

Data, Relativism and Archaeological Science

Author(s): Lewis R. Binford

Source: *Man*, New Series, Vol. 22, No. 3 (Sep., 1987), pp. 391-404 Published by: Royal Anthropological Institute of Great Britain and Ireland

Stable URL: http://www.jstor.org/stable/2802497

Accessed: 10/02/2015 10:16

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Royal Anthropological Institute of Great Britain and Ireland is collaborating with JSTOR to digitize, preserve and extend access to Man.

http://www.jstor.org

DATA, RELATIVISM AND ARCHAEOLOGICAL SCIENCE*

Lewis R. Binford

University of New Mexico, Albuquerque

Against the backdrop of current archaeological debate, this article presents a discussion of the production of data for anthropological research. It is suggested that the particular character of ethnographic research has conditioned the discussion of the role of science in both ethnography and archaeology. It is argued that the 'ethnographic model' of data production is misleading and offers a false model for archaeology. By implication it is also suggested that ethnography is misled as well by its acceptance of personal experience as an ontological guide to the nature of ethnographic data or the ethnographic research domain.

Contemporary archaeology is coping with some of the fundamental philosophical issues of our time through argumental posturing and polemics. Today I will suggest that many of these arguments and postures stem from a poor understanding of the philosophical issues themselves, but more importantly, many are metaphysical issues that are not really appropriate to science in fundamental ways. Thus, when introduced, these issues become distractions and lead to unproductive argument. This is not a new situation. Thomas Huxley spent much of his intellectual life coping with just such issues. Even when solved, these issues would never lead to greater learning, only to a kind of intellectual comfort or discomfort with the act of seeking knowledge itself and the methods proposed for doing so. I will seek to elaborate these introductory remarks with what I consider to be some fundamental issues around which current controversy swirls.

Where do data come from?

It has been said that any science can be operationally defined with respect to the way it interacts with its empirical domain or subject to study. Albert Spaulding (1960) has cogently argued that archaeology may be productively considered as that science which studies artefacts (I would say the archaeological record) with respect to the dimensions of form, time (inferred), and space. This statement sounds neat and concise, but when it actually comes down to doing archaeology

* The Huxley Memorial Lecture 1986

Man (N.S.) 22, 391-404

we need a better understanding of process—of how we actually go about learning from archaeological observations.

Crucial to the process of learning is a clear understanding of what a fact is for a scientist. Within science the term fact refers to aspects of the actual occurrence of an event. More importantly, scientists generally attribute factual status to 'recognisable', singular events that occur at given times. While a fact exists in an event or part thereof that occurs once and is then gone forever, data are the representations of facts by some relatively permanent convention of documentation. The astute person will recognise that this conventionally used definition of a fact signals for archaeologists some interesting methodological problems that the very nature of their experience with the archaeological record prescribes. For instance, if we accept the equation of facts with events, we must conclude that archaeologists can never work with facts of the past. Nevertheless, archaeologists produce many data as a result of their study and observation of the archaeological record. These studies may result in relatively permanent records of their observations. What then are the events that archaeologists describe so as to produce data? They record the events of observation in which they participate. These observational events, occurring in the present, may be recorded in notes and laboratory attribute tabulations. These observational records, reported as the data of archaeology, refer to contemporary facts -contemporary observational events. No historical facts (past events) are available for archaeologists to observe. Archaeologists produce data from facts of contemporary observations on artefacts. This important point is given further importance when we consider the criteria commonly employed in science for judging the admissibility of data for scientific treatment.

1. The event that is accepted as a scientific fact must be singular. Data are representations of singular events.

This idea has been introduced above, and it can be accepted as a given. The rationale for it will become more clear when we consider the operations that scientists perform with their data.

2. The event must, in principle, be available for public scrutiny. That is, it must be an event that could be sensed by more than one person.

Another way of stating this criterion is that the fact must be objectively observable. In modern science the word *objective* has a very specific meaning. It simply means that the rules for observation are made explicit so that another observer using the same rules for looking would see the same fact if given the opportunity.

3. The description of the event should be such that different individuals can know, as specifically as is reasonable, the nature of the event that is being described.

