

SESSION ABSTRACTS

TAG'91

**USING BIOMOLECULAR ARCHAEOLOGY: *Martin Jones*
(*Cambridge University Department of Archaeology*) and *Terry Brown*
(*UMIST Molecular Biology*)**

Bio-archaeology is in the process of being revolutionised by recent and ongoing methodological developments in molecular biology and biochemistry. Up until the mid 1980's bio-archaeology had taken a rather separate route from the contemporary life sciences, on account of pragmatic limitations on the scale of possible analysis. While more and more questions within the life sciences were being addressed at the molecular scale, bio-archaeologists were effectively constrained to whole organism analysis, the finest resolution being the cellular scale.

The most dramatic methodological development effecting this constraint has been the polymerase chain reaction (PCR) conceived in 1983-84 and first applied to archaeological materials in 1988, whereby as little as a single molecule can, at least theoretically, be multiplied up to levels susceptible to established analytical techniques. The initial applications to rather exceptional archaeological materials such as mummified brain tissue has now been extended to such commonplace items as bone fragments and charred plant remains, and promises a widespread applicability.

PCR is however, merely the most conspicuous of a series of methodological developments that open up hitherto non-existent paths of bio-archaeological analysis. Recent developments in immunological techniques and mass spectroscopy have, similarly, greatly extended the potential of tracking, for example, proteins and lipids in archaeological and earlier materials. A 'stamp-collecting' approach has shown that bio-molecular analyses are possible with material up to at least 17 million years old, though as yet it is not known if this is exceptional or run of the mill and whether the preservation of one type of biomolecule in a sample is paralleled by similar levels of preservation of other biomolecules. These are exciting times and there is a considerable momentum in life sciences research in general, leading to the prospect that ever smaller quantities of an increasing range of biomolecules will become more precisely identifiable. Within our own discipline we can now be fairly optimistic about substantial funding of an ancient biomolecule initiative to jointly support research in the archaeological and earth sciences.

It is imperative that we move into this new phase of ancient biomolecule research in the context of a critical debate about its theoretical ramifications within archaeology, and it is the aim of this session to open up that debate. In our view, not only will the range of essentially phylogenetic research goals be considerably elaborated, the impact of biomolecular archaeology will also be felt in many other key fields, and this is reflected in the framework of the session.

HUMAN ORIGINS AND MIGRATIONS : INTRODUCED BY C RENFREW

The context of this field of biomolecular archaeology is the correlations between linguistic and genetic variation in modern populations and archaeological evidence of a conventional nature, such as conducted by Cavalli-Sforza and others. The clear potential of a parallel approach using genetic material from archaeological tissue has been established for example at Horai, and we need to consider how the modern genetic and palaeogenetic approaches are best combined in the light of the limitations of each.

The question of migrations is a more open one, in that a case may be argued for the importance of exploring migrations on a wide range of spatial and temporal scales, from the original colonisation of the New World down to particular questions of localised historic period migrations such as are currently being addressed at the 1st millennium cemetery at Abingdon, Oxfordshire. These different scales may pose distinct problems of precision and reliability.

GLOBAL DYNAMICS AND ECOLOGY : INTRODUCED BY PETER WESTBROEK

Our archaeological view of past environments has been dominated by the same organisms that fill our current visual frame and archaeological record alike : in general the more complex multi-cellular terrestrial plants and animals. Even these are subject to a severe taphonomic 'filter' excluding most soft tissue. Our view of human interaction with past environments has thus , and largely for pragmatic reasons, concerned essentially mechanical modification on a local scale: removal of trees and topsoil, replacement of large mammals and vascular plants, and so on.

Current views of global dynamics have moved much further than this. The sheer scale of influence of human action and the bio-sphere on the one hand and of the bio-sphere on the lithosphere and atmosphere on the other, is gradually becoming more evident, as is the fact that much of these influences are mediated by organisms excluded by the taphonomic filter. Ancient biomolecules, with or without their original somatic tissue, may allow us to pursue bio-energetic pathways hitherto invisible to archaeological analysis.

EXPLOITATION OF PLANTS AND ANIMALS : INTRODUCED BY P ROWLEY CONWY AND G HILLMAN

The problems of agricultural origins and dispersal mirror those of human origins and migrations, but on a compressed time scale and in some cases with a more complex phylogenetic path. Substantial advances have already been made in the case of maize, and British work is currently under way on wheat. The latter example highlights the potential of looking at a range of biomolecules and not DNA alone, as lipid markers are proving taxonomically significant in a wide range of economic .

On this latter point, we need to consider what new categories of economic plant and animal are now open to analysis but which hitherto have been lost to the taphonomic filter mentioned in the previous section.

KINSHIP AND GENDER

There is a clear, but problematic, potential of DNA analysis to provide the most direct assessment of the genetic sex of human (and of course animal) remains. In addition, we should anticipate the possibility that analysis of other biomolecules, eg. sex hormones or their derivatives, may allow some analysis of physiological sex.

There are two archaeological loci we could consider, the remains of humans themselves, and objects with which they come into frequent contact (here drawing an analogy with ceramics incorporating lipids from organics with which they have been in contact).

While in broad terms we have the sense that this may assist our exploration of past kinship patterns, and social constructions of gender, we need to think about how it would proceed in terms of the burial assemblages etc. that can actually be retrieved in the archaeological record. What can realistically be gained from knowing the precise genealogical relationships of the occupant of, for example, a neolithic collective tomb, or that a certain category of bowl retains more evidence of contact with female rather than male tissue ?

With each of the above topics we need also to address the question of selectivity. Some applications will end up at a cost that will enable a widespread application. In other cases we can envisage a small number of well funded programmes and consequent case studies that we might then be tempted to generalise across a vast series of less intensively studied examples. It would be valuable to gain some sense of the major 'global' candidates for such case studies. It is also important that we establish the precautions and practices that must be followed during the excavation of material destined for biomolecular analysis, as in some cases these requirements (or more precisely the difficulties in meeting them) may limit the areas into which biomolecular archaeology can be taken

NEW TRENDS IN SLOVENIAN ARCHAEOLOGY: P Mason, (Z.V.N.K.D.) and I. Saksida (Ljubljana, Slovenia, Yugoslavia)

The aim of the session is to review the new trends in Slovenian Archaeology, which have been developed since the last general overview during the "New Developments in Yugoslav Archaeology" conference in Bradford in December 1987. There has been a great increase in the application of modern theoretical and field techniques since then. This session intends to present an overview of these theoretical and practical developments as reflected in the work of archaeologists from the Republic of Slovenia, in co-operation with colleagues from other parts of Yugoslavia and from Britain. Some of these practical and theoretical advances have been made as a result of co-operation in field survey projects in Dalmatia, which has had a bearing on the approaches to the varied landscapes in Slovenia, leading to the formulation of new field strategies in landscape archaeology. Further trends can be seen in the development of computer-based landscape studies - GIS, the active application of stratigraphic excavation to archaeological sites, now steadily replacing the old method of arbitrary spits. On the theoretical side, beside the interest in the theoretical approaches used in Western Europe and the USA, the impact of the sociology of culture and Lacanian psycho-analysis on archaeology theory has been of particular interest. The wide range of subject presented in the seminar is intended to give the audience an insight into the important work, which is at present being undertaken in a part of Europe, previously under presented at TAG.

The Slovene language has hitherto been a major barrier for the communication of new ideas with colleagues in the West, and for this reason we feel that a seminar within the increasingly international framework of TAG is by far the best solution to this problem. (Individual abstracts were not available for these papers at the time of going to press)

GENDER, MATERIALITY, LANGUAGE AND TEXT: EXPLORING THE PROBLEMS. (Local TAG Organising Committee)

In this session it is intended to explore some current areas of keen debate within the discipline. The papers have been grouped as closely as possible to complement each other and to provide a clear thread for structured discussion. We are extremely grateful to all those who offered contributions in the session - it should certainly not be regarded as the usual TAG 'General' session in another guise.....

THE POTENTIAL FOR GENDER ARCHAEOLOGY IN POLAND: Hanna Zawadzka

In recent years Polish archaeology has been trying to catch up with theoretical developments in Western archaeology. Now there is more access to the literature and more personal and official contacts than ever before. Most theoretical writing, old and new, is warmly welcomed. Archaeologists are learning more about processual archaeology on the one hand and grasping some information about post-processual archaeology on the other. New archaeology, structural and post-structural archaeology are no longer distant echoes of the debate taking place in the West. But is there any place for gender archaeology? Is this term familiar, if known at all in Polish archaeological practice? This paper will attempt to present the ways the past is interpreted by both women and men as well as some archaeological examples of gender studies. I will also show briefly the social contexts in which women work and the implications of these for archaeology. In relation to these questions I will ask if there is a place for gender archaeology in Poland and who would want it?

