Note: In these letters, what Dr. Hoch identified as Section 3
the Flood of Noah he has since concluded was
the "Flood of Genesis" [illegible]

10606 Vanora Drive
Sunland, Calif. 91040
January 12, 1976

Dear Messrs. Herrmann, Patton and others in geology and archaeology:

Many months of study for the evidence of the Flood break are now finished. Firm information exists for a total picture that differs somewhat from the conclusions I reached 14 years ago in the Compendium. And it of course differs from the conclusions Mr. Herrmann also offered at that time. I should like to summarize the tremendous events that ought to be shaping our understanding -- the revolution in C^{14}, the full impact of the spirit in man, the shattering revolution in geology and the major archaeological expeditions only now beginning to be published.

The first view we held was simplistic: most all geology is to be explained in terms of two biblically revealed events recorded in Genesis 1 and 6. The world of reptiles, the pre-Ademic. The world of mammals, Adamic. And the Flood, was it in some way related to the Pleistocene? The geologic record was essentially limited to the destruction of each of these worlds. And most an anthropoid find related to culture, however dimly conceived, was evidence of Adam's family. And C^{14} was viewed as nearly nil before the Flood, rising rapidly afterward.

Then came the revolution in geology in the world, and recognition on our part that time was indeed significant in the geologic timetable. Our concept about a world of Adam paralleling the Tertiary was shattered. At the same time the bristlecone pine provided a total opposite of the view of C^{14}. By no stretch of the imagination could human history have begun until after the close of the Pleistocene's last ice period if there is any validity in biblical history, secular evidence and C^{14}. And the question of the spirit in man came to focus on where, in the series of primates and anthropoids, the family of Adam is to be found.

It is my proposal, in this summary paper, to indicate that the whole of human history is limited to the Recent. That there was a world before Adam that was far in advance of reptiles. That the greatest creative event was not the making of a body approaching the shape of deity, but of creating in matter the image of God through spirit in man. That however near creatures may now approach man in shape -- the chimpanzee, for example -- or may have approached man in configuration in the past -- homo erectus, homo neanderthalensis, for example -- no creature is truly in the image of God without the presence of spirit in him.

Paralleling the emphasis from the pulpit on the world of angels before Adam, we need to understand, through the sciences, the world of matter on earth before Adam. And that world was far nearer in appearance to the world of Adam than was an earlier world of the Upper Cretaceous and Tertiary.

Craig White

The first issue we must dispose of pertains to the nature of the Flood and the devastation of Genesis 1:2. It is easy to postulate what we think a Flood deposit would look like. We could argue, on the basis of preconceived ideas, that no universal Flood has occurred in the Recent of sufficient magnitude to meet our preconceptions. But then, at no point in the whole geologic record since the Mesozoic began, can we find evidence of sufficient magnitude to meet our preconceptions. Not even in the Upper Cretaceous have we ever found evidence that is sufficient to meet the kind of model we might postulate as to what a Flood deposit would look like. The fact is, any argument is specious that overlooks the fact that we simply do not know what kind of deposit a Flood would leave that occupied the space of a calendar year. Instead, we must first determine whether we have reached an adequate approximation of the time of the Flood. This must include the evidence of Genesis, C^{14}, and the implication of continuity in civilization and culture. When we have found this approximation, then we must analyze locally the stratigraphic evidence. And after a series of local analyses, we must evaluate the implications of whole cultures. Can a model be arrived at that fits the evidence of contemporary history and the Biblical implications. Is there a sufficient population variation? Are there indications of broadly contemporary local breaks in continuity? We do not expect that archaeologists can or would conclude that local evidence at a dig is indication of a Flood worldwide. But it is the accumulation of all the evidence that should provide indication of the meaning of all the local discontinuities. Radiocarbon is our initial evidence, from which this study proceeds.

Biblical history, whether from the text of the Hebrew or the Greek, would preclude the search for Adam outside the limits of 5,500 B.C. to 3,700 B.C. (calendar years). And the evidence for the Flood would be from 2,300 to 1,500 years more recent in time. That is, no matter how one looks at the text of whatever version of the Bible, Creation Week and the Flood are within the Recent, geologically speaking. (For those who conceive Holy Writ to be in error in whatever version they use, there is no way to adequately delimit the area of search.) Radiocarbon studies sufficiently parallel this period of time to be a valuable tool. That is, there is no scientific basis for denying the broad implications of Antiquity, Vol xlix, No 196 (December 1975), "A Calibration Curve for Radiocarbon Dates" by R. Malcolm Clark, and the bibliography contained therewith. To search for Adam and the Flood in the Pleistocene or earlier is to lay aside the text of the Bible and/or the evidence of radiocarbon dating. If the text of the Bible on time is not a valid source, the text of the Bible on the event or events is also not useable as a sufficiently reliable source. And any further study would be a pursuit of myths and speculations.

The present study is based on the archaeological and historical parallels that are demonstrated from digs. That is, it is not imperative that any reconstruction of history be used such as the Compendium. What is imperative is that all records of the

civilizations which claim to follow the Flood be properly associated in archaeological context. Once the evidence of history and archaeology are properly correlated, then one can compare that evidence with the Bible and C14. Thus it may turn out that the Compendium and Ages in Chaos and Courville's work on the Exodus are better the data than the traditional time frameworks And it should also be possible to evaluate the accuracy of the Hebrew versus the Greek texts of the O. T. Radiocarbon dates that are consistently too young are much less logical to explain than dates that are older than expected.

I recommend consideration of the following volumes:

Proceedings of the Prehistoric Society, Vol xxxvi (Dec. 19 The Tree-Ring Calibration of Radiocarbon: An Archaeological Evaluation, by Colin Renfrew, page 280 ff.

The Foreign Relations of Palestine during the Early Bronze Age by J.B. Hennessy, Colt Archaeological Institute, 1967.

Near Eastern, Mediterranean and European Chronology by Homer L. Thomas; Vol xvii: Charts of Studies in Mediterranean Archaeology

Near Eastern Archaeology in the Twentieth Century edited by James A. Sanders, 1970, particularly Palestine in the Early Bronze Age by Paul W. Lapp (p. 101ff) and The "Middl Bronze I" Period in Syria and Palestine by William G. Dever (p. 132ff).

