

WHITLOCK, S. T.

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Provo, Utah
September 16, 1965

Dear Brother,

Some months ago I was asked to write an article for the Instructor on "Archaeology and Our Religion". I did what I thought was a conscientious piece, but it has been returned to me with an unequivocal rejection and a letter of furious denunciation. This lends an interest to the item which it hardly deserves. It was written before any of the other articles in the I Believe series had appeared, and it seems to me today that it would have supplied a much-needed element of balance in that series, which has turned out to be hopelessly one-sided in its point of view. You can judge for yourself whether what has been said in our little article, which has so deeply offended the editors, deserves to be read or suppressed.

Yours very truly,

Hugh Nibley

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September 16, 1965

Dear Mr. W.

So you didn't like my article even a little bit. You would be justified in rejecting it on the basis of my renowned incompetence had you suggested any other title for the thing than "I BELIEVE". That happens to be the one theme on which, right or wrong, I am beyond all doubt the world's foremost authority. I am sorry if I made the fatal mistake of not believing what you thought I believed or think I should believe--but you should have known. The letters I send to the editors of journals all have the name of Brigham Young and the designation "College of Religious Instruction" in their heading. With that kind of introduction it would be futile for me to attempt to disguise my real beliefs. And yet I have had articles published on religious subjects by Protestant, Catholic, and Jewish editors. This, in fact, is the first article I have ever had rejected, which makes it most interesting--especially since the rejection is by an L.D.S. publication which requested it in the first place! The special title assigned was "Archaeology and Our Religion". You don't fancy me as an archaeologist and neither do I, but to accuse me of hating archaeology as you do is to give yourself away. What could be of greater importance in discussing Archaeology and Our Religion than the indisputable fact that archaeology has been used and is being used as a tool against Our Religion? Or the equally indisputable fact that archaeology is by no means the precision tool that some people think it is? You should be grateful to me and not wrathful.

Your violent rejection of what I Believe makes me wonder in what sense your invitation to make a free and frank statement of faith is to be interpreted. My article was written before the others appeared, and so it was not directed against any of them. And during the months that the paper has been in your hands I have been reading a copy of it to many audiences--study groups on the East Bench, student gatherings on the Coast, general convocations of "Education Week", etc., and it has always been received with enthusiasm, many people eagerly asking where they could get a copy. If it is as wildly irresponsible as you say it is, it would at least seem to fill a long-felt want, and that is why I am circulating it now.

Actually it is very mild--I have had much stronger things published both inside and outside the Church. Contrary? What else do you want in an atmosphere of free discussion? This week I have written replies to two long attacks on the Book of Mormon, the one addressed to me by a Viennese scholar who knows quite a bit, and the other by a well-known authority on the Dead Sea Scrolls in the eastern U.S. It is a pleasure to discuss things with these men, though we disagree completely; by addressing their challenges to me they not only justify me in making any rebuttal I might choose, but put themselves under obligation to hear my side of the story. You on the other hand write me a scathing letter and along with it make special steps (I will not mention them here) to insure that I will not or cannot reply. And that is what you call "Life's Great Adventure, the Pursuit of Truth"? Adventure by all means--but spare us the unpleasant surprises! I have always been taught that the Pursuit of Truth entails searching out and exposing any flaws and errors in existing knowledge, no matter whose feelings are hurt. It is certainly not irrelevant in articles on science and religion to point out that Lamarck and Darwin diligently searched out what they felt were weaknesses in the Bible and attacked them unsparingly. And why shouldn't they? And why shouldn't we at the present time note that their attacks were largely unjustified on purely factual grounds?

In charging me with taking a negative position you are apparently unaware of

issues which I would gladly forget but am not allowed to. When graduate students confide to my reluctant ears that they really believe the Gospel but cannot afford to admit it openly for fear of offending their major professors and jeopardizing their chances for a degree, I am forced to admit that the sniping from behind departmental rocks and bushes has not abated since my student days, though the snipers are rarely honest enough to come out in the open as you have done. I applaud you for that and would not for the world suppress a syllable of any of the other articles--they are good and should be read. But what can be the advantage of having a series of articles by people in different fields if not to give the reader different points of view? Why are you so desperately determined to allow only ONE point of view to be expressed? What can be sillier than to propose a frank discussion of controversial issues with the stipulation that there shall be no disagreement among the speakers? This is exactly what you have done, justifying your position with the well-known argument that since your viewpoint is scientific all who disagree must be unqualified as unscientific, unthinking, and irresponsible. Where is the danger of letting me speak my piece? Why the hysterics? If my reasoning is feeble and my evidence poor, what better refutation than to bring them out into the open? We have had just one point of view presented with monotonous consistency in the series; why not allow at least a nodding recognition of some arguments or facts from another direction, if only to demonstrate how unassailable your position is and how absurd the contrary? Actually there is an enormous accumulation of factual information refuting the claims of the evolutionists, or at least casting serious doubts upon them. Maybe the stuff is no good, but we will never find out by forbidding all mention of it. We may put the age-old controversy (by no means the child of our Modern Scientific Age, as most people are led to believe) in the form of a dialogue:

A. Why do you undermine the faith of these young people?

B. To make them think! To get them out of the grooves!

A. But there are millions of things to think about. Why do you always emphasize the same half-dozen shop-worn commonplaces?