This additional criterion of objectivity implies that the rules for seeing an event are also specified by the investigator so that another person would be able to isolate an event in the same way as the scientist reporting factual events as data. In the case of archaeologists, the context of observation is most unambiguously seen as the observation of an entity by an archaeological observer. Archaeologists do this all the time, with the result that observations on one pottery sherd or projectile point are treated as single events and hence sources of facts. This criterion can become somewhat confusing when the archaeologist

speaks of observations on other types of units considered to be unitary phenomena, such as archaeological features, pits, house remains, burials, or sites or regions. I suggest that a bounded phenomenon, where the bounds are visible to the observer at the time of observation, may legitimately be treated as an observational unit for purposes of the production of archaeological data. Phenomena that can be seen at the time of observation by virtue of visible and specifiable boundaries, such as pits, postmolds and hearths, may for purposes of data production be considered units of observation. It is the rules for the recognition of unitary phenomena that provide the archaeologist with the ability to identify units of observation objectively for purposes of the production of data from observational events.

Since all relevant archaeological facts are inherent in events of observation, the archaeologist has many advantages over other social scientists who report facts of social interaction, facts of events from on-going dynamic experiences, facts that are uncontrolled or constrained in ways that render their data inadmissible for scientific research. Quite literally the archaeologist seeks to render his factual observations admissible for scientific use by developing and explicating operational definitions, or descriptions of how one documents a fact. These definitions describe the operations the observer performs in order to produce data, the records of facts.

The domain of archaeological investigation is the archaeological record. When archaeological phenomena are recovered from a static context—a buried surface, a surface of the earth not currently used by man, or one on which man currently lives but does not use any previously deposited artefacts—it seems probable that the artefacts must relate to past events. This is the reasoning that renders it rational for archaeologists to seek knowledge of the past through the study of artefacts. Nevertheless, we cannot confuse implications with facts. The artefacts so discovered may have had their origin in the past, but the past events in which they participated are gone—not available for observation—and hence there are no historical facts remaining for us to see or record.

Archaeologists study contemporary data, data generated by them in the act of observing the archaeological record. This means that the possible observational events in which the archaeologist might participate are the result of the archaeologist's judgements as to what might be profitable to observe—that is, what properties might implicate the past in reliable ways. Putting this situation very bluntly, all archaeological data are generated by us in *our* terms. We are responsible both for the production of data and, as we will see later, for what we have to say about it in so far as we use it to implicate the past. All responsibility for accuracy and reliability rests with us.

During the early days of science this was not the manner in which data production was conceived. Strict empiricists believed that data were derived from nature and experience itself. Put another way, data were handed over to the astute observer as 'natural' packages residing in nature. As Francis Bacon said,

I am of the opinion that if men had ready at hand a just history of nature and experience, and labored diligently thereon; and if they could bind themselves to two rules,—the first, to lay aside received opinions and notions; and the second, to refrain the mind for a time from the highest

generalizations, and those next to them,—they would be able by the native and genuine force of the mind, without any other art, to fall into my form of interpretation. For interpretation is the true and natural work of the mind when freed from impediments (in Commins & Linscott 1947: 154).

Bacon saw the weakness of poor theories as guides to the interpretation of nature and suggested that all theories should be abandoned in favour of the gift of conclusions arising from the 'natural work of the mind'. Similarly, archaeologists viewing the frequently racist products of theoretically guided interpretation produced by the nineteenth-century evolutionists adopted the strict empiricism of Bacon's thought and rejected theory as a useful component of scientific procedure. Not only did they reject the particular theories of the nineteenth century, they concluded that all theory must therefore be misleading. They operated with the naive belief that they could clear their minds of 'received opinions and notions' and be guided to understanding through simple observation and the natural 'discoveries' that might result from such procedures. Data were thought to reside in natural units of nature, awaiting our discovery.

How do we evaluate our data?

If one adopts a strict empiricist's view of the growth of knowledge and believes that 'interpretation is the true and natural work of the mind when freed from impediments', then clearly the best way to evaluate knowledge claims is to evaluate something of the 'quality' of the mind at work and the degree to which it has been truly 'freed of impediments'. In short, the way to judge the validity of inferences offered by archaeologists would be to evaluate the archaeologists and their states of mind. It is interesting that serious epistemological discussion during the heyday of traditional archaeology stressed only the subjective element as crucial in the evaluation of archaeological interpretations.

The final judgment of any archaeologist's cultural reconstruction must therefore be based on an appraisal of his professional competence, and particularly the quality of the subjective contribution to that competence (Thompson 1956: 331–2).

This was a total endorsement of ad hominem argument, sanctioning the introduction of character and personality into archaeological debate (see Binford 1983 for a response to this type of evaluative discussion).

I think most people acknowledge that the strict empiricist's view of fact and data is faulty. Anthropology has demonstrated again and again that the facts of culturally guided cognition render naive the empiricist's claim of a privileged ability to see nature and experience 'truly'. In the past, however, many archaeologists purporting to adopt the posture of empiricism nonetheless operated with 'received opinions and notions' and were quick to generalise, while in the same breath they advertised that their claims for knowledge flowed self-evidently from nature and experience.

It was in the context of strict empiricism that one such knowledge claim was made, and it has debilitated archaeology even into the current era. This is the claim of relativism. I am quite aware of the experiences that have propelled

researchers to this viewpoint and will suggest that it is the naive psychology of certain types of ethnographic and social research that has led to relativist conclusions. I will further suggest that a careful examination of the locus of responsibility for the production of data in a science will negate the claims of utility made for the relativist viewpoint in the science of archaeology.

Let me present a story of ethnographers and their experiences. Typically ethnographers are trained in 'their' culture; they are schooled in the culture of their particular research specialisation. As students they learn all the 'received knowledge and opinion' of their predecessors in their research field. If lucky, they are given the opportunity to go out to a 'group' or 'society' to do fieldwork. I have done this several times and can attest to the fact that this experience is generally traumatic. In fact, I tell my students that no more unnatural position exists for any person. All our culturally conditioned expectations for behaviour and belief are challenged. The people the fieldworker is with behave differently, express different concerns, and express themselves and their motives in terms unfamiliar to the observer. In this context the fieldworker becomes increasingly dependent upon informants to provide him or her with information regarding their knowledge and beliefs in terms of which the local people operate. This needed understanding must come from the informants, the local experts, who it is hoped can enculturate the fieldworker sufficiently to be able to see the world from their perspective.

We may ask the interesting question: if the field observer is a scientist, who is creating the data? In this situation the answer is always that the local people provide the fieldworker with information regarding what they consider to be 'data', in response to the researcher's request that the informants provide an understanding of their own behaviour. In so far as ethnographers are successful in understanding a different cultural system from the perspective of 'participant observers', they will do so in the terms of the people being studied. The circumstances of the ethnographic situation reinforce the researchers' convictions that their approach is purely empirical, for they have successfully laid aside 'received opinions and notions', and understanding has flowed directly from experience.

Even though ethnographers are successful in communicating their new-found cultural experiences to readers in their own culture, they are still not operating in a scientific role. Instead, they have adopted the role of intercultural translators; they provide an intellectual Rosetta Stone—the monograph—so that the alien cultural behaviour of one group can be appreciated by an outsider. Throughout this experience field researchers are continuously bombarded by the recognition that their own cultural guides to understanding appear to be inadequate: they find that their ways of thinking about their experiences may not anticipate the responses of the informants. In short, their conventional codes for thinking do not work very well in the face of an unknown and different way of thinking about and interpreting experience.

As Clifford Geertz has said:

The whole point . . . is . . . to aid us in gaining access to the conceptual world in which our subjects live so that we can, in some extended sense of the term, converse with them (Geertz 1973: 24).

The essential vocation of interpretive anthropology is not to answer our deepest questions, but to make available to us answers that others, guarding other sheep in other valleys, have given, and thus to include them in the consultable record of what man has said (Geertz 1973: 30).

I suggest that these goals, coupled with baffling experiences in the ethnographic world, have compelled many social researchers to rely on their informants to create their data. In turn, these same informants guide the interpretation and ultimately mediate the understanding of the data. What ethnographers report is not data but information, the intellectualised expression of experience. If the ethnographer is successful in capturing the character of others 'guarding other sheep in other valleys', the act of intellectualising is done by the informants. It is no wonder that from this context each culture appears unique, each culture has a logic all its own, and each culture must be understood in its own terms. Ironically, this relativistic conclusion appears to be consistent with the archaic assumptions of strict empiricism. The ethnographers had to clear their minds of received knowledge and beliefs in order to experience a different cultural reality.

This ethnographic procedure has had important and confusing impacts 'at home', in the centres of social science research. To begin with, although it affirmed one basic principle of empiricism (that we must clear our minds of preconceived ideas and received knowledge), it demonstrated the inapplicability of another: ethnographers were capable of comprehending nature directly when dealing with the intellectualising of others. The social scientist was dependent upon an informant, an expert guide to alien cultural realities. In an ethnographic setting, understanding was not the consequence of mental liberation as much as it was the result of fortuitous collaboration.

If this was the only 'world', the only way to study man and his works, then (alas!) archaeology was cut off. All such potential sources of information regarding the alien cultural materials that had been dug up were long since dead and gone! From this perspective, the pessimistic viewpoint of Edmund Leach (1973) was correct. He said, 'The contents of the Black Box, social organization as the social anthropologist understands that term, must forever remain a mystery'. Strangely, archaeologists accepted the participant-observer perspective and committed themselves to the frustrating goal of seeking understanding in terms that, as Leach points out, 'must forever remain a mystery'. They persisted in seeking to understand the past in seemingly unobtainable terms. As Robert Dunnell has said,

the field is . . . encompassed by the concept artifact, objects which owe some of their attributes to human activity. The problem similarly is to provide categories for these data that are cultural, for the ultimate purpose of explaining the products of human behavior and with them the behavior that created them in terms of ideas held in common by the makers and users (Dunnell 1971: 130, emphasis added).

Crucial to this view of archaeology is the belief that we do not study the archaeological record; rather, we seek to organise the remnants of the past into cultural categories that were significant in the past. In turn, culture itself is considered to be a mental phenomenon held in the heads of persons now gone.

As Walter Taylor has said:

culture is a mental construct consisting of ideas . . . attitudes, meanings, sentiments, feelings, values, goals, purposes, interests, knowledge, beliefs, relationships, associations. . . . For example, there is present in an Indian's mind the idea of a dance. This is a trait of culture. This idea influences his body so that he behaves in a certain way. The result of this behavioral activity is the pattern of the dance. . . . Both the behavior itself and the resulting patterns are observable, but for this very reason they are fleeting. The culture idea is not observable but endures in the Indian's mind to be repeated again (Taylor 1948: 101–2).

As Leach (1973) has pointed out, there is no way the archaeologist can study culture when it is conceived of in these terms. This was acknowledged by ethnologists and traditional archaeologists alike. For instance, James Griffin has said.

An archaeologist may recover material but not the substance of aboriginal artifacts. The exact meaning of any particular object for the living group or individual is forever lost, and the real significance or lack of importance of any object in an ethnological sense has disappeared by the time it becomes a part of an archaeologist's catalogue of finds (Griffin 1943: 340).

In spite of these misgivings, archaeologists continued to delude themselves into believing they could achieve the improbable. This was accomplished by assuming that culture, when conceived of in a mentalist fashion, was the explanation for certain selected manifestations remaining from the past. They assumed a conventionalist posture in which meaning was assigned to archaeological observations chosen by us, made in the contemporary world by us, yet presented not as data but as *information* reflecting the ideas held in the minds of long dead persons.

Artifacts are concrete objects. Types and modes, on the contrary, are conceptual patterns set up by the archaeologist to represent ideas possibly held by the artisan. . . . Artifacts have little historical significance. Types and modes, however, are well suited for historical study (Chang 1967: 91)

Stated another way, archaeologists presented their own observations as 'pre-intellectualised' understandings, just as the ethnographer presents his intercultural experiences 'pre-intellectualised' by his informants' understandings. The great problem with this approach was that the archaeologist had no informant from whom to receive understanding, yet he behaved as if he were capable of penetrating the minds of past men and rendering his observations into information about the past in cultural terms. This was and continues to be a great self-deception. We are surrounded today by arrogant intellectual inventions that claim to make possible a discussion of the past in the intellectual terms of the past. Accepting a mentalist definition of culture, James Deetz notes:

Culture is patterned . . . (therefore) the patterning which the archaeologist perceives in his materials is a reflection of the patterning in the culture which produced it (Deetz 1967: 7).

This approach is also emphasised by Ian Hodder:

Excavated artifacts are immediately cultural, not social, and they can inform on society only through an adequate understanding of cultural context (Hodder 1982: 10).

In Hodder's view, *cultural context* refers to the received knowledge, beliefs, and 'codes' for conceptualisation held in the minds of past men. Both these

conventionalist approaches share the belief that artefacts directly implicate the mental codes held in the minds of past men. The first approach represents the view of traditional archaeology, in which it was acknowledged that not all artefacts directly implicate past ideas, only those that are patterned in certain ways (Dunnell 1971; Ford 1962; Krieger 1944; Spaulding 1960). The more recent view, championed by those adopting a 'textual' approach, assumes that all artefacts are symbols and are direct semiotic evidence or, in a more structuralist posture, present themselves as clues to the intellectual determinants of the ancients' behaviour.

