

THE TRUTH ABOUT ARCHAEOLOGICAL DATING

— Dating methods have been twisted - so archaeological discoveries will not agree with the Bible

— MUFFLING THE STONES, SO THEY WON'T CRY OUT

Creationist books are deeply concerned with vindicating the Genesis 1 six-day Creation of our world and the Genesis 6-9 Flood and its effects. We have consistently observed that the scientific evidence abundantly confirms both of those great historic facts.

But there is another aspect which is generally neglected: the historic dating of the centuries which followed the Flood. Although it is not well-known, secular humanists have ignored or misinterpreted evidence in order to push ancient history back thousands of years. The objective has been to contradict Biblical dating in order to undermine confidence in all that the Scriptures have to say.

The key lies in Near Eastern dating, for after the Flood people first multiplied in the Fertile Crescent, and from there migrated to Egypt. The earliest dates in history are found in Egypt. All archaeological dating is based on certain conclusions made about Egyptian dates.

In this study, we will examine the field of Near Eastern archaeological dating, and in the process will find that an immense cover-up has taken place. As a result, the archaeological discoveries made in Egypt, Palestine, Jordan, Iraq, Iran, Turkey, and the Mediterranean islands are misdated and misinterpreted. Because secular humanists control a majority of the exploratory funds, the research digs, and the written reports summarizing conclusions drawn from those digs, archaeological evidence, since the mid-20th century, is being used to undermine confidence in Biblical facts!

Obviously, this is a topic you will want to understand more clearly. Although we will not be directly discussing evolution or creation, we will be concerned with a close

ramification of the larger humanist cover-up of scientific facts, carried out to annihilate confidence in the Bible and its statements about the Flood and Creation.

1 - ARCHAEOLOGY, PAST AND PRESENT

IMPORTANCE OF ARCHAEOLOGY—Over the years, archaeology has provided us with remarkable insights into the past. In 1748, Italian farmers discovered the site of Pompeii. In 1799, during Napoleon's occupation of Egypt, a French officer found the Rosetta Stone containing a lengthy message in three ancient languages. In 1842, Paul Botta began excavations at Nineveh and Khorsabad. In 1871, Heinrich Schliemann found the site of Troy. In 1876, Schliemann discovered the royal tombs at Mycenae, in the Mediterranean. In 1894, Sir Flinders Petrie excavated the first pre-dynastic cemetery in Egypt. In 1990, Sir Arthur Evans began work at Knossos, capital of the ancient Minoan civilization on the island of Crete. In 1922, Howard Carter found the tomb of King Tut (Tutankhamen) in the Valley of the Kings, in Egypt. In 1926, Sir Leonard Woolley uncovered the royal cemetery at Ur, in Iraq (ancient Babylonia). In 1947, an Arab shepherd found the first of the Dead Sea Scrolls in a cave near Jericho.

In chapter 18 of *Our Origin of the Universe Series* (Ancient Man), we dealt, at length, on evidence indicating that the earliest instances of human civilization always occurred in the Near East. Such evidence is mute testimony to the fact that the Ark came to rest near there. (The "mountains of Ararat," of Genesis 8:4, 16, were but a short distance northwest of the Fertile Crescent.) Experts in the study of ancient writings have found that the earliest king lists are also to be found in that general area, which includes Egypt.

However, we will find, in this study, that a systematic misinterpretation of Near Eastern dating has played a key role in the present archaeological problem. Discoveries are applied to incorrect time periods.

“If there is a major error in Egyptian chronology, it is obvious that the archaeological record of Biblical history has been misinterpreted. A notable link between Egyptian and Israelite histories is at the time of the Exodus; and, significantly, difficulties in interpreting the archaeological evidence have been recognized for years.

“The *Encyclopedia of Christianity* has an article on ‘Biblical Archaeology’ which indicates that the positive evidences of the Exodus and the settlement of the Israelites in Palestine are totally lacking. Summarizing the Egyptian evidence [for the Exodus and Conquest]: ‘. . . we cannot be certain’; and ‘when we look at the evidence from Palestine, it is again inconclusive.’ Professor MacRae concludes this section of his article with these words: ‘Some new discovery may make the matter absolutely final, but up to the present, it must be considered a question on which we do not have sufficient light.’ However, this absence of any solid, positive evidence is incompatible with the Biblical record. The Exodus was a catastrophe for Egypt: economically, politically, and militarily. The Scriptures declare it to be a judgment upon that nation.”—David J. Tyler, “Radio Calibration—Revised,” in *Creation Research Society Quarterly*, June 1978, p. 21. [Quotation from A.A. MacRae, “Biblical Archaeology,” in *Encyclopedia of Christianity*, Vol. 2, p. 167.

Archaeological facts do indeed fit Scripture when the right dating is used. The problem is the insidious way in

which the humanists have taken over Near Eastern archaeological work—and have carefully altered the dating system so events in ancient Egypt and Mesopotamia will not fit the Old Testament account.

ANDREW WHITE—The attempt to wed archaeology to the Darwinist attack began in earnest with Andrew Dixon White, in 1896. A fervent Darwinist, he had spent years collecting data, in an effort to disprove Christian beliefs in a variety of areas. In that year, he published his large two-volume work, *History of the Warfare of Science with Theology in Christendom*. Volume 1, chapter 6, was entitled, “The Antiquity of Man, Egyptology, and Assyriology.” This marked the first forceful effort to link the Darwinist biological attack with an attempt to show that human civilizations reach back beyond the dates given in Genesis for the Flood and Creation.

But even before Andrew White’s time, other men had suggested older dates for the earliest civilization known. In spite of this, it is of interest that, with the passing of time, the estimated earliest dates have gradually lowered.

LOWERING THE DATES—The very earliest Egyptian date would be the one assigned to the beginning of its first dynasty. Menes was the first king. Cerem, in his *Gods, Graves, and Scholars*, tells us that the date assigned to that earliest Egyptian event, as estimated by several scholars, has gradually lowered with the passing of time: Champollion - 5867 B.C. / Lesueur - 5770 B.C. / Bokh - 5702 B.C. / Unger - 5613 B.C. / Mariette - 5004 B.C. / Brugsch - 4455 B.C. / Lauth - 4157 B.C. / Chabas - 4000 B.C. / Lapsius - 3890 B.C. / Bunsen - 3623 B.C. / Breasted - 3400 B.C. / George Steindorff - 3200 B.C. / Eduard Meyer - 3180 B.C. / Wilkinson - 2320 B.C. / Palmer

- 2224 B.C.

At the present time, the earliest Egyptian date is considered to be c. 3100 B.C., with some considering 2900 B.C. still better.

“In the course of a single century’s research, the earliest date in Egyptian history—that of Egypt’s unification under King Menes—has plummeted from 5876 to 2900 B.C. and not even the latter year has been established beyond doubt. Do we, in fact, have any firm dates at all?”—*Johannes Lehmann, The Hittites (1977), p. 204.*

DATE OF CREATION AND THE FLOOD—It should be mentioned, at this point, that the date of the six-day Creation Week is variously estimated by Creationists as somewhere between 4000 and 8000 B.C. As a result of the evidence presented here, the present writer places it at approximately 4000 B.C.; 4004 B.C. would make it 4,000 years before the birth of Christ.

The date of the Flood is variously set at 2300 to 4500 B.C. The present writer places it at 2348 B.C.

Admittedly, both dates are very conservative; yet they are both in harmony with Biblical evidence, which is the most accurate ancient historical record known to mankind. 2348 B.C. would be equivalent to 1656 A.M. (anno mundi), or about 1,656 years after Creation.

Within a century after the Flood ended, Egypt could have been entered and its first kingdom established.

IN THE HANDS OF HUMANISTS—As we shall learn later in this study, the entire structure of Egyptian dating continues to be based on a few assumptions that place those dates too far into the past. Because nearly all Near Eastern archaeological findings are

keyed to a system of assumed Egyptian dates, those archaeological conclusions lack the historical veracity they ought to have.

“Scholars have been compelled, because of more recent evidence, to revise the date for the beginning of the dynastic period to dates in the era 3300-2850 B.C. The error in the earlier dating of Mena [Menes, the first king of Egypt] and the beginning of the dynastic period amounts to something over 2,000 years

..

“Worthy of note is the fact that all of the 2,000-year correction of the date for Mena was made by condensing the period previously allotted to the first eleven Egyptian dynasties. This strange type of correction was necessary because of the assumed ‘fixity’ of the date for the beginning of Dynasty XII.

“But if an error of 2,000 years or more was made in assigning elapsed time for the first eleven dynasties, then what confidence is to be placed in a chronology for the subsequent period for which error was recognized? This error is greater than for the total period of Egypt’s history from the XIIth Dynasty to the fall of Egypt to the Persians in 525 B.C.

“In point of fact, the currently accepted date, c. 2000 B.C., for the beginning of Dynasty XII is not fixed, astronomically or by any other means! The combined inability of modern scholars to devise a satisfactory chronology of antiquity may be traced to this error of assumed fixation of certain dates. This ‘fixation’ is on the same level as is the assumed ‘factual’ nature of evolution.”—*D.A. Courville, “Evolution and Archaeological Interpretation,” in Creation Research Society Quarterly, June 1974, pp. 49-50.*

You may not know it, but it is no secret to the experts that modern archaeology is in the hands of secular hu-

manists. A statement issued by a prominent archaeological society spelled it out clearly enough. By mutual agreement, their minds are closed:

“The basic dilemma in “historical Jesus” research is not any complexus of technical problems but rather the seeming incompatibility between intellectual honesty and traditional Christian belief.”—*Statement issued by the Society of Biblical Literature, 1969.*

The Bible, as a genuine historical book containing correct facts, is frequently denied by such organizations.