B. Because they are true! Truth at any price! All things must yield to the facts!

A. Bully for you! I could not agree more. And here are some facts to which I would like to call your attention. Let us tell them to the students, and then they will think harder than ever.

B. No, no! You can't do that! That will merely make trouble.

A. But you said truth at any price--that includes the price of much trouble.

B. I see no point to undermining scientific reputations; these things are agreed on by many important scientists--it would be foolish to question them.

A. But isn't that exactly how science has made progress in the past? Who is in a groove now?

And so on. Speaking of grooves, Lowell and Schiaparelli were great and devoted scientists in their day, easily the top experts in the world on the planet Mars. As a boy I thought they were wonderful. And yet today their life's work has been effectively wiped out by a few photographs. Well, what's the loss? Science moves on, and I am not too badly broken up about my heroes. But what if I had followed them to the point of rejecting the Gospel--the point of no return? I used to spend long hours listening to old Dr. Larkin talking about the wonders of astronomy and the absurdities of "ancient Jewish mythology". Today his astronomy sounds pathetically old-fashioned--he was wrong on almost everything--and ancient Jewish "mythology" has received a new lease on life. What if I had become his disciple to the point of rejecting religion, as he often urged me to? THERE ARE THOUSANDS OF PEOPLE OUTSIDE OF THE CHURCH TODAY BECAUSE OF SCIENTIFIC TEACHINGS WHICH HAVE NOW BEEN EXPLODED, ARE NOW BEING EXPLODED, AND ARE YET TO BE EXPLODED, while the Gospel remains unscathed.

With the Christian world in general the scientists have always had their way (not the other way around, as we have been taught), the whole history of doctrine being, as Whitehead points out, one "long undignified retreat" as year by year the churchmen since the third century have diligently accommodated their teachings to the science of the day. It was not the Bible but the best science of his time that was brought to

bear to silence Galileo: while his learned opponents argued from Aristotle that the earth could not move, Galileo argued from the Bible that it did. Your letter makes it clear that the present series of articles is not meant to be a discussion but the cool pontifical pronouncement of unassailable authority. The idea that there are men of such vast knowledge that even to have them admit to membership in the Church is a source of consolation and pride to the rest of us is amusingly Victorian but also rather offensive with its assumption of Olympian superiority; the tone of the series is definitely patronizing. Brigham Young had the proper words for those intellectual Mormons who generously offered to place their great minds at the disposal of the Church and make the Gospel intellectually respectable: "O puss, what a long tail you have got!"

During the Darwin Centennial Year a great outpouring of articles took stock of 100 years of Evolution. I have a whole shoe-box full of notes taken from them. The dominant theme in these is that what Darwin really gave the world was not so much a particular explanation of how things came about as the fundamental awareness that however ~~it~~ it happened it was entirely through natural and material means.; whether this or that process produced the world around us is not the important thing, we are told over and over again, the important thing being to recognize that whatever the process it was a purely mechanical one, the working of natural forces alone and unaided. The corollary of this, expressed with great heat and passion by scientists today as well as a hundred years ago, is that it is both unnecessary and pernicious to clutter up the picture with "supernaturalism". G.G. Simpson, the patron saint of our local geologists, never ceases to harp on this theme: he equates God to Santa Claus in his dialectic, and then berates those immature souls who still believe in Santa. It is no accident that Marx wanted to dedicate his monument of dialectical materialism to Darwin--the key to both systems is their uncompromising materialism. But it was hardly an original discovery: where is the thesis better expressed than in the Book of Mormon? Korihor not only taught that "every man fared in this life according to the management of the creature," but urged the people to give up their absurd belief in Simpson's Santa Claus, "the effect of a frenzied mind." Again it is Brigham Young who states the issue with characteristic clarity and brevity: "Instead of considering that there is nothing known and understood, only as we know and understand things naturally, I take the other side of the question, and believe positively that there is nothing known except by the revelation of the Lord Jesus Christ, whether in theology, science, or art." You cannot reconcile these two views because they look in opposite directions. Indeed, your furious reaction to my contribution proves as plainly as anything could that our viewpoints cannot be reconciled. But they should BOTH be heard, and that is where we disagree.~~here~~.

It is quite proper for you to observe that I am no archaeologist and therefore unqualified to speak as one. I was careful, however, to let the experts speak for themselves and to quote the best ones in the proper context. But to say that I hate archaeology is an impertinence. It was part of the strategy of Progressive Education, and one of the secrets of its baneful success, to accuse all who would not accept the specific philosophy of Dewey and his school of being opposed to Education itself, and to denounce all who hesitated to conform to their teachings as sworn enemies of Science and Civilization, "deviative" and reactionary. Because my interpretation of the archaeological record does not agree with your own you are free to charge me with error, but not to describe me in impassioned terms as the Enemy of Archaeology. When in your thrilling Pursuit of Truth you have taken as much pains as I have to familiarize yourself with that record, you may begin to see that I have a case.

