Material Culture

We wish to address two basic questions in this chapter. First, how do we interpret material culture; what meaning, if any, does it possess? Secondly, how does material culture patterning relate to the social? As a way of approaching these questions we wish to briefly examine some of the answers provided by both traditional and 'new' archaeology.

TYPES, CULTURE AND COGNITION

In traditional archaeology the question of the relationship between material culture and society was addressed in a fairly limited fashion and was very closely bound up with considerations of artefact classification and the establishment of typological sequences. The attempt to establish a spatio-temporal systematics for the pigeon-holing of artefacts formed the backbone of research in Anglo-American archaeology until the relatively recent rise of the new archaeology.

Given that artefacts exhibited demonstrable variation across both time and space, one of the primary aims of traditional archaeology was to bring order to this variability by stipulating redundancies in the form of classificatory schemes often explicitly modelled on the basis of biological analogies in which artefacts were to be sorted and 'identified' in a manner equivalent to plants, animals, or mushrooms and toadstools. For example, the 1930 Pecos Conference concerned with the formulation of procedures for classifying American south-western ceramics adopted the following scheme: 'Kingdom: artefacts; Phylum: ceramics; Class: pottery; Order: basic combination of paste and temper; Ware: basic surface colour after firing; Genus: surface treatment; Type or
Clark notes that 'the fact that industrial and art forms are subject to evolutionary processes is a great aid when it comes to arranging them in sequence . . . [The problem is] to determine the direction in which the development has proceeded, to determine in other words whether one is dealing with progressive evolution or with a series of degeneration' (Clark, 1972, pp. 134-6, cf. Kreiger, 1944, p. 273). One task of the archaeologist was to determine types, usually descriptively labelled according to the locality where first identified (e.g. Flagstaff red pottery; Folsom point; Peterborough Ware), or presumed function, or a mixture of the two (e.g. La Tene fibulae). Artefacts could then, ideally, be assigned to these type groupings on the basis of perceived similarities and differences. Different groups of artefacts, associated together in hoards, burials, settlements, votive deposits etc., could be grouped together in more inclusive entities, 'cultures'. But what did the 'types' and the 'cultures' mean in social terms?

**Meaning and artefact types**

Traditional archaeology provided three main answers to this question. The first largely evaded the question of social meaning altogether. Types were developed as purely classificatory devices to bring order to the immense range of archaeological materials discovered and to facilitate comparison of specimens and expedite field recording and cataloguing (Kreiger, 1944, p. 275).

The second answer was that the types defined by the archaeologist were expressions of the 'mental templates' of their makers:

> It may be said that, ideally, an archaeological type should represent a unit of cultural practice equivalent to the 'culture trait' of ethnography. Each type should approximate as closely as possible that combination of mechanical and aesthetic executions which formed a definite structural pattern in the minds of a number of workers, who attained this pattern with varying degrees of success and interpretation.

(Kreiger, 1944, pp. 272,278).

Rouse makes a similar point when he writes: 'Types are stylistic patterns, to which the artisan tries to make his completed artefacts conform'(1939, p. 15). Compare Gifford:

> When entire cultural configurations are, taken into account, certain regularities are discernible that are due to the interaction of
individuals and small social groups within a society, and these are observed as types. Types in this sense are material manifestations of the regularities of human behaviour. . . The basic attributes involved in any type come together in the combination of a mental image plus the motor habits of the prehistoric artisans of a culture in such a way that when executed in clay, they fulfilled the requirements of the ceramic and stylistic values of that culture.

1960, pp. 341-2)

And Chang:

The 'right' categories are those that reflect or approximate the natives' own thinking about how their physical world is to be classified, consciously or unconsciously, explicitly or implicitly, within which framework they accordingly act.

(1967, p. 78)

The third answer, very closely related to the second, was that types and cultures primarily had meaning as historical indicators of temporal and spatial relationships between human groups:

We find certain types of remains - pots, implements, burial rites, house forms - constantly recurring together. Such a complex of regularly associated traits we shall term a 'cultural group' or a 'culture'. We assume that such a complex is the material expression of what today would be called a people.

(Childe, 1929, pp. v-vi).

The ideas of artefacts as Hypes' reflecting basic ideas, mental images, preferences or culturally prescribed ways to do things, and of regularly occurring patterns of different material items as representing peoples or ethnic groups, formed the interpretative basis for assigning meaning to material culture and the archaeological record. It is represented perhaps most succinctly in the 'type-variety' concept developed in the US, initially for classifying ceramics (figure 4.1).

European and American prehistory was, in essentials, written as the history of cultural continuity and change of types and cultures. A number of assumptions underpinned such an approach. Learning formed the basic means for cultural transmission between generations in any particular cultural group, while diffusion of ideas between discrete non-breeding' populations accounted for cultural similarities and differences. This cultural transmission of ideas took place in inverse proportion to the degree of physical or social distance between them. Concomitantly spatial discontinuities
in culture resulted from either natural boundaries to interaction or social value systems inhibiting the acceptance or adoption of new ideas. Internal cultural change was deemed to be essentially slow and incremental resulting either from an inbuilt dynamic or 'drift' away from previously accepted norms governing artefact production, vagaries of fashion, or technological innovation. Alternatively, obvious discontinuities in the archaeological record were explained as resulting from the development of exchange networks with other groups; migration or invasion of populations; or diffusion of radically new and powerful ideas, for example religious cults. Binford termed such an interpretative framework the 'aquatic view' of culture:

Culture is viewed as a vast flowing stream with minor variations in ideational norms concerning appropriate ways of making pots, getting married, treating one's mother-in-law, building houses, temples...and even dying. These ideational variations are periodically 'crystallized' at different points in time and space, resulting in distinctive and sometimes striking cultural climaxes which allow us to break up the continuum of culture into cultural phases.
Artefact classification

One idea underlying the development and refinement of the classificatory schemes was that the act of classification was usually held to be a neutral device and independent of theory. Classification followed data collection and once carried out could lead to inferences being made from the materials thus sorted. Material culture had a meaning or significance inherent in itself and the task of the archaeologist was to extract this meaning which was restricted, i.e. each artefact retained within itself one or a few meanings. Much debate centred on how artefacts might be best classified (e.g. Rouse, 1960; Sears, 1960) and whether these classifications were 'real' or 'ideal', i.e. whether they actually reflected the ideas of prehistoric artisans which were then discovered, or were imposed by the archaeologist (Ford, 1954a, 1954b; Spaulding, 1953, 1954). Because many of the typologies obviously worked, at least as limited temporal indicators, they were assumed to be in essentials correct and the 'types' and 'cultures' became canonized in the literature as the types and the cultures: 'pottery types are not primarily descriptive devices but are refined tools for the elucidation of space-time problems' (Sears, 1960, p. 326).

As we have mentioned above, the meaning of archaeological data was its supposed direct relationship to cognitive structures collectively held by peoples or ethnic groups; but despite this interest traditional archaeology never really developed such concerns because to identify types, cultures and spatio-temporal relationships between them became ends in themselves. This was coupled with a pessimism in which it was claimed that little could be known beyond the realms of technology and the economy (Hawkes, 1954; Piggott, 1959, pp. 9-12).

The cognitive and social reality of artefact taxonomies and cultures have been much disputed during the last 25 years. As regards artefact classification, it has begun to be recognized that classification is not independent of theory (Dunnell, 1971; Hill and Evans, 1972) and that there is no such thing as a 'best' classification. All classifications are partial and select from observed features of the data set. Attempts to create some kind of 'natural' classification, good for all purposes, and dealing with all possible variation within the data set studied is simply unattainable. Any form of classification involves the definition of significant criteria (significant to the classifier) to be used in the process of forming classes. This may involve the arrangement of these criteria in some
order of importance which depends on theory or what we know or want to know. The link between classificatory systems and theoretical knowledge of the data universe to be studied is insoluble. Classifications are dependent on and derived from theory; they are not in some sense independent formal schemes which may be considered to be more or less convenient or useful. An infinite number of different classificatory systems may be developed for the same data set and there is no automatic obligation for the archaeologist to model, or attempt to model, his or her taxonomic systems on the basis of those utilized by prehistoric artisans.