ARCHAEOLOGISTS NEED THE BIBLE—In reality, the Bible is the oldest historical book in the world, and archaeologists ought to value its insights. The limitations that the field of archaeology labors under are such that archaeologists need all the help they can obtain from literary sources. Here are eleven fundamental problems of modern archaeology:

(1) ***Excavations are time consuming.*** At the present rate of accomplishment, the excavation of just one important Biblical site, Hazor, will require 800 years to complete.

(2) ***Normally only a very small section of an entire site can be excavated,*** and very little of that is dug down to the bedrock.

(3) ***The findings are lopsided.*** The most important discoveries are never made—because they have burned or rotted away.

(4) ***Even those rare discoveries of documents are often not openable or in languages not readable.***

(5) Even generously assuming that one fourth of the sites have been excavated and one fourth of their findings published,—***we have less than one twentieth of the potential archaeological evidence that could be***

had. But, in reality, hardly more than 200 of the more than 5,000 sites in Israel and Jordan have been excavated, and less than 50 of these can be considered to have been major digs. Less than one percent of the sites in Mesopotamia have been excavated, and only two sites in Israel have been totally excavated (Masada and Zumrun).

(6) ***Sometimes archaeologists do not know where they are digging and thus misinterpret the results*** (note Heshbon).

(7) At other times, ***preconceived opinions keep the archaeologists from the truth.*** Because it was assumed that Moab and Ammon could not have existed as early as the time of the Exodus/Conquest, all digs in those areas were misinterpreted. (More recent investigations have concluded that sites in those areas may be much older than formerly believed).

(8) ***Then there is the problem of publication and argumentation!*** One only need subscribe for a short time to *Biblical Archaeology Review* to learn two important facts: [1] Less than 5 percent of the excavated documents are published within 10 years time; most will never meet printer's ink. [2] The experts spend far too much time belittling one another's achievements, arguing over conclusions, and even verbally attacking one another's workmanship and character!

(9) ***Uniformitarian thinking prevails in archaeological digs.*** It has been theorized that a layer of sediment four feet thick must have taken twice as long to lay down as a layer two feet thick. For more information on this, see "1 - Near Eastern Mounds" in the appendix section at the end of this chapter.

(10) Anyone conversant with archaeology knows about the extreme importance of pottery dating, but **what is not generally realized is that pottery dates are based**

on Egyptian dating,—and those dates, in turn, are based on erroneous assumptions. Yet, publicly, it is said, with deep assurance, that pottery can pinpoint Near Eastern dates to within 50 to 100 years (some say 10 to 20 years). But this assumes arbitrary time schedules for pottery style changes; they change infrequently, and, as soon as they change, are found throughout most of the Near East.

“Since Egyptian chronology is now fixed within a decade or two for the Middle Bronze and Late Bronze Ages, our dates are approximately certain wherever we can establish a good correlation with Egyptian cultural history . . . thanks to [Egyptian] scarabs and inscriptional evidence.”—*William F. Albright, The Archaeology of Palestine (1984), p. 84.*

Dr. Adnan Hadidi, Director of Antiquities, of Jordan, made the following statement in 1970:

“It is a strange anomaly that pottery, of the Middle and Late Bronze Ages, can in Palestine at any rate be dated by its contexts to within 25 or 50 years with reasonable accuracy, whereas as soon as the [later and] far better-known Roman period is reached, a couple of centuries seems to be the closest limit one can hope for.”—*Adnan Hadidi, Annual of Department of Antiquities, XV (1970).*

(11) Last, but not least, ***it is the director of the dig and those funding him that decide what the conclusions will be.***

“There would be many different interpretations of a 5-meter square [the standard unit of excavation at a dig], if the director did not always have the final say in the excavation report.”—*J. Maxwell Miller, Approaches to the Bible through History and Archaeology (1982), p. 213.*

One reason for this is the need to agree with the ideol-

ogy of the funding organization. Another is to present a single conclusion in the hope that it will less likely be controverted. But frequently that hope is in vain, for controverted it will be anyway by archaeologists in other universities.

“I decided that it was a disgraceful situation—a reflection on our much-vaunted modern methods—to allow a major, well-published city wall system [at Gezar] to remain in such dispute that authorities could vary by as much as twelve hundred years on the question of its date, not to mention its interpretation.”—*William G. Dever, quoted in “The Sad Case of Tell Gezer,” Biblical Archaeology Review, 9(4):42 (1983), p. 42.*

This terrible clash of expertise over such matters as Gezer continues on, with no unanimity in sight. Yet, in the case of Gezer, the walls of that ancient city were almost entirely excavated to their base! Lots of pottery and a wealth of other finds were found. But opinions, as to the dating of its wall system, vary by as much as a thousand years!

THE WALLS OF JERICHO—What does that have to say about the walls of Jericho? Garstang’s earlier excavation of Jericho discovered they had “fallen flat outward.” He dated them to the time of Joshua’s attack of the city as recorded in Joshua 6. Garstang also found that the level of the Jericho wall that fell flat was thicker than usual and burned. What obviously happened was that, instead of looting the city, it had been set afire. This would make a larger tell level than normal (you will recall that Achan was the only one who took some of the loot). Thus, the excavation of Jericho perfectly fitted the Biblical record in every way.

But then the humanists gained control of archaeological digs.

When Kathleen Kenyon began her dig at Jericho in the 1950s, she dug a small slice—and authoritatively announced that Garstang was wrong; the walls dated to a time that could not possibly fit the Bible account. But Kenyon’s dates were based on Egyptian dating assumptions. **Why do scholars accept Kenyon’s opinion of Jericho’s wall dates as so very accurate, when the issue of Gezer’s walls continues on in such disarray?**

“I have personally heard one of Kenyon’s students (now a world-recognized scholar in archaeology) openly scoff at Kenyon’s highly subjective decisions during the Jericho excavations. Thus, the interpretation is not as conclusive as many writers would have us believe, but it fits very well into a humanist conception of the Jericho story.”—*Erech A. von Fange, “A Review of Problems Confronting Biblical Archaeology,” in Creation Research Society Quarterly, December 1986, p. 95.*

“Kathleen Kenyon, the founder of modern scientific archaeology around the mid-20th century, was characterized by Mendenhall (1981) as one who gathered infinite amounts of useless detail, and who ignored the value of texts in shedding light on the past. Her excavations covered too tiny a slice, carried out endless elaboration, and never got to any real results or relationships. She was blinded by the trees and never saw the forest. This rather unkind critique stemmed from his work under her supervision at Jericho, the excavation that won for her top rank in scientific archaeology!”—*Op. cit., p. 94.*

LOCATION AND DATING OF SODOM—When it came to the excavation of a tell on the south end of

the Dead Sea, there was great anxiety regarding whether or not it should be identified as ancient Sodom. The implications of that particular Biblical story being true would not be good for our liberal modern world, with its acceptance of practices such as those conducted in Sodom.

“I personally cannot free myself from the suspicion that the dating of some of Bab edh-dhra pottery [the possible site of ancient Sodom] was a result of wishful thinking rather than real fact finding. The ‘Cities of the Plain’ had to be found in a certain area . . . The weakness [of the argument] is not the Biblical patriarchs, but the assumed chronology in which the archaeological facts are made to fit one way or another.”—*William C. van Hattem, “Once Again: Sodom and Gomorrah,” in Biblical Archaeology (1981), p. 87.*

Biblical history is strong enough to stand alone, without archaeological corroboration. But it would be useful if it could have it. Mendenhall expresses his concern:

“Unless Biblical history is to be relegated to the domain of unreality and myth, the Biblical and the archaeological must be correlated.”—*George Mendenhall, The Tenth Generation (1974), p. 4.*

It is already clear, from what we have already said, that Egyptian chronology is a key to the whole problem.

2 - MANETHO

It all began with Manetho. The history of ancient Egypt was first arranged in 31 dynasties by a third century A.D. Egyptian priest, named Manetho (c. 300-250 B.C.). Manetho wrote at a time when the Greeks

ruled the world and Egypt was a subjugated nation. In preparing his extensive king lists, Manetho determined to prove that Egypt, too, had greatness. In fact, his lists indicated that Egyptian history reached back further than any other nation.

All that we have from Manetho are those king lists. His other writings have only been preserved in a few quotations in other ancient documents. The fact that there are two conflicting copies of his king lists only adds to the problem. Barton, of the University of Pennsylvania, discusses the vexing puzzle:

“The number of years assigned to each [Egyptian] king, and consequently the length of time covered by the dynasties, differ in these two copies, so that, while the work of Manetho forms the backbone of our chronology, it gives us no absolutely reliable chronology.”—*George A. Barton, Archaeology and the Bible, p. 11.*

Two copies that do not agree with one another is problem enough. Another is Manetho’s concern to show the greatness of Egypt. We have reason to believe that he stretched the lists out to indicate more time than should be assigned to them. Whether or not he invented a few kings cannot be known; but, assuming they are all genuine, a number of Egyptologists think that Manetho’s lists dealt not with a single dynasty—but with two different ones that reigned simultaneously in upper and lower Egypt. This would markedly reduce the Manetho dates.

IS MANETHO RELIABLE? Manetho’s king lists supply us with dates that are older than those of any other dating records anywhere in the world. But there are a number of scholars who believe that (1) *the lists deal with two simultaneously reigning sets of kings,* (2) *that they are not numerically accurate,* and (3) *that Manetho fabricated names, events, numbers,*

and history, as did many other ancient Egyptian pharaohs and historians.

It is an interesting fact that ancient Egyptian writers always tended to slant information in a way to magnify the greatness of their rulers and nation. For example, it is well-known, among archaeologists and Egyptologists, that ancient Egyptian monuments and records invariably gloated over military victories and never mentioned defeats.

With such a background, can Manetho be trusted to provide us with the basic keystone chronology that all modern archaeological excavations are based upon?

