

# Psychic Archaeology

## The Anatomy Of Irrationalist Prehistoric Studies

Kenneth L. Feder

As a scientific enterprise, archaeology is relatively young. The use of objective, consistent, and meticulous field-techniques is barely 100 years old. As recently as 25 years ago archaeological theory—that is, a body of general theory explaining the nature of the relationship between human societies and the material remains of these societies—was so deficient that those who discussed it could state that it lacked even a name (Willey and Phillips 1958, p. 5). In the past twenty years archaeology has experienced a methodological and theoretical revolution characterized by the explicit application of statistical analysis, use of computers, a heavy emphasis on ecological relationships, and the growth of cultural evolutionary theory.

Though scientific or anthropological archaeology is new, archaeology has never lacked fringe-area, pseudoscientific, and, at times, decidedly *antiscientific* approaches and theory. Archaeology and astronomy are probably the two sciences that have attracted the greatest number of serious and dedicated amateurs who go on to make valuable contributions. These two fields have also attracted the greatest number of individuals whose time would be better spent selling incense. It is truly mind-boggling to consider the number of frauds (Pitdown Man, the Cardiff Giant, the Davenport Stones), racist ideologies (Nazism), religions (Mormonism), and just plain crazy theories (ancient astronauts) that have utilized archaeology to “prove” their often preposterous hypotheses.

It should come as no surprise that a “new” field of endeavor involving archaeology and the paranormal has been introduced: “psychic archaeology.” After all, what could be more obvious? Psychics can find missing things; why shouldn’t they be able to find archaeological sites?

---

*Kenneth L. Feder is an archaeologist in the Department of Anthropology, Central Connecticut State College.*

---

They can, for instance, psychometrize an object—that is, they can perceive detailed personal information about the owner of an object simply by holding it in their hands. Why shouldn't they be able to do the same for a 10,000-year-old spear-point?

It is not surprising that people who have embraced the paranormal would also wish to embrace psychic archaeology. If this was the extent of this phenomenon, it might best be ignored. However, psychic archaeology has gained an unfortunate professional tolerance, if not acceptance, in some quarters. Ivor-Noel Hume, one of the most influential (and, I might add, theoretically conservative) historical-site archaeologists in North America, details in his introductory text the technique of dowsing for the location of buried metal artifacts (Hume 1974, pp. 37-39). In a popular new introductory text, David H. Thomas, who is highly respected, and deservedly so, devotes a two-page inset to psychic archaeology and straddles the fence on the issue (Thomas 1979, pp. 286-287). However, far and away the most disturbing work is that of David E. Jones (1979), a professional anthropologist at the University of Central Florida. His book *Visions of Time*, published by the Theosophical Society, purports to be a “test” of psychic archaeology. Jones is honest enough in describing his interest in parapsychology as stemming from his desire to “escape from the tyranny of a Western ‘logic’ of the universe.” Yet, through procedures that, at least superficially, feign Western scientific methodology, Jones attempts to test the validity of the psychic-archaeology hypothesis and states, “I feel a positive conclusion is unavoidable.” Let us see just how “unavoidable” this “positive conclusion” is in the testing of psychic archaeology. Because Jones’s work claims to be an objective test, and since Jones is a professional scientist, his work demands professional attention.

In essence, Jones tests some basic claims made by “psychic archaeologists”:

1. the ability to locate unknown archaeological sites;
2. the ability to ascertain the location of buried artifacts and features at archaeological sites; and
3. the ability to perceive detailed information of both a general and specific nature about the prehistoric environment, culture, and even the emotional and physical states of individuals who have been dead for thousands of years, by simply handling artifacts. (As Jones states, “The psychic’s claim, if it could be demonstrated *rigorously enough* [emphasis mine], was precisely what archaeology needed to make it an historical tool capable of generating cultural descriptions comparable to primary or first-hand observation” (Jones 1979, p. 4).

Let us see exactly how these phenomena are supposed to work.

## Site Location

Whether lecturing to a class of archaeological neophytes or speaking to a local civic group, archaeologists are always asked how they find sites. The question is asked, at least initially, much in the same way one might inquire how pirate treasure is found. The notion is that sites are terribly rare, randomly strewn across the countryside, and almost impossible to find without detailed technical knowledge. With this in mind, certainly if a psychic could precisely locate a site it would seem to be impressive evidence that such abilities exist.

I am certain that it would not be giving away any trade secrets to admit that, although our methodologies may be quite sophisticated, involving rigorous sampling techniques, infrared photography, and so on, the theory behind locating archaeological sites is, in fact, quite simple. Human beings do not distribute themselves randomly across the landscape. Especially in technologically unsophisticated societies, people settle areas differentially, as a function of certain rather obvious environmental parameters. Among these are:

1. distance to potable water
2. distance to a navigable waterway
3. gentleness of topographic relief
4. defensibility
5. natural protection from the elements
6. soil type
7. presence of natural resources (stone quarries, clay, etc.)

Thus, while our methods for assessing the probability of site location in a given area are becoming increasingly sophisticated—Thomas (1972, 1973) utilized a computer simulation model—the gross variables considered are often commonsense characteristics. In order to survive, people need fresh water, a flat area large enough to accommodate the community, and so on. How much detailed technical information must someone have before being able to duplicate the accuracy of an archaeologist in finding a site? In many cases, not much.

In my introductory course in archaeology each semester, I distribute copies of United States Geological Survey quadrangle maps (1:24,000 scale) of an area of Connecticut that has been partially tested in the Farmington River Archaeological Project (FRAP). The goal of FRAP is to explicate, as well as explain, prehistoric human settlement in the Farmington River valley, a small to medium-sized tributary valley of the Connecticut River located in the central portion of the state. In this survey, test pits were excavated at 30-meter intervals along randomly selected transects running perpendicular to the river. Each transect cut across the

three distinct topographical/depositional zones in the valley floodplain, glacial terrace, and bedrock upland. A large number of prehistoric settlements have been located in this fashion. The vast majority of sites have been situated in the kinds of areas in which one would expect to find human settlements.

After only an hour or so of discussion of human settlement locational choice, where the students suggest the key parameters of this question and with no other information provided, I ask them to suggest areas where sites might be expected. Invariably, in a class of 40 students, a number point out *precise* locations where, unknown to them, sites have already been found by FRAP. Are these students psychic? Of course not. They simply paid attention and applied the reasoning that was discussed. To predict that an area where a swift brook enters a navigable river would have been attractive to human settlement is like predicting there will be cold nights in Alaska this January. You can't miss.

A perfect example of this "can't miss" test of psychic archaeology occurred in a recent program in the "In Search Of" series on one of the major TV networks. Here we are told of a fabulous experiment in underwater psychic archaeology where a group of "sensitives" were asked to identify the location of possible historic shipwrecks from sea charts. The areas suggested by the psychics were examined in a research mini-submarine, and, sure enough, a wreck was found, although not in any of the precise locations predicted by the psychics. The fact that a wreck was spotted (after many hours of searching) was presented as proof positive of the existence and utility of psychic underwater archaeology. The fact that the area chosen for psychic examination was historically one of the most highly traveled regions of the world's oceans, and where a number of wrecks were known to have occurred, was played down in the show.

According to Jones (p. 15), a number of key archaeological discoveries made in the past were based on the psychic abilities of the researchers. He very clearly implies that it was by using their "intuitive" (read *psychic*) powers that Winckelmann discovered artifacts at Pompeii; Stephens and Catherwood, the Mayan civilization; Boucher de Perthes, paleolithic tools; Layard, the palaces at Nimrud in Assyria; and Schliemann, the ruins of ancient Troy. With the exception of Layard, who apparently did claim to possess clairvoyancy, these claims are extremely misleading. When a scientist, after years of analysis and meticulous, painstaking research, puts the data together in a new way, makes a discovery, and gains a new insight into a perplexing question, it is called rational thought, or deductive reasoning. There is no reason to call it paranormal.

Does Jones go on to adequately test the hypothesis that psychics can

“locate” sites? Not only does he not *adequately* test the hypothesis, he doesn’t test this at all! At no point is a map presented to a psychic to predict the location of an unknown site whose existence can then be tested. Instead, Jones presents psychics with artifacts and photographs from *known sites*, whereupon they are asked to determine the location of these sites.

In one such experiment Albert Bowes (a professional psychic) was left *alone* in a room with his wife and a series of artifacts (p. 55). Bowes correctly identified the site as a coastal occupation, a result which is seen as impressive; after all, the site could have been in the mountains or in a desert. However, the fact that among the artifacts provided were shells and some columella beads may have given Bowes a tiny hint.

