

- Renfrew, C. 1982. Socioeconomic change in ranked societies. In Renfrew, C. and Shennan, S. (eds) Ranking, resource and exchange. Cambridge, Cambridge University Press, 1-8.
- Schiffer, M. 1976. Behavioural archaeology. New York, Academic Press.
- Schiffer, M. 1978. Methodological issues in ethnoarchaeology. In Gould, R. (ed.) Explorations in ethnoarchaeology. Albuquerque, University of New Mexico.
- Tzakou, A. 1979. Siphnos central settlements. Ph.D. thesis. Athens. No publisher stated.

PAST PRACTICES IN THE RITUAL PRESENT: EXAMPLES FROM THE  
WELSH BRONZE AGE

Paul Lane

Introduction

The aim of this paper is to question the common archaeological conception of space and time as passive environments for action, by proposing instead that time and space are constituents of action, which take an active role in the reproduction and transformation of society. The perceived advantage of this perspective is that it redirects attention away from the search for material correlates of behaviour of a universal nature, towards the explication of the specificity of individual contexts.

More specifically, this paper will discuss problems of inference with special reference to the use of the terms 'ritual' and 'domestic' to describe various categories of archaeological entity. It will be argued that while both terms are a useful short-hand for defining the dominant characteristics of particular entities, their use introduces a set of largely ethnocentric, and frequently androcentric, assumptions, which serve to reinforce and reproduce an appearance of mutual exclusiveness and opposition between these two aspects of human action. That is, without wishing to deny the empirical existence of activities that can be described as ritual or domestic, I shall question the validity of the assumptions which underpin the division of social practice along such lines, and point to problems of inference that such a division introduces into the interpretation of archaeological deposits.

Archaeological inference: defining domestic and ritual contexts

At the heart of the ritual/domestic dichotomy lie particular conceptualisations of human action and of the relationships which pertain between action and the representation of notional phenomena, especially through the medium of material culture. However, there are initial definitional problems with the terms 'domestic' and 'ritual'. Within archaeology the term 'ritual' is conventionally used to refer to archaeological entities which cannot be adequately accommodated by technological or economic processes, and, in this sense, is employed to explain the unexplainable. This idea can be seen in Hawkes' "ladder of inference", which ranks inferences into a scale of ascending difficulty, from fairly straightforward ones about technology and economic subsistence through those concerning socio-political organisation to those relating to religious and spiritual life (Hawkes 1954, 161-2). These divisions are based on the assumption that the respective classes of activity are inherently different, and can be arranged along a continuum "leading up (sic) from the generically animal in man to the more specifically human" (Hawkes 1954, 162).

Hawkes may have been right to postulate that the natural laws governing physical, chemical and biological processes impinge as constraints more acutely on technical and economic activities. However, this is very different from arguing that all possible technological and economic explanations must be exhausted before recourse is made to either socio-political or ritual explanations, which appears to have been the way in which the scheme has been applied.

It might be that a liberty is being taken here in treating ritual as synonymous with what Hawkes had in mind when he used the phrase "religious and spiritual life". Nevertheless, the implication of his scheme is clear, namely that the meaning of some types of activity is more self-evident than it is for other types. This should be stressed, for it has an important consequence on the manner in which the nature of the relationship between action and meaning is perceived, and probably accounts for a common assumption that the symbolic is exclusive to ritual. Let me try to elaborate on this: if the meanings of ritual actions are characterised as obscure, in some way 'hidden' and not revealed directly by the actions themselves, then in this sense they can be called 'symbolic'. But, since ritual acts are defined in contradistinction to the more self-evident technical and economic activities, this necessarily precludes the possibility of more characteristically pragmatic acts of ever having a symbolic connotation. A logical outcome of this dichotomy, although not invariably followed, is the extension of the principle so that domestic contexts are interpreted in an utilitarian manner, by virtue of being perceived, principally, as a locale for the performance of routine, pragmatic activities. This in turn helps to reinforce a set of assumptions about the universal nature of domestic activities, a point further discussed below.