It is of interest that Manetho, living about 250 B.C., prepared a king list that apparently no one else had made beforehand. At least, his is the only such complete Egyptian king list that has been recovered. We would hope that he had an unusually accurate grasp of history to have prepared such a document. One of his other statements dealt with an event that occurred earlier in Egyptian history. We can observe from it that Manetho either had no clear understanding of historical facts or he prevaricated in order to heighten the glory of Egypt's past.

“Manetho, an Egyptian of the third century B.C., as reported by Josephus, tells us that the Exodus was due to the desire of the Egyptians to protect themselves from a plague that had broken out among the destitute and enslaved Jews, and that Moses was an Egyptian priest who went as a missionary among the Jewish ‘lepers.’ ”—*Will Durant, Our Oriental Heritage (1935), pp. 301-302.*

Was there anything that Manetho was right about?

“The little town of Jebus, the ‘Salem’ of Genesis 14, and the ‘Urusalim’ (City of Peace) of the letters of Ebed-Hapi, its governor, to his overlord, Amenophis

IV, Pharaoh of Egypt, which were found among the Tell-el-Amarna tablets, had been a military stronghold from time immemorial. Manetho, the Egyptian priest-historian, who lived in the third century B.C., claimed that Jebus was founded by the Hyksos when they were driven out of Egypt. Excavations at Jerusalem, however, prove Manetho in error, as there was evidently a town there as early as 2000 B.C. or at least four hundred years before the Hyksos were driven out of Egypt . . . The Jebusites were of Ammorite-Hittite extraction, taking their name from the 'jebus' (threshing floor) that loomed above their tiny town [to the north, on what later became the Temple site]. Ezekiel, upbraiding Jerusalem, tells her: 'Thy father was an Ammorite, and thy mother a Hittite.' Ezekiel 16:3."—*James C. Muir, His Truth Endureth (1937) p. 127.*

One of the most fundamental assumptions of modern Egyptologists is that the 31 dynasties of Manetho (with one exception) are consecutive and non-overlapping. Two men challenged that theory, but in different ways.

3 - VELIKOVSKY AND COURVILLE

VELIKOVSKY'S STUDIES—Born in Russia, in 1895, Immanuel Velikovsky received a medical degree from the University of Moscow and studied psychoanalysis, in Vienna, under Wilhelm Stikel, one of Freud's disciples. After practicing psychoanalysis from 1924 to 1939, Velikovsky became interested in ancient history and spent the rest of his life studying into Egyptian and Near Eastern history. A researcher, Velikovsky wanted to solve the puzzle of ancient dating.

Famed Egyptologist James Breasted wrote, in 1927, about Manetho's list:

“[The chronology of Manetho was] a late, careless, and uncritical compilation, the dynastic totals of which can be proven wrong from the contemporary monuments in the vast majority of cases, where such monuments have survived. Its dynastic totals are so absurdly high throughout, that they are not worthy of a moment's credence being often near or double the maximum drawn from contemporary monuments, and they will not stand the slightest careful criticism. Their accuracy is now maintained only by a small and constantly increasing number of modern scholars.”—*James H. Breasted, History of Egyptians (1927), p. 26.*

That statement was made by one of the leading Egyptologists of his time,—but before the humanists took over the fields of Egyptology and archaeology a decade later, and used Manetho's king lists as a handy means of rejecting Biblical chronology. As a result of his own studies, Velikovsky spoke even more strongly about Manetho's list, calling it “a most confused and deliberately extended and misleading list”—*I. Velikovsky, Ramses II and His Time (1978), p. 26.*

He also said this:

“In composing his history of Egypt and putting together a register of its dynasties, Manetho was guided by the desire to prove to the Greeks, the masters of his land, that the Egyptian people and culture were much older than theirs and also older than the Babylonian nation and civilization.”—*I. Velikovsky, peoples of the Sea (1977), p. 207.*

THE BIBLE INSTEAD OF MANETHO—Instead of slavishly patterning his dating studies to those of Manetho, Velikovsky turned instead to the largest and oldest ancient

history book in the world—the Bible. Fortunately, there are so many thousands of partial or complete early copies of this book that we can compare the various manuscripts and know that we have essentially the very words that were originally written in that volume of 66 books. We have both internal, as well as external, evidence that the Bible is extremely trustworthy.

Very early in his research, Velikovsky noticed a strange oddity: Although the Bible recorded many contacts between Egypt and Israel, yet modern mid-20th century historical and archaeological students could not locate any of them! This was indeed peculiar. Checking further, Velikovsky discovered that the problem centered on Manetho's king lists; history was being rewritten to fit Manetho, and in the process, dates were pushed centuries into the past. The result was that, with one exception, Bible events and chronologies were hopelessly out of step with the scholars who keyed their timing to Manetho. (That one exception, by the way, was the 22nd to the 24th (Lybian) dynasties, extending down into the 25th (Ethiopian) dynasty. A primary reason for that was that Tirhakah, the third Pharaoh of the 25th dynasty, is mentioned, not only in the Bible (2 Kings 19; Isaiah 37), but also in eighth century Assyrian inscriptions. Once again, a non-Biblical source—in this case an Assyrian said it, the scholars could therefore accept it as true.

Disgusted with the problems in Manetho, Velikovsky struck out on his own and used the Bible as the basis for rewriting the dates of history. He eventually published three major books (*Ages in Chaos* [1952], *Peoples of the Sea* [1977], and *Ramses II and His Time* [1978]). We do not have time here to detail his conclusions, but you will find them of interest.

COURVILLE'S STUDIES—In 1956, a biochemist pro-

fessor at Loma Linda University in southern California, Donovan A. Courville, read *Ages in Chaos*, and began searching into ancient history also. Fifteen years later he published his momental *Exodus Problem and Its Ramifications* (1971).

Velikovsky's reconstructed datings began at the close of the Middle Kingdom in Egypt. Courville agreed with Velikovsky that the Exodus occurred at the end of the Middle Kingdom in Egypt (about 1450 B.C.). In fact, both concluded that it was the catastrophe of the ten plagues that brought about the end to the Middle Kingdom and ushered in the Second Intermediate Period, when Egypt was ruled for a time by foreigners—the Hyksos.

Courville also agreed with Velikovsky in his dating of the 18th century dynasty, but there were differences between them for some of the later periods. Both agreed that the end of the Middle Kingdom was closer to the present by about 350 years.

But Courville went back beyond Velikovsky in his chronological analysis, all the way back, in fact, to Egypt's first dynasty. As mentioned earlier, one of the fundamental assumptions of modern Near Eastern scholars is that the 31 dynasties of Manetho (with one exception) are consecutive and non-overlapping. **Courville spent years in research, and his book presented a wealth of evidence showing that many of those dynasties occurred simultaneously with one another, and only represented contemporary rulers over different parts of Egypt. Courville's research studies provide us with one of the best ancient chronologies available. It is also in very close agreement with that book which contains the oldest and most accurate historical records available to mankind: the Bible. Here are a few of his conclusions regarding the Egyptian dynasties:**

Dynasties 1-2 and 3-5 were both conservative and rep-

resented two different local Egyptian kings ruling at the same time as the other. Dynasties 7-10 and 14-17 were also contemporaneous; so also were 20-23 and 24-26.

The result is that the “*Old Kingdom*” occurred at the same time as the “*Middle Kingdom*,” rather than preceding it by 400-500 years. Thus, the “*First Intermediate Period*” and the “*Second Intermediate Period*” were also contemporary with one another.

Courville’s careful analysis produced a major reduction in the duration of Egypt’s dynastic history and a placement of its first double-ruler dynasty at around 2150 B.C., which would be approximately 200-350 years after the Flood, according to whichever date one wished to apply to that event. (From his own studies, the present writer would place the Flood at c. 2348 B.C.)

Let us now consider events after the Flood which led to the founding of Egypt:

4 - EVENTS AFTER THE FLOOD

DESCENT TO MESOPOTAMIA—According to the evidence we now have, at the termination of the Flood (Genesis 6-9), the eight occupants of the Ark descended from “the mountains of Ararat” (Genesis 8:4, 16) in what is now eastern Turkey, to the lower altitude and warmer plains of Mesopotamia. We find there the earliest records of animal husbandry, farming, mining, metal working, cities, and written records. Here is one scholar’s view of that early time in Mesopotamia when—suddenly and dramatically with no degenerate culture leading up to it—a highly intelligent and active agricultural, animal husbandry, and small-city culture flowered rapidly there:

“Consider these comments taken [here and there] from Reed (1977) in *Origins of Agriculture*: . . . If vil-

lage life is to be correlated with an increase in population as I believe we must accept, then the arc of hills from western Iran through northern Iraq, and southwestern Turkey, down through Palestine and western Jordan almost to the Red Sea was sprouting villages. In each such village a group would depart and found a new village. Whatever the factors, plant agriculture did arrive in the Near East, and with such a rush and such a rapid spread that we are amazed.”—*Erech von Fange, Creation Research Society Quarterly, December 1986, p. 97.*

THE TOWER OF BABEL—Some time after that, the Tower of Babel incident (Genesis 11) would have occurred in Mesopotamia. Here is how a Near Eastern text describes it:

“. . . Babylon corruptly to sin went and small and great mingled on the mound . . . Their [work] all day they founded, to their stronghold in the night entirely an end he made. In his anger also the secret counsel he poured out to scatter [abroad] his face he set, he gave a command to make strange their speech . . . Violently they wept for Babylon, very much they wept.”—*Ancient Babylonian text, quoted in A.H. Sayce, Records of the Past (1948), p. 131.*

That ancient record is describing the archtypical “fall of Babylon”—the first fall,—when on the Babylonian plains the Tower of Babel was destroyed.

The “division” mentioned in Genesis 10:25 may well have referred to the worldwide dispersion after the tower was shattered. This would date that event about one century after the Flood. Would that have been enough time for a sizeable population to result? Courville suggests that the descendants of the eight who left the Ark could have produced 10 million inhabitants within two centuries.

“On the basis of the stated rapid increase in population [Genesis 9:1, 7], on the basis that three generations may be allowed to a century [Genesis 12:11ff], and on the basis of the stated longevity of life in that era [Genesis 12:11ff], multiplication of the population by a factor of ten per generation is not at all improbable. The population could increase to 10,000,000 during a period of two centuries.”—*Donovan A. Courville, “Evolution and Archaeological Interpretation,” in Creation Research Society Quarterly, June 1974, pp. 50-51.*

On that basis, one century leading down to the “division” of Genesis 10:25 could have produced a sizeable population.

MIGRATION TO EGYPT—The large number of people, gathered to make the tower the heart of a major world center, scattered when it was destroyed. Immediately a sizeable migration into Egypt occurred,—and that brought with it something that astounds modern students of ancient Egyptian history: A full-blown civilization suddenly sprang up in Egypt with next to no human activity really there beforehand.

“One of the issues that concerns modern Egyptologists is the origin of Egypt’s dynastic civilization. Walter Emery, professor of Egyptology at the University of London, makes the following three points:

“(1) The cultural connection between Egypt and Mesopotamia at the [very] beginning of Egypt’s dynastic history is beyond dispute, and is generally accepted by scholars. One example is the *Narmer Palette* from Egypt’s first dynasty which displays unmistakable Mesopotamian influence.

“(2) Dynastic civilization appeared suddenly in Egypt. There is no [gradual] development from a

more primitive pre-dynastic culture to the highly developed dynastic culture.

“(3) In contrast to Egypt, there is a period of cultural development in Mesopotamia from a pre-historic culture to a dynastic type of civilization.

“These three points suggest that the beginning of Egypt’s dynastic history is due to a population movement from Mesopotamia to the Nile valley which carried with it the more advanced culture.”—*Stan F. Vaninger, “Archaeology and the Antiquity of Ancient Civilization.”—Part 1 in Creation Research Society Quarterly, June 1985, p. 38.*

The Tower of Babel event is not dated in the Bible record, but it is clear that it came after the Flood and before the birth of Abraham. Speaking of the sudden, immense cultural activity that sprouted out of nowhere in Mesopotamia and the consequent, sudden migration to Egypt, Albright said this:

“There must have been an exceedingly intensive transfusion of culture going on in the Near and Middle East. Syria and Palestine naturally became the cultural intermediaries through which Mesopotamian influences streamed into Egypt in the period before the first dynasty.”—*William F. Albright, Archaeology of Palestine (1971), pp. 71-72.*

Here is archaeological data on this dramatic migration that occurred at that time:

“That there occurred, late in the pre-dynastic period, an extensive migration of peoples out of Mesopotamia into the surrounding areas of Anatolia, Syrophenicia, Palestine, Egypt, and even into the islands of the Mediterranean is clearly detectable archaeologically. The migration can be dated to the so-called Jemdet Nasr culture of Mesopotamia, a culture that had but a brief duration.

“The migration is evidenced by the appearance of this culture in widely scattered areas. This widespread cultural change is taken as the basis for marking the beginning of the Early Bronze Age just before the beginning of the [Egyptian] dynastic period . . .

“It is at this very point that the evidences of an intensive migration from Mesopotamia into surrounding areas are to be found . . . According to archaeological evidence, at this time, the beginnings of numerous cities in Palestine are a reflection of an extensive migration:

“ ‘And there can be little doubt but that the new city [Jericho] was founded and fortified by a people migrating either from farther north in response to pressure from beyond, or from Mesopotamia itself.’ ”—*Donovan A. Courville, “Evolution and Archaeological Interpretation,” in Creation Research Society Quarterly, June 1974, p. 54.*

New evidence has surfaced that when those initial migrations occurred after the Flood, the group that went down into Africa stayed there while the other migrants spread out to all the other continents. That is no earthshaking news, but here is the evidence for it:

It has been discovered that the genetic blueprint, the DNA in the cell nucleus, is inherited 50-50 from the mother and father, but there is some non-genetic DNA outside the nucleus, within the cell mitochondria. That DNA is inherited only from the mother. Analysis of mitochondrial DNA from women on various locations in the world indicate that women in Africa have one type, and all other women have a slightly different type. It appears that mitochondrial DNA mutates ten times faster than nuclear DNA.

TROPICAL NEAR EAST—As the Flood ended, there was so much volcanic action from the break-up of the earth as its water geysered out (Genesis 7:11), that dust in the air brought rapid cooling and an ice age in northern areas. **For this reason, those leaving the Ark went, not northward, but southward to what was then a subtropical, well-watered and fertile paradise: Mesopotamia, and thence into Egypt.** We now know that at some earlier time tropical fruits and plants grew all over the Near East and most of North Africa. Centuries later, as the climate warmed, sands blew in and crowded Egypt to within a few miles of the edge of the Nile River.

NAMES OF NOAH'S DESCENDANTS—It is of interest that, although much of the population scattered outward in every direction after the tower incident, they left behind the names of those first descendants of Noah's son, Shem:

“In Upper Mesopotamia, remnants of occupational sites have been found that bear names that are recognizably derived from the names Peleg, Arphaxad, Serug, Terah, Haran and Nahor [Genesis 10:10-32]. All these names occur in the lineage of Noah to the time of Abraham.”—*Ibid.* [See also G.E. Mendenhall, “Mari and the Patriarchs,” in *Biblical Archaeologist*, Vol. 11, p. 16 (1948).]

In addition, another descendant of Noah is said to have been the founder of Egypt, and possibly its first king:

“According to the Genesis accounts, Mizraim [Genesis 10:13-14] was a grandson of Noah and hence of the same generation as Arphaxad, who was also a grandson of Noah. While the age of Mizraim at death is not given, Arphaxad is stated to have lived to an age of 402 years. Granting even half this age to Mizraim, he could have been alive still at the time of the dispersion into Egypt,

just before the dynastic period. Egypt and the Egyptians were named by the Hebrews after Mizraim, and legendary evidence, cited by early historians of the Christian era, has been used to identify Mena as the Mizraim of Scripture:

“Mizraim was indeed the founder of the Egyptian race, and from him the first Egyptian dynasty must be held to spring . . . The memory also of the Mesraites is preserved in their name for we, who inhabit this country [Palestine], called Egypt Mestre, and the Egyptians Mestraeans.’

“Whether the identification is correct or not, it would seem that Mizraim did not belong to an era ending millenniums before the dynastic period.”—*Op. cit.*, pp. 54-55. [Quoting Flavius Josephus, Book 1, Chapter 6; see also Manetho’s statement quoted in W.G. Waddell, *Manetho* (1956), p. 9.

5 - RADIOCARBON DATING

THE RADIOCARBON COVER-UP—There are additional important facets of the problem in Egyptian dating that need to be discussed, but for a moment we shall turn our attention to one aspect which, by itself, has become a massive cover-up operation: the C-14 problem. However, we should recognize there is a special reason for the cover-up: As long as ancient Near Eastern chronology is kept out-of-step with Biblical chronology, the scholarly world can be taught that all Biblical history is little better than worthless.

“As pre-history is made continuous with [preceding that of] recorded history, a problem of ancient chronology exerts a crippling effect on both the study of the Old Testament and on ancient history in general. Evidence is accumulating rapidly that Egyptian

chronology is off by as much as 500-600 years. Since most scholars calibrate Old Testament events and the history of other ancient cultures by Egyptian dates, the effect is devastating, crippling, and stifling.”—*Erech von Fange, “Time Upside Down” in Creation Research Society Quarterly, June 1974, p. 26.*

In the late 1940s, Willard F. Libby developed his radiocarbon dating method. (*“Radiocarbon-14 dating,” “carbon 14-dating,”* and *“C-14 dating”* all mean the same thing. We will not go into detail on how it works. The technique and serious laws in carbon-14 assumptions and dating were discussed in an earlier chapter (chapter 7 of *Our Origin of the Universe Series* (Dating Methods). At any rate, living organisms absorb radiocarbon from the atmosphere. After they die, the carbon disintegrates at what is thought to be a known rate. By measuring the amount remaining in a sample of organic material, such as wood, charcoal, or bone, technicians try to determine how long ago the plant or animal died.

MORE ACCURATE DATING FROM 600 B.C. ON-WARD—Because of atmospheric conditions immediately following the Flood, carbon-14 dating, when applied to samples which died closer to the deluge, tends to give inaccurate, lengthened-out date readings which extend too far into the past. **But dates from about 600 B.C. on down to A.D. 200 tend to be closer to reality—and far more accurate than radiodating methods (such as uranium or thorium dating).** C-14 dates, from A.D. 200 on down to the present, are generally still more reliable.

Thus, radiocarbon is able to provide us with more accurate dates than uranium, thorium, potassium-argon, etc., for several centuries prior to the birth of Christ. In fact, even carbon-14 dates closer to the Flood are still far more accurate than radiodating methods.

VELIKOVSKY BEGINS WRITING LETTERS—Upon learning of Libby’s new radiocarbon dating method, Velikovsky immediately determined that it needed to be applied to Near Eastern materials—especially in Egypt and Palestine. Velikovsky was no timid soul, and he spent years, urging that this be done. In 1953, he sent Libby a copy of his newly printed *Ages in Chaos*, and asked that he perform tests on 18th and 19th dynasty materials. Shortly thereafter, Libby returned the book and said he could not conduct such sample C-14 tests. The reason given: He knew nothing about Egyptology or archaeology! A strange reply indeed; Libby knew little about anatomy or botany, yet he regularly radiodated bones and wood.

In 1963, Libby wrote an article in *Science*, in which he said that C-14 dates needed to be separated into two broad categories: Egyptian and non-Egyptian dates. The reason for this dichotomy, Libby explained, was that Egyptian chronology was not fully understood, was subject to possible errors,—and that radiocarbon dating on many Egyptian materials yielded dates that were too young by as much as 500 years! That was quite an admission. Such a statement was the result of a ten-year letter-writing campaign by Velikovsky and scientific acquaintances. They wrote museums and C-14 laboratories all over Europe and North America, in an effort to obtain radiocarbon datings of material from the New Kingdom dynasties of Egypt.

Velikovsky had done his homework. He had learned what is more generally known today in creationists’ circles, that catastrophes which greatly affect the atmosphere, such as the Flood, damage the C-14 balance. He felt that, in later centuries, dating of Egyptian articles would yield more accurate results, even though not in

the earlier ones just before the Flood.

In Velikovsky's books you will find accounts of some of the strange responses he received to those letters. For example, in 1960, Dr. Kaus Baer, assistant professor of Egyptology, at the University of California, replied that, to his knowledge, **no published datings of any objects from the New Kingdom existed, and that they would not be necessary (!)** since Egyptian dating had already been confirmed in other ways.

By that time, Velikovsky had good reason to suspect that such tests had already been made, but had produced results that were not wanted: dates which, if published, would have connected Egyptian history with those in the Bible.

A year before, in 1959, Dr. Froelich Rainey, of the University of Pennsylvania revealed that its C-14 laboratory had, in fact, dated samples from every period of Egypt's history including the New Kingdom, and concluded his statement by admitting that "there are many serious problems in the C-14 method."

A later 1961 reply to Velikovsky, from New York City, was revealing. A curatorial assistant, in the department of Egyptian art, of the Metropolitan Museum of Art in New York City mentioned that, in 1947, Libby had requested, from their department, New Kingdom samples. Libby afterward reported back that the samples had been judged to be contaminated. This meant that those samples had been tested and that the results were not as expected.

Then the breakthrough came in 1962. A scientist, Dr. David Baker, who had carefully read Velikovsky's book, *Ages in Chaos*, went to the C-14 lab at the University of Pennsylvania and had a lengthy visit with two scientists at the laboratory: Dr. Froelich Rainey and Dr. Elizabeth K. Ralph, director of the Radiocarbon Laboratory. Following the visit, he summarized it in a letter which he

sent to Velikovsky.

“Mutual friends secured for me a most favorable introduction to Dr. Froelich Rainey, director of the Museum of the University of Pennsylvania. Dr. Rainey is a vigorous, enthusiastic, obviously very well informed, courteous gentleman in his late middle years. At no time was your name brought up by me or by anyone else at the university. I told Dr. Rainey that I was interested in the latest findings that have bearing on the date of the Exodus. My position, as a professor of religion in Ursinus College and a long-time interest in the matter had prompted my quest for information in this area . .

“ ‘The dating of Egyptian history,’ said Dr. Rainey, ‘is one of the most controversial matters in the whole realm of archaeology today. On the basis of radiocarbon dating we have come up with a very serious difference of 600 years between the old chronology and the radiocarbon evidence! We do not know how to account for it. It seems to extend throughout Egyptian history, but the earlier dates are off more than more recent ones. Fortunately we have an astronomical fix in the time of Seti I, so we are pretty sure of his date, but before him we are in real trouble. Right now our museum, the British Museum, and the University of Leiden are working furiously to try to find out the cause of the discrepancy’ . .

“ ‘Is it your opinion then,’ I asked Dr. Rainey, ‘that we may expect some very drastic changes in the dates of early Egyptian history in the next few years?’ He replied, ‘Yes. And not only in Egypt but in the dating of the ancient world, especially the Near East.’

“Dr. Rainey then called Miss Elizabeth K. Ralph,

who is in charge of the Radiocarbon Laboratory of the University of Pennsylvania. This laboratory is located in marvelous quarters in the basement of the new physics building. A special guide took me to Miss Ralph.

“Miss Ralph is a deeply serious, dedicated scientist, whose whole life is bound up with her work. She received me most kindly, was in no wise hurried in answering my inquiries, and most willingly answered all my questions and gave me access to all the information she had!

“In addition to confirming everything that Dr. Rainey told me, she furnished me a wealth of other information . . . Miss Ralph was insistent on the wide gap between the so-called archaeological dates of Egyptian history and those derived from radiocarbon dated materials. In almost every case, the radiocarbon dates are significantly younger. Today, they feel they can date to within an accuracy of 25 years in some instances. **I found her working on a huge graph on which she had entered every important item of radiocarbon Egyptian evidence, plotted against the archaeologically determined dates for the same material.** This graph shows a very unmistakable trend throughout Egyptian history in the interest of younger dates. She is trying to ascertain what the cause may be.”—*David Baker letter, dated 1963 to Velikovsky, in “letters,” Ash Pensee 4(1):14 (1973) [emphasis ours].*

In 1964, Velikovsky wrote to Elizabeth Ralph, expressing his view that Tutankhamen (“King Tut”) did not live in the 14th—but 9th—century B.C.; and that, if tomb samples should date to about 840 B.C., a test made in 1971 corroborated his conclusions. In that year,

I.E.S. Edwards, of the British Museum, forwarded the conclusions of two Tutankhamen tests to the University of Pennsylvania C-14 lab. **One test, dated at 846 B.C. and the other at 899 B.C.**

Always prodding people, Velikovsky wrote to the director of the British Museum C-14 laboratory and inquired when those test results would be published, and if not, why not. In reply, the director wrote back, saying that test results which deviate substantially from what is expected are often discarded and never published.

That is science? Throw away the facts which do not fit the theories?

In 1972, G.W. Oosterhout, of the Delft University of Technology in the Netherlands, wrote the British Museum about those same two test results. He asked for a written statement of some kind, in regard to the test and its results. **In reply, he received a letter stating that the lab at the British Museum had made no radiocarbon measurements on any material from the tomb of Tutankhamen.**

David Baker (quoted above) had been told, in 1962, that the major universities and museums of the world were *“working furiously to try to find out the cause of the discrepancy,”* and that *“some very drastic changes in the . . . dating of the entire Ancient World, especially the Near East,”* could be expected shortly.

But that has not happened, and it will not happen. To do so would be to admit that Biblical documents are reliable,—and this the humanists will never admit. As with everything else, the evolutionists seek to strike from the record all data which is not favorable to their cause.

“If a C-14 date supports our theories, we put it in the main text. If it does not entirely contradict them, we put it in a footnote. And if it is completely ‘out of

date,' we just drop it."—*Professor Brew, quoted by J.O.D. Johnston, "Problems of Radiocarbon Dating," in Palestine Exploration Quarterly 105, p. 13 (1973).*

Not only in the Near East, but elsewhere in the world,—radiocarbon dates for the past 2,500 years have proven that the dating theories of the anthropologists and archaeologists are far from correct.

"Fewer than 50 percent of the radiocarbon dates from geographical and archaeological samples in North America have been adopted as 'acceptable' by investigators."—*G. Ogden III, quoted by Robert E. Lee, "Radiocarbon: Ages in Error," in Creation Research Society Quarterly 19:117 (1982).*

MORE ON RADIOCARBON DATING—Frederick Johnson, a co-worker with Willard Libby, made this important statement on radiocarbon dating:

"This [radiodating verification by actual historical dates] is not true of geological and archaeological measurements, except in relatively rare instances. Measurements of time in these fields are inferred from processes, the rates of change or progress of which are not consistent and which are, as yet, quite unpredictable. There is no known standard rate for any one of these processes, and measurements of time for one process are invariably relative to rates of progress in other processes."—*Frederick Johnson, quoted in H.M. Morris, W.W. Boardman, and R.F. Koontz Science and Creation (1971), p. 85.*

Carbon 14 produced a date of 200 B.C., when archaeological dating theories had fixed it at 600 B.C.

"This book, *Gears from the Greeks*, about an ancient astronomical device found in an ancient wreck off the Greek Island of Antikythera early in this cen-

tury, has provided a piece of information [about radiocarbon dating] . . . During additional investigation recently, wood from the wreck was dated by radioactive carbon in the usual way. The result was an indicated date of about 220 B.C. But on archaeological grounds, the date of the wreck has been set at about 800 B.C.”—*News note, Creation Research Society Quarterly, June 1776, p. 67.*

Yet we must keep in mind that not even carbon-14 dating is reliable. G.B. Ogden III, director of a radiocarbon dating laboratory, lists reasons why carbon 14 is unreliable. He explains that too many unknown factors are standing in the way of successful dating. Then he gives a revealing statement:

“It may come as a shock to some, but fewer than 50 percent of the radiocarbon dates from geological and archaeological samples in northeastern North America have been adopted as ‘acceptable’ by investigators.”—**Gordon Ogden III, “Use and Abuse of Radiocarbon Dates,” Annals of the New York Academy of Sciences, 288:167 (1977).*

Not even radiocarbon dating is fully reliable. We dare not entrust Near Eastern dating to its conclusions.

“A last difficulty, and at the moment one of the most frustrating, is the failure of the radiocarbon technique to yield dates of certain dependability. Although it was hailed as the answer to the prehistorian’s prayer when it was first announced, there has been increasing disillusion with the method because of the chronological uncertainties (in some cases, absurdities) that would follow a strict adherence to published C-14 dates. This, not to question the physical laws underlying the principle used or the accuracy of the counters now in operation around the world, the unsolved problem, instead, seems to lie in the diffi-

culty of securing samples completely free from either older or younger adherent carbon.

“At least to the present, no kind or degree of chemical cleaning can guarantee one-age carbon, typical only of the time of the site from which it was excavated. What bids to become a classic example of C-14 irresponsibility is the 6,000-year spread of 11 determinations for Jarmo, a prehistoric village in northeastern Iraq, which, on the basis of all archaeological evidence, was not occupied for more than 500 consecutive years.”—*Charles A. Reed, “Animal Domestication in the Prehistoric Near East,” *Science*, 130:1630 (1959).

6 - ECLIPSE DATING

ASTRONOMICAL DATING—In a previous quotation, mention was made that archaeologists claim that Egyptian dating is based on “*astronomical dating*.” That has an awesome sound. Astronomical measurements are generally considered to be very firm and solid. Who dares resist the fixity of astronomy, and we are told that “astronomical dating” is the basis of Egyptian dating, which, in turn, is the reference point for all other Near Eastern dating. And since Near Eastern history is the oldest in the world, Egyptian dating becomes very important.

To set the record straight, Egyptian dating is neither an extension of astronomical dating nor is it based on it. Egyptian dating is based on a theory, not on astronomy.

Please understand: **There are astronomically fixed Near Eastern dates, but they are not Egyptian dates.** Two separate Babylonian cuneiform tablets were written, each one filled with astronomical data covering a whole

year. One lists a Babylonian date and the other a Persian.

The *first tablet* is about the 37th year of Nebuchadnezzar, and contains a series of observations from Nisan 1 (which is the Babylonian New Year's Day) of year 37, on through to Nisan 1, year 38. A single astronomical observation could be suspect, and not necessarily reliable for fixing a date, but a combination of records, such as are found on this tablet, relating to the positions of sun, moon, and planets, all of which move in different cycles, can be located exactly in only one year. Therefore we can know, with certainty, that Nebuchadnezzar's 37th year was beyond doubt the Babylonian lunar-calendar year extending from April 12, 568 B.C. through April 12, 567 B.C. This places the first official year (that is, the first full year) of Nebuchadnezzar at 604/603 B.C., spring to spring, and similarly fixes all the years of his reign.

The *second tablet* of astronomical data fixes a year in the reign of Cambyses, a Persian ruler. It fixes the 7th year of Cambyses, in accordance with the Babylonian calendar which they also used, as dating from April 7, 523, to March 26, 522, B.C.

THE EGYPTIAN ECLIPSES—But, in the case of Egyptian dating, we have something far different: An eclipse is mentioned; and, due to a lack of corroborative data, it could apply to a number of different dates spanning over a thousand years. The Egyptologists have arbitrarily selected the one they wish to use, and call the result “astronomical dating of the Egyptian calendar.”

Unfortunately, in addition, there is the problem of *partial eclipses*. These are also called “eclipses” by the ancients, and such partial eclipses occur fairly frequently. Were these full or partial eclipses? No one knows. Were they solar or lunar eclipses? The text frequently does not

provide clarity. Even a total or near-total eclipse *of the sun* can occur within a century or less in any given area.

Major eclipses *of the moon* are even more frequent. Filmer, in his *Chronology of the Reign of Herod the Great*, notes that three different eclipses of the moon, separated by only four years, cause problems in locating the birth of Christ.

Ptolemy, an Egyptian historian, provided a series of eclipses, which have been dated to 791 to 491 B.C. But recent re-analysis reveals that Ptolemy did some hedging in some of the related data he provided. If he did that, how can we rely on his eclipse dates? The eclipse date assigned to the 10th year of Assur Dan III, king of Assyria, can be applied either to 763 B.C. or to a lesser eclipse in 791 B.C. We do not have here the certainties of planetary motions, but the vagueries in observations of events which keep repeating themselves.

Prior to the 8th century B.C., we have no clear-cut event which can be correlated with a calculated eclipse. Yes, there are possibilities, but none are more than speculative theories. A key problem is often the vague wording of the ancient text in describing something that might or might not be an eclipse.

Eclipse data cannot provide confirmation of a possible date unless (1) a definite eclipse is mentioned, and (2) enough information is given to fix that eclipse, so that it can only apply to that one date. Ideally, this additional information should be further astronomical data, fixing that same calendar year.

With Egyptian dating, as with everything else, one cannot arrive at definite conclusions when he uses uncertain factors as the basis of the proof.

7 - THE SOTHIC CYCLE

Egyptian dating is keyed both to the king list of Manetho and to the Sothic cycle. This entire chapter on Egyptian dating should have begun—instead of ended—with the Sothic cycle. But it has been saved for the last. If you find it is too deep for comfort, just skip this section. You have already read the most important conclusions.

“The currently accepted absolute chronologies of the Near Eastern civilizations in the second and third millennia B.C. rely ultimately upon the Sothic dating method. Egyptian chronology stands alone as being ‘independently derived,’ and the other contemporary civilizations are dated by cross-reference to it. Powerful arguments against the validity of the Sothic dating method have been presented by Courville and Velikovsky.”—*David J. Tyler, “Radiocarbon Calibration: Revised,” in Creation Research Society Quarterly, June 1978, p. 20.*

Mark it well: *“Egyptian chronology stands alone as being ‘independently derived,’ and the other contemporary civilizations are dated by cross-reference to it.”* **Egyptian chronology has been made the touchstone of all other dating, yet it is proudly declared to be “independently derived”; that is, this dating system is totally based on the Manetho/Sothic theory, and not on anything else!** This peculiar theory, full of holes as experts have shown it to be, ranks in the same category with stratigraphic dating—the 19th century theory which also stands “in glorious isolation,” judging all evidence and being judged by none of it, declaring that certain million-fold year dates have been arbitrarily assigned to all the sedimentary strata and their fossils, because of certain undatable marine creatures (“index fossils”) found in them!

8 - THE SOTHIC CALENDAR

THE SOTHIC CALENDAR—The “astronomically fixed” Egyptian dates are not tied to astronomy, but to a theory about the *Sothic cycle*. To call those dates “astronomically fixed” is deceptive. Astronomical data are made use of, but they are used in a way dictated by a theory, not by the motions of heavenly bodies.

What is this “Sothic cycle”?

It is thought, by some, that a certain calendar was used in ancient Egypt. This calendar is conjectured to have been composed of 12 months of 360 days, with 5 additional days added at the end to bring it to 365. Since the solar year is closer to 365.25 days in length, we today add an extra day every fourth year (February 29, making it a “leap year”). Without that extra day every fourth year, the calendar would wander backward through the seasons at the rate of one day every four years. New Year’s Day would return to the original position after 365×4 , or 1,460 years. This conjectured 1,460 years is the *Sothic period*, or *Sothic cycle*, also called the *Sothic year*.

If such a calendar actually was used in Egypt, and if it was used for at least one full cycle of 1,460 years, then it would be possible to date backward through it from later known dates to earlier ones. Two “if’s,” but there are actually six in all.

THE SIX IF’S—As with eclipse dating, certain requirements must be met to use the Sothic calendar as a dating tool: (1) ***It must be clearly established that, as far as Egypt was concerned, such a calendar was never actually used.*** We have no certainty of that; in fact, since our only evidence for it is one statement in one ancient text, it is only a faint possibility. (2) ***We must have definite evidence that it was used throughout a 1,460-year cycle.*** Such information is also lacking.

(3) ***The beginning date of the 1,460 Sothic cycle must be known with certainty.*** We do not know that. (4) ***It is not clearly known that the extra 5 days were invariably a part of the Egyptian calendar.*** Without that feature, the Egyptian calendar would not be a 365-day calendar. The earliest scholars assumed this to be so, and later Egyptologists followed on in their assumption. But assumptions are not facts. (5) It is known that ***at least one other type of Egyptian calendar was in use at the same time*** as this proposed Sothic calendar, therefore each date reference in an Egyptian text or on an Egyptian monument should explain which calendar is referred to. (6) ***The dates based on this theoretical Sothic year should be relatively free of internal inconsistencies*** and external conflicts.

If one or more of those six points is in doubt, then we cannot say that the Sothic calendar is fixed or even dependable. For example, if you did not know when the year began, how could you date events today? You would have a sliding calendar; any day of the year could be called March 15. Likewise, if you do not have certainty about item 3, above, you cannot date backward through a 1,460-year Sothic calendar.

In reality, we have here the same problem of faulty theories piled on theories in support of “fixed Egyptian dating,” that we find all through evolutionary theory in regard to stellar origins, primitive environment, beginnings and development of lifeforms, fossil-dating theories, “man/ape” bones, mutational “improvements,” and all the rest. It is all a house of cards, and the slightest touch of serious investigation knocks it over.

Interestingly enough, ancient Egyptians had no word for “calendar”; they gave dates and let it go at that. We believe that their year wandered through our 365.25-

day calendar, but the speed of wandering is not known, and that is crucial.

THE RISING OF SOTHIS—*“The rising of Sothis”* is mentioned one time in Egyptian literature. It may have been an event that wandered through their vague calendar along with their New Year’s Day, or it may have been a one-time event. But what does “rising of Sothis” mean? It is thought that “Sothis” was the bright star Sirius, and early Egyptologists decided that it may have reference to when the star Sirius arose each year at the same time as the sun, on the wandering New Year’s day. This concern over Sothis is due to an effort to fix the beginning of the 1,460-year Sothic cycle. It is conjectured that, at the beginning of the cycle, Sothis (Sirius) arose at the same time as the sun, on New Year’s Day. But is “Sothis” the star Sirius? No one can really know. The Egyptian texts just do not tell us. That is simply another conjecture!

SIX PROBLEMS WITH THE RISING—There are difficult problems with the “Sothic cycle” theory:

(1) **Sirius could not be seen if it arose at the same time as the sun.** It would have to arise a minimum of 9 degrees or 36 minutes of time earlier than the sun to be seen. With the discovery of that fact alone, the major part of the theory falls through the floor.

(2) In 1851, R.S. Poole, an astronomer, calculated the viewing positions of Sirius from the latitude of Thebes and Memphis on the “fixed beginning” of the 1,460 Sothic cycle—which is supposed to be 1320 B.C. He found that Sirius would have been, not 16 minutes high, as the sun rose on that New Year’s Day, but 1 hour, 16 minutes high at Thebes and a little over 1 hour farther north, at Memphis. Using Poole’s data, the astronomer, **MacNaughton** concluded that **Sothis could not be Sirius.** Instead, he

suggested the less-bright star, Spica. But most Egyptologists were not interested; they already had a comfortable theory to explain all dating mysteries.

(3) The accepted Sothic cycle went from 1320 B.C. to A.D. 141. **Knowledgeable astronomers and Egyptologists have suggested a variety of alternate explanations. Which one are we to accept?** Lockyer, a modern astronomer, said the cycle began four centuries earlier than 1320 B.C. Theon, an earlier astronomer, proposed 26 B.C. as its terminal date. Ingham suggested 1312 B.C. to A.D. 141 (a cycle eight years shorter).

(4) Disgusted with the futility of theories piled on theories, **a number of Egyptologists have rejected the Sothic cycle outright.**

(5) Adding to the hazards of trying to locate the initial date is the problem that **the ancients did not know the proper solar length.** They thought it was 365 days, whereas it is closer to 365.25. In fact, it is really 365.2422. A true solar year would change the calculation from 1,460 to 1,507 years. But here is the mathematical catch: Should an extra 46 years be added to the end of the ancient cycle, or should the beginning be started 47 years later?

(6) The standardly accepted cycles would begin in 1320, 2780, and 4240 B.C. A century ago it was thought that the first Sothic cycle began in 4240 or 4241 B.C., and that the first dynasty of Egypt began in the 6th or 7th millennium B.C. But carbon-14 dating has shrunk that starting date down somewhere to 3300-3000 B.C. Scharff shortly thereafter reduced the first dynasty to c. 2850 B.C. But, if that should be accepted as the dating standard,—then **the Sothic cycle did not begin at the beginning of a Sothic cycle!** Was the scheme introduced within the cycle that should have begun in 2780 B.C., or could it have been within the cycle which ought to have begun in 1320 B.C.? A number of scholars have accepted

this possibility. But such a conclusion would make the whole system even more ridiculous.

Oddly enough, the scholarly name for the remarkably uncertain and little understood Egyptian year has, for over a century, been *annus vagus*, which is Latin for “vague year.” Modern archaeologists base all Near Eastern dating on what they themselves call the “vague year” [the vague calendar system] of Egypt! **That nebulous calendar, with almost nothing known about it, is made the standard by which all other Near Eastern dates are measured and assigned!** Why? The answer is simple enough: The theory that the humanists have piled up around the 12th dynasty “rising of Sothis” statement and the 3rd-century Manetho king list—**provides them with a stretched-out dating system, the only one in all the Near East which, if accepted, could annihilate Biblical dates and events.**

With such an objective as the grand prize, they are willing to call dates “astronomically fixed” and prevaricate regarding the extensive radiocarbon tests they have applied to Egyptian samples. We can be certain that, if they could have obtained a few test samples which corroborated their Manetho/Sothis theory, they would have published the news with trumpeting. But, lacking the discovery of such evidence, they have instead said that such testing is not needed and has therefore not been made.

In his book, Bickerman provides an excellent one-paragraph summary of all that is really known about that ancient Egyptian calendar:

“All conjectures about the date of the introduction of the *annus vagus* are premature. We can only state that there is evidence of the use of a variable year from the V dynasty on, that [in Egypt] the rising of Sirius was observed as early as 1900, and that the

celebration of this event was, from the Middle Kingdom, a change date in the civil year.”—*E.J. Bickerman, Chronology of the Ancient World (1968), p. 42.*

Where, in those facts, does a 365-day calendar fit in? It doesn't. We have no data that the Egyptians actually did use a 365-day calendar; we only think they may have done so. **We do not know that they had a “Sothic cycle” or that Sirius had anything to do with it.** The single mention of a “Sothic rising,” in the 12th dynasty, dated to the 16th day of the 8th month, is no key to anything.

THE THREE SEASONS—When was the Egyptian “New Year’s Day”? When did their yearly cycle begin? No one knows! The fact is that no consistent Egyptian calendar existed. We have thousands of Egyptian engraved inscriptions, but not one calendar on them. The Egyptians ought to have left us large numbers of calendar inscriptions, if they had a definite calendar. Hundreds of thousands of papyrus writings have been found. Large numbers of these papers were stuffed inside their animal gods when they were buried by their Egyptian worshipers. Journal accounts, love letters, current news reports, business memos,—all kinds of things, but no calendars.

Why not? Probably because they only had a simplistic calendar, and not the “elaborate Sothic system” the archaeologists attribute to them.

Where, in the three seasons, did the Egyptian yearly calendar begin? Scholars recognize that there were three parts to the Egyptian year, the *Summer*, or hot season, the *Season of Waters*, or Nile flood time, and the *Winter Season*, or season of growing crops. It has been suggested that the “*rising of Sothis*” may have had something to do with the yearly rising of the Nile waters. But that would only add to the problem, for who can know the exact day

on which the Nile waters arose each year? (Apparently the event generally occurred sometime during the second week in August, but the exact time varied.) Still other scholars thought that the Egyptian year would begin with the Winter Season. There is also the possibility that it began during the winter solstice.

It is significant that the flooding of the Nile was the one yearly event upon which the lives of the Egyptians depended, and it always began in late summer. Yet if the yearly calendar began with that event, then it would NOT be a wandering calendar! And if it was not a wandering calendar, then the whole theory of a “Sothic cycle” of 1,460 years would be worthless.

THE SECOND CALENDAR—A second calendar, used by government officials, was also known to exist. It was a lunar calendar of alternating **months of 29 and 30 days**, which apparently was used from c. 1900 B.C. down to about 235 B.C. This calendar was used for religious gatherings, and somewhat for daily life. But the beginning and termination of each year is not known, and such a calendar would in no way match a solar calendar of 365 days.

CONCLUSION—The Egyptian so-called “*astronomical calendar*” is used as the referable dating standard for all other events worldwide. How did archaeologists decide what it was?

First, Manetho: Manetho’s king list is accepted as completely truthful, totally accurate, and entirely sequential, with no doubling of kingly reigns. We have already considered a variety of reasons why Manetho and his list cannot be trusted.

Second, eclipse: An eclipse that could apply to a number of different dates is arbitrarily assigned to

one. Along with it, several others are used also. Most or all may have referred to frequently occurring partial eclipses. This forms the basis for the so-called “astronomically fixed Egyptian calendar.” An indefinite eclipse is used to make it all “astronomical.” We earlier discussed the flaws in such thinking.

Third, Sothis: A single strange passage in a letter—which even the Egyptologists cannot figure out—is used as the basis for an elaborate framework of speculation, the outcome of which they call the “Sothic calendar.” (Egyptologists cannot figure it out, because they do not have another inscription or ancient text which refers to the “*rising of Sothis*” and could explain this single, mysterious passage.) Here is what that single ancient text says:

“You ought to know that the rising of Sothis takes place on the 16th of the 8th month. Announce it to the priests of the town of Sekhem-Usertasen and of Anubis on the mountain and of Suchos . . . and have this letter filed in the temple records.”—*Part of a papyrus inscription found at Kahun, Egypt, and addressed to the priest, Papihotep, quoted in Duncan MacNaughton, Scheme of Egyptian Chronology (1932), p. 146.*

You have just read the keystone in the so-called “Sothic cycle calendar” of the Egyptians. What did we learn from that ancient Egyptian text? Next to nothing.

But, specifically, what DID we learn?

(1) The “rising of Sothis” would be on the 16th day of the 8th month. **That year or every year?** We are not told—and that omission is a glaring fact. Is the “rising of Sothis” supposed to refer to a local or national holiday, midway point in the year, end of the year. When?

(2) **Did it only apply to just those three towns?** We are not told. If it applied to all Egypt, why were only the

priests in three insignificant towns to be told about it? If it applied to all Egypt, it would have been worded, “Publish it in all the cities and towns, tell all the priests about it, and file it in all the temples!

(3) If it applied to a nationwide calendar, which continued on as is, or with adjustments, year after year—many copies of it would have been stored in temples all over the land and recovered by archaeologists. If the Egyptian calendar wandered from year to year and if the “rising of Sothis” continually applied to every year in a 1,460 year cycle (rather than a local event dealing with just one year),—then newly revised copies of the “rising of Sothis” date would be issued every year for a thousand years or more! **Multiplied thousands of copies of the yearly revised “rising of Sothis” text sheet would be found.** You think not? Of course it would, for it is said to have been the key date governing the beginning of each year’s calendar, each year, every year—for over a thousand years!

(4) **What was “Sothis”?** No one knows. How can anybody know from one statement? It could be the sun, the moon, a planet, a star, a constellation, the Pleiades, etc. It could relate to the Nile or one of the (literally) thousands of Egyptian gods (crocodile gods, hawk gods, snake gods, beetle gods, fish gods, etc.)

(5) **What does the word “rising” mean?** Rising over the horizon, rising to full height overhead (zenith), initial rise of the river, rise to its fullest height, a lifting up of an Egyptian god for a ceremonial procession, the date when Pharaoh would come through those three towns in a grand lifted-up procession, carried by servants in his palanquin?

There are thousands of possibilities. We simply do not know what that single text, speaking about a “rising of Sothis” means. Anyone who says he does know is only fooling himself and anyone else who chooses to believe him.