In another test Bowes was mailed four photographs of a Florida site, which he kept for three days, and was asked to provide locational data (pp. 106-114). Jones claims that the photographs are not diagnostic of Florida. This seems like a particularly poor way to test a hypothesis. Though Bowes correctly identified this and other Florida sites as being near “water,” we must remember that (1) almost all prehistoric, as well as historic, habitation sites everywhere in the world are near water; (2) Florida has, in a state covering 58,560 square miles, approximately 1,800 miles of coastline (more than 8,000 miles of detailed shoreline); and (3) when a psychic correctly guesses that a Florida site is near a lake and even suggests the direction of the lake from the site, it is not terribly surprising, since there are approximately 30,000 lakes in the state. It would be difficult for a site in Florida not to be near a lake. Furthermore you can point in almost any direction from an archaeological site in Florida and find a lake nearby.

What evidence is given that psychics can locate unknown archaeological sites? In a word, *none*.

## **Site Excavation**

In the excavation of most archaeological sites, researchers are faced with the problem of deciding precisely where to dig. All but the smallest of archaeological sites are too large to excavate in their entirety. Archaeological science deals with this problem through the application of rigorous sampling strategies designed to ensure a representative sample of the subsurface materials. Archaeological pseudoscience deals with this problem through clairvoyance.

Jones conducts four experiments purported to test psychic abilities applied to archaeological excavation. The bulk of the test results, however, have nothing whatsoever to do with the proposed psychic ability to

perceive unseen artifacts. Rather, most of the information provided by the psychics deals with reconstructing past cultures, that is, “sensing” what went on at a site when it was occupied. I will assess Jones’s tests of the psychics’ abilities at site reconstruction in the next section of this paper.

However, there were some attempts made by the psychics at specifying the material that was found, or would be found, at a particular site on the St. John’s River in central Florida. James Randi has introduced the concept of “negative success” as a common rationalization used in psychic research—“when you win, you win; and when you lose, you win” (Randi 1975, p. 8). Jones exploits his own version of this when he states (p. 101): “If the psychic subject stated that a particular artifact was present in the site, the lack of its discovery during excavation would not disprove the presence of the artifact.” This statement, while absolutely true, renders this set of experiments entirely meaningless, since a psychic *cannot* be proved wrong. Anything guessed at correctly is a hit. Anything guessed at which is not found does not *prove* a miss; it may merely mean that it has not yet been found. Philosophers of science often judge the utility of a hypothesis by its falsifiability. This particular hypothesis does not meet this criterion in Jones’s test.

In terms of the actual testing, a specific list of artifacts found at the site is provided (p. 105). Of all the materials listed, Bowes was correct only twice in his psychic assessment of the artifacts that were present: a single iron nail and some metal pieces (all of non-Indian manufacture and intrusive to the site). The 11 projectile points, 42 flint pieces, fire hearths, shell tools, beads, worked bone, flat (milling?) stone, European ceramics, Indian pottery, and the human burial were not mentioned by Bowes in the first experiment.

Jones attempts to convince the reader that Bowes came close to perceiving the burials; Bowes did not. Instead, he talks about broken necks and heads on poles, but this is meaningless in testing the hypothesis. In fact, he initially states, “I really feel as though this site or area may not show that many bones or people” (p. 113). In the second experiment, where Bowes actually visits the site, he goes so far as to say “if you find skulls here, it would be surprising” (p. 115). Well, they did find a skull. Jones, of course, sees this as verifying Bowes’s psychic abilities because, after all, *only* one skull was found.

The most abundant artifact found at the site was pottery, with over 5,000 shards recovered. Bowes, however, never mentions pottery at all until he is brought to the site and sees or is given a potsherd (in the test it is unclear where it came from). This is not a very impressive degree of accuracy.

## Site Reconstruction

The claim is made that psychics can provide detailed information about prehistoric groups. In the lexicon of pseudoscience, “vibrations” of individual people and their natural and cultural environment are imprinted on their possessions, bones, and so on, and these “vibrations” can be read thousands and even millions of years later by psychically inclined individuals. According to Jones, what these people can accomplish is “like nothing that any archaeologist could do by simply observing the artifact” (p. 4). I shall ignore for the moment that archaeologists do a bit more than “simply observe” artifacts.)

The bulk of Jones’s book is devoted to testing experimentally the psychics’ abilities to accomplish this feat: “psychometrizing” an artifact, that is, psychically producing as detailed a description of prehistoric people as an ethnographer could who lives with a contemporary group. All archaeologists admit a deficiency in detail of our cultural reconstructions compared with those of the cultural anthropologist, who observes and interacts with a people in their daily lives. Can psychics recapture this lost detail?

A slight digression must be made here to discuss the methodology employed by Jones in his testing of this hypothesis. The essence of any good experiment, archaeological or otherwise, rests in consistency and objectivity. It is incumbent upon the rational scientist to detail, as explicitly as possible, the problem being addressed, the methodology and operationalization of the experiment to be performed, and, quite important, the precise nature of the results required to accept or reject the hypothesis. Jones goes as far as the first two steps but never discusses the third. We are not told beforehand what exactly will constitute proof or disproof of the hypothesis that psychics can provide detailed archaeological information. In any acceptable test of a hypothesis, it is necessary to present a set of predictions, to spell out precisely those things that *must be true* if the hypothesis is to be considered valid. It makes no sense, in an objective test of a hypothesis, to propose a phenomenon, design an experiment to test the phenomenon’s existence, conduct the experiment, and then seek to explain all experimental results within the context of the assumption that the hypothesis is, in fact, valid and true. This constitutes post-hoc rationalization. This constitutes precisely Jones’s “reasoning” in *Psychic Archaeology*. Post-hoc rationalization is *not* science. All of the results of the experiment, including those that quite clearly contradict the hypothesis, are interpreted, squeezed, fudged, and rationalized away as actually supporting the hypothesis. Scientists set out to *test*, not *prove* hypotheses. The trouble with trying to *prove* something

rests in the self-fulfilling prophecy: if you want to prove something badly enough, you always will.

Further, Jones states that he does not use quantitative or statistical techniques in the analysis of his data; that his discussion in the body of the test constitutes the “hits,” rather than the misses, of the psychics. His reasoning seems to be that, while the psychics were *so* wrong part of the time that not even a post-hoc rationalizer could account for it, when they were correct it was so impressive as to alone prove the existence of psychic powers. Jones seems to believe that explicit, admitted avoidance of quantitative techniques obviates all criticism of his not being statistical. This is akin to a surgeon trying to avoid responsibility for the consequences of not sterilizing his or her instruments on the grounds that he/she specifically said it would not be done. That simply is not a good enough argument. The abandonment of statistical analysis by a person with an advanced degree in anthropology is appalling. This critical problem can be explained through the following example.

Suppose you designed an experiment to test whether or not a particular coin was “fixed.” In the experiment you performed 100 sets of 10 flips each. Obviously, if the coin was legitimate you would expect (predict) that in the majority of sets of 10 flips you would obtain 5 heads and 5 tails. Statistically you would expect to achieve 10 straight heads or tails  $1/2^{10}$  or  $1/1024$  times. With 100 sets of these 10 flips, your probability increases to  $1/10.24$ . Thus, though it is unlikely, it is certainly possible. Suppose, when presenting the results, the coin tester stated: “In the 100 sets of 10 flips each, there were many nonsignificant (5 heads/5 tails) results, but let’s forget these. On one occasion I obtained 10 consecutive heads—a highly unlikely result. I therefore conclude that the coin is fixed.” This would not be accepted as being valid by any rational individual. This reasoning displays a complete lack of understanding of the meaning of “proof” in a statistical sense. This is precisely the approach used by Jones.

A key element in the statistical reasoning that *must* be used when testing probabilistic phenomena (which all psychics claim psychic phenomena to be) is the recognition that unlikely events *do* occur. The point of a statistical test rests in providing a mathematical measure of the likelihood of a given result in order for us to determine whether or not the result is so unlikely as to reject or accept the hypothesis.

Specifically, it can be certainly stated that none of Jones’s quasi-experimental tests renders a conclusion in favor of psychic archaeology “unavoidable.”

Jones initially ran a two-stage preliminary experiment. The first stage involved a double-blind reading of wrapped and boxed artifacts. Remember, Jones is giving a detailed report only of the *hits*. The claim is

made that Bowes scored positive hits on 50 percent of the 10 items he was presented. The case for the antique baseball in box number 4 is typical. Indeed, on page 20 a section of the transcript of the experiment is quoted in which Bowes mentions that the object in box number 4 pertains to a game and that the thing is a ball. Sounds impressive. Well, when we turn to the full transcript we are able to isolate 15 different specific references to the item in box number 4: (1) teeth, (2) pottery, (3) game, (4) ball, (5) Incas, (6) South American, (7) man with scar or injured jaw, (8) Egypt (9) mummy, (10) building, (11) cave, (12) pyramid, (13) supreme ruler, (14) bones, and (15) jaws. Hardly an extraordinary outcome.