The Gods and Goddesses of Old Europe by Marija Gimbutas (1

Though some of the terms may not be generally known to each of you, the following summary can be used as a guide. In the Middl East the pre-~~Flood~~ world had reached the Chalcolithic stage. In Palestine the end of the Chalcolithic Ghassulien marks the end of the pre-~~Flood~~ world (not the time of Abraham as in the Compendium). The ~~post-Flood~~ world begins with Kenyon's Proto-Urban or Wright's Early Bronze I. In Syria, the ~~pre-Flood~~ world ends with Amq (or Amuq) F. The Post-Flood world begins with Amq F. In Egypt the Post-Flood world begins with Early Gerzean. In Mesopotamia the pre-Flood world ends with Ubaid 4 in the south and Late Northern Ubaid in the North. The ~~post-Flood~~ world begins with Early Uruk in the south and Early Gawra in the nor

Human settlements in these areas are continuous beginning with the Early Bronze and show marked population growth. Since the term Early Bronze has been controversial in Palestinian archaeology I have designated that it includes what DeVaux terms Late Chalcolithic and Kenyon Proto-Urban, but which Wright properly and consistently calls Early Bronze I. In radiocarbon years we are somewhere in the vicinity of the end of the 4th millenium B.C. (unadjusted radiocarbon years). A later paper will examine why some woods of later dynasties of the Old Kingdom in Egypt (~~after the Flood~~) fall prior to 3,000 B.C. and why some dates of the First Dynasty occur as late as the close of the 3rd millennium B.C. But this is not a matter that can detain us for the moment -- it will be important in determinin whether a reconstruction of history is required.

The correct dates B.C. for the Early, Middle and Late Bronze and Iron Ages will become clear when C-14 dates and Biblical history are examined in detail. What is important for the present is that a break in history, to be correlated with the Flood, does occur in connection with the rise of the full Bronze Age in the Middle East. Parallels must be examined carefully for Europe and other areas of the world where a retardation in culture is to be expected, owing to distance from the main areas of human population.

It is important to read the literature carefully because some earlier works contain errors of information owing to poor excavation techniques. Many interpretive works also tend to bridge gaps in culture despite the fact of the gaps being present. The most important article in this connection is that of Paul Lapp cited above. In this article we learn how often excavators who cannot account for a local problem resort to local solutions without realizing how many other areas have similar difficulties at the same time period.

The indication that eastern Anatolia was the center for the spread of the Bronze (Copper) Age at this period is evident from the works of the Puccellatis in their reports appearing in the Journal of Near Eastern Studies, especially Vol xxxiii, No 1, p. 44ff. It corroborates the information given by Lapp in his essay.

The nature of the Pre-Adamic Flood, on the basis of this evidence, is quite different from what one might have expected. The problem is that we have been thinking in geological terms, not archaeological. And we have not given due consideration to the nature of deposits being laid each year at annual floodings of river valleys. These floodings, no matter how screaming the headline in newspapers, do not leave the expected geologic remains that most creationists entertain. In other words, the very fact of the Flood and of the devastation of Genesis 1:2 appearing in the Bible should have been a warning that men would not be able to determine the nature or the cause of evidence they find without consulting Biblical evidence. The evidence is and will continue to be insufficient to "prove" the Bible, but it will be sufficient to indicate where, in time and space, the problem lies.

The next step is to determine where the probable area of the devastation of Genesis 1:2 may appropriately be sought. A careful evaluation of all of Homer Thomas' charts would indicate that it is most likely to be found in the time range of the beginning of the 6th millennium B.C. (unadjusted for bristlecone pine dates). That is, Marija Gimbutas' Old Europe is the Europe of the pre-Flood world (her dates are adjusted for bristlecone pine). And therefore human civilization may appropriately begin with the Neolithic and the presence of agriculture and pottery.

Respectfully submitted,

Herman L. Hoeh

10606 Vanora Drive
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January 15, 1976

Messrs. Herrmann, Patton, Lain and others in archaeology and geology,

Yesterday I sent to several, for our mutual study, a one-page letter regarding the relationship of France to the studies on the Flood and Genesis 1. Today I have decided to send, for those not at Pasadena, a xerox of special pages from France Before the Romans. These are so well done that I felt it necessary to make them available to the three whose names appear above personally addressed -- but in no way to slight any others of you who can have use of my own copy here in Pasadena!

Having evaluated the material from France and Mesopotamia and Palestine, I find we ought to give special consideration to a fact brought out by Christopher Patton to me some time ago. He suggested that a major break in Palestine occurs at the close of Pre-pottery Neolithic A in Jericho and related areas. At that time he thought this might be that of the Flood. From historic reasons pertaining to Egypt, from radiocarbon dating and whatever Biblical chronology from the texts be used, there is no way of placing the Flood other than in the period immediately prior to 3,000 B.C. in calendar years as men mark time on the basis of history and radiocarbon (but uncorrected for bristlecone pine). That is, at the close of the Late Chalcolithic by Wright's definition. But it is to be noted that Pre-pottery Jericho Neolithic A is at the close of a mesolithic continuum whose roots take us back to the late Pleistocene. The break between Jericho's Pre-pottery Neolithic A and B is very marked. Kathleen Kenyon's Archaeology in the Holy Land, pp. 47-48 makes this clear, even commenting on major erosion. This break at Jericho is parallel with that at France mentioned in the previous letter as occuring at the close of the Boreal and just prior to the Atlantic in Western Europe. This break is therefore of significance for our study of Genesis 1:2 and creation week.

Mesopotamia contains a continuum from this same period foreward from Upper Jarmo and Hassuna, through Samarra/Halaf to and including Ubaid 4 and Late Northern Ubaid. This parallels the sequence in Syria labeled Amuq (Amq) A through E. Human history beginning with Adam should be sought therefore in the post-Natufian of Palestine, beginning with the Atlantic climatic period, the first efficient agriculture. In Egypt this corresponds with Fayum A, Badarian and Amratian.

At this point it would be advisable to call attention again to Chronologies in Old World Archaeology, edited by Robert W. Ehrich, 1965. Though in factual material out-of-date (its C^{14} material is solidly useful), it is kept up to date by annual summaries by Edith Porada, etc. in the journal of the Archaeological Institute of America: American Journal of Archaeology.

I have been asked to be in England for the last week and a half of January. So on-going material will be sent by John Hopkinson.

Harold W. Clark

[illegible] Vanora Drive
[illegible], CA. 91040
January 16, 1976

Dear Messrs. [illegible] archaeology
[illegible],

This letter is to draw attention to British Prehistory-A New Outline edited by Colin Renfrew, 1974. I met Professor Renfrew last year when he spoke in Southern California. The pages of major concern for our present studies begin with the Mesolithic Period: early postglacial environments (p. 77 of Mellars' The Paleolithic and Mesolithic) and continue to and through the section Material Culture:later neolithic (p. 111ff of Smiths' Neolithic). This important paperback is available both in the USA and Britain.

