

Chariots of the Gods? *and All That:*
Pseudo-History in the Classroom

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ARE WE descendants of ancient astronauts? Was the flaming chariot of Ezekiel really a flying saucer? Were the pyramids of Egypt landing markers for visitors from another planet? Was the manna given to Moses and his people part of a comet which later became the planet Venus? Did the ancient Babylonians have electric lights? Such provocative and bizarre questions have captured the imagination of millions and evoked the hostility of scholars. Many students, from art to zoology, from English to electrical engineering, are quite receptive to the interpretations and methods of pseudo-scholars who espouse such ideas. This is, moreover, a phenomenon which extends to all levels of higher education, as is made clear by the fact that week after week one or another book endorsing such strange views is near the top of the "What Students Are Reading" popularity chart published by the

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Chronicle of Higher Education. Popularity of the subject matter alone, however, is not a sufficient justification for a course; otherwise, courses on football, beer-drinking, and sex would be offered at most universities.

The popularity of strange views of the past is directly tied to certain academic concerns. Both students and the general public are for the most part unfamiliar with the methodology used by the historian and the archaeologist in sweeping away the dust and cobwebs from the picture of man's slow ascent from barbarism. It is easy to ridicule, as pseudo-scholars often do, the efforts of an archaeologist who may spend his life establishing a chronology of Babylonian pottery or those of an historian announcing the fifteen-thousandth different interpretation of the fall of the Roman Empire. Their efforts and achievements are not glamorous and their conclusions, couched in the dry and cautious language of scholars, rarely are noticed by the layman. It is not so surprising, then, that students do not seek exposure to these disciplines. This is most unfortunate, for these men have collected the pieces of the mosaic of our past and have established rules for fitting the pieces together. The first rule is to base one's interpretation of past events on as broad a base of facts as possible. The scholar must above all be sure of his facts and avoid selecting only those that somehow fit his own preconceptions and pet theories. To ignore evidence against one's view, to change the facts rather than the interpretation, to gloss over difficulties or inconsistencies is to forfeit one's reputation. Because this painstaking method is followed, historians and archaeologists have a well-founded aversion to filling in gaps in their evidence through sheer guesswork, since they recognize that complex questions and events often require complex answers and analyses. As a result, there remain many apparent "puzzles" or "mysteries" about the past. In some instances there is no evidence; in others, the evidence as to why certain events transpired is ambiguous. In these cases, scholars rely on "might," "possibly," "perhaps," and "could have" instead of "must," "had to," "did," and "because."

Just as historical novels are more popular and thus more instrumental in the shaping of the general public's conception of the past than the scholarly tomes on which they are based, so are the presentations of Erich von Daniken and others of the same persuasion. These "strange views" offer fancy in the guise of fact decked out in all the gaudy finery of pseudo-scholarship. They ignore counter-evidence and casually dismiss the work of professionals in order to provide one solution to every difficulty, one culprit for every "mystery," one answer, whether spaceman or comet, to every question. Pseudo-scholars cite

obscure (and often out-dated) sources, compiling hundreds of "facts" of dubious accuracy or relevance which are then trimmed and planed and forced into a preconceived pattern.

The best known radical interpretations are those of Immanuel Velikovsky and Erich von Daniken. Velikovsky in the 1950's ignited a controversy with geologists and astrophysicists which still burns today. Indeed, one of the more popular sessions of the 1974 American Association for the Advancement of Science meeting in San Francisco was a formal debate between Velikovsky and his scientist-critics. Velikovsky, a student of biology, medicine, rabbinical literature, and numerous other subjects, argues that the planet Venus was actually a "comet" expelled from Saturn. This comet passed close to the earth about 1500 B.C. and for a period of about fifty years greatly perturbed the earth. These events coincide, he claims, with the Exodus of the Hebrews from Egypt. Velikovsky then attributes the plagues, the parting of the Red Sea, the manna from heaven, the pillar of cloud by day and fire by night, the destruction of Jericho, and a host of other miraculous happenings described in the Old Testament and in the folklore of other peoples to the comet and its presumed electrical, gravitational, and other influences upon the earth. Although an overwhelming majority of scientists and Biblical scholars rejected Velikovsky's ideas when they were first presented—and continue to do so today—his "strange view of the past" has attracted a vocal group of followers.