The second part of the preliminary experiment involved a second reading, with the objects now open for view. Interestingly, in almost every case Bowes provides a far more detailed reading of the objects when seen than when they were boxed. Why would *seeing* an object that was being analyzed by another “sense” help in its description? Does seeing a stereo speaker help you hear it? Can you feel heat or cold better with your eyes open than with them closed? I suggest that it’s just easier to make up a story about something if you can see it. The length and detail of the second set of psychic observations are far more congruent with this conclusion than any other I can suggest.

In one of the more purely archaeological experiments Bowes was given a set of artifacts and asked to analyze them. These items were from Lindenmeier, a Paleo-Indian site in Colorado. Jones could not have picked a worse example on which to run a test. The Paleo-Indian period, with its easily recognizable “fluted” points, is known to anyone who has seen even a child’s book on Indians or American archaeology. During a recent lecture to fourth-graders I was asked about these “fluted” points, which are found across the country and date from 12,000 to 9,000 years ago. Certainly if I were Bowes, and even if I believed I was a psychic archaeologist, I would at least pick up a book or two on archaeology to get acquainted with the field. Anyone who did so would have to be unconscious not to come across at least a brief discussion of these late Pleistocene inhabitants of the New World.

Even given all this, how well did Bowes do? Not especially well. He locates the site in California, New York, Nevada, and even suggests Georgia and Tennessee, though he correctly prefers the general area of the American west. He correctly identifies the period generally as being before Christ and before Egypt, but he never gets beyond this in specificity. Much of the other information provided by Bowes is problematical, vague, and, in general, meaningless. However, there is one point at which Bowes clearly gives away the source of his meager knowledge of Paleo-Indians. It is decidedly not psychic.

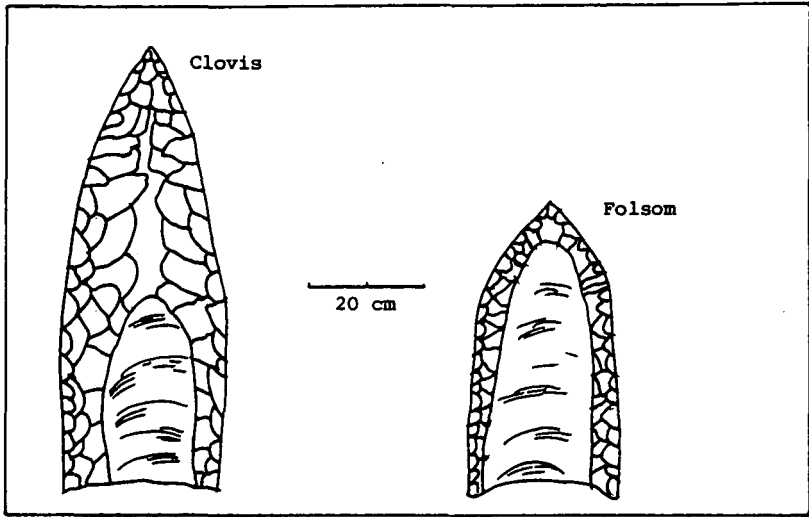


FIGURE 1. The two types of fluted points found in North America

When discussing diet and hunting techniques Bowes states that the fluted points at Lindenmeier were used “to shoot bison, or an elephant or mastodon or something” (p. 82). He later denies the presence of bison (which is rationalized by Jones to be confusion over the fact that an *extinct* form of bison was present at Lindenmeier). While most popular books on North American archaeology will tell you that Paleo-Indians hunted bison and mastodon with their fluted points, most neglect a small, technical piece of information. There were actually two forms of fluted points: Clovis points—long, leaf-shaped points with a channel on both faces rarely reaching beyond the midpoint of the projectile’s length; and Folsom points—somewhat shorter leaf-shaped points with channels reaching nearly the entire length of the points (see Figure 1). The Clovis points, which tend to be older, are almost always associated with the remains of extinct proboscidiens. The Folsom points are *never* associated with these elephants, which apparently became extinct before the large, Pleistocene bison. Folsom points are almost always associated with bison in the west. The only way Bowes could get the impression of elephants here would be through some faulty psychic connection, since Lindenmeier is a Folsom-period site. The list of faunal species recovered at Lindenmeier includes pronghorn antelope, wolf, coyote, swift fox, red fox, jackrabbit, and bison (*Bison antiquus*) (Wilmsen 1979:23). The list is notably devoid of elephants of any genus or species. Bowes’s mention of elephants or mastodons could have come from no psychic vibration from the Lindenmeier artifacts. I would suggest that either he forgot the subtle distinction, or the book he

got his general information from did not provide that little detail, which, in any case, seriously calls into question the entire experiment.