It is interesting that archaeologists who adopt culture as an explanation for their observations do so by virtue of the ethnographer's experience with the domain of intercultural experience. In the manner in which it has been predominantly championed by anthropology, this experience ensures that the discipline is not a science. In this experience the researcher does not generate his data, and he does not intellectualise it except in an intercultural, translator fashion. Since 'explanations' of cultural phenomena are always in terms of information received from informants, from a scientific perspective the anthropologist never, in fact, seeks explanations—only understanding in others' terms.

This is not to say that anthropologists have not attempted to treat the understandings so generated as data to be explained. In some cross-cultural studies, advocates of behavioural observation have sought to move anthropology in the direction of science. Nevertheless, there are those who are convinced that their experience (viewed from a strict empiricist perspective) is the only 'true' one, and they preach the 'conclusion' that their ability to communicate with others renders the domain of human experience inaccessible to the methods of science. This claim for 'truth' is made in the context of empiricism. Ironically, it is cited as the justification for rejecting science as a learning procedure appropriate to man and his works. Since archaeological remains are said to be derived from this human domain, then in the view of the textualists a scientific approach applied to these remains is a violation of the ethnographic truths of nature that they enjoy by virtue of their actions as empiricists. At the same time they behave as believers in the 'received knowledge' obtained from their communicative, information-passing informants—the relativist posture—to claim that since scientists create their data they violate the great 'truth' discovered by them in empiricist terms: that each culture, including that of the scientist, is unique and therefore the scientist operates as an *intellectual imperialist*, and his perspective is therefore unacceptable.

The fact nevertheless remains: archaeologists have no informants. We cannot see the past from the ancients' cultural perspective because they cannot tell us what that might have been. We have no access to truth by authority emanating from the past. For those impressed by the cultural relativist's experience, such authority is the source of the only 'true' reality regarding the human domain. What is such an archaeologist to do? There are two suggestions currently in vogue: adopt a universalistic interpretative approach and/or give up and exploit the past for contemporary purposes, disregarding the search for an understanding of the past in its own terms. The justification for knowledge claims is abandoned in favour of moral justifications for one's own interpretive scenarios.

Adopting a universalistic interpretive approach

This is the most highly recommended approach. We search the historical literature or our own human experience, seeking to abstract universals, particularly regarding 'human nature', and then we use these universals as premisses in a deductively reasoned interpretation of the archaeological remains. As Hodder suggests,

Theories basic to archaeological knowledge must be concerned with the principles according to which individuals construct their social worlds (Hodder 1985: 13).

Where do we obtain such principles? We obtain these principles by reasoned recognition of certain 'truths of humanity', a procedure only made rational if one accepts the empiricists' doctrine of archaic science.

The situation is interesting. We do not compare properties cross-culturally that appear similar or different and seek to understand their distributions, since such formal characteristics chosen by us are illusions conditioned by our judgements as to what we should look for and how we should view the world—in short, by our production of data. This relativistic posture was outlined long ago by Boas:

research which compares similar cultural phenomena from various parts of the world... makes the assumption that the same ethnological phenomenon has everywhere developed in the same manner. Here lies the flaw..., for no such proof can be given. Even the most cursory review shows that the same phenomena may develop in a multitude of ways (Boas 1943: 273).

It is quite clear that Boas, who viewed the ethnological world from the participant perspective, saw that different informants from different culture-historical backgrounds viewed phenomena judged similar by us as carrying highly variable meanings. Since he believed that causes had reference to culturally variable ways of thinking about experience (the relativist view), then comparing phenomena considered similar by us is said to violate the cultural contexts of the informants. They thought about these things differently, thus their cultural causes were said to be different. Boas also states,

it is not possible to predict the behavior resulting from the historical events that made the people what they are. This problem is essentially a psychological one and beset with all the difficulties inherent in the investigation of complex mental phenomena of the lives of individuals (Boas 1938: 5-6).

To a scientist this is an intellectually strange conclusion to draw. The ethnologist generally depends on his informants to create his data and, importantly, to give it meaning in the informants' terms. When this is accomplished, the investigator discovers that he could not have anticipated his informants' different perspective because of his own ethnocentric cultural perspective. He concludes that the only reliable commonality between himself and his informants is the fact that all possess a symboling capacity and a common human nature. If we are to go beyond simple appreciation and respect for cultural differences, this extension must be made through the medium of the properties that all individuals share, their 'human nature', which is believed to flow 'self evidently' from the 'human' experience, an empiricist doctrine.