_Cognition and the past_

Archaeological taxonomies and descriptions of the past may tell us a great deal about the manner in which the archaeologist thinks about past socio-cultural systems, but is there any reason to think that they tell us anything about the manner in which prehistoric social actors thought about their culture? Is this irrelevant anyway? One answer is provided by Eggert (1977) who makes four points:

1. A native people's way of thinking about and explaining their world should represent a starting rather than an end point for inquiry and this inquiry has to be undertaken from another (scientific) frame of reference.
2. Material forms not explicitly devised for communicative purposes, unlike language, are too ambiguous to reflect in an unequivocal manner the ideas embodied in them.
3. Cognitive systems are abstractions of the anthropologist. They are idealized and tend to subsume or ignore the considerable degree of individual variability in action sequences and thought.
4. People's conceptions of what they do and how they should act may differ markedly from their actual practices.

Eggert concludes that any attempt on the part of the archaeologist to study or infer or attempt to model taxonomic systems in terms of prehistoric cognitive systems is fundamentally misguided. Some ethnoarchaeological studies, on the other hand, have attempted to demonstrate that cognitive systems are embodied in material culture and cannot be ignored by the archaeologist if he or she wishes to arrive at an adequate understanding of that being investigated (e.g. Arnold, 1971; Friedrich, 1970; Hardin, 1979, 1983; and see the discussion below pp. 148-58). Arnold suggests that
Since artifacts are the result of what people actually do and not what they say they do, it seems more reasonable to attempt to reconstruct non-verbal behaviour from ancient artifacts rather than from anything else. But, if it can be demonstrated from an analysis of verbal behaviour, non-verbal behaviour, and from the material aspects of culture that a cognitive system common to a particular group is really conditioning all of these factors, then, it seems reasonable to suggest that cognitive systems should warrant some attention as a significant factor in the production of artifacts.

(Arnold, 1971, p. 22)

Arnold's study attempts to demonstrate a clear relationship between the cognitive ethnomineralogical system used by potters in Ticul, Yucatan, and verbal, non-verbal and material aspects of processes involved in selecting and using raw materials for making pottery. He finds a correlation between certain emic ethnomineralogical categories of raw materials used to make pottery (clays, temper etc.) and actual (etic) composition as determined by X-ray diffraction studies. However, studies such as those by Arnold and Hardin seem to fall rather short of mapping a cognitive system in terms of material culture patterning - a point we wish to elaborate by returning to consider Eggert's strictures.

Even if an archaeologist were able to reproduce an exact replica of a prehistoric taxonomic system how much would this tell us? It appears to be insufficient to regard such an attempt at a reconstruction of the 'templates' of prehistoric artisans as providing an explanation of material culture patterning. An archaeologist duplicating a prehistoric taxonomic system would be arriving at a description of that system, but such a description of the manner of ordering and thinking about artefacts is itself in need of explanation or further description in relation to social strategies and practices. Material culture should be regarded as not merely a reflection of cognitive systems and social practices but actively involved in the formation and structuring of those practices. So, we are never likely to be dealing with a simple correspondence relationship between idea and/or action and material culture form but a situation in which material culture actively mediates ideas and practices. The fact that material culture differs from language in its communicative form and effect does not require that we evaluate the communicative intent of material culture negatively, in terms of its difference from language, and conclude that material culture as a communicative form is too ambiguous to repay study. Cognitive systems are, of course, attributed by the anthropologist or the archaeologist to ethnic groups and material culture: patterning.
Such systems are constructs; but this in no way implies that they do not exist or that the actions of individuals might be contradictory or variable. In fact, as we argue in chapter 6, societies are inherently contradictory entities. The idea of society as being constituted in terms of a normative (and cognitive) set of beliefs held and subscribed to by all social actors cannot be sustained. The problem with the studies by Arnold, Hardin and others is that while they do usefully point out the significance of cognitive bases for social action and their manifestation in material culture, in common with the work of traditional archaeologists the assumption is made that all social actors in a society share an undifferentiated and normative set of beliefs. There is little consideration of the negotiation and renegotiation of meaning frames within the context of social strategies which may very well be oppositional and contradictory. An emphasis on contradiction and conflict of interest goes some way to explain why social practices, as often as not, conflict with idealized models of these practices.

**STYLE AND FUNCTION**

In much of the literature post-dating the mid-1960s the notion of material culture as more or less directly relating to cognition or peoples was challenged or abandoned by many. A realization developed that archaeological cultures could simply not be correlated in any direct or immediate manner with ethnicity and there were in fact multiple factors affecting the nature of distributions of material culture items perceived in the archaeological record (e.g. Hodder (ed.), 1978). The types used to define cultures were as often as not atypical features of the archaeological record in any particular region (e.g. Clarke, 1968, pp. 29-31). What traditional archaeologists took as representing ethnicity might instead refer to functional variability in the types of activities carried out on different sites. This point provided the essence of the debate between Binford (1973) and Bordes (1973) regarding the meaning of assemblage variability in Mousterian sites in south-western France: Bordes arguing that the differences reflected ethnic identity, and Binford claiming they related to functional variability between different activity sets. Clarice (1968) argued that cultures were to be polythetically rather than monothetically defined and that such cultures were distinct analytical entities in themselves with no necessary relationship with ethnicity. Renfrew (1978) questioned the existence of homogeneous
assemblages, suggesting that cultures were little more than arbitrary taxonomic categories imposed on a continuum of change.

In short, the interpretative basis of the meaning of material culture provided by traditional archaeology was undermined. Instead, material culture was granted a fresh significance which became grafted in terms of the opposition between two dichotomous terms: style and function. Much of the debate which has taken place during the last 15 years about the relationship between material culture and the social hinges on the definition and use of these terms and whether primacy can (or should) be granted to one or the other in an understanding of the past.

**Material culture: system and adaptation**

Two major developments in thinking occurred. Firstly, culture became redefined as a system composed of distinct subsystems. It became fashionable to talk about the interaction between sub-systems rather than people, the latter being effectively screened out of the analysis (see chapter 2). Secondly, Binford (1962), following White (1959), redefined culture as an extrasomatic means of adaptation. Consequently the primary meaning of material culture was its role as an interface between people, the environment, and interactions of individuals regarded as components of social systems. Culture was no longer to be regarded as something shared by people but as participated in differentially:

A basic characteristic of cultural systems is the integration of individuals and social units performing different tasks, frequently at different locations. ... Within any one cultural system, the degree to which the participants share the same ideational basis should vary with the degree of cultural complexity of the system as a whole. 

(Binford, 1972, p. 199)

As Binford regarded material culture as an extrasomatic means of adaptation it was entirely consistent that he should regard it in wholly functional terms. It either had a direct utilitarian function or a social function. In an early paper Binford (1962) defined three distinct classes of artefacts: technomic, sociotechnic and ideotechnic, functioning respectively in coping with the environment, social and ideological relations. Residually cross-cutting these three functionally defined artefact classes was style: 'formal qualities that are not directly explicable in terms of the nature of the raw materials, technology of production, or variability in the
structure of the technological and social subsystems of the total cultural system' (1972, p. 25). Style functioned in terms of promoting group solidarity, awareness and identity. Later recognizing that it was impossible to sustain any meaningful distinction between functional classes of artefacts operating in different social subsystems, Binford (1965) redefined artefacts as possessing primary (utilitarian) and secondary (stylistic) functions cross-cutting morphological and decorative variation (in the case of ceramics). Primary functional variation referred to utilitarian use (e.g. the difference between a drinking vessel and a plate). Secondary functional variation referred to the social context of the production and use of material culture: 'this variation may arise from a traditional way of doing things within a family or a larger social unit, or it may serve as a conscious expression of between-group solidarity' Binford, 1972, p. 200).