The Lindenmeier experiment is typical of the rest of Jones's book. Any time Bowes or the others say anything that might possibly be construed as correct, the only possible explanation is psychic power. When Bowes identifies the source of some Mayan artifacts as the Vikings, it is clearly correct because both Vikings and Mayans were warlike, seagoing, and traders (Jones rationalizes this on page 181). When Mayan astronomical observatories are described as storage areas, it is suggested that they *might* have stored material there. When some very amorphous stones from the Yucatan Peninsula are located by Bowes in North Carolina, Florida, Texas, or South America, it's a hit (each successive guess comes closer to the actual source). When another of the psychics lists Lake Erie, Louisiana, Missouri, and Mexico for the same stones, it's a direct hit (pp. 231-232).

Even when they are clearly wrong, it proves psychic power, since the reading may not relate to the manufacturer of the artifact but, perhaps, to someone else who owned or touched the artifact at any point in time (p. 39), or it may have been contaminated by contact with some other artifact.

Perhaps the best tactic of all in the arsenal of psychic archaeologists is vagueness in the face of a friendly researcher. The vast majority of the data provided by the psychics is untestable personal information about the makers of the artifacts they analyzed. Even on specifics they are vague, though Jones is misleading on this point. When he states, "It would take a highly trained and experienced expert to differentiate a piece of primitive basketry of Bontoc or Mono origin" (39), the implication is that the psychics can do so. They don't.

When he describes Bowes's description of wrapped and boxed toy combs from Boston in the 1840s, he claims that it is "full of references to a mid-1800s Boston" (p. 26). While there are references to a body of water and lots of different kinds of people and buildings, there are *no* specific references to Boston or the 1800s. The only specific reference is to Eskimos. Finally, when detailing the Lindenmeier experiment he states: "No one, not even the most expert New World archaeologist, could look at a Folsom point and tell it came from Lindenmeier" (p. 77). I read into this the implication that the psychic can tell and did state that the material was from *Lindenmeier*. He, of course, never does.

The Jones experiments are not experiments at all—they are rationalized "proofs" of the existence of a highly questionable phenomenon. I do not believe that Jones is dishonest. If he were, he would not have supplied the full transcripts of the experiments in the appendices. Instead, Jones is clearly a researcher who has abandoned science,

reasoning, and rationality.

I, for one, am not going to replace my trowels with little Jeane Dixons. Instead, my research in FRAP will plod slowly along, underfunded and understaffed. We will advance one step at a time in our understanding of the prehistoric inhabitants of the Farmington Valley of New England, and, in essence, of all humanity. The human past is a fascinating enough field without wallowing in the mire of the miracles of lost continents, ancient astronauts, or psychic archaeology.

## References

- Feder, Kenneth L. 1980. "Foolsgold of the Gods." *Humanist* (Jan./Feb.):29-23.
- Goodman, Jeffrey 1977. *Psychic Archaeology: Time Machine to the Past*. New York: Putnam.
- Hume, Ivor-Noel 1974. *Historical Archaeology*. New York: Knopf.
- Jones, David E. 1979. *Visions in Time: Experiments in Psychic Archaeology*. Wheaton, Ill.: Theosophical Publishing House.
- Randi, James 1975. *The Magic of Uri Geller*. New York: Ballantine Books.
- Thomas, David H. 1979. *Archaeology*. New York: Holt, Rinehart and Winston.
- Willey, Gordon R. and Philip Phillips 1958. *Method and Theory in American Archaeology*. Chicago: University of Chicago Press.
- Wilmsen, Edwin 1974. *Lindenmeier: A Pleistocene Hunting Society*. New York: Harper & Row. ●

---

## On superstition

*Such is the way of all superstition, whether in astrology, dreams, omens, divine judgments, or the like; wherein men, having a delight in such vanities, mark the events where they are fulfilled, but where they fail, though this happen much oftener, neglect and pass them by.*

Francis Bacon, *Novum Organum I*