category. Secondly, our purpose would be best served if the city had been suddenly overwhelmed and destroyed, with a detailed biblical record of the event. (Destruction of a city tends to leave behind large quantities of debris, contributing to preservation of the event archaeologically.) It would also be helpful if the city had been burned during this destruction since preservation and correct identification of the destruction layer are then further enhanced by the durable and easily identified blanket of ashes and charcoal which is left over the ruins.

A factor which can work against preservation of the ruins of a city, and greatly complicate archaeological interpretation, is any subsequent building on the site. Not only does the digging of foundations into previous layers complicate the stratigraphy, but it also admits the possibility of subsequent destruction, thus complicating the task of finding an *unambiguous* correlation between archaeological remains and the Bible.

Summing up, if we had our choice, we would want to search for the destruction layer of a city which had been violently destroyed and never rebuilt. We would like a considerable amount of information about the city and its destruction to exist in the Bible, and might hope that this information would yield one or more details which would aid in making a correct and unambiguous identification. The time at which the destruction of the city took place relative to biblical chronology should be perfectly clear. And, of course, we would require all of this to be within the early section of biblical history whose floating chronology we are attempting to anchor.

Normally a researcher is not granted such a wish; this time we are. There is one biblical event which comes very close to fulfilling all of these criteria – it is the destruction of the city of Ai by Joshua and his troops.

4.2.2 The Conquest of Ai

Ai was the second city to be conquered by Joshua after the crossing of the Jordan river. Its position within the floating section of biblical chronology which we are seeking to anchor is quite precise – it is very near the beginning of the Conquest, about 40 years following the Exodus. Details regarding the destruction of the city are recorded in the eighth chapter of the book of Joshua.

Almost all scholars identify the modern, conspicuous ruins called et-Tell with the biblical Ai. Dissenters have unquestionably been motivated to look elsewhere for Ai by the fact that the archaeology at et-Tell is completely incompatible with the biblical conquest of Ai *at the conventional dates* (either “early” or “late” dates). Nonetheless, the geographical situation of et-Tell and its topography match that of the biblical Ai very well.

Ai is located, biblically, on a hilltop east of, but not far from, Bethel (Genesis 12:8, Joshua 7:2,3). Again, almost all scholars identify Bethel with the modern Beitin. Beitin and et-Tell sit on neighboring hills about two miles apart with Beitin on the west and et-Tell on the east (see Figure 4.1). Joshua 8:11 states that there was a valley to the north of the city; at et-Tell this is matched by a ravine of a seasonal wadi north of the city. It is clear from Figure 4.1 that et-Tell is correctly placed relative to Jericho, from a strategic perspective, for it to have been the next city to have been attacked by Joshua after Jericho.

That Ai was a significant city in Joshua’s time is implicit in the biblical narrative in a number of ways. For example, the city had its own king (Joshua 8:14). After the defeat of Ai and the treaty of the Gibeonites with

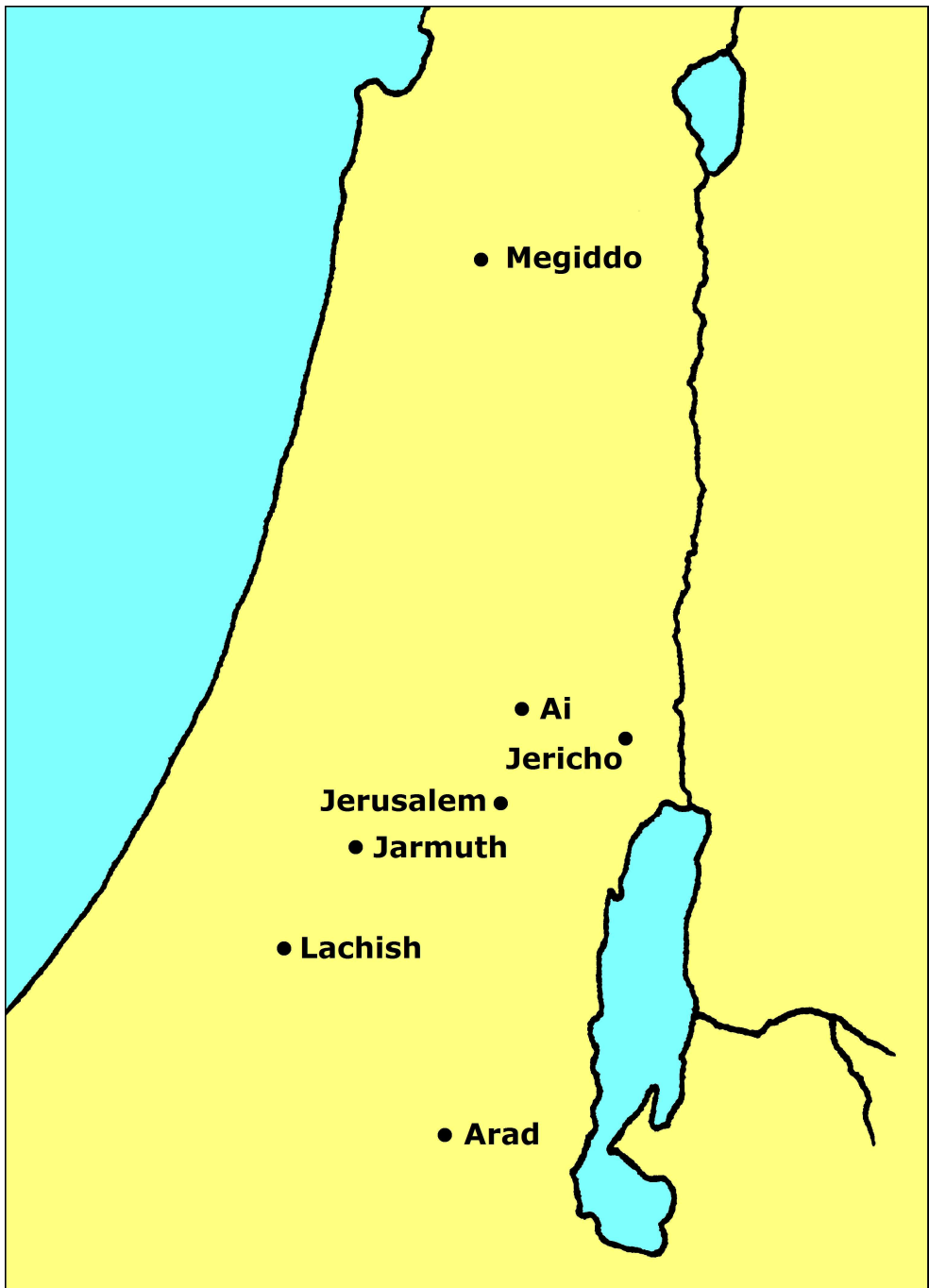


Figure 4.1: *Map of Palestine showing some of the cities at the time of Joshua.*

Joshua, the king of Jerusalem was alarmed “because Gibeon was a great city, like one of the royal cities, and because it was greater than Ai” (Joshua 10:2). That Gibeon was compared to Ai, not Jericho, which had also been defeated, suggests that Ai was a larger city than Jericho. In fact, the remains at et-Tell cover about twenty-five acres; excavation at Jericho has shown that it covered only about seven acres. Thus, et-Tell is over three times the size of Jericho, further corroborating its identification as the biblical Ai.

Some might argue that Ai must not have been such a large city since the spies said “they are few” (Joshua 7:3). But the remainder of the biblical account reveals that the spies were certainly wrong. God commanded that the whole army (of at least 40,000 men) should go up against the city (Joshua 8:1), and, in fact, 12,000 inhabitants of Ai and its environs were slain, indicating that Ai was a major city, not just a small town.

We learn from the Bible that the destruction of Ai was violent, the city was burned, and it was not rebuilt for a very long time afterwards (Joshua 8:24,28). At one point in its history et-Tell was violently destroyed and burned, after which there was no occupation of the site for over 1000 years.

Ai was allied with Bethel in some way (Joshua 8:17), but Ai was clearly the only target of military significance. Taken in context with the rest of the conquests in the book of Joshua, the implication is that Ai was a fortified city at this time while Bethel was not. In fact, archaeological excavation at Bethel (the modern Beitin) has revealed that the first walled city at Bethel did not appear until some time following the violent destruction layer at et-Tell.

The Bible records that in the evening on the day in which Ai was destroyed by Joshua, a somewhat unusual monument was erected in Ai by Joshua’s army. The account is given in Joshua 8:29.

And he hanged the king of Ai on a tree until evening; and at sunset Joshua gave command and they took his body down from the tree, and threw it at the entrance of the city gate [the LXX reads “cast it into a pit (or trench)”, so there is some textual uncertainty here], and raised over it a great heap of stones *that stands* to this day. (NASB)

This is a very significant detail. The evident difficulty of erecting such a heap of stones (recall that Joshua had available 40,000 soldiers for the task) suggests that such monuments should be rare, archaeologically speaking. Judging from excavation reports from other sites, this apparently is the

case; Joshua's heap of stones was a highly unique monument. It also has the property of high preservability, and there is thus good reason to suppose this monument might still have existed in modern times when excavation was begun.

In fact, the excavators of et-Tell did find a great heap of stones covering a portion of the ruins [10, page 41]:

The citadel at Ai . . . was discovered by Marquet-Krause in 1934. Working with 80 to 100 men for "un long mois," [one long month] a six-meter heap of stones was laboriously removed from what proved to be the ruins of Sanctuary A and the citadel.

A six-meter heap of stones is not a small rock-pile; this definitely fits the biblical description of the "great heap of stones" which Joshua and his troops left at Ai following its destruction. The fact that we find such a monument situated immediately above the ruins of a strongly fortified but violently destroyed city which suits the biblical description of Ai in so many other ways as well seems to me to completely guarantee that we have correctly identified the site and the event.

With so much positive evidence confirming the equivalence of the modern et-Tell and the biblical Ai, there is every reason to expect this site to correctly provide the anchor point we are seeking. Secular dating methods (both pottery dating and radiocarbon) reveal that the date of the final destruction of this ancient city is about 2400 B.C., *a full millennium earlier than the traditional Conquest date!*

Violent destruction overtook the city about 2400 B.C., . . . No definite identity of the aggressor is known, . . . The site of Ai was abandoned and left in ruins after its destruction circa 2400 B.C. . . . the site of Ai lay in ruins until circa 1220 B.C., . . . [3, page 49]

(The history of et-Tell, as reconstructed from archaeological reports, is summarized graphically in Figure 4.2.)

The idea that a full millennium might be missing from traditional biblical chronology is somewhat shocking at first sight, but there is no mistake apparent in our logic or assumptions to this point, and, thus, no rational way around this implication. All of the archaeological clarity which we had hoped for is found at this site, so the historical picture seems quite plain. There is only one stratigraphic layer which can possibly correspond to the violent destruction and burning followed by a long period of no rebuilding,

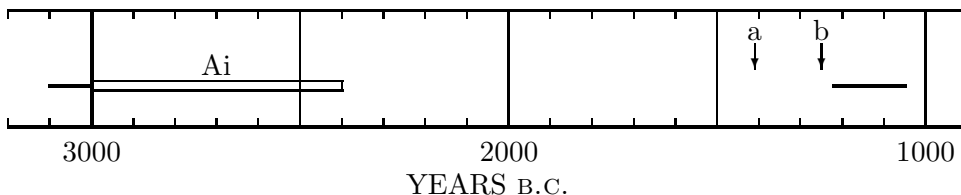


Figure 4.2: *History of Ai as reconstructed from archaeological reports. Single horizontal lines represent an unwallled town. Double horizontal lines delimit the period when Ai existed as a walled city. Conventional dates for the Conquest are shown with vertical arrows as: a. the traditional biblical (“early”) date, and b. the “late” date. Absolute dates in the middle of the third millennium B.C. are uncertain by about one hundred years; the terminal date for the walled city at Ai is similarly uncertain.*

and it dates to *ca.* 2400 B.C. Et-Tell suits the biblical data pertaining to Ai very well, and, despite much effort, no other site has ever been found which suits these data at all. Only the date is “wrong”, and this, apparently, is all that has ever been “wrong” with the archaeology at this site.

Perhaps some readers are tempted to dismiss the secular archaeological dates at this stage. In fact, there is no rational, objective grounds for doing so. The destruction of the city was initially dated in excess of 2000 B.C. by Marquet-Krause in the mid 1930s on the basis of pottery shards found there. Refinements in pottery dating techniques allowed the date to be more precisely estimated at around 2400 B.C. by the mid 1960s. Radiocarbon dating was invented only in the late 1940s, and has itself gone through a number of refinements of technique over the past forty-five years. Even so, it has an inherent dating uncertainty of about ± 100 years when applied to these ancient times, so it has not been able to provide a more precise date for the destruction of the city. It has, however, provided completely independent corroboration of the conclusion already reached by pottery dating at Ai. The radiocarbon results from Ai [11] simply will not admit anything like a thousand year error in the secular dates at this point. When all of the pertinent chronological data are taken into consideration the only reasonable conclusion is that the true date for the destruction of Ai cannot possibly differ from 2400 B.C. by more than about 100 years.

4.3 Restoring the Biblical Text

Ai does an excellent job of furnishing the anchor point we are seeking – even if the result is unanticipated. Strictly speaking, nothing more is required to further develop the biblical chronology which results from this new approach. However, the rough *date* of the Conquest of Ai – our anchor date – has immediate, if somewhat unexpected, implications of its own. Most importantly, it provides an obvious explanation of how the text of 1 Kings 6:1 came to its present form (i.e., “480 years”) and immediately suggests how the text should be restored.

The secular date for the destruction of Ai (*ca.* 2400 B.C.) is essentially 1,000 years before the traditional biblical date for the Conquest (*ca.* 1407 B.C.) which is computed using the “480 years” of 1 Kings 6:1. This suggests the possibility that the original number in 1 Kings 6:1 was “1,480”, and that the text of 1 Kings 6:1 has come to its present form through the loss of the leading digit “1”. Thus, the problem with 1 Kings 6:1 seems even more similar to that which we saw with 1 Samuel 13:1 previously.