A common pitfall in reconstructions of the past is the illusion that if one had explained by a proper scientific method how a thing COULD have happened one has explained how it actually DID happen. The best scientists are guilty of this very unscientific thinking. We are allowed to say "This is how it MAY have happened," but never "This is how it DID happen." There are always unknown factors. "Fifty-seven years ago," wrote Whitehead, "...I was a young man in the University of Cambridge. I

was taught science and mathematics by brilliant men and I did well in them; since the turn of the century I have lived to see every one of the basic assumptions of both set aside...And yet, in the face of that, the discoverers of the new hypotheses in science are declaring, "Now at last, we have certitude"--when some of the assumptions which we have seen upset had endured for more than twenty centuries." It is easy and pleasant to show off by talking about the subject one is presently working on, but to put it in the category of eternal truth is incalculable. W.S. McCulloch reminds us that "each hypothesis predicts the outcome of numberless experiments. Hence, though NO HYPOTHESIS CAN BE PROVED, it may ultimately be disproved. A good one is so specific that it can be disproved easily." The evolutionary hypothesis from the beginning had this merit; its proponents boldly set forth certain propositions, confidently predicting the outcome of certain experiments. Many of these experiments were carried out, with results diametrically opposed to those predicted. What did the experts do? Did they apologize for their presumption? Did they admit that there might be a flaw in the hypothesis? Not a bit of it! With the greatest of ease they contrived new interpretations of the data that proved that the outcome of the experiments, though it was the reverse of what was predicted, proved the validity of the original hypothesis instead of refuting it. Such men can't lose. The same thing happened in archaeology, which failed to consider "the essential discontinuity of historical phenomena" in its zeal for establishing easy evolutionary patterns: "Only by utilizing the vast historical resources of archaeology, Oriental science, and anthropology can this narrowness of outlook be corrected," Albright observes. It is interesting that the old evolutionary view should now be described as a narrow outlook, of all things.

The question of my impudence in speaking up at all brings us to the problem of MODELS. The archaeologist Piggett has a good deal to say on this head. "When scientists are concerned with a large general problem (he writes)...they construct a general framework within which further observations fall into a significant pattern. This they would call a MODEL. The model is valid in so far as it makes sense of the observed phenomena, and the inferences made from these. More than one model can exist at a time, each 'true' in its own way." In archaeology, he says, "inferences can only be made within the terms of a model of the past, a method of looking at it, a way of describing what is seen." The model is NOT a fact, it is merely an interpretation of a fact. A common scientific error is to assume that if one's conclusions are based on facts then what one concludes must also be a fact. That it can never be. The fossil or plant or spectrum photo that I hold in my hand may be called a fact--it is an immediate concrete experience. But my interpretation of it is NOT a fact and never can be. A model is 100% the product of imagination, and it is quite incorrect to call such a model as Evolution a fact.

The model is often compared with a jigsaw-puzzle. Imagine that the family on Home Evening is working on an enormous jigsaw-puzzle that covers the whole livingroom floor. They have just begun to assemble the pieces. Charles looks over at Becky diligently assembling what looks like part of a red wheel, and screams, "You dummy! That isn't the way it goes! It's supposed to be blue!" "It is not," Becky retorts, "it looks like part of a wagon and it fits together perfectly." "So does mine fit together perfectly, and it's all blue! Look, yours won't even fit into mine at all!" If this goes on Charles in his righteous conviction may rise up and start kicking Becky's project to pieces. So Daddy intervenes with the Wisdom of the Ages: "Wait a minute, you little baboons! We don't even know what the picture is supposed to be yet. If you can fit any pieces together go ahead and fit them, and later on we shall see how they all join up. There is still room ~~at~~ for a thousand pieces between Becky's wheel and your piece of blue sky, Charles, so don't go jumping at conclusions."

Every discipline in the university has its own model of things, and every model represents at least a century of hard work and huge accumulations of data. We are NOT free to brush any model aside simply because it does not conform with certain

aspects of our own model. It is perhaps to be expected that the people least sure of their own models are the most impatient of other people's; and that those who have the most rickety models of all (they never can agree on such things as mountain-building and rock production) are the touchiest of all, rejecting out-of-hand all models that do not conform to their own far more closely than their own conform to each other. In the place of solid evidence these harassed souls introduce a vigorous polemic with a great deal of emphasis on status and prestige--they need a smoke-screen.

I am not a scientist at all, but spend what time I can steal working on models which belong as much to the world-picture and go just as far to filling out that picture as do the models set up by my betters in the sciences. I begrudge no man his model or the corner of the floor he is playing on. But when anyone insists that he knows from his model alone exactly how the entire jigsaw cosmos will look when it is completed it is time to protest. That can be known only by revelation. The Lord has given us the Big Picture, but no amount of juggling the pieces in any one or any dozen disciplines can begin to give us the remotest inkling of what the whole picture is like. The best we can hope for from that direction are men's own hypothetical tentative constructions, and to present them as part of the Gospel is entirely out of order. You should know that.

