necessarily 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 multivary introduced by the context of use and intentions. It is this discursive element and the changing emphases of the more dominant modes, that archaeologists should endeavour to understand.

Acknowledgement

I would like to thank Colin Renfrew for helping to clarify aspects of contemporary Bronze Age pottery typologies.

References


Savory, M.R. 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.


THE TRANSFORMATION OF SPACE: TWO EXAMPLES FROM BRITISH PREHISTORY

Robin Brat 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; Billier 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 1978; Hodson 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 lead 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 (Berlio and Graver 1981).

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, Dorn 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 representation, 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

(Archaeological Review from Cambridge 5:2 [1986])
are separate in analyses that treat interaction in space as static. Only when we demand to view society as a thing-in-itself, which can be examined by taking "snap-shots" of it as the analyst, where the dynamic element is thus lost, is such a distinction possible. Form has meaning within a structure frozen, because each element of form may be removed, manipulated and compared at the leisure of the analyst. The same things may be said for relation. Again, only within the static frame of an analytical structure can relation have meaning as a thing-to-itself, distinguished from form. A major problem in spatial studies is that we risk reducing constructions to spatial archetypes, and to this extent it can be questioned what extent spatial entities can be accredited with any temporal independence. Does or should a spatial structure exist, given the fact that temporal and spatial concepts must be considered as totally embedded within their social context? Certainly, this problem relates to the translation of spatial languages/analysis derived from contemporary built environment and architectural studies into prehistory. For these studies are largely based on the modules of enclosed spatial cells which are aggregated in houses and collectively settlement networks, which are ultimately weak in their conceptualisation of public space and locality.

When built structure is removed from social interactions in time, it is removed from the very context, the very dimension which constitutes it as a social entity (Giddens 1979, 1984; Hodder 1982), removed from the forum which creates and is created by human action. Built structures are rarely, if ever, used as either a collective of disparate formal attributes or as an organisation of relations. Built structures are used as entities which exist with reference to both the action of the moment as well as its traditional, or reproductive, use. It exists in reference to its past -- its place in past action (Giddens 1984). The significance of a built structure is a creation within context (Hodder 1982), but context itself is creative, depending on a multiplicity of interactive forces.

The problem of the adaptation of these approaches to prehistory, and specifically British prehistory, relates primarily to the nature of archaeological evidence and that the 'building-blocks' of these aggregates are often lacking. The archaeology of the 3rd and 2nd millennia BC is dominated by its monuments, and its domestic component, if not enigmatic in character, is certainly ephemeral in its presence. It is only in the later 2nd and 1st millennia BC that recognisable domestic settlement forms begin to dominate the archaeological record. But even then, given the round house tradition in British prehistory, with little or no internal sub-divisions and only limited evidence of discrete building discontinuity, we find that network-based spatial analysis may be inappropriate to much of its material record.

The distinction between a built environment which defines a network-based spatial configuration, and a built environment which defines a public space, a location, is not just a distinction of approach, but also defines a traditional distinction in the strategy of space in the prehistory of Britain. This paper outlines two examples, one 1st millennium BC settlement, the other 3rd millennium BC monument, that seek to demonstrate this distinction. The failure of "spatial studies", however, to distinguish an active spatiality of built environment is also considered.

Community and household in the Iron Age

The remarkable preservation of a recently excavated Iron Age household compound located on the southern flanks of the Upper Delphs, a gravel 'island' in the south-western Fen margin near Haddenham (Evans and Hodder 1988), makes it a suitable example with which to address the character of transformation of domestic space. Unfortunately, there is not scope in this brief paper to go into detail concerning this site's three phases of Middle Iron Age occupation and the later Roman re-use of the Iron Age enclosure as it then survived as an earthwork, and only the briefest phasing summary will be presented (Figure 1).