Is this view correct? The answer must be no. The simple fact is that the methods of science have never been attempted or implemented. The above conclusions derive from the research posture and the particular social articulation of the observer with his or her subject matter, not from some inherently self-evident truth of nature or privileged insight regarding the human condition. This fact is not appreciated by its advocates. Nevertheless, the conclusion is drawn that because we can communicate our inner thoughts, we are thus removed from nature and can be understood only in these 'inside' terms.

The historian Collingwood summarised this perspective nicely when he noted,

I shall contend that the work which was to be done by the science of human nature is actually done, and can only be done, by history; that history is what the science of human nature professed to be (Collingwood 1956: 209).

The historian, investigating any event in the past, makes a distinction between what may be called the outside and the inside of an event. By the outside of the event I mean everything belonging to it which can be described in terms of bodies and their movements; the passage of Caesar, accompanied by certain men, across the river called the Rubicon at one date, or the spilling of his blood on the floor of the senate-house at another. By the inside of the event I mean that in it which can only be described in terms of thought: Caesar's defiance of Republican law, or the clash of constitutional policy between himself and his assassins. The historian is never concerned with either of these to the exclusion of the other. He is investigating not mere events (where by a mere event I mean one which has only an outside and no inside) but actions, and an action is the unity of the outside and inside of an event. . . . His work may begin by discovering the outside of an event, but it can never end there; he must always remember that the event was an action, and that his main task is to think himself into this action, to discern the thought of its agent (Collingwood 1956: 213).

The cause of the event . . . means the thought in the mind of the person by whose agency the event came about: and this is not something other than the event, it is the inside of the event itself (Collingwood 1956: 214-15).

In short, Collingwood is arguing that in order to understand human action we must adopt the 'human' perspective, the 'inside humanity' view of humanity's experience. This is a value judgement offered by Collingwood to explain what gives history meaning for some humans; we want to view ourselves in terms that we all intuitively appreciate. On the other hand, when these same ideas are adopted by Marxist, 'textual', or 'contextual' archaeologists, a very different claim is being made—namely, that the recognition of our perspective as a cognitive filter to experience justifies the claim for an independent ontological realm of 'reality'. The human or 'inside' perspective is said to prove the existence of a new and independent domain of phenomena that must be understood only in terms of itself, in human terms.

In this approach, man is raised above nature, capable of self-generative, self-guided, or self-determined action such that only a 'deep' understanding of human nature can render human actions, history and contemporary events understandable. Scientific study of the 'outside' of events is irrelevant; the inside view of humanistic history is seen as the only 'proper' perspective. The emphasis on the term *event* is not accidental here. It will be recalled that in science the objective specification of an 'event', as well as the facts of events to be described, was a fundamental act leading to data production. It was also

emphasised that no events remain from the past for archaeological observation. All observations and hence all 'data' generated by archaeologists have reference to observational events in the present and represent facts selected by us for systematic observation. The attempt to use history as the model for archaeological investigations is therefore totally inappropriate. At least the historian begins with some 'outside' description of 'events' in the past and then proceeds to try to insinuate himself into the actor's roles in those events, to see them from the actor's 'inside' viewpoint. The archaeologist sees no past events, only contemporary phenomena. To play the historian's game (as understood by the textual-contextualists) archaeologists must infer past events and then insinuate themselves into these inferred events so as to produce for contemporary readers a 'you were there' inside view of the past.

What happened to cultural relativism? Where is the claim that there are many different 'inside views'? How do the contemporary 'contextualists' create past events from contemporary static phenomena and then proceed to insinuate themselves into these created events so as to see them from the perspective of past humans? How did we move from the posture of cultural relativism, which recognised many different human worlds, to that of cultural universalism, which proposes the existence of a common, unique and distinctive human experience that transcends cultural differences and renders intercultural understanding possible even across the 'barriers of time'? The answer is simple: just accept the intuitive, subjective insight implicit in the principles of empiricism, which of course dictates these conclusions.

The result for the thinking person is a paradox that leads to the second posture common today. The argument is outlined here by Ian Hodder:

whether I accept any test of my theory as valid or relevant, depends on my theory (or paradigm) (Hodder 1984: 66).

This relativist claim is elaborated upon as follows:

The past exists for us through our perceptions of it. And the process of perception is not passive—we do not just receive patterns from the world out there. We seek for pattern. To perceive is to create pattern and meaning (Hodder 1984: 67).