Sincerely (no, I am not just being smart),

Hugh Nibley

Hugh Nibley

Archæology and Our Religion

H. H. H. H.

The Naïve Science:-- Nothing illustrates better than archaeology the inadequacy of human knowledge at any given time. It is not that archaeology is less reliable than other disciplines, but simply that its unreliability is more demonstrable. Meteorology (to show what we mean) is quite as "scientific" as geology and far more so than archaeology--actually it makes more use of scientific instruments, computers, and higher mathematics than these disciplines need to. Yet we laugh at the weather man every other day; we are not overawed by his impressive paraphernalia, because we can check up on him any time we feel like it: he makes his learned pronouncements--and then it rains or it doesn't rain. If we could check up on the geologist or archaeologist as easily when he tells us with perfect confidence what has happened and what will happen in the remotest ages, what would the result be? Actually in the one field in which the wisdom of geology can be controlled, the finding of oil, it is calculated that the experts are proven right only about 10% of the time.¹ Now if a man is wrong ninety per-cent of the time when he is glorying in the complete mastery of his specialty, how far should we trust the same man when he takes to pontificating on the Mysteries? No scientific conclusion is to be trusted without testing--to the extent to which exact sciences are exact they are also experimental sciences; it is in the laboratory that the oracle must be consulted. But the archaeologist is denied access to the oracle, for him there is no neat and definitive demonstration, he is doomed to plod along, everlastingly protesting and fumbling, through a laborious, often rancorous running debate that never ends.

To make a significant discovery in physics or mathematics or philology one must first know a good deal about the subject; but the greatest archaeological discoveries of recent years were made by ignorant peasants and illiterate shepherd boys. From that it follows, as the handbooks on archaeology never tire of pointing out, that the proper business of the archaeologist is not so much the finding of stuff as being able to recognize what he has found. Yet even there the specialist enjoys no monopoly. Dr. Joseph Saad, who directed the excavations at Khirbet Qumran, tells of many instances in which the local Arabs were able to explain findings which completely baffled the experts from the West, to the rage and chagrin of the latter. Hence Sir Mortimer Wheeler warns the archaeologist: "Do not ignore the opinion of the uninstructed. 'Everyone knows as much as the savant. . ..' Emerson said so and he was right."²

With everybody getting into the act, it is not surprising that the history of archaeology is largely the story of bitter jealousies and frightful feuds. Archaeology mercilessly accentuates certain qualities characteristic of all research but often glossed over in the exact sciences. The elements of uncertainty, surprise and disappointment, and the pervasive role of speculation and imagination with all the unconscious conditioning and prejudice that implies, are not merely regrettable defects in archaeology --they are the very stuff of which the picturesque discipline is composed. "What in fact is Archaeology?" asks Sir Mortimer, and answers, "I do not myself really know. . . I do not even know whether Archaeology is to be described as an art or a science." Even on the purely technical side, he points out, "there is no right way of digging, but there are many wrong ways."³

Duel in the Dark:--The idea of archaeology as the key to a man's origin and destiny was introduced as a weapon of anti-clerical polemic in the revolutionary movements of the 18th and 19th centuries. Reimar's "hate-filled pamphlet" on history and the New Testament launched the "scientific" attack on the Bible,⁴ and when Boucher de Perthes, a child of the French Revolution, found stone "hand-axes" among the flints of Abbeville he published them in five stately volumes entitled, with pontifical finality, "On the Creation".⁵ These objects, whose use and origin is still disputed, were to be nothing

less than the key to the creation! Such fantastic leaps of the mind reveal the fierce determination of the first modern archaeologists to "get something" on the Bible. It was inevitable that Biblical archaeology should become little more than "an offshoot of Darwinism."⁶ The great Lamarck, before he ever came up with his explanation of the creation was animated "by a severe...philosophical hostility, amounting to hatred, for the tradition of the Deluge and the Biblical creation story, indeed for everything which recalled the Christian theory of nature." And Darwin writes of himself in his twenties:

I had gradually come, by this time, to see that the Old Testament from its manifestly false history of the world and from its attributing to God the feelings of a revengeful tyrant, was no more to be trusted than the sacred books of the Hindoos, or the beliefs of any barbarian...By further reflecting ...that the more we know of the fixed laws of nature the more incredible do miracles become--that the men at that time were ignorant and credulous to a degree almost incomprehensible to us...This disbelief crept over me at a very slow rate, but was at last complete. The rate was so slow that I felt no distress, and have never since doubted for a single second that my conclusion was correct.⁸

This is a very revealing statement, a rich compound of cliches, a testament of Victorian smugness: "...manifestly false...revengeful tyrant...any barbarian...fixed laws of nature...never doubted for a single second." Those are the words of a man who knows all the answers and is proud rather than ashamed of his unflinching loyalty to his adolescent prejudices. Just how much would a young English theology student in the 1820's know about the real history of the world, books of the Hindoos, or "the beliefs of any barbarian"? Next to nothing is putting it mildly, but it was enough to put the stamp of "complete disbelief" on Darwin's thinking forever after. Students commonly assume that it was the gradual amassing of evidence that in time constrained such men to part company with the Bible. Exactly the opposite is the case: long before they had the evidence they brought to their researches such an unshakable determination to discredit the Book of Genesis that the discovery of the evidence was a foregone conclusion. It was Darwin's bosom friend and spokesman who blurted out the real issue with characteristic bluntness: "Darwin himself avoided attacking the Bible, but for Huxley, his doughty champion against all comers," writes J. C. Greene, "the battle against the doctrine of inspiration, whether plenary or otherwise, was the crucial engagement in the fight for evolution and for freedom of scientific enquiry."⁹ The battle was against revelation, and evolution was the weapon forged for the conflict. We must not be misled by that inevitable tag about "freedom of scientific enquiry." When a Tennessee high-school teacher was fired for teaching evolution in 1925 the whole civilized world was shocked and revolted at such barbaric restriction on freedom of thought; yet at the same time there was not an important college or even high-school in the country that would hire a man who dared to preach against evolution. Freedom of thought, indeed!

