CHAPTER 1

Studying the History of Archaeology

Though there exists one major academic industry . . . telling the social scientists . . . how they can turn themselves into genuine scientists, there exists another, with at least as flourishing an output, putatively establishing that the study of man and society cannot be scientific.

ERNEST GELLNER, *Relativism and the Social Sciences* (1985), p. 120

Since the 1950s archaeology, especially in North America and western Europe, has shifted from a seemingly complacent culture-historical orthodoxy to ambitious theoretical innovations. These innovations have led to growing disagreements about the goals of the discipline and how these goals can be achieved. Increasing numbers of archaeologists, following in the wake of historians and sociologists, have abandoned positivist certainty and begun to entertain doubts about the objectivity of their research. They see social factors as determining not only the questions they ask but also the answers they judge to be convincing. Extreme versions of this view deny that archaeologists can offer interpretations of their data that are other than a reflection of the transient values of the societies in which they live. Yet, if archaeology cannot produce some kind of cumulative understanding of the past and a commentary that is at least partially independent of specific historical contexts, what scientific – as opposed to political, psychological, or aesthetic – justification can be offered for doing archaeological research?

These concerns have encouraged studying the history of archaeological thought as a means by which problems of subjectivity, objectivity, and the gradual accumulation of knowledge can be assessed. A growing number of archaeologists have come to agree with the philosopher and archaeologist R. G. Collingwood (1939: 132) that "no historical problem should be studied without studying . . . the history of historical thought about it." The clear implication of

Collingwood's position is that archaeological interpretation and the history of archaeology are closely aligned. In recent decades, historical investigations of archaeological interpretation have multiplied and more advanced methodologies for carrying out such studies have been adopted from the history of science (Corbey and Roebroek 2001). Christopher Gosden (1999: 34) has argued that to be effective, disciplinary histories must not be purely intellectual or social but both.

This historical approach is not, however, without its critics. Michael Schiffer (1976: 193) once asserted that graduate courses should cease to be "histories of thought" and instead should systematically expound and articulate current theories, as, in a general sort of way, K. R. Dark has since done in his book *Theoretical Archaeology* (1995). Schiffer's position embodied the view that the truth or falseness of theoretical formulations is independent of social influences and hence of history but can be determined by applying scientifically valid procedures of evaluation to adequate bodies of data. Taken to an extreme, this view implies that the history and philosophy of archaeology are totally unrelated to each other.

The primary goal of this book is to survey the intellectual history of archaeology in an attempt to evaluate the claims of three alternative epistemologies that are currently being applied to archaeology. Positivist epistemologists maintain that society and culture exert no significant influence on the development of archaeology, which is shaped by explanations based on explicit theories being tested in the light of adequate evidence and according to proper scientific methods. Extreme relativists argue that the interpretation of archaeological data is so influenced by the intellectual persuasions, class interests, ethnic loyalties, gender prejudices, and personal self-interest of archaeologists that objectivity is impossible. There is no such thing as objective knowledge, and, therefore, no one truth but many possibly antithetical truths. Moderate relativists concede that archaeological interpretations are influenced by society, culture, and self-interest but maintain that archaeological evidence constrains speculation. The term relativism, as used here, embraces both relativism, in the strict sense of phenomena being perceived, valued, and understood differently as a result of cultural variation, and subjectivism, which refers to how phenomena are perceived, valued, and understood differently as a result of variations in individual

comprehension. To address these questions, it is necessary to consider what archaeologists have learned about the past, how the methods they use to study the past have changed, what ideas have guided the development of archaeology at different periods, how these ideas relate to broader social, cultural, and intellectual trends, whether different societies produce different kinds of archaeology and, if so, what are the differences, and finally whether there is long-term convergence or divergence in the development of archaeology. It also cannot be assumed that the same factors necessarily influence archaeology to the same extent at every stage in its development.

Archaeology is not a universal or self-evident activity. In some countries, people debate whether foreign archaeologists are treasure hunters or spies. They cannot imagine that anyone would be interested in going to so much trouble and expense to study the past for its own sake. In Western civilization, despite the popularity of the Indiana Jones stereotype, it is generally accepted that archaeology is an esoteric discipline that has no relevance for the needs or concerns of the present. Ernest Hooton (1938: 218) once described archaeologists as "the senile playboys of science rooting in the rubbish heaps of antiquity." Yet for almost 200 years a widespread concern for the broader implications of archaeological discoveries has contradicted this image of archaeology. No one would deny the romantic fascination aroused by spectacular archaeological finds, such as those by Austen Layard at Nimrud or Heinrich Schliemann at Troy in the nineteenth century, and the more recent discoveries of the tomb of Tutankhamen, the Palace of Minos at Knossos, the life-size ceramic army of the Chinese Emperor Qin Shihuangdi, and numerous several-million-years-old remains of hominids in East Africa. This does not, however, explain the intense public interest in the controversies that have surrounded the interpretation of many more routine archaeological finds, the attention that diverse political, social, and religious movements throughout the world have paid to archaeological research, and rigorous efforts by various totalitarian regimes to control the interpretation of archaeological data. During the second half of the nineteenth century, archaeology was looked to for support by both sides in the debate about whether evolutionism or the book of Genesis provided a more reliable account of human origins. Later, W. M. F. Petrie, Leonard Woolley, and John Garstang claimed to have made finds in Egypt, Iraq, and Palestine that supported