AGRARIAN MATERIAL CULTURE: REFLECTIONS ON GENDER: Linda France Stine

A feminist approach is applied to the study of early twentieth century gender roles on North Carolina Piedmont farms. The relationship of dichotomized cultural ideals is compared to the actual interdependent gender roles of agrarian women and men, circa 1910 to 1940. Using data generated from oral history and the U.S. Census, the multiple occupations and related labour of men and women is analyzed. Various farm-related tasks are discussed in light of cultural perceptions of gender and work and compared to actual farm-related activities. Although shared notions of gender incorporated an ideal of separate masculine and feminine spheres, the realities of farmwork meant that both men and women were engaged in household and farmstead labour. The archaeological ramifications of this shared ideal of segregated labour, as opposed to the realities of work patterns, are discussed.

Based on data collected from investigations at two adjoining farmsteads, the visible effect of gender roles on material culture patterning is detailed. The influence of gender on overall site structure as well as feature formation and interpretation is significant. At the level of artifact analysis, it is found that simple ranking of artifacts as being related to male or female tasks is not a powerful tool for study of the rich and varied gender roles on the farm. Too many artifacts prove to be

multi-functional, and many activities are not gender-restricted, to allow for simplistic categorizing as feminine or masculine objects.

Gender is just one of several important facets of social differentiation. The dynamic relationship of gender, ethnicity, and class is perhaps best revealed through shifting the scale of analysis from individual artifacts to a focus on site structure and regional patterns of institutionalized material culture. The interplay of ethnicity, class, and gender at an agrarian community in Harmony, North Carolina illustrates that these variables can and do have material correlates.

POWERFUL PUDENDA; THE PENIS IN PREHISTORY: L Bevan (Birmingham)

The paper is an exploration of penile representations in prehistory, providing an episodic rather than chronological view. It comprises three areas of research; firstly, phallic representations in rock art and in the form of wooden carvings recovered from water-logged contexts, exploring and challenging previous interpretations and concepts of male/female penile/vulvic symbolism and gender roles.

The second part is concerned with the gold penis sheath recovered from Grave 43 at the Chalcolithic cemetery of Varna on the Black Sea coast. Again, the symbolism of this unusual aspect of material culture is examined in relation to the wearing of penis sheaths in non-urban societies. Examples, drawn from ethnographic studies in Highland New Guinea and certain African groups including the Dowayo, are included, providing a contrasting ideology to the inclusion of this high-status item in a richly-equipped funerary context. This powerful image is examined in relation to local burial ritual and within the context of other 'symboles masculins' within the Balkans.

Part three takes further the concept of masculine display introduced by the discussion of penis sheaths; how indicative is clothing of power? With this in mind, Etruscan vases which show naked young men and clothed matrons are considered. What does this tell us of Etruscan society? Perhaps we are as biased in our interpretations as the Romans were in theirs, examining the Etruscans from the point of view of their own male-orientated society.

On one level this paper evaluates the contribution of ethnographic data to elements of prehistoric art and material culture but on another level it identifies the tendency among past researchers to ignore or subvert the evidence according to their own environment, prejudices and preconceptions.

This paper cannot provide a key to the mysterious world of prehistoric sexuality but it gives a glimpse into a peep-hole through which we see ourselves reflected back like an Etruscan mirror.

THE "MATERIALITY" OF WESSEX BEAKERS: Koji Mizoguchi (University of Cambridge)

The beginning of the post-processual phase in archaeology marked the rising of the new perspective in material culture studies in which the role of active manipulation by agents of material variability was strongly emphasized. In many case studies the variability has been meant to be "visible" variability, and language analogy and iconographic studies of artifact decoration have been dominant. Nevertheless, it has currently become realized that artifact variability as a resource of conduct in the structuration of a social system demands rather

different interpretive procedure from that of other resources such as act and speech because of its "materiality". "Materiality" can be characterized with its dual nature: strong institutionalizing effect and ambiguity in its decoding. This duality should be given more attention and appropriate interpretive framework in material culture studies.

In the paper I wish to consider how this duality can be interpreted in studying beakers from the Wessex region. To achieve the aim, the technology and the energy-expenditure, that tend to be neglected in the study of British beakers, are given specific attention in addition to such attributes as the shape, the decoration, and other contextual informations. It will be shown that both "visual" attributes such as the shape and the decoration, and the complexity and intensity of work required in the production appear not to have been manipulated separately but to have been materialized in fineness/coarseness of a vessel and manipulated as a unified structural resource to structure/restructure a social system based upon age/gender class system.

THE MATERIAL CULTURE OF MATERIAL CULTURE: Matt Edgeworth

In appropriating the material cultures of others for archaeological or ethno-archaeological research, these become our material culture too. Artefacts discovered or collected are invested with meanings relative to the projects of the archaeological community in the present day, whatever meanings they may have had in their original context of use. In this sense archaeology is a material culture of material culture.

It is also the case that we use a wide range of material culture items for apprehending the material cultures of others. In excavation, for example, there is that neglected treasure-chest of trowels, spades, planning-frames, pencils, scales, tapes, etc. Such 'tools of the trade' are the mundane things of everyday life for archaeologists digging out in the field. They are used to work upon other objects, but are rarely constituted as the objects of attention in themselves. Yet they mediate the subject-object encounters, or acts of discovery, which characterise excavation. Through their use material evidence is brought to light, manipulated and transformed into data. They play a crucial role in the (re-) production of archaeological knowledge.

"PHILOSOPHICAL RESIDUES: PRIMITIVISM AND LIBERALISM IN ARCHAEOLOGICAL APPROACHES TO THE INTERPRETATION OF ART" : J C Dronfield

This paper attempts to pin down a problem which has great relevance to contemporary issues in archaeology: the attitudes of Western archaeologists and anthropologists to non-Western and prehistoric societies, and what separates "Western-ness" from "otherness". This problem is approached through the entry point of archaeological and anthropological studies of art. A discussion of the ways in which ideas about the nature of society have influenced the interpretation of art leads to the conclusion that, although the word "primitive" has been expunged from our conventionally accepted professional vocabulary, the concept remains very much alive, insidiously veiled in the underlying principles which mould our approaches to studying societies.

In Structural anthropology, Levi Strauss suggested that "primitive" had such a secure place in our languages that the only possible course was to remove the "philosophical residue" which it entailed. I suggest that the reverse of this has happened, and that refusing to use the word, placing it in inverted commas, or seeking a less perjorative alternative is merely a palliative solution which

ultimately only avoids direct confrontation with the issue of the Western-Other dichotomy.

This paper tries to apprehend the role of our own material culture in the constitution of objective meanings.

WHY INDIANA JONES IS SMARTER THAN THE POST-PROCESSUALISTS

John Bintliff (Durham University)

The so-called Post-Processualist movement in contemporary British theoretical archaeology can usefully be seen as a helpful commentary on the inadequacies of the Processual movement as perceived from the 1980's, at the end of Processualism's first two decades of 'Formative' development. Rather than considering Post-processualism as a set of replacement theory for the previous paradigm, a task for which it is manifestly unsuited, its critique can serve to stimulate a more flexible and sophisticated version of Processualism, more responsive to the realities of human life, yet nonetheless committed to a scientific methodology - in short, 'Archaeology as a Human Science'.

In other disciplines, Post-modernism is considered as an intellectual movement of the past, its lasting achievement - to broaden the perspective of mainstream, rational thought - having been accomplished. Western Marxism, frequently associated with post-modernism, is more catastrophically disappearing from discussion, its adherents in complete intellectual disarray. Before archaeological Post-processualism, the pale shadow of these traditions, suffers the same fate of fading away into its own obscurity, serious efforts should be made to rescue key aspects of its critique to enrich future mainstream archaeological theory.

This paper will highlight the main features of Post-modernism that deserve to be rescued, and suggest how they can be integrated into a Neo-processualist 'Human Science' theory for archaeology. It will also bring to renewed attention essential insights into human behaviour absent from the Post-processualist view of the human condition, deriving from Human Ecology and Psychology. I shall seek to clarify the methodology and goals of practical science, a subject on which Post-modernists are very poorly informed. Finally consideration will be given to the relevance to a future 'Human Science' of archaeology, of the immensely-influential philosophy of Wittgenstein - and to the surprisingly similar approach to Metaphysical issues detectable in the published extracts of Indiana Jones' lectures to student archaeologists.

