Processual, Postprocessual, and Interpretive archaeologies

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The theme of this book is the character and scope of archaeologies which may be termed interpretive. However, in spite of the use of the word 'interpretive' in this way as a label, the authors are not proposing and outlining another 'new' archaeology. There have been many such gestures over the last three decades with programmatic statements of panaceas for archaeology's perceived methodological maladies. We do not wish to add to the host of methods and approaches, but present here a general examination of current states of thinking in archaeology via the topic of interpretation. Our interest is interpretation in archaeology.

More particularly, it is proposed that interpretation is a term which helps clarify current debates in Anglo-American archaeology between processual and post-processual approaches (see, for example, Preucel (ed) 1991, Norwegian Archaeological Review 22, 1989, Sherratt and Yoffee (eds) 1993).

Processual archaeology[1] is the orthodoxy which emerged after the reaction, beginning in the 1960s and calling itself 'new archaeology', against traditional culture-historical and descriptive approaches to the material past. Its characteristics are as follows.

• Archaeology conceived as anthropological science rather than allied with history.

• Explanation of the past valued over description.

• Explanation via the incorporation of particular observations of the material past into cross-cultural generalisations pertaining to (natural and social) process (hence the term 'processual').

• Explanation via explicit methodologies modelled on the hard sciences.

•   An earlier interest in laws of human behaviour has shifted to an interest in formation processes of the archaeological record: regularities which will allow inferences about processes to be made from material remains.

For many, and although it may not explicitly be described as such, processual archaeology is a good means, if not the best, of acquiring positive knowledge of the archaeological past. Positive archaeological knowledge is of the past, which means that it aspires to objectivity in the sense of being neutral and indeed timeless (the past happened in the way it did, that much at least will not change). Under a programme of positive knowledge, archaeologists aim to accumulate more knowledge of the past. The timeless and objective quality of knowledge is important if the aim is to accumulate and build on what is already known; it would be no good building on facts which cannot be relied upon, because they might change. The aspiration to timeless and value-free knowledge also enables high degrees of specialisation, knowledges isolated in their own field, and disconnected from the present. The cultural politics of the 1990s do not affect what happened in prehistory, it is held. The archaeologist can live with one while quite separately gaining knowledge of the other.

To secure this timeless objectivity is the task of method(ology), and in processual archaeology this may be described as coming down to reason or rationality working objectively upon data or the facts. Reason is that cognitive processing which is divorced from superstition, ideology, emotion, subjectivity, indeed anything which compromises the purity or neutrality of logical calculation. To attain objectivity means carefully relying on those faculties which allow access to the past - particularly observation, controlled perception of those empirical traces remaining of what happened. Theory building may be involved in moving from the static archaeological record of the present to past social dynamics (Binford 1977), but to move beyond controlled observation is to speculate and to invite bias and subjectivity, contamination of the past by the present.

These aspirations to positive scientific knowledge, neutrality, and reliance on controlled observation of facts have led to processual archaeology being described as positivist and empiricist (see, among others, Shanks and Tilley 1987a).

Processual archaeology is anthropological in a sense of being informed by an interest in social reconstruction of the past. The following form the main outlines of processual conceptions of the social as they developed from the late 1960s.

•   Society is essentially composed of patterned sets of behaviours.

•   Material culture and material residues, the products of processes which form the archaeological record, reflect the patterned behaviours which are society, or they are the result of natural processes which can be defined scientifically (the decay of organic materials; the corrosion of metals).

- Society is a mode of human adaptation to the social and natural environment.

- Accordingly, explaining social process means focusing on those features of the society which most relate to adaptation to environments: resources, subsistence and economic strategies, trade and exchange, technology. Attention has, however and more recently, turned to symbolism and ritual.

- The interest in cross-cultural generalisation and patterning is expressed in societal typing (identifying a particular society as band, lineage based, chiefdom, state etc) and schemes of cultural evolution.

Post-processual archaeology, as the label implies, is something of a reaction and supercession of this processual framework (especially after Hodder (ed) 1982; see also Hodder 1985, 1986). Since the late 1970s issue has been taken with most of these tenets of processual archaeology: the character of science and aims of objective explanation; the character of society; and the place of values in archaeology, the sociopolitics of the discipline, its contemporary location as a mode of cultural production of knowledges2.

Doubt, from theoretical and empirical argument, has been thrown on the possibility of an anthropological science, based upon observation of residues of patterned behaviours, detached from the present and aspiring to value-freedom (as positive knowledge). So the processual-postprocessual debate has centred upon the forms of knowledge appropriate to a social science, how society may be conceived (reconciling both patterning or structure and individual action, intention and agency), and upon the workings of the discipline of archaeology, its ideologies and cultural politics, its place in the (post)modern present.

The debate has tended towards a polarisation of positions, and it is this which has led to an obscuring of the issues. Postprocessual has come to be seen by some as anti-science, celebrating subjectivity, the historical particular in place of generalisation: the cultural politics of the present displacing positive knowledge of the past. Above all, the authority of a scientific and professional knowledge of the past is posited against particular and subjective constructions, a pluralism of pasts appropriate each to their own contemporary constituency: science is pitted against relativism (Sherratt and Yoffee (eds) 1993, Trigger 1989b, Watson 1990.

We refer to an obscuring of the issues because this polarisation is unnecessary, indeed damaging. We are proposing that a consideration of the character and scope of interpretation may help overcome the polarisations. And to begin, a renaming may be appropriate. The label postprocessual says nothing about what it stands for, other than a relative position in respect of processual archaeology. If we are to use interpretation as an epithet, Interpretive Archaeologies may be used as a more positive label perhaps for many of those approaches which have been called postprocessual. These are archaeologies (the plural is important, as will become clear) which

work through interpretation. And we hope it will become clear that a careful consideration of interpretation entails abandoning the caricatures of science versus relativism, generalisation versus the historical particular and the objective past versus the subjective present.

The main aspects of archaeologies termed interpretive might be summarised as follows.

•   Foregrounded is the person and work of the interpreter. Interpretation is practice which requires that the interpreter does not so much hide behind rules and procedures pre-defined elsewhere, but takes responsibility for their actions, their interpretations.

•   Archaeology is hereby conceived as a material practice in the present, making things (knowledges, narratives, books, reports …) of the material traces of the past, constructions which are no less real, truthful or authentic for being constructed.

•   Social practices, archaeology included, are to do with meanings, making sense of things. Working, doing, acting, making are interpretive.

•   The interpretive practice that is archaeology is an ongoing process: there is no final and definitive account of the past as it was.

•   Interpretations of the social are less concerned with causal explanation (accounts such as this is the way it was and it happened because of this) than with understanding or making sense of things which never were certain or sure.

•   Interpretation is consequently multivocal: different interpretations of the same field are quite possible.

•   We can therefore expect a plurality of archaeological interpretations suited to different purposes, needs, desires.

•   Interpretation is thereby a creative but nonetheless critical attention and response to the interests, needs and desires of different constituencies (those people, groups or communities who have or express such interests in the material past).

To interpret, the act of interpretation: what do the words mean and imply?

We particularly stress the active character of interpretation: one is an interpreter by virtue of performing the act or practice of interpreting. An interpreter is a translator, an interlocutor, guide or go-between3.

Meaning   To interpret something is to figure out what it means. A translator conveys the sense or meaning of something which is in a different language or medium. In this way interpretation is

fundamentally about meaning. Note however that translation is not a simple and mechanical act but involves careful judgement as to appropriate shades of meaning, often taking account of context, idiom and gesture which can seriously affect the meaning of words taken on their own.

Dialogue   A translator may be an interlocutor or go-between. Interpretation contains the idea of mediation, of conveying meaning from one party to another. An interpreter aims to provide a reciprocity of understanding, overcoming the lack of understanding or semantic distance between two parties who speak different languages or belong to different cultures. Interpretation is concerned with dialogue, facilitating and making easier.

In a good dialogue or conversation one listens to what the other says and tries to work out what they mean, tries to understand, to make sense. Translation may be essential to this, either performed by a separate interpreter or by the parties of the dialogue themselves. Further questions might be asked and points put forward based on what has already been heard and understood. The idea is that dialogue moves forward to a consensus (of sorts) which is more than the sum of the initial positions. This fusion of horizons (a term taken from hermeneutics, the philosophy of interpretation, discussed below) is potentially a learning experience in which one takes account of the other, their objections and views, even if neither are won over.

It is not a good and open dialogue if the one party simply imposes their previous ideas, categories and understandings upon the other. Preconceptions are simply confirmed. It is not good if the interpreter does not recognise the independence of the interpreted, their resistance to control and definition. A good conversation is one perhaps which never ends: there is always more to discover.

What might be a dialogue with the past? One where the outcome resides wholly in neither side but is a product of both the past and the present. Archaeological interpretation here resides in the gap between past and present. Such a dialogue is also on-going. We will take up these points again below.

Uncertainty   Interpretation involves a perceived gap between the known and the unknown, desire and a result, which is to be bridged somehow. There is thus uncertainty, both at the outset of interpretation (what does this mean?) but also at the end of the act of interpretation. It could always have been construed in a different way, with perhaps a different aspect stressed or disregarded. Although we might be quite convinced by an understanding we have managed to achieve, it is good to accept fallibility and not to become complacent. Is this not indeed the character of reason? Rationality is not an abstract absolute for which we can formulate rules and procedures, but is better conceived as the willingness to recognise our partiality, that our knowledge and reasoning are open to challenge and modification. Final and definitive interpretation is a closure which is to be avoided, suspected at the least.