Erich von Daniken is the most successful and publicized advocate of radical interpretations of the past. He has achieved the best-seller list with worldwide sales of some 25,000,000 copies of his books, has appeared on the "Johnny Carson Show," has inspired a movie and two television shows, and has achieved the ultimate distinction of an interview in *Playboy*. Although his views are in many ways less consistent and scholarly than Velikovsky's, they are by far the more spectacular. He asserts that the earth was visited numerous times in the distant past by extraterrestrials, that the pyramids and many impressive megalithic ruins (megalith="huge stone") such as Stonehenge and those on Easter Island were either constructed or inspired by them, and that man himself may be the result of inbreeding with or genetic experiments on the ancestors of *homo sapiens*. In other words, from the perspective of von Daniken, all "mysteries" of the past are solved, the origin of all religions is clarified, and the inspiration for much of ancient art, architecture, and mythology is revealed by referring to visitors from outer space.

As teachers of the history of science and ancient history, we frequently found ourselves engaged in discussions with students concerning the validity of these strange views of the past. Too often these students took the position that virtually any interpretation which appears in print or on television is essentially correct. Because of this attitude, we decided to design a course dealing with a broad range of interpretations of ancient history. We classified these interpretations under three major headings: orthodox, neo-orthodox, and radical. We subdivided the "radical" category into "supercivilizationist" and "interventionist." Our primary objectives for the course were the following: first, to familiarize students with accepted historical and archaeological interpretations and methodology; second, to have the students examine a broad variety of radical interpretations in greater depth; and, third, to teach students to evaluate conflicting interpretations of the same body of evidence and to approach explanations of man's past with less subjectivity and naivete.

To determine the effectiveness of this course in modifying student attitudes toward such types of "pop" history we utilized the following procedure. On the first day of class we made explicit our own biases toward this body of material: we were highly skeptical of the more radical views; yet, at the same time we acknowledged the occasional gaps in the evidence and conflicting interpretations offered by the orthodox school. We then obtained from each student a statement of his opinion of the better known radical views, intending to compare it with his opinion at the end of the quarter.

In the next few classes we introduced the students to the orthodox interpretations, with particular emphasis on ancient science and technology. As part of the presentation, we included an analysis of the methodology central to the development of the conventional picture of the historical and archaeological past. For the remainder of the quarter, the class compared the traditional with the various heterodox accounts. We began with the "neo-orthodox" ideas of Gerald Hawkins on Stonehenge. He determined with a computer that the stones of this ancient structure were so aligned that they could serve as a calendar for the prediction of lunar eclipses and other solar and lunar phenomena. Hawkins does not assume that extraterrestrial visitors or a supercivilization such as Atlantis were necessary for the construction of such an edifice. Rather, he makes the startling yet conservative assumption that the prehistoric Britons who built it were as intelligent—though not as educated nor as technologically sophisticated—as modern man.

We then considered interpretations which could be categorized as either supercivilizationist or interventionist. The supercivilization

school of thought holds that the myths of the past obscure all but a few traces of highly advanced cultures which were responsible for apparent similarities in the mythology and monuments of peoples scattered throughout the world. The story of Atlantis, recounted by Plato, was used by Ignatius Donnelly as a means of explaining similarities between Old and New World civilizations. The success of his writings in the late nineteenth century continues to spawn numerous imitations, markedly inferior to Donnelly but nonetheless very popular, such as Mu and Lemuria, two "lost worlds" in the Pacific.

Interventionists, on the other hand, claim that much of the same evidence cited by supercivilizationists points to extraterrestrial visitations. Such works as those of von Daniken, Jessup's *UFO's and the Bible*, Tomas' *We Are Not the First*, and Dione's *God Drives a Flying Saucer* all share a common outlook. According to them, ancient man's achievements in technology, much of his mythology and his artistic and architectural inspirations, and even his religious views are a product of his contact with beings from other worlds. The interventionists do, however, offer varying answers to the questions why, how often, when, and from where these visitors came. Moreover, they differ in the evidence cited and the specific interpretations of that evidence.