PATTERNS AND INTENTIONS: NOTES TOWARDS AN EXPLANATION OF FORM

James Whitley, (University of Wales, College of Cardiff)

Most recent archaeological discussions of artefacts and material culture, especially by prehistorians, have assumed that the archaeologist's main aim is to understand society through its material remains. The 'social' and the 'economic' have come to be seen as the true subjects of archaeological study, and the material remains have been reduced to the status of a medium through which 'the social' can be apprehended. This paper takes issue with this view, and with the current fashion for social and literary theory which underpins it. Archaeologists must reverse their theoretical priorities. Instead of trying to apprehend societies through material culture, they should be searching for adequate explanations of form. Greater attention should be given to art historical rather than social or literary theories.

The argument is presented through a series of concrete examples (ranging from the Italian Renaissance to the Greek Dark Ages). Following the procedure adopted

by Michael Baxandall, a variety of 'universalising' theories of a kind now currently fashionable in archaeology is tested against the stubborn materiality of individual artefacts, and are found wanting. The paper concludes that what archaeology needs is greater attention to the real material qualities of artifacts, and greater theoretical eclecticism and flexibility. Only in this way can the true richness of the past be realised, and the impoverishment of prehistory which is implicit in the universalising dogmas of textual and social theory be prevented.

THE RETREAT FROM LIFE INTO LANGUAGE: Paul Graves

To the best of my knowledge, criticism of current trends in archaeological theory have derived, almost exclusively, from a backlash by "processualism". Indeed, it seems that some of us would be surprised to find that there are any other alternatives to processualism versus post-processualism/structuralism. This paper takes its argument from a growing interdisciplinary relationship between archaeology and psychology, and in particular from work in ecological and social constructivist psychology.

At a very basic level I reject the retreat from realism into a realm of language games, typified by deconstructionism and post-modernism. Not only is realism possible without the positivism of the New Archaeology, but further than this there is a fundamental error in a world view ultimately derived from Saussurian linguistics. The treatment of all experience in terms of language and sentential logic is contradicted by psychological studies which indicate that experience and cognition precede and often defy linguistic expression.

TEXT, (CON)TEXT AND (PRE)TEXT: Sue Content, James Kenworthy

An examination of the value of the textual metaphor in the light, for example, of the thought of Ricoeur and Derrida. This will include concepts of context and pretext and the examination of the metaphor as a general principle. There are current moves in some archaeological circles away from text, without, we feel, its potential having been thoroughly explored. The aim of this paper is to situate the metaphor of material culture in broader contexts of textuality.

TEXT AS CULTURE: Sue Content, James Kenworthy

This paper aims to position a specific text, Anglo-Saxon England by Sir Frank Stenton, in its social and historical context by examining the interpretive influences of culture on the author, and the influence this text has had on later archaeological thought.

ARCHAEOLOGY AND ASSOCIATION FOOTBALL: *Duncan Brown (Southampton)*

This is archaeology and Association football, not the archaeology of Association football. The distinction is important. This session is an examination of archaeological processes and interpretations through our understanding of a contemporary phenomenon. It is not the search for an archaeology of sporting history.

Many archaeological themes are reflected in the structure that is football. Most easily identifiable are the edifices within which the game is played. More

ephemeral perhaps are those elements of economic and social expression, popular tradition, regional identity, mass behaviour and above all emotional involvement which constitute what football has become. Parallels for these phenomena may be found in past societies, but it would be facile to parade them without attempting some interpretation.

This session seeks to provide a context for human behaviour, a context for archaeological perception and a critique of archaeological method. Association football provides the framework for this exercise. It is an activity which may have had a meaning in the past and which today involves a large proportion of the population. Above all it engages the interest and emotions of the speakers in this session. Their presentations are therefore informed by their experiences as archaeologists and football supporters. Neither the past, nor football, can be examined with complete objectivity by those who are closely involved with them. An important point is that the speakers have great enthusiasm for both activities. Nevertheless, John Williams, the first speaker, is not an archaeologist. As a sociologist based at the Sir Norman Chester Centre for Football Research, he does however, have an interest in the past. His talk will provide a social context for the development of the game of football, and from which we archaeologists may proceed. Clare de Rouffignac is an environmental archaeologist whose enthusiasm for her subject is equalled by her love of football. She will offer the session an emotional context from which to view them both.

From this starting point the session then presents four speakers who will examine separate aspects of football and archaeological study. Paul Spoerry is trained as an archaeological scientist. His talk will scrutinise the meaning of objectivity and archaeological data in an unusually lively environment. The next two speakers offer case studies. Donny Mackay works for the Royal Commission, but here he expounds themes which transcend the limitations of landscape. Duncan Brown is a ceramicist. His talk deals in part with systems of exchange but is concerned with broader themes, expressed in an analysis of football stadia. Finally, Jim Hunter, now based at the Cambridge Archaeological Unit, offers his critique of archaeological theory while employing the language of football-speak.

Two discussants have been asked to kick off the important part of the session. John Williams will contribute on the basis of his experience of football and his lack of archaeological knowledge. Isobel Holroyd is an archaeologist but not a football supporter. Their two contributions will hopefully initiate a lively debate. At least in this forum, the supporters do get to have their say!

Those attending the session are encouraged to participate at any stage of the proceedings. The mood will be enhanced by the wearing shirts and favours, but the intention is not to make this accessible only to archaeologists who are football supporters. If you like archaeology then you should get something out of this session. All too often those attending conference sessions find it difficult to express their enthusiasm for archaeology. We are asking for all the support you can give. Archaeology is fun. Hopefully this session will be also.

THE LIMITS OF INTERPRETATION IN HUMAN SKELETAL STUDIES: Dr Jennifer Wakely (Leicester)

The session is intended to explore the range of opinions that exist concerning the conclusions that can be drawn from human skeletal remains. Should the process of examining a skeleton stop at a simple description of observed phenomena, or should one attempt a diagnosis, or go further and attempt to examine the wider

social implications of anthropological or palaeo-pathological findings? Are grave-goods or skeletal remains more reliable indicators of sex? Why may they differ? Is much of the "detail" of a skeletal report unnecessary or meaningless? Ancient disease and modern health.

FACT OR FICTION - THE NATURE OF THE EVIDENCE: Janet D Henderson

Human bone specialists whose main interest is in the study of past peoples are all too often confronted in their work on the one hand by a dearth of evidence and on the other by archaeologists and laymen clamouring for analysis and interpretation of excavated material. This paper's theme is to examine the nature of the evidence and the ways in which the presentation of results may be either misleading or informative. An attempt will be made to show how it is possible to be positive yet accurate at the same time, it being all too easy to be critical and negative.

A CLINICAL PERSPECTIVE IN DIAGNOSTIC PRECISION IN PALAEOPATHOLOGY:

K Manchester

See Addenda

SURGERY OR SORCERY - THE ART AND SCIENCE OF TREPHINATION : J Wakely

Microscopic techniques enable us to distinguish genuine trephinations from openings in skulls caused by other human or biological phenomena. In some cases examination of the skull reveals injury or other pathology that suggests a motive for the procedure that from a modern Western perspective appears 'rational', in others it does not, and a ritual basis is suggested. This paper explores the sometimes ill defined line between 'surgery' in the modern sense and ritual, between naturalistic and supernaturalistic interpretation of health and disease.

A DATE FOR DEATH: S McLaughlin

This paper discusses the preliminary results of a new technique to establish the time since death. Legally, there is a cut off point of 75 years before the present, which dictates whether human remains are of forensic or archaeological provenance. Physically this is somewhat arbitrary as there is no scientific technique available to confirm such a point in time. Therefore, a sensitive and reliable technique is required. The presence of radio-active strontium in human bone is examined as a means to determine whether or not the individual was alive before the 1960's.

HUMAN REMAINS: IMAGE AND CONTEXT OF INFANTS AND INFANT BURIALS: A CROSS-CULTURAL EXAMINATION: E Scott

Possibly the greatest limitation to the interpretation of infant remains is the lack of symbolic meaning assigned to infants and infant burials by archaeologists. Through an exploration of infant deposition, iconography, and anthropological studies, it can be demonstrated that the unborn and newborn infant is imbued with a rich and complex contextual landscape of meaning. The paper will also explore the proposition that this special category of information-loaded archaeological data has remained invisible because infants have been regarded as part of women's domestic domain, and therefore of little value, status or interest. The recent engendering of archaeology has challenged this reductionist view of

women, and this paper will examine the implications for the study of the infant and infant remains.