This possibility seems, in fact, quite plausible when examined more closely. In the original Hebrew, “1,480 years” would have been written out in words, probably as it appears in the top row of Figure 4.3.¹ (I have purposely not included any space between words, nor any vowel points in this figure to more closely imitate the text as it probably originally appeared to the ancient copyist.) The similar beginnings of the words “and thousand” and “and four” in Hebrew, would make it easy for the eye of the scribe who was copying the text to skip from the beginning of “and thousand” to the beginning of “and four” as shown by the arrow. This would result in the accidental loss of the “and thousand”, giving the present reading, as shown

¹This is not the only possible reconstruction; the ‘rules’ for the construction of numbers in Hebrew are not sufficiently rigid to exclude other possibilities. Lambdin [27, page 255] notes that “There is a great deal of variety in the order and syntax of the higher numbers”. The order of the digits can not be guaranteed. The usual order is from larger to smaller (thousands first, then hundreds, then tens, and finally ones) but smaller to larger and even mixed ordering occurs in the Old Testament [40, page 283]. The reconstruction which I present in Figure 4.3 seems the most probable one to me. I have arrived at it as follows. First, the double appearance of the word for year appears to signal the usual framing construction (i.e. “year” + number + “year”; see [40, page 286]) used for large numbers when specifying dates in the Old Testament. The occurrence of the tens (i.e. 80) outside the frame produced by the double appearance of “year” seems paralleled in Exodus 12:40. Thus, it seems likely that the “thousand” was dropped from the number inside the frame. In reconstructing this number I have followed the usual order of larger to smaller; this is the order in which this same number appears in 1 Kings 10:26.

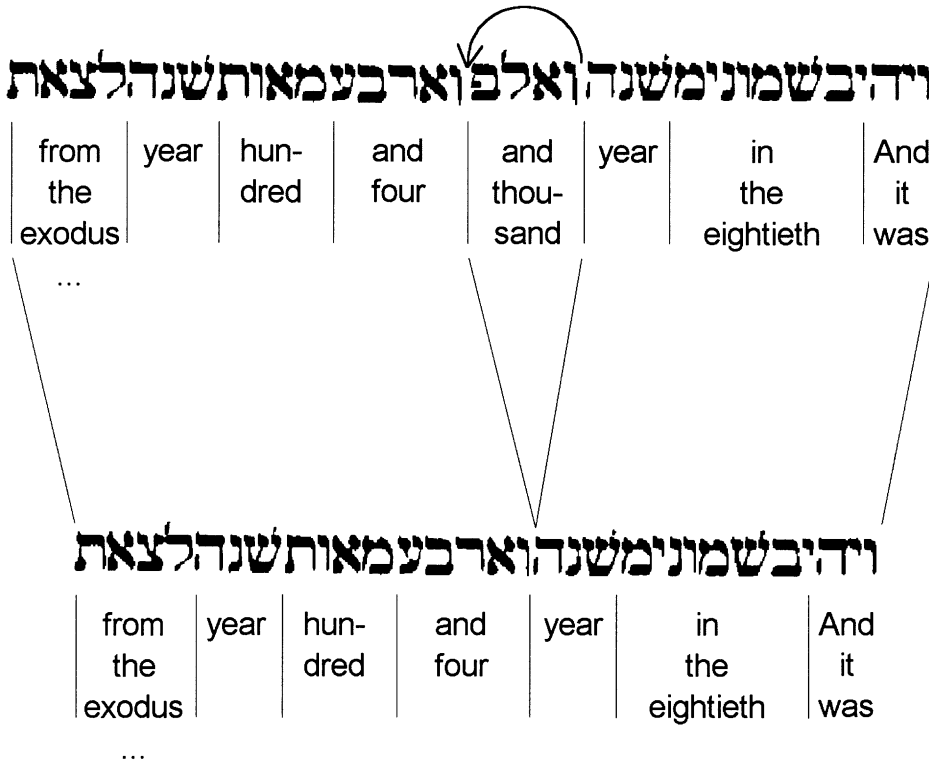


Figure 4.3: *Proposed copy error resulting in the loss of one thousand years from the present text of 1 Kings 6:1. The proposed original text is shown on the upper line (read from right to left); the present text is shown on the lower line. The arrow indicates how the scribe’s eye might accidentally have skipped over “and thousand” in the process of copying the original.*

in the bottom row of the figure. This is a minor example of the well-known type of manuscript error called homeoarkton. (See Archer [2, pages 54-57], for example, for a discussion of various types of manuscript errors.)

Notice that this suggested restoration of the text of 1 Kings 6:1 satisfies the requirements of rule 4 discussed earlier in this chapter. Specifically, it “restores a reading as close as possible to the corrupted one”, and it takes “due consideration for the well-known causes of textual corruption.” Thus, though the lack of textual evidence has forced us to conjecture about the nature of the original text, we have satisfied the normal rules governing textual emendation completely in doing so.

Notice also that there is nothing arbitrary at all about the final result. We are completely constrained to the choice of 1,000 as the only possible missing

quantity in 1 Kings 6:1 through two considerations. First, the archaeology at Ai demands that this quantity be roughly between 900 and 1,100. Choices outside this range – say 500 or 5,000 – simply won’t work because there is no destruction at Ai corresponding to the dates which such choices would predict. Second, once this range of roughly 900 to 1,100 has been established, textual considerations mandate the choice of 1,000. Other choices – such as 999 or 1053 – are disallowed by rule 4 above. (The situation here is once again completely parallel to the emendation of the text in 1 Samuel 13:1 which we saw earlier.) “One thousand” is the *only* permissible possibility.

4.4 A Simple Explanation

Here, then, is a simple explanation of the whole problem of the disharmony between biblical history and archaeology in the pre-monarchical period. “One thousand” was accidentally lost from the text of 1 Kings 6:1 hundreds of years B.C. The loss of this millennium seriously desynchronized biblical history and archaeology in the pre-monarchical period, a problem which was only made sufficiently obvious to warrant serious attention by the rise of biblical archaeology in the present century.

If this explanation is correct, then we predict the restoration of harmony between biblical archaeology and biblical history in the pre-monarchical period by the simple inclusion of this “one thousand” in the future computation of pertinent biblical dates. If it is wrong, serious disharmony should result, for it is not possible to insert a full millennium into any chronology where it does not belong and find resulting harmony between it and actual field data. In subsequent chapters we will see that this simple explanation does, in fact, work out very well.

4.5 The New Chronology

We are now in a position to propose a new chronology for the pre-monarchical portion of Old Testament history beginning with Abraham. Complete quantification of the new chronology of this portion of biblical history results from the adoption of two premises, presented formally below:

Premise 1 *The interval of time between the Exodus and Solomon is 1,480 years, not 480 years.*

Premise 2 *The chronological information given in the book of Judges is contiguous.*

The second premise says that the chronological data found in the book of Judges should simply be taken at face value and not be stretched (by supposing there are gaps in the book of Judges) or compressed (by supposing that the periods mentioned are overlapping). As noted previously, this premise is contrary to the traditional treatment of the chronological data found in Judges. However, it is endorsed by evidence internal to the book of Judges. The particular evidence I am referring to is Jephthah’s assertion in Judges 11:26 that Israel had been in the land “300 years” by his time. (This figure, in its context, appears to be a round number, not a precise count.) In fact, the chronological data given in the book of Judges from the beginning of the book up to Jephthah sums to 319 years. There is certainly not room for any significant stretching or compressing here, and there is no reason to believe the treatment of subsequent chronological data in Judges should be any different.

The new biblical chronology which results from these two premises is shown in Figure 4.4, and the new biblical dates of numerous biblical events are listed in Table 4.1.

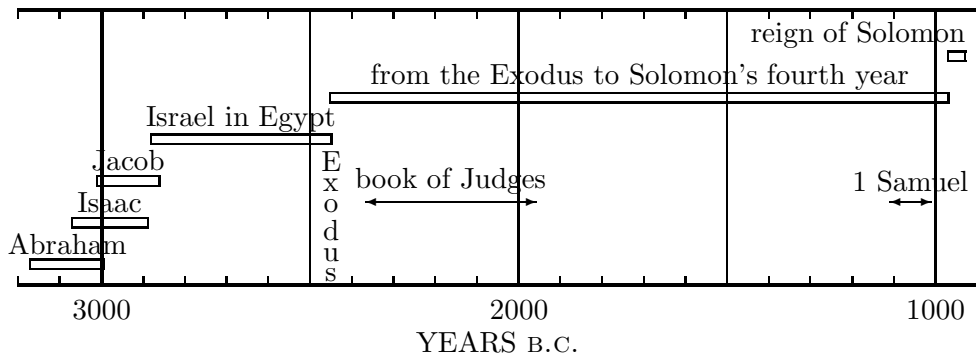


Figure 4.4: *Principal elements of the new biblical chronology.*

In calculating these new dates I have used the date of accession of Rehoboam, Solomon’s son, which is given by Thiele [36] as 931/930 B.C, as the starting point. In 1 Kings 11:42 and again in 2 Chronicles 9:30 we find that Solomon reigned a total of forty years, which places his accession year in about 971 B.C. Working with 1,480 years from the Exodus to the fourth year of Solomon’s reign yields a date for the Exodus of about 2447 B.C.

Table 4.1: *Approximate dates resulting from the new biblical chronology from Abraham through the early monarchical period.*

item	date (B.C.)	reference
birth of Abraham	<i>ca.</i> 3167	Gen 21:5
birth of Isaac	<i>ca.</i> 3067	Gen 25:26
birth of Jacob	<i>ca.</i> 3007	Gen 47:9
birth of Joseph	<i>ca.</i> 2916	Gen 41:46
Joseph's famine	<i>ca.</i> 2879-2872	Gen 45:6
Israel enters Egypt	<i>ca.</i> 2877	Ex 12:40,41
birth of Moses	<i>ca.</i> 2527	Ex 7:7
Exodus from Egypt	<i>ca.</i> 2447	1 K 6:1 (see text)
Conquest begins	<i>ca.</i> 2407	Ex 16:35
oppression by Cushan-rishathaim	<i>ca.</i> 2367-2359	Jud 2:6-10, 3:8
Othniel the judge	<i>ca.</i> 2359-2319	Jud 3:11
oppression by Eglon king of Moab	<i>ca.</i> 2319-2301	Jud 3:14
Ehud the judge	<i>ca.</i> 2301-2221	Jud 3:30
oppression by Jabin king of Canaan	<i>ca.</i> 2221-2201	Jud 4:3
Deborah the judge	<i>ca.</i> 2201-2161	Jud 5:31
oppression by "the sons of the east"	<i>ca.</i> 2161-2154	Jud 6:1
Gideon the judge	<i>ca.</i> 2154-2114	Jud 8:28
Abimelech	<i>ca.</i> 2114-2111	Jud 9:22
Tola the judge	<i>ca.</i> 2111-2088	Jud 10:2
Jair the judge	<i>ca.</i> 2088-2066	Jud 10:3
oppression by Ammonites	<i>ca.</i> 2066-2048	Jud 10:8
Jephthah the judge	<i>ca.</i> 2048-2042	Jud 12:7
Ibzan the judge	<i>ca.</i> 2042-2035	Jud 12:9
Elon the judge	<i>ca.</i> 2035-2025	Jud 12:11
Abdon the judge	<i>ca.</i> 2025-2017	Jud 12:14
oppression by Philistines	<i>ca.</i> 2017-1977	Jud 13:1
Samson the judge	<i>ca.</i> 1977-1957	Jud 16:31
birth of Samuel	<i>ca.</i> 1110	(estimate)
accession of Saul	<i>ca.</i> 1051	Acts 13:21
accession of David	<i>ca.</i> 1011	2 Sam 5:4
accession of Solomon	<i>ca.</i> 971	1 K 11:42
accession of Rehoboam	<i>ca.</i> 931	(see Thiele, [36])

$(931 + 40 - 4 + 1, 480 = 2, 447)$. This immediately places the Conquest at about 2407 B.C., given forty years of wandering in the wilderness (Exodus 16:35, Joshua 5:12, Deuteronomy 8:2,4).

Other dates of significance can be computed from these. For example, since Israel was in Egypt for 430 years (Exodus 12:40,41) the computed date for the entrance of Jacob and his family into Egypt during the seven years of severe famine (Genesis 41-47) is approximately 2877 B.C. This, in turn, places the birth of Jacob in about 3007 B.C. (Genesis 47:9), the birth of Isaac in about 3067 B.C. (Genesis 25:26), and the birth of Abraham in about 3167 B.C. (Genesis 21:5).

At least a decade of uncertainty should be allowed at all points in this new chronology to account for probable round-off of some of the biblical chronological numbers which have been used. Other problems (e.g., the length of Joshua's leadership not being specified) increase the uncertainty beyond this in some portions of the chronology. However, most of the dates given are probably not out by more than three decades.

4.6 Biblical Genealogies

There are two questions which naturally arise with many people at this point, regarding the biblical genealogies, and these need to be dealt with before proceeding with the application and evaluation of this new chronology. These questions are the following. First, don't the Old and New Testament genealogies preclude the possibility that a full millennium could have been accidentally dropped from Old Testament chronology; aren't there simply too few names in these genealogies to span such a large additional time? Second, and more specifically, doesn't Matthew's genealogy of Christ, which says that there were fourteen generations between Abraham and David (Matthew 1:17), preclude an additional 1,000 years between Abraham and David?

These questions are easily answered by a brief survey of the genealogies of the Bible, such as can be found in most Bible encyclopedias. By comparing different genealogies within the pages of Scripture the fact that the Near Eastern custom of composing such lists was quite different from modern Western practice is clearly seen.

Consider Matthew's genealogy, for example. Matthew concludes his genealogy with the statement (Matthew 1:17):

Therefore all the generations from Abraham to David are fourteen generations; and from David to the deportation to Babylon

fourteen generations; and from the deportation to Babylon to *the time of Christ* fourteen generations. (NASB)

This seems quite definitive and quantitatively precise to the typical Western mind at a casual reading. However, a small amount of study reveals that quantitative precision is not what Matthew had in mind at all. For example, between Joram and Uzziah (Matthew 1:8,9) three generations, conspicuous in the Old Testament, have been left out of Matthew's genealogy. These are Ahaziah (2 Kings 8:24) the son of Joram, Joash (2 Kings 11:2) the grandson of Joram, and Amaziah (2 Kings 14:1) the great-grandson of Joram and actual father of Uzziah. It is, of course, not credible that these names were accidentally overlooked by Matthew – still less that Matthew's original audience would be unaware of the omission. Obviously, then, these three names were deliberately left out and such a practice was considered normal by Matthew's original audience.

Further evidence of the deliberate omission of names by Matthew can be seen in the last leg of his genealogy, from the deportation to Christ. Luke lists nearly twice as many generations as Matthew in this same period of history (Luke 3:23-27).

It is quite plain that Matthew's partitioning of history from Abraham to Christ into three groups of fourteen generations each is deliberately schematic, and was intended to be understood as such. The full significance of this schematization continues to be debated by scholars today, and many interesting and illuminating opinions regarding it can be found in commentaries on Matthew. For our present purpose, however, it is sufficient to note that all scholars agree that Matthew did not intend his genealogy to serve any accurate chronological purpose.

The abridgement of genealogical lists is, in fact, the general rule for Scripture. It is easy to produce several additional cases illustrating this point.