The examination of what Binford termed primary and secondary functional variability in the archaeological record has played a major role in the recent development of archaeology. In prehistoric and ethnoarchaeological studies much attention has focused on technologies of artefact production (e.g. Semenov, 1964; Van de Leeuw, 1976; Kramer, 1985, pp. 78-83; Howard and Morris (eds), 1981; Steponaitis, 1983). A second area that has been investigated is the determination of the utilization of particular artefacts (e.g. Hayden (ed.), 1979; Wilmsen, 1968; Braun, 1983; Hally, 1986). In such studies attention has focused on the suitability of particular artefact types for different purposes which are supposedly strictly delimited by the physical properties of the artefacts themselves. Characterization studies of sources of raw materials have been used to suggest the existence of exchange networks or social interaction spheres (e.g. Earle and Ericson (eds), 1977; Ericson and Earle (eds), 1982; Sabloff and Lamberg-Karlovsky (eds), 1975), and attention has been paid to the rate of breakage of artefacts, discard and reuse patterns (e.g. DeBoer and Lathrap, 1979; David, 1972; Kramer, 1985, pp. 89-92; Schiffer, 1976; Binford, 1979). Other studies have investigated sites in terms of the relationship between artefact patterning and different activities such as tool manufacturing, food processing and group size (e.g. Binford, 1978, 1981; Schapiro, 1984; Kent, 1984; Hietala, 1984). Such work has certainly alerted archaeologists to the complexities of the formation processes of the archaeological record but the symbolic and social meaning of artefact production and usage has been neglected. Meaning tends to be only investigated insofar as it can be reduced to an effect of various technologies or utilitarian considerations.
Ceramic sociology

Some innovative research in the 1960s and 1970s on ceramics was based on the assumption that degrees of stylistic similarity in material culture patterning might reflect social interaction. In cases where it could be assumed on the basis of ethnographic evidence, as in the American South-West, that residence was uxorial and women made the pottery intended for household use and traditions of pottery manufacture and, decoration were passed down from mother to daughter, the spatial concentration of micro traditions in design style would be expected to indicate distinct clan or residence groupings within a settlement (for synchronic studies see e.g. Longacre, 1970; Hill, 1970; and for a diachronic perspective Deetz, 1965; Whallon, 1968).

On a broader regional scale, degrees of social interaction resulting in the borrowing of designs or design fields would be reflected in the degree of stylistic similarity between sites (Engelbrecht, 1978; S. Plog, 1976; Washburn., 1983). Such studies have been subjected to much critical assessment (Allen and Richardson, 1971; Hodder, 1982; Stanislawski and Stanislawski, 1978; Longacre, 1981; S. Plog, 1978), focusing on the feasibility (or necessity) of reconstructing kinship patterns from archaeological data given that concepts such as matrilocal kinship are often second or third order anthropological abstractions themselves. Ceramics may also often be produced by groups rather than individuals and learning networks may differ considerably from a simple transmission from mother to daughter within a social unit essentially conceived as isolated. Nor is there any necessary correlation between interaction and stylistic similarity because style may be actively used to mark put boundaries of different social groups where there is intense interaction between them. The theory assumes that style is a passive reflection of group or social identity and the cross-cultural generalizing perspective, in terms of which this research has often been framed, denies the specificity of cultural context, that in some situations style may relate to learning networks while in others it clearly does not. We need to know why this is the case. In one sense the idea that decorative style reflects the composition of social groups in space arid time bears a very close resemblance to traditional archaeology, but at a fine-grained level.

Choice, function and information

Many archaeologists, however, have always realized that given consideration of technological and utilitarian parameters there still
exists a latitude for choice in the manner in which artefacts may be produced and the meanings which they may carry. But how much choice and what are these social meanings?

Choice is predominantly regarded as strictly delimited by environment and function:

If our interest resides in ancient artefacts and our aims in the most powerful interpretation of these artefacts, then we must realise that archaeological artefact systems express the individually modified imprints of environmental constraint on particularly valued cultural matrices.

(Clarke, 1968, p. 83)

According to Braun,

Where pottery making is a domestic craft, we can then assume a selective process. Pottery techniques that produce vessels that are inefficient as tools, require relatively high labour or material costs, or require relatively frequent placement, will tend to be avoided in favour of techniques that produce more efficient results, at lower costs . . . The mechanical uses of ceramic vessels directly constrain the kinds of decoration they receive and hence the kinds of social information they carry.

(1983, pp. 112-13)

And Arnold:

Viewed from the perspective of cybernetics, weather and climate can provide either deviation counteracting feedback or deviation amplifying feedback for pottery production depending on the character of the climate . . . In areas where a wet, cold and foggy climate persists for the entire year, the negative feedback is totally effective in preventing the development of pottery making, even if the craft is introduced by innovation or diffusion.

(1985, pp. 76, 83)

Such statements are so widespread in the literature that they require no further documentation. While rigid environmental and functional constraint on the choice of the form and nature of material culture is usually emphasized, meaning is sometimes addressed in a purely abstract manner as 'information' and in terms of information flow structures (e.g. Johnson, 1978; Van de Leeuw, 1981).

Clarke (1968) defined material culture as a separate subsystem of society providing information, the messages being 'accumulated survival information plus miscellaneous and random noise peculiar
to each system and its past trajectory' (1968, p. 85) and this general approach to meaning as survival information has been frequently advocated in debates about the significance of style and function in material culture. Dunnell regards style as denoting 'those forms that do not have detectable selective values. Function is manifest as those forms that directly affect the Darwinian fitness of the populations in which they occur' (1978, p. 199 emphasis in original).

A priority of function is asserted in purely adaptive terms with the significance of style marginalized in terms of stochastic processes - trivial socio-cultural variation. On the other hand, style may be regarded as important but only insofar as it can be explained away as just another form of adaptation to the natural and social environment (e.g. Conkey, 1978; Fritz, 1978; Jochim, 1983).

Wobst regards style as a strategy of information exchange with both functional and adaptive significance. Artefacts convey messages and Wobst conceives the content of such messages as being more or less isomorphic with spoken language. Consequently he suggests that because it is relatively costly to produce messages in the stylistic mode of artefacts as opposed to conveying information through language, only a relatively narrow range of information will be expressed in the form of simple invariant and recurrent messages - messages of emotional state, social identification, group affiliation, rank, authorship and ownership, behavioural norms, religious and political belief (Wobst, 1977, p. 323). Stylistic messaging will usually be 'targeted' at individuals beyond the immediate household or residence group but loses its usefulness in relation to socially distant populations because they will either be unable to encounter or decode the messages. This leads Wobst to claim that

the majority of functions of stylistic behaviour should relate to processes of social integration and social differentiation. Stylistic messages of identification, ownership, and authorship link efficiently those members of a community who are not in constant verbal contact and who have little opportunity to observe each others' behaviour patterns... it makes social intercourse more predictable. (Ibid., p. 327)

So style transmits information about social group membership and internal differentiation, functioning to keep a society running smoothly by reducing stress or conflict, and may be used to maintain social boundaries. This general perspective has been frequently adopted in the subsequent literature (e.g. Weissner, 1983; Pollock, 1983; Graves, 1982; S. Plog, 1980, pp. 126-39; Braun and S. Plog,
1982). All such a perspective purports to explain is the existence or non-existence of style; it is incapable of telling us anything at all with regard to its specific form and nature, such as why pots might have one set of designs rather than another.

*Style and meaning*

Whether explicitly stated or implicitly assumed, in most studies style is regarded as something left over in material culture after utilitarian function has been taken into account. It is generally regarded as having social significance which may or may not be regarded as important and possible or impossible to study with any degree of ‘rigour’.

Underlying much of this discussion are two assumptions: (1) style can be separated out from utilitarian aspects of artefacts; (2) it ‘functions’ in social rather than utilitarian areas of life. In a series of papers Sackett (1973, 1977, 1982, 1985) has been specifically concerned to stress the inseparability of style and function, challenging the idea that stylistic aspects of artefacts merely constitute a residue, something left over when function has been taken into account. He argues that style does not constitute a distinct domain but is to be encountered in all formal variability in individual artefacts and that style and function share equal responsibility for the finished product, a view which we wish to fully endorse. It is impossible, for example, to separate out the style and the function in either vessel shape or projectile point morphology. There is no way in which we can meaningfully measure and determine what proportion of a vessel’s shape performs some utilitarian end, the remainder being assigned to the domain of style. To take a chair - what proportion of this is functional as opposed to stylistic? No answer can be given; the style inheres in the function and vice versa. Furthermore, ascribing any specific or strictly delimited function to an object is in many, if not all cases, an extremely dubious exercise. A chair may be to sit on, it nominally fulfils this; function, but chairs can also be used for standing on, or for knocking people over the head with, as pendulums, rulers, or almost anything else. This is not to deny the banal point that objects have uses and may normally be used in just one way, but it is to suggest that such a position represents, at best, a starting point rather than an end point for archaeological