THEORY IN PRACTICE (Local TAG Organising Committee)

This year's TAG Conference has produced an excellent crop of papers that range over the wide area of the practical application of theoretical concepts. This is to be welcomed at a time when it seems to us that there is a growing chasm between so-called 'Theoretical Archaeologists' on the one hand and so-called 'Pragmatic Archaeologists' on the other. What the session highlights is the very basic, yet important point that all archaeology is theoretical archaeology. We look forward to some interesting argument in this session....there should be something to interest most people here.

LANDSCAPES OF THE MIND: RECENT DEVELOPMENTS IN THE INTERPRETATION OF SURFACE SCATTERS: Martin Tingle

This paper examines the links between perceptions of landscape archaeology, changes in the methodology by which these have been studied and the resultant developments in interpretation. It will concentrate on the role of surface scatters in the theory and methodology of landscape archaeology.

When and how were surface scatters first recognised? How were they interpreted and what impact did they have on the perceived relationship between sites and surrounding landscape? Methodological changes in the study of surface scatters have inevitably led to changes in their interpretation. For instance, there is a growing use of systematic collection techniques as it is increasingly clear that partial collection distorts analysis. In the light of new evidence from recently published surveys, it is also evident that surface collection has a much wider application than was originally thought. The range of collected material has expanded to include more unmodified natural substances, as the taphonomy of surface scatters is better understood. Surface scatters deriving from medieval and later periods are also seen as important sources, not only for the periods in question, but also as a way to compare evidence of activity in the archaeological record with accounts from contemporary written sources.

A PLOUGH-ZONE BELOW HIGH-WATER?: B Ferrari

In recent literature much attention has focussed on the question of the refined utilisation of surface and near surface assemblages in inference. This presentation will consider whether method and theory applied to the plough-zone on land could be applied to the analysis of material from areas of seabed impacted by commercial fisheries.

A comparison of ploughing and certain methods of commercial fishing reveals broad similarities in terms of physical impact and potential for the transport of material. Case studies will be presented illustrating both the nature of the impact of commercial fisheries and the methodologies which have been applied to analysing material from impacted areas.

One of the most problematic aspects of such research is obtaining base-line data in the form of pre-impact distributions. A case study utilising such data will be presented which poses significant questions about the nature of appropriate method and theory.

THE APPLICATION OF SOIL ANALYSIS TO THE INTERPRETATION OF HISTORIC GARDENS: C Currie

In the course of research into the application of archaeology to the restoration of historic gardens, soil analysis was undertaken as part of routine testing. Archaeological contexts were tested for inorganic phosphate, calcium, magnesium and pH, with a view to identifying artificially enhanced soils. The tests were initially carried out on known historic plant beds and compared with control samples. Subsequently, a more random system of sampling was adopted to help in the interpretation of problematical areas. The results suggest that multiple analysis can help to identify the past uses of garden areas that have either been abandoned or had their land-use altered.

SPATIAL ANALYSIS OF AN 18TH CENTURY FORMAL GARDEN: Martin Locock

The interpretation of the 18th century walled garden undergoing excavation of Castle Bromwich Hall, West Midlands, revealed two conflicting readings of the site's use of space, based on alternative models of 18th century society. A range of spatial analyses were used to compare the readings, including gamma analysis and accessibility coefficients, and it was found that the walled, compartmented garden was internally an open structure. Examination of treatises and documents of the time illuminated aspects of the conscious manipulation of space, and the role of symmetry was found to be less central than had been thought. As a result of these analyses, a revised model of 18th century society is presented, and the utility of spatial analysis for historic periods is evaluated.

THE USE AND ABUSE OF ARCHAEOZOOLOGICAL DATA BY NON-ARCHAEOZOOLOGISTS: Marsha Levine

A very well-known British archaeologist has been quoted as follows: "Animal bones are peripheral to archaeology". There is no reason to mention the individuals name, because this is a very common opinion amongst archaeologists of the non-archaeozoological variety. Archaeozoologists, and perhaps bioarchaeologists in general, are looked down upon because, for the most part, they do not exhibit much interest in mainstream archaeological theory, ie. Marxism, structuralism, post-structuralism, and so on. However, this lack of interest is not because they are too dumb to understand these theories or because they are merely technicians, fit only for producing species lists to lose in endless microfiched appendices, but rather, generally speaking, because of the lack of relevance of some of the more abstract kinds of theories to archaeozoological issues.

However, looking at the problem from another point of view, archaeology has a much more serious problem. That is, mainstream archaeologists, who for the most part have neither an understanding of nor interest in archaeozoological theory, and, indeed, may not even recognize faunal data to support their own theories about the past.

THE GRAND CONSTRUCTIONS OF THE LIVING: OSSUARY MONUMENTS, THE CULT OF THE DEAD AND COMMUNITY RELATIONSHIPS IN BRITTANY 1600-1980: E C Musgrave

This study of ossuaries is an historian's attempt to study the past using some of the methodologies of archaeologists and anthropologists as well as 'conventional' documentary sources. Ossuaries, or charnel houses, are standing monuments

common to parts of Western Brittany, France. They are first constructed in the early 17th century, and are found in association with parish churches and calvaries. Their obvious function was for housing human bones and for rituals associated with death and burial. Their use continued into the 20th century.

The first aim of the project has been to examine the ossuary structures themselves, to try to define the rituals and ideologies associated with them, differences according to geographical areas and changes in their use over time. Secondly, the relationships between the use of ossuaries and the dynamics of local communities are under scrutiny. The way in which Breton communities conceptualised death, passage into the afterlife, the role of the dead in the living, spiritual community and how this changes over time is under discussion. Thirdly, the role of rituals and symbols in the reinforcement of communal solidarity and divisions will be examined. How did they reinforce community identity and relationships between social groups and relationships between villagers and the agents of the outside world such as the Catholic Church and the French State?

ARCHAEOLOGICAL THEORY REALLY DOES INCLUDE MANAGEMENT THEORY! M A Cooper

The archaeological discipline takes place within a turbulent and fast changing environment. Changes in the social, political and economic environment has led to the rapid evolution of organisations in some sectors of the archaeological discipline and continues to highlight tensions between the goals and methods of the 'academic' community and other sectors of the discipline.

The rapid changes witnessed over the past decade - and which seem likely to continue in to the next - have led to discussion of a wide range of subjects, including: the aims of archaeology, the nature of efficient project management, the role of a professional institute in the profession, and, career development and motivation. Much of the discussion and development, however, appears to have ignored - and indeed can learn from - the vast range of literature developed in the management theory field.

The purpose of this paper, then, will be to investigate what management theory has to offer for archaeologists. It will also develop the argument that management theory is a valid theoretical subject for archaeologists and that, more importantly, it has the potential to provide an important bridge between the academic and the practical sides of the discipline.

THE PSYCHIC/INTUITIVE ELEMENT IN ARCHAEOLOGICAL THINKING : HELPING THE SUBJECT TO MOVE FORWARD ? : K Crow

All archaeologists agree that archaeology is the study of humankind by interpreting material remains. This has two realms:

- a) Study of material remains and
- b) Reconstructing meaning from these remains.

I shall argue that:

- 1) Archaeology at present can only describe the form of individual artefacts and
- 2) It can only come up with a limited amount of meanings.

This is because it has never integrated a mystical element into its approaches. Hodder admits "archaeologists have always claimed to be rigorously scientific" (1986, preface); it still is - it uses inferential thinking and knowledge. However, 'inferential knowledge is only part of a whole and cannot grasp the whole'. Science cannot, regardless of further progress, encroach on the background or substratum from which it springs; and our consciousness obviously lies in this background - indeed is the background (de Riencourt, 1980). In order to make my point though I must use an inferential argument.

Only two works have questioned whether inferential knowledge will help archaeology to proceed - Moberg's Similar Finds - Similar Interpretations? and Bonnischen's "Millie's Camp" (World Arch. 1973). Moberg asked 'whether archaeology is feasible at all'; he concluded 'similar finds do indicate similar interpretations but admits 'We know so well... that the reply has to be negative' hence there can be an unlimited amount of interpretation about any artefact.