Exploration and making connections   Interpretation implies an extension or building from what there is here to something beyond. We have already mentioned that interpretation should aspire to being open to change, exploring possibility. Exploration of meanings is often about making different connections.

Here can be mentioned the structuralist argument that meaning, if it is to be found at all, resides in the gaps between things, in their interrelationships. A lone signifier seems empty. But once connected through relations of similarity and difference with other signifiers it makes sense. In deciphering a code different permutations of connections between the particles of the code are explored until meaning is unlocked.

Judgement   A sculptor or wood carver might examine their chosen material, interpret its form and substance, taking note of grain and knots of wood, flaws and patterning in stone, and then judge and choose how to work with or against the material. An archaeologist may examine a potsherd, pick out certain diagnostic traits and judge that these warrant an identification of the sherd as of a particular type: they choose an identification from various possibilities. Interpretation involves judgement and choice: drawing sense, meaning and possibility from what began as uncertainty.

Performance   In this way interpretation may refer to something like dramatic performance, where a particular interpretation of a dramatic text is offered according to the judgement of performers and director. The text is worked with and upon. Focus is drawn to certain connections within the characters and plot which are judged to be significant . Interpretation is here again reading for significance, where significance is literally making something a sign4.

Dramatic interpretation has further dimensions. A text is read for significance and courses of action inferred. A past work (the text of a play) is acted out and in so doing it is given intelligible life. Now there is no need here to take a literal line and think that archaeological interpretation involves those experimental reconstructions of past ways of life that are familiar from TV programmes and heritage parks (though there is here a serious argument for experimental archaeology). We would rather stress that interpretation is in performance an active apprehension.5 Something produced in the past is made a presence to us now. It is worked upon actively. If it were not it would have no life. An unread and unperformed play is dead and gone. Analogously an archaeological site which is not actively apprehended, worked on, incorporated into archaeological projects, simply lies under the ground and decays. The questions facing the actor-interpreters are: how are the characters to be portrayed, what settings are to be used, what form of stage design, what lighting, sound and ambience; simply, what is to be made of the play? (Pearson 1993)

Courses of action inferred, projects designed: these are conditions of interpretation.

Critique   Judgement here involves taking a position, choosing how to perform, what to do, which meanings to enact or incorporate. Involved is a commitment to one performance rather than another. Any interpretation is always thus immediately critical of other interpretations. Performance is both analytic commentary on its source, the written play, but also critical in its choice of some meanings and modes and not others.

The ubiquity of interpretation forgotten in black boxes

Interpretation is insidiously ubiquitous. There are always choices and judgements being made even in the most mundane and apparently empirical activities. Describing and measuring an artifact, for example, always involves acts of interpretation and judgement. Which parts of a stone axe blade are to be measured, for example, and from where to where?

But some interpretation is often overlooked when people accept certain interpretive conventions. So, for example, plants are most often described according to scientific species lists. But these species lists are not 'natural': they are the result of scientific interpretation concerning the definition and classification of plants and creatures. Such interpretation may have occured a while ago now, and be more of interest to historians of science, but it should be recognised that the choice or judgement is made to accept that interpretation. Interpretations such as this concerning the classification of plants are often worth following simply because so much work would be required, starting almost from first principles, to redesign natural history. The idea of a species is tied in to so many other things: evolutionary theory and ecology, botany and zoology ... .

When an interpretation or set of interpretations is accepted, treated as uncontroversial and no longer even seen for what it is, the term black-boxed can be used. Interpretation is made, accepted and then put away, out of sight and often out of mind, in a black box. It allows us to live with the world more easily; we would otherwise be as infants, asking whether this thing in front of us really could be interpreted as a table with a box upon it which is most difficult to interpret, a computer.

Indeed all archaeology is hereby interpretive, concerned intimately with the interpretation of things. However, some archaeologists refuse to accept this, or choose to overlook or black-box acts of interpretation. Excavation, for example, is so thoroughly interpretive. Many students on their first dig find the uncertainty very disturbing. Where does one layer end and another begin, how can you tell; how can it be ascertained that this scatter of traces of holes in the ground were once a wooden house. Yet this pervasive interpretive uncertainty is the construction of 'hard' facts about the past.

Hermeneutics   The theoretical and philosophical field of interpretation, the clarification of meaning and achievement of sense and understanding, is covered by hermeneutics.67 Hermeneutics addresses the relationship between interpreter and interpreted when that which is to be interpreted is not just raw material to be defined and brought under technical control, but means something. The term traditionally applied to the reading of texts and the understanding of

historical sources - is the source authentic, what does it mean, what were the author's intentions? We do not propose a simple import of hermeneutic principles into archaeology, but will be noting their relevance to the topics and issues of this book.

Having unpacked the idea of interpretation we will now develop some of the observations

Uncertainty

Interpretation is rooted in a world which cannot be tied down to definitive categories and processes. Consider classification. Articles are grouped or a group divided according to their similarities. Each class or taxon contains those articles judged the same. There are two fields of remaindering or possible foci of uncertainty where judgement is required. First it may not be absolutely clear where a particular article belongs, particularly if the criteria for inclusion in a class are not specific, if an article is approaching the edges, the margins of a taxon, or if it is somehow incomplete. Second, there is always a remainder after classification. Classification never completely summarises. There are always aspects or attributes of an article which are disregarded and which remain outside taxa, embarrassing classification.

Classification operates under a 'rule of the same'. Taxa are characterised by relative homogeneity. This is a legitimate strategy for coping with the immense empirical variety and particularity that archaeologists have to deal with. However, we should be clear that classification does not give the general picture; it gives the average. It is not a general picture because there is no provision in classification for assessing the norm, the taxa (where do they come from; they are supplemental or external to the classification), nor the variations within a class, nor the variability of variability. Classification is less interested in coping with particularity: why are the members of a class of pots all in fact slightly different?

Things are equivocal. A pot can be classified according to its shape and decoration as of a particular type. But thin-sectioned under a polarising microscope it explodes into another world of micro-particles and mineral inclusions. The pot is not one just thing which can be captured in a single all-encompassing definition. There is always more that can be said or done with the pot. A single pot is also multiple. It depends on the trials we make of it, what we do with it, how we experience it - whether we attend to surface and shape or slice it and magnify it.

Instead of smoothing over we can also attend to that which does not fit, to the rough and irregular, to the texture of things. Everyday life is not neat and tidy. History is a mess. We can attend to the equivocal, to the absences in our understanding, focus on the gaps in neat orders of explanation. Conspicuously in archaeology there can be no final account of the past. Because it is now an equivocal and ruined mess, but also because even when the past was its present it was to a considerable extent incomprehensible. So much has been lost and forgotten of what never was

particularly clear. Social living is immersion in equivocality, everyday uncertainty. What really is happening now? There are no possible final answers.

Uncertainty and equivocality refer to the difference of things: they can be understood according to a rule of the same, but difference escapes this rule, escapes homogeneity. Because an attention to texture which escapes classification is outside of qualities of sameness (the homogeneity of what is contained within the class), the term heterogeneity may be used. To attend to difference is to attend to heterogeneity - the way things escape formalisation, always holding something back.

Nietzsche and Foucault's project of genealogy involves revealing the difference and discontinuity, the heterogeneity in what was taken to be homogeneous and continuous. Nietzsche reveals the 'uncertain' origins of morality (1967). Sexuality is shown to be far from a biological constant by Foucault (1979, 1984a, 1984b).

The social world is thoroughly polysemous. This is another concept which can be related to uncertainty. That a social act or product is polysemous means that it can always be interpreted in various ways. Meanings are usually negotiated, that is related to the interpersonal practices, aspirations, strategies of people. We repeat the classic example of the safety pin, the meaning of which was radically renegotiated by punk subculture in the 1970s (Hebdige 1979).

The forms of social life are constituted as meaningful by the human subjects who live those forms. People try to make sense of their lives. This ranges from interpreting the possible meanings of a politician's speeches and actions, to trying to make sense of the fact that you have been made redundant and may never work again even though you are highly skilled.

Giddens (1982, 1984, p374) has related this characteristic of the social world (that it is to do with interpretation and meaning) to the hermeneutic task of the sociologist. He describes the difficult double hermeneutic of sociology. First, it aims to understand a world of meanings and interpretations (society). Second, sociologists themselves form a social community with its own practices, procedures, assumptions, skills, institutions, all of which in turn need to be understood.

Shanks and Tilley (1987a, chapter 5 especially p107–8) have described a fourfold hermeneutic in archaeology, four levels of interpretation and the need to develop understanding: understanding the relation between past and present; understanding other societies and cultures; understanding contemporary society, the site of archaeological interpretations; and understanding the communities of archaeologists who are performing interpretations. Thus, not only do archaeologists translate between 'their' and 'our' world, but they also have to deal with worlds separated in space and time. But it is difficult to argue that sociologists deal with a double hermeneutic, anthropologists with a threefold hermeneutic and archaeologists with a fourfold. Certainly the societies with which prehistoric archaeologists deal are often remote and there are many social and cultural layers that have to be bridged. But a palaolithic archaeologist is not

dealing with more hermeneutic layers than an historical archaeologist, and it is inadequate to assume that some cultures in space and time are more 'like us' than others. It is better to assert with Giddens that all the social sciences can be contrasted with the natural sciences in that they face a double rather than a single hermeneutic. Certainly at the methodological level the problem is always one of fusing two horizons, the scientific and the past society. Other information from western and other ethnographic contexts may be brought into the argument, but always through the scientific community. The archaeologist faces the distant past in the same way that any social scientist faces 'the other', even if the scanty nature of the evidence and the great spans of time involved greatly increase the uncertainty of interpretation.