In the book of Ruth, for example, a portion of the ancestry of David is given as Salmon – Boaz – Obed – Jesse – David. This same sequence is repeated in Matthew, with the additional information that Rahab was the wife of Salmon. Since Rahab was involved with the Conquest at Jericho, this genealogy would imply that only four generations had transpired between the Conquest and David if we assume that it is complete. But this is quantitatively impossible.

To see this we must set aside the new biblical chronology temporarily so as not to beg the question. The traditional date of the Conquest is roughly

1410 B.C. David was born roughly 1040 B.C. This is a time span of 370 years. In this time, according to the assumption that this genealogy is complete, fewer than four generations elapse in the line of David. This computes to an average of greater than 92 years per generation! This is impossibly long, for the length of a generation is merely the average age of males at the birth of their sons. Recall that the natural life span had reduced to 70 years already by the time of Moses (Psalm 90:10), which predates this section of David's genealogy. Thus, we would expect a reasonable average generation time to be 40 years at most. We may reasonably conclude that *at least* 50% of the generations are missing in this portion of David's genealogy.²

But this section of genealogy is not only found in Ruth and Matthew. This same sequence (i.e., Salmon – Boaz – Obed – Jesse – David) is repeated without additional generations in 1 Chronicles 2:11-15, and Luke 3:31,32. Here again, it is not credible to suppose that the author of Chronicles, or Luke was unaware of the fact that four generations could not possibly span the period from the Conquest to David, and it seems reasonable to infer that the compilation of a complete genealogical line (in which no generation was missing) was not intended in any of these cases.

A similar argument can be made with respect to the 430 years in which the Israelites were in Egypt. Five generations (Perez – Hezron – Ram – Amminadab – Nahshon) are listed for this period of time in Ruth (4:18-20), and these are repeated in 1 Chronicles (2:4-10), and Matthew (1:3-4). This computes to an average generation time of 86 years. This seems, once again, far too long, implying that a number of generations have been left out.

Interestingly, Luke (3:32,33) gives an additional name in this portion of his genealogy (Admin, before Amminadab) which can be taken as further evidence of abridgement in Ruth, Chronicles, and Matthew.

This additional name reduces the average time per generation for this portion of Luke's genealogy to about 72 years if we assume that no generations are missing. While this is not impossible, it still seems quite unlikely. Notice that the portion of Luke's genealogy from David to Christ includes 43 names, and this period of history spans roughly 1,080 years. Thus, this most recent portion of Luke's genealogy (which may or may not be complete) suggests that the normal, average generation time for the first millennium B.C. was 25 years or less. While Scripture indicates that the human life span

²The same basic argument can be made in the case of an assumed thirteenth century B.C. date for the Conquest, though with less force. In that case the average generation time works out to greater than 52 years. This is no longer impossible, but it is still improbable, suggesting abridgement.

may have been somewhat longer at the start of the 430 year period during which the Israelites were in Egypt than it is today, it was not much longer (Joseph died at 110 years, for example) and was indistinguishable from the modern life span by the time of Moses, as was noted above. Thus, the nearly 300% increase in the apparent generation time in this early portion of Luke's genealogy relative to the later period does not find a ready physiological explanation, and it seems more appropriate to conclude that this portion of Luke's genealogy is also abridged.

The purpose of the biblical genealogies is to emphasize a line of descent, not to provide accurate counts of numbers of generations or reasonable estimates of elapsed time. The focus of the biblical genealogies is on the fact of the existence of the line itself, not the particulars of the line. It is as if we were to ask a wilderness guide whether there was a path from point A in the wilderness to the distantly removed point B. He assures us that there is and lists a number of the better-known landmarks along that path as corroboration of his affirmative answer. He does not give us every landmark along the path, and those he does give us are spaced quite unevenly along the path as some stretches of the path are more generally familiar than others. This, we must admit, is a perfectly sensible procedure for he is not telling us how to get from A to B, he is only assuring us that a path from A to B does, in fact, exist.

Since this is the nature of the biblical genealogies, it is obvious that their applicability to chronological questions is very limited. In fact, the *only* legitimate quantitative purpose they can serve is to establish an approximate *minimum* lapse of time for the periods of history which they span. They cannot be used reliably to establish an approximate actual lapse of time. Furthermore, they cannot serve to establish an absolute maximum lapse of time, since we know of no biblical rule stipulating the maximum permissible number of generations which could be left out of a genealogy. Indeed, the purpose of these genealogies would seem to allow *any* number of generations to be left out. Only the first and the last names in a genealogical list are, strictly speaking, essential to inform the reader of the important fact of actual genetic descent. In fact, Matthew approaches this limit of economy when he writes in Matthew 1:1 "...Jesus Christ, the son of David, the son of Abraham".

This being the case, it is clear that the biblical genealogies, both in the Old and the New Testaments, do not prohibit the inclusion of an additional millennium in Old Testament chronology between the Exodus and Solomon.

CHAPTER FIVE



HARMONY RESTORED

In the present chapter I will begin to show that restoring “one thousand” to 1 Kings 6:1 yields immediate harmony between pre-monarchical biblical history and biblical archaeology. I will do this by looking initially at the broad sweep of archaeological data from whole geographical regions. Specifically, I will follow the biblical narrative of the Exodus, wilderness wandering, and Conquest geographically and chronologically.

5.1 The Exodus

The lack of convincing support from secular studies for the biblical account of the Exodus anywhere in the second millennium B.C. (where it has conventionally been dated) has, evidently, caused the significance of this event to biblical chronology to be somewhat overlooked in the literature. This can lead to the mistaken impression that the evidence bearing on the Exodus is inherently less interesting or less important than that which bears on the subsequent Conquest of Palestine. It seems to me, however, that the opposite is actually closer to the truth. The biblical account of the events immediately surrounding the Exodus is much more detailed and explicit than that of the Conquest. Furthermore, the uniqueness and magnitude of the events which are claimed to have transpired at the time of the Exodus seem clearly to make the evidence which bears on it the more interesting and important of the two.

The biblical record claims rather forcefully that the Exodus was immediately preceded by a whole series of national disasters in Egypt. These included the complete pollution of the Nile, infestation of the land with

frogs, gnats (or lice), and great swarms of insects, death of all Egyptian livestock, boils on all the people, destruction of all standing grains by hail, stripping of all vegetation in the land by locusts, complete darkness in the land for three days, and finally, death of all first-born sons throughout the land of Egypt. Furthermore, the Israelites not only deprived Egypt of its slave labor when they left, they also despoiled the land by carrying away much of its wealth in the form of gold, silver and clothing (Exodus 12:36). And, finally, the pharaoh and his army were drowned (Exodus 14:5-15:21), depriving the nation of its armed forces.

It seems unavoidable that Egypt would be devastated by this sequence of events; no nation of the world, even in modern times, could survive such an experience without consequences to its citizens of a most severe kind. Indeed, a sudden hiatus in Egyptian civilization seems the only possible outcome of the Exodus, if the biblical account is taken at all seriously.

Now no such hiatus is observed in Egyptian history at the conventional biblical dates for the Exodus. Table 5.1 shows three separate chronologies for Egypt in the periods of interest. These chronologies have been advanced by different scholars over nearly an eighty year interval. They demonstrate that the chronology of Egypt for this period of history seems quite secure; differences amount to about thirty years or less.

The traditional biblical date of *ca.* 1447 B.C. for the Exodus does not fare well at all. In fact, one observes roughly the opposite to an hiatus at this point in the history of Egypt; this was a period of unprecedented growth and prosperity for the nation. The year 1447 B.C. falls in the reign of Tuthmosis III or Amenophis II. Tuthmosis III was a mighty warrior-pharaoh who built a great empire for Egypt, which reached to the Euphrates. Nor did the prosperity of the nation wane in the decades following his death. It went on to reach its greatest splendor under the reign of Amenophis III, who reigned well beyond the traditional date for the onset of the Conquest of Palestine by Joshua. Not only is there no evidence of any disruption in the great prosperity of Egypt in this period, it is also simply inconceivable that Joshua could have been conquering part of this mighty Egyptian empire in Palestine, and Egypt fail to do anything about it. Yet, there is no mention of Egypt in either the book of Joshua or the book of Judges.

The “late date” for the Exodus fares no better. Merneptah left a record of his military success in Palestine in which he mentions that he decimated Israel. This single inscription guarantees that Israel was established as a nation in Palestine by the reign of Merneptah, forcing the date of the Exodus into the early part of the reign of Ramesses II at the latest. But, as with the

Table 5.1: *Three chronologies of the New Kingdom of Egypt.*

pharaoh	Kitchen (1987) [28, p.35,36]	CAH (1970) [28, p.35,36]	Breasted (1908) [8]
Amosis	1550-1525	1570-1546	1580-1557
Amenophis I	1525-1504	1546-1526	1557- ?
Tuthmosis I	1504-1492	1525-1512	? -1501
Tuthmosis II	1492-1479	1512-1504	1501-1493
Hatshepsut and Tuthmosis III	1479-1457	1503-1482	1493-1480
Tuthmosis III	1479-1425	1504-1450	1479-1447
Amenophis II	1427-1400	1450-1425	1448-1420
Tuthmosis IV	1400-1390	1425-1417	1420-1411
Amenophis III	1390-1352	1417-1379	1411-1375
Amenophis IV (Akhenaten)	1352-1336	1379-1362	1375-1358
Smenkhkare – Horemheb	1336-1295	1362-1320	1358-1315
Ramesses I	1295-1294	1320-1318	1315-1314
Sethos I	1294-1279	1318-1304	1313-1292
Ramesses II	1279-1213	1304-1237	1292-1225
Merneptah	1213-1203	1236-1223	1225-1215
Amenmesses – Sethos II	1203-1200	1223-1216	1215-1205
Siptah	1200-1194	1216-1210	1215-1209
Tewosret	1188-1186	1209-1200	1205-1200
Sethnakhte	1186-1184	1200-1198	1200-1198
Ramesses III	1184-1153	1198-1166	1198-1167

Table 5.2: *Chronologies for the Old Kingdom dynasties of Egypt.*

dynasty	CAH (1971), [32]	Breasted (1908), [8]
third	2690-2610	2980-2900
fourth	2610-2495	2900-2750
fifth	2495-2345	2750-2625
sixth	2345-2180	2625-2475

“early date” above, there is no sign of anything which could possibly correspond to the biblical Exodus in the reign of this pharaoh or his immediate predecessors. Life carried on as usual in Egypt all through this time.

5.1.1 The New Date

The outcome at the new date for the Exodus is quite different from this. Our new biblical date for the Exodus is *ca.* 2447 B.C., which takes us back to the Old Kingdom of Egypt. The assignment of dates in the Old Kingdom and First Intermediate Period results from calculations, based upon interpretation of historical references, from an astronomical anchor point in the Middle Kingdom. Table 5.2 shows two chronologies for Egypt in this early section of its history. Clearly (and not surprisingly) there is more uncertainty in the historical chronology of Egypt in the third millennium B.C. than we observed in the second millennium B.C. Breasted’s dates are earlier than the Cambridge Ancient History dates by about 300 years.

Fortunately, radiocarbon can be used to help choose between these historical chronologies. A careful sampling and radiocarbon dating program for Old Kingdom monuments, specifically designed to check this portion of the historical chronology of Egypt, has recently been conducted [22]. This comprehensive dating program unambiguously showed that the Old Kingdom dates of the Cambridge Ancient History chronology were, on average, 300 years or more too recent, indicating that Breasted’s chronology was closer to the truth.

Accepting this result at face value, we find that our new date for the Exodus is less than thirty years from Breasted’s date for the collapse of the Old Kingdom of Egypt at the end of the sixth dynasty. This sudden break-up of the Old Kingdom and onset of the chaos of the First Intermediate Period satisfies the biblical description of the events surrounding the Exodus very well. Since the secular dating uncertainty is obviously greater than thirty years at this remote period, it is appropriate to regard our new date for

the Exodus and Breasted's date for the collapse of the Old Kingdom as essentially coincident.

From Egyptian historical sources the collapse of the Old Kingdom appears to have been rather sudden, unexpected, and surprisingly complete. The political and social institutions of the Old Kingdom had functioned quite effectively for 500 years previous to this collapse. There is every indication that the Egyptians of the Old Kingdom were prosperous and content. It was during the Old Kingdom that the pyramids were built, bearing elegant testimony even today to the competence, cohesiveness, and internal integrity of this ancient civilization. But it all fell apart, seemingly overnight, and secular historians continue to wonder why.

The result was famine and anarchy. Egypt disappeared from the international scene more or less completely, and did not reemerge for 400 years. There is every indication that this mighty civilization was dealt a most unusual, sudden, and devastating blow – just the sort of thing one would naturally expect of the biblical Exodus.

Here, in broad outline, is harmony between biblical record and archaeological discovery. We did not have to “read between the lines of history” to bring it about. At the new biblical date for the Exodus the whole character of the corresponding time in the secular history of Egypt naturally coincides with our biblical expectations.

5.2 The Wilderness Wandering

Between the Exodus and the Conquest the Israelites spent forty years in the wilderness south of Palestine. Their time in the wilderness is conveniently summarized in the early chapters of Deuteronomy. They seem to have spent the majority of their time in and around an area named Kadesh-barnea (Deuteronomy 1:46 and 2:14).

Here again the conventional dates for the Exodus (both the “early” and the “late” dates) run counter to the results of modern archaeology. Rudolf Cohen has spent many years as an archaeologist working in the Negev. According to the Biblical Archaeology Review he is “known colloquially among Israeli archaeologists as the ‘King of the South’ ” [31, page 2]. Cohen [13, page 78] has written “there was a settlement hiatus in the central Negev lasting over a thousand years, until Iron Age II”. That is, nobody lived in or around Kadesh-barnea at any time near the conventional dates for the wilderness wandering.

In sharp contrast here again, the new biblical dates which result from the restoration of 1000 years to 1 Kings 6:1 find immediate archaeological support. Cohen has observed that there was a migration of people through the central Negev at this earlier time, displacing the previous inhabitants, and, in fact, he has been led to voice doubts about the conventional dates for the Exodus on this basis alone.

The settlement picture in the central Negev in the third millennium B.C.E. offers striking parallels to the description of the Israelite presence in this area as presented in the Old Testament traditions of the Exodus and Conquest. For this reason, I propose a reevaluation of the entire chronological scheme in which the Israelite Settlement in Canaan is normally studied. [13, page 78]

(In my opinion, this is an eminently sensible proposal, and I heartily endorse it.)

5.2.1 Mt. Sinai

Significantly, this same basic conclusion has been voiced by another archaeologist of international stature. The archaeologist is Emmanuel Anati, professor of palaeo-ethnology at the University of Lecce in Italy.

Anati discovered a mountain in a remote location in the Negev which he eventually concluded must be the biblical Mt. Sinai. The archaeological evidence clearly bore witness to significant religious activity at the mountain, to a degree unparalleled at any other location.