The second point is far more crucial, and we will consider it in relation to Sackett’s work. What is at issue here is the socialmean-
Sackett argues that 'any artifact has an *active* voice which connotes function . . . [and] a passive voice which connotes style' (1977, p. 370; our emphasis). The implication here is that function is something dynamic and active depending on the use of artefacts and the roles they play as technology or in social terms, while style merely reflects aspects of the social world, playing no significant role in either creating or transforming it. Sackett distinguishes between two domains of artefacts: those which may be taken to be utilitarian in function; and those which are primarily non-utilitarian, for example a crown or a head-dress. Both may be cross-cut by adjunct form, for example pottery decoration. Stone tools, by contrast, have no obvious adjunct form. Sackett's non-utilitarian class of artefacts clearly embraces both Binford's sociotechnic and ideotechnic classes, while adjunct form is that which is normally taken to be stylistic in the archaeological literature. Sackett's further and most important argument is worth quoting at some length:

Although the form of any given object may be entirely appropriate to its function . . . there exists nevertheless a great range of alternative forms that would be more or less equally appropriate. In other words, there usually is a variety of functionally equivalent means of achieving a given end, whether these concern the design of a weapon with which to kill reindeer, the execution of pot decoration that symbolically identifies a specific residence group, or the manufacture of a chisel-ended burin. The seemingly equally valid and feasible options we may regard as functional equivalents with respect to a given end constitute a spectrum of what I choose to term *isochrestic* form . . . The artisans in any given society tend to 'choose' but one, or at most but a very few, of the isochrestic options that at least in theory are potentially available to them from this spectrum . . . Given the large number of options that are at least potentially available, chance alone dictates that any single one is unlikely to be chosen by two societies which are not ethnically related in some fashion; and chance would appear to exclude altogether the possibility that the same combination of several such choices in different spectra of isochrestic form could be made by two unrelated societies. . . Since material culture is largely the product of learned behaviours that are socially transmitted, there exists a strong and direct correlation between the specific choices a society makes and its specific position in the stream of culture history.

(Sackett, 1982, pp. 72-3)

In this formulation style, viewed as isochrestic variation, has no social meaning whatsoever other than being a habitualized expression of ethnicity and, apparently, neither suggests nor
requires any further explanation (Sackett, 1985, p. 157). Sackett's position, while being sensitive to the detection of style in all artefacts, at the same time explicitly avoids any consideration of its meaning and significance because in his view style just happens as a product of habit and socialization processes; hence the claim which he makes that style is function writ small.

To summarize: while in traditional archaeology the meaning of material culture was its supposedly direct reflection of ethnicity and (unspecified) ideas, the new archaeology reduced its meaning to function - as an adaptive interface between people and the environment (as technology) or as a means of cementing together social groups or symbolizing group identity (as style). In the case of Sackett's work this is a purely passive process, while for Wobst and others it has a more active dimension as a form of social signalling. In all accounts, function has either been privileged in relation to style or style has been explained away as existing because of an inherent social function. However, specifying a social function for stylistic aspects of material culture patterning tells us virtually nothing about its specificity, for example all the multitudes of different chair forms, past or present, their shapes, decorative features, arrangements in different rooms or types of rooms. The general conclusion that may be drawn is that the term function is virtually redundant.

When we are dealing with material culture we are analysing a world of stylistic form and conceptual choice, creating things in one way rather than another. The corollary is that the archaeological record is a record of form according to specific cognitive orientations toward the world. The first stage in trying to understand material culture is to accept it as a stylistic cultural production. The second stage is to make full use of the range of variability in the material culture patterning apparent to us and not to subsume this variability under high-level generalizations. Exploiting the variability in material culture patterning is of vital importance: it gives us clues on which to hinge our statements and ensures we realize the full potential of the archaeological record.

Place a brick somewhere in London. Imagine that London represents the totality of the social relations and practices existing in a prehistoric society. The brick represents the archaeological evidence from which we have to extrapolate to come to an understanding of that past social totality. Obviously the variability in the brick is of vital importance if we are going to understand anything at all. However, for many archaeologists, it appears as if even our solitary brick in the centre of London is too variable and
complicated, so much so that high-level generalizations must be employed to further reduce the brick to a few fragments via the operation of certain methodological hammers. One of the most powerful of these hammers - the hammer of function - has already been discussed above, and is often combined with another even more powerful tool, the sledge hammer of cross-cultural generalization (e.g. Arnold, 1985; and see the discussion above), which finally manages to reduce our brick to fine particles of dust. London appears to be lost.

HISTORY, STRUCTURE AND MATERIAL CULTURE

Most of contemporary archaeological discourse concerns itself with the delimitation and analysis of constraints, usually of an asocial nature, impinging upon societies - environment, ecology, population pressure, economic resource availability - presupposing that human potentialities are strictly bounded and limited. However, in most of the substantive analyses, such a position is simply assumed rather than demonstrated, and there is little, if any, evidence to support it. Rather than thinking in terms of asocial constraints, perhaps we should think in terms of human potentialities and possibilities for action. In any given determinate social field societies to a greater or lesser extent constrain themselves, rather than being constrained by external forces or purely utilitarian considerations. Such a move parallels a shift from viewing material culture as primarily functional to regarding it as constituting a symbolic, active communicative field. How then do we conceive of material culture and its relation to the social?

Perception, history and material culture

Very broadly, a history of perception or the manner in which people regard the world provides one link between the content of thought and the structuring of society (Lowe, 1982). Merleau-Ponty, in The Phenomenology of Perception (1962), emphasizes three main features of perception together creating a perceptive field: the subject as perceiver; the action of perceiving; and the content of that perceived. The perceiving subject from an embodied spatial location always approaches and conceives of the world as a lived, dynamic, open, horizontal field. The act of perceiving unifies the subject with that perceived and the content of the perceived resulting from the act of perception affects the
subject’s actions and relationship with the world. Perception is bounded by three fundamental factors: (1) common media framing and facilitating the act of perception; (2) the senses themselves - hearing, touching, smelling, tasting, seeing - structuring the subject as embodied receiver; (3) epistemic or cognitive presuppositions ordering the content of that perceived. Together these constitute a field of perception within which knowledge of the world becomes possible. From such a perspective we can view material culture as being involved actively in a process of perception and as media framing and facilitating the act of perception and gaining knowledge of the world. The question we next have to ask is: how important is material culture as framing and communicative media in society; and, historically, has it had a differential importance?

All communicative media from the patterns on a pot to television and video not only transmit information but also form, package and filter it. If the medium doesn’t actually constitute the message it certainly alters it. Historically, media for communication have changed dramatically, from oral cultures in which there was no written language, script or text, to cultures where writing was the preserve of an elite minority, to the introduction of print and an increase in literacy, to the mass media electronic communicative forms of today. These changes have been additive rather than substitutive. Ong (1967) and Lowe (1982) have claimed that such changes from oral to chirographic to typographic to electronic cultures are correlated with a changing hierarchy of the senses. In oral cultures speech has to fulfil the role of both preserving knowledge and framing communication, for only in the act of speaking can knowledge be preserved. Speech, memory and a primacy of hearing as perception go together: oral communication is primarily aural communication. A priority of hearing over seeing is implied. It is only with the advent of a typographic culture that sight assumes priority.

This perspective, while privileging language, overlooks the role of material culture as a perceptive medium and as a framework for communicating knowledge and information. In an oral culture it would seem to be quite plausible to regard material culture as a communicative medium of considerable importance for transmitting, storing and preserving social knowledge and as a symbolic medium for orientating people in their natural and social environment because of the relative permanence of material culture vis a vis speech acts. So material culture can be regarded in oral societies as a form of writing and discourse inscribed in a material medium
in just the same way as words in chirographic and typographic cultures are inscribed on a page. It is then possible to go on to suggest that as a communicative discourse material culture becomes successively transformed in importance with the advent and spread of communicative media directly related to spoken language - writing, printing and the mass media of today, which do not transcribe speech but actually transmit it.

With the development of mass industrial production as opposed to craft production the role of material culture as an active symbolic transformative intervention in the social world is certainly altered. In a world capitalist economy we may be wearing jeans at the same time as a Lebanese gunman. The material form - in this case jeans - remains the same but its meaning will alter according to the context. Jeans will be consumed in different ways, appropriated and incorporated into various symbolic structures according to historical tradition and social context. In a prehistoric situation not only will the meanings differ, but so will the particularity of the material form. Consequently it is possible to argue that there is likely to be a closer relationship between material form and meaning content than exists today.