The final radical view studied in class was that of Immanuel Velikovsky. He selects his evidence to fit his preconception that the Old Testament is a true account of geological events rather than of God's direct action. Essentially, he also advocates an interventionist interpretation, but the intervening force for him is a comet. At first glance, his claims appear to be based on a solid foundation of research and documentation. He cites a wealth of sources including early twentieth-century German works on Babylonian astronomy, C. E. Brasseur de Bourbourg's nineteenth-century translations of Mayan documents, numerous scientific articles and monographs, Egyptian papyri, rabbinical literature, and the Old Testament. Indeed, it is understandable why the average reader would be overawed by the prodigious "scholarship" of Velikovsky.

This enormous range of interpretations, from the outrageous to the orthodox, was presented using a variety of techniques. The standard and the more significant radical explanations of ancient history were imparted by lectures, class discussions, video-tapes, films, and extensive assigned reading. Less familiar views, such as Robert Dione's whimsical theory that God and his angels are really rocket pilots superintending a laboratory experiment, i.e., man, were the subjects of multimedia presentations by students. Among the highlights of the course were two debates by student panels, one on the "Velikovsky Affair" and the other on assessment of the value of radical views of the

past. Both of these debates generated considerable interest and, in both, the student participants exhibited an increased appreciation of the problems and pitfalls of interpreting the evidence bearing on man's ancient past.

Throughout the course, we emphasized the relationship between the evidence and the diverse interpretations. This evidence includes artifacts, ruins, inscriptions, coins, petroglyphs (drawings on rocks), legends, myths, ancient writings, and an assortment of man-made and natural curiosities. The scholar, when confronted with this mountain of evidence, thinks: "There are numerous *possible* explanations. Which one best agrees with *all* the evidence?" The typical pseudo-scholar thinks: "I have an explanation. It may be bizarre, but it is possible, therefore as good as or better than any other. What bits of evidence can I select to justify it?" This difference in the usage of evidence by the scholar and the pseudo-scholar was clearly illustrated in class by specific examples. A comparison of the traditional and radical explanations of the building of the Great Pyramid is a case in point.

The Great Pyramid, constructed during the first half of the twenty-sixth century B.C. beside the Nile near Giza, is a stunning engineering achievement. It was originally 481.4 feet high, the almost perfectly square base covers over 13 acres, and it is the focal point of an elaborate complex of buildings. Because of its dimensions, it has been an enduring cause of speculation as to how and why it was constructed. Almost every "strange view" includes some discussion of its function: a space travel center for ancient astronauts, a shelter from cosmic rays, a focusing device for an as yet undiscovered form of energy, a repository for mathematical, astronomical, and geographical truths, or some combination of these.

Von Daniken cavalierly dismisses the view held by the scholars that the pyramid was merely a grandiose tomb for the pharaoh Cheops (Khufu) and claims it as evidence for ancient man's contact with extraterrestrials. What is the nature of his argument? He claims in *Chariots of the Gods?* that the Egyptian civilization linked with the Great Pyramid appeared suddenly and without transition. The structure is a "genuine miracle in a country that is suddenly capable of such achievements without recognizable prehistory." Why is it built on the rocky terrain near Giza? It is a mystery; he says there is no "common-sense" explanation. How was it built? He provides no detailed account of his own but rejects the traditional theory that it was built by thousands of laborers working with crude instruments over a period of some twenty years. According to von Daniken, the Egyptians had no technique to quarry and dress the 2,600,000 stone blocks; no ropes and no wooden rollers to haul these 12-ton blocks to the site and

lift them into place; no way to fit them together to the nearest .001 of an inch; neither grain nor housing for the several hundred thousand workers involved; and no reason for undertaking the project if the orthodox view be true except for "the whim of an eccentric king." Therefore, for von Daniken, though he nowhere states precisely what purpose he believes the Great Pyramid served, it could not have been built by the ancient Egyptians. The mystery can be solved only through an appeal to heaven, or, more accurately, to outer space.

Archaeologists, Egyptologists, and historians take a very different view from that of von Daniken. It is conceivable that the Great Pyramid was built by or for "saucer-men" but the evidence cited by von Daniken is but a smattering of the vast fund of knowledge amassed by scholars and, moreover, much of the "evidence" he cites is simply wrong. The explanation most in accord with all the evidence is that the Great Pyramid was both a tomb and the center of a complex of religious buildings. By way of introduction, artifacts and other remains clearly establish the gradual development of a farming culture from about 5500 B.C., almost three millenia before the Great Pyramid was built. Moreover, the Great Pyramid is by no means unique; it is the culmination of a burial practice dating back to the Stepped Pyramid of Soser a hundred years earlier, and even back to the mastabas (oblong tombs with sloping sides) some five hundred years earlier. There is no mystery about the "sudden" flourishing of Egyptian culture, if by sudden one means "occurring over a period of 3000 years" (a period of time equal to that between David, King of Israel, and our own era).

Is the location of the Great Pyramid a mystery? The rocky terrain, as any engineer would point out, is desirable for the substratum of an edifice estimated to weigh 6,000,000 tons. Further, the site itself provided the bulk of the rock for the interior of the pyramid, thus easing the problem of transport. Additional considerations in selecting the site might well have been the proximity to both the then capital city of Memphis (some 17 miles distant) and the Nile. During the season of the Nile flood, the distance from the bank to the pyramid was only about 1500 feet. Thus, building materials and other supplies shipped to the site would have to be hauled overland only a short distance. Finally, there is an outcropping of rock which was incorporated into the pyramid, saving considerable labor and material. To the scholar, these practical considerations provide a common-sense explanation for the choice of site.

Are scholars truly incapable of explaining how the Great Pyramid was built? There is in fact a sizable body of evidence bearing on this point, although scholars are not in complete agreement on every detail. There is ample evidence, both literary and archaeological, that the

Egyptians could quarry and dress soft stone, such as the limestone facing of the pyramid, with the copper saws and other tools then in use and the harder types of stone with heat and metal wedges followed by “bashing” and polishing with stone such as dolorite. These approximately 2,300,000 blocks (not 2,600,000) with an average weight of 2½ tons (not 12 tons) could each be moved with ropes and wooden sledges (as depicted in tomb paintings) by ten men the short distance from the Nile or the local quarry. These blocks could then be moved up earthen ramps (described in numerous Egyptian texts and indeed partially preserved at the Meidum pyramid) and emplaced. Incidentally, the blocks are fitted together with precision only in the case of the limestone sheathing and then with an average gap of .02 inch (not .001 inch). As for the work force, a permanent cadre of 4000 men (housed in the huts excavated in the last century) assisted by a 100,000-man levy (not several hundred thousand) of laborers (fed by the grain of the Nile Valley which later sustained all of Egypt as well as 250,000 Romans) could have completed the construction of the Great Pyramid in twenty years.

Scholars readily admit that there are unanswered questions about the pyramids, including the Great Pyramid, such as how the four-sided pyramidal shape came to be chosen. For them, however, there is no great mystery about where or how the pyramids were built—provided *all* the evidence is considered. As for the purpose or function of the pyramids, a matter virtually ignored by von Daniken, there is a mass of evidence, ranging from ancient texts and inscriptions to recent archaeological excavations, all according with the view that the pyramids were royal tombs and centers of religious rites. One may claim that the Great Pyramid was a landing beacon for spacecraft, but only at the cost of ignoring the enormous body of evidence that points to the tomb theory and indeed, in some cases, of misrepresenting or misunderstanding that evidence as seen above.

It is quite true that there are other constructions of ancient man that are not as fully understood by scholars. The cryptic lines on the Plain of Nasca in South America are claimed to be a landing field for spacecraft, a route map for ancient aircraft, fertility symbols, or an aid to predicting astronomical events. Scholars do not agree on one explanation of these lines because the evidence is insufficient and too ambiguous. It might be well to point out, however, that the pyramids have been studied for centuries, whereas the lines at Nasca only came to the attention of scholars a few decades ago. Perhaps with further study, this “mystery,” too, will be solved without recourse to some *deus ex machina* such as a visitor from another planet.

This manner of misusing, or even fabricating, evidence is relatively

easy to expose in class. A much greater challenge is presented by the author who relies upon citations of obscure or outdated authorities, mistranslations of ancient documents, and the representation of scientific speculation as fact. In the case of Velikovsky, part of the challenge is the interdisciplinary nature of the evidence he advances. The average reader is not grounded in both Mayan and Babylonian studies, to say nothing of astrophysics and geology. A close study of Velikovsky's citations, however, revealed to the class a number of flaws in his usage of sources. His major source of information on Mayan legends supposedly connected with various astronomical and terrestrial events at the time of the Exodus is, as mentioned earlier, the translations of Brasseur de Bourbourg. These translations, particularly the Troano Codex, are regarded today by scholars, as they were in his own day, as inaccurate to the point of being sheer nonsense, yet Velikovsky—and many partisans of Atlantis—used them uncritically. Worse yet, for his information on Babylonian astronomy and chronology he relies upon the work of a number of German authors writing in the early twentieth century. These authors were under the delusion that the Babylonians possessed an incredibly ancient and very accurate astronomy as part of an imagined advanced civilization. This school of thought was subsequently demolished by further research; yet pseudo-scholars continue to cite these outdated and erroneous studies. Velikovsky cites, for instance, E. F. Weidner, *Handbuch der babylonischen Astronomie* (1915), in confirmation of his contention that Venus was not part of "the four-planet system of the ancient astronomers of Babylonia." An inspection of Weidner reveals that the basis of this contention is a star list which includes, according to Weidner, the planets Mercury, Mars, Jupiter, and Saturn but not Venus. Modern scholars agree that Venus is not listed in the Babylonian text, but neither are the other four planets. Weidner mistranslated the names of four stars as planets. Numerous other Babylonian sources cited by Velikovsky are vitiated by similar errors.

This approach of presenting a variety of interpretations and critical evaluations of the evidence cited in those interpretations resulted in a measurable shift in student attitudes. Many students who at the beginning of the course credulously accepted various strange views of the past gradually became confused in the welter of contradictory interpretations based on the same body of evidence. By the end of the quarter, most students developed a better understanding of the strengths and weaknesses of historical and archaeological methodology, an attitude of skepticism toward the more radical views, as well as an awareness of some of the problems of the traditional interpretations, and some insight into the relationship between historical theory and

historical fact. This change is clearly indicated in the following sampling of student opinion:

STUDENT NO. 1: As this quarter begins, I am most familiar with von Daniken's writings and find his work very thought-provoking and believable. I am not familiar enough with the other theories to comment on them. I am taking the course because of an interest in von Daniken and similar "controversial" ideas about the past. . . . [End of the Quarter] My confidence in the orthodox view has been shaken, but my acceptance of the strange views, particularly the interventionist theory as presented by von Daniken, has also been challenged. I find these theories interesting but their popular and serious image is definitely damaged by the poor methodology of the researchers and writers involved.

STUDENT NO. 2: I came into this course fairly open-minded concerning "strange views." However, after studying them, I have become highly skeptical. The evidence presented is interesting and "mysterious," but the conclusions drawn from the evidence are often too far-fetched. Proponents of such views are not scientific, rational, or objective. The evidence is sufficient to question man's orthodox views but not sufficient to conclude that we are the product of visits from outer space.

STUDENT NO. 3: At the beginning of the quarter, I did not know much about ancient history. The theories of von Daniken appealed to me. Now his theories seem a little far out for me to believe. The class lectures, discussions, and presentations and the research for my term paper have changed my ideas. I still feel that ancient man has not been given the credit he deserves.

In summary, von Daniken, Velikovsky, and others have succeeded in exploiting some of the "gaps" in our historical knowledge. At the same time, however, their own interpretations rest upon such scant or questionable evidence or upon such incredible stretching of well-established evidence as to be scarcely plausible. Much more needs to be done in archaeological and historical investigation, such as in the case of the lines on the Plain of Nasca. More students should be exposed to the proper methodological approaches and, above all, students and laymen alike must be encouraged to approach both controversial and accepted explanations of man's past with a critical spirit. As Pope put it so well, and as is so well illustrated by the continuing popularity of strange views of the past, "A little learning is a dangerous thing."

HISTORY 4700
 “Strange Views of the Past”

TEXTS: Jones, *Paths to the Ancient Past*
 von Daniken, *Gods from Outer Space*
 Donnelly, *Atlantis the Antediluvian World*
 Hawkins, *Stonehenge Decoded*
 Charroux, *The Gods Unknown*
 Velikovsky, *Worlds in Collision*

TENTATIVE SCHEDULE OF TOPICS

1. Introductory Remarks

The Orthodox View
 reading: Jones

2. Methodology; Mythopoeic Thought
3. Egyptian Science
4. Babylonian Science; Greek Science

The Neo-orthodox View
 reading: Hawkins

5. Stonehenge and computers
6. Evidence of pre-literate science; presentation: Giorgio de Santillana's *Hamlet's Mill*; presentation: Michell's *View over Atlantis*
7. “Paraphysics” videotape and discussion of same

“Radical” View 1: Atlantis & Mu
 reading: Donnelly and Charroux

8. Discussion: Donnelly's and Plato's Atlantis
9. Presentations: Hapgood's *Maps of the Ancient Sea-Kings*; one or more of Frank Churchward's Mu books; Charles Berlitz's *Mysteries from Forgotten Worlds*; one or more of Charles Fort's Lo books
10. Discussion of Charroux; Presentation: Charroux's *Legacy of the Gods*

“Radical” View 2: Extraterrestrials
 reading: von Daniken

11. Film: “In Search of the Ancient Astronauts”
12. Film: “In Search of Ancient Mysteries”
13. Discussion: von Daniken and films

14. Presentations: von Daniken's *Gold of the Gods*; Peter Kolosimo's *Not of This World*; Andrew Tomas' *We Are Not the First*; Blumrich's *Spaceships of Ezekiel*

“Radical” View 3: *Biblical Literalism in
Cosmic Perspective*
reading: Velikovsky

15. Discussion of Velikovsky
16. Debate: “The Velikovsky Affair” or audiotapes of 1974 AAAS meeting
17. Presentations: Jessup's *UFO* and the Bible*; Dione's *God Drives a Flying Saucer*; Raymond Drake's *Gods and Spacemen in the Ancient East*
18. Debate: “The Value of Radical Views of the Past”
19. Final thoughts

Additional Books of Possible Interest:

- Erich von Daniken, *Chariots of the Gods?*
Father Xavier Kugler, *Im Bannkreis Babels*
J. W. Spencer, *Limbo of the Lost (Bermuda Triangle)*
Jacques Bergier, *Extraterrestrial Visitors from Prehistoric Times to the Present*
Louis Pauwels and Bergier, *Morning of the Magicians*
Immanuel Velikovsky, *Ages in Chaos*
Immanuel Velikovsky, *Earth in Upheaval*
Daniel Cohen, *Mysterious Places*
Daniel Cohen, *Myths of the Space Age*
Pensee magazine
Raymond Drake, *Gods or Spacemen?*
Raymond Drake, *Mysteries of the Gods*
Robert Charroux, *One Hundred Thousand Years of Man's Unrecorded History*
Henri Frankfort *et al.*, *Before Philosophy*
Peter Tompkins, *Secrets of the Great Pyramid*
L. Sprague de Camp, *The Ancient Engineers*
L. Sprague de Camp, *Lost Continents*
Charles Berlitz, *Mysteries from Forgotten Worlds*
I. E. S. Edwards, *The Pyramids of Egypt*