The great debate between "science" and "religion" has been a duel in the dark. How do things stand between the picture which "archaeology" gives us of the past and the picture that the Scriptures give us? Take the Biblical image first: the best efforts of the best artists back through the years to represent a clear picture of things described in the Bible look to us simply comical. Even the conscientious Flemish artists using the best Oriental knowledge of their time paint Solomon or Holofernes as a boozy Landgraffs at a fancy dress ball, while the masters of the Italian Renaissance show their prophets and apostles affecting the prescribed dress and stock gestures of

travelling Sophists of the Antique world. We are no better today, with our handsome "Bible Lands" books, based on diligent research, showing Jesus or Elijah in the garb of modern Bedouins or Ramallah peasants moving through the eroded terrain of modern Palestine or discoursing beneath arches and gates of Norman and Turkish design. The moral of this is that no matter where we get our information our picture of the Bible is bound to be out of focus; for it will always be based on inadequate data and it will always be our own construction. And at no time did the Christian world have a more distorted picture of the Bible than in the 19th century. To the Victorians, creaking with culture and refinement, it was easy and pleasant to assign all other creatures their proper place and station in the world--for that is what evolution does; their outspoken objection to Mormonism was that it was utterly barbaric, an intolerable affront to an enlightened and scientific age; Huxley declared with true scientific humility that the difference between a cultivated man of his own day and a native of the forest was as great as that between the native and a blade of grass. What possible understanding could these people have of the real Bible world? Taken at face value the Bible was a disgustingly primitive piece of goods--"poor stuff" John Stewart Mill pronounced it; the work of people "ignorant and credulous to a degree almost incomprehensible to us," as Darwin said, for this, of course, was the Bible that Darwin rejected: in it he was attacking an image which was the product of his own culture and nothing else.

The Mind's Eye:--Archaeology today "in our universities and schools," according to Wheeler, "forms innocuous pools of somewhat colorless knowledge--mostly a refined Darwinism--in which our kindergartens are encouraged to paddle."¹⁰ Again, everybody gets into the act. My own children, long before they could read, write, or count, could tell you exactly how things were upon the earth millions and millions of years ago. But did the little scholars really know? "What is our knowledge of the past and how do we obtain it?" asks the eminent archaeologist Steward Piggott, and answers: "The past no longer exists for us, even the past of yesterday...This means that we can never have direct knowledge of the past. We have only information or evidence from which we can construct a picture."¹¹ The fossil or potsherd or photograph that I hold in my hand may be called a fact, it is direct evidence, an immediate experience; but my interpretation of it is NOT a fact, it is entirely a picture of my own construction. I cannot experience 10,000 or 40 million years--I can only imagine, and the fact that my picture is based on facts does not make IT a fact, even when I think the evidence is so clear and unequivocal as to allow of no other interpretation. Archaeology brings home this lesson every day, as Sir Flinders Petrie pointed out for in no other field does interpretation count for so much.¹² "The excavator," writes Sir Leonard Woolley, "is constantly subject to impressions too subjective and too intangible to be communicated, and out of these, by no exact logical process, there arise theories which he can state, can perhaps support, but cannot prove...they have their value as summing up experiences which no student of his objects and notes can ever share."¹³ Yet what makes scientific knowledge scientific is that it CAN be shared. "There are fires," writes a leading student of American archaeology, "which man may, or may not, have lit--animals he may, or may not, have killed--and crudely flaked stone objects, which those most qualified to judge think he did not make. By weight of numbers these finds have been built into an impression of probability, but the idol has feet of clay."¹⁴ This is the normal state of things when we are dealing with the past: "If one certainty does emerge from this accumulation of uncertainties," writes an eminent geologist, "it is the deep impression of the vastness of geologic time."¹⁵ An "accumulation of uncertainties" leaves the student ("by weight of numbers") with an "impression" which he thereupon labels a "certainty".

Yet with examples gross as earth to exhort him the archaeologist is constantly slipping into the normal occupational hazard of letting the theory rather than the facts call the tune. For years archaeologists always assumed that pieces could be chipped from the surface of stones merely by exposure to the burning sun--they never

bothered to put their theory to the test, though no one ever was present when the sun did its chipping.¹⁶ From Breasted's Ancient Times millions of high school students have learned how primitive man woke one morning in his camp in the Sinai Peninsula to find that bright copper beads had issued from the greenish rocks with which he banked his fire that night. It was not until 1939 that a scientist at Cambridge actually went to the trouble to see if copper could be smelted from an open fire, and discovered that it was absolutely impossible.¹⁷ Nobody had bothered to check up on these simple things--like the Aristotelians who opposed the experimenting of Galileo, the men of science felt no need to question the obvious. If man had been on the earth for, say, 100,000 years, scattered everywhere in tiny groups subsisting on a near-animal level, could we possibly find the cultural and linguistic patterns we do in the world today? After 50,000 years of local isolation is it conceivable that languages at opposite ends of the earth should be recognizably related? Only in our day are such elementary questions beginning to be asked--often with surprising and disturbing results. But however vast the accumulation of facts may become, our picture of the past and the future will always be, not partly but wholly the child of our own trained and conditioned imaginations. "The world will always be different from any statement that science can give of it," a philosopher of science writes, and he explains: "that is, we are looking for an opportunity to restate any statement which we can give of the world...we are always restating our statement of the world."¹⁸ Scholarship is also an age-old open-ended discussion in which the important thing is not to be right at a given moment but to be able to enter seriously into the discussion. That I cannot do if I must depend on the opinion of others, standing helplessly by until someone else pronounces a verdict, and then cheering loudly to show that I too am a scholar.

Because interpretation plays an all-important role in it, archaeology has been carried on against a background of ceaseless and acrimonious controversy, with theory and authority usually leading fact around by the nose. If the great Sir Arthur Evans decided eighty years ago that the Minoans and Mycenaeans were not Greeks, then evidence discovered today must be discounted if it shows they were Greeks; if it was concluded long ago that the Jews did not write in Hebrew at the time of Christ, then Hebrew documents from that time if they are discovered today must be forgeries. "Does our time scale, then, partake of natural law?" a geologist wonders, "No...I wonder how many of us realize that the time scale was frozen in essentially its present form by 1840...? The followers of the founding fathers went forth across the earth and in Procrustean fashion made it fit the sections they found even in places where the actual evidence literally proclaimed denial. So flexible and accommodating are the 'facts' of geology."¹⁹ "Science," said Whitehead, "is our modern-day dogmatism." There is something cozy and old-fashioned, almost nostalgic, in the archaeology of 40 years ago with its invincible meliorism and romantic faith in man's slow, steady, inevitable onward and upward march. But archaeology is the science of surprises, and the most desperate efforts of accommodation have not been able to discredit sensational changes of our day.

"One of the most exciting results of the radio-carbon dating," writes Pigot, "...has been to emphasize how rapidly and severely environment was modified."²⁰ Extreme and rapid changes of environment have long been anathema to science. "Darwin's secret, learned from Lyell,"²¹ according to W. F. Osborn, was (in Lyell's own words) that "all theories are rejected which involve the assumption of sudden and violent catastrophes..."²² In a world of nuclear explosions this seems downright funny, but it "was a perfect expression," as Egon Friedell has written, "of the English temperament and comfortable middle-class view of the world that refused to believe in sudden and violent metamorphoses, world uprising, and world calamities..."²³ One of the most militant evolutionists of our day says that "...it remains true, as every paleontologist knows, that most new species, genera, and families, and nearly all categories above the level of families, appear in the record suddenly, and are not led up to by known, gradual,

completely continuous transitional sequences."²⁴ One wonders why if MOST species appear on the scene suddenly without millions of years of evolutionary preparation leading up to them, the human race cannot have done the same. "Because if didn't" we are told. For a hundred years thousands of scientists have devoted their lives to proving that it didn't; yet all they have to offer us as proof to date is a large and cluttered science-fair of bizarre and competing models, interesting but mutually damaging. it?
not if?

The New Uniformity:--Through the years the writer, who is no archaeologist, has had to keep pretty well abreast of the journals and consult occasionally with archaeologists in order to carry on his own varied projects. Anyone who has any contact at all with what is going on is aware that the significant trend since the war has been the steady drawing together of far-flung peoples and cultures of antiquity into a singly surprisingly close-knit fabric. Early in the present century an "Egyptologist" could make fun of the "amusing ignorance" of the Pearl of Great Price in which "Chaldeans and Egyptians are hopelessly mixed together, although as dissimilar and remote in language, religion, and locality as are today American Indians and Chinese."²⁵ Today a ten-year-old would be reprimanded for such a statement, since now we know that Chaldeans and Egyptians were "hopelessly mixed together" from the very beginning of history. Even as late as the 1930's so eminent a scholar as T. E. Peet had to exercise extreme caution--suggesting that there might be any resemblance between the literatures of Babylonia, Palestine, Egypt, and Greece.²⁶ Today we know better, as every month establishes more widely and more firmly the common ties that knit all the civilizations of the ancient world together.

A hundred years ago investigators of prehistory already sensed "the essential unity of the earlier Stone Age cultures throughout the Old World." From the very beginning of the race "at a given period in the Pleistocene," writes Piggott, "one can take, almost without selection, tools from South India, Africa and South England which show identical techniques of manufacture and form....What happened at one end of the area seems to be happening more or less simultaneously at the other."²⁷ I have never seen any attempt to account for this astounding world-wide coordination in the industries of primitive beings who could only communicate to their nearest neighbors by squeals and grunts. In the mid-Nineteenth century the folklorists were beginning to notice that the same myths and legends turned up everywhere in the Old and the New Worlds, and philologists were discovering the same thing about languages; today Hockett and Asher are bemused by the "striking lack of diversity in certain features of language," and make the astounding announcement that "Phonological systems(of all the languages of the world) show much less variety than could easily be invented by any linguist working with pencil and paper."²⁸ The same authorities note that "man shows an amazingly small amount of racial diversity," and pardonably wonder "why human racial diversity is so slight, and....why the languages and cultures of all communities, no matter how diverse, are elaborations of a single inherited 'common denominator'".²⁹ With a million years of savagery and hostility, ignorance, isolation and bestial suspicion to keep them divided it seems that men should have had plenty of time to develop a vast number of separate "denominators" of language, legend, race, and culture. But that is not the picture we get at all.³⁰ In religion it is the same. It was not until 1930 that a group of researchers at Cambridge cautiously presented evidence for the prevalence through the ancient world of a single pattern of kingship, an elaborate religious-economic-political structure that could not possibly have been invented independently in many places. We do NOT find, as we have every right to expect, an infinite variety of exotic religious rites and concepts, instead we find a single overall pattern, but one so peculiar and elaborate that it cannot have been the spontaneous production of primitive minds operating in isolation from each other.³¹