. Material culture, the individual and society

In considering the nature of material culture as communication, as a form of writing and silent discourse, we need some perspective on the relationship between the individual subject and society. In other words, we need to consider to what extent material culture production is simply a product of individuals and to be related to their intentions, individual psychology and personal make-up, or to what extent it can be considered a social production. How important is the individual as individual in cultural production? Is material culture to be regarded as a largely autonomous expression of individual personality, or as indelibly structured in relation to social processes which themselves encompass, define, create and articulate the individual? We have already provided answers to these questions in the previous chapter. It does not seem to be at all theoretically acceptable to pursue a view of the human subject as endowed with specific capacities and attributes, as the source of social relations, font of meaning, knowledge and action. We should insist, therefore, on the logical priority of the social and the structuring of social relations in accounting for all social practices including material culture production. Material culture is, in no sense to be regarded as a product of unmediated individual inten-
tionality but as a production of the intersubjective social construction of reality. Individuals are structured in terms of the social and, concomitantly, material culture is socially rather than individually structured.

The intention here is not to uphold a radically anti-humanist position in the manner of Althusser and Balibar (1970) but, as we argued in chapter 3, to regard individuality as created and constructed in a social and symbolic field over which the subject has no immediate or direct degree of control or possibility for radical intervention. This is to decentre the subject and to regard material culture as a social production created in terms of a socially mediated symbolic field. We are placing emphasis on the constructedness of human meaning and that meaning is not a private experience but a product of shared systems of signification. Language and material culture pre-date the individual. The agent does not so much construct language or material culture but is, rather, constructed through them. Meaning is by no means a natural extension of personality but a product of linguistic and material culture systems. Reality is not reflected by language or material culture as much as actively produced by it. The meaning an individual is able to articulate in relation to the world is dependent on the construction of that world through language and material culture.

**Material culture and structure**

We now want to explore the relationship between material culture and structure. The central proposition that follows from a position in which the subject is decentred *vis a vis* material culture production is that the archaeological record must be regarded not in terms of just a random collection of artefacts or attributes of individual artefacts but as a structured record, structured in relation to the social construction of reality and in relation to social strategies of interest and power and ideology as a form of power. The position we are taking is that material culture as communication is a structured sign system. The point has: already been made that material culture can be considered as a form of writing and in the absence of writing as we know it today as a textual production it can be considered to play a much more powerful role as a signifier in the comparatively less complex oral cultures archaeologists typically investigate. If we take up this notion of material culture as a form of writing does this imply that it can be considered in just the same manner as language - as a form of non-
verbal discourse with grammars, codes and specific units of signification? In other words, does material culture act as a structured series of signs which signify something in social reality, or does material culture form a kind of discourse signifying itself rather than something external to it? If material culture signifies the social or aspects of social reality in what manner is this effected? Is material culture a supplement to language acting in a similar way with an equivalent pattern of meaning structure? These questions take us into the realm of structuralism, semiotics, post-structuralism and deconstruction.

Saussure, the father of contemporary structuralism, in his Course in General Linguistics (1978), regarded the study of linguistics as one day forming part of a general science of signs. This would seem to suggest that language forms one sign system among many and that there might be a relative autonomy among different semiotic systems. Barthes, in his Elements of Semiology (1967), strongly criticized such a view regarding all sign systems as part of language. For him there could be no non-linguistic semiotic system. Rather than adhering either to Saussure or Barthes' position it would seem best to regard material culture as forming a system of discourse which has a relative degree of autonomy from a language, a second order type of writing which shares some essential features with linguistic systems while at the same time not being directly assimilable to, or reducible to, language. So, in what manner does material culture as a signifying system have a relative autonomy from language and what features does it share with language? The answer to this question depends, of course, on how we regard language as a signifying system.

Saussure in his Course viewed language as a system of signs which must be studied synchronically rather than diachronically. Each sign is made up of a signifier (sound-image or graphic equivalent) and a signified (a concept or meaning). According to Saussure the relationship between the signifier and that signified was entirely arbitrary, a matter of cultural or historical convention. Each sign in a system only had meaning by virtue of its difference from other signs. For example, badger has meaning because it is not rat, dog or pig; but its relationship with the four legged, black and white striped creature is entirely arbitrary, a matter of convention. In Saussure's conception of a linguistic system emphasis is placed therefore on relational difference. Meaning does not inhere in a sign in itself but by virtue of its difference from other signs. Saussure was not particularly interested in actual speech (parole) but with objective structures making speech
possible (*langue*), i.e. the rules underlying and structuring any particular real speech act in the world. The nature of *langue* as a system of rules lies underneath and governs the relative superficiality of day-to-day speech. If language is an exchange of messages constituted in their difference, governed by an underlying system of grammatical rules and is taken as a paradigm for social and cultural analysis, then the move made by Levi-Strauss (1968) to view kinship as a structured exchange of mates within the confines of an abstract system of underlying unconscious rules, the economy an exchange of goods and services, politics an exchange of power and so on, is quite easy to understand. But what of material culture? If language is an exchange of messages, then material culture might be thought to act as a kind of second level back-up, mirroring in some sense this message exchange and reinforcing it by virtue of its very materiality and relative permanence.

There are two major problems with this structuralist perspective. First it systematically diverts attention from history, the manner in which people have altered and do alter their objectifications of the social. A structuralist perspective concentrates on the synchronic investigation of order, the codes underlying the order, and the significance of the experience of the order.

In archaeology formal analysis of pattern in material culture is now well established. The aim has been to investigate pattern, to establish the logic behind the patterning and establish rules for constructing the patterns. Washburn (1978, 1983) has used symmetry (repetition, rotation, reflection of a design element) as a logic lying beneath pottery decoration. Hodder (1982, pp. 174-81) has claimed a generative grammar for the decoration of calabashes among the Sudanese Nuba, a system of rules operating on an originary cross motif, which can generate a wide variety of actually occurring calabash designs. His analysis included computer simulation - 'testing' the rules he isolates as generating the designs to see whether they fitted observed patterns. Fritz (1978) has identified symmetrical relationships in the organization of the directional orientation of settlement space in the Chaco Canyon in the American south-west. Fletcher's (1977) work on the formal arrangement of settlement space can be mentioned here - an analysis aimed at identifying a syntax of space.

In addition to attempts to identify rules of symmetry and design combination and space syntax, analysis of pattern or structure in archaeology has employed the use of binary oppositions such as bounded/unbounded, horizontal/vertical, left/right, hierarchical/sequential. Hodder (1982d) has described a transfer-
mation of the structure of designs on Dutch neolithic pottery according to a horizontal/vertical distinction: from bounded designs hierarchically organized, to later horizontally zoned sequential designs. As in orthodox structuralism the meaning of such patterning remains a problem. Hodder links the changes in pottery design in the Dutch neolithic to a change from strongly bounded to incorporative social groups; so designs are held to directly mirror social entities. Another way of assigning meaning is to invoke oppositions or distinctions such as male/female (as in Leroi-Gourhan's early work (1965) oh upper paleolithic cave painting), culture/nature, domestic/wild, living/dead, settlement/burial, and these may be held to be cognitive universals as implied by Hodder (1982, p. 215f).

Secondly, a structuralist position privileges language and this may hinder the recognition of the importance of non-verbal signifying systems. Granting priority to the verbal, and suggesting that non-verbal forms of communication merely directly mirror (inadequately) linguistic structures and forms of signification is, as Rossi-Landi points out, rather like

asserting the priority of digestion upon breathing, or of rivers upon seas, or worse, of downhill roads upon uphill roads. Since language and all other sign systems of a community are in reciprocal relations in reality, we don't understand in what possible way one can attribute to any one of these sign systems a real priority.

(Rossi-Landi, 1975, pp. 20-1)

Material culture as a coded sign system constitutes its own 'material language', tied to production and consumption. It does not simply reflect the significative structures of language in another form. Like language it is itself a practice, a symbolic practice with its own determinate meaning product which needs to be situated and understood in relation to the overall structuration of the social.