When the uncertainty of an interpretation declines it is black-boxed and need no longer be subject to suspicion and negotiation. The controversy over an interpretation is settled and closed. What allows one interpretation to prevail over another? Archaeological cultures, for example, are no longer interpreted by many as racial groups; it is not something now usually entertained as a possible interpretation. What allows or brought about the closure? A common answer might be reason and the facts. Close examination of empirical examples shows that ethnicity is not reflected in what archaeologists call cultures. But the history and philosophy of science indicates that such an explanation for the closure of scientific controversy is not enough. The central principle is that of underdetermination. This is the Duhem-Quine principle which holds that no single factor is enough to explain the closure of a controversy or the certainty acquired by scientists. It is the philosophical basis of most contemporary history and sociology of science8. Theory is never fully determined by the facts or by logic. There is always something which sets off doubts about the certainty, always something missing to close the black box forever9. David Clarke (1968) was very willing to relate material culture patterning to ethnicity after his ethnographic investigations. Cultural and by extension racial identity are clearly established with reference to material culture, though perhaps not in the precise terms of the archaeological culture concept (Conkey and Hastorf (eds) 1990).

Creativity and the technology that is archaeology

The equivocality, heterogeneity or multiplicity of the material world means that choices must be made in perception and to what we attend. The archaeological record is an infinity in terms of the things that may be done with it and in terms of how it may be perceived. Which measurements are to be made? Are some aspects of an artifact to be disregarded in coming to an understanding? How is justice to be done to the empirical richness of the past? How is an archaeological monument such as a castle to be represented? Measured plans may be prepared and descriptions made of masonry and sequence of construction from observations of structural additions and alterations. Here attention is focused upon certain aspects of the architecture deemed worthy by conventional archaeology. But what of other experiences and perceptions of such a monument? This is hardly an exhaustive treatment of architecture. A technical line drawing may direct attention

essentially and almost wholly to the edges of masonry - a subjective choice. Turner, in his sequence of picturesque renderings of castles in the early nineteenth century focuses upon situation in landscape and attempts to convey the passage of light across monumental features. Both approaches are selective, but both also, we suggest, attend accurately to the empirical, albeit in different ways10.

Archaeological interpretation requires that some things be connected with others in order to make sense of what remains of the past. Circular features in earth of contrasting colour are associated with removed wooden stakes, and then in turn associated with other post holes to trace the structural members of a building. To interpret is in this way a creative act. Putting things together and so creating sense, meaning or knowledge.

We are concerned to emphasise that the person of the archaeologist is essential in coming to understand the past. The past is not simply under the ground waiting to be discovered. It will not simply appear, of course, but requires work. Consider discovery. Discovery is invention. The archaeologist uncovers or discovers something; they come upon it. An inventor may be conceived to have come upon a discovery. Discovery and invention are united in their etymology: invenire in Latin means to come upon, to find or invent. Invention is both finding and creative power. The logic of invention, poetry and the imaginary is one of conjunction, making connections. It is both/and, between self and other; not either/or. The pot found by the archaeologist is both this and that (surface decoration and mineral inclusions). A castle is both technical drawing and romantic painting. It is there in the landscape and here in a painting. It is both of the past and of the present. Archaeology's poetry is to negotiate these equivocations and make connections. It is the work of imagination.

This is to deny the radical distinction of subjectivity and objectivity in that the subjective is simply the form that the objective takes.

Foregrounding the creativity of the interpreting archaeologist is to hold that archaeology is a mode of production of the past (Shanks and McGuire 1991, Shanks 1992). This would seem to be recognised by those many archaeologists and text books which talk at length of archaeological techniques - archaeology seen as technology. The past has left remains and they decay in the ground. According to their interest an archaeologist works on the material remains to make something of them. So excavation is invention/discovery or sculpture11 where archaeologists craft remains of the past into forms which are meaningful. The archaeological 'record' is, concomitantly, not a record at all, not given, 'data', but made. 'The past' is gone and lost, and a fortiori, through the equivocality of things and the character of society as constituted through meaning, never existed as a definitive entity 'the present' anyway. An archaeologist has a raw material, the remains of the past, and turns it into something - data, a report, set of drawings, a museum exhibition, an

archive, a TV programme, evidence in an academic controversy, and perhaps that which is termed knowledge of the past. This is a mode of production.

To hold that archaeology is a mode of production of the past does not mean that anything can be made. A potter cannot make anything out of clay. Clay has properties, weight, plasticity, viscosity, tensile strength after firing etc, which will not allow certain constructions. The technical skill of the potter involves working with these properties while designing and making. So there is no idealism here which would have archaeologists inventing whatever pasts they might wish.

To realise archaeology as cultural production does introduce a series of important illuminations. Technical interest in the empirical properties of raw material, the viability of a project, is but one aspect of production. Other essential considerations include purpose, interest, expression and taste.

Purpose and interest: products always attend needs and interests, serving purpose. Here is an argument for engaging with and answering a community's interests in the archaeological past, because a discipline which simply responds to its own perceived needs and interests, as in an academic archaeology existing for its own sake ('disinterested knowledge'), can be criticised as a decadent indulgence. Different archaeologies, different interpretations of the material past, can be produced. We suggest that a valuable and edifying archaeology attends to the needs and interests of a community, interpreting these in a way which answers purpose while giving something more, enhancing knowledges and experiences of the past and of the material world. Some issues and questions, a basis perhaps for discussion and establishing such interests, forms the substructure to this book and presented in the next chapter. Reference to publics and communities can be found particularly in Section 3. A strong political argument is that archaeology should attend to the interests of the diversity of communities and groups that it studies, works and lives among, and draws funding from (Potter 1990).

Expression and taste. The expressive, aesthetic, and emotive qualities of archaeological projects have been largely down played or even denigrated over the last three decades as archaeologists have sought an objective scientific practice. In popular imagination the archaeological is far more than a neutral acquisition of knowledge; the material presence of the past is an emotive field of cultural interest and political dispute. The practice of archaeology also is an emotive, aesthetic, and expressive experience. This affective component of archaeological labour is social as well as personal, relating to the social experiences of archaeological practice, of belonging to the archaeological community and a discipline or academic discourse. Of course such experiences are immediately political. (Shanks 1992, Archaeological Review from Cambridge 1990)

The essentially creative character of production is also one of expression: taking purpose, assessing viability, working with material, and expressing interpretation to create the product that retains traces of all these stages. This expressive dimension is also about pleasure (or displeasure) and is certainly not restricted to the intellectual or the cognitive. Pleasure is perhaps not a very common word in academic archaeology, but an interpretive archaeology should recognise the role of pleasure and embody it in the product made. This means addressing seriously and with imagination the questions of how we write the past, our activities as archaeologists and how we communicate with others.

In archaeological interpretation the past is designed, yet is no less real or objective. (We can expect some to dispute the reality of a past produced by such an interpretive archaeology which realises the subjective and creative component of the present: such a product cannot be the 'real' past, it might be said, because it has been tainted by the present and by the person of the archaeologist. This is precisely like disputing the 'reality' of a television set. Here is a technological product which looks like a television set. To ask whether it is real is a silly question. A far better question, and one that applies to the product of archaeological interpretation, is does it do what is required of it, does it work.) The question of archaeological design is - what kind of archaeology do we want?

A product of technology is both critique and affirmation; it embodies its creation, speaks of style, gives pleasure (or displeasure) in its use, solves a problem perhaps, performs a function, provides experiences, signifies and resonates. It may also be pretentious, ugly or kitsch, useless, or untrue to its materials and creation. In the same way each archaeology has a style; the set of decisions made in producing an archaeological product involves conformity with some interests, percepts, or norms, and not with others. As with an artifact, the judgement of an archaeological style involves multiple considerations, many summarised by the term 'taste'. We need to consider its eloquence, that is how effective and productive it is. We should also make an ethical appraisal of its aims and purposes and possible functions. Technical matters are implicated, of course, including how true it has been to the material past, the reality and techniques of observation that it uses to construct facts. Judgement refers to all these aspects of archaeological production: purpose, viability, and expression.

Projects and networks

The 'objective past' will not present itself. The remains of a prehistoric hut circle will not excavate themselves. A pot will not thin-section itself and appear upon microscope slide beneath the gaze of a cataplectic archaeologist. Work has to be done in the sense that the remains of the past have to be incorporated into projects. An archaeological project has a temporality of presencing Heidegger 1972, p 14): the past is taken up in the work of the present which is projecting forward into the future, planning investigation, publications, knowledge, whatever. There is here no hard and fast line between the past as it was and the present. This temporality also refers us back to the

character of dialogue. On the basis of what one already knows and on the basis of prejudgement, questions are put, answers received which draw the interpreter into further prejudged questions. This is an ongoing hermeneutic circle (above note 6 for references) better termed perhaps a spiral as it draws forward the partners in dialogue.