How can one escape this basic problem? One possibility which suggests itself might be to differentiate the two types of activity according to their formal properties rather than their normative content, moving on to identify the observable characteristics and material correlates of the two categories of action. Since within such a theoretical framework, direct behavioural links are held to exist between society and material culture, and because behaviour is lacking from the archaeological record, an apparent need is created for actualistic, ethnoarchaeological studies. Despite differences in specific research concerns, the latter have been construed, by the majority of ethnoarchaeologists, as the search for the 'signature patterns' of various forms of behaviour. Yet, after almost twenty years of research, most ethnoarchaeologists have steadfastly avoided making an effort to identify the material correlates of ritual.

A major reason for this reluctance to consider 'ritual' must lie in the conceptualisation of human action employed by these researchers. Action, normally referred to as behaviour, is thought to be reducible to the purely mechanical properties of bodily movement. This is for two reasons, firstly, an assumption that notional phenomena, things held in the mind, are less real than behavioural phenomena. Secondly, the relative status of knowledge, value, and belief across cultures. If

these are thought not to pose too great a problem within an ethnographic context, it is argued that they do so with regard to archaeology, by virtue of the fact that human behaviour of interest to archaeologists is past and therefore non-observable. In order to make inferences about past behaviour from contemporary observations, therefore, it is proposed that unambiguous relationships between the two sets of phenomena must be established (Binford 1981, 21-5).

What this amounts to is an assumption that all actions have in common the mechanical properties of bodily movement. The goals of ethnoarchaeology are therefore seen as identifying relationships between formally different behaviours and their physical and material consequences, even though the precise construal of this relationship might vary from researcher to researcher. I believe this search for 'material correlates' to be one of the most fundamental shortcomings current in ethnoarchaeology and archaeology today, and I shall argue that the concept of behaviour be replaced by that of human agency. Before this case is developed, however, I want to review, briefly, how anthropologists have viewed ritual. For it could be held that the lack of success at identifying material correlates derives from an inadequate understanding of the nature of ritual, rather than a negation of the principle that material culture passively reflects society.

In a recent review of anthropological definitions of ritual, Lewis has suggested that the majority portray ritual as a kind of performance in which the actions of participants are largely prescribed and stylized (Lewis 1980, 10-11). Although so defined this suggests that ritual is something practical, and guides action, there is still no way of distinguishing it from behaviour governed by custom and tradition. In fact, Lewis suggests that definitions of both ritual and tradition are based on an assumption that the relationship which exists between the form and intent of such behaviour is essentially non-intrinsic, that is either irrational or non-rational (Lewis 1980, 13). As such, both can be contrasted with craft and skill, and other categories of pragmatic activity, for which a clear means-end relationship is thought to exist. However, this dichotomy cannot be sustained, in that aspects of ritual may have a practical intent just as elements of pragmatic activity can have a symbolic connotation. Thus, rather than assuming that ritual is a particular kind of action, it seems more reasonable to treat it, as Lewis suggested, as an aspect of action.

It was intimated, also, that an analogous dichotomy reinforces the assumption that domestic functions are somehow universal. Although it would take another paper to elaborate this fully, a few general points can be made. The main point at issue is whether the functions of domestic units, of households, are universal. Part of the problem is definitional, for, although the term 'household' minimally refers to individuals who share a common residence, in current usage more than this is implied by the term. Specifically, it is assumed that those who share a common living space share some set of activities, generally those connected with food production and consumption (Yanagisako 1979, 165). Added to this is the assumption that household units coincide

with families, and thereby represent the nexus of both biological and social reproduction, as well as the day-to-day servicing of human beings (Harris 1981, 61). As commentators have pointed out, we find this range of activities glossed under the term 'domestic functions', which ultimately results in a tautology where families and households are defined as domestic groups.

Furthermore, it is often held that domestic functions link individuals within a household to each other into a cohesive entity. The net effect of this is to create an artificial image of the household as a separate and private sphere, which can be contrasted with a public sphere typified by political and religious activities. This can effectively mask any relations of inequality which might exist within residential units thus reinforcing the false dichotomy between domestic domains and the wider social collective in which such groupings are situated. Critics of this kind of conceptualisation of the domestic, have argued that such gross assumptions should be abandoned in favour of the explication of the exact nature of each social unit, and that the empirical existence of private and public spheres, domestic and ritual contexts must not be taken as self-evident. In other words, we should not separate the "practices which distinguish the private and the public from the establishment, negotiation and confirmation of the concepts 'private' and 'public' in everyday social life" (Sayer 1982, 498).