If for Saussure the relationship between the signifier and that signified is entirely arbitrary within the context of an overall system of difference, then for Derrida (1976, 1978), the later work of Barthes (1977) and for Foucault (1981) this difference can be extended infinitely. If meaning is a matter of difference and not identity, taken to its logical conclusion language cannot be held to constitute a stable closed system. Meanings of signs are always elusive, for if a sign is constituted by what it is not, by difference from other signs, there can be no final relationship between one signifier and something that is signified, as the signified is always already the signifier of another signified. Meaning is then the result
of a never-ending play of signifiers rather than something that can be firmly related to a particular referent. The meaning of one sign depends on that of another; signifieds keep on changing into signifiers and vice versa. Signs confer value as much by virtue of what they are not as what they are. The concomitant of this position is that meaning in language is floating rather than fixed - dispersed along whole chains of signifiers, as each becomes in effect a residue of others, a trace of language. For signs to have any capacity for meaning they must be repeatable or reproducible: something that occurs only once cannot count as a sign. The reproduction of signs constitutes part of their identity and difference but the very fact of their reproduction entails a Jack of any unitary meaning or self-identity because they can always be reproduced in different contexts, changing their meaning. Signifieds always become altered by the chains of signified-signifiers in which they become embroiled through usage.

**Material culture, language and practice**

We want to suggest that material culture can be considered to be an articulated and structured silent material discourse forming a channel of reified expression and being linked and bound up with social practices and social strategies involving power, interests and ideology. As a communicative signifying medium material culture is quite literally a reification when compared with the relatively free-flowing rhythms of actions of individuals in the world and the spontaneity of spoken language. If we take up Saussure's notion of the diacritical sign - i.e. the sign whose value is independent of denoted objects and rests upon its insertion in a system of signs, and Derrida's deconstruction of the notion of the sign as possessing a plenitude of meaning by virtue of its relation to other signs - we arrive at what might be termed the *metacritical* sign: the sign whose meaning remains radically dispersed through an essentially open chain of signifieds-signifiers. If we conceive of material culture as embodying a series of metacritical signs then we must regard the meaning of the archaeological record as being always already irreducible to the elements which go to make up and compose that record, characterized as a system of points or units. What we will be involved with will be a search for the structures, and the principles composing those structures, underlying the visible tangibility of the material culture patterning. Our analysis must try to uncover what lies beneath the observable presences, to take account of the absences, the co-presences and co-absences, the similarities and the
differences which constitute the patterning of material culture in a particular spatial and temporal context. The principles governing the form, nature and content of material culture patterning are to be found at both the level of micro-relations (e.g. a set of designs on a pot) and macro-relations (e.g. relationships between settlement and burial), but they are irreducibly linked, each forming a part of the other; hence any analysis which restricts itself to just considering one feature of the archaeological record such as an isolated study of pot design is bound to be inadequate.

Material culture can be considered to be constituted in terms of a spiralling matrix of associative (paradigmatic) and syntagmatic relations involving parallelism, opposition, linearity, equivalence and inversion between its elements. Each individual act of material culture production is at the same time a contextualized social act involving the relocation of signs along axes which define the relationships between signs and other signs. The meaning of these signs is constituted in their lateral or spatial and horizontal or temporal relations. The signs reach out beyond themselves and toward others and become amplified in specific contexts or subdued in others. Material culture does not so much signify a relationship between people and nature, since the environment is itself socially constituted, but relationships between groups, relationships of power. The form of social relations provides a grid into which the signifying force of material culture becomes inserted to extend, define, redefine, bolster up or transform that grid. The social relations are themselves articulated into a field of meaning partially articulated through thought and language and capable of reinforcement through the objectified and reified meanings inscribed in material culture. The material logic of the relationships involved in the contextual patterning of material culture may run parallel to, subvert or invert the social logic or practices involved at the sites of the production, use, exchange or destruction of artefacts. Material culture as constituted by chains of signifiers-signifieds should not be treated in a simplistic fashion as necessarily representing anything in particular, such as red ochre or use of red as symbolizing blood or pots of shape X as signifying male and pots of shape Y as signifying female, on its own. The signifying force of material culture depends on the structure of its interrelations, and the signification of any particular artefact or item can be seen as being intersected by the meanings of other items. So, particular objects form nodes in a grid of other objects. This follows from a view of material culture as being constituted in an open Held rather than as a closed system of signs. The material culture
Material culture record is a set of conjunctions, repetitions and differences, and meaning shifts across from context to context, level to level, association to association. Despite that, material culture forms part of the encoding and decoding strategies involved in the active social construction of reality helping to constitute a common cultural field and tradition along with action and speech. It would be naive to suppose that material culture expresses exactly that which might be expressed in language but in a different form. The importance of material-culture as a signifying force is precisely its difference from language while at the same time being involved in a communication of meanings. Material culture forms part of the social construction of reality in which the precise status of meaning becomes conceptually and physically shifted from one register to another: from action to speech to the material. Meaning can be communicated in all these areas but the medium alters the nature and effectivity of the message. The depth of social meaning in the world derives partly from the use of multiple channels for its transmission. Material culture constitutes an external field to the intersubjectivity of social relations and is dialectically related to them, its signifying relations affecting the constitution and transformation of the social.

Material culture may be regarded as revealing its structure and the principles which underlie it through its repetition. This is why, as has long been recognized, consistent patterning in the archaeological record is so important for understanding its nature. Material culture as a communicative discourse solidifies, encodes and reifies the social relations in which it is embedded and from which it is derived. Social action is the product of discourse and from this discourse both action and material culture arise. Material culture plays less the role of signifying social relations than acting in terms of established and fixed relations.

We can argue, therefore, that artefacts constitute a code of signs that exchange among themselves. The production, utilization and consumption of material culture on the part of the individual agent can be regarded as an act of *bricolage*. Material culture is used to organize the existence of agents and invest this existence with meaning and significance. The *bricoleur*, or handyman (Lévi-Strauss, 1966, 1969), who uses odd scraps of wood, a bent saw or whatever, to do a reasonable patching up job, cannot by the nature of his or her situation create something entirely new, but is trapped by the 'constitutive sets' from which the elements came. The bricoleur is never fully in control or master of the situation with which he or she is confronted. Similarly, the agent produces and
uses material culture, but is never aware of the entire system of material significations. The agent lives through the world metonymically. That which is being utilized, produced and consumed is never the individual artefact or object (although it may appear as such), but rather the entire symbolic structured system of objects or artefacts of which it forms a part; the use and production of artefacts is simultaneously the use and reproduction of the system of which they form a part.

The primary significance of material culture is not pragmatic, its utilitarian or technological use-value, but its significative exchange value. In our argument, we agree with Baudrillard (1981) in suggesting that a theory of material culture simply cannot be established in terms of biological needs and their satisfaction, but must be based on a theory of signification and regarded as a symbolic production, part of the social constitution of reality:

the empirical 'object,' given in its contingency of form, colour, material, function and discourse .... is a myth. How often it has been wished away! But the object is nothing. It is nothing but the different types of relations and significations that converge, contradict themselves, and twist around it, as such - the hidden logic that not only arranges this bundle of relations, but directs the manifest discourse that overlays and occludes it.

(Baudrillard, 1981, p. 63)

We need to analyse artefacts in terms that go entirely beyond them, in relation to meaning structures and the social strategies to which they are related, to determine what specific place in the social is occupied by material culture as part of an overall pattern of significations.

STUDYING MATERIAL CULTURE

Material culture and social practices

A growing number of recent archaeological studies are beginning to work towards the position we have been proposing. Braithwaite's. (1982) ethnoarchaeological study among the Azande (southern Sudan) brings out the active use of material culture in processes of definition and maintenance of social categories and boundaries. Male/female differentiation and asymmetrical power relations related to this differentiation form a fundamental feature of the Azande social world. Power relations between the sexes are played
out in terms of the sexual division of labour and its articulation with the timing and spacing of productive activities. While men are in a position of social domination, and greater prestige is associated with their activities and labour product, this domination is nevertheless dependent on their relationship with and competition for women who possess a more muted but nevertheless important strength and influence. The male-female relationship is one of considerable tension and ambiguity. Clay pots are made by the men and used and owned almost exclusively by women in the domestic sphere of labour. The male/female opposition involving the negotiation and renegotiation of social position is related to the use of decorated and undecorated pottery: Pots only used by a single sex are not decorated while the decorated pots are those used in the transfer of foods or drink from one sex to another, e.g. a woman serving a man food from a cooking vessel. So, pottery decoration is associated with and serves to mark put situations in which there is transfer of food across fundamental social boundaries; it serves to mark out areas of concern and importance in Azande society.