Archaeological projects are about connecting past, present and future, but what empirical or concrete form do they take? An archaeological project involves the mobilisation of many different things or resources. Landowners are approached, funding needs to be found, labour hired, tools and materials convened, skills operated to dig, draw and photograph, computers programed and fed with data, finds washed and bagged, workforce kept happy, wandering cows chased off site. This is a great and rich assemblage of people, things and energies which achieve what are conventionally termed data. An archaeological project is a heterogeneous network12. A network because different elements are mobilised and connected, but unlike a bounded system there are no necessary or given limits to the network; it is quite possible to follow chains of connection far beyond what are conceived as the conventional limits of archaeology (in pragmatic terms think of the ramifications of funding; in institutional terms the relations with the education system; in affective terms all the associations of 'working in the field' (Shanks 1992)). These networks are heterogeneous because connected are different (not belonging to a homogeneous category) entities, actors or resources: interests, monies, academics, career trajectories, volunteers, landowners, wheelbarrows, JCB mechanical diggers, cornfields, decayed subsurface 'features', laboratories ... .

All these are brought together in an archaeological project which constitutes the reality of the past, makes it what it is. It is within such contingent (there is nothing necessary about them) assemblages that the past comes to be perceived and known. If we were to report objectively the detail of an excavation, all the resonances and associations, all the thoughts, materials and events, the result would be very confusing and of perhaps infinite length. This is again the paradox that specificity of detail brings into doubt the validity of sensory evidence, and points to the necessity of creative choice13.

That data are constructed or crafted in (social) practices is the central contention of 'constructivist' philosophy of science (above note 8). Anthropological attention has been focused on communities of scientists and how they work with the physical world. In archaeology Joan Gero has recently considered the role of recording forms (basic now to excavation practice) in constructing archaeological facts.

Context and dialogue

A pot without provenance is of limited value to archaeological interpretation. It has long been recognised that placing things in context is fundamental to understanding the past. Much of conventional archaeological technique is about establishing empirically rich contexts of things.

A 'contextual archaeology' makes much of the associations of things from the past (Hodder (ed) 1987, Hodder 1986). Meanings of things can only be approached if contexts of use are considered, if similarities and differences between things are taken into account. It is often argued that since the meanings of things are arbitrary, archaeologists cannot reconstruct past symbolism. There are two ways in which archaeologists avoid this impasse. First, artifacts are not like words in that they have to work in a material way and are subject to universal material processes. Thus, an axe used to cut down a tree must be made of rock of a certain hardness and the cutting action will leave wear traces. An axe made of soft chalk and without wear traces can thus be identified, on universal criteria, to be of no use for tree cutting — an aspect of its meaning has been inferred.

Archaeologists routinely think through why prehistoric actors built this wall, dug this trench, using common-sense arguments based on universal criteria. In all such work universal characteristics of materials are linked to specific contexts to see if they are relevant. Interpretation and uncertainty are involved in deciding which aspects of the materials are useful in determining meaning. Hence and secondly, the archaeologist turns not to universal characteristics of materials but to internal similarities and differences. Thus, perhaps the chalk axes are found in burials with female skeletons, while the hard stone axes are found in male burials. Such internal patterning not only supports the idea that stone hardness is relevant to meaning in this case, but it adds another level of meaning — gender. The task of the archaeologist is to go round and round the data in a hermeneutic spiral, looking for relationships, fitting pieces of the jigsaw together. Does the patterning of faunal remains correlate with the two axe types or with male and female burials? Is there any difference in axe-type deposition in different parts of the settlement system? And so on. The more of the evidence that can be brought together in this way, the more likely is one able to make statements about meaning — for example that chalk axes were of high value and were associated with women in ritual contexts.

It is important to recognise that a contextual emphasis does not mean that archaeologists can interpret without generalisation. It is impossible to approach the data without prejudice and without some general theory. But the interpretive challenge is to evaluate such generality in relation to the contextual data. So much of what archaeologists assume in a general way is 'black-boxed'. But even terms like pit, or ditch or wall or post-hole should be open to scrutiny to see if they are relevant in each specific context. Archaeologists always have to evaluate relevance — are there aspects of this context which make this general theory relevant? However well-defined the theory, some contextual judgement has to be made.

The same or similar things have different meanings in different contexts. It is context which allows a sensitivity to diversity and to local challenges to social meanings. But if context is so important, is not each context, each pit different with different meanings? Certainly, at a precise level this is probably true. But most contexts are grouped together in larger contexts — a group or type of pit, a site, a region and so on. The problem then becomes one of defining the context relevant for each question. Context itself is a matter of interpretation, based on defining similarities and differences. Thus a group of pits might be described as a context because of their spatial clustering, or because they are a distinctive type, or because they have cimilar contents. By searching for similarities and differences some contextual variation can be identified as more relevant than others, but context and content are always intertwined in a complex hermeneutic spiral. The meaning of an artifact can change the context, but the context can change the meaning.

Thus archaeologists, working in their own contexts, are likely to pick out certain types of context in the past and look for patterning in relation to them. There can be no context-free definitions of context. A pit, ditch or post-hole are not 'natural' contexts. As already stated, archaeologists have to evaluate such general assumptions in relation to specific similarities and differences in the data.

Interpretation, in its concern with context, can also be described as being to do with relationality - exploring connections in the way we have been describing14. However an important point to reemphasise is that context cannot only refer to the things of the past. They are inevitably bound up in archaeological projects. We will clarify with some points from hermeneutics.

Involved here is the context (historical, social, ethical, disciplinary, whatever) of interpretation itself. In coming to understand we always begin with presuppositions. There can be no pure reception of a raw object of interpretation. We begin an interrogation of an historical source with an awareness of its historical context - we view it with hindsight; the flows and commixtures of earths, silts and rubbles in the archaeological site are understood as layers. As interpreters we have to start from somewhere; what we wish to interpret is always already understood as something. This is prejudgement or prejudice. And it is essential to understanding. Prejudgement and prejudice are legitimate in that they furnish the conditions for any real understanding.

Another aspect of this is that the acts of looking, sensing and posing questions of things always involve intentional acts of giving meanings. These meanings (rubble as layers for example) derive from the situation of the interpreter. So the archaeological past is always for something. At the least an archaeological site under excavation is part of an archaeological project, and, as we have just argued, would not exist for us if it were not. It is understood in terms of its possible applications and relevances in the present. So the 'prejudice' of the interpreting archaeologist's position (ranging from social and cultural location to disciplinary organisation to personal disposition) is not a barrier to understanding, contaminating factors to be screened out; this is the very medium of understanding, indeed objective understanding.

Prejudgement and prejudiced assumptions regarding what it is we seek to understand bring us again to the hermeneutic circle introduced above. Realising that interpretation is about establishing connections and contexts involves realising interpretation as dialogic in character.

This is partly recognised by the idea of problem orientation, strongly supported by processual methodology. This maintains that research projects, archaeological observation and study should be designed around meaningful questions to be posed of the past. The correct methodological context is one of question and answer. Questions are considered meaningful if they fit into an acceptable (research) context. So rather than digging a site simply to find out what was there, archaeological projects should be organised around questions which fit into a disciplinary context of progressive question and answer. Theory: complex society can be observed in settlement hierarchy. Hypothesis: region R has a settlement hierarchy at time T. Question: does site S display features correspondent with a level of the supposed hierarchy? Investigate. Do the data require modification of the hypothesis? ... This is indeed a dialogue of sorts with the archaeological past: the archaeologist questions the past in relation to their accompanying 'assumptions' of theory and hypothesis; the respose of the past may demand the archaeologist thinks and questions again.

But we hope that the notion of interpretation as dialogue suggests a more sensitive treatment and awareness of the relationship between interpreter and interpreted. There is much more to interpretive context. First, the interpreted past is more than something which exists to supply responses to questions deemed meaningful by male and middle-class academics of twentieth century western nation states (as most processual archaeologists are). The past has an independence of research design, procedures of question and answer (this independence is accommodated in the notion of heterogeneity). It overflows the questions put to it by archaeologists. It may be recognised (Charles Redman, in discussion) that strict problem orientation may miss a great deal, and that simply being open to what may happen to turn up in an excavation is a quite legitimate research strategy. There is nothing wrong with sensitive exploration, being open to finding out.

Second, the past is constituted by meanings. By this is meant that the past is not just a set of data. Some archaeologists have responded to the Native American request for respect of the spiritual meanings of their material pasts with a cry 'they are taking away our data base'15.

This relates closely to our third and most important point: a dialogue with the material past is situated in far more than methodological context. The means of archaeological understanding include everything that the interpreting archaeologist brings to the encounter with the past. The context includes method yes, but also the interests which brought the archaeologist to the past, the organisation of the discipline, cultural dispositions and meanings which make it reasonable to carry out the investigations, institutional structures and ideologies. We repeat that the

archaeological past simply could not exist without all this, the heterogeneous networking of archaeological projects.

Meaning and making sense

Interpretation may suggest meanings for things from the past. A sociological argument is that social practice is to do with interpreting the meanings of things and actions; society is constituted through meanings ascribed and negotiated by social agents (Giddens 1984). So an understanding of the past presupposes that interpretation is given of past meanings of things.