The crucial point about action, then, which distinguishes it from mechanical acts that are outwardly similar, is that actions have a semantic content which the latter lack. That is, they are indissoluble from meaning and intention. Thus, to treat material culture merely as the material correlates of behaviour, or extrasomatic adaptive appendages, actually precludes the possibility of ever recognising that its meaning is both concept-dependent and intersubjectively constituted. That is, the meanings of the acts of material production, use, exchange, consumption and discard exist in their realisation through action, and are mediated by and through socially available forms, such as language and material culture. Both have a recursive effect on action, but material culture, because of its durability, can often have a more lasting influence. Meanings may thus come to be sedimented in its material form.

#### Past Practices in Mortuary Ritual

Keeping these points in mind, this argument will be illustrated with regard to specific archaeological data. The principal aim is to contrast the kinds of inferences about the past reached from the theoretical stance I have forwarded, with those made by the more conventional methods I have criticised. I do not intend to offer a complete re-working of the Welsh Bronze Age, merely to establish the initial building blocks.

The main reason for choosing the site discussed below was that its phases of use exhibit an apparent change from a domestic context to one

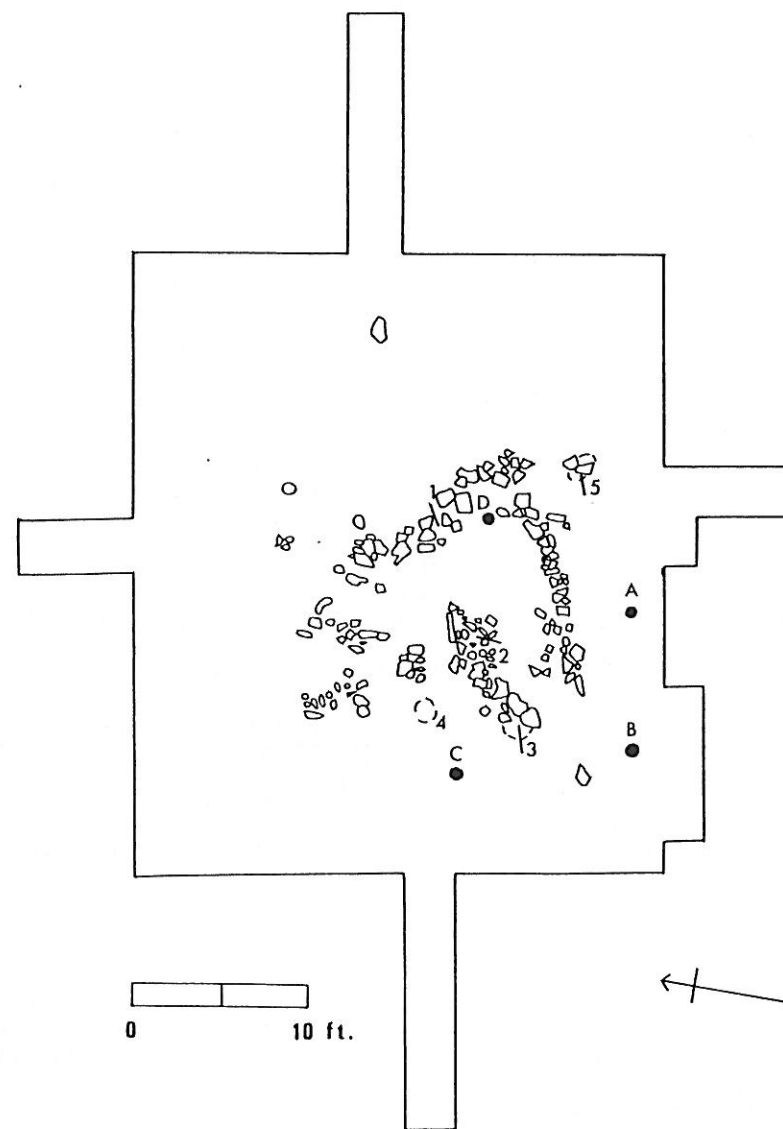


Figure 1. Mount Pleasant Farm, Nottage. Neolithic phase. After Savory 1952.

of ritual, specifically mortuary, activity. The example provides, therefore, a good opportunity to contrast the processes of inference employed by the excavator, whose work can be taken to be fairly representative of much of archaeology.