From the evidence on page 81 we can conclude that the period of the family of Adam is paralleled in Britain with the 'later' mesolithic, which is viewed by the author as beginning in the middle of the boreal climatic phase, probably around 6,500 bc. Mellars, in his chapter, places the later Boreal as extending to 5,500 bc. This [illegible] is slightly later than the French scholars propose. In any case we are dealing with the later Boreal as a time of significant changes in characteristic vegetation that lead to the Atlantic period dated in this work as beginning 5,500. This period of the late Boreal and Atlantic transition is also the time that Britain became an island. The later Mesolithic continues through the 4th millennium B.C. So there would seem to be general agreement as to the continuity of culture throughout this period. As in France there is an early Neolithic that makes its appearance fairly early in the 4th millennium, paralleling the late Mesolithic. The end of the Atlantic period is marked by sudden falling in frequency of elm pollen, accompanied by rise in weed pollen characteristic of cultivation (pp.79-80). On page 88 Mellars expresses his inability to conclude whether the later Mesolithic is the result of population movement into Britain. In all these cases we must recognize the limitation of information provided by the data. Too often, [illegible] previous conclusions that are derived from the model used, not from the data extant. That there is major similarity with the continental mainland of Europe during the later Mesolithic is acknowledged. But the cause may be viewed as either assertion of methodology or actual movement of population. The biblical implication would require the latter.

Excellent tables for radiocarbon dating are at the ends of each chapter in the book. Page 107 discusses the transformation of the landscape at the end of the Atlantic and the expansion of population and forest clearance. This parallels the reference to weed pollen above. Throughout the book there is indication that terminology for the British Neolithic is in transition. It would be best at present to consider that the later Neolithic begins clearly after the Atlantic ends -- that is, in the post-Flood period. There is no clear indication whether there is a middle neolithic or earlier [illegible]. The radiocarbon dates for the Scottish tombs indicate that almost everyone is to be considered post-Flood, [illegible] comparative cultural evidence that [illegible]

[illegible]

10[illegible] Vanora Drive
Cupland, CA 91040 (USA)
February 9, 1976

Dear Messrs Herrmann, Patton and those interested in archaeology and geology:

I have returned from abroad and am happy to report to you that Professor Mazar is well again and at work. I was able to be in Israel as guest of the Pattons and we discussed at some length his growing awareness of the relationship of Iron Age finds with periods usually separately designated -- Persian and Hellenistic.

In continuing this series of letters, I should again draw your attention to a number of volumes which have proved most helpful in elucidating the material under study. The first is the University of Chicago Oriental Institute Publications volume LXI titled Excavations in the Plain of Antioch. part I, The Earlier Assemblages / Phases A-J. The authors are Robert J and Linda S. Braidwood. The cost is at least $100 in the USA for the text and plates. I will suggest for reading pages 2 (map), 20-21, 26-27, 100-102, 117, 175,183,204, 226, and 500-516. The value of this work is that it illustrated material in the border area of Turkey and much of adjoining Syria.

By way of recall. We have noted that Proto-Urban and Early Bronz may be assigned the time following the Flood to the conquest of Palestine under Joshua. Please note the parallels in J. B. Hennessy, The Foreign Relations of Palestine during the Early Bronze Age, between Egypt's Dynasty 1 and Canaan. (The association of Joshua with the close of Early Bronze is my conclusion, not that of Hennessy.) From Braidwood and Braidwood we learn that Amuq (Amq) in Syria may be divided as follows. Phases A-E precede Proto-Urban. Phases F-J parallel Proto-Urban and the Bronze Age (in its earlier phases). Therefore we should expect to find the Flood break between E and F in the Amuq Plain in Syria. The following quotations from Braidwood and Braidwood should prove significant: "5. In no place in our 'Amuq stratification is Phase F found immediately above Phase E, but Phase E ceramic elements are part of the First Mixed Range content on Judaidah." (p. 26) "6. There are a few profiles in pottery which suggest a typological continuation between our Phases E and F.... Later manifestations of Phase E and earlier manifestations of Phase F may yet be found, but we doubt that a complete assemblage will ever appear which will need to be intercalated between the two." (pp. 26-27.)

The full impact of these two statements becomes apparent when we turn to a profile of the dig at Judaidah in the Amq. Phases C, D and E are eroded and mixed and much of the summit of the tell was washed away (p. 101). Of course, the erosion itself does not prove the Flood. What it does indicate is that the site, near a creek, was not eroded between A and E, nor between F and J. But only at that point where we would and should look for the Flood. The water action was of sufficient action to create a First Mixed Horizon of C-E, that is, material washed together after E had come into existence. A second mixed phase at the top of the tell is the result of three thousand years of erosion.

In [illegible] page 17 we read: "In none of our operations in [illegible] did we find material representing a transition from Phase E to Phase F. On page 17 is: "We are not sure of the very end of Phase E or of the character of transition (if any) from Phase E to Phase F. Although pieces of Ubaid-like painted pottery were isolated in the first mixed Hunge sherd samplings, we nowhere had Phase F materials conformably above Phase E materials. The uppermost layers of Kurdu represent Phase E; the mound was never occupied again." See likewise the footnote ending on page 183. On page 204: "Thus, in spite of the relatively large bulk of the Phase E sherd sampling, this section must end on the note that all is far from being known of the phase, especially its end (see p. 181, n. 4). If there is any evidence in hand which refers to the time of contact between Phase F and Phase E, we are not conscious of it."

On page 226: "Phase F is also represented by the lowermost materials obtained at Chatal Hüyük in the narrow base cut in W 16, at the very edge of the mound... They lay directly above virgin soil ..." On page 512 is an interesting section titled "The Phases E-F Contact Zone." The masterful achievement of the Braidwoods and Hennessy's summation of Kenyon's Jericho excavations fully establish the parallels in archaeological horizons between Egypt and Palestine, Syria and Mesopotamia, as mentioned in my previous letters. This information corrects my previous error of placing the Ghassulian shortly after the Flood. It is immediately prior. It also corrects a mistake in Mesopotamia, where I previously began the post-Flood sequence with Ubaid 4 (also known as Ubaid II). This phase is immediately pre-Flood and the first post-Flood phase is Southern Mesopotamia is Early Uruk or the Warkan Period. This is Woolley's Ur Ubaid III at the excavations at Ur. This brings to our attention another very helpful and inexpensive volume titled The Old World / Early Man to the Development of Agriculture under the editorial supervision of Robert Stigler. It's published by Thames and Hudson in 1974. Chapter 3 "The Beginning of Food Production in the Near East" by Perkins and Daly is very helpful on locating the beginning of a true self-sufficient food producing economy -- but that is not the theme of this letter. It is chapter 4 that I want to focus attention: "The Later Neolithic in the Near East and the Rise of Civilization" by Stigler. Page 115 sums up the end of the Ubaid world in Sumer with the following technological innovations: "the casting of copper, especially in northern Mesopotamia; the use of fired bricks in construction; the simple sailboats for river transport, to name a few." Though the technology remained, as witnessed by Babel, Stigler points out: "although we have almost no details concerning immediately post-Ubaidian times in the south, it is only reasonable to assume a continuing intensificati in the pace of development." The next paragraph continues: "It would serve little to detail the arguments-in-a-vacuum, the terminological variations, and chronological uncertainties of this period in southern Mesopotamia beyond a few words." Why so little can be said is summed up on page 116: "This leaves us with almost nothing to say at present concerning Warka, since its existence has been detected only through a new pottery style presen in the lower levels of two or three sites. This pottery retains a few features of the Ubaidian, but since the most typical forms do not show the painted designs... an 'Uruk invasion' has been invoked." The Warka Period is the seventy first post-Flood phase.

creation

The same picture of the Warkan culture phase may be seen in The Comparative Archaeology of early Mesopotamia ("Studies in Ancient Oriental Civilization," No.) by Joan L. Perkins. Published by the University of Chicago Press. For years I read over the period in question because so little was said about it. It has now become clear why so little is said about it. It is in the late Uruk period that we find the first beginnings of writing in the languages of Mesopotamia.

A supplementary volume that gathers together a great many facts with C-14 dates is Neolithic Cultures of Western Asia by Purushottam Singh. It was published in 1974 by Seminar Press, New York.

The following work is extremely valuable in fitting in the evidence from the steppes of Russia with what we have thusfar examined. Russia by Tadeusz Sulimirski. Published in 1970 [illegible] Publishers Ltd., 5 Royal Opera Arcade, Pall Mall [illegible], S.W. , and by Humanities Press Inc, 303 Park Ave So[illegible] New York, N.Y. 10010. It appears that the Mesolithic in the vast area of Russia is divided into an early pre-Adamic phase related to the old Upper Paleolithic and a younger phase related to the succeeding Neolithic. This younger phase is the spread of the Tardenois industry of Europe west of Russia. It appears as the Kunda in the East Baltic, as the Tardenoisian on the lower Don River, etc. (p. 406). Sulimirski describes the vas area of Russia as passing from the Late Mesolithic through the Early Neolithic to the point, as measured by C-14, where we have a parallel with the Near East equivalent to the Flood. That is Sulimirski describes the Early Neolithic as ending in the last half of the fourth millennium B.C. He then places the succeeding Middle Neolithic and Late Neolithic and Bronze ages in the end of the fourth millennium, the third millennium and the second The Early Neolithic ends with the Tripolyan B-1 (= Cucuteni A). This is equivalent to Surskii I, Kyul-Tepe I, Late Kunda, etc.

The succeeding phases which parallel Warkan, Proto-Urban, and Amuq F (in Sumer, Canaan and Syria) are, in Russia, Tripolyan B-2, Surskii II, Kura-Araxes, the Dniener-Elbe Assemblage, Valdai, Kelteminar, and in Romania Cucuteni AB. The post-Flood Tripolyan B-2 is described on page 72. It should be noted that, although Russia as a whole is chronologically divided by Sulimirski into Late Mesolithic and Early Neolithic and Middle and Late Neolithic, the further north one travels geographically the more retarded the culture. That is, Russia's Late Mesolithic is already pre-pottery and pottery Neolithic in the Near East. And Russia's Early Neolithic is already Chalcolithic in the Near East Equally, the "Arctic Paleolithic" is equivalent to Late Mesolithic further south in Russia. And the Early Neolithic Surskii I and Surskii II are in fact equivalent to Early and Middle Neolithic elsewhere. So on page 80 we read: Surskii Island on the Dnieper has "two Neolithic periods that mark two consecutive stages in the development of the local Early Neolithic, the remains of which have been called the 'Surskii' culture. The later of these, the Surskii II period, seems to have been contemporary with our Middle Neolithic (Table 3). Now what separated Surskii I from Surskii II? "Often the remains had been flooded, and so were covered by alluvial deposits. At Surskii Island, the Early Neolithic layer was overlaid by accumulations of Paludina shells and a sterile layer six to eight inches thick; above this layer—

were remains of the next period, the Middle Neolithic. The flooding was evidently concurrent with similar floods recorded in the valley of the Dniester and the Southern Bug. According to some authorities, the level of the Dnieper rose at that time about thirteen feet above the level of the Early Neolithic sites, and this was obviously the cause of their abandonment" (p. 82). Once again we have prominent evidence of flooding in contrast to faint traces of sand at other occasions. At the time where we have been looking and finding evidence of the Flood we have a significant inundation here. A minimum of 13' rise would be necessary to cove the sites in southern Russia in the valleys. But how much higher the waters rose cannot by this evidence be determined. Nor can we conclude that a more 13' rise would leave a deposit of six to eight inches. That too is a guess.

A parallel discussion of this same time and area is found in Indo-European and Indo-Europeans / Papers presented at the Third Indo-European Conference at the University of Pennsylvania. Published 1970. The chapter of significance is by Marija Gimbutas: "Proto-Indo-European Culture: The Kurgan Culture during the Fifth, Fourth, and Third Millennia B.C." Her Kurgan I parallels Tripolyan A and B-1 (Pre-Cucuteni III and Cucuteni A). Her Kurgan II parallels Tripolyan B-2 and Cucuteni AB. Kurgan III in the steppe of Russia parallels Tripolyan C-1 and Cucuteni B. (Her dates are already calibrated by bristlecone pine evidence.)

While in Britain on this last trip I visited the British Museum Thracian exhibit, on display from Bulgaria. The Trustees of the British Museum have published Thracian Treasures from Bulgaria. A Special Exhibition Held at the British Museum January-March 1976. A whole section was devoted to the Varna treasures -- the pre-Thracian period of the fourth millennium B.C. in radiocarbon years (as are all references in this letter). The brochure indicates that the culture belonged to "an unknown and mysterious people." "About the end of the fourth millennium this culture reached its zenith." "At a later date, about 2800 BC, far-reaching changes took place throughout the Bronze Age, changes which contributed to the disappearance of all traces of this culture and which were connected with a strongly centralized rule.

"The decline which followed does not allow us to present any considerable examples of works of the Early and Middle Bronze Age. Here the Bronze Age is restricted to the Late Bronze Age, which already belongs to the Thracian culture." (p. 25.)

Here in Thrace the disappearance of one culture in entirety -- the pre-Flood -- is followed by a slow period of expansion in the later post-Flood world. The authors do not understand the causes, but it would be very difficult to have a parallel here in the same time frame as in the Near East and it not be the Flood.