Meaning is a term which requires examination. For example, archaeologists have tried to distinguish functional from symbolic meanings, primary from secondary, denotative from connotative (Shanks and Tilley 1987a chapter 7, Conkey 1990). In practice, however, it is difficult to separate functional, technological meanings from the symbolic realm, and conversely symbols clearly have pragmatic social functions. In the material world function contributes to abstract symbolic meaning. Much symbolism is entirely engrained in the practices of daily life, in the rhythms of the body and the seasons, and in the punctuated experience of time. The notion of abstract symbolic code, arbitrarily divorced from practice has little role to play in current understanding of meaning and its interpretation. There has been a gradual shift in archaeology from a consideration of material culture as language, to a concern with material culture as text and then to an emphasis on practice (see the discussions in section 5 of this volume).

It thus often become difficult to ask 'what does this pot mean?', since it may not 'mean' in a language-type way (a point well-illustrated by Maurice Bloch, this volume). There may be no signifieds tied to the signifier in a code. Rather it may be the case that even if people cannot answer what the pot means, they can use the pot very effectively in social life. This practical knowledge of 'how to go on' may be entirely engrained in practices so that the meanings cannot be discussed verbally with any readiness — the meanings are non-discursive. This does not, of course, preclude verbal meanings being contrued by an outside interpreter. And at other times, for example in conflicts over uses and meanings, non-discursive meanings may be brought into 'discursive consciousness', although in doing so actors often embellish and transform.

The meanings that archaeologists reconstruct must on the whole be assumed to be general social and public meanings. Archaeologists have sufficient data to identify repeated patterning within large contexts (sites over many decades, regions over centuries or even millennia). The meanings reconstructed must be public and social in nature. Individual variation may be expressed in variability in the archaeological record, but it is rare that the data allow repeated patterning in an individual's action to be identified. Nevertheless it is important at the theoretical level to include the dialectic between individual and social meanings since it is in such terms that the negotiation of change is conducted (Barrett 1988, Johnson 1989).

There is also the question - whose meanings? We have argued for a fusion of horizons as being characteristic of effective interpretation. A fourfold hermeneutic places great distance and interpretive problems between past and present. There are problems with defining the concept of meaning and some of these are elaborated in Section 2 which deals with (cultural) meaning in relation to early hominids and primates.

Archaeological interpretation deals with the meanings of the past for the present, so it is perhaps better to think of making sense. Emphasis is again placed on the practice of interpretation. As a go-between, guide or interlocutor, the archaeologist makes sense of the past, providing orientations, significances, knowledges, and yes meanings, relevant to understanding the past. The question of whose meanings is superseded.

Pluralism and authority

A guide interpreting a map and the land can follow equally feasible paths which may offer different returns or benefits, different vistas. There are different ways of achieving the same ends. Interpretations may vary according to context, purpose, interest, or project. Interpretation, we have argued, implies a sensitivity to context. With the equivocality and heterogeneity of things and the underdetermination of interpretation, here are many arguments for pluralism.

But pluralism introduces the problem of authority: on what grounds are different interpretations of the same field to be judged? The problem arises because finality and objectivity (residing in and with the past itself) have been abandoned for an attention to the practice of interpretation (making sense of the past as it presents itself to us now). Charges of relativism have been made (Trigger 1988), . Relativism is usually held not to be a good thing. If interpretations of the past depend on present interests and not on objectivity, then there is no way of distinguishing a professional archaeological explanation from the crazed views of cranks who may interpret archaeological remains as traces of alien visitors (ref Renfrew).

The issue of relativism crops up in Section 3. Section 1 deals with this issue of truth, objectivity and knowledge and argues that the real issue in the debate over pluralism and relativism is that of absolutes. Truth and objectivity are not abstract principles inherent in the past, but have to be worked for. That Anglo-Saxon cemetery in the countryside will not excavate itself. It needs the archaeologist's interest, efforts, management skills, excavation teams, finds laboratories and publisher to be made into what we come to call the objective past.

There are very important issues here to do with the value of interpretation in relation to what science is commonly taken to be. Relativism has not been adequately dealt with, so we present some possible lines which can be taken regarding judgement, authority, objectivity and science.16

Objectivity   It is argued that objectivity is not an absolute or abstract quality towards which we strive. Objectivity is constructed. This is not to deny objectivity, but rather, ironically, to make it more concrete. So let it be agreed that an objective statement is one which is, at the least, strong, and that indeed we would wish our interpretations to be full of such strong statements. What makes a statement strong? The conventional answers are that strength comes from logical coherence, or because the statement corresponds with something out there, external to the statement, or because of some inherent quality called objectivity. But who decides on how coherent a statement must be? How exact must correspondence be? And in historical and sociological studies of scientific controversies there appear many other sources of strength such as government or religious support, good rhetoric in convincing others, even financial backing.

We have been arguing that the archaeological past will not excavate itself but needs to be worked for. If objectivity is an abstract quality or principal held by reality, how does it argue for itself, how does it display its strength? No, people are needed, their projects. Gravity does not appear to all and everyone on its own. Microbes needed the likes of Pasteur (Latour 1988). So a statement about the archaeological past is not strong because it is true or objective. But because it holds together when interrogated it is described as objective. What then does a statement hold on to, whence does it derive strength, if not from objectivity? There is no necessary answer. It can be many things. An objective statement is one that is connected to anything more solid than itself so that if it is challenged all that it is connected to threatens also to fall.

An archaeological report usually aims to present data as objective as possible - a strong basis for subsequent inference. Its strength comes from all those diagrams and photographs, the many words of detailed description, the references to comparative sites and materials which give further context to the findings. These all attest to the actual happening of the excavation and to the trustworthiness of the excavation team. Where otherwise is the quality of objectivity? Because the report is coherent and reads well (no contradictions betraying lies and artifice), and the photographs witness things actually being found, because its style and rhetoric are found acceptable, because it delivers what is required (from format to types of information), it is described as sound. Objectivity is what is held together. If a report holds together it is considered objective.

Challenge a fact in the report and you have to argue with all of this, with the happening of the excavation, that great heterogeneous assemblage of people, things and energies. Ultimately the only way to shake its strength is to excavate another similar site, mobilising another army of resources and people. The skill of crafting objectivity is heterogeneous networking - tying as many things together as possible.

Relivism

Relativism   If the abstract and independent principle of objectivity is denied, relativism is held to result. Here an important distinction is between epistemic and judgemental relativism[17] (Bhaskar 1979). Epistemic relativism, which we follow, holds that knowledge is rooted in a particular time and culture. Knowledge does not just mimic things. Facts and objectivity are constructed. Judgemental relativism makes the additional claim that all forms of knowledge are equally valid. But judgemental relativism does not follow from epistemic relativism. To hold that objectivity is constructed does not entail that all forms of supposed knowledge will be equally successful in solving particular problems. Epistemic relativism simply directs attention to the reasons why a statement is held to be objective or strong; it directs attention to the heterogeneous assemblages of people and things and interests and feelings etc mobilised in particular projects. To argue a relativism which maintains objectivity is socially constructed is to argue simply for relationality.

But on what grounds is judgement to be made? If objectivity is constructed, are different interpretations of the past to be judged according to their place in the present? Constructed objectivity would seem to imply that there is no real past. Common sense says that it is silly to think that the distance between survey transects is something to do with society or politics (Bintliff 1992). Is an archaeological interpretation to be explained not by the past but by the politics of the Council for British Archaeology or the Smithsonian?

The reality of the past   But what is the real past? Reality is what resists, and trials test its resistance. Kick a megalith and it hurts - it is very real. But you cannot conclude that if you used a bulldozer it would have the same result. This is not to deny reality at all, but it has to be specified which trial has been used to define a resistance and hence a specific reality. Look at a ceramic thin section down a microscope and there is a reality different to that of its surface decoration. Reality is plural; the artifact is a multiplicity. It depends on what 'work' is done upon and with it.

So what are the conditions of trials of resistance which define reality? Interpretive encounters. They are those heterogeneous networks or projects described above — mobilised mixtures of people and things.

But there is still the problem of the authority of academic science. What is to be done about those cranks who purvey what are clearly mystical untruths about the archaeological past?[18] It has been argued that objectivity is to be sought when the term refers to a strong statement which is held together. Relativism of the sort described here does indeed cherish a sense of reality when the real past is conceived as that which resists specific trials of resistance.

Introducing an abstract and absolute objectivity into this comparison of academic and fringe archaeology confuses things because thereby trials of resistance are made incommensurable.

Consider the opinion that scientific archaeology is objective and people who believe in ley-lines are cranks. Archaeologists have objectivity on their side; they are clever and professional. What do ley-liners have? Stupidity? Science and pseudo-science are here incommensurable; they cannot be compared This takes us nowhere, and most importantly it makes impossible an understanding of scientific controversy. Does the truth always win? What force does it have? How is it that ideas which are now totally discredited, such as the presence of phlogiston in combustible materials, were once to be objective truths? Were people stupid then, or at least not as critical as later?

Maintaining an absolute objectivity makes it impossible to understand the reasons for there being different versions of the past. So it seems reasonable to abandon abstract objectivity and make trials of resistance commensurable. This means treating, at the outset, objectivity and 'falsity', science and 'pseudo-science' as equal (many scientific ideas began as cranky ideas). Trials of resistance are perfectly in order. Talk to people, understand them, persuade if necessary; instead of patronising them by playing the expert19. Maintain an open and reasoned dialogue. Test what holds the respective objectivities together.20

But can fringe archaeologies ever be treated in such a way? Surely there is no controversy? The general point is that it is not possible to argue with the independent reality of the past. It happened. It is not possible to argue with the laws of nature. The environment, for example, sets immovable constraints on what people can do. How can a relativist argue with this?