Bonnischen asked whether models can have any basis in reality, he concludes that 'although the prehistorian may be able to develop logical, satisfying, explanatory structures for understanding prehistoric data, there need not be any relationship between his model and the site under investigation'. Inferential thought is thus seriously flawed. Archaeology's problem is that its material is removed in time and space from its original context. In order to bridge these distances, there has to be a utilisation of a system other than inferential thinking. Mysticism in all forms is something that can transcend space and time (cf. 'Man's Religious Quest - W Foy, 1978).

Integrating a mystical approach will help archaeology give meaning to its artefacts and interpretations. Archaeology is way behind other disciplines in this area - even Einstein admitted to a mystical element in his work.

PLACE, TIME AND EXPERIENCE : INTERPRETING PREHISTORIC LANDSCAPES: Jan Harding (Reading)

Recent literature and TAG contributions have discussed the development of a number of shifts and elaborations in the archaeological perception of landscape. This session will contribute to this discussion, moving beyond the conception of the landscape as a purely environmental constraint and economic resource towards an understanding that cultural and natural space is socially meaningful and contextually specific. Central to this session is the appreciation that landscape acts as a structure to orientate human agency, while the latter transforms spatial relationships through the movement of time. Some of the session contributions will explore the long term transformations of landscape by prehistoric communities and emphasise the importance of examining the relationships between our traditional types of data. It is believed that the involvement of social anthropologists will certainly add to the self critical awareness of this session, while providing a more thorough introduction to our theoretical constructs

TOTALISED LANDSCAPES: Julian Thomas

Recent years have seen a willingness to develop an approach to archaeology which places artefactual and structural evidence in a broader spatial context, and which interrogates entire landscapes as theatres of human activity. This has built upon a distinctive British tradition of landscape archaeology, and to judge by the content of the past few TAG conferences is now strengthened by a desire to make

landscape a theoretical issue. This general trend is doubtless a positive one, yet it is the aim of this contribution to voice some concern regarding the conception of landscape abroad in archaeology.

Archaeologists commonly perceive landscape through a series of remote visual media: aerial photographs, distribution maps, remote sensing, geographical information systems and site plans. Each of these forms a part of a visual discourse which is historically situated: and alienation of the gaze from the other senses which allows an object to be appropriated as a whole from a distance and without involvement. Cosgrove's work has demonstrated how this discourse is linked to the emergence of capitalism, while recent studies in feminist aesthetics have emphasised the gendered character of the alienated gaze. In this paper I will discuss the appropriateness of such a totalising view of landscape to precapitalist societies, and suggest ways in which fragmented and narrative (as opposed to simultaneous) perceptions of the environment might be more useful.

AN APPRECIATION OF DISTINCTIONS: THE PREHISTORIC HUNTER-GATHERER LANDSCAPE: Steven Mithen

The paper is concerned with developing an appropriate theoretical framework for making a regional study of prehistoric hunter gatherers. Two alternative theoretical frameworks are compared: that which views hunter gatherers from an evolutionary ecological perspective and focusses on decision making in subsistence practices; and that which views hunter gatherers as living in a mythical world of their own creation in which utilitarian issues play a minimal role in their decision making. The paper draws on a case study of mesolithic settlement in the southern Hebrides to illustrate how both of these approaches are indeed in opposition, as they initially appear, or whether there are in fact certain common features that suggest an integrated approach can be developed.

SIGNING THE LAND: Richard Bradley

The prehistoric petroglyphs of the Atlantic seaboard have been studied largely as evidence of interaction between different regions. Little attention has been paid to their relationship to topography, and yet this provides important clues to the ways in which the landscape was experienced before the creation of a network of fixed boundaries and field divisions. This paper considers the local context of the rock carvings of Galloway, southern Scotland, and attempts to define the rules by which different motifs were located. The organisation of those motifs across the landscape as a whole is interpreted in relation to the movement of people and animals in a mobile economy.

CONFLICTING PERCEPTIONS OF LANDSCAPE IN NORTHERN AUSTRALIA: Howard Morphy and Veronica Strang

The paper contrasts the way in which aboriginal hunters and gatherers and European pastoralists locate value in land. The particular focus is on place names as a reflection of historical process. Aboriginal place names are seen as a means of linking people to place. In a sense place names come out of the land and enter into and influence patterns of human life. In contrast European place names are an imposition onto the landscape of colonial processes and introduced values, and reflect the appropriation of land by European colonists. While Aboriginal naming systems make history subordinate to place, European naming systems locate places in history.

CREATING THE LANDSCAPE : MONUMENTS AND SOCIAL SPACE: Jan Harding

This paper will briefly attempt to re-evaluate the terms which archaeologists use to provide a meaningful social dimension to our traditional conception of the Neolithic and Early Bronze Age Landscape. Underlying our perceptions is the irony that landscape remains to be seen as an environmental stage, and set of parameters, for predominantly "economic" activities, while the archaeological evidence for this is relatively limited and certainly contradictory. The monuments of these periods have all too often been simply inserted into a domesticated context, central concerns often revolving around their part in subsistence cycles and their relationship to economically viable land.

It is from these assumptions that our perceived packaging of landscape into ritual and domestic space occurs. I will suggest that a new set of understandings are necessary if we are to attempt to appreciate both monument and landscape. Possible approaches include a greater emphasis on "public" and "private" space, and an appreciation of differing landscapes rather than the application of a uniform model across the differing regions of Neolithic and early Bronze Age Britain.

LATER PREHISTORIC LANDSCAPES: CREATING THE BIOGRAPHY OF SPACE:

John Barrett

The sequence of monuments from the bronze age through the iron age in southern Britain will be described in outline as representing, in part, mechanisms for writing into existence a relationship between people and resources. In other words, we can understand how different forms of tenure could have been structured through time. From this perspective the transformation of later prehistory, with its increasing emphasis on land divisions and settlement enclosures, will be accepted as a shift towards a tenurial control over land. This seemingly self evident point will be examined as representing a transformation in the ways biographies could be described, from the transient nature of life, situated in cyclical time to an emphasis upon 'being' in place and time. The settlement and the house will be considered as mechanisms central to this presencing of 'being'.

TEMPORALITY OF THE LANDSCAPE: Tim Ingold

Human life is a process that involves the passage of time and is itself inseparable from the process of formation of the environments of landscapes in which people have lived. Time and Landscape are, I contend, the essential themes that link (yet are apt to divide) the disciplines of archaeology and social-cultural anthropology. This paper shows how the perspectives of anthropology and archaeology might be brought into unison through a focus on the temporality of the landscape. Rejecting both the naturalistic view of the landscape as a neutral, external backdrop to human activities, and the culturalistic view that every landscape is a particular, symbolic ordering of space, I argue that we should adopt what I call a "dwelling perspective", according to which the landscape is constituted as an enduring record of - and testimony to - the lives and works of past generations who had dwelt within it and in so doing have left their mark.

This recognition of the essential historicity of the landscape, of its enfolding of the temporal process of human life, requires us to re-think the conventional dichotomy between natural and artificial (or 'built') environments. However, the landscape is formed not only through human activity, but also through the activities of non-human animals and through a variety of other biotic, geological

and meteorological processes. Each of these processes has its own form of temporality, so that the landscape can be read simultaneously on many levels. But it is a mistake to suppose that human processes are necessarily of a shorter 'term' than others .

REVENGE OF THE GRAND NARRATIVE : MARXIST PERSPECTIVES IN ARCHAEOLOGY .

Steve Roskams and Tom Saunders (York)

Marxism has been marginalised within archaeology, particularly with the recent ascendancy of the 'posties' movements, despite the fact that many of these alternatives are acknowledged reactions to Marxist theory or practice. This session will attempt to redress the balance. It will start with critiques of the intellectual roots of post modernism, of Giddens and the categories of structure and agency and of the archaeological applications of Shanks and Tilley. This will be followed, in more positive vein, by examination of some fundamental tools of Marxist analysis and of the problems in their archaeological application - the mode of production, class in pre-class societies and the production of culture. Throughout the objective will be to demonstrate that Marxism has a vital role to play in forwarding the intellectual concerns of archaeology in all periods and places.

AGAINST POSTMODERNISM : A MARXIST CRITIQUE: Alex Callinicos

Postmodernism is the name which has come to be associated with the idea that we live in a new kind of world characterised by:

- a) the formation of post industrial if not post capitalist modes of production,
 - b) a break with realist accounts of the relation between thought and the world and
 - c) the collapse of modernism as a form of sensibility and a set of cultural practices.
- In this paper I will seek to show from a Marxist perspective why these claims are false.