In these letters I am attempting to give sufficient guidelines that any of you could read in the literature and add to the quantity of information. You would not even need some of the volumes I refer to, and you may choose instead to read excavation reports. I am assuming that some of the terminology is not clear without further references, but Ehrich's Chronologies in Old World Archaeology should provide clues as to where to look for further information if you cannot obtain each of the volumes I am using.

Harold S. Gill

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February 11, 1976

Dear Messrs. Patton, Herrmann and others interested in archaeology and geology,

Two evenings ago Mr. Macdonald brought to my wife's attention the difficulty in following up archaeological terms when one has been more often than not thinking in geological terms. I would like to address my experience in this matter.

In 1966 I had the opportunity to be in Praha, Czechoslovakia for the International Conference on Pre-historic and Protohistoric Sciences. Quite an opportunity came to a number of us who chose to visit a pre-historic site -- Bylany, near Kutná Hora, Bohemia. The site is located on level ground with no significant mountains around. The Czechs had uncovered, through local farming operations, a site covered by about a foot of soil (All figures are from memory.) One had to step down from the edge of the once-farmed area onto the excavated floor area. The floor area was of more than one depth since at least three phases of culture were uncovered. The area was carefully excavated, visible postholes were filled with plaster or cement forms after the woodstained earth had been removed. The area was later recovered with soil to preserve the site from erosion. For the historians who visited the site, workmen uncovered the area again and removed the plaster and/or cement forms so that we could see the layout and examine the negative evidence.

At the time in 1966 I did not have a clear picture of what was involved. But now we may conclude the following. The culture is a sequence of Linear Pottery followed by Chalcolithic Lengyel As late as 1964 scholars were not sure of the time frame of Central European cultures with respect to the Near East and usually assigned European cultures dates at least 1,000 years later than their Near Eastern counterparts. It is evident from radiocarbon dates throughout Europe and at Bylany (The Gods and Goddesses of Old Europe by Marija Gimbutas, p. 245) that the Linear and Lengyel pottery cultures are both to be assigned C-14 dates in the fifth and early fourth millennia B.C. That is, pre Flood, on the basis of all evidence so far examined in this seri of letters.

The Flood deposits are therefore to be associated with the soil cover overlying Bylany, and over which -- through the centuries -- further soil development has taken place. Soil studies so recent in time perspective are seldom of significance to geologists, who tend to strip away soils (figuratively) before developing their stratigraphic maps of the hard features of the earth's surface. Therefore geologists are normally not in a position even to evaluate Flood deposits. This is equally true of soils that underlie sites like Bylany and represent the surface of the land at the beginning of the Adamic world. Soil profiles are found throughout Mesopotamia, the steppes of Russia and in Egypt which have similar relationships to the Biblically recorded ever And similarly, archaeologists are seldom concerned with soil profiles, or have had no training in soil studies at all. It is of course understood that at the foot of mountain chains alluvial and not merely soil profiles represent Gen. 1:2 and the Flood.

arrived at the same time, too. This, of course, provides a date for the Neolithic Revolution arriving in southern Greece." I am giving these dates, and others in previous letters, so that any of you can follow up studies in whatever areas you have greatest interest and volumes available -- and so that you are aware of trends elsewhere during parallel time periods. Franchthi cave in the northern headland of the Gulf of Argolis is very helpful in pinpointing the arrival of domesticates in the Mediterranean where there were none previously. This period is not long after the introduction of efficient agriculture in nearby regions. By contrast, the arrival of certain domesticates in the New World did not occur in the Tehuacán valley of Mexico until after a break that I would associate with the depopulation by the Flood on the basis of accumulating evidence together with the Biblical record. —pre-Adamic

David Wilson's book quoted here is a general work for the lay audience. Barbara Bender's work is the for alert student. I shall now quote significant comments from here and there throughout her book. "In southern Turkmenia there seems to be a rather abrupt transition to food-production associated with the Djeitun culture (Masson and Sarianidi 1972, 53). There are no carbon-14 dates for the early Djeitun. A late phase has a date of 5050± 110 b.c. Two-row barley (Hordeum distichum) and wheat (including club wheat, Triticum compactum) were grown; sheep and goat and, in the late phase, cattle were herded.

"The Djeitun culture has much in common with the Jarmoan culture found further to the west in the Zagros and the Tauros region (p. 109). (Masson and Sarianidi's book is Central Asia/Turkmenia before the Achaemenids.) Previously I referred to the Jarmoan culture as the apparent beginning of a sequence that lasts till the break late in the 4th millennium b.c. An excellent summary of C^{14} dates is given on page 113 for the Mousterian through the Natufian culture sequence, which resolves a lot of looking in the journal Radiocarbon. A second table, p. 132, covers C^{14} dates beginning with Jericho and Jarmo through Çatal Hüyük East in Anatolia.

and contemporary

In Pre-Pottery Neolithic B/cultures "some communities grew crops, some herded, some did both and some did neither." (p. 146.) Compare with the story of Abel and Cain at a very early period in human experience.

With respect to Peru's cultural sequence: "The dates are fairly arbitrary for there are many odd discrepancies in the Peruvian carbon-14 sequence (fig. 32)." A footnote on this same page 201 says: "Rowe (1965) has noted that the two main processing laboratories come up fairly consistently with an 'earlier' and a 'late' set of dates." I will draw attention that this problem exists at Jarmo as well as in Egyptian material. Rather than a real problem -- as it is for those who state from carbon-14 dates in their reasoning, it may instead be a solution to the question of whether vegetable life was created only with or without apparent carbon-14 age or both. Ms Bender's book is also very helpful in defining time periods which have not been properly excavated due to climate or political or financial reasons. There are sequential breaks that are real and breaks that are due to mere lack of expended effort, which are not worldwide in nature.

If any of you are so tied to other duties as not to be able to use any of this material for thought, please let John Hopkinson know

10506 Valora Drive
Sunland, Ca. 91040
February 13-- Friday!-- 1976

Messrs. Berman, Patton and others interested in archeology and geology,

Again I should like to draw your attention to one or more books and articles. Prehistoric Chronology and Radiocarbon Dating in India, by [illegible] and Agrawal and Sharma (number, 1974, is published by Munshiram Manoharlal Publishers Pvt. Ltd., 4415 Nai Sarak, New Delhi 110006. The orientation is far more Western in basic and presentation than one might expect from India. All dates are presented in the 5730 half-life of C-14.

An interesting section is devoted to dates (C-14) of the older alluvium of the Peninsular Rivers, beginning page 41. It is the period of the Indian Late Pleistocene Age (Middle Paleolithic), but includes material that on C-14 evidence involves the very close of the Pleistocene (used in its restricted meaning). The Indian "Late Stone Age" is equivalent to the Western microlithic industries commonly designated as Mesolithic. This book is very helpful in giving C-14 dates for cultures that are much more retarded than in the West and that go by different time/name frames. Thus the Late Stone Age materials describe tools and cultures as recent as 1000 B.C. radiocarbon years.

At Langhnaj in Gujarat are sand dunes occupied by mesolithic folk (Late Stone Age). These sand dunes developed soil cover. This soil was again covered by sand on which has developed modern soil, in which artifacts dated to pre-2000 B.C. radiocarbon years are associated. Here again is an indication of two significant events -- called "climatic fluctuations" -- involving the same time frame as in the West. (See pp. 56-58.)

Page 63 gives good comparative material from Afghanistan with C-14 dates. The Non-ceramic Neolithic, Ceramic Neolithic and Chalcolithic Neolithic are all dated early by C-14. The succeeding Chalcolithic in Afghanistan (at Mundigak, for example) has dates fully corresponding with the Proto-Urban in the region of Syria/Palestine. That is, beginning in the 32nd century B.C. radiocarbon years.

Pages 66-67 provide a significant list of Neolithic sites in India. All fall in the third, second and first millennia B.C. radiocarbon years. Only in West Pakistan is the Neolithic dated to the middle third of the fourth millennium. The Chalcolithic Pre-Harappan and Harappan sites are thoroughly covered by C-14 dates on pp68-89. The Harappan is India's most famous culture, paralleling the period of Sargon I, Hammurapi and Isin/Larsa in Mesopotamia.

Appendix I (pages 159-165) is an unusual and helpful summary titled "On the Calibration of C[illegible] Dates." The authors (together with I.E.S. Edwards, who spoke to me personally in London 1969) concur that corrected C-14 dates are "too old to be justified on the basis of historical chronology. In fact, the corrected date for the end of Mohenjodaro is earlier than the historically dated beginning.. In the near future we will examine this matter, but first it has been important to establish the proper time frame contemporary cultures worldwide.

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February 12, 1976

Dear Messrs Heppenstall and Patton and others interested in archaeology and prehistory,

Again I should like to draw your attention to a paperback on the theme of early stages of history and archaeology. It is entitled [illegible] and is published by John Baker Ltd., 4,5, Bedford Square, London WC1B 3DA. Copyright is 1975.

Barbara Bender's book is full of up-to-date information on the relationship of radiocarbon dates and the development of agriculture in Meso-America, Peru, Southwest Asia, with lesser appendices on Africa, India, China, Southeast Asia and tropical South and Central American lowlands. Attention should be drawn to the footnote on page 171 where too-recent carbon-14 dates are excluded from consideration in the tables. I will try to cover as many of these problem areas in as timely as possible at a later time. For the present I want to draw attention to the survey done by MacNeish (Richard S.), and discussed by Bender beginning page 170. Correspondence with Europe and the Near East, in broad outline, is the Aggregate phase of hunting and gathering between 10,000 to c. 6700 B.C. "Changes in the pattern begin to be noticeable in the El Riego phase, 6700 to 5000 b.c." (p. 173). "In the next phase, the Coxcatlan 5000 to 3400 b.c. the evidence for plant cultivation is less ambiguous" (p. 177). This sequence of cultural phases is derived from R.S. MacNeish's The Prehistory of the Tehuacán Valley, Vol. "By the Abejas phase, between 3400 and [illegible] b.c., a quarter of the food supply is cultivated."(p. 178.) On page 183 Bender writes: "Just as at Tehuacán, and perhaps for a similar, as yet unknown, reason, information peters out between 3500 and 1400 b.c. It picks up in the Tierras Largas phase (1400-1150 b.c.) and the assemblage including pottery is very similar to the Tehuacán Ajalpan material. This last quote pertains to the Oaxaca valley, which is also in Puebla state.

For those who do not have MacNeish's original work, this summary may not be clear as to meaning. So let me refer to The New Archaeology by David Wilson, published 1975 by Alfred A. Knopf. In describing the original excavation, Wilson writes: "Soon they went down to the period known as Classic in Central American archaeology and below that they found remains of the period called Formative. Then came a sterile layer that had not been inhabited by anyone, and below again they came to dirt that was obviously a very thick layer left by people who had not even been able to make pottery (a pre-ceramic culture). " (p. 172) This break is between the Coxcotlan and the Abejas phases. Here in the New World, as in the Old, there is a break assigned to the last third of the 4th millennium b.c., radiocarbon years. As we keep journeying around the world we will be accumulating further evidence that this is not a period in which only [illegible] disruption from a local catastrophe. The first [illegible] animals in the Tehuacan Valley only appear about 3000 b.c. ..." (p. [illegible]).

Turning to another area of the world, Wilson says on page 211: "Evidentially Pre-[illegible] also provides evidence of a sudden change of culture [illegible] with the sudden arrival of domesticated [illegible] wheat and barley, which [illegible] Pottery

with a certain amount of isolation between them.... over most of West Mediterranean Europe the economic unit was still an single crouched burial. This must mean that the group was not yet more important than the individual, or the simple family." Page 112, beginning a section on The Later Fifth Millennium b.c.: "A crucial difference occurs from the earlier isolated large cultures of the late fourth millennium b.c. By the late third millennium b.c. West Mediterranean Europe is seen with highly individualistic local cultures, subject to rapid change, which are none the less linked cross-culturally by very strong bonds based on similarity of burial practice and probably much more intensive trade and exchange."

The breakdown of unity in early culture (Chasséen) in Southern France is described on pages 120-121. A fact that continued till Roman times and since.

Page 151: "The great variety of material culture in the third millennium b.c. contrasts markedly with occupation levels described from preceding periods. Although there is considerable regional and local diversity, a general increase in the types of objects produced by each society can be seen." Same page, new paragraph: "The individual is now absorbed into the group, and buried according to his residential or kinship affiliation. More grave goods are offered than ever before..."

PP. 154-155: "A tentative model for economic strategies is West Mediterranean Europe over the millennia in question might be that from a primarily land-based economy in the Mesolithic there was a shift to a primarily sea-based economy in the sixth and fifth millennia. The economy swung back to land orientation in the fourth millennium. From circa 3000 to circa 2000 b.c., although subsistence was land-based, much more extensive exchanges of goods and ideas occurred, which must have been based on sea communications. (Beginning p.155:)"The model accounts for the phenomena of several broad stylistic regions, separated by geographical barriers, in the Mesolithic, and for the similarities of pottery and other artifact types over coastal zones throughout West Mediterranean Europe during the Early Neolithic.
"In the fourth millennium b.c. there is a more inland orientation, so that again cultural differences occur either side of geographical barriers such as the Pyrenees and the Alps.... Finally, in the third millennium, considerable variety in material culture occurs between local areas...." We might give comment to this general conclusion, which I have typed at length. The population growth in the fourth millennium with inward land orientation is the probably close of the pre-Adamic flood period. The resurgence of sea communication, divergency and developments in burials is the succeeding age. Why some of these dates lie seven centuries or so earlier than the indications of the Massoretic text must be examined separately. First we must see what archaeology has to say to us in terms of breaks and the broad picture. Then we need to examine what radiocarbon measures (dates in all these letters are essentially C-14 dates), the problem of "earlier" and "later" sets of dates and of unreported dates ("much too late and obviously contaminated"), two of which were rescued from the British Museum sequence on Egypt with their sequence numbers.

Thanks for reading through these criptic letters which are really meant to ask you to do much further reading. Hoping to see the Pattons in March and the Herrmanns in April.

[illegible] Venera Drive
Oakland, California 94610
February 10, 1978

Dear Mr. Herrmann, the Pattons and others interested in archaeology and geology,

As two unrelated assignments are now demanding priority, I may make this the last letter for the next week or two.

On my trip to England I obtained a very inexpensive and most helpful paperback: Early Farmers of West Mediterranean Europe by Patricia Phillips, lecturer in prehistory and archaeology at the University of Sheffield. It is published by Hutchinson and Co. Ltd., 3 Fitzroy Square, London W 1, and copyrighted in 1975. The outline of the book is clear from the Contents: Pre-farming Communities, The First Farmers, The Fourth Millennium b.c., The Third Millennium b.c., Conclusion. Though it would be useful to xerox several pages, it is better to obtain the volume which is £ 2.95 in the UK only. The Bibliography is excellent, listing along with major works, the relevant issues of Radiocarbon. The only lack is that of a chart coordinating cultures. But these can be found elsewhere. This volume, in fact, demonstrates in fine detail the accuracy, or inaccuracy, of many of the generalized charts. It would be beneficial to inset many of her suggestions in margins of charts from other volumes. I will note below some of the piquant ideas she includes.

Pages 22-23 gives a succinct summary of the Boreal/Atlantic boundary with radiocarbon evidence for various parts of Europe. This section should be read in connection with Lepenski Vir. I will delay an further comment on C-14 till later. Pp. 30-31 point out the gap in succession in Northern Italy between culture after 6000 b.c. radiocarbon years and the Epigravettian industries prior to 8000 b.c. Page 75: "The fourth millennium societies seem to have been open to trade and cross-cultural influences and it is difficult to detect warlike activities." War, as distinct from crime, is characteristic of the nation-state. P. 86 points out the Chasséen sites of an earlier date west of the Rhône and the later dates east of the Rhône, ca. 3000 b.c. New evidence from Sardinia is presented on page 102, indicating the Ozieri Ighinu and succeeding cultures probably began "about the late fourth millennium." P. 104: "At the end of the fourth millennium b.c. a number of technological and perhaps religious events were taking place in Southern Italy."

(p. 114)

The radiocarbon generalized date of 3000 b.c. is summarized for Spain: "It seems quite possible that the Cardial culture in the Barcelona region lasted until approximately 3000 b.c., producing toward the end both decorated and plain pottery. The pit-grave culture probably runs from circa 3000 to past 2000 b.c. The people who buried their dead in pit-graves lived in open-air villages..." P. 115: "Partly contemporary with the agriculturalists of the Catalonia pit-grave culture, a very homogenous cultural group extends from the Pyrenees to North Italy. In Southern France the Chasséen culture continues its development." That is, east of the Rhône, being the new area of development. See also p. 117 for Southern France and Liguria.

[illegible] "On the eve of the third millennium b.c. West Mediterra[illegible]

10606 Vanora Drive
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February 25, 1976

Messrs. Herrmann, Patton and others interested in archaeology and geology,

Thank you for your recent responses. I want to make this letter short and cover radioactive carbon dating. But first, let me mention, from a letter by Christopher Patton, that Ruth Amiran found a sterile layer at her dig at Arad between the Beersheba Chalcolithic and the Early Bronze strata. This is in the form o a personal communication. = pre-Adamic flood

David Wilson's book The New Archaeology says on p. 112, "The corrections applied by the bristlecone pine chronology agreed very precisely with the corrections demanded by the Egyptologists." This statement is not valid, however interesting the rest of his book may be. I have personally spoken to I.E.S. Edwards of the British Museum about this matter and he agrees that something is still wrong. He would assume it lies in the area o the natural sciences. I would conclude it is wiser to examine the reconstruction of history itself. It is your responsibility to obtain recent charts listing the cultural periods for the Middle East -- I won't repeat them here, in each letter. What I will do is point up the problems; later we will offer causative explanations.

The British Museum samples 642 a and 642 b on reed and palm nut kernels from Tutankh-amen's tomb gave C-14 dates of 846 and 899 B.C., uncalibrated. (Commentary on published correspondence re. radiocarbon tests, Pensée, Winter 1973-4, p. 19 and quoted from page 11 of the REVIEW published by the Society for Interdisciplinary Studies, Vol. I, No. 1.) Since these dates deviated substantially from the expected ones, they would have been discarded had they not been rescued by individuals interested in Velikovsky studies. We have no way of guessing the number of samples whose C-14 readings have not seen the light of day because they were assumed to be "contaminated." Granted the possibility that archaeologists can err at the site of an excavation in interpreting material. But when a specific pattern turns up that cannot be accounted for by "contamination," we had better re-examine the evidence. Random contamination would not produce a pattern of dates such as we are now examining. The conventional dates for Tutankh-amen are ca. 1350. Even correcting the BM samples for bristlecone pine, we obtain 1025 and 1100 B.C. -- 250 to 325 yea younger than historians allow. They are slightly older than one would expect on the basis of the Compendium. These Late Bronze dates lie entirely outside the traditional dates assigned to the Late Bronze for Palestine.