What were constraints in the past are often not constraints now - nature has an historical relationship with people. Indeed it is not possible to negotiate with gravity falling out of a 10th story window. But neither is it easy to negotiate with an IRA bomber. These circumstances do not often occur however. 'Hard' reality does not often suddenly impose itself. It is usually more gradual, during which time 'society' may negotiate and change its practices: consider environmental change. Gravity is not so much a constraint upon an engineer as a resource used, for example, in the building of a bridge. Clay is a very real resource used by potters, but of course many things cannot be made with it. Why be obsessed with the things that cannot be done? Why not try to understand the creativity?

There still remains the issue that the past happened when it did. If it is argued that archaeology is a mode of cultural production of the past, does this mean that things did not exist before they were so constructed? Was the bronze-age hut circle not there before being excavated. And conversely, were prehistoric stone tools once thunderbolts?

Here it is important not to confuse existence and essence. Existence is when you specify times and settings; it is local and historical. Essence makes no reference to time and space. If something exists at time 1(the excavated cemetery) can we conclude that it always existed, even at time 2 (ie in essence)? Conversely, can we conclude from the fact that something existed between time 1 and

time 2 (a stone thunderbolt) that it never existed (ie never had an essential quality)? the same questions can be set with regard to space.

The dualism between existence and essence corresponds with the following:

existence	essence
history	nature
society	objectivity.

Why should the object world be credited with essence while people only have subjectivity and historical existence? Deny the dualisms. Society then becomes more than just people, receiving objective materiality, and is no longer opposed to the natural world of objects, and nature becomes truly natural history with things having a history which is often tied to that of people. The specific realities of the past are now historically connected with those of archaeologists in particular projects — heterogeneous and historical mixtures of real people and things. If timeless essences and abstract qualities such as objectivity are put to one side as products of theology, we do not lose the solidity of archaeological facts. They are still real and important, but so too are archaeologists, volunteers, publishers, television companies, photographers, feelings, interests, tools, instruments and laboratories which gather and bring to historical reality those facts. There is no necessary monopoly of one particular archaeological mobilisation of people and things which is tied to objectivity. We are hereby more attuned to different archaeological projects. Reburial issues, treasure hunting, landscape art and fringe archaeology become commensurable with professional archaeology: they are but different assemblages of resources (things, practices, people, aspirations, projects ...).

It may be objected that this leads to the apparent nonsense that Thomsen 'happened' to stone and metal tools. But this is indeed the case, because the object world is now credited with a history. Grahame Clark did happen to the settlement at Star Carr.

How could Star Carr be defined and pictured before Clark? Perhaps we should apply Clark's excavation retrospectively and suppose that the site was there all along. It is quite legitimate to believe this, but how could it be proved? There is no time machine to take archaeologists back to 1182 or 431 to check that Star Carr was there then, albeit perhaps less decayed21. Rather than jumping to conclusions about total existence or non-existence — essences, why not stick with reality defined as that which resists particular trials made of it. The confusion of existence and essence is a damaging one.

A site such as Star Carr does not have an abstract essence or timeless objectivity. We argue that its objective existence has a history. Clark is part of the reality of Star Carr, just as the excavations at

Star Carr are part of the biography of Grahame Clark. The reality of Star Carr includes the excavation team, the tools, the whole project.

Are we otherwise to project Clark's and our present back into the past? It is good to remember that Nazi archaeologists find their political realities in the past, projecting back from their present, tinkering with real history.

If objectivity is accepted as constructed, a criticism may be voiced that thereby is subjectivity unleashed. This may be countered with the argument that if objectivity is denied as an essence, so too must be subjectivity. The opposition between objectivity sticking to the facts and subjectivity giving way to mystical and personal feelings is a false one. Why deny that it is people who do archaeology, and that people are indeed constituted as subjectivities in historical dealings with others and with things? If objectivity is denied as an essence, subjectivity becomes the form that the object world takes - though the looking, digging, thinking, feeling, the projects, those heterogeneous mobilisations of people.

If it is accepted that archaeology is a technology, a mode of cultural construction of the past, reality, objectivity and the past are not lost. Troublesome essences and dichotomies are however discarded. The solidity, beauty, originality of archaeological facts are still there and may be described with terms of 'fact', 'reality' and 'objectivity'. But present also are archaeologists, volunteers, publishers, film makers, television companies, photographers, feelings and desires, instruments and laboratories which make these facts live and hold together.

Critique

Another aspect of judging the relative value and worth of different interpretations of the same field is critique22.

Awareness of the dialogues at the heart of interpretation requires self-reflexivity regarding the situated and contextualised interpreters and interpretands. Vital here is the project of ideology critique, now well established in archaeology. Ideology may hinder or make impossible the project of making good sense of the past.

Another dimension of critique is rooted in the heterogeneity, otherness and consequent independence of the material past. The past may become grounds for a critique of the present in that its forms and meanings may defamiliarise and throw into contingency what is taken in the present to be natural or unchanging.

The terms equivocality and heterogeneity were introduced above to describe how something always escapes its classification, there always being more to say and consider. The old pot found by an archaeologist is equivocal also because it belongs both to the past and to the present. This is

its history; it has survived. And the equivocality confers upon the pot an autonomy because it is not limited to the moment of its making or use, or to the intentions of the potter. It goes beyond. The archaeologist can look back with hindsight and see the pot in its context, so time reveals meanings which are accessible without a knowledge of the time and conditions of its making. The pot transcends. In this it has qualities which may be called timeless.

Here also historicism (understanding in historical context) must be denied, otherwise we would only be able to understand a Greek pot by reliving the reality of the potter, a reality which anyway was indeterminate and equivocal. We would be fooling ourselves in thinking that we were appreciating and understanding the art and works of other cultures.

Pots are often used as a means to an end by archaeologists. They are used for dating a context; they may be conceived as telling of the past in different ways. Historicist interpretation reduces the significance of a cultural work to voluntary or involuntary expression: the pot expresses the society, or the potter, or the date. This is quite legitimate. But there is also the pot itself, its equivocal materiality, its mystery and uncertainty, which open it to interpretation.

The pot does indeed preserve aspects of its time and it can be interpreted to reveal things about the past. So the integrity and independence of the pot does not mean that it does not refer outside of itself. It means that no interpretation or explanation of a pot can ever be attached to the pot forever, claiming to be integral or a necessary condition of experiencing that pot. The autonomy of the pot is the basis of opposition to totalising systematics: systems of explanation or understanding which would claim closure, completeness, a validity for all time. We must always turn back to the pot and its particularity. This autonomy brings a source of authority to interpretation, if it is respected.

The autonomy of the past is also the reason why archaeological method has no monopoly on the creation of knowledges and truths about the material past. Does a painting of a castle by Turner reveal no truths of its object in comparison with archaeological treatment? Were there no truths about the material past before the formalisations of archaeological method from the late nineteenth century onwards?

There is a gap between the autonomy and dependency of the pot. If we were back in the workshop where the pot was made we might have a good awareness of its meaning. If we were the one who actually made the pot then it would very much be dependent upon us. But its materiality, equivocality, heterogeneity always withholds a complete understanding: the clay is always other than its maker; the pot is always more than its classification. People may interpret it in all sorts of different ways. The material world provides food for thought, for negotiation of meaning, as we have already indicated.

So the tension within the pot between dependency and autonomy is a tension between its expressive (or significative) character and its materiality. It is a gap between, for example, an image (which has an autonomous existence) and its meanings. Or between the sound of a word and its meaning to which it cannot be reduced. To bridge these gaps requires effort, work, the time of interpretation. This work is one of reconstruction and connection, putting back together the pieces which have been separated.

When a pot becomes part of the ruin of time, when a site decays into ruin, revealed is the essential character of a material artifact - its duality of autonomy and dependency. The ruined fragment invites us to reconstruct, to exercise the work of imagination, making connections within and beyond the remnants. In this way the post-history of a pot is as indispensable as its pre-history. And the task is not to revive the dead (they are rotten and gone) or the original conditions from whose decay the pot remained, but to understand the pot as ruined fragment. This is the fascination of archaeological interpretation.

Commentary and critique   The tension within the (temporality of an) artifact between past and present, between autonomy and dependence upon its conditions of making, corresponds to the complementarity of critique and commentary. Commentary is interpretation which teases out the remnants of the time of the artifact, places it in historical context. Critique is interpretation which works on the autonomy of the artifact, building references that shift far beyond its time of making. It may be compared artistically with artifacts from other times and cultures in critical art history. Critique may consider different understandings of the artifact in our present. Critique may use the integrity of the artifact as a lever against totalising systems, undermining their claims to universality.

Both are necessary. Commentary without critique is empty and trivial information with no necessary relation to the present. Critique without commentary may be a baseless and self-indulgent appreciation of the aesthetic achievements of the past, or a dogmatic ideology, an unedifying emanation of present interests.

Commentary is made on the dependency of things upon their time of making, fleshing out information of times past. But the flesh needs to be brought to life, and this is the task of critique: revealing heterogeneity, yoking incongruity, showing the gaps in the neat orders of explanation, revealing the impossibility of any final account of things. This is a living reality because it is one of process rather than arrest. It is the ongoing dialogue that is reasoned interpretation.

Designed pasts: discourse and writing

The archaeological past is written or told. It is translated into other forms. This is the focus of Section 3, but some general points can be appended here.

Archaeology is a practice in which language plays a dominant part. The archaeologist comes literally to the site with a coding sheet, labelled with words, to be filled in. In addition there is a large implicit 'black box' coding sheet, never discussed, which defines walls, pits, sections, layers and so on. If the excavation process starts with language, so too it finishes with language. The events which take place in practice on an archaeological excavation are contingent and they are experienced differently by different participants. Interpretations are continually changed and contested. But in the end a report has to be written, the diversity and contingency subsumed within an ordered text. A story has to be told which not only describes what happened on the site (usually a minor part of the report) but also describes how the layers built up, when and perhaps why the walls were constructed and so on. The story has to be coherent, with a beginning, middle and end. The site has to be molded into a narrative using rhetoric which makes the story persuasive. A practice has been translated into words and narrative.

Archaeology, like any other discipline, constructs its object past through the workings of discourse23. This is a key concept in directing attention not so much to the content, but to the way something is written or told, and the social and historical conditions surrounding writing and telling. Discourse can be treated as heterogeneous networkings, technologies of cultural production (of a particular kind) which enable and are the conditions within which statements may be made, texts constituted, interpretations made, knowledges developed, even people constituted as subjectivities. Discourse may consist of people, buildings, institutions, rules, values, desires, concepts, machines and instruments … . These are arranged according to systems and criteria of inclusion and exclusion, whereby some people are admitted, others excluded, some statements qualified as legitimate candidates for assessment, others judged as not worthy of comment. There are patterns of authority (committees and hierarchies for example) and systems of sanctioning, accreditation and legitimation (degrees, procedures of reference and refereeing, personal experiences, career paths). Discourses include media of dissemination and involve forms of rhetoric. Archives (physical or memory-based) are built up providing reference and precedents. Metanarratives, grand systems of narrative, theory or explanation, often approaching myth, lie in the background and provide general orientation, framework and legitimation.

Discourses may vary and clash in close proximity. In a factory the discourse of the workforce may differ considerably from that of the management. Academic archaeology probably includes several discourses: Near Eastern and classical archaeology being distinct from Anglo-American processual archaeology. The discourse of commercial excavation is different again. Fowler (this volume) considers aspects of discourses on the countryside, though he focuses as much on the content of the writing. The notion of the English countryside and landscape, its development and relation to national identity could be termed part of a metanarrative. Thomas (1991) has challenged the metanarrative of earlier British prehistory, that it was then just as it always has been - hearty peasants in the English countryside. Other metanarratives include the stories of cultural diffusion

from centres of excellence accompanied by conquest and population movement: an explanatory scheme based on nineteenth-century experiences of imperialism. Larsen (1989) has related Near Eastern archaeology to an ideology of orientalism (Said 1978). Evolutionary theories, when treated uncritically, often also form neat formulae for bringing the past to order (Shanks and Tilley 1987b, chapter 6), which is a function of metanarrative.

Archaeological poetics An awareness of discourse implies an attention to technique, to style, to the way archaeology designs and produces its pasts. This is the project of an archaeological poetics (Shanks and Tilley 1989, Shanks 1992, Tilley 1993) and involves a shift from validation to signification, from anchoring our accounts in the past itself (divorced somehow from our efforts in the present to make sense of it) to the ways we make sense of the past by working through artifacts.

In Section 1 Lucas discusses clarity and density of styles of writing about the archaeological past, arguing not for obscurity, but for contingency: a dependency of writing on its conditions of production. Some other papers in this volume explicitly consider issues of writing the past. Fowler, as already mentioned, discusses writings on the countryside and their styles. Lowenthal introduces the central theme of rhetoric in his discussion of appeals to the past in contemporary self-definition. Shanks considers archaeological historiography and the place of individual agency. Hodder takes a different line and uses rhetorical tropes or features of style to suggest structures in prehistory.

Some concerns of an archaeological poetics include narrative; rhetoric; rhizomatics; quotation; illustration.

Narrative, telling stories, is a basic human way of making sense of the world as particular details are given sense by incorporating them into story forms. The following are components of narrative24.

• story: a temporal sequence

• plot: the causation and reasoning behind the story

• allegory: metaphor, the story and plot may stand for something else

• arrangement of parts: this need not necessarily be a linear sequence of events (there may be temporal slips and changes of pace, condensation and focus on key points)

• agency: the medium through which the story is told

• point of view: given to the reader

Archaeological narrative is often very predictable. Arrangement is usually linear or analytical, the agency is anonymous or impersonal powers, and the point of view is academic, white, Anglo-American, middle-class (but cf Leone et al in this volume). Little experiment is encouraged even though it might considerably improve archaeological writing and attend more to the interests of different audiences (an essential component of narrative after all).

Archaeology almost of necessity has to quote because so much of the past is destroyed in excavation. Quotation here refers to bits of 'reality' brought into the picture in the form of photographs or lists of actual objects lodged in a museum (quotation is thus distinct from referencing or citation of other texts). In archaeology this is usually to witness and legitimate the writing. Quotation is to do with collage and montage — direct quotation, literal repetition of something taken out of its context and placed in another. But there is no archaeological discussion of the theory and poetics of collage that we know of (other than Shanks 1992, p188-90 and passim). Collage is of essential importance to museum display and there are many effective exhibitions (on art and anthropology see Schneider's review (1993)). Walsh (this volume) touches on some issues with reference to the concept of ecomuseum and multimedia display, but again the literature in the archaeological field seems weak. Objects need not only credit a statement with concrete validity, but also be used for their heterogeneity, treated in terms of their autonomy from what is written about them, overflowing the words. This aesthetic principle is familiar from art museums and books but can be greatly extended (see, for example, Greenaway 1991 and 1993).

The field of rhetoric is coextensive with all communicative and expressive acts25. Classically it comprises the following.

• Inventio: the discovery of ideas and arguments. Here is included modes of creative generation covering the history of ideas, historiography, the sociology of knowledge, and also interdisciplinary connections.

• Dispositio: the arrangement of ideas into sequences and narratives. Logical and aesthetic links may be considered.

• Elocutio: forms of expression and figures of speech, stylistic treatment. This may be divided into aptum — appropriateness to subject matter and context (for example is a line drawing appropriate); puritas — correctness of expression (according, or not, to rules of discourse and the discipline); perspicuitas — the comprehensibility of expression (clarity and density); ornatus — the adornment of expression.

Tropes or figures of speech provide a great insight into varieties of text structure within 'elocutio'. Here are included strategies such as antithesis and irony (figures of contrast), metaphor (identity in difference), metonymy. These particularly would seem to be very relevant to archaeology in its translation of material pasts into a different medium, text and image (on metaphor see Shanks

1992 and Tilley 1990b). Another issue is that of humour (so successfully used by Gamble in his conference presentation); mention has already been made of the importance of pleasure as a constitutive principle in interpretation.

• Memoria: the techniques of storage and the retrieval of speech or text.

• Pronunciatio: delivery, gestures and setting. Included here are the design and delivery of lectures and TV programmes, books and publishing projects, museum displays.

Illustration may be treated simply as a visual appendage to a written text, not intended to add anything to verbal description for example, simply exemplifying. It may approximate to quotation, a photograph witnessing what is written. But illustration can also perform a summarising function, particularly in the form of diagrams. This, arguably, is one of the great strengths of systems thinking in archaeology: diagrams of neat boxes and arrows brought the complexity of the empirical to order. Renfrew's classic conception of the social system (1972) provided a synoptic structure of chapter topics for over half of his book on the prehistoric Aegean. Illustration or graphic representation can draw together things, establishing and mobilising connections which are made all the more effective by being visible at a glance in one place. Thought is hereby guided, possibly even conditioned (Lynch and Woolgar eds 1990). Latour (1990) has argued that graphic representation can perform a key role in scientific controversy by performing this function.

Illustration involves working with the relation between words and pictures. It refers to multi-media production, a topic which has long been around in the form of the illustrated book or lecture, but which is now receiving attention through the development of computer-based hypermedia (see Miller 1992). Illustration can be related to breaking the linear flow of text, having a disruptive power: 'a picture, labelled or not, is a permanent parabasis, an eternal moment suspending, for the moment at least, any attempt to tell a story through time' (Miller 1992, p66). Illustration, grafted upon text, can be an alien addition which produces more than the sum of text and image.

Rhizomatics is a term borrowed from the philosophy of relations of Deleuze and Guattari (1988). A contrasting pair is formed with tree-thinking. Both refer to the way connections can be made, the way things can be thought and interpreted, so the way texts may be construed and constructed. The two are complementary, but rhizomes thinking is often forgotten or overlooked.

Tree-thinking is unified and hierarchical (trunk and dendritic structure), concerned with the place of things, their meanings and identities (by virtue of position). It is conceived that there are roots and bases to what is known. The purpose is to reproduce the object of thought (either by means of an image or in terms of structure).

Rhizomes belong with plants which spread insidiously. Rather than fixed and centred structure there is shifting, motive connection. Connections spread, shifting through analogies and

associations. Rhizome thinking does not aim to reproduce an object in thought, image or words, but connect with it, construct with it. Final and definitive identities are denied as the object world is forever reconstructed.

Through our discussion of the general field of interpretation we hope to have shown openings for such relational work26. J. Hillis Miller has drawn upon similar distinctions in his essay on cultural studies (1992). He discusses how binary oppositions or dualisms (such as those above) permeate cultural studies (the academic (inter)discipline): high versus popular culture, theory versus practice, hegemonic versus marginal culture, artifact as reflecting culture versus artifact as creating culture for example. They are difficult to avoid. As a resolution he puts forward Abdul JanMohamed's distinction between binary negation (twinned oppositional pairs subject to hierarchical ordering) and negation by analogue. The latter treats each element of the dualism as part of a differential series without hierarchical priority or fixed origin or end. He comments, 'I see this distinction as a crucial theoretical point. It is crucial because cultural studies must hold on to it firmly if they are to resist being recuperated by the thinking of the dominant culture they would contest' (1992, p16)27.

Interpretation, if followed through and as implied by this discussion of archaeological poetics, implies a blurring of the absolute distinction between factual and fictional writing. The archaeological text becomes a literary form. Fact and the fictive form a continuous field. They share the same techniques of production. As Tilley (1993) has pointed out, the real purpose of a radical and absolute distinction would seem to be an interest in the validation of some interpretive practices over others. It should carefully be noted that fictional writing and 'creative imagery' can be a tremendous resource in working with and learning about reality.

Tilley (1993) has remarked upon the paradox that what we now term interpretive archaeology hardly exists, yet all archaeology is interpretive. The number of empirical studies which are self-consciously postprocessual or interpretive (in the senses outlined here) is growing, and the range of issues discussed in this volume attests to the wide applicability of the concept of interpretation, but it is less important that archaeologists adopt the label. We are simply proposing that archaeologists, whatever their claims, always have done and can do no other than interpret the past. This places archaeology in symmetry with those in the past who are studied, and with those who are not archaeologists but who try to make sense of the material past. They too interpreted and interpret their world, engaging in cultural production. Foregrounding the interpretive character of archaeology deprives archaeologists of an authority which would lie in their restricted access to scientific method, abstract truth and the objectivity of the past. But they can potentially offer to others their skill in crafting and interpreting material pasts, cherishing their creative responsibilities.

Notes

1   For definitions and literature see Trigger 1989a, Willey and Sabloff 1982; a recent textbook expression is Renfrew and Bahn 1991.

2   For general introductions to the issues see Hodder 1984, Gero, Lacy and Blakey (eds) 1983, Gero and Conkey (eds) 1991, Shanks and Tilley 1987a, 1987b, 1989, Miller, Rowlands and Tilley (eds) 1989, Layton (ed) 1989a and 1989b, Gathercole and Lowenthal (eds) 1989, Leone 1986, Leone, Potter and Shackel 1987, Leone and Preucel 1992, Shanks 1992.

3   Etymology is of relevance in supporting this choice of epithet for archaeology which stresses an ongoing practice of mediation and translation. Interpret and interpretation are derived from interpres, Latin. The prefix inter - refers, of course, to mediation or reciprocity. -Pres is of uncertain root, but perhaps relating to the Greek verbs ??????? (phrazein), to speak, or ???????? (prattein) to act or do; the Sanskrit root may be prath, to spread abroad, celebrate, disclose or unfold, reveal or show. And should we speak of 'interpretative' or 'interpretive'? Both have long histories of English usage; interpretive is not a recent and by implication unorthodox elision or American usage. We prefer interpretive because it is an adjective derived not from the noun interpretation, but from the verb interpret - attention is drawn to the practice.

4   Signification: composed of the Latin signum facere - to make a sign.

5   Mike Pearson, director of Brith Gof performance theatre company, Cardiff, has been exploring the connections between performance (theatre without conventional text) and archaeology: see his paper Theatre/Archaeology (1993).

6   We draw on Gadamer 1975. See also Warnke 1987 and Bleicher 1980, 1982. Ricoeur has great potential for archaeology: 1981, 1984–8: see Moore 1990. For archaeology: Shanks and Tilley 1987a chapter 5, Shanks 1992, Johnsen and Olsen 1992.

7   Etymology again reveals a rich range of deep and relevant cultural references. The Greek is ermeneuw (hermeneuo) related to the actions of the god ?????, Hermes. Messenger and herald, thief and inventor of the lyre, guide to the souls of the dead, the rhetorician Hermes presided over commerce and exchange, markets and traffic, science and weights and measures. He dealt in strategems and secret dealings, was a god, like craftsman god Hephaistos, of practical intelligence or know-how. Termed ?????, the field of application of this ingenuity or worldly knowledge is ambiguity and equivocality - finding a way out of sticky situations (Detienne and Vernant 1978, especially p 122-3, 281-3, 301-3).

Hermes takes us from the philosophical circuit of hermeneutics into a semantic and interdisciplinary field of translation, communication, movement and equivocality, messages and

interference, transference and exchange, connections, hermeticism and mystery. The five volume interdisciplinary epic of Michel Serres on such themes in language, literature, philosophy and science takes the name of Hermès (1968-; selected translations 1982).

8   The collections Knorr-Cetina and Mulkay (eds) 1983 and Pickering (ed) 1992 provide introductions and bibliographies to the work of people such as Latour, Knorr-Cetina, Woolgar, Collins and many others.

9   Gavin Lucas has pointed out (in discussion) that not only is theory underdetermined, but it is also overdetermined by the facts — there is always a surplus or excass of data which any theory cannot cover. This also contributes to uncertainty.

10   Shanks 1992 and 1993; more generally on phenomenologies of landscape see Thomas 1993a and 1993b, Tilley n.d. For a background in humanistic geography see Seamon and Mugerauer (eds) 1989 and Seamon (ed) 1993.

11   The analogy is owed to David Austin, Lampeter.

12   For this important concept in the sociology of production and technology see Law 1987, Law and Callon 1992, Callon 1986 and 1991.

13   On the idea of ethnographies of archaeological excavation and project see Shanks 1992, p192-3.

14   For philosophies of relationality see Ollman 1971, Sayer 1984, Deleuze and Guattari 1988; in archaeology: Shanks and Tilley 1987a, Shanks 1992, McGuire 1992.

15   This was repeated, in various ways, several times at a conference held at Hunter College, Manhattan, April 1990; cf Leone and Preucel 1992.

16   The following arguments can all be found thoroughly rehearsed in much recent history, sociology and philosophy of science particularly that which is sometimes called 'constructivism': above note 8.

17   The terms are unfortunately ambiguous. Judgemental relativism maintains that judgement cannot be made of different interpretations which arise authentically from their social context, though interpretations are judged to be equal. Epistemic relativism allows judgement of different interpretations. We have used the terms because Bhaskar is well cited and himself continues their use (for example 1989).

18   A question posed forcibly by Renfrew in his critique of postprocessualism (1989) and by Renfrew and Bahn (1992, p430).

19   An important point is however that professional archaeologists deal with the material past on a day-to-day basis, amateurs when and if they can. Archaeologists should have achieved an authority through developing the skills involved in interpreting material remains of the past, though, of course, they may not have. This is based on the premise that archaeology is a mode of cultural production of the past — skills which involve practical reasoning as well as propositional knowledge (Shanks and McGuire 1991). A key set of issues, and relevant to epistemology, here concerns the regulation of the profession and monitoring of the acquisition of interpretive skills.

20   This is a possible answer to the dilemma posed by Rhys Jones and reported in section 1 concerning possible confilcts between accounts of human origins presented by academic scientists and Australian Aborigines. Reference may also be made to the issue of professionalism raised in note 19. The skill of interpreting the material remains of the past should, if characterised as in the present paper, carry with it a persuasive authority.

21   But, it may be argued, scientific observation shows that materiality has duration. Excavate Star Carr and its materiality (and any C-14 dates) signifies its duration. This is precisely the point. A house does not stop being real when it is abandoned and collapses, when it ceases to be tied to the history of the people who once lived in it. That house has its own history.

22   See Connerton (ed) 1976, Held 1980, Kellner 1989; for archaeology Leone, Potter and Shackel 1987, Olsen 1986, Shanks and Tilley 1987a and 1987b.

23   See Foucault 1972 and 1981, together with secondary literatures, for example Macdonnel 1986. Tilley has presented a programme for what he calls a discourse analysis of archaeology: 1989, 1990a and 1990b, 1993.

24   See Cohan and Shires 1988, Ricoeur 1984–8, Rimmon-Kenan 1983, White 1973 and 1987.

25   On archaeology and rhetoric see Shanks 1994.

26   Further examples can be found in Shanks 1992a, 1992b and 1992c and Tilley (edited 1993). A Thousand Plateaus by Deleuze and Guattari (1988) is full of historical references.

27   This point cannot be overstressed. Consider the distinction within representation between repetition as copy and repetition as simulacrum (Derrida 1972, Foucault 1973, Deleuze 1969). Bruno Latour (1987 and elsewhere) adopts a similar relational strategy in dealing with the connections between science, technology and society.

It should, however, be pointed out that relational thinking encompasses that described as tree thinking. A radical dichotomy which simply denies the validity of one pole of the opposition is to be avoided. In describing features of rhizomatics the intention is to open space for experiment rather than to deny the usefulness, in specific circumstances, of dendritic organisation.