In the Wessex area of south England a new type of pottery, finely decorated beakers, appears in the late neolithic at a time when the social landscape is dominated by the use of large-scale ceremonial monuments in what appears to have been a dispersed and acephalous society with legitimation of authority being ritually based in the activities taking place at the henge monuments. Although the building of these monuments must have required considerable labour input and co-ordination, contemporary burials show little evidence of hierarchy or status differentiation (Shennan, 1986, p. 145). Thorpe and Richards (1984) and Shennan (1986) note that the new material culture form - the finely decorated beakers - occur in graves on the peripheries of the assumed areas of ritual influence of the henge monuments and moreover in graves in which we have the first evidence of status differentiation. They suggest that these beakers were actively adopted and used by those excluded from the traditional power structures associated with the use of the henges and mark the beginning of the development of an alternative and competing structure of authority and power. This is a markedly different kind of explanation for the adoption of beakers than those previously proposed in the literature where their introduction was discussed in terms of the appearance of new peoples in the framework of traditional archaeology, or as a prestige good in the new archaeology. Thorpe and Richards and Shennan display sensitivity as to the particular context in which beakers occur in Wessex and argue for their active use in competing
power strategies; however, neither explanation is able to cope with the specificity of the local context in which finely decorated beakers first occur in large areas of Europe: these frameworks were unable to explain why beakers appear in some areas in a particular context (in graves or settlements or ritual structures) and not in others.

These studies are also unable to explain within the framework adopted the specificity of pot decoration. For example all that Braithwaite's explanation does is to tell us why decoration might occur - but what of its form? Similarly, why use beakers in Wessex rather than decorated ox bones?

Hodder's ethnoarchaeological studies, reported in Symbols in Action (1982), usefully emphasize two important features of material culture. First, and again, that material culture plays an active symbolic role in social relations. Interacting groups manipulate and negotiate, consciously and unconsciously, material symbols according to their strategies and intentions. For example, particular types of body decoration worn, by young men and women in the Baringo area of Kenya are a means by which the authority of older men is contradicted. In the Lozi kingdom material culture is used by status groups to legitimate authority. In both these cases it is clear that material culture does not simply reflect social relations but actively mediates intentions, strategies, attitudes and ideologies.

Secondly, material culture is meaningfully constituted; it is produced in relation to symbolic schemes, structured according to the system of meanings of particular social groups. These structured meanings mediate social practices and material culture. Hodder argues that all aspects of Nuba material culture, from burial to settlement to decoration to refuse disposal are related to the same symbolic scheme. Among the Nuba there are well-developed local groups, while roles and networks of individual relationships are only weakly defined, following Douglas (1970), Hodder associates these features with an emphasis on the purity of the group, the distinction insider/outsider, and on classification and categorization:

AH these aspects of ritual and world view are present in Nuba society, and particularly in Mesakin society... from the emphasis on spatial group seclusion to the pollution taboos, to the concern with body, home and granary boundaries, to the ritual surrounding the boundary between life and death and the breaking of items associated with a dead man, to the regular placing of items in particular places in the huts, to detailed classification and
categorisation of form and design, to, the: logically consistent set of generational rules in the art.

(Hodder, 1982, p. 183)

As indicated here, however, Hodder emphasizes a single unitary logic within a social system which may nevertheless contain tensions:

Each material item has significance in terms of its place in the whole. This is not to say that the patterns in the different types of data are always direct mirror images of each other. Rather the identifiable patterns are transformations, often contrasting, disrupting, or commenting on basic dichotomies and tensions within the social system and within the distribution of power.

(Ibid, p. 212)

The concomitant of such a position is that any unitary logic must be argued to be historically specific and not a universal principle of analysis.

We have suggested (Shanks and Tilley, 1982) a series of principles generating the patterning of human remains from communal tombs (long barrows and chambered passage graves) in neolithic Wessex and Skane, Sweden, based on the distinctions individual/group, bounded/unbounded, male/female, right/left, culture/nature and basic body symmetries such as body/limbs, upper/lower in respect of disarticulated/articulated remains. Such distinctions were argued to be part of what Bourdieu has termed habitus (1977), aspects of lineage-based social systems, involving social strategies arising from opposed structuring principles of social control by individual lineage heads or elders in contradiction with collective production, and direct, unmediated reciprocity and exchange relations between kin groups. In such a social context we argued that communal burial asserts the collective rather than the individual. • The regrouping of disarticulated remains, which we identified, incorporates in the expression of symmetry between body parts a denial of asymmetrical relationships in relations of production. In this manner we focused on the possible ideological dimension of the form and nature of material culture, how it may act to naturalize and misrepresent other social practices.

Tilley (1984) has extended the analysis to cover all aspects of material culture patterning in the middle neolithic of southern Sweden, identifying structural homologies running through the directional orientation of tombs in the landscape, to burial practices, ceramic designs and uses of settlement and mortuary
space. These homologies are related to social strategies of group competition in the context of status display and ritual elaboration. Incorporating the distinctions ancestors/living, spiritual/social, material culture is analysed as an ideological comment on other social practices. Related transformations in diverse aspects of material culture patterning are traced through to the emergence of the Battle Axe/Corded Ware tradition. It is proposed that the manipulation of material culture in the sphere of ritual activities was part of an ideological order which eventually failed to misrepresent structural contradictions and justify asymmetries in social relations, leading to a legitimation crisis and wholesale social change: the emergence of the more egalitarian Battle Axe tradition.

Miller (1985a) has similarly used concepts of ideology and a legitimation crisis in the context of the Indus or Harappan civilization. He articulates the material remains around a culture/nature distinction and in relation to an emphasis on order, standardization and purity. He invokes Foucault's notion of power as relating not merely to coercive social processes manifested by particular individuals, institutions or groups but as an overarching and pervasive principle which generates as well as constrains social forms. Arguing against notions of priest-kings and redistributive temple bureaucracies, he suggests that power resides in a multiplicity of organizational forms, this very dispersal of power ensuring the reproduction of the social order.

Miller's (1985) analysis of Indian Dangwara pottery is a sophisticated elucidation of some of the principles we have been emphasizing in this chapter. He represents a formal symbolic framework summarizing the variability of pottery in Dangwara society established by relating the pot forms, colours and uses to cultural categories and codes such as food, gender and caste (figure 4.2). Having noted different classifications of the pottery categories (e.g. according to colour, semantic label and function) and related the pottery code to other codes or category systems, Miller stresses that this formal order is his objectified postulation which is to be superseded:

rather there is a se{ of individual and transient realisations in particular contexts and strategies, which treats these alignments as generalised potentials rather than rules of meaning ... the formal is constantly qualified as category (to the different actual pots of the same form), code (to the variety of classifications) and grid (to the variety of 'evocations') into the informal and realised, which produces an array of different and sometimes inconsistent patterns.

(P. 175)
FIGURE 4.2 The associations between pottery and major social variables in Dangwara society, India, according to Miller

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The variability apparent in the interpretation of the meaning(s) of the same pot depends on the particular context in which the interpretation takes place. Miller adopts the term 'pragmatics' to refer to this relationship of conceptualization and context. Two important concepts of pragmatics are 'cue' and 'frame'. Cues and frames divide off various contexts in which interpretation may occur. Pots themselves may act as framing devices (see above), providing cues as to the significance and meaning of events taking place, controlling spheres of evocation. The notion of pragmatics introduces substantial multivalency with regard to pottery, and through pots acting as frames, into other categories.

Context implies not only other category sets but also human practice: the production and use of pots. Miller also considers the relation of pot categories to social strategies - in particular 'emulation', a process in which attempts are made to raise status through utilizing particular pot forms associated with dominant groups; and 'naturalization', in which the socially contingent appears natural. He rightly emphasizes this as an important feature of material culture. Its frequency, apparent triviality and practicality or simple functionality lend themselves to naturalization. Arbitrary cultural distinctions may be superimposed on apparently natural (functional) associations, without becoming a discursive focus of attention.

We may note several conclusions from Miller's work:

1. The notion of a formal set of discrete categories as forming the basis of classification systems is to be extended. Categories include non-incidental variability. Such variability involves the heterogeneity of social context and practice and does not involve a denial of structure (p. 202). The material artefact is polysemous.