From Antiquity, Vol. XXX, No. 120, December 1956, "The Radiocarb Age of Jericho" by F. E. Zeuner, we find these dates for Middle Bronze produced by the Geochronological Laboratory. GI6 — Furniture wood from Middle Bronze Age tomb B 35 — 2150 B.C. Second sample of furniture wood, same tomb, same period: GL5 — 1320 B.C uncalibrated. (P. 196.) When calibrated from tables in Antiquity for bristlecone pine factor, we obtain 2755 and 1617 B.C., with factors of 150 and 110. The latter date is 30 years younger tha

archaeologists expected, even when recalibrated. But the former (GL6) is 1,100 years older! Furniture is usually made of seasone wood. Therefore GL5 is, when recalibrated, unreasonably young if the traditional view of Middle Bronze is accepted. It is an acceptable age, whether recalibrated or not, on the basis of Velikovsky's reconstruction and Courville's. GL6, when recalibrated for bristlecone pine deviation, is very old wood and dates to a period normally designated Early Bronze II. This sample is an indication that wood used for furniture may be so old as not to b useful for dating contemporary society, in which the furniture wa used. It is not the age of the furniture C-14 measures, but the age of the wood used in the furniture. Were the furniture piece an antique, it would not go unnoticed by archaeologists who would date it to the time of its manufacture rather than its entombment These two Middle Bronze samples of wood focus our attention on th validity of bristlecone recalibration. Japan and New Zealand hav both provided indication that, near oceans, the readings of wood do not vary as widely from calendar years as do bristlecone pines from the White Mountains. (See Jansen, H., "Comparison between ringdates and 14 C dates in a New Zealand kauri tree," New Zealan Journal of Science, Vol 5, No. 1.) At this point, however, it is important that we do test the readings and examine the evidence for recalibration.

British Museum sample BM-341 is linen cloth made of flax. Found in Thebes tomb 386, time of Intef of Dynasty XI. Date is 3500±7 That is 1550 B.C. Recalibrated, the date is 1720-1870 B.C., Masca tables. Based on Anticuity, Dec. 1975, 1900 B.C. It is unimportant whether this cloth fragment be assigned to Dynasty XI or XII of Thebes since they immediately followed each other. What is significant is that the uncalibrated figure is too low by any reconstruction of history. (This period retains nearly the same dat any reconstruction when compared with modern Egyptologists' table The recalibrated figure is reasonable; the uncalibrated is not easily explainable. Therefore evidence exists that some recalibration in the direction of bristlecone pine readings is valid. Two other samples BM-343 (wood, probably fragment of a coffin) and BM 342 (charcoal) date 1770 and 1710 respectively. These dates are again too young even when compared with the Compendium, etc. When recalibrated by Masca tables: 2110 and 2070 B.C. By Anticuity, Dec. '75: 2188 and 2108 B.C. These recalibrated figures agree ve well with the Compendium reconstruction and with modern historica interpretation. It would be most unlikely, therefore, that no re calibration is warranted.

Again, UCLA-1211 and 1212 both read 1550 B.C. The latter is reed matting used as bonding in pyramid of Sesostris II at El-Lahun. The former is from the same tomb as the BM samples above. The tw UCLA samples must be recalibrated (figures would be same as for BM-341.)

BM-340, time of Nectanebo I, first half of 4th century B.C. The reading reported in JNES, Vol. 30, No. 4, Oct. 1971 by Robin M. Derricourt of U. of Cambridge in "Radiocarbon Chronology for Egyp and North Africa," and dated 390 B.C. is incorrect (preliminary). Radiocarbon, 1971, Vol. 13, No. 2, reads 360 B.C.±80. Recalibrated, the reading is 410 or 430 B.C. There is not the least quest of the date of this dynasty (contemporary Greek records exist). recalibration is used, then reed matting is likely to read upward

Craig White

of a half century older than the date of its use in the Greek period of influence in Egypt. (I should draw attention that every date recorded in Derricourt's article mentioned on p. 2 and label "R forthcoming" was preliminary and is in need of some correction. All corrections are in the Radiocarbon journal, Vol. 13, No. 2.)

We come now to another question. Most all dates for the Middle Kindgom in Egypt, when uncalibrated, are too young. When recalibrated they are reasonable for both modern historians and for Velikovsky et al. The parallel Biblical record would also seem to be satisfied better with this recalibration. The Middle Kingdom (a time designation) was centered at Thebes. The Old Kingdom was centered at Memphis in Lower Egypt. Old Kingdom dates all seem to be acceptable without recalibration when compared with Courville and the Compendium. But they almost always need recalibration in order to make them satisfactory for historians, whose dates for Dynasties III-VI are much earlier. Is it possible that the region from which reed or wood originated has more effect on dating than we realize? Suppose the wood recovered from Memphis came mostly from the Lebanon and the wood recovered from Thebes from the Upper Nile? Is it possible that the age of the wood which is measured in C-14 laboratories indicates Lebanese forests were appreciably older than other forests in Africa?

But before we assume that recalibration solves the historians' difficulties with the Old Kingdom, notice BM-134 (Radiocarbon 1969, 282)! The uncalibrated date is 1840±65 B.C. Recalibrated, it is 2150 B.C. by Masca tables or 2290 by Anticuity, Dec. '75. This date is still much too recent for a Dynasty III Saqqara tomb, dated around 2600 B.C. There is something radically wrong with so early a date for Dynasty III, if this sample is considered. The same may be said of BM-236, dated 1890 B.C.; UCLA-1206, dated 2015±60 B.C.; BM-332 and TF-56 both dated 2040 B.C.; BM-253, dated 2050 B.C.; SL-8, dated 2070±100 B.C.; BM-237, dated 1770±100 B.C.; UCLA-1208 dated 2060 B.C. (See page 280 of Derricourt's article.) Recalibrated these dates are, by Masca: 2110 B.C. to 2540 B.C. By Antiquity these dates fall between 2158 and 2625 B.C. By either system of calibration the majority of these dates fall significantly later in time than expected by historians. Hence I.E.S. Edwards' concern that something is wrong with the physics of radiocarbon measurements. Something is wrong with the traditional dating of the two earliest dynasties of the Old Kingdom, Dynasty III and Dynasty I.

Based on the example of the Middle Bronze in Palestine, C-14 dates can be contemporary or appreciably older in the same tomb. For the Old Kingdom in Egypt there are certainly dates which are older than those mentioned in the previous paragraph. Almost all are too young for historians unless recalibrated. When recalibrated, they seem to be acceptable to historians, who often overlook those we have quoted above. How many others have never been reported because they are younger still -- and therefore "contaminated" -- we have no way of knowing. None of the older dates for the Old Kingdom are any further out, however, than the dates on the Middle Bronze tomb at Jericho referred to on page 1. If Middle Bronze wood can be so unexpectedly old, so can Old Kingdom wood from sites in Lower Egypt. The conclusion we are forced to look at is that C-14 dates are often in need of recalibration -- and therefore in agreement with the physical evidence from bristlecone pine. That even when recalibrated, the results are, in part, significantly too young for traditional history. And, not uncommonly, recalibrated dates are older than everyone expected.

Dwight X. Walsh