Located in Glamorgan, the site of Mount Pleasant Farm, Nottage (N.G.R. SS 833796) was initially selected for excavation as a probable Bronze Age cairn, in advance of its immanent destruction. Excavated in 1952, it overlooks a small coombe on the edge of a plateau above Porthcawl. It comprised of a ring cairn, enclosed by an irregular quarry ditch with a burial pit to the west of the apparent centre, containing a small Hilversum urn (Savory 1981) and another deposit near the southern edge of the cairn containing part of an adult cremation and an inverted collared-rim cinerary urn of Earlier Bronze Age type. Beneath the centre of the cairn, and partially covered by a buff-coloured layer of earth, were the remnants of dry-stone walling, outlining three sides of a small rectangle, six metres by three metres, and several post holes. Sherds of several different forms and fabrics, all of probable Neolithic date, were found in the buff-coloured layer and in some of the post-hole fills (Figure 1: Savory 1950-2, 76-80).

The excavator interpreted the underlying structure as a dwelling, and the associated artefactual and botanical remains distributed through the layer of darker coloured earth as occupation debris, on the basis of the particular associations of several elements. Specifically, these were the form and material of the structure, and the condition and composition of the associated artefactual assemblage. The surviving courses of the walls all were comprised of sandstone blocks, and could be distinguished from the Carboniferous limestone used for the construction of the cairn. Although excavation only revealed a three-sided construction, the excavator argues for the existence of a fourth wall along the western edge, suggesting that it was later destroyed during the erection of the cairn, with the displaced sandstone blocks being incorporated into the cairn (Savory 1952, 78). On the excavation plan, however, there is little trace of these blocks, which were presumably removed, if the excavator's interpretation is correct, from a wall course between 9 inches and 1 foot high to judge from the condition of the surviving walls. Admittedly there had been later 19th Century damage to this portion of the cairn, but it is at least questionable whether this conveniently succeeded in removing the bulk of the disturbed sandstone blocks.

Uncertainties over the interpretation of this structure are increased as the excavator postulates the existence of features necessary to meet the load-bearing requirements of the architectural form already inferred. Thus following the suggestion that "post-sockets 1 to 3 held a central row of posts carrying a gabled roof" the author assumes that "there was a fourth socket about six feet west of number 3. Furthermore, the large hollows marked 4 and 5 on the plan are linked, on architectural grounds, with post holes 'C' and 'A' and 'B' respectively, despite being of a different size, having different profiles, possibly different fillings, although this is unclear from the text, and

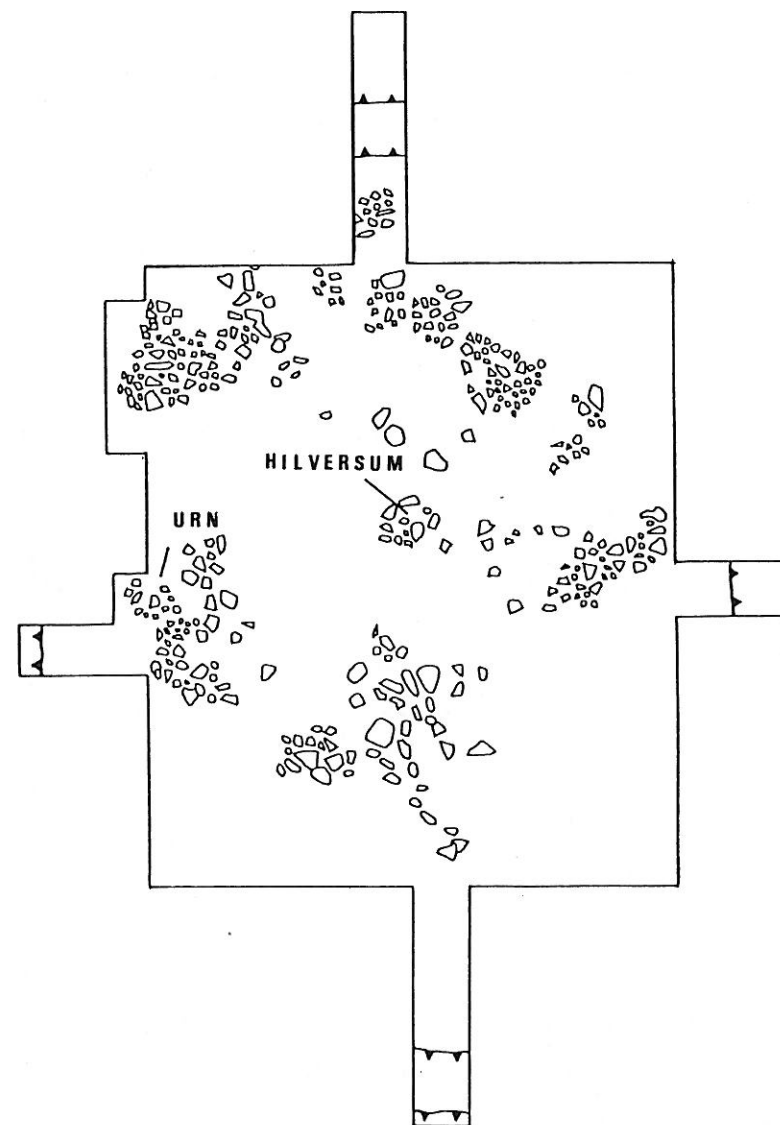


Figure 2: Mount Pleasant Farm, Nottage: the Early Bronze Age cairn. After Savory 1952.



that the few diagnostic sherds from these different forms are possibly of different date, earlier Neolithic in feature 5, and a later, Peterborough derivative form in post-hole 'C'.

The composition and condition of the pottery assemblage, as outlined above, is used to support the conclusion that the earliest levels of the site represent a domestic context. The majority of sherds recovered were small, although in a few instances larger pieces were recovered (Savory 1952, 82). Distinct, localised distributions of sherds could be defined, and no pottery was found along the southern edge. As the excavator noted, the assemblage was "far from uniform in character" (Savory 1952, 82), containing diagnostic sherds of both early and later Neolithic forms. Moreover, the earlier material could be distinguished from that recovered from other sites "by its abundant furrowed, fluted, stamped or stabbed decoration and the association with it of sherds of 'Peterborough' in attribution" (Savory 1952, 85), that is, as an atypical assemblage. Thus, it is on the basis of sherd size, mixed assemblage and contrasts in decorative motifs, that the material was judged to represent an occupation deposit.

These points have been rather laboured to make the simple observation that, when viewed critically, the evidence does not support, unequivocally, the favoured interpretation. My reason for doing this is not that I prefer a 'ritual' interpretation of the earlier context, but to suggest that in terms of understanding the mortuary practices at the site, it is both inappropriate to impose our own categories 'ritual' and 'domestic' on to the archaeological contexts, and that such a distinction is largely unnecessary.

In view of the attention given to identifying the formal properties of each functional context, it is surprising, to say the least, that the excavator made very little of the observed stratigraphic relationships with respect to the interpretation of Early Bronze Age mortuary rituals. Indeed, the evidence from the cairn is dismissed as less important than the house-foundation found beneath it (Savory 1952, 87). The archaeological value of the site, for the excavator, thus derived from the apparently fortuitous construction of a cairn over a Neolithic habitation at some point in the Bronze Age, which helped to protect the settlement from various processes of erosion.

Again, one can suggest that the false division of practices into ritual and domestic categories, and the search for their appropriate material forms, meant that the excavator missed one of the meanings of the burial ritual which can be held with a high degree of certainty as embodied in the intentional location of the cairn over historical remains. By proposing this I am arguing that the actions which resulted in the observed stratigraphic relationship should be treated as part of the mortuary rites performed at this specific site, and not simply as the outcome of functional expediency.