2. Material variability is not a simple symbolic reflection of a prior social classification. Categories of social relationship such as caste or class are like the material dimension - 'constructs which capture and in turn constitute elements of culture, but within an array of alternative, sometimes complementary and sometimes conflicting representations. There is no privileged real "society" that is being represented: there is nothing else behind these mirrors. The term "representation" refers to a circle of form and understanding, and culture is exhausted by the same constructs through which it is understood' (pp. 202-3).

3. This means that different social dimensions are not reducible, one to the other (such as stylistic form to adaptive function).
Consequently archaeologists are not in a weak position with regard to social analysis in the sense of having no direct access to the understanding of social actors which may he linguistically articulated. We have analogously argued above that archaeological analysis is not a recovery of a lost life-world through empathetic reconstruction of the consciousness of an ancient potter: 'a society studied through its material rather than its linguistic manifestation is in no sense less immediate or less real' (p. 198).

This requires a theorization of material culture not readily available in contemporary sociologies. This will not be a specifically archaeological theory but theory directed at material culture and its particular properties: as an important aspect of Bourdieu's doxa, a representation of the given order of the world that constitutes an environment for living (Bourdieu, 1977, pp. 164-71); as an effective frame for social action; as ideologically informed due to its perceived simple functionality, concreteness and triviality which facilitate naturalization and misrepresentation.

Our work (Shanks and Tilley, 1987) with the design of contemporary beer cans in Britain and Sweden also exemplifies some of the features of material culture analysis we have been proposing. Involving detailed analysis of the material culture of alcoholic drink, both packaging and advertising, we located the design of beer cans within a social context of brewing, commercial marketing, consumerism, consumption and the relation of drinking to images of health and the body. Eschewing cross-cultural generalization with its resultant problems of lack of explanation of specific features of material culture, we compared the two capitalist nation-states Britain and Sweden, analysing the historical development of brewing, drinking, the welfare state and technologies of disciplinary power. We argued there was a contradiction embodied in the material culture of drink in Britain and Sweden, between alcohol as commercial product and alcohol as drug. The differences between British and Swedish can design can be understood as different ideological mediations of the contradiction between promoted consumption and disciplinary control of drink. So design can hardly be conceived as reflecting a separate social reality but is a structured mediation inscribed in commercial, institutional and individual social practices and strategies.
Material culture and the archaeological record

We have argued for a view of material culture as a constructed network of significations, linking this position with some recent studies. Considered in terms of the archaeological record material culture obviously has boundaries and thresholds in terms of its content and internal structure. It is not reducible to, nor deducible from, a universal code because material culture is intimately linked with social praxis and it is through praxis that it comes into being as an objectification and in an objectified form. Material culture is structured in relation to a specific social totality and is historically and spatially constituted.

Individual material culture items are concrete and particular. They are, after all, empirical objects. At the same time material culture items in the archaeological record are meaningfully constituted and linked in structural relationships underlying their physical presence, forming a network of cross-references. The individual item forms part of the totality and the totality in part serves to constitute the nature of the individual artefact, its value and significance. The interrelatedness of the meaning of material culture in the archaeological record refers to the intersubjectivity of human actions. Material culture production, in any particular context, is not an isolated act but is always already established as a juncture: a relation to the material culture which already exists in a cultural tradition both spatially and temporally. Any fresh or novel material culture production is always a response to an established tradition. The space and time of material culture patterning is charged through with the space and time of the social relations to which it refers and relates. This is not quantitative space and time but lived human space and time (see chapter 6). Meaning is distributed across space and time through repetition and difference, contextualized parallels, associations, inversions and so on. While the meaning of material culture is relatively fixed as compared with the nuances of speech, i.e. it is likely to possess fewer syntactic links, and differences between right and wrong are likely to be more clear cut than in speech, the meaning of material culture can by no means be regarded as stable. It can possess different meanings at different times and in different locations. A large tomb such as a megalith is unlikely to possess exactly the same meaning 1,000 years after it was first constructed and this point leads us on to a consideration of how we, as archaeologists, go about interpreting material culture.
Translating material culture

The past is not an eternally open site in which the archaeologist rambles around conferring meaning and significance at will. Regarding material culture as meaningfully constituted forming a signifying field inevitably involves the archaeologist in a complex process of interpretation, decoding or translation. The single most important feature of material culture is that while it is irreducibly polysemous with an indeterminate range of meanings we can't just ascribe any old meaning to it. Material culture patterning is not a reality to be questioned in the way in which a hypothethico-deductive analysis might suggest but a reality that has to be constructed in the process of translative, interpretative analysis. Gaining a representation of the significance of material culture forms a process in which the significance is achieved by making visible or drawing out certain features of the data rather than others.

In translating from the past to the present we are not trying to convey exactly the form and meaning of artefacts in terms of their significance for prehistoric social actors. They had their point of view; we have ours. Is one any better than the other? Are our categories their categories? Much archaeological discussion, particularly that concerned with erecting typologies, has concerned itself, as we discussed earlier in this chapter, with this distinction. Our present analysis of the archaeological record provides one perspective on that record, and as all material objects have to be interpreted, whether they exist in the present or the past, we cannot restrict ourselves to some arcane attempt at a recovery of original meaning for there is no such thing as original meaning given the intersubjective context of the production and use of material culture. In this the position of the archaeologist is no different from an anthropologist faced with an essentially alien culture. So we are not trying to convey form and meaning from an original, somehow untainted past context into a present-day context as accurately as possible. Such a perspective would find it hard to define the nature of its own accuracy and, therefore, could shed no light on what actually is important in the process of translating the past. In the act of translating the past we change it just as we change a text in translation from one language into another. No translation or conceptually mediated intervention would be possible if it strove for an absolute degree of identity with the original (see Benjamin, 1970). Translation is always active, it changes the past while being constrained by that being translated,
the foreignness, the otherness. Translation is a mode of recovering the meaning in the past, an active remembering on the part of the archaeologist. The past does not somehow form a slate which we can wipe clean since materiality is inscribed or written into it. No interpretation can ever be complete or whole or exhaust the meaning of the past because of the polysemous nature of the structured series of metacritical signs that compose it. Content and form in the past form a whole, like a banana in its skin. Our interpretations can either envelop the past like a gigantic octopus with ample tentacles to suck it in or, alternatively, can try to come to terms with the otherness through a theory-data dialectic in which we allow the data to challenge our presuppositions while at the same time not privileging that data as in standard empiricist approaches. This is in part a realization that all archaeology is essentially derivative, derived from that which it studies.

The artefact constitutes both a point of departure and a point of return. The point of return is a translation of the archaeological record into a fresh constellation. Truth does not reside in a recovery or reproduction of some supposed original meaning but in the process of the transformation of the past. The difference between a translation of the past and the empirically perceived past indicates the similarities and not vice versa. Because material culture relates to and was produced in a past social context we should not think of it as being mute and enclosed in an isolation which can only be broken by an infusion of our present consciousness. The past still speaks in its traces, in the signifying residues of the texture of the social world in which it was once located. It is up to us to articulate that past in our own speech, to come to terms with it as a vast network of signifying residues, to trace the connections down the signifying axes and place them back in our present.

C O N C L U S I O N

In this chapter we have argued that to try and explain material culture in functionalist terms or subsume it under cross-cultural generalizations is entirely unsatisfactory. Instead we should be thinking in terms of human potentialities linked with social constraints rather than the asocial and the environmental. Material culture forms a set of resources, a symbolic order in practice, something drawn on in political relations, activated and manipulated in ideological systems. In other words, material
culture is actively involved in the social world. We have suggested that material culture should be regarded as a social production rather than an individual creation. Conceived as a form of communication it constitutes a form of 'writing' and is located along structured axes of signification. We are not attempting to argue that material culture, in a manner analogous to language, directly represents things, features or concepts in the social world, but that it is ordered in relation to the social. The structure of this ordering is of vital significance. Material culture is polysemous, located along open systems of signified-signifiers or metacritical signs. This means that we can never exhaust or pin down its meaning once and for all. Material culture in the archaeological record consists of a set of conjunctions and repetitions with meaning shifting between different levels and contexts. Interpreting material culture might be regarded as a kind of translation which is essentially transformative and does not aim at a recovery of original meaning. Given the intersubjective context of the production and use of material culture there is no original meaning to be recovered as the meaning depends on the structured and positioned social situation of the individual.