When history begins, "let us say c. 5000 B.C.," to follow J. Mellaert, "we find throughout the greater part of the Near East...villages, market towns...and the castles of local rulers," widely in touch with each other as "goods and raw materials were traded over great distances."³² It is essentially the same picture we find right down to the present; and we find it everywhere--if we go to distant China "the life of the Shang (the oldest known) population can have differed little in essentials from that of the populous city-states of the Bronze Age Mesopotamia,"³³ or from that of the peasants of the Danube or of "the earliest English farming culture."³⁴ This is what has come out since World War II. Before that archaeology had made us progressively aware of the oneness of our world with the successive discoveries of Amarna, Ugarit, Boghazkeui, Nuzi, etc., each one tying all the great Near Eastern civilizations closer and closer together while revealing the heretofore unsuspected presence of great nations and Empires as active and intimate participants in a single drama. And the Bible is right in the center of it: the Patriarchs who had been reduced to solar myths by the higher critics, suddenly turned out to be flesh-and-blood people; odd words, concepts and expressions and institutions of the Bible started turning up in records of great antiquity; the Hittites, believed to be a myth by Bible scholars until 1926, suddenly emerged as one of the greatest civilizations the world has ever seen. Since then a dozen almost equally great empires have been discovered, and the preliminary studies of each of them have shown in every case that they had more or less intimate ties with the great Classical and Middle Eastern Civilizations.³⁵ The picture of ancient civilization as a whole has become steadily broader and at the same time more uniform, so that the growing impression is one of monotony bordering on drabness. Seton Lloyd is depressed by "the drab impersonality of the 'archaeological ages'";³⁶ Archaeology gives us, as M. P. Nilsson puts it, "a picture-book without a text,"³⁷ or, in the words of Sir Mortimer, "the archaeologist may find the tub but altogether miss Diogenes."³⁸ The eager visitor to a hundred recent diggings is fated to discover that people once lived in stone or brick or wooden houses, cooked their food (for they ate food) in pots of clay or metal over fires, hunted, farmed, fished, had children, died, and were buried. Wherever we go it is just more of the same--all of which we could have assumed in the first place. The romance of Archaeology has always resided not in the known but in the unknown, and enough is known today to suggest the terrifying verdict that a great Cambridge scientist pronounced on the physical sciences a generation ago: "The end is in sight!"

And now we come to the crux of the matter. As the tub without Diogenes has nothing to do with philosophy, so archaeology without the prophets has nothing to do with religion. "You cannot" says Piggott, "from archaeological evidence, inform yourself on man's ideas, beliefs, fears or aspirations. You cannot understand what his works of art or craftsmanship signified to him..."³⁹ The ancient patriarchs and prophets ate out of ordinary dishes, sat on ordinary chairs, wore ordinary clothes, spoke the vernacular, wrote on ordinary paper and skins, and were buried in ordinary graves. The illusion of the pilgrims to the holy land, Christian, Moslem and Jewish, that this is not so, i.e., that contact with such objects by holy men rendered them holy, and gave rise to Biblical archaeology at an early time--the Palestine pilgrims from Origen and Gregory to Robinson and Schaff were all looking for extra-special things, for miraculous or at least wonderful objects. Men who viewed the idea of living prophets as a base superstition turned to the dead stones of the "Holy Land" for heavenly consolation, and enlisted archaeology in the cause of faith.⁴⁰ But though archaeology may conceivably confirm the existence of a prophet (though it has never yet done so), it can never prove or disprove the visions that make the prophet a significant figure. Former attempts to explain the Scriptures in terms of nature-myths, animism, and psychology had nothing to do with reality.⁴¹ What can archaeology tell me about the Council in Heaven? Nothing, of course--that all happened in another world. The same holds for the Creation, taking place as it did at a time and place and in a manner

which we cannot even imagine. Then comes the Garden of Eden--a paradise and another world beyond our ken. It is only when Adam and Eve enter this world that they come down to our level. Strangely enough, the Biblical image is not that of our first parents entering a wonderful new world, but leaving such, to find themselves in a decidedly dreary place of toil and tears. Before long the children of Adam are building cities and are completely launched on the familiar and drab routines of civilized living: "dreary" suggests old and tired, and there is nothing fresh or new about the Adamic Age.

On the archaeological side we have Jericho, by general consensus (as of the moment) the oldest city in the world. It emerges abruptly full-blown, with a sophisticated and stereotyped architecture that remains unchanged for twenty-one successive town-levels; and from the first it displays a way of life substantially the same as that carried on by the inhabitants of the near-by towns right down to the present day. This has come as a great surprise: it is not at all consistent with the official model of the onward and upward march of civilization that we all learned about at school. When the civilization of China was re-discovered by European missionaries in the 17th century skeptics and atheists saw in it a crushing refutation of the Bible--here was a great civilization thousands of years older and far richer, wiser and more splendid than anything Western man had imagined, thriving in complete unawareness of God's plan of salvation. It was the discovery of such other worlds, such island universes, that was once the concern of archaeology, ever seeking the strange, the marvellous and the exotic. But now Archaeology has found too much: the worlds are there, but they are not isolated; not even China; they are all members of a single community, and by far the best hand-book and guide to the nature and identity of that community remains the Bible.