But the date was a problem. Activity at the mountain had clearly reached its zenith in the third millennium B.C.; there was virtually no evidence of human activity near either the late or early Exodus dates in the second millennium. These facts led Anati to conclude: “The traditional dating of the Exodus is simply wrong” [1, page 57].

It is obviously significant that two eminent archaeologists working in the same geographical area, but in quite different fields of investigation, should both be forced by the weight of evidence *in their field alone* to conclude that the conventional dates for the Exodus must simply be wrong. This is a strong indicator that the archaeological evidence which bears upon the period of the wilderness wandering is not abstruse or ambiguous. The data are obviously clear; yet they are contrary to the conventional dates for the wilderness wandering, and supportive of the new biblical dates. The archaeological

evidence from the geographical area occupied by the Israelites during the wilderness wandering harmonizes naturally with the biblical account of the wilderness wandering when 1000 years is restored to 1 Kings 6:1. It does not fit the biblical account at all otherwise.

5.3 Palestine

The Conquest of Palestine under Joshua is recorded principally in the book of Joshua. It is characterized biblically by a protracted warfare between the Israelites and the indigenous population, with the capture of one after the other of the major Canaanite cities. Most of these cities were not destroyed, only the inhabitants were slain. Jericho, Ai, and Hazor were exceptions (see Joshua 11:13) in that each of these was destroyed and burned.

The arrival of a new people in Palestine, displacing the native stock, should show up pretty clearly in the archaeological remains of Palestine. Certainly, one would not expect cultural continuity to be the result. New types of pottery and new modes of life should appear more or less synchronously throughout Palestine (though, according to Judges 1:1-3:6, not all the land was immediately conquered, so persistence of the old culture should be found in isolated pockets for a considerable length of time). This sort of thing would normally be easily observed by the archaeologists and would occasion the definition of a new archaeological period.

Thus, we expect to see the emergence of a new culture around 2400 B.C. In fact, this date corresponds closely to the end of the Early Bronze III (EB III) period in Palestine (see Figure 5.1), which scholars have long observed ended suddenly with the emergence of a new people almost everywhere. For example, Kenyon [24, page 134] summarized as follows:

The final end of Early Bronze Age civilization came with catastrophic completeness. . . . Every town in Palestine that has so far been investigated shows the same break. The newcomers were nomads, not interested in town life, and they so completely drove out or absorbed the old population, perhaps already weakened and decadent, that all traces of the Early Bronze Age civilization disappeared.

The archaeological period following EB III definitely warrants its own label. Interestingly (and somewhat confusingly), the naming of this period has been problematic for the archaeologists. Albright called it MB I, and

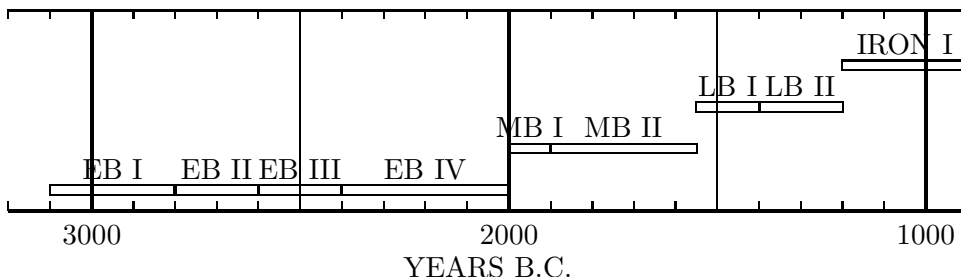


Figure 5.1: *The archaeological and historical time periods in the Near East during the second and third millennia. EB, MB, and LB stand for the Early Bronze, Middle Bronze, and Late Bronze respectively. Absolute dates for the transitions between time periods (EB IV - MB I, MB I - MB II, etc.) are only approximate and may in reality differ from those shown here by 100 years or more.*

this term is still in use by some archaeologists. Kenyon called it Intermediate Early Bronze - Middle Bronze. It seems to be most often designated as EB IV today, and I will call it EB IV throughout the rest of this book (though I venture to suggest that the situation might be clarified considerably in the future by calling it Early Israelite). Regardless of the label, however, the point remains the same – there *was* an abrupt cultural shift in Palestine commencing around 2400 B.C.

In addition to this major cultural upheaval at just the right time in Palestine, the overall picture of this transition which emerges from the archaeological record matches well with the general picture from the book of Joshua. In particular, most of the EB III cities were not destroyed, there just ceased to be anyone living in them.

With the exception of a few sites with clearly defined destruction layers coinciding with the end of EB III . . . , the archaeological record evinces a pattern of abandonment . . . [30, page 12]

Finally – sticking with our broad geographical emphasis in the present chapter – there is another interesting archaeological observation from Palestine. We learn from the Bible that the Israelites were organized into distinct tribes. The tribes remained distinct throughout the wilderness wandering, and inherited different portions of the land of Palestine following the Conquest. It is to be expected that distinct regional differences should be found in Palestine after the Conquest, reflecting the distinctiveness of these various

tribes. This, in fact, is found to be the case in the archaeology of EB IV.

Though the practice of single burials is so characteristic, the burial customs in other respects show many variations, and these variations are probably to be explained as evidence of a tribal organization, each group maintaining its own burial customs. [24, page 137]

To put it categorically, this period, more than any other in the archaeological history of Palestine, exhibits strong regional patterning in the material culture. [16, page 49]

Thus, at the new biblical date for the commencement of the Conquest of *ca.* 2407 B.C., the large-scale features of archaeology in Palestine naturally harmonize with the biblical record of the Conquest. No coercion of the archaeological data or the biblical text is necessary to bring about this harmonization.

5.4 Conclusion

In the present chapter we have looked panoramically at the biblical history of the Exodus, wilderness wandering, and Conquest, and compared this view to the broad picture which emerges from biblical archaeology at our new biblical dates. Though there are many details of the biblical text which could have been compared to the archaeological record – and we will be looking at a number of these in subsequent chapters – I have deliberately chosen to examine the “big picture” first, believing that this provides one with the best means possible to accurately evaluate any chronology. History consists of a myriad of details, and it is always possible to pick out at least a few details which can be made to seem supportive of any chronological scheme. On the other hand, it is also always possible to find some details which do not seem to fit even a correct chronological scheme – archaeology is not a perfect discipline and neither is biblical interpretation. By looking at the big picture much of the ambiguity which can be present in small details tends to be averaged out. We have looked at the big picture in Egypt, the Negev, and Palestine at the new dates and we have observed a natural harmonization of secular and sacred throughout.

It is impossible to insert a full millennium into any historical chronology where it doesn’t belong, and expect to produce anything but overall

disharmony. Yet, the insertion of a full millennium into traditional biblical chronology by the restoration of “one thousand” to 1 Kings 6:1 is found to produce a clear harmonization of biblical history and biblical archaeology when both are viewed panoramically.

It is also true that disharmony will be the inevitable consequence of dropping out a full millennium from any historical chronology when it really does belong. We have observed that a geographical and chronological study similar to that of the present chapter, conducted at the conventional biblical dates, will, in fact, only yield overwhelming disharmony. Leave 1 Kings 6:1 as it currently reads (i.e., “480 years”) and you will be unable to find the Exodus in Egyptian history at the corresponding (conventional) biblical dates, you will find that nobody was living in the wilderness when you are led by the Bible to suppose there should have been many people there, and you will discover that all efforts to reconstruct the Conquest at the corresponding (conventional) dates have – as Callaway pointed out in Chapter 1 – “foundered on the evidence from archaeological remains”.

The only rational explanation of the broad harmony which results between biblical history and biblical archaeology when “one thousand” is included in 1 Kings 6:1, and the disharmony which results when it is left out, is that the “one thousand” really does belong in 1 Kings 6:1.

CHAPTER SIX



MORE HARMONY

The evidence discussed in the previous chapter is restricted to a single period of time near the middle of the third millennium B.C. Obviously, this new approach affects biblical chronology in the neighboring millennia as well. I now want to discuss three additional periods of history to demonstrate that the biblical chronology which results from this new approach is functional over the entire span of times which it affects. I will deal with these, once again, in chronological order, beginning in the remote and misty late fourth millennium, moving forward in time to the early third millennium, then skipping over the rest of the third millennium (which, for the present purpose, has already been adequately represented in the last chapter) into the second millennium.

6.1 The Time of Abraham

Perhaps one of the hardest adjustments which this new chronology necessitates is that of moving Abraham in our thinking from the third millennium B.C. into the fourth millennium B.C. We have grown so accustomed to thinking of Abraham as dating just prior to 2000 B.C., and heard this “fact” repeated and endorsed so often, that this relationship has nearly acquired the status of a definition, similar to “water freezes at zero degrees Celsius”. Is it possible that Abraham could have lived a full millennium earlier?

Actually, the extra-biblical evidence in support of a third millennium B.C. date for Abraham is not convincing. It amounts to little more than an identification of Near Eastern culture in the Middle Bronze Age with that which is observed of the patriarchs biblically. For example, David Noel

Freedman wrote some time ago:

For the most part, the Patriarchal stories of Genesis can be attributed with confidence to the Middle Bronze Age (*ca.* 2100-1550) . . . the narratives reflect validly the customs and manners of MB [18, page 204]

Freedman points out in the same article, however, that “efforts to pinpoint events and their dates have been repeatedly frustrated” [18, page 204], and further observes that culture is not a very sensitive or reliable means of dating events since “the MB pattern of social custom and practice survived basically unchanged for centuries in certain localities in the Near East” [18, page 205]. He rightly advances the caveat:

Caution must be exercised in using culture and social patterns for dating purposes; since these are our principal clues in the case of the Patriarchal Age, considerable flexibility in fixing the chronology is advisable. [18, page 205]

Moving Abraham back into the fourth millennium certainly provides several opportunities for disharmony between secular and sacred to develop. In particular, we are told that Abraham came originally from Ur, settled for a while in Haran, and, at one point, went down into Egypt and interacted with a pharaoh there. If Ur or Haran had not existed at this remote date, or if there had been no pharaoh in Egypt, then there would be some explaining to do. But there is no difficulty with any of these items.

6.2 Joseph’s Famine

The Bible records, in Genesis 41-47, an interesting climatic anomaly during the time of Joseph. This was a period of fourteen years, the first seven of which were unusually favorable for agriculture in Egypt (Genesis 41:47), and the latter seven of which were unusually unfavorable so that severe famine rapidly developed. The famine was not confined to Egypt, but covered at least all of Canaan as well. The Bible describes this time as follows:

When the seven years of plenty which had been in the land of Egypt came to an end, and the seven years of famine began to come, just as Joseph had said, then there was famine in all the lands; but in all the land of Egypt there was bread. . . . When

the famine was *spread* over all the face of the earth, then Joseph opened all the storehouses, and sold to the Egyptians; and the famine was severe in the land of Egypt. And *the people of* all the earth came to Egypt to buy grain from Joseph, because the famine was severe in all the earth. (Genesis 41:53-57; NASB)

Egypt is desert country, receiving far too little annual precipitation to support agriculture. Thus, agriculture in Egypt depended upon the annual flood of the Nile river, both to irrigate its fields and to renew their fertility with a fresh deposit of silt. The fact that there was famine in Egypt for seven years can only mean that the Nile failed to flood its banks during those years.

The Nile originates near the equator and flows to the north through Egypt. Its annual flood occurs in the summer, reaching a maximum in early fall. The Nile flood results from heavy tropical rains near the source of the river in modern Kenya and Ethiopia. Thus, the fact that there was famine in Egypt implies an absence of the usual seasonal tropical rains in Kenya and Ethiopia.

Canaan, on the other hand, had a Mediterranean climate, quite distinct from Egypt. It did depend upon annual rainfall for agriculture. The fact that there was also famine in Canaan implies that rainfall over this region was also meager during this seven year period.

Obviously then, Joseph's famine was not due to a quirk in the local climate of Egypt. The large geographical area affected by this famine, its duration of seven years, and its severity all suggest a widespread, possibly global, climatic anomaly.

All terrestrial climates are ultimately driven by the sun. If the sun were to change its output even slightly for a number of years, it is reasonable to suppose that global weather patterns would be affected. A great deal of attention has begun to be devoted to the question of whether the sun's output may have varied in the past, and whether a link between solar variability and global climatic anomalies can be established. (See, for example, [7, 17, 33, 42, 15].)

Evidence that the sun has varied its output in the past comes, interestingly, from radiocarbon measurements on tree-rings [35]. These measurements show pronounced peaks lasting on the order of a century, as shown in Figure 6.1. The peaks are explained as resulting from a period of time during which solar output diminished, permitting more cosmic radiation to enter the solar system, resulting in higher radiocarbon production on the

earth. Correlation of the most recent of these peaks with historic climate anomalies has been persuasively demonstrated. For example, many have noted the coincidence between the most recent radiocarbon peak, called the Maunder peak, and the historically recorded European cold spell referred to as the “Little Ice Age”. And Eddy [17, page 1199] has noted, also in relation to the Maunder peak:

A lasting tree-ring anomaly which spans the same period has been cited as evidence of a concurrent drought in the American Southwest.

Given this background, the climate anomaly recorded in Genesis, which we have called Joseph’s famine, takes on a new interest and significance. This is undoubtedly the oldest historical record in the world of such an anomaly. It is natural to ask whether this biblically recorded climatic anomaly correlates with any of the radiocarbon peaks, which have only been measured in the past few decades. Interestingly enough, it does.

We can date this event, using our new biblical chronology, to *ca.* 2879-2872 B.C. As can be seen in Figure 6.1, this correlates with a large peak in the radiocarbon/tree-ring record.

Thus, we have a peak in the radiocarbon/tree-ring data signalling a period of solar quiescence, during which time climatic anomalies are to be expected, and at the same time we have a climatic anomaly covering a large geographical region in the Near East recorded in the Bible. Here are two historical events (i.e., a period of reduced solar output and Joseph’s famine), both quite rare, which might be expected to be contemporaneous from a theoretical viewpoint, which are found, in fact, to be so. There is no other suitable radiocarbon peak for the following two thousand years, and there is no other famine comparable in size and severity to Joseph’s anywhere in the Old Testament. It seems unlikely that this should have worked out so neatly just by chance.

This is not the end of the data bearing on this famine, however. The Bible is quite explicit about the severity of the famine in Canaan as well. For example, Genesis 47:13 says (NASB) “Now there was no food in all the land, because the famine was very severe, so that the land of Egypt and the land of Canaan languished because of the famine.” Thus, we should expect to find appropriate archaeological evidence of this crisis in Palestine as well, if we are truly on the right track.

In fact, we do find such evidence. It appears that the EB I to EB II transition in Palestine was caused by this famine. This transition is usually

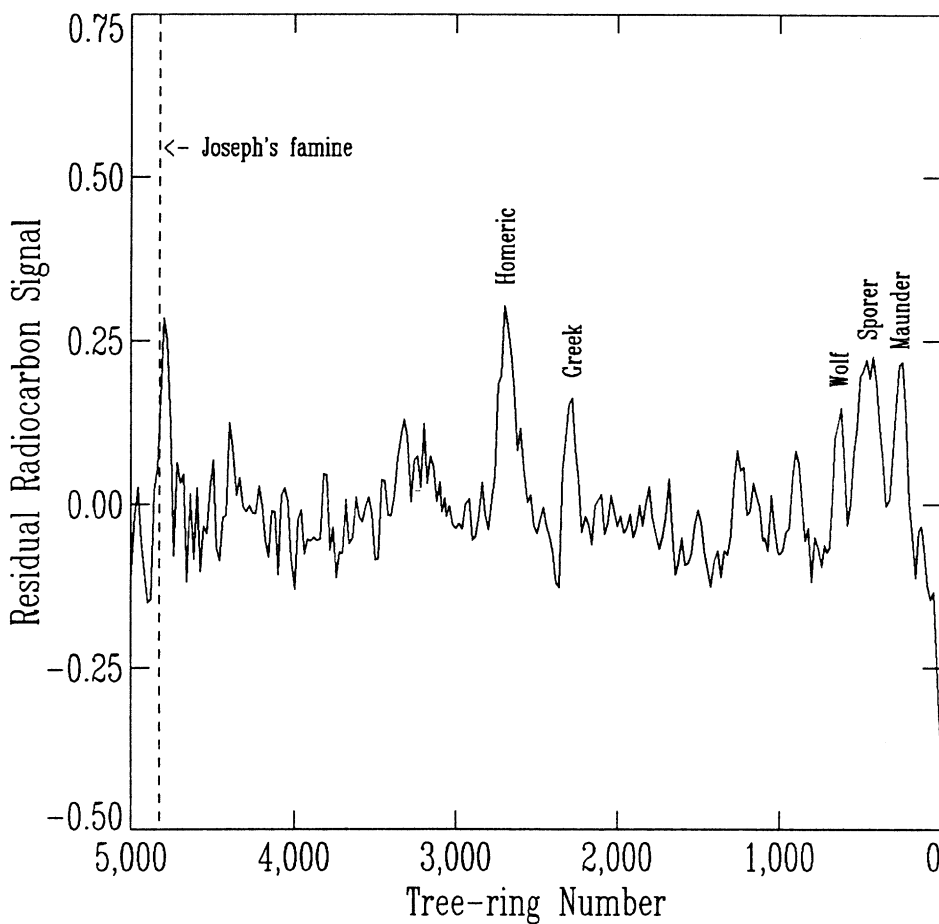


Figure 6.1: *Detrended radiocarbon measurements on tree-rings versus tree-ring number, showing the coincidence of Joseph's famine (commencing ca. 2879 B.C.), indicated by the vertical dashed line, and a large radiocarbon peak. Tree-ring number zero corresponds to the calendar year A.D. 1950.*

dated around 2800 to 2900 B.C., well within the normal dating uncertainty of the new biblical date of the famine (i.e. *ca.* 2879-2872 B.C).

The EB I to EB II transition is marked archaeologically by a sudden abandonment of many EB I sites in Palestine, and a shrinkage in EB II of many of the larger EB I sites. Professor Ram Gophna of the Tel Aviv University, Institute of Archaeology, has emphasized [20] that the archaeological evidence indicates a sudden crisis at this time throughout the land of Palestine. The EB I people suddenly abandoned their towns and cities, only to reappear, albeit in reduced numbers, in EB II. This archaeologically observed “crisis” not only falls at the right time for Joseph’s famine (according to the new biblical chronology), it also finds a completely adequate and appropriate explanation in that event. For example, the observed reduction of population in Palestine at this time is precisely what is seen in the biblical account of the departure of Jacob’s household for Egypt in the second year of the famine (Genesis 45-46). Here again the correspondence between biblically motivated expectation (at the new biblical date) and archaeological fact is striking.

6.3 The Missing Egyptians

The book of Judges appears to rehearse history in the interval from the Conquest to about 1960 B.C. (See Figure 4.4, page 51). Chronological information pertinent to the biblical historical narrative then terminates abruptly near the end of Judges and does not resume until 1 Samuel, over 800 years later. It is possible to work backwards from Solomon, through David, Saul, Samuel and Eli, combining biblical data with reasonable inference to estimate that Eli was born probably within 25 years of 1175 B.C., near the beginning of the Iron I period (see Figure 5.1, page 64). This leaves essentially the entire Middle and Late Bronze periods for which no Old Testament record of the history of the nation of Israel is given.

This 800 year gap is not altogether devoid of biblical history, of course. After a concise review of the lives of the thirteen judges from Othniel to Samson, Judges closes with several interesting snatches of history for which no chronological information is provided, but which one might reasonably infer follow the careers of these judges somewhere in this 800 year period. Also, the book of Ruth would seem to fit somewhere in this gap. But insufficient data are given biblically to permit even approximate dates to be assigned to these particular narratives.

Since the Bible does not give us a detailed history of this 800 or more year period, it is, of course, not possible to demonstrate the sort of positive harmony between biblical history and archaeology which has been shown above for other time periods. Nonetheless, the fact that the Bible does not provide any significant history for this period solves a puzzle with secular history which has plagued the conventional chronologies, and, thus, produces harmony, once again, in its own way.

Specifically, it has always been a problem for the conventional chronologies that the Egyptians are nowhere mentioned in the book of Judges. It is well established, for example, that the Egyptians launched some fairly significant military campaigns into Palestine not long after the traditional, *ca.* 1407 B.C., date for the Conquest. Gleason Archer elaborates this difficulty as follows:

One final problem attaching to the early date theory of the exodus has to do with the complete silence of Judges concerning the Palestinian expeditions of Seti I [who ruled sometime between about 1318 and 1279 B.C., see Table 5.1, page 59] and Rameses II [who ruled sometime between about 1304 and 1213 B.C.]. If these invasions actually took place and the territory of Canaan was actually subjected to the Egyptian power after the Israelite conquest had taken place, why are the Egyptians not mentioned along with all the other oppressors? [2, page 233]

Archer responds to “this persuasive argument” in part by pointing out that the late date theory (which places the Conquest near 1250 B.C.) is in no better shape, since the later Egyptian campaigns into Palestine of Merneptah (who ruled sometime between about 1236 and 1203 B.C.) and Rameses III (who ruled sometime between about 1198 and 1153 B.C.) are also not mentioned in Judges. This, however, only intensifies the problem, it does not solve it.

This problem vanishes in the new chronology. All of these Egyptian exploits fall within the period of time between Judges and 1 Samuel for which no biblical history is given (see Figure 4.4, page 51). Thus, the biblical silence regarding these Egyptian campaigns is the natural expectation in this new approach. Here, again, the new chronology produces harmony between the secular and sacred histories.

6.4 Conclusion

While this new approach yields a biblical chronology which, in some respects – such as the displacement of Abraham into the fourth millennium B.C., or the opening of an 800 year gap in the period of the Judges – is so shocking relative to conventional thinking as to seem at first impossible, the end result is always improved harmony between the biblical text and the secular data. I am aware of no instance in which this is not the case.

If the conventional pre-monarchical biblical chronologies were basically sound, this should not be the outcome. Rather, in that case, we should observe an overall *loss* of harmony between biblical text and secular data with this new approach, if not complete catastrophe. The success of the new biblical chronology, from the time of Abraham to that of Eli, implies that the conventional chronologies are not sound, and that they should be discarded in favor of the new approach.

CHAPTER SEVEN



SOME PRE-MONARCHICAL BIBLICAL PEOPLE

In Chapter 2 we observed that no biblical persons have ever been identified in secular sources much before the first millennium B.C., and I suggested that this was due to an underlying problem in biblical chronology. We are now aware of the nature of the problem to which I was alluding. With the problem mended – by the restoration of “one thousand” to 1 Kings 6:1 – we now anticipate identification of some biblical persons in secular historical sources from earlier millennia. In the present chapter I will show that this expectation is met.

7.1 Biblical Historical Persons

We noticed previously that, with this new chronology, there is a period of roughly 850 years between the death of Samson and the birth of Samuel for which little or no historical information is given in the Bible. For this reason we will obviously not find any biblical persons in most of the second millennium B.C. The book of Judges leaves off in the 20th century B.C., and 1 Samuel does not resume until late in the 12th century B.C. It may be that some of the disconnected incidents recorded at the end of the book of Judges, and also the history recorded in the book of Ruth, fall within this 850 year gap. If so, some of the individuals mentioned in these incidents may someday be found in secular sources from this period. But, overall, there is a paucity of biblical history in this period, and a complete lack of biblical chronological data. Consequently, our search for biblical persons must skip

over the second millennium B.C., and begin back in the third millennium B.C.

The fact that our search can not really get under way until the third millennium implies that the number of biblical persons we can expect to find will be somewhat limited; the hard data of secular history and archaeology becomes increasingly sparse as one moves back into this more remote millennium. Nonetheless, with but a minimal amount of research, I am able to present five biblical individuals whose identifications in secular sources at our new biblical dates range from essentially certain to highly probable.

7.1.1 Cushan-rishathaim

Judges 3:8 mentions “Cushan-rishathaim king of Mesopotamia” as the first oppressor of the Israelites during the period of the judges. This king is particularly interesting to investigate for a number of reasons. First, while most of the history given in Judges involves only peoples indigenous to Palestine (e.g., Moabites, Canaanites, and Philistines) this king provides a potential tie-point into the history of a separate geographical region, that of Mesopotamia. Secondly, the Judges reference to this king seems immediately to pose a substantial hurdle to the new biblical chronology since it refers to Cushan-rishathaim as *king of Mesopotamia*. This is an entire geographical area, not just a single city. Yet the norm for this early period was for each major city to have its own king (as is clearly seen in the book of Joshua, for example) and for these local kings to be fighting with one another, not subduing other nations. How could there be a “king of Mesopotamia” at this early time? Furthermore, how could he have enough military might to subdue the Israelites who had, just in the preceding generation, defeated seven nations in Palestine?

No reasonable candidate for Cushan-rishathaim has ever been identified from secular sources at the conventional dates for Judges. The “early date” view yields a date for this incident somewhere in the fourteenth century B.C.; the “late date” view yields a date somewhere in the twelfth or thirteenth centuries. The precise dates are not too important, the principal difficulty being that Mesopotamia was fragmented into smaller rival kingdoms throughout these centuries. Many kings of Assyria, Babylonia, and even Elam are known during this time, but there is no person who could properly be called “king of Mesopotamia”.

The new approach fares much better, once again. Our new biblical date for this Judges incident with Cushan-rishathaim places it *ca.* 2367-2359 B.C.

Due to secular dating uncertainties we do not have the privilege of working with a precise Mesopotamian chronology back at this time. The *Encyclopædia Britannica* [39, page 912] summarizes the complexities of this chronology as follows:

The basis for the chronology after about 1450 BC is provided by the data in the Assyrian and Babylonian king lists, which can often be checked by dated tablets and the Assyrian lists of eponyms (annual officials whose names served to identify each year). But it is still uncertain how much time separated the middle of the 15th century BC from the end of the 1st dynasty of Babylon, which is therefore variously dated to 1594 BC (“middle”), 1530 BC (“short”), or 1730 BC (“long” chronology).

So there are three possible chronologies for times earlier than the middle of the second millennium B.C. The maximum divergence between these three is 200 years. Only one of these chronologies can be correct, of course.

When applied to the problem immediately at hand, neither the “short” nor the “middle” chronology turns up anything of interest, but the “long” chronology produces a temporal overlap between the Judges incident and the latter end of the celebrated Sargonic (or Akkadian) empire. This was the first Mesopotamian empire, and is thought to have lasted 146 years. It was founded by Sargon and carried on by his descendants Rimush, Manishtusu, Naram-Sin, and Shar-kali-sharri. This empire could indeed boast a “king of Mesopotamia”.

It is immediately apparent that the biblical name, “Cushan-rishathaim”, does not match any of these kings. This is not a surprise as Cushan-rishathaim is not a proper name, as most commentators have noted; rather it appears to be a derogatory label meaning “the doubly wicked Cushite”.

It would be very nice if our chronological calculations were sufficiently definitive to pinpoint one specific king of the five kings of the Akkadian Empire. Unfortunately, both the secular chronology and my revised biblical chronology have uncertainties of several decades, making this impossible. My chronological calculations indicate that Naram-Sin is the most probable candidate, but the kings on either side of Naram-Sin – Manishtusu and Shar-kali-sharri – are also possible.

The historical record of these early kings is, not surprisingly, far from complete. Nonetheless, what is known further supports the choice of Naram-Sin. His approximately forty year reign appears to be filled with conquests

and victories in foreign lands, similar in extent to those of Sargon, his grandfather and founder of the empire, and apparently exceeded by none of the other kings of this dynasty. It is certain that he penetrated into Syria, where he destroyed Ebla, for example. There is some inscriptional and artifactual evidence indicating that he may have penetrated all the way to Egypt, but the evidence does not appear to be conclusive in this regard [19, page 445]. If he did advance upon Egypt it seems certain that he would have had to first subjugate Palestine. In any event, it is recorded that his reign ended with a turn of events in which a foreign enemy overran Mesopotamia, which certainly leaves room historically for the biblical account of Othniel's liberation of Israel:

And the Spirit of the Lord came upon him, and he judged Israel. When he went out to war, the Lord gave Chushan-rishathaim king of Mesopotamia into his hand, so that he prevailed over Chushan-rishathaim. (Judges 3:10, NASB)

Thus, I conclude that Naram-Sin is very probably the historical person identified biblically as Cushan-rishathaim. His predecessor, Manishtusu, and follower, Shar-kali-sharri, seem also possible chronologically, but much less likely historically.

7.1.2 The Pharaohs of the Oppression and Exodus

The next two individuals are:

1. The pharaoh of the Israelite oppression, and
2. His successor, the pharaoh of the Exodus.

Unfortunately, these two pharaohs are not named in the Bible. (I suppose if they had been this missing millennium problem would have been obvious a hundred years or more ago and there would be no need for the present book.) We are, however, given several details about the reigns of these pharaohs in the Bible which make them quite unique when considered together so that their correct identification seems assured even in the absence of specific names.

The first biblical detail is that the pharaoh of the oppression seems to have had a very long reign. The length of his reign is not given explicitly in the Bible, but the biblical narrative leaves one with the impression that it was the same pharaoh whose daughter found Moses as a baby and adopted

him (Exodus 2:10) that later wished to kill Moses (Exodus 2:15) and who did not die until Moses was approximately eighty years old (Exodus 4:19, 7:7). If this impression is correct then this pharaoh had to reign for a minimum of eighty years, a highly unusual length of time. This expectation of a very long reign seems also to be supported by Exodus 2:23. The King James Version translates this verse as “And it came to pass in process of time, that the king of Egypt died:”, but this does not adequately express the original Hebrew, which involves the idea of the passage of considerable time. This concept comes out more clearly in New American Standard Bible which translates this passage with the words, “Now it came about in *the course of* those many days that the king of Egypt died”.