Here we see the relativist position. There are many cultural worlds; all are subjective and represent particular 'inside' views. We perceive or create pattern for the past in terms of our 'theories' (or paradigm) in the present. All history becomes myth produced to serve a contemporary hunger for justifying a past consistent with what one wants to believe as viewed from the 'inside' world of the present. At the same time, however, those persons wedded to the 'truth' of relativism (an argument that a true relativist position ensures cannot be made!) step out even further on the small, fragile branches of a convoluted logical tree and make the claim that a knowledge of the universal properties of humanity or human action will make possible the 'translation', the understanding, not only of the past but of the different cultural worlds of contemporary men. How do we escape the relativist's dilemma and obtain a universalistic view of man?

It was appreciated long ago that attempts to understand such properties as

redness were not advanced by postulating inherent red tendencies underlying the surface manifestations of redness. Redness, in fact, became understandable only through the recognition of natural properties that were not 'red' in themselves but interacted in ways so as to appear red to us. This lesson has been repeated over and over again as our knowledge of the world around us has grown and accumulated. Is it unreasonable to explore the possibility that when we demand an understanding from the 'inside view', we prevent and ensure against learning and a more reliable basis of understanding?

Exploiting the past for contemporary purposes

Another basic assumption of science is that we cannot assume we possess a sufficient knowledge of the subject matter of study. We must assume there is something to learn. If we adopt the procedures advocated by the 'textualcontextualists', interpretation of the archaeological record is dependent upon adequate and sufficient knowledge of human nature linked to an interpretative art in order to recreate the 'codes' or 'masked expressions' of ancient power negotiations as played out by ancient men! Strangely, I thought that it was culture and man that we sought to investigate, yet in the hands of the 'textual-contextualists' these are not the subjects of investigation at all. Rather, it is human history, the variable actions in which past men participated, that is to be understood in terms of a priori knowledge of culture and man. In short, we simply translate the inferred past into our contemporary view of ourselves. We accommodate the phenomonological world of the past to what we believe about ourselves and the present. This is the very act that leads to claims that science is inappropriate as a learning procedure. 'Textual-contextualists' assert that scientists cannot escape 'theory-laden' or paradigm-dependent thoughts, while at the same time they argue that men are 'free' to negotiate their own cultural worlds! The implication seems to be that scientists are not human!

This suggestion is not simply a smart remark. Scientists are viewed with contempt by the advocates of the 'textual-contextual' approach. Scientists are viewed as having been duped, as having sold their birthright of 'free will', and as masking their true motives. We are told that

perhaps the clearest attempt to hide the political in reconstruction of the past is found in the embrace of the hypothetico-deductive method, independent tests and 'middle range theory', prediction, and objective measurement (Hodder 1984: 67)

We see further moralising by Ian Hodder in the following statement:

The ideology of science, and the control of nature through knowledge, are [also] linked to strategies of social dominance. . . . The culture of science and modernism is linked . . . to the control of men through the control of knowledge and machines (Hodder 1984: 68).

This type of approach—truth as rendered up by socio-political moralising—becomes the justification for using the past to suit our contemporary ends.

From the standpoint of dialectical materialism the knowledge claims delivered by any theory... can only be considered 'true' insofar as their own validity criteria are concerned; that is, they are

relative truths. . . . By rejecting the notion . . . that theories can be evaluated and rank ordered using some standard measure of validity, the dialectical materialist does not mean to imply a relativist indifference toward alternative theoretical or epistemological frameworks. Rather, dialectical materialism specifies a form of critique . . . [to] determine the consequences of competing theoretical approaches for those other aspects of the [contemporary] social totality . . . Since, from the standpoint of dialectical materialism, theories end only when their social conditions of existence end, pursuit of these tasks is seen to serve the purposes of radical social criticism (Saitta 1983: 301).

Here we have laid bare the programme of those who advocate the 'critical' approach of the Frankfurt school, the ideological dialectic of much modern Marxist archaeology, and the extreme view of the 'textual-contextualists'. The past does not matter. The framework for evaluating the accuracy of any inferred past is not the record remaining from the past and our tentative knowledge thereof, but instead it is the present intellectual world. This intellectual world consists of values placed on knowledge and ideas in our contemporary setting. Here the second component of an empiricist's view is implemented by the most vocal critics of empiricism: namely, one must evaluate the quality of the mind at work. Instead of the old, tiresome, personalised, *ad hominem* argument we are now given the same form of argument on a larger scale. Ideas must be rejected or accepted in terms of their socio-political affinities. Empiricism reclothed in Marxist contextual clothes is still an intellectual failure.

Conclusion: where do we go with our data?

Science works responsibly. We create our data in the present. We seek through pattern recognition studies to gain an insight into how the past was organised. We propose ideas as to the nature of past organisations and how they changed. At this juncture the scientist is responsible for seeking out experiences as widely as possible in order to provide reality checks on the accuracy and utility of his ideas. Responsible learning is dependent upon the degree to which research is designed so as to expose ambiguity, inadequacy and inaccuracy in our ideas guiding both the production of data and our attempts to understand it. The backboard for achieving this is the world of experience. The external world exists in its own right, and that includes the properties of the archaeological record. This external reality must be used in skilful ways to inform us about our ideas concerning that reality. The claim that our cognitive devices insulate us from the external world is false. The claim that we may accommodate properties of the external world wrongly through our cognitive devices may be correct. It is the availability of the external world, regardless of the character of our cognitive devices, that makes it possible for science to work. We can learn the limitations of our own ideas, as science has demonstrated over and over again, through skilful interaction with the world of experience, the external world.

This is the view that Thomas Huxley so eloquently adopted. Today, however, we must combat the self-appointed authorities who proclaim what we are like and then use such alleged knowledge to create pasts consistent with their beliefs. As in the past, a natural science, in this case the study of the archaeological record, is the only way to expose the current crop of archaeological theologians and move us in an orderly manner, through learning, to an accurate appreciation of the past.

REFERENCES

- Binford, Lewis R. 1983. Reply to 'More on the Mousterian: flaked bone from Cueva Morin' by L. Freeman. Curr. Anthrop. 24, 372-7.
- Boas, Franz 1938. Introduction. In *General anthropology* (ed.) Franz Boas, pp. 1–6. War Department Education Manual EM 226. Madison, Wisconsin: United States Armed Forces Institute.
- 1943. Race, language and culture. New York: Free Press.
- Chang, K. C. 1967. Major aspects of the interrelationship of archaeology and ethnology. Curr. Anthrop. 8, 227-43.
- Collingwood, R. G. 1956. *The idea of history*. New York: Oxford Univ. Press. [Originally published in 1946 by Clarendon Press.]
- Commins, Saxe & Robert N. Linscott 1947. Man and the universe: the philosophers of science. New York: Random House.
- Deetz, James 1967. Invitation to archaeology. Garden City: Natural History Press.
- Dunnell, Robert C. 1971. Systematics in prehistory. New York: Free Press.
- Ford, James A. 1962. A quantitative method for deriving culture chronology (Technical Manual 1.) Washington, DC: Pan American Union, General Secretariat, Organization of American States.
- Geertz, Clifford 1973. The interpretation of cultures. New York: Basic Books.
- Griffin, James 1943. The Fort Ancient aspect; its cultural and chronological position in Mississippi Valley archaeology. Ann Arbor: Univ. of Michigan Press.
- Hodder, Ian 1982. Theoretical archaeology: a rectionary view. In Symbolic and structural archaeology (ed.) I. Hodder. Cambridge: Univ Press.
- ——— 1984. History vs science: no contest. Review of L. R. Binford 1983, In pursuit of the past (Thames and Hudson) and J. G. D. Clark 1983 The identity of man (Methuen). Scot archaeol. Rev. 3, 66-8.
- ——— 1985. Post-processual archaeology. In Advances in archaeological method and theory, vol. 8, (ed.) M. B. Schiffer. New York: Academic Press.
- Krieger, A. D. 1944. The typological concept. Am. Antiq. 9, 271-88.
- Leach, Edmond 1973. Concluding address. In *The explanation of culture change: models in prehistory* (ed.) Colin Renfrew. London: Duckworth.
- Saitta, D. J. 1983. The poverty of philosophy in archaeology. In Archaeological hammers and theories (ed.) J. A. Moore & A. S. Keene. New York: Academic Press.
- Spaulding, Albert C. 1960. The dimensions of archaeology. In *Essays in the science of culture: in honor of Leslie A. White* (eds) Gertrude E. Dole & Robert L. Carneiro. New York: Thomas Y. Crowell.
- Taylor, Walter W. 1948. A study of archaeology (Mem. 69). Am. Anthrop. 50 (No. 3, Part 2).
- Thompson, R. H. 1956. The subjective element in archaeological inference. SWest. J. Anthrop. 12, 327-32.