That the association was intentional is clearly supported by the archaeological evidence. For, although it is conceivable that the

observed relationships came about purely by chance, this is not an opinion that the excavator held. Instead, he argues that traces of the earlier site would have been visible as a field monument and concentration of exposed stone, which were in any case disturbed during the erection of the cairn. My main disagreement with him, therefore, is to whether the reason for selecting the site for a burial was entirely because it presented a ready supply of stone, and it is on the evidence for alternative, or even complementary reasons that will now be discussed.

While I have suggested that it might be inappropriate to categorise the earlier structure as a dwelling, on the available evidence we can at least say that it was not used for burial. Hence, by virtue of the superimposition of the cairn and the deposition of an urn cremation on its southern edge, the mortuary ritual, as well as identifying with the past, entailed a transformation of a specific locale into a place of burial. It is important to see this change in use as the realisation of intentions, which were neither immutable nor trivial. Before pursuing the implications of this, I want to reconsider the nature of the burial *per se*, and to make a number of inferences about the sense of these specific acts of burial.

The primary burial, it will be recalled, was found in a shallow hollow on the southern edge of the cairn, covered by loosely-packed limestone blocks. It was composed of the cremated bones of an adult, of indeterminate age and sex, covered by an inverted urn, of early collared-rim type, with a herringbone design of 'maggot' impressions around the shoulder (Savory 1952, 81 and 86). Both the cremation and the urn were incomplete, and it is possible that the deposit had been reburied in its final context after the construction of the cairn (Savory 1952, 81). Despite this indeterminacy regarding the original location of the burial deposit, we can infer that, not only did the notion of human burial, in this instance, entail a heat-mediated transformation, but also that the context and practices, that is the choice of locality and the acts of cremation and enurnment, were appropriate to this specific individual.

To put it another way, the observed configuration of material forms described as 'the primary burial', was generated according to specific relations of spatial location, which structured the choice of context, and a set of relations of exclusion and inclusion which affected the choice of particular forms. There are several levels of spatial location, which range from the association between cremated bones and collared urn, through the deposition of this urn in or beneath a stone cairn with an encircling ditch, to the topological location of the cairn. Had the burial been placed outside the cairn, or the cairn placed above ploughed fields rather than above an historical monument, the significance of the burial, its external reference may have been different. In much the same vein, the relations of exclusion and inclusion govern the selection of specific forms from the entire corpus of a particular artefact type (see also Miller 1985). By this I mean, for instance, the use of a decorated urn, rather than an undecorated

one, the herringbone motif rather than a chevron design, and a ring-cairn rather than a kerb-circle. These relations effectively determine which forms are interchangeable, without altering the sense of the act, and which forms would be inappropriate.

Without further comparison with other contemporary burials in the region, at this juncture it is only possible to say that an inverted collared urn, with a specific decorative motif, situated within a stone cairn, conveyed a meaning appropriate to the age, gender and standing of the deceased, even though we cannot specify these latter dimensions of personality. This might appear a somewhat trivial observation, but it is important to introduce these concepts, for they underlie my points about the contextual specificity of meaning, and raise to the fore the 'could-have-been-otherwise' feature of action. The latter, as Giddens has indicated, links action to power and domination (1979, 88; 1981, 53) in that the realisation of the specific acts of burial and cairn construction required a certain autonomy of purpose and legitimacy of intention. It is this capacity to act, such that a particular interpretative reading of the natural and social worlds finds expression, which is of importance here.

As I have said, what was realised through the mortuary rituals was the conceptual link between a particular category of the dead and the visible remains of a past order. In addition, I wish to argue that because this link was objectified through practice, the rituals had as their outcome the transformation of 'the past' into a legitimating resource. To elaborate, I have suggested that immediately prior to the construction of the cairn, the locality existed, for the local population, as an historical monument. By virtue of being used for burial, the locale was subsequently appropriated in the dual sense of being taken out of a pre-existing topological order and integrated into another, and, of being intentionally selected as 'appropriate' to the context of the specific ritual (Thornton 1980, 16-20). If prior to the acts of burial and cairn construction the place had significance as a 'monument', the rituals, simultaneously added a dimension, of an ancestral or spiritual kind, which it had previously lacked, and re-integrated the space into the domain of contemporary practice. Thus not only was the meaning of space transformed, but also that of time, in that the conceptual boundary of 'the past' was extended to incorporate aspects of the social as embodied in the deceased's identity.

This re-introduction of the past into the present, in a specific guise, raises a fresh set of questions about the relations of power. Specifically, the possession of a capacity to transform an allocative resource, potentially available to the community, into an authoritative one. By the latter is meant the particular symbolic constructs of the legitimate post-mortem statuses of the deceased individuals and their relationships with the living. Without precise knowledge of their age or sex, and the chronological relationship between the primary and secondary burials, it would be inappropriate to speculate on the specificity of either of these. What I think we do have evidence for, in a more general sense, is the use of history to give contemporary practices

the appearance of emanating from the past, and, as a consequence of this, a shift in the boundaries of a tradition (cf. Shils 1979, 262-3).

Wider contextual evidence would be needed to support this, and the provisional nature of these remarks is intentional. Even so, the preceding discussion has opened up a set of questions for future research, and to this end a number of general and concluding remarks can be made. Firstly, the contextual associations of a cairn and burial over the remains of an earlier structure are not unique to Nottage. Certainly two other comparable sites are known elsewhere in Glamorgan, namely Sant-y-Nyll, to the west of Cardiff (N.G.R. ST 101783), and the Mumbles, or Newton site, near Swansea (N.G.R. SS 606887).

At the former, excavation of a denuded cairn revealed a deposit of cremated bones in a shallow, circular pit, cut through another putative occupation deposit, containing quantities of bone and fragmentary pottery, and associated with a complex of shallow post-holes, thought to represent three huts (Savory 1959-60). Like the so-called secondary cremation at Nottage, the cremation pit was covered by a sandstone block and a heap of stones loosely bonded with earth. Although no grave objects were found, it was possible, in this case, to identify some of the bones as belonging to at least one adult, probably female, and a child aged between 15 and 24 months (Irvine 1959-60, 26-7). The Newton site also comprised of a cremation pit beneath a denuded cairn, with 'the bones of two adults (one female) and a child scattered throughout' its fill (Savory 1972, 126). Close by, to the north west of the pit, lay part of a crushed Food Vessel. A semi-circular arrangement of post-holes was found beneath this layer in association with fragments of Beaker pottery of a Long Necked variety.

The second, general, point emerges out of these resemblances, in that comparison between these three sites and with other burial and non-burial sites should indicate how different organising principles were structured and related. Only through contextual studies will it be possible to establish how, for instance, the nature of spatial boundaries within and between sites, other heat-mediated transformations, such as cooking and metal working, or the decorative motifs on pottery, stood in relation to the living and the dead, and the age and gender categories of the former. Again our interests in these similarities and contrasts should be less with the fact that they are symbolic representations, and more with why such a conceptual ordering of the physical and social worlds was appropriate, and how that order was sustained.

Finally, it has been indicated that the search for 'material correlates' is not a necessary prerequisite for archaeological inference, and that it is possible to make sense of the lived experience of past actors from archaeological remains. This task is helped by the fact that in order to make sense of their lives, these same actors represented their experience, and interpretations of that experience, to others in a structured and communicable way. Various media are available to the human species to communicate with others, some of the most durable being physical artefacts and architectural forms. It is

precisely because of this durability that material culture is so amenable to the task of conveying meaning across generations, and yet, as a vehicle for meaning it is also subject to both constraints and multivalency introduced by the context of use and intentions of users. It is this discursive element and the changing emphases of the more dominant modes, that archaeologists should endeavour to understand.

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#### References

- Binford, L.R. 1981. Bones: Ancient Men and Modern Myths. London, Academic Press.
- Giddens, A. 1977. Central Problems in Social Theory. London, Macmillan Press.
- Giddens, A. 1981. A Contemporary Critique of Historical Materialism. London, Macmillan Press.
- Harris, O. 1981. Households as natural units. In Young, K., Wolkowitz, C. and McCullagh, R. (eds) Of Marriage and the Market. London, CSE Books, 49-68.
- Hawkes, C.F.C. 1954. Archaeological theory and method: some suggestions from the Old World. American Anthropologist 56, 155-68.
- Irvine, G. 1959-60. Report on bones and teeth found at St-y-Nyll site. Transactions of the Cardiff Naturalists' Society 89, 26-29.
- Lewis, G. 1980. Day of Shining Red. Cambridge, Cambridge University Press.
- Miller, D. 1985. Artefacts as Categories. Cambridge, Cambridge University Press.
- Savory, H.N. 1950-52. The excavation of a Neolithic dwelling and a Bronze Age cairn at Mount Pleasant Farm, Nottage (Glam.). Transactions of the Cardiff Naturalists' Society 81, 75-92.
- Savory, H.N. 1959-60. The excavation of a Bronze Age cairn at Sant-y-Nyll, St. Brides-Super-Ely (Glam.). Transactions of the Cardiff Naturalists' Society 89, 9-25.
- Savory, H.N. 1972. Copper Age cists and cist-cairns in Wales with special reference to Newton, Swansea and other multiple-cist cairns. In Lynch, F. and Burgess, C. (eds) Prehistoric Man in Wales and the West. Bath, Adams and Dart, 117-139.
- Savory, H.N. 1980. Guide Catalogue of the Bronze Age Collections. Cardiff, National Museum of Wales.
- Sayer, R.A. 1982. Misconceptions of space in social thought. Transactions of the Institute for British Geographers 7, 494-503.
- Shils, E. 1979. Tradition. London, Edward Arnold.
- Thornton, R.J. 1980. Space, Time and Culture among the Iraqw of Tanzania. London, Academic Press.
- Yanagisako, S.J. 1979. Family and household: the analysis of domestic groups. Annual Review of Anthropology 8, 161-205.

#### THE TRANSFORMATION OF SPACE: TWO EXAMPLES FROM BRITISH PREHISTORY

Robin Boast and Christopher Evans

In the rash of created archaeological spaces of the past ten years, there has been an emphasis on the relational within and between enclosed space (Shanks and Tilley 1982, Hillier and Hanson 1984, Fraser 1983). This shift has been largely a reaction to the overabundance of formal methods applied to space in archaeology throughout the 1970s (Clarke 1976; Hodder and Orton 1977; Hietala 1984). This paper attempts two things: firstly to demonstrate that this shift is the result of a recategorisation of design strategy to 'space', and secondly to demonstrate that this recategorisation of design into 'space' has led to a misconception of the use of 'space' in prehistory.

First, it is essential to define a distinction within spatial studies between relational measures and formal measures of space, in that this distinction is symptomatic of this recategorisation of space. Relational measures refer to the representation, either graphically or quantitatively, of relations between defined elements within a built environment. Relational representations are representations that delimit those relations within built structures that remain constant, even though the form of the built structure is deformed, reduced or manipulated (Bağlıcıoğlu and Graver 1983).

For the purpose of this discussion, formal representations are those representations that define organization as the additive or cumulative formation of qualitative attributes -- as the serial transformation of distinctive forms into compositions of forms. The simplest of these approaches (of the set we are dealing with here) are measures of similarity (Whallon and Brown 1982, Doran and Hodson 1975). However, formal taxonomy and typology, and shape grammars are also formal measures, in that they too deal with structure as cumulative formation of qualitative attributes.

Relational representation is not concerned with formal aspects (attributes of form) of the built structure. In fact, relational representation is concerned with stripping these formal aspects completely away, reducing a structure only to its barest relations, and representing these relations as directly as possible. The emphasis with formal representation, unlike relational representations, is on the observed form, in most, if not all, of its detail and nuance. Formal representations focus on form as a reality unto itself, with relations within form left to the intuitive and self-explanatory, or seen as arising directly from the transformation of form.

However, this distinction is not just based on method, it is a much more significant analytical distinction. Form and relation necessarily