In the primary phase of this site was found a series of small, unenclosed, round buildings in conjunction with a linear field boundary and ard-scoured cultivation plots/fields. It was only in its secondary phase that a large, sub-square, ditched enclosure was constructed and a north/south oriented field boundary was massively expanded so as to link the compound with a similar enclosure and linear field system to the north (Evans and Hodder 1988, Figure 6). At the same time a large round building (constructed immediately above primary building A) was built, which was surrounded by a deep, continuous eavesdrip gully (building C). This structure apparently burnt and was then replaced by two, almost matching, round buildings (E and F) which were possibly surrounded by semi-circular eavesdrip gullies. Clearly, it was the deteriorating environmental conditions in the SW Fens (freshwater flooding), eventually resulting in the abandonment of this enclosure, that was the main factor determining the construction of this ditched enclosure and the gullies around its sequence of round houses. Such ditched household compounds and buildings, surrounded in whole or in part by eavesdrip gullies, are a frequent settlement form in Lowland England in the Iron Age (Pryor 1983a, Allen et al. 1984), and it is this obvious (ditched) demarcation of spatial entities which in this case allow us to examine the transformation of a domestic configuration through time/sequence.

In the Haddenham Iron Age enclosure we can see two spatial principles in operation in a manner which is not at all uncommon in later prehistoric settlements -- circular structures situated within an enclosed sub-square yard. Given a logic of spatial archetypes, as discussed by Flannery (1972), one could argue that the demonstration of these two spatial forms could generate a conflict or dichotomy between centrally-focused and sub-divisions/aggregator space. Yet, the frequency and longevity of this settlement configuration in later British Iron Age would argue against such interpretations. In this enclosure, the operation of these two spatial principles is most apparent in the respective orientation of the round houses and the sub-square enclosure: the entrance to the main sub-square enclosure (first
across a bridge structure which later was replaced by a brushwood and
gavel causeway) was located in the middle of its western side, whereas
the doorway orientation of its houses were all very tightly on an east-
south-east axis.

One can, of course, argue that the roughly easterly orientation of
the successive doorways was dictated by functional constraints (maximum
sunlight, prevailing winds). Yet if these were the sole criteria which
dicted their plan, then one would suspect that this would result in a
more approximate orientation (up to say 20°-30°), but their very exact
orientation, which is true to within 5°, would suggest a different
spatial patterning. Possibly a specific orientation in relation to a
feature on the local landscape, which, while broadly determined by
functional/environmental factors, nevertheless operated/transformed
itself through a local building tradition.

Certainly it can be argued that the location of the entrance-way
into the yard enclosure was determined by larger-scale landscape
criteria, and the immediate layout of the sub-square enclosure was
determined by a pre-existing field boundary which determined the align-
ment of its west side and associated field/ditch system. What we can
therefore suggest is that the sub-square enclosure reflects the larger
landscape organisation of the field boundary system in the local
landscape and was laid out at a 'public' or community level so as to
integrate the discreet household clusters. Within the confines of this
Iron Age enclosure proper, the only point at which these two organisa-
tional patterns (household and enclosure/landscape) can be said to come
into any spatial conflict is with structure F, whose doorway opened
directly out on to the main bank. With a few steps in the wrong direc-
tion one would quickly end up in the main ditch system, which was still
functioning at this time and certainly not bridged in any way at that
point. In terms of the general spatial patterning within this
enclosure, we can, therefore, suggest that the rectilinear layout of the
compound enclosure and field system related to a larger landscape-
oriented organisation, while the circular plans of its enclosed
buildings operated at a level of centrally focused household space.

This apparent lack of integration between household and 'public'
space has further implications, for there is no functional relationship
between the drainage ditches which surround the round houses and those
which constitute the main compound enclosure. It would not take a great
deal of engineering insight to 'design' a more successful drainage
system which integrated the separate house and compound ditches. But
within the context of the Iron Age, such questions are only relevant in
terms of the contrast value they offer, and we cannot 'judge' or analyse
the site solely from the basis of these functional/drainage criteria.
Certainly the eavesdrip gulleys which surround these buildings were
primarily dug so as to catch eaves run-off water and to sweep their floor
surfaces (Pryor 1983b), yet one could also argue that their enclosure of
and operation at the level of individual buildings carried associations
of household demarcation and 'boundness'. For given the Iron Age round
house building tradition, though structures could be clustered into
semi-nucleated communities (hamlets and hillforts), they still remained as discrete, non-directly aggregated entities. At a strictly local level the construction of extensive ditch systems/networks could suggest intra-household co-operation. Nevertheless, its basic settlement configuration would arguably demonstrate much household independence. It was the character of Iron Age social organisation, expressed through its building tradition, which determined and structured the organisational possibilities of its settlements.