The second important biblical detail is that the pharaoh of the Exodus should have a very short reign, as he and his entire army were drowned in the Red Sea shortly following the Exodus (see Exodus 14, Psalm 106:9-11, and Psalm 136:15).

Thus, the principal biblical signature of these two successively ruling pharaohs is that of an unusually long reign (greater than eighty years) followed by an unusually short reign (on the order of one year).

We have previously identified the fall of the Old Kingdom of Egypt with the biblical Exodus, and have argued that this historically observed collapse of Egyptian civilization is the natural expectation of the biblical Exodus. Thus, we have no freedom of choice in making the secular identification of these two pharaohs – our analysis to this point demands that they be the final two pharaohs of the Old Kingdom.

In fact, this regnal signature *is* found with the final two pharaohs of the Old Kingdom, and it is not found anywhere else in the entire history of Egypt. The second-to-last pharaoh of the Old Kingdom was Phiops II (sometimes called Pepi II). He reigned for more than ninety years.

... Phiops II, succeeded his brother at the age of six and died in his hundredth year after the longest recorded reign in world history. [23, page 179]

Merenre Antyemsaf II was the pharaoh who succeeded Phiops II and the final pharaoh of the Old Kingdom. He reigned for one year only.

Phiops II is followed in the Abydos List by a Merenre who was also called Antyemsaf and must not be confused with the earlier and more important Merenre. The name is broken off in the Turin Canon, where the length of reign is given as one year. [32, page 196]

I conclude that Phiops II is the biblical pharaoh who oppressed the Israelites referred to in the first two chapters of the book of Exodus, and Merenre Antyemsaf II is the biblical pharaoh of the Exodus who is a main character in the real-life drama recorded in the third through the fifteenth chapters of Exodus. Because of the extreme improbability of finding these three facts in correct temporal relationship – that is, an unusually long reign followed immediately by a very short reign followed immediately by the collapse of Egyptian civilization – merely by coincidence, and because this combination is not seen ever again in the history of Egypt, I believe the identification of these two individuals is essentially certain.

7.1.3 Joseph and Joseph's Pharaoh

The final two biblical individuals I want to look at are Joseph and the pharaoh he served under. According to the Bible, the Israelites had entered Egypt as a relatively small clan 430 years prior to the Exodus (Exodus 12:40,41). They had been caused to migrate to Egypt as a result of the severe famine which we discussed previously. They were invited to live in the land by the then ruling pharaoh because they were relatives of Joseph who was second in command in Egypt at that time (Genesis 41). The end result of Joseph's administration during the famine was that all of Egypt – its money, its livestock, its people, and its land – became the possession of the pharaoh, making him unusually wealthy relative to his predecessors (Genesis 47:13-26).

Here again the Bible does not supply the name of Joseph's pharaoh. It does, however, supply Joseph's name and the Egyptian name which the pharaoh gave him – Zaphenath-paneah. This Egyptian name has never been located in secular Egyptian sources, and my new biblical date for Joseph does not help in this regard. Thus, my identification of these two individuals relies upon chronological considerations (to limit the possibilities to a relatively narrow time window) followed by observed similarities between the biblical and secular records of these individuals.

The new biblical date for the entrance of Jacob and his family into Egypt is computed to be *ca.* 2877 B.C. It is, of course, necessary to take into account the radiocarbon motivated 300 year correction to the Cambridge Ancient History chronology of the Old Kingdom of Egypt, as discussed above, when comparing this to secular history. Even when this correction is made, there remains a secular dating uncertainty of at least a century at this early date. Thus, all that can be accomplished from chronological considerations is to

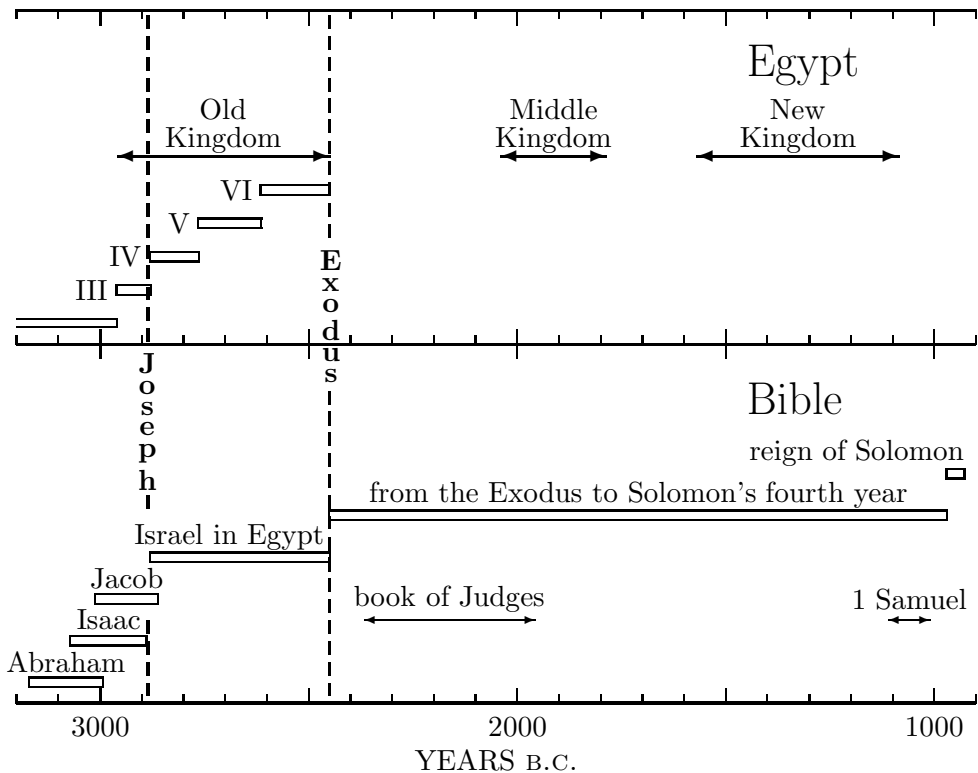


Figure 7.1: *Locating Joseph in the chronology of Egypt.*

narrow the search to the Third or Fourth dynasties (see Figure 7.1). It is necessary to turn to historical detail to proceed further.

From the biblical account of this period of time we expect to find:

1. A united Egypt ruled by a single pharaoh,
2. An administrative assistant to this pharaoh (usually called a vizier),
3. Possibly some record of a severe famine during this pharaoh's reign, and
4. Possibly some surviving material evidence of this pharaoh's newly acquired wealth.

These expectations are all realized in one king of the Third Dynasty. This is Djoser (sometimes written as "Zoser"), who ruled with the aid of

his well-known and historically revered vizier, Imhotep. A late Egyptian text, which derives from the Ptolemaic period, affirms an Egyptian tradition of seven years of famine during the reign of Djoser [29, page 24]. Our expectations of a pharaoh possessing much newly acquired wealth seem to be fulfilled in Djoser's unprecedented and spectacular Step Pyramid with its surrounding stone enclosure and numerous accompanying smaller structures. This was the first stone building to be erected by the pharaohs of Egypt, and it antedates the more familiar true pyramids by many years.

If Djoser is Joseph's pharaoh, then Joseph must be this pharaoh's vizier, known historically as Imhotep. Comparison of the biblical record of Joseph with the historical records of Imhotep raises no serious objection, that I have been able to discern, to the suggestion that they were one and the same person. Both were obviously unusually gifted administratively, and both are recorded to have been second in command to pharaoh during a famine which lasted seven years.

I do not feel that the identification of these two biblical persons is as certain as the other three which were discussed above. This is largely because of the very remote period in which they lived, which results in a consequent scarcity of extant contemporary secular historical sources and relatively large chronological uncertainties. Nonetheless, Djoser and Imhotep appear to be good candidates for these two biblical individuals, and I am not aware of any better candidates from any other period of the history of Egypt. Thus, I tentatively propose the identification of Joseph with Imhotep, and Joseph's pharaoh with Djoser.

7.2 Conclusion

There are many more biblical individuals waiting to be researched before the time of Eli, and I hope the brief treatment of the five whom we have discussed above will encourage others to invest time in doing so.

I had originally hoped that the Ebla tablets might provide many historical details overlapping the biblical history covered by the book of Judges and thus be a secular source for biblical individuals encountered in Judges. It is now clear that this will not be the case since Ebla was destroyed by Naram-Sin and we have seen that Naram-Sin is probably the Cushan-rishathaim of Judges, who is the first oppressor of Israel to be mentioned in Judges. This means that Ebla lay in ruins through most of the book of Judges.

It is also unfortunate that there appear to be no king lists or other

similar historical sources yet available from the region of Moab for the third millennium B.C. The book of Judges provides us with the name of a Moabite king – Eglon – whom we can now date to *ca.* 2319-2301 B.C. We know that he reigned for at least eighteen years, since he oppressed Israel for that space of time. We also know that he received tribute from Israel, was a very fat man, and that he was assassinated by Ehud. Thus, the biblical side of this history is sufficiently complete and detailed to form the basis of a very nice comparison with secular history. All that is lacking is some secular data to compare to. An archaeological find in Moab similar to that at Ebla but covering the period of the Judges would obviously be very interesting.

In any event, the examples discussed in this chapter are sufficient to show that this new approach to biblical chronology does not face the serious problem which was encountered by the old approach of not being able to find any biblical persons in secular sources much before the first millennium B.C. Where the old approach to biblical chronology so visibly failed, the new approach succeeds once again.

CHAPTER EIGHT



CITIES OF THE CONQUEST

It should be quite clear by now that the inclusion of “one thousand” in 1 Kings 6:1 greatly increases the degree of harmony which is observed between the sacred and secular histories of the ancient Near East in the pre-monarchical period. In Chapter 5 we observed markedly enhanced harmony when the archaeological and historical data touching on the Exodus, wilderness wandering, and Conquest were viewed panoramically at the new biblical dates. In the present chapter I will discuss some of the more detailed archaeological findings relating to cities of the Conquest.

A properly thorough investigation of the archaeological data from any given city is very time consuming. I have found that just getting the technical literature together for a particular site can be quite a chore.

Typically a site will have been excavated by different research teams at different times. Sometimes research groups from different countries will have been involved so that publications may be in several different languages. Furthermore, excavations of sites of prime biblical significance will likely have been begun a century or more ago. Obtaining excavation reports from these early digs is generally not routine. One is not at all guaranteed that the results of a particular excavation have been fully published. On top of this, one may find that the most extensive and thorough work has been invested by the archaeologists on the “biblical periods” (which, in light of the present chronological discovery are seen to be a full millennium after the time which is really of interest biblically) so that the levels of interest to the current work are inadequately covered either in publication or excavation or both.

In short, the reinvestigation of the cities associated with the biblical Conquest necessitated by the present discovery in biblical chronology is a

lot of work.

I have concentrated my efforts on two sites, Ai and Jericho. Judith Marquet-Krause carried out the primary research of concern to the present study at Ai, and Kathleen Kenyon did the same at Jericho. I have come to have a high degree of admiration for the work of both of these archaeologists; it has opened my eyes to the wealth of factual information pertaining to the past which can be unearthed by careful excavation of ancient ruins.

We have already discussed Ai in Chapter 4. In the present chapter I will discuss Jericho, showing how its archaeological remains naturally harmonize with the biblical record of the destruction of Jericho under Joshua at the new biblical dates. Following this are some remarks pertaining to other cities of the Conquest of a more general nature.

8.1 Jericho

Jericho and Ai constitute the two most important cities for purposes of the present investigation of those which are claimed in the Bible to have been destroyed during the Conquest. No other cities are given such detailed treatment. Consequently, these two provide the most definitive points of contact biblically.

With respect to Jericho we are led by the biblical record and our new biblical chronology to expect that the archaeological excavations at this site should have encountered the following specifics:

1. A walled city should exist at Jericho for some time preceding and up to about 2407 B.C.
2. The city should be completely destroyed at about 2407 B.C.
3. The destruction should show signs of having included deliberate burning (Joshua 6:24).
4. The ruined city should not be rebuilt for some significant lapse of time after its destruction (Joshua 6:26).

Modern excavations were carried out at Jericho by John Garstang (1930-1936), and Kathleen Kenyon (1952-1959). These excavations showed that Jericho was a very old city, with a history as a walled town extending back intermittently for thousands of years. A representative cross-section of the tell is shown in Figure 8.1, and the history of Jericho, as reconstructed from archaeological reports, is summarized graphically in Figure 8.2.

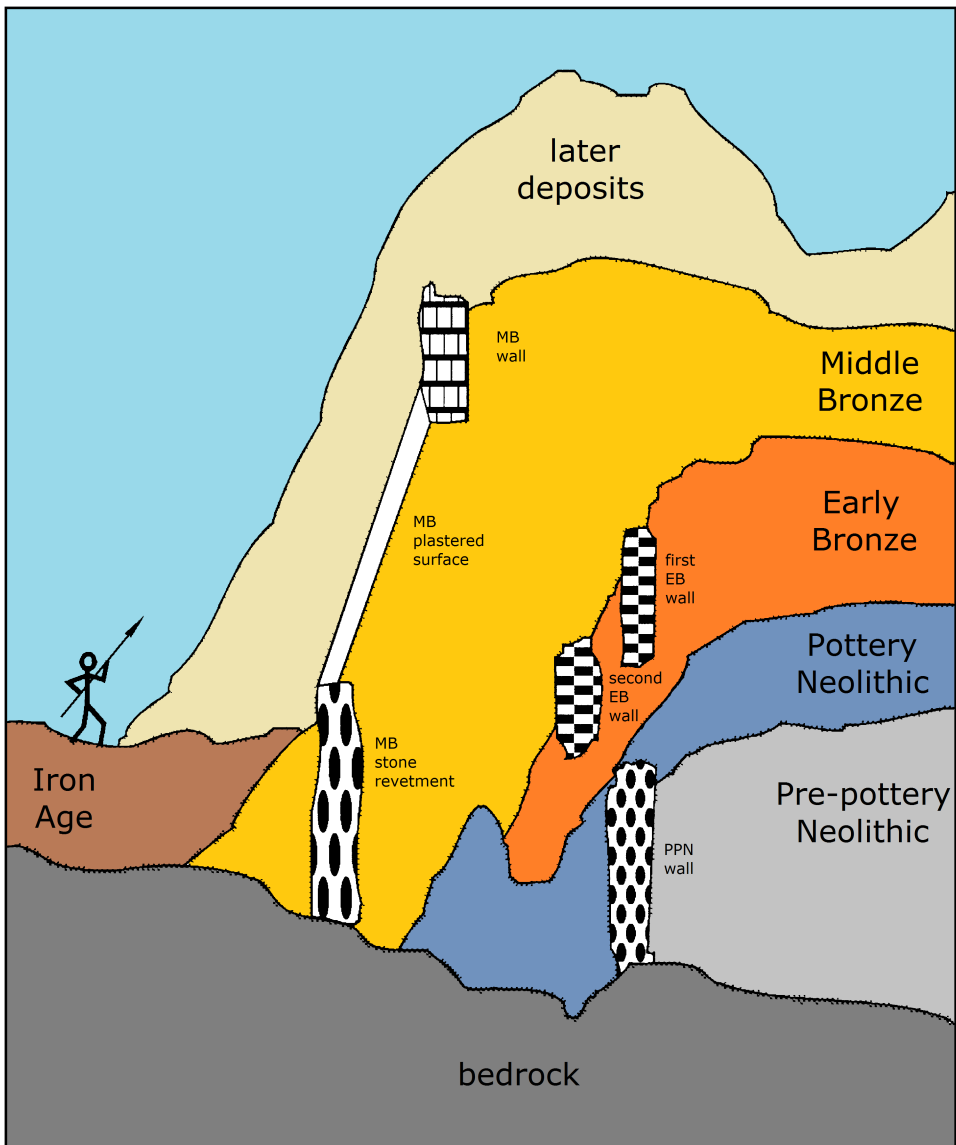


Figure 8.1: *Schematic cross section of the mound of ancient Jericho as revealed by modern archaeological excavation. The stick figure provides an approximate vertical proportion; the horizontal scale is compressed by about a factor of five relative to the vertical scale. (See [4] for more detail.) According to the new biblical chronology the second EB wall is the one which fell before Joshua.*

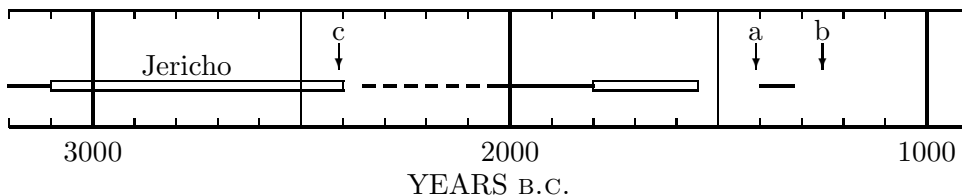


Figure 8.2: *History of Jericho as reconstructed from archaeological reports. The dashed line signifies times during which the site was only used as a campsite. Single solid horizontal lines represent an unwallled town. Double horizontal lines delimit the periods when Jericho existed as a walled city. Conventional dates for the Conquest are shown with vertical arrows as: a. the traditional biblical (“early”) date, and b. the “late” date. The new biblical date is shown by the vertical arrow labelled c. Absolute dates in the middle of the third millennium B.C. in Palestine are generally uncertain by about 100 years; those in the middle of the second millennium are uncertain by about 50 years or less.*

Kenyon’s work, now well-known, generated considerable consternation among all scholars concerned with the date of the Exodus when it was first published because she failed to find significant evidence of occupation of the site at either of the then popular, conventional, second millennium B.C. dates for the Conquest (i.e., *ca.* 1407 B.C. and *ca.* 1250 B.C.) as Figure 8.2 shows.

There are two destructions of walled cities to deal with at Jericho. The later one, near 1550 B.C., is not of much interest in the current context. However, if one were trying to support the traditional biblical date for the Conquest, it would certainly be tempting to try to raise this date by about 140 years to bring it into agreement with traditional biblical chronology.

Not surprisingly such an attempt has been made. Recently, Bryant Wood has suggested that a reanalysis of pottery found at Jericho by Kenyon allows for the possibility of this destruction dating to the late 15th century B.C. [43, 45].¹ Whether or not Wood’s redating is sound remains to be determined

¹Wood has also advanced a single radiocarbon date of 1410 ± 40 B.C. from a piece of charcoal found in the destruction debris of this later city in support of his claim. However, this date has been subsequently corrected by the laboratory which originally made it (together with several hundred dates from other samples measured during the same period of time). The correction was necessary because of a (rare) systematic error in the calibration of the radiocarbon counters, which only became apparent after these samples had been dated and the (erroneous) results published [6]. The revised uncalibrated date for this sample (BM-1790R; [6, page 74]) is 220 years older than the erroneous date. When this

[5, 44]. If it turns out to be correct (though this does not look likely to me) it will not prove that this later city was destroyed by Joshua in the Conquest, or that the traditional biblical chronology is correct. It should be clear to the reader by now that Jericho is only one of a plethora of problems which plague the traditional chronology.

In sharp contrast to the controversy currently surrounding the destruction date of the later city, what Kenyon found at the earlier (lower) destruction level *immediately* fits the biblical account of the Conquest at the new biblical date both in terms of the nature of the archaeological remains and the date of those remains. Kenyon summarized her findings in the Early Bronze as follows:

This is a fully urban stage, for the greater part of the town was enclosed by mud-brick walls. The complex of the structures in all excavated areas suggests a thriving population, and the many rebuildings of the town walls, sometimes in new positions, show how necessary it was to keep the defenses in repair, either against the occupants of neighboring Palestinian towns or against invaders from the east. [26, page 26]

Regarding the final destruction of EB III Jericho, Kenyon [26, page 27] wrote:

In one area, seventeen successive stages in the town walls can be identified. The seventeenth was destroyed by a raging fire, and its destruction marks the end of the Early Bronze Age town, . . .

Walled cities existed at Jericho in the Neolithic, the Early Bronze, and the Middle Bronze. However, the final Early Bronze city and walls are most conspicuous with respect to the requisite tell-tale signs of violent overthrow and burning.

The wall was destroyed by fire, the brick being burnt to a red color from one side of the wall to the other. Outside the wall there were layers of ash from the wood that had been piled up against the wall, and inside the layers of burning show that the attack succeeded in setting fire to the town inside. [4, page 75]

Finally, regarding the rebuilding of the city after its destruction Kenyon noted:

revised result is calibrated it actually lends further support to Kenyon's 1550 B.C. date for the destruction and argues against Wood's redating.

...there would appear to be an interval after the arrival of the newcomers and their settlement on the site, sufficiently long for some 2.75 m. of silt to accumulate, before they started to build houses.

Since during the years that this silting-up was in progress a considerable amount of pottery fell into the ditch ... people ... must have been living on the tell. But ... they must have lived in tents or very slight structures ... Though they lived on the tell, they were not really interested in it as a town. ...they never built themselves a town wall. [25, 192]

Pottery dating placed the destruction of EB III Jericho within 100 years of 2400 B.C. A series of radiocarbon dates from Jericho corroborates this date. Callaway and Weinstein studied radiocarbon dates from several sites for the Early Bronze. They reached the following conclusion regarding the date at which EB III Jericho was destroyed based upon seven radiocarbon determinations from that site:

...it seems likely that the very end of EB III at Jericho falls in the 25th century B.C. (or possibly even later). [11, page 10]

Thus, the secular date of this destruction is in full accord with the new biblical date.

The identification of the destruction of this EB III city with the Conquest under Joshua can obviously be accomplished without the exercise of excessive imagination.

8.2 Other Cities

It is well-known that, like Ai, the archaeological remains at most of the cities of the Conquest do not fit the biblical record at the conventional Conquest dates. The question of their compatibility with the biblical record at the new Conquest date remains largely unexplored. However, it has received some attention as a result of ideas proposed by Courville [14] and Vaninger [37, 38].

Courville and Vaninger have attempted to remove the disparity between biblical and secular history in the pre-monarchical period by redating EB III in Palestine to roughly a thousand years later than it is normally dated. As I have stated above, you cannot remove a millennium from any chronology

where it really does belong without producing overall disharmony with actual field data. Not surprisingly then, this effort encounters some serious difficulties (it is completely at odds with radiocarbon dates, for example). Nonetheless, it has one thing in common with my new chronology; it suggests that the biblical Conquest should be identified with the termination of EB III in Palestine. Thus, the works of Courville and Vaninger have already stimulated some discussion of this possibility.

Stiebing [34] has recently discussed the theories of Courville and Vaninger, and, in the process, raised some objections to a general EB III - Conquest connection which are pertinent here. In particular, Stiebing looked at fourteen cities mentioned in connection with the Conquest and concluded that while seven of these did seem to fit the biblical account during EB III, seven others did not. He further noted

This “score” would decline for an EB III conquest (...) if we included Dor, Beth-shemesh, Gaza, Shiloh, and other sites that were supposed to be occupied during the era of the “judges” but which had no EB III or MB I sedentary occupation. [34, page 135]

Though I have not had opportunity to check Stiebing’s assessment of most of these cities, my experience researching Jericho and Ai suggests that Stiebing has been overhasty in his analysis. Consider Stiebing’s first two cases, for example, Kadesh-barnea (which is pictured as a camping site in the Bible, not a city) and Arad. Stiebing noted that both of these show EB II but no EB III occupation. Since EB II is too early for the biblical Exodus/Conquest narrative, Stiebing concluded that the archaeology at these two sites does not support an EB III Conquest.

Actually, Cohen, the “King of the South” whom we met in Chapter 5 in connection with the wilderness wandering, provided the answer to this apparent problem in 1983 [12]. He noted that throughout southern Palestine EB IV (which he calls MB I) immediately follows EB II, with no apparent lapse of time between them. He explained that EB II is distinguished from EB III only by the absence of one particular type of pottery in EB II which is found in the north in EB III. He suggested that this type of pottery simply never penetrated into the south, thus causing what are really EB III remains to be misidentified as EB II. He concluded [12, page 27]:

Thus, Arad, until now assumed to have been destroyed at the end of EB II, was in fact destroyed at the end of EB III.

This archaeologically motivated conclusion brings the secular data at both Arad and Kadesh-barnea into harmony with the biblical history at the new biblical dates. And this single realization changes Stiebing's "score" from "seven to seven", to nine which fit and only five which don't.

Investigation of one of these remaining five cities – Heshbon – has recently been reopened [46]. Heshbon was the capital of the kingdom of Sihon, the Amorite king who confronted Moses and the Israelites east of the Jordan river (Numbers 21:22-26). The Bible records that Sihon was defeated, all of his people were slain, and his territory was then occupied by the Israelites. Heshbon seems to have been a walled city (Deuteronomy 2:36) at this time, though it is not clear from the biblical record whether it was destroyed when it was captured. In any event, it is clear that a sudden cultural transition (from Amorite to Israelite) should be evident in the archaeology of Heshbon at about the time of the Conquest of Palestine. Thus, we should expect archaeological investigation to reveal a major city at the end of EB III, with a clear cultural discontinuity at the EB III to EB IV transition.

For geographical and linguistic reasons Heshbon was initially identified with the modern Tell Hesbân. However, excavation of this site between 1968 and 1976 failed to produce any evidence for occupation there prior to about 1200 B.C. Stiebing, noting this lack of EB occupation, scored Heshbon as being contrary to an EB III - Conquest connection. However, Tell Hesbân is too late for the biblical Heshbon by any chronology, and it seems reasonable to conclude that the true site of Heshbon must lie elsewhere.

It has been recognized for some time that there is a possible alternative site called Tell Jalul. A single season of excavation has been completed at this site, during which only the most recent strata were uncovered. Further excavation is planned, however, and occupation levels of interest to the present thesis should be revealed over the next few years. If Tell Jalul is the biblical Heshbon, then I predict that it will reveal a significant city in EB III whose culture was abruptly terminated and replaced by a typical EB IV culture.

In any event, it is clearly too early to conclude that the archaeological evidence bearing on the biblical Heshbon is contrary to the idea that the Conquest was the cause of the termination of EB III civilization in Palestine, and I suspect that this is true in many other cases as well. If Tell Jalul does turn out to be the biblical Heshbon with appropriate EB III - EB IV remains, then Stiebing's apparent 50% failure rate will have dwindled to a mere 29%. I submit that serious, thorough investigation will eventually show there to be no real exceptions to the pattern of success which we have seen already

at Ai and Jericho.

But we must exercise due caution in such an investigation. Archaeology, like all of science, is not a perfect discipline. It has real limitations, and it is necessarily carried out by fallible human beings. Furthermore, its work is neither exhaustive nor complete. Are we certain of the identification of each of the sites corresponding to the cities of the Conquest? (It is important to reopen this question at each site, as it is possible that some of the correct sites may have been rejected by the archaeologist simply because they were mistakenly thought to be outside the “biblical period”.) Have the excavations been extensive enough to reveal the whole picture at each site? Is the archaeologist’s assignment of each stratum to a specific time period beyond question in all cases? These and other questions should caution us against drawing overhasty conclusions.

There is also the question of whether the Bible has been properly understood in each instance, of course. The biblical record is far from a detailed history in many of these cases, and it is possible to read things into the text which are not really there, or to overlook important text which is there. Stiebing, for example, stated [34, page 133] “according to the Bible, after its destruction Jericho was cursed and remained unoccupied until it was rebuilt during the time of the Divided Monarchy (Joshua 6:26; 1 Kings 16:34)”. But this is not the whole biblical picture – it overlooks the biblical evidence implying settled occupation of the site during the period of the judges (Judges 3:13) and during David’s time (2 Samuel 10:5).

8.3 Conclusion

It is quite clear that the archaeological findings at Ai and Jericho fully corroborate the biblical history of the destruction of these cities under Joshua at the new biblical dates. Many other cities of Palestine remain to be reinvestigated in light of the discovery that a full millennium is missing from traditional biblical chronology. This task will probably take several man-years to complete. A quick survey of some of the literature on these cities suggests that the archaeology of the majority will harmonize with their corresponding biblical record without surprise or incident when the new chronology is applied to them. A few are likely to be more of a challenge, but this is only to be expected given the limitations of archaeology and biblical interpretation. There is every reason to believe that the reward for perseverance in each of these cases will ultimately be demonstrable harmony. Even at this early

stage of investigation, however, it is apparent that the new chronology has been more successful than the conventional chronologies were at harmonizing the biblical history and archaeology pertaining to the Conquest.

CHAPTER NINE



MISCELLANEOUS IMPLICATIONS

Though we have now come very near to the end of this little book, it is apparent that we have by no means come to the end of all that this simple discovery in biblical chronology entails. The number of avenues for further research and discovery which can be pursued from this point is large. I am hopeful that those scholars and students who have followed the discussion to this point will have gleaned or conceived several ideas of what this new biblical chronology might mean in their area of study, and that they will pursue those ideas vigorously.

In this chapter I will briefly mention a few areas which seem to me to require careful reevaluation in the light of the new biblical chronology. These are just a sampling, but I hope they will stir the reader's mind and help instigate further research.

9.1 Composition Dates of Old Testament Books

The new chronology obviously injects new variables into the discussion regarding the composition date of the early books of the Old Testament. This, in turn, necessitates a reanalysis of current ideas about the impact of Near Eastern literature and customs on the original composition of Scripture.

For example, the Gilgamesh Epic is well-known for its flood account which shows several striking parallels to the biblical narrative of the Flood of Noah, such as the sending out of birds from the boat after the flood. The question naturally arises as to how these similarities came about.

In discussing this question Walton [41, page 22] observes:

The Gilgamesh Epic is an edited work comprised of several an-

cient works. According to the reconstruction of the evolution of the work by Jeffrey Tigay, Gilgamesh tales may well have begun circulating in writing as early as the twenty-fifth century B.C. The earliest copies known are Sumerian; they date to the Old Babylonian period, 2000-1600, . . . Tigay further understands three sections as being still later additions: the prologue, the flood story, and tablet XII. The flood story is borrowed from the Atrahasis Epic.

Since the Atrahasis Epic “could not have taken its present form earlier than the eighteenth or nineteenth centuries B.C.” [41, page 20], the flood account in the Gilgamesh Epic seems likely to have originated somewhere between about 2000 and 1500 B.C. Thus, the Gilgamesh Epic appears older than Genesis, if Moses is granted to have written Genesis only in the fifteenth century, as the traditional biblical chronology indicates.

This generally accepted temporal relationship has important consequences for the discussion of the relationship of the Gilgamesh Epic and the Genesis Flood narrative, as illustrated by the following quote [41, page 38], for example.

We are faced with essentially the same options for understanding the relationship of biblical and Babylonian materials that were available in our study of the creation accounts, i.e., borrowing in one or the other direction, or a common source. As in the creation accounts, the possibility that Babylon borrowed from the Israelites is usually written off immediately because of the dates of the materials involved.

The new chronology reverses the temporal relationship between Genesis and the Gilgamesh Epic flood account, making “the possibility that Babylon borrowed from the Israelites” now seem rather probable, and the notion that the Israelites borrowed the Flood story from Babylon most improbable.

Clearly, the new chronology will have fairly drastic consequences for some currently popular evolutionary notions regarding how the early books of the Bible came into existence. The fact is that, in the light of the new chronology, the early books of the Bible are seen to be not only historically accurate, but also of a very rare antiquity. Reevaluation of this field of study within the new chronological framework promises to be productive for biblical conservatives.

9.2 Habiru

Another example comes from the much disputed term “Habiru”. According to this new biblical chronology, one would naturally expect to be able to find references in ancient secular texts to the Israelites as a group of people resident in Palestine from the latter half of the third millennium B.C. onward. It seems possible that this expectation may be realized in this term.

The Israelites identified themselves as “Hebrews” (see Jonah 1:9 for example) and it is this proper noun which we should expect to find in the secular historical documents of their neighbors. It seems that the only name from any period of antiquity which could possibly stand as the equivalent to the biblical “Hebrew” is the name “Habiru” or “Hapiru”. This name is, in fact, found in ancient historical documents in both the second and the end of the third millennia B.C.

Scholars have recognized the phonetic similarity between “Hebrew” and “Habiru” for many years and have noted numerous similarities in the general behavior of the biblical Hebrews and secular Habirus, but have felt it impossible to equate the two. A major reason for this has been the chronological difficulty which such an equation seemed to entail. This difficulty no longer exists with the new chronology.

To be sure, many other arguments than just the chronological one have been formulated against such an equation, but nearly all of these lose all force when considered in light of the new biblical chronology. For example, it has been argued that the geographical distribution of the Habiru, which extended well beyond the boundaries of Palestine, implied they were not simply the Hebrews. But since, according to the new biblical chronology, the Hebrews had been settled in Palestine for several hundred years by the time the earliest of these secular references was recorded, there is every reason to expect to find some Hebrews living in the nations surrounding Palestine, just as we find some Americans living elsewhere than America today, for example.

Some have suggested that the Israelites were but one sub-group of a wider ethnic category called “the Hebrews”. This seems to me to be improbable when the biblical usage of the term is considered. For example, there are numerous references in the Bible to “the Lord, the God of the Hebrews”. To my knowledge, of all the peoples of antiquity, the Israelites alone worshiped Yahweh as a nation. Furthermore, Abraham’s descendants through Esau – who would certainly seem prime candidates for this hypothetically wider use of the term “Hebrew” – are never referred to as Hebrews in the Bible, but

always only as Edomites.

The new chronology calls into question the former conclusions relative to the term “Habiru”, and a thorough reexamination of the data bearing on the use of this term seems warranted. While no definitive conclusions can be drawn in the absence of such a study, it currently seems probable that the secular term “Habiru” (or “Hapiru”) is simply the equivalent of the biblical term “Hebrew”, and that it designates the people who later came to be called the Israelites.

9.3 History of Israel

As a final example, this new chronology implies that the early history of the nation of Israel has not been properly understood in modern times. Not only has the inception of Israel been misdated by 1000 years, but a full 800 years of Israel’s early history has been entirely overlooked. Evidently, a major chapter in the history of the nation of Israel has yet to be revealed.

Though we know from the Bible that the Israelites continued to be governed by judges throughout this 800 years, there is a great deal of unknown history in this gap in the biblical narrative. What was the character of this 800 years? What did the Israelites do between the time of Samson and that of Samuel? Did they prosper as a people? Such questions will have to be answered from archaeology, for the Bible is silent regarding them.

When we turn to archaeology we immediately find a marked cultural transition from Early Bronze to Middle Bronze at the beginning of this 800 year period. Kenyon [24, page 162] painted the following picture of this transition from the archaeological evidence available to her over 30 years ago:

As was the case with the beginning of the Intermediate Early Bronze-Middle Bronze period [our EB IV], the beginning of the Middle Bronze Age was ushered in by the appearance of a new group of people. This is clearly indicated by the appearance of new pottery, new weapons, new burial customs and a revival of town life. Unlike their predecessors, they came from an area possessing a developed civilization, for it is with the Phoenician coastal towns that close links were established. In the early stages there were also links with some of the settled areas of inland Syria, but these grew less as the Middle Bronze Age culture of Palestine developed. With Canaanite Phoenicia, the ties which

were established about 1900 B.C. were permanent, and on the evidence of the pottery we can say that the same basic culture grew up in an area stretching from Ras Shamra in the north to the desert fringes of Palestine in the south. Moreover, the culture now introduced into Palestine was to have a very long life. In spite of the fact that a series of events took place of major political importance, there is no cultural break until at least 1200 B.C.

According to these archaeological observations, the Israelites seem to have suffered a severe setback at the hands of newcomers who ushered in the Middle Bronze Age. Apparently, the land of Palestine was taken over by others, and even though the Israelites continued to live there they were no longer its sovereign inhabitants. As indicated above, this would have taken place near the end of the book of Judges, sometime soon after the career of Samson.

This archaeological observation may help clarify another passage in the Old Testament. Judges 18:30 says:

...; and Jonathan, the son of Gershom, the son of Manasseh, he and his sons were priests to the tribe of the Danites until the day of the captivity of the land. (NASB)

It has always been difficult to understand what historical event “the captivity of the land” referred to in this verse. The only captivity with which we are acquainted biblically is that associated with the exile of Israel and Judah near the end of Old Testament history. But a reference to this much later event would certainly be anachronistic in the book of Judges.

Is it possible that this brief mention of “the captivity of the land” in Judges may refer to a much more remote loss of the land to these archaeologically attested newcomers at the beginning of the Middle Bronze Age? It certainly seems significant that such a statement should be found at the end of the book of Judges, and only there, when this is exactly where the transition to Middle Bronze – with the archaeologically observed sudden influx of a new people – is anticipated in this new biblical chronology.

CHAPTER TEN



THE NEW CHRONOLOGY IN PERSPECTIVE

In this closing chapter I wish to summarize my perspective on the validity of this new biblical chronology, and provide some positive outlet for those who might not agree. Following this, I will conclude with a brief sketch of the historical setting in which this new chronology has arisen, providing some necessary context for its proper evaluation, and an understanding of why it has only now been discovered.

10.1 Validity of the New Chronology

Though the evidence supporting the new biblical chronology which I have presented in this volume is clear, and though the implications of this discovery seem overwhelmingly positive, it would be unrealistic to suppose that the new biblical chronology will be accepted without dispute within the conservative Christian community. It is impossible to overturn traditional thinking in any area without engendering some reaction.

I would encourage those who, for whatever reason, may not like this new biblical chronology, to apply themselves toward the discovery of an objective falsification of it through an extension of the research which I have here initiated. This new biblical chronology is radically different from those which have preceded it – injecting a *full additional millennium* between the Exodus and Solomon, as it does! Now either this new chronology is way off, or it is essentially correct; there is really no middle ground. If it is way off, then this should be easy to demonstrate in any number of relatively simple

ways.

There are, for example, a large number of cities in the Near East mentioned in the Bible – such as the cities of the Conquest discussed in a previous chapter – whose archaeological record can be compared to their biblical record. We have already mentioned the current excavations at Heshbon, for example, on page 92 in this regard. Repeated failure of the archaeological record to accord with the Bible at the new dates would clearly undermine this new chronology. And the unambiguous identification of even a single biblical person in secular historical sources at some other date than my chronology allows would falsify it outright.

A particularly clear test case might be had if a suitable excavation could be carried out at the site of ancient Gaza. Much of the later life of Samson involved the city of Gaza (Judges 13-16). My new biblical chronology places Samson's career *ca.* 1977-1957 B.C. Conventional chronologies would place Samson at least 800 years later. Such a large time difference can easily be resolved both by standard pottery dating methods and also by radiocarbon analysis.

From the Bible we know that Gaza had a gate during Samson's time (which Samson carried off early one morning (Judges 16:1-3)) and must, therefore, also have had a wall. Furthermore, we know that the city had a prison (in which Samson was later kept (Judges 16:21)), and a large public building or pagan temple whose roof was supported by pillars (which Samson destroyed (Judges 16:23-30)). It should not be difficult to identify the remains of Gaza corresponding to Samson's time once they had been uncovered. If they should date near 2000 B.C. the conventional chronologies would be proven wrong and my chronology right. If they should date near 1000 B.C. my chronology would be proven wrong and one of the conventional chronologies right.

For myself, at this point, I can see no escaping the conclusion that the new chronology is basically sound. There are several reasons for this.

1. It is impossible to insert a full millennium into any chronology where it does not belong and observe any other result than overwhelming disharmony; yet, the new chronology has repeatedly been shown to bring about improved harmony. The ability of the new chronology to harmonize such a large quantity of biblical and secular data cannot be coincidental.
2. The conventional biblical chronologies are unable to harmonize the pre-monarchical biblical and secular data, which is what one would

naturally expect if these chronologies were *missing* a full millennium.

3. In a number of instances the synthesis brought about by the new chronology appears to be the only one possible. Examples include:
 - (a) The identification of the defeat of the city of Ai by Joshua with the destruction of EB III Ai,
 - (b) The identification of the Exodus with the fall of the Old Kingdom of Egypt, and
 - (c) The identification of “Cushan-rishathaim king of Mesopotamia” with Naram-Sin (or possibly his immediate predecessor, Manishtusu, or follower, Shar-kali-sharri).

There is really no other possible choice in any of these cases if one is to accept the plain sense of the biblical record and the plain sense of the secular data.

4. The new chronology could easily have been falsified in any number of ways already, yet the data has always come out supporting it in the end. Examples here include:
 - (a) The fact that not one of the many pre-eleventh century B.C. biblical individuals has ever been identified in secular sources at the dates predicted by the conventional chronologies,
 - (b) The existence of Ur and Haran prior to 3000 B.C. as required by our new date for Abraham, and
 - (c) The existence of Arad in EB III – despite earlier claims to the contrary – as required by our new date for the wilderness wanderings.

10.2 A Context for This Work

Throughout this book we have been concerned with the problem of the correct historical setting for the first seven books of the Old Testament. This problem and the solution which I have presented to it have not just suddenly appeared from nowhere, of course; they have an historical setting of their own. In closing, I would like to sketch this setting briefly as it presently appears to me.

10.2.1 A Brief Historical Sketch

The intrinsic biblical conflict between the “480 years” of 1 Kings 6:1 and chronological data found elsewhere in the Bible, especially the book of Judges, which we saw in Chapter 3, existed since before the dawn of the Christian era. The traditional approach to pre-monarchical biblical chronology sided with the “480 years” of 1 Kings 6:1, and applied a free hand to the interpretation of the chronological data found in the book of Judges to bring about an apparent harmonization of the biblical chronological data pertinent to the pre-monarchical period. No attention was paid to external chronological data from radiocarbon and biblical archaeology in the traditional approach since such data have only become available in recent times.

With the growth of the secular chronological and biblical archaeological databases in recent decades it became possible to check the conventional pre-monarchical biblical chronologies for the first time, and to do so in a large number of ways. The conventional chronologies failed these checks, without noticeable exception.

Unfortunately, the failure of these chronologies was misinterpreted by many scholars as a failure in biblical historiography. As scholars observed these failures accumulating over the past half century many were led to conclude (or were confirmed in the belief they already held) that the Old Testament books from Genesis through Judges were simply late theological compositions with little or no factual historical content.

Meanwhile, there was an alternative biblical solution to the conflicting pre-monarchical biblical data, but it was generally not noticed and was not seriously pursued if it was noticed. This is not surprising; the internal biblical evidence hinting at this alternative solution was inconspicuous and easily brushed aside, and, much more tellingly, no textual variant of 1 Kings 6:1 suited to this alternative solution was apparent. It took the amassed results of decades of research in biblical archaeology to reveal the inadequacies of the old approach, and instigate serious consideration of an alternative.

While biblical archaeology brought about the downfall of the old biblical chronology, it also provided the essential data necessary to erect the new. Though the death throes of the old chronology have not been pleasant, the final result can be seen from the current vantage point to be a positive one, including at least a more perfect understanding of the Old Testament world and a renewed and strengthened confidence in the historicity and integrity of Scripture.

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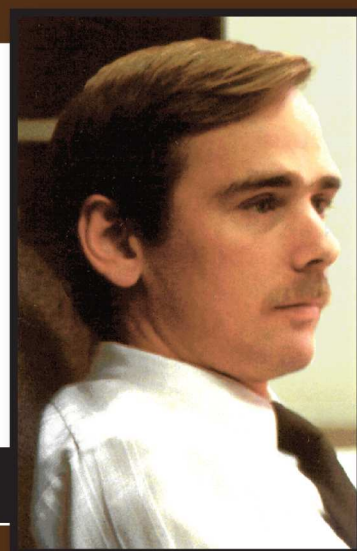
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