HISTORICAL MATERIALISM IS STILL BETTER THAN HISTORICAL SOCIOLOGY: Matthew Caygill .

Anthony Giddens' theory of structuration has attracted growing interest and has been adopted as a theoretical frame work in many fields of study, including archaeology. This paper will present Giddens' ideas on structure and agency in historical change, particularly in his critique of 'historical materialism' and argue that although Giddens' theory marks a considerable advance within sociology it is still necessary to defend historical materialism and will present a critique of Giddens from a Marxist point of view.

BEER CANS AND BITS OF POT BUT NOT A LOTTA BOTTLE: Doug Hawes

This paper will look at the substantive case studies in Shanks and Tilley's "Reconstructing Archaeology". From this examination it will be seen that:

- 1) Shanks and Tilley's own practical interpretative work militates against the use of the theoretical perspectives which they claim to hold and
- 2) Their practical work, in substance, is no different from that carried out under the auspices of structuralist and post-structuralist archaeology and suffers from the same defects.

MARXISM AND THE ANCIENT ECONOMY - THE CASE OF ROMAN BRITAIN:

Steve Roskams

Recent archaeological discussions of Romanisation in Britain have, in the main, ignored Marxist perspectives on the ancient world. This stands in considerable contrast to Marx himself, interested in that world as an integral part of his work on pre-capitalist economic formations. Even among avowedly Marxist ancient historians, basic misunderstandings of his concept of the slave mode of production arise, despite the efforts of de St. Croix to set matters straight.

This paper will contrast the 'tributary' with the 'ancient' mode of production and suggest the process of Romanisation is fundamentally the endeavour of imperial power to impose the latter in place of the former. Archeological material, particularly from ecofactual studies, can be used to chart the success or otherwise of this endeavour. A Marxist perspective is shown to be a more useful way of explaining patterning in this data than the other characterisations of the Roman world current in archaeology.

ECONOMY AND SOCIETY : TECHNOLOGICAL CHANGE IN EARLY MEDIEVAL ENGLAND:

Tom Saunders.

Understanding technological change within pre-capitalist social formations has long been the source of controversy within Marxist circles. Recently the work of the historian Robert Brenner has raised debate over the social basis of economic development in the medieval period. This paper explores some of the implications of this debate for archaeology in an examination of the rise and fall of the Late Saxon wheel thrown pottery industries. By assessing these technological changes within the context of the rise of feudalism, archaeology is shown to offer fresh insights for the Marxist analysis of medieval economy and society.

CLASS, SOCIETY AND HISTORICAL TRANSITION IN THE PREHISTORIC AMERICAN SOUTHWEST : D Saitta

The issue of Marxist theory's applicability - especially a concept of class-to the analysis of pre-class societies continues to be a contentious one in contemporary anthropology. This paper defends the relevance of a class analytical perspective for studying the organisation and history of pre-class societies. The concept of class helps us specify the organisational form of these societies, directs us to some under examined loci of social tension and struggle, and leads to new understandings of historical transitions. The argument is illustrated by drawing on the archaeological record of Pueblo societies in prehistoric west-central New Mexico, USA. The time period of interest - ad 1150-1300- is defined by a historical sequence of population dispersal, social experimentation, and ultimately population aggregation in a few large sites.

STONEHENGE - POLITICS AND PERSPECTIVES : B Bender

The word 'landscape' is back in favour for all the wrong reasons. But landscape has the potential to be political, dynamic and contested. Much more than a reflection of 'living in' the world, people's engagement with the land, their experience of landscape, forms part of the way in which identity - self/group/regional/national - is established. At any given moment people engage differently, depending on who they are, where they stand, their age, gender, class, religion. Since the landscape is multi-vocal, there will be

alternative and contested landscapes. The case of Stonehenge - prehistoric, medieval and contemporary - will be used to substantiate these points.

**THE CREATION OF CULTURE IN PRE-STATE AND NON-STATE SOCIAL FORMATIONS:
Thomas Patterson.**

This paper explores the relationship between the creation of culture and social formations manifesting various forms of the primitive communist mode of production. It argues that the creation of culture as well as cultural diversity or complexity are linked to and expressions of the division of labour. Ambiguities and diversities are potentially greatest in societies with the least pronounced divisions of labour. It also argues that there are various roads of historical development. As a result, the historical development of social formations and the concomitant forms of culture are also multi directional. Furthermore, there is nothing inherent in any form of the primitive communist mode of production that automatically necessitates the appearance of class- and state-formative processes. When these do occur in concrete historical circumstances, they have major transformative effects both within the social formations where they occur and in primitive communal societies that are encapsulated by them. These processes, and by extension, forms of culture are reversible.

***THEORIES OF ARCHAEOLOGICAL LEARNING - WHAT WE KNOW,
AND HOW IT'S TAUGHT:***

David Fine, Nigel Mills, Graham McElearney (Sheffield)

Theories and models of archaeology itself are commonplace, but how do we learn - and teach - archaeology? This workshop is designed to explore this lacuna. In particular these questions:

The nature of archaeological learning
Working from objects and places rather than from concepts
Routines of Discovery
Language of Professionalism
Relations to other disciplines in terms of learning
Archaeologists and non-archaeologists
Archaeology in non-archaeological syllabuses and curricula
Where next?

N.B. numbers for this session will have to be limited to 50. Please indicate your preference at the TAG registration desk in the Bennett Building and please try to stick to that preference on the day.

DOCUMENTS AND ARCHAEOLOGY ; P. Courtney (Leicester)

A great deal has been written about the relationship of archaeology and history at a fairly abstract level, for instance, on the application of the Annales school concepts of time. The session hopes, instead, to concentrate on issues raised when primary historical and archaeological sources are used together. The papers will cover work in Britain and Ireland from the 11th to 19th centuries relating to landscape studies, industrial archaeology and artefacts. Speakers will illustrate both the possibilities and limitations of interweaving archaeological and documentary evidence, as well as the wider issues which such work raises in

historical archaeology. Problems covered will include the limitations of the retrospective method as well as distortions of the past created by the differential survival of evidence.

AT THE INTERFACE: DOCUMENTS AND ARCHAEOLOGY: Paul Courtney

This paper will argue the need for tailor-made programmes of documentary research to accompany medieval and post-medieval field archaeology. What can documents offer the archaeologist? Why are documents so often misused and why are historians and archaeologists so often dismissive of each others disciplines?

URBAN CONTINUITY AND CHANGE: Steph Mastoris

This paper is based on documentary research undertaken as part of the long term post-excavation programme at Nottingham. It will examine the usefulness of the concept of the continuity in the urban context. In particular the distortions caused by chronological biases in the documentary record and by the emphasis on excavating in city centres will be examined.

**RECONSTRUCTING HISTORIC LANDSCAPES FROM DOCUMENTS: TWO CASE STUDIES:
Richard Newman**

This paper will concentrate on the use of documents for the analysis of the landscape in two case studies from Gloucestershire. One will examine their use in the study of common field systems, and the other in the recreation of a medieval landscape and battlefield setting. The two examples will be used to highlight the way in which documents can provide a historical context for archaeological data.

**THE INTER-RELATIONSHIP BETWEEN FIELD AND DOCUMENTARY EVIDENCE : THE
GLYN PITTS COLLIERY SITE IN SOUTH WALES : M Palmer**

This paper will draw on the writers experience of integrated field and documentary work on the history of a major industrial archaeological site in South Wales. The structures and documentary evidence for the Glyn Pitts colliery are remarkably well preserved and allow for a detailed understanding of the establishment and development of long and short term 'sequence' at the site. The ultimate aim is to develop a 'stratigraphy' for the site's development.

**EVIDENCE AND INFERENCE: THE PROBLEMS OF STUDYING A VICTORIAN BACKSTREET
INDUSTRY: Y C Courtney**

Documentary sources for study of diesinkers who were producers of the post-1830 series of brass tokens are meagre or non-existent. However integration of artefact analysis of the tokens used in pubs (die analysis, spatial and temporal distribution patterns), fragmentary documentation from recalcitrant local studies sources and oral evidence, it is possible to show how localised and regionalised marketing networks survived well into the 19th century. It is also possible to suggest an explanation for the anomalous distribution of this type of token.