historical accounts in the Hebrew Bible. Elsewhere German and Polish archaeologists engaged in polemics about whether the Lusatian culture had been created by prehistoric Germans or Slavs. As recently as the 1970s, Peter Garlake, a government-employed archaeologist in Southern Rhodesia, found his position no longer tenable because he refused to cast doubt on conclusive archaeological evidence that stone ruins in that part of central Africa had been built by ancestors of the Bantu peoples who live in that region. Today, the findings of ecological archaeologists are being coopted both by conservationists and by those who are anxious to minimize legal restraints on environmental pollution and degradation.

My adoption of a historical perspective does not mean that I claim any privileged status with respect to objectivity for such an approach. Historical interpretations are notoriously conjectural and open-ended, to the extent that some historians have characterized them as merely expressions of personal opinion. It is also recognized that, because of the abundance of historical data, evidence can be selectively marshaled to "prove" almost anything. There may, however, be some truth in William McNeill's (1986: 164) argument that, even if historical interpretation is a form of myth-making, such myths help to guide public action and can be regarded as a human substitute for instinct. If this is so, it follows that they are subject to the operation of the social equivalent of natural selection and hence may more closely approximate reality over long periods of time. This, however, is a tenuous basis on which to base hopes for the objectivity of historical interpretations.

I therefore do not claim that the historical study presented here is any more objective than are the interpretations of archaeological or ethnological data that it examines. I believe, however, as do many others who study the history of archaeology, that a historical approach offers a special vantage point from which to examine the changing relations between archaeological interpretation and its social and cultural milieu. The time perspective provides a different basis for studying the ties between archaeology and society than do philosophical or sociological approaches. In particular, it permits the researcher to identify the influence of subjective factors by observing how and under what circumstances interpretations of the archaeological record have changed. Although this does not eliminate the bias of the observer, or the possibility that this bias will influence

the interpretation of archaeological data, it increases the chances of gaining more rounded insights into what happened in the past.

Approaches to the History of Archaeology

The need for a more systematic study of the history of archaeological interpretation is indicated by serious disagreements about the nature and significance of that history. Much of the controversy centers on the role played by explanation in the study of archaeological data over the last two centuries.

Some historians of archaeology believe that the discipline has evolved in a predetermined manner through a series of stages (Schwartz 1967; Fitting 1973). In *A History of American Archaeology*, G. R. Willey and J. A. Sabloff (1974, 1980) posited an initial Speculative period (1492–1840) followed by Classificatory-Descriptive (1840–1914), Classificatory-Historical (1914–1960), and Explanatory (1960–) ones. This scheme was based in part on Douglas Schwartz's (1967) previous division of the history of American archaeology into three stages: Speculative, Empirical, and Explanatory. Only in the 1993 edition of *A History of American Archaeology* was the final period, which began in 1960, renamed the Modern one. Although this series of stages was applied only to New World archaeology, Willey and Sabloff (1974: 209–10) observed that their scheme was likely to apply everywhere. They proposed that over the course of 150 years archaeology had developed according to an inductive Baconian model of doing science, which involves first collecting data, then describing and classifying it, and finally trying to explain it. Yet this approach does not account for why archaeological findings were already highly controversial during the nineteenth century. Such debates were only possible because various conclusions about the past were already being drawn on the basis of available evidence and some of these conclusions were offending people. Also, if archaeologists could not draw any conclusions, what motivated them to continue to study the past or to collect artifacts? As the British historian E. H. Carr (1967: 3–35) has reminded us, the mere characterization of data as being relevant or irrelevant, that occurs even in the most descriptive historical studies, implies the existence of some kind of theoretical framework. It can further be argued in opposition to the idea of a neutral observational language that not even the simplest

archaeological fact can be established independently of a theoretical context (Wylie 1982: 42). In the past, most of these frameworks were not formulated explicitly or even consciously by archaeologists. Today, especially in the context of American and British archaeology, many theoretical propositions are systematically elaborated. Explanation was an inherent aspect of archaeology from the beginning, even if much of the theory that was employed was left implicit rather than clearly spelled out.

David Clarke (1973) proposed a convergent model of archaeological development. He argued that until the 1960s archaeology had consisted of isolated regional traditions of research, each following its own idiosyncratic and largely uncritical practices and characterized by its own preferred forms of description, interpretation, and explanation. Because these sorts of archaeology were scientifically undisciplined, their modes of analysis tended to be highly subjective and produced the results that local archaeologists expected. According to Clarke, in the 1960s these prescientific approaches were replaced by a new, sophisticated, self-critical, universal, and objective scientific archaeology. This is a false, or at best partial, view of the history of archaeology. International contacts characterized archaeology from the earliest stages of its development. Therefore, if local forms of research have been radically different from one another, an explanation other than mutual isolation is required.

Many archaeologists have utilized the philosopher Thomas Kuhn's (1962, 1970) more relativistic concept of scientific revolutions to try to understand the development of archaeology. Kuhn formulated his ideas to explain the development of the physical sciences and, in the first edition of *The Structure of Scientific Revolutions* (1962), he spoke of a preparadigmatic period to which his concept of scientific revolutions did not apply. He also appears to have believed that all social sciences remained in that category. However, in the second edition, he accepted that immature disciplines might be described as having multiple research paradigms (Kuhn 1970). Kuhn described a research paradigm as having an accepted canon of scientific practice, including laws, theory, applications, and instrumentation, that provides a model for a "particular coherent tradition of scientific research." Such a tradition is sustained by a "scientific community," defined as a group of scholars working together in the same discipline. Kuhn argued that every scientific community develops a paradigm

that influences the types of questions thought to be worth asking, the theories that are used to explain data, and the procedures that are employed to collect and analyze evidence. Scientists promote such paradigms through their control of teaching, journals, research grants, professional accreditation, hiring, tenure, and promotion. In normal times, scientists conduct their research within the context of the dominant paradigm, which they seek to elaborate. Paradigms are thus not merely scientific theories but also belief systems that constitute the culture of scientific communities. In adopting this view, Kuhn was building on the work of Ludwik Fleck ([1935], English translation 1979), who maintained that science was a collective creation within a social milieu.

According to Kuhn, paradigm shifts occur when an old paradigm is seen as not supported by accumulating data or when scientists working within it grow interested in problems that the existing paradigm is not equipped to answer. Kuhn maintained that this leads to the old paradigm's being replaced by a new one. He also argued that successive paradigms are incommensurate. This means that a scientist working in terms of one paradigm can never understand how matters are perceived by someone working in terms of an alternative one. Kuhn originally argued in extreme relativistic terms that a new paradigm was not necessarily more comprehensive or accurate than its predecessor. Eventually, he accepted that, at least in the physical sciences, later paradigms are more comprehensive and account for more than do antecedent ones (Kuhn 1970; Bird 2000). This represented a shift from an extreme to a more moderate relativist position. He also argued late in his career that without debates among scientists who hold different views, incorrect assumptions would go unchecked and improved scientific insights would be impossible (Kuhn 1977).

Some archaeologists, especially processual ones seeking to enhance the innovativeness of their movement, combined Kuhn's idea of scientific revolutions with a unilinear evolutionary view of the development of their discipline. They maintained that successive phases in the development of archaeological theory display enough internal consistency to qualify as paradigms and that the replacement of one paradigm by another constituted a scientific revolution (Sterud 1973). According to this view, successive innovators, such as Christian Thomsen, Oscar Montelius, Gordon Childe, and

Lewis Binford, recognized major anomalies and inadequacies in conventional interpretations of archaeological data and created new paradigms that significantly changed the direction of archaeological research. These paradigms not only altered the significance that was accorded to archaeological data but also determined what kinds of problems were and were not regarded as important. Clarke, however, regarded archaeology before 1960 as being in a preparadigmatic state.

Such unilinear views of the history of archaeology fail to account for why archaeologists or other social scientists, in part because of the emergent complexity of their subject matter, never agree about high-level theory. This disagreement has meant that several rival paradigms coexist at any one time. Currently, processual archaeology treats ideas as epiphenomenal, whereas postprocessual archaeology regards them as the principal determinants of behavior. Simultaneously, evolutionary archaeology is seeking to create a new paradigm by combining elements of culture-historical archaeology with a selectionist Darwinian explanation of changes in material culture. Although archaeologists often display considerable bias in their support for different schools, there is no evidence that they are trapped in noncommunicating discourses or that it is impossible for them to understand their opponents. On the contrary, their arguments often display considerable knowledge of such positions. Robert Chapman (2003: 14) argues that in archaeology rival positions are not only not hermetically sealed but also internally highly variable. Thus, they are not incommensurate with one another in the Kuhnian sense. Both Michael Schiffer (1996: 659) and Todd and Christine VanPool (2003) maintain that regarding theoretical orientations as paradigms radicalizes positions and encourages exclusion and polemic rather than the systematic comparison, testing, and synthesis of ideas.

The relevance of Kuhn's concept of revolutionary change also has been questioned. Most alterations in the theory and practice of archaeology appear to occur gradually and there are growing doubts that even what appear to be rapid shifts accord with his concept of revolutions. Kuhn also failed to account for the longevity of various positions and for why rival positions fluctuate in relative importance, often repeatedly, rather than one position definitively replacing another, or for why few positions are ever totally abandoned. Thus, the new cultural anthropology and postprocessual archaeology

address many of the same issues that Boasian culture-historical anthropology and archaeology once did, and early neoevolutionary archaeology strongly resembled nineteenth-century unilinear archaeology. To accommodate the concept of paradigm to these realities, Margaret Masterman (1970) differentiated three main types of paradigm: metaphysical, relating to the worldview of a group of scientists; sociological, that define what is accepted; and construct, that supply the tools and methods for solving problems. No one of these types alone constitutes "the" paradigm of a particular era. Despite such efforts to modify Kuhn's ideas, there is a growing sense that the concept of paradigm may not be appropriate to describe changing trends in interpretation in archaeology or any of the social sciences, and perhaps not even in science in general (Gándara 1980, 1981). Finally, Jean Molino (1992: 19) argues that nothing is more dangerous than the belief that a scientific revolution allows a science to start again. Old questions, methods, and answers frequently remain valid. Once the principle of stratigraphy was established as a reliable technique for inferring chronology, it continued to be used by archaeologists regardless of what other views they might espouse (Dunnell 2001: 1298). The same is true of Ian Hodder's (1982b) demonstration that material culture can be used to distort or invert as well as to reflect social reality. The development of such broad agreements is another factor reducing the incommensurability of different bodies of theory. For all these reasons, I will avoid the term "paradigm" and speak simply of schools or theoretical positions.

Shaun Hides (1996) and, in a more nuanced and careful manner, Ian Morris (1994b) have attempted to understand the development of archaeology in relation to Michel Foucault's (1970, 1972) concept of four successive but radically different and in his view discontinuous *epistemes* or modes of knowledge: Renaissance (ca. 1400–1650), Classical (ca. 1650–1800), Modern (ca. 1800–1950), and Postmodern (ca. 1950–). Foucault understands these epistemes as general modes of thought, each of which in turn influenced all fields of knowledge and dominated an era of modern Western civilization. Each episteme is radically different from any other. No one could escape the episteme of the time in which they lived, which imposed a particular set of norms and postulates on all thinking. Thus, epistemes, as dominant cultural patterns, are very different from Kuhn's paradigms,

although both have been used to characterize general stages in the development of scientific interpretation.

Although Foucault's views about epistemes have potentially valuable contributions to make to understanding the development of archaeological thought, they have been criticized because of his reluctance to study causation and how epistemes may have been influenced by changing social realities (Morris 1994b: 10; Gutting 1989). Foucault also appears to underestimate the extent to which epistemes have overlapped and mutually influenced people's thinking. Epistemes can contribute little to understanding the theoretical diversity that characterizes archaeology at any given point in time.

An alternative unilinear evolutionary view to those based on the ideas of Kuhn and Foucault, and that accords with Stephen Toulmin's (1970) thesis that sciences do not experience revolutions but, rather, gradual changes or progressions, holds that the history of archaeology has been characterized by a cumulative growth of knowledge about the past from early times to the present (Casson 1939; Heizer 1962a; Meltzer 1979). It is maintained that, although various phases in this development may be delineated arbitrarily, in reality archaeology changes in a gradual fashion, with no radical breaks or sudden transformations. Some archaeologists view the development of their discipline as following a course that is inevitable. Jaroslav Malina and Zdenek Vašíček (1990) document how an expanding database, with evidence increasingly being derived from settlement data and ecofacts as well as from artifacts and monuments, together with new theories from the other social sciences and biology has shaped the development of archaeology. Like other unilinear views, theirs does not take account of the variability of archaeological theories at any one time. Nor does it explain the frequent failure of archaeologists to develop their ideas in a systematic fashion. For example, although nineteenth-century naturalists with archaeological interests, such as Japetus Steenstrup (Morlot 1861: 300) and William Buckland (Dawkins 1874: 281–4), carried out experiments to determine how faunal remains were introduced into sites, research of this sort did not become routine in archaeology until the 1970s (Binford 1977, 1981).

Other historians of archaeology have rejected unilinear interpretations in favor of cyclical ones. This view began with Stuart Piggott (1935, 1950, 1968, 1976, 1985) and Glyn Daniel (1950). They argued