- ¹R. D. Sloan, in Geotimes, Vol. 3, No. 1 (1958), p. 6: "Only one wildcat well in nine discovers oil or gas: only 1 in 44 is profitable..." In spite of scientific methods, "the high risks...are unusual in the business world." Ib.p.6.
- ²M. Wheeler, Archaeology from the Earth (Penguin Books, 1956), p.68.
- ³Ibid., p. 16.
- ⁴J. Jeremias, in Expository Times, 69 (19), p. 333f.
- ⁵S. Rapport (ed.), Archaeology (N.Y.: NYU Lib. of Science, 1964), pp. 18-20.
- ⁶A. V. Gall, Basileia tou Throu (Heidelberg, 1924), p. 12, discussing the Wellhausen school.
- ⁷C. C. Gillispie, in The American Scientist, 46 (Dec. 1958), p. 397.
- ⁸Chas. Darwin, Autobiography () pp. 85f, describing the period between 1836 and 1839. Darwin was born in 1809.
- ⁹J. C. Greene, in Proceedings of the American Philological Society, 103 (1959), p. 717.
- ¹⁰Wheeler, op.cit., p. 38.
- ¹¹S. Piggott (ed.), The Dawn of Civilization (N.Y.: McGraw-Hill, 196), p.11.
- ¹²P. Patric, in Ancient Egypt, 1923, Pt. III, pp. 80-81.
- ¹³L. Woolley, Digging Up the Past (Pelican, 1950), p. 119.
- ¹⁴G.H.S. Bushnell, in Piggott, op. cit., p. 177.
- ¹⁵H. H. Swinnerton, The Earth Beneath Us (Boston: Little Brown, 1955), p. 15.
- ¹⁶J. de Morgan, in La Prehistoire Orientale (Paris, 1924), II, 4ff, discusses this phenomenon, with pictures of "hatchet-shaped sills chipped by the heat of the sun..." (Fig. 2).
- ¹⁷H. R. Coughlan, in Man, 39 (1939), pp. 106-8.
- ¹⁸George H. Mead, Movements of Thought in the 19th Century, (Univ. of Chicago Press, 1957), pp. 507f, discussing Bergson.
- ¹⁹E. M. Spieker, in Bull. of the Amer. Assn. of Petroleum Geologists, 40 (Aug. 1956) p. 1803; cf. N. D. Newell, in Proc. of Amer. Phil. Soc. 103 (1959), p. 265.
- ²⁰Piggott, op. cit., p. 40.
- ²¹H. F. Osborn, The Origin and Evolution of Life (N.Y., 1917), p. 24.
- ²²C. Lyell, Principles of Geology (11th Ed., N.Y., 1872), I, 317f.

²³E. Friedell, Kulturgeschichte Aegyptens u. des alten Orients (Munich: Beck, 1953), p. 105.

²⁴G. G. Simpson, The Major Features of Evolution (N.Y.: Columbia University, 1953).

²⁵John Peters, in Rev. F.S. Spalding, Joseph Smith as a Translator (Salt Lake City, 1912), p. 28.

²⁶T. E. Peet, A Comparative Study of the Literatures of Egypt, Palestine and Mesopotamia (London: Brit. Acad., 1931), pp. 52f, 96f, 127-9, 133-6.

²⁷S. Piggott, Prehistoric India (Pelican Books, 1950), p. 24.

²⁸C. Hockett & R. Ascher, in The American Scientist 52 (1964)

²⁹Ibid., pp. 90f.

³⁰Hockett and Ascher not only insist that man "had already achieved the essence of language and culture" at least a million years ago (ib., p. 89), but that "the crucial developments must have taken place once, and then spread," by that time, since "true diversity is found in more superficial aspects of language" but not in the fundamental aspects, (ib., p. 90). That is, all the languages of the world have retained recognizable ties to a parent language from which they separated over a million years ago! Since C.S. Coon puts the age of the human race at about 50,000 years, this is quite a thing.

³¹The subject is well treated in Lord Raglan, The Origins of Religion (London; Thinker's Library, 1949).

³²J. Mellaert, in Piggott (Ed.), Dawn of Civilization, p. 62.

³³W. Watson, ibid., p. 271.

³⁴G. Sieveking, in E. Bacon, Vanished Civilizations (N.Y.P. McGraw-Hill, 1963), p. 321, this being the Windmill Hill site of 2750 B.C.

³⁵For a good survey, see Ibid. of the preceding footnote, which deals in major civilizations of which we have virtually no history but all of which are definitely tied to the great civilizations of antiquity.

³⁶In Piggott, op. cit., p. 185.

³⁷M. P. Nilsson, Minoan and Mycenaean Religion (Lund: Gleerup, 1950), p. 7.

³⁸M. Wheeler, op. cit., p. 243.

³⁹Piggott, op. cit., p. 15.

⁴⁰We have discussed this in the Jewish Quart. Rev. 50 (1959), pp. 99ff, 109ff.

⁴¹Lord Raglan, op. cit., pp. -38.