HOUSES, FIELDS, MAPS AND LISTS : M Johnson

This paper explores the 16th and 17th century English countryside contextually. It argues that the production and use of new house forms, enclosed fields, church interiors, surveying techniques, parks and gardens, maps and practices entailing the out pouring of new forms of document are linked by a common set of

principles. These principles are linked under the arbitrary name 'closure'. Closure is a process which is entwined with new forms of domination and resistance, and which underlies changes in both material culture, document and social practice.

MATERIAL CULTURE AND CULTURAL IDENTITY:

S. Hides (Leicester)

The relationship between material culture and cultural identity is one of the most important issues for contemporary archaeological theory. How people use or have used artefacts in the construction of individual and social identities is also a concern for a number of other academic disciplines.

By bringing together contributions from Anthropology, Ethnography, Archaeology, Art History, Cultural Studies/Sociology, Museum Studies and History, the session will highlight the complexity of the theoretical issues involved. However it will also generate discussion of the themes which unite the diverse methodologies and theoretical approaches that have been applied to the investigation of the artefact's relation to identity.

ROOTS, SHOOTS AND CULTIVATION : REPRESENTING MATERIAL CULTURE IN LEICESTERSHIRE MUSEUM'S INDIAN COLLECTION : D Figuarado

This paper will provide background information to the setting up in 1985 of Leicestershire Museum's unique contemporary Indian arts and crafts collection. It will outline the needs identified within Asian communities, how provision could have an active role in reviving /interpreting material culture. It will describe methods and processes of consultation and fieldwork undertaken by the curator before acquiring the collection from Gujarat, India. This collection has a distinct socio-cultural focus in that it comprises assemblages or units of items which have particular significance, meaning or usage and relate to way of life.

Over 20% of Leicester's population is made up of Asian communities. There is a great need to re-interpret and record material culture to enable people to express and have access to aspects of their cultural heritage. How can primary material be used to raise awareness, self esteem and cultural understanding? I will talk about current networking projects and propose how the collection which is now in storage can be permanently displayed to reflect the city's diversity and acknowledge a presence and history of the Asian communities

AN ARCHAEOLOGY OF CULTURAL IDENTITY : S Hides

The relationship between material culture and cultural identity is a central concern for contemporary archaeological theory. Historically the association of artefact with races, peoples, tribes or cultures has been a persistent feature of descriptions of the past. The relationship has however been extremely difficult for archaeologists to define. In response to this, my paper will suggest :

- 1) That cultural identity has continued to interest archaeologists primarily because of the discipline's historical and cultural context,
- 2) That the search for the means to identify people with artefacts is the result of a peculiarly modern European view of the significance of objects.
- 3) An effective history, a history of the present practice of theorising and defining cultural identity in archaeology will clarify contradictions and problems in existing approaches; and provide new directions for future study.

MATERIAL CULTURE AND CULTURAL IDENTITY: THEORIES AND DEFINITIONS - THE POLITICS OF ETHNICITY: Sian Jones

The concepts of "ethnicity" and "ethnic Identity" have been claimed to be central to many of the conflicts of the contemporary world. As with the related concept of "tribalism", they have often also been ascribed an explanatory role in the interpretation of archaeological data.

Over the last three decades there has been considerable debate about the nature of ethnic groups in the contemporary world, but the relationship between the particular theoretical position of the author, and the definition of ethnicity adopted, has not been fully analysed. Often the basis of the definition is lost in a concept deriving from emotive and political power relations in the contemporary society.

Following the widespread abandonment in the U.K. and elsewhere, of the culture/historical paradigm and its associated simplistic concept of ethnicity for archaeological explanation, the development of more refined theoretical approaches for the analysis of ethnic processes in archaeology has been fragmentary. This paper will present a review of the literature which attempts to define ethnicity, in order to assess whether all, or part, of this literature offers a useful basis for the formulation of a theoretical framework, which would allow fruitful archaeological analysis to be carried out. To do so it will be necessary to explore the concepts and vested interests which commonly make up the substance of notions of ethnicity.

STYLISTIC VARIATION IN AUSTRALIAN ROCK ART: Robert Layton

Variation in space: results of computer analysis of similarities and dissimilarities between rock art sites across Australia, especially in relation to the geographical distribution of geometric and silhouette styles.

Variation in time: continuity and change in the use of these styles, manifested in the location of sites (e.g. open air vs. rock shelter), presence or absence of compositions, motif frequencies at particular sites, in relation to available C14 and other dates.

Evidence for the cultural contexts of rock art:

- (a) contemporary contexts for the production of geometric and silhouette styles; do these contexts of use have archaeologically detectable characteristics?
- (b) archaeological evidence for changes in social organization and possible correlations with change in the distribution of rock art styles.

THE PEOPLING OF LONDON : N Merriman

The paper will look at the issues surrounding the 'Peopling of London Project' which is examining how archaeologists can address such issues as immigration, and the cultural identity of Londoners by providing a long term perspective.

By beginning at the end of the last Full Glacial, when there was probably no occupation in the area we can show that we are all immigrants of some sort. By looking at the Roman city and its cosmopolitan nature, we can make links with later periods over issues such as slavery. By linking up with recent social history, we hope to lead people to question what it means to be a Londoner, and dispel the notion that there are "original Londoners" and that immigration is a recent 'problem'.

HOUSEHOLD CHOICES AS CULTURAL MATRIX: Tim Puttnham

'Home is a fundamental cultural nexus, and a complex one: simultaneously encountered, envisaged and enacted. This paper asks what significance may be accorded the material culture of contemporary domestic environments. May 'signs of the times' be read in the affordances of mass production and its models of consumption, or is the 'meaning of things' primarily constituted through using photography and interviews conducted for the Household Choices Project, a collaborative exercise in contemporary documentation. The paper argues for a re-instatement of the problem of 'tradition' in debates about contemporary relations of consumption in a way which has implications for the study of material culture in a more general sense.

LANGUAGE, MATERIAL CULTURE AND IDENTITY IN ANGLO-SAXON ENGLAND :

J Hines

The Late - Roman and Early Medieval period in Germanic Europe is well suited to research into the relationship of language change and cultural history, not only because of the richness of relevant evidence and the tradition of scholarly research, but also because fundamental stages in the evolution of state societies and national identity are being passed in this period. This Paper will offer a brief survey of the possible methods, scope and parameters for future research.

FOLKS AND FELLOWSHIPS; SIGNS, SYMBOLS AND SOCIO-IDENTITIES : A Woolf

See Addenda

STONED INTO SILENCE? - HERITAGE AND DISCOURSE :

J. CARMAN (CAMBRIDGE)

This session will address issues concerning the nature and location of the phenomenon called 'Heritage' in contemporary thought. Discussion will focus on 'valuation' and questions of 'ownership' and 'control'. The emphasis will be on new ways of thinking about and understanding the phenomenon rather than the usual technicalities of conservation, museums and presentation.

ABOVE AND BELOW DISCOURSE : *RUBBISH THEORY*, 'HERITAGE' AND SILENCES:

J Carman

Michael Thompson's book 'rubbish theory' divides things into three categories. 'Transient' items are those of which value is declining over time; 'rubbish' is those items of nil worth; and 'durable' items are those of which the value increases over time. When durable items reach the level of pricelessness - that is when they are so valuable that the value literally cannot be assessed in monetary terms - they are simply withdrawn from circulation and preserved. The heritage exists in this durable category.

This category is also the realm of the 'public domain' - a special arena of consciousness in which special things reside. The heritage also resides here - no longer part of the everyday world but somewhere 'up there', remote from ordinary things.

This separation of heritage from the ordinary, everyday world has consequences for the way we think and talk about it. While 'ordinary' objects operate at level below that of discourse, and thus provide a useful means by which the 'silenced' can express themselves, heritage occupies a conceptual space above discourse - stunning us into silence in its presence.

LAND RIGHTS IN THE ENGLISH COUNTRYSIDE : ENGLISH HERITAGE AS ABORIGINAL HORDE : A Sinclair

The question, " who owns Stonehenge?", raises a series of interesting dilemmas in heritage management. On the one hand, English Heritage 'owns ' a number of major monuments and has control over who has access to these monuments - implying that these sites are the *property* of English Heritage. On the other hand English Heritage acts as the guardian of these sites for the nation, suggesting that we - the general public- are the rightful owners. There seems to be a contradiction in the concept of property here.