Within the domestic context, it is necessary to recognise settlement space as representing the intersection of private/household and public/community interests operating in both space and time (Giddens 1984). For it is in its temporal dimension that articulated space is structured and is either intentionally maintained and/or transferred by social agency and material deterioration (Fletcher 1984). In this manner constructs cannot be regarded as static spatial phenomena that only exist as abstract generalities/archetypes. Rather, they exist only within their social context and thereby are continuously transformed and maintained at the level of daily detail and generational pattern. If, for example, one was to simply take the unphased plan of the Haddenham enclosure (Figure 1), one would be presented with an apparent axis of round buildings, aligned E/W across the enclosure, and by this configuration the alignment of the successive round structures could be said to complement the 'squariness' of the enclosure. This axial pattern, however, is only apparent in the terminal phase of its Iron Age occupation. When, in the second phase of the site sequence, the sub-squarish enclosure and major house were constructed, the off-centre location of the building (C) within the enclosure was caused by the fact that it represents a rebuilding of the primary un-enclosed building (A). What, in fact, we are seeing in the secondary phase at this site is a rebuilding and enlargement of this house unit, now set within a square/ditched enclosure, the alignment of which was determined by a pre-existing field/land boundary which caused the uncomfortable relationship between the house and enclosure. While there is no reason to doubt that the square, ditched enclosure fulfilled a necessary function (drainage), this enclosure, however, appears to have been a relatively unimportant spatial configuration or social frame when first constructed, and rather, it is the house which is still the predominant spatial unit. Whereas it is only in the final phases of the site, when this building burns, that two 'houses' were built at the juxtaposed corners of the square enclosure. In other words, the square enclosure only becomes influential as a spatial or a social frame once it has been inhabited for a period of time.

It is relevant to this discussion to note that it was the scale of the main Iron Age enclosure that caused it to survive as an earthwork, and which determined the later Romano-British re-use of the site. There is no question of direct continuity in this case, but one could suspect that cultural/historical associations might have been incidentally applied or grafted onto this feature in the local landscape. In this regard, the relative spatial status between the Iron Age enclosure and its houses was ultimately reversed, though only within a different social context, in as much as it was only the enclosure-as-earthwork which structured the utilisation of the site in Roman times -- the world is never 'designed' afresh, and spatial properties ultimately are resolved through time/sequence in which structure and event interact.

Domestic or settlement space, therefore, be most appropriately considered as a landscape bounded by physical and/or social structures in which the interaction and negotiation of daily life occurs. While the daily patterning of domestic activity may become routine, its settlement structures certainly do not reflect the institutionalisation of space and deposition which is evident in intentional projects (ie: monuments; Giddens 1984). Rather, its structures can be understood as an idiocies, reflecting the interaction between community and household, and the rhythms of social generation and differential material deterioration.

Elaboration of monumentality in the Neolithic

Megalithic tombs have been the subject of serious archaeological study for at least the last 150 years (Daniel 1970, Henshall 1972) and many explanations of their structure and their social use have been proposed. We have no intention of going into any detail of these histories since many syntheses may be had elsewhere (Daniel 1970, Pigott 1954, Henshall 1972, Rendle 1975, 1979). It is important, however, to extract from these histories a theme which is central to our discussion here; that all of these explanations of the relationship and form in the study of spatial configuration, and that this separation is essential to the conception of space maintained in spatial studies. The earlier explorations focus on formal aspects of the structures and their place within a developing chronology -- taxonomy in time and space. More recently, the view of the megaliths as constitutions of social action has also been explored (Shanks and Tilley 1987, Hodder 1982, Rendle 1975). In all these studies, however, form and relation are seen as separate features related as a developing taxonomy over time. Whether these features are imposing their reality on society or manipulated to legitimate society, they still remain separate and internal. Space is treated as a field in which megaliths are situated, within which megalithic form and relation is contained.

This analytical separation of relation and form promotes this assumption that spatial configuration is embedded in the tomb in some direct and material way. If we consider the permeability of several Orkney megaliths (Fraser 1981, 389-90), we find two quite different organisations for demarcating the space within these monuments. The stalled cairns (of the Orkney/Cromarty group) are linear sequences of one demarcated space after another. The chambered tombs (of the Maes Howe group) display a quite different organisation from the stalled cairns: a series of demarcated spaces off a central space. It could be argued that to understand the demarcation within these tombs and how they differ, the relational distinctions within and between these internal spaces should be examined in the relation of space to space, internal to external and internal oppositions must be defined and
This suggests that the demarcation of space within those megaliths is of at least two different sorts: one that minimally demarcates low, internal spaces by short wing walls (orthostats), and one that excessively demarcates between internal spaces with low, narrow passages. Though it is sufficient to say that each demarcation does in fact define an internal space, these spaces are of very different types, and their relations are not to be understood in simple terms of interaction in space.

Megaliths are not simply internal configurations, for megaliths as public spaces, must be considered also as locations (Giddens 1984), settings of public focus and definition. Megalithic tombs are not just enclosed structures, existing completely within the internal with little or no reference to relations beyond their own construction. They exist as constructions in a landscape, distinctive both in location and form. Megalithic tombs (along with round barrows) are unique among British monuments in that they are almost always buried. Unlike causewaysed enclosures and henges, megalithic tombs are distinctive in the fact that they are hidden. The structure, on which so much spatial analysis has been lavished, is buried, concealed, made natural within the landscape. However, the form of this 'hiding' is as complicated and as manipulative as is the internal form and relation, for these monuments are obscured and made natural in the most visible and unnatural ways. Megalithic tombs are covered by large and often quite elaborate mounds, and these mounds are placed in quite distinct locations (Renfrew 1975). This pattern of location and mound elaboration can be contrasted with the henges, where there is no attempt to 'hide' the structure. This is further apparent in that many henges are located in less prominent places, situated in valleys or on river terraces.

If the temporal pattern of mound construction is considered, another spatial distinction emerges. Better excavation of mounds and their phases of construction has illustrated a pattern of mound elaboration throughout the 3rd millennium BC (Henshall 1972, Burgess 1989, Bradley 1984). This pattern of elaboration, from simple, round mounds to long mounds, to mounds with horns or other complex shapes, and even forecourts, demonstrates an increased consideration of the monument as place — as a public context whose meaning is embedded in its location (Giddens 1984).

The problem with separating space from context — the design of space as a strategic action — is that it misses the larger question of the use of space. We assume, because the internal space of megaliths is demarcated, that it is sufficient to understand these tombs as spaces of interaction, as it is sufficient to understand interaction in domestic space. This is, however, not the case. Though space is demarcated in megaliths, we have seen that this demarcation is of a very different form and that this form is significant in understanding megaliths as units in space. For megaliths, unlike domestic spaces, demarcation in relation to their internal structure assumes that examination of the

Figure 7: Megalithic access and elevations: a) Midhows, b) Quanterness.

This, however, ignores any contribution by the form of tombs. If we examine the internal form of these tombs, two primary distinctions present themselves. Firstly, there is a major distinction in the type and placing of the access to different spaces within these tombs, and secondly, the treatment of the internal spaces is quite different. Within these megaliths, the form of access and the form of the internal chambers are both distinct and correlative (Figure 2).
stage of interaction is sufficient. Monuments, as with all public spaces, must be considered as locations in space which define their place in social interactions.

The movement of megalithic studies from design to spatial studies was a move that sought to situate the examination of built form within the larger question of relations in space (Hillier and Hanson 1984, Clarke 1976). The result of this resituation was to dissolve the distinction between monuments and settlements and the landscape at large. This dissolution of space into a single entity, that of structures in a plane, dissolved also the possibility of space being a result of event (Giddens 1984). Thus space became the stage in which relations, constrained by form, were enacted, with little consideration of the effect of the act upon space.

If we ignore this dissolution of spatial configuration — that is, deny the premise that space is a stage, unaffected by, but affecting action — then we can replace this premise with one in which space may be seen as a medium of both control and distinction (Ghikas and Tilley 1982). Under such a premise, design becomes important in that space now becomes a strategy for situating practice. Such a situation of practice can be seen in the steady increase of control of public space as the 3rd millennium BC progressed. From the brief outline of the role of elaboration and location of megalithic tombs and other monuments, such as henges and causewayed enclosures, it is clear that a common strategy of enclosure, location and distinction of public ritual monuments was significant. The design strategy of the 3rd millennium BC in Britain may be summarised as the distinction of ritual space from domestic space.

As mentioned above, however, the concept of space as strategy is relevant to the definition of interaction in time as much as to the definition of interaction in space. Hence, this distinction of ritual to domestic space was not a static distinction. Rather, it was a process which was itself situated in time and in the manipulation of time. The process of elaboration of monuments, in both size and form, demonstrates that the affirmation of this distinction was ongoing in social action — the distinction found in the maintenance of the public/ritual context was both necessary and active. For when the public is distinct from the domestic, it loses its place in daily interaction, it is removed from daily time. Monuments of the 3rd millennium BC are definitely outside the daily sphere of interaction. This means that there must also be a strategy of reproduction within a ritual time that is based on periodic and deliberate practice as compared with daily domestic time, with its basis in the control of chance interaction.

This design distinction — strategic separation of ritual and domestic context — is embedded in a series of power relations: there is no separation of them here. However, this distinction is lost to the uniformity of the Cartesian spatial frame as long as we insist that space in 3rd and 2nd millennium BC Britain is a stage in which action takes place rather than a creation of the social strategies as argued with the location and elaboration of monuments.

Conclusions

Given that articulated space operates both within space and time, we may ask to what extent does the apparent distinction between monument design/planning and vernacular traditions of domestic construction relate to a different conceptualisation of these two factors? Certainly, monumental constructs can be seen as relating to the creation of focal points or locations in their cultural landscape, in which space and construction are employed as public events relating to the identity of society and the reproduction of its specific time/space parameters (Evans 1985). Society's temporal concepts can thus be considered as being fixed or embedded in the organisation of monuments themselves.

This temporal reproduction is not only apparent in the proposed astro-crcnical orientations associated with monuments of the 3rd and 2nd millennia BC, but also in the very pattern and rhythm of ritual deposition and practice which occur within. While these practices and constructs may be indirect products of social and possibly agricultural calendars, they are not themselves directly represented as activities, rather, they are formalised so as to have cultural significance. Whereas the household/domestic spatial configuration is directly reproduced and transformed through time, structure and society itself -- conceptualisation of time and space are among the dominant structures of daily social life, and together they create the framework in which it continually articulates and 'unfolds' itself.

What distinguishes the practice of design, as opposed to vernacular tradition, is not so much a question of sophistication as a question of the degree of formalisation of intent. This formalisation, it can be argued, is reflected in the 'monumental' form, and demonstrates a greater abstraction of planning procedure (Evans n.d.). If spatial design can be considered in a broader context that encompasses the range of processes/activities by which societies combine and order their physical environment so as to match their conceptual scheme (Mauzepot 1976, 20-23) planning can therefore be seen as an extension of this cognitive 'mapping of the world' (Renfrew 1983). It is important to recognise that the strict control of spatial forms and evidence of formal or abstract design does represent a major shift in the manner in which the world is ordered, inasmuch as it may be described and replicated by abstract entities or procedures. Furthermore, because of their sheer scale and endurance as earthworks, monumental constructs 'inscribe' themselves in the landscape and can act as a frame for later social activity. It is inasmuch as formal design strategies allow for the abstractisation and depersonification of large-scale constructs that they relate to the demarcation and sub-division of the landscape, and in this manner can 'enshrine' a categorization of the world in relation to which later social action must resonate.
It is not the intention of this paper to argue for a strict dichotomy of domestic and ritual context. In this regard, it is relevant that it can be argued that the 'public' ritual activity of the 3rd and early 2nd millennia BC was itself internalised in the settlement context of the later 2nd and 1st millennia BC. Nevertheless, this categorisation of social context is certainly to some extent appropriate and valid, and can be seen in the varying denotation of location and transformation of space in later prehistory.

The consideration of design as a strategy of distinction helps relate the ceremonial extravagance of the Neolithic to the distinct settlement framework in the Iron Age. This is not to say that the two are in any way directly linked, but that both are conceptualised, in an increased investment of formality into the ordering of the cultural landscape. The differing strategies, that of the domestic/monumental in the 3rd millennium BC and that of the household/community in the 1st millennium BC, centre on the investment of formality into the distinction between that which is public and that which is private. This is the purpose to which spatial design -- the ordering of the built environment which controls interaction in space and time -- is directed. Space is not a Cartesian stage, nor is it an ever-changing construction. It is the consequence of formalisation of cultural order in the landscape -- the creation of strategic design.

References