This “rising of Sothis” text is used as a pretext for an elaborate theory which could be used to date forward and backward from a very few later known dates to all the other ones in Egyptian history, and thence as the absolute, unequivocal standard by which all other dates in Near East, and Near Eastern records (including the Bible), must agree with—or be changed!

In contrast, of all the chronologies available, Courville’s chronology agrees the best with Biblical events and chronology, and carefully fits them into contemporary B.C. history of the other nations of the Near East. **By applying Courville’s dating methods, a beautiful harmony is seen between Egyptian, Near Eastern, and Biblical dates and events.** And this is to be expected. The Bible has shown itself to be accurate in a number of other ways, so we would expect its chronology would be the key to the otherwise confusing dates of ancient eastern Mediterranean nations.

For more information on this, we refer you to Donovan A. Courville’s two-volume set, *The Exodus Problem and Its Ramifications* (1971).

1 - NEAR EASTERN MOUNDS

Does mound thickness provide us with an indication of the great age of Near Eastern towns? Here are facts which indicate otherwise.

The *Fertile Crescent* extends from Ur (near the Persian Gulf) northward up to Babylon, Ashur, Nineveh, Haran, Carchemish, Ugarit, and thence downward along the Mediterranean through Syria and Palestine, and into Egypt to Thebes. The hollow of the Crescent is the Arabian Desert. Just north of the top of the rounded part is Ararat, where the Ark came to rest.

Within that Crescent, throughout the entire

Mesopotamia-Syria-Palestine region are to be found earthen mounds. Those mounds are all that remains of ancient towns and cities. Archaeologists call them “*tells*,” which is the Arabic word for these low, rounded earthen hills.

More than a century and a half ago, men first realized what those dirt heaps were, and archaeological digs into ancient cities and villages began.

The question we are here concerned with is how much time did it take to produce those mounds?

The mound sites are sometimes as much as 50 feet or more in height, and consist of successive levels of occupation before a level is reached which can be dated to the dynastic period in Egypt. At Jericho, for example, a layer of about 13 feet of clay was found above the bedrock. That 13 feet was composed of a series of mud floors, each with the faint outlines of foundations of mud dwellings. Above this were the remains of foundations of three successive rebuildings within the time period of a city wall. Above that were the remains of additional constructions. A single slice downward through it all revealed 26 levels.

Above the 26th level was a point of non-habitation for an undefinable period of time (which modern archaeologists declare to have been “a thousand years”), and then above that was a level datable to the dynastic period.

It was Kathleen Kenyon’s dig, at Jericho, which produced this down-to-bedrock approach to digs that won her the acclaim of the archaeological world. It was felt that she had provided additional evidence that the Bible could not be true,—for had she not shown that long ages of human habitation must have preceded the dynastic period of Egypt? As a result of her research, Jericho is said to be one of the oldest towns in the world, and the oldest continuously inhabited one ever found.

We know that those occupational levels represent a sequence. Each level represents people living and working. Each higher level was built on top of the one below it, so each upper level must be younger than the one it was built upon.

What is the answer to all this? Specifically: How much time elapsed from the first human habitation to the beginning of the first dynastic period in Egypt? Was it thousands of years, as Kenyon maintained?

Let us examine those mound sites more closely. They are particularly characteristic of areas where construction was of mud brick. Unfired brick is easy to make. Simply form it out of clay, let it dry in the sun and then use it to build house walls. Place straw over the top for roofing, and you are ready to move in and set up house-keeping!

The uniformitarian theory of modern archaeologists is that a certain period of time is required to produce a given height of a mound. Each mud-brick house is said to have survived for at least 50 to 100 years; and, between each rebuilding, an extended period of non-habitation, or "hiatus," is said to have often occurred. Thus, a fair-sized mound is thought to have taken many thousands of years to be built up. Proof of the fact is the climatic conditions found in the Near East. Hardly any rain falls and mud-brick buildings last quite a while today, so it is obvious they should have been long-lasting in earlier ages. It has been said that probably only warfare or the decimation of a culture could have been responsible for the start of many of the new mound levels.

Now let us leave the theories and consider the facts:

The mud bricks which both ancient and modern Near Eastern cultures have used were unfired bricks. *Unfired bricks* (also called *mud bricks* or *sun-dried bricks*) are molded, laid out to dry, and then formed into the walls of

houses. In contrast, fired bricks must be placed in kilns where very high temperatures harden them. Large numbers of fired bricks are to be found all over the ruins of old Babylon, in southern Iraq today. After thousands of years, they still remain hard and fairly squared, each one revealing the stamped image of a lion with wings and a human head—and the name “Nebuchadnezzar” (Daniel 7:4 and 2:38). The fired bricks survived, but only the wealthiest could afford them.

But the unfired bricks are all gone. What caused them to disappear? One of two things. Yes, warfare might destroy the home, but rainfall did it even faster! And it did it often in ancient times.

A major factor, in the duration of a mud-brick structure, would be the amount and severity of rainfall. Modern archaeologists declare that ancient mud-brick structures lasted 50 to 100 years, generally the latter. Ceram tells us that modern unfired-brick houses in the Near East rarely last more than 20 years:

“The buildings which make up these villages are still constructed of bricks of unfired clay—bricks which crumble under the baking sun and slowly dissolve under the sparse rain . . . Such adobe houses seldom last more than twenty years.”—C.W. Ceram, *The Secret of the Hittites*, (1966), p. 6.

Today, in the dry Near East, we are told that mud-brick homes “slowly dissolve under the sparse rain . . . [in] twenty years.” What would happen if that kind of rain fell there that falls in most of Europe and North America.

“In April 1940, a terrific rain- and hail-storm literally washed half of the mud-brick village [of Aquabah] away. Many of the mud-brick walls simple dissolved . . . Small wonder that such bricks go to pieces during the first heavy rain!”—Nelson Glueck, *Bulletin of the American Schools of Oriental Research*, No. 79, p.

12 (1940).

Even Kenyon agreed:

“The growth of these tells [mounds] is particularly characteristic of those areas in which the local building material was mud brick, for a destroyed building of mud brick disintegrates into mud, which cannot be used again in the same way that stone from a building can be. The growth of the tell is therefore more rapid.”—*Kathleen M. Kenyon, Archaeology in the Holy Land (1960), pp. 30-31.*

Garstang said about the same thing:

“Mud bricks, such as were used throughout the life history of Jericho, were peculiarly liable to decay . . . Sometimes too, in winter, rain falls very heavily so that unless the outer walls are protected from the elements, they would be liable to perish.”—*J. and J.B.E. Garstang, The Story of Jericho (1948), pp. 57-58.*

At this point we must stop to consider the type of climate that existed anciently.

Prior to about 300 B.C., the entire Near East received much more rainfall than it now does. Trees, gardens, vineyards, crops, and farm animals flourished. Prior to about 700 B.C., the Near East received so much rainfall that it was a tropical paradise. Yet throughout all ancient history, continuing on down to the early 20th century, nearly every residence built in the Near East was made of those fragile, sun-dried bricks.

It is obvious that rainfall is a key factor in the duration of a mud-brick structure. **Heavy or frequent rainfall crumbled the houses, and they had to be remade. The further back we go into time, the more frequently they had be rebuilt.** People tended to congregate in towns,

most of them small. Each time the houses washed away, the ground they had melted into was smoothed, and new walls were erected. Because most structures had low walls and were only one story, it did not take much time to produce a new house. So it was easier to let the family members quickly rebuild the house of sun-dried bricks, than to go to the great expense of using only kiln-fired brick. Only the wealthiest kings generally seemed able to afford kiln-fired brick facing on their great stone palaces.

There is abundant evidence that a tropical, well-watered paradise existed in Egypt, Mesopotamia, and India in ancient times. In addition to remains of tropical plants and trees which have been found in those areas, streams that carried the extra rainwater have also been found.

“There is good evidence for a heavier rainfall, and extensive forests in the Indus Valley in ancient times

. . .

“In his explorations of Baluchistan these problems of climate and population were, of course, much before Sir Aurel Stein’s eyes, and he was able to identify a large series of artificial stone-built dams and terraces, known locally in Jhalawan as gabarbands, clearly designed to aid the irrigation of fields. The date of these is unknown but, as Stein remarks, they must reflect not only climatic conditions with a greater rainfall, but also a large population to provide the necessary labour for their construction . . . Even though the age and culture of these works are still unknown, their presence is important in indicating greater rainfall in antiquity, and it is by no means improbable that they do, in fact, date back to the prehistoric occupation of the Baluchi Hills.”—*S. Piggott, Prehistoric India (1961), pp. 67-68.*

“A dozen settlements of antiquity were observed

along the now dry Ghaggan River in the desert area of Bahawalpur in India. Numerous scholars have observed evidences of a past exposure to torrential rains in areas.”—*Donovan A. Courville, “Evolution and Archaeological Interpretation,” in Creation Research Society Quarterly, June 1974, p. 52.*

“There remained, in the Sahara and adjacent regions, stream channels ‘not now occupied by water courses’ that obviously carried great quantities of water.”—*I. Velikovsky, Earth in Upheaval (1955), p. 135.*

Does not the Bible say essentially the same thing, when it describes conditions in the Near East in those ancient times?

“And Lot lifted up his eyes, and beheld all the plain of Jordan, that it was well watered everywhere, before the Lord destroyed Sodom and Gomorrah, even as the garden of the Lord, like the land of Egypt, as thou comest unto Zoar.”—*Genesis 13:10.*

Since mud-brick homes would be subject to rapid decay under normal climatic conditions found in Europe or eastern U.S., the rapid rise of those ancient village mounds could be accounted for within a relatively short time. From his extensive research into the subject, **Courville decided that, both in relation to ancient chronology and mound-building, no more than about 200 years would be needed between the Flood and the beginning of the first dynasty in Egypt.**