This paper will look at the contradiction from the perspective of the debates over land rights and th aboriginal hunter- gatherer peoples. In these debates it has been argued that the relationship between these people and 'their' land is not so much a case of ownership (and exclusion of access) to a tract of three-dimensional land, as a matter of control of the appreciation of this land. Land in this situation is not personal property but inalienable wealth. There is much that we can learn from these studies about the potential relations between land, 'property' and the importance of the appreciation of a 'view'.The final part of the paper reflects on issues raised by other ideas of property and the situation of English Heritage. Whose view are we trying to control?

CALM AND COLLECTED OR HOW MOVEABLE OBJECTS BECOME HERITAGE : S Pearce

Carman has drawn attention to the division of objects into the three categories of 'durable', 'transient' and 'rubbish' and shows that heritage objects belong within the durable class. This paper suggests that it is the act of collecting which produces the transformation from 'transient' and 'rubbish' to durable, and consequently the shift of material into the heritage mode. This is true across the whole heritage world and includes museums, private collections and the National Trust.

It is therefore important to understand how the collecting process operates as the location of change through which heritage is produced. I shall suggest that collecting is a metaphorical inscription on the world, that it has to do with notions of 'play' and 'closure' and that it operates within the obscure zone between inherited ideas of cultural value and the deepest levels of individual personality. Collections, both private and public, are the extended self and the act of assembling or viewing is used to create a romantic metaphysic of the self in the world.

EQUIVALENTS AND CHANCE : BRITISH ART AND ARCHAEOLOGY IN THE 1930'S : C Evans.

Producing images that are still startlingly new, during the 1930's the avant garde drew upon archaeological sources. Unlike so much work produced at present, archaeology was not so much appreciated for sentimental purposes nor sites merely employed as signatures of locality. It provided grist for surrealist notions of 'chance', was a vehicle for the introduction of formal modernist elements into landscape, and served as a national counterpart to international ethnographic primitivism.

This is an alternative dialogue with the past, one not dictated by the discipline's conventions. This paper explores how archaeology was drawn upon as an artistic resource and its background interaction with popular imagery (e.g. travel guides).

HERITAGE AND THE CRAFT CONNECTION : C D De Roche

One essential characteristic of 'the heritage' is continuity with the past. This paper will explore that continuity in an area often utilised by archaeologists as a source of analogy to apply in explaining material culture - the area of the craft traditions.

Examples of the effects of both the innovating and conservative tendencies of artisans will be related to the resulting craft products and their possible interpretations. Recent attempts to recreate the past and to re-enact historical events are heavily dependent on an understanding of the crafts for their authenticity. Attitudes towards current craft work influences the value and importance we attribute to such work in times past, the products of which are the material evidence of our heritage.

MANAGEMENT AND NATURE: RETHINKING ENVIRONMENT/HUMAN INTERACTIONS IN ARCHAEOLOGY:
Tony G Brown (Leicester).

This session will aim to cover some of the theoretical aspects of Environmental Archaeology, and in particular how it functions in relation to implicit and explicit models of cultural/resource/environment interactions. Important questions in Environmental Archaeology include; how do we differentiate between natural environmental change and human impacts? What do we mean by the management of natural resources in Prehistory? What is the role of environmental change in social and cultural change observed in the Archaeological record? What independent evidence can Environmental Archaeology provide which will unambiguously indicate the constraints on resource utilisation in the past. What has been the role of natural events and hazards in changing the subsistence base. Can we make models based upon assumptions concerning mental processes including perception, which will help us to understand the evidence we have of human reactions to environmental change? In the light of increasing concern about direct and indirect human degradation of the planet what do Archaeologists have to contribute? Will we go on pushing anthropogenic ecological impacts further and further back into Prehistory and if so what does this mean in terms of relationships between humans and nature?

These theoretical concerns have practical implications for the relationship between environmental Archaeologists and cultural archaeologists and funding. Must environmental and cultural archaeologists compete for funding or can they cooperate on projects or overall archaeological significance? Archaeology is included as one of the research areas in several new initiatives on global climate change (e.g. PAGES, TIGER, INQUA Palaeohydrology Commission etc) but will many archaeologists be involved? The papers in this session address some of these questions from two perspectives. One is from a management of natural resources angle, and the other concerns methods and specialism within Environmental Archaeology.

THE ECODYNAMICS OF HUMAN-MODIFIED LANDSCAPES: DISTURBANCE REGIMES AND THE EVOLUTION OF SPATIAL AND TEMPORAL HETEROGENEITY: James McGlade

The reconstruction of the palaeo-environment, along with patterns of resource exploitation and land use, constitutes a primary concern of environmental archaeology. Though dedicated to understanding the complex array of processes that underwrite the ecology of long-term change, archaeologists conventionally employ linear deterministic models in their studies of human/environmental interaction. Additionally, this causal structure is generally predicated on assumptions which stress the maintenance of equilibrium and an overly simplistic view of concepts such as adaptation, ecological succession and stability. By way of contrast, research in the natural sciences over the past two decades has demonstrated that ecological systems are imperfectly understood within an equilibrium-centred framework; indeed, disturbance regimes e.g. fire, are seen as important structuring elements in landscape evolution. Much of this work has shown that ecological systems are often in transient states, are inherently nonlinear, and are metastable; i.e. their evolution is characterised by two or more stable domains of attraction. Within these stable domains, the system may fluctuate wildly but so long as it remains within the boundary of the domain, it is resilient; it is thus able to persist despite a high degree of disturbance. By and large these types of open systems are maintained far-from-equilibrium, and can demonstrate unpredictable qualitative restructuring as a consequence of the self-reinforcing capabilities of feedback linkages.

The proposed session will address some of the implications of these findings for a better understanding of the evolutionary structuring of human-modified landscapes. For example, it is of crucial importance that we identify the potential ecodynamic pathways that lead to the persistence and longevity of human/land interaction, as well as attempting to unravel the relationship between disturbance and the evolution of spatial and temporal heterogeneity

HUNTER-GATHERER MANAGEMENT OF NATURAL RESOURCES AND THE IMPLICATIONS FOR THE MESOLITHIC SOCIETIES IN EUROPE: Marek Zvebil

the objective of this contribution is to assess, on the basis of ethnographic evidence, the extent to which hunter-gatherers are capable of altering their natural environment, and to summarise the practices which are employed by hunter-gatherers in this activity. How can we identify some of these practices in the archaeological/palaeoenvironmental record? The archaeological and palaeoenvironmental evidence for the postglacial hunter-gatherer societies in Europe is examined for indications of interference in the natural environment and for the development of "cultural landscape".

HAZARD FREQUENCY AND RESPONSE IN COASTAL ENVIRONMENTS: Martin Bell

Long term coastal environmental trends and individual stochastic events are considered in terms of their effects on past human communities. It is argued that there is a need to focus more explicitly on the way in which these changes may have been perceived and the range of responses to which they gave rise. Of particular importance in terms of hazard perception is the frequency of individual events which may variously be calculated from instrumental, ethnohistorical, archaeological and palaeoenvironmental evidence. Each of these sources provides evidence of hazards on different timescales and with contrasting levels of precision.

These issues of timescale, recurrence and response will be considered in the context of storm incidence and its possible implications for the Welsh coastal Mesolithic and the relationship between marine transgression/regression episodes and human settlement and activity in the Severn Estuary during prehistory.

PERCEPTIONS AND MANAGEMENT: SOME THOUGHTS ON RECONSTRUCTING PAST ENVIRONMENTS AND ECONOMIES: Yannis Hamilakis

Environmental archaeologists very rarely take into account the principle, that the decision making process in environmental management and agricultural practice is mediated by people's perceptions of the environment in its different aspects and forms, which are socially, spatially and temporally specific. Therefore, in most of their attempts to explain changes in the agricultural management, only purely environmental/economic factors are employed, whereas the interrelation between the above factors and the conceptual ones, is missing.

The aims of this paper are:

- (a) To show how different perceptions of the environment affect economic decision making processes.
- (b) To emphasize the importance of exploring the relation between "real" and "perceived" environments and to discuss possible methodological pathway to that end.

Overall, using the above example, the author will try to show that emphasis on the dichotomy between ideological and material factors, which dominates, even today, most of the archaeological theoretical debate, is an obstacle, leading to a fragmented image of the past.

MANAGEMENT, RISK AND CULTURAL CONTROLS ON ENVIRONMENTAL ACTIVITY: A G Brown

Since the 1960s environmental archaeology (as an area of enquiry rather than a method) has been based firmly on ecological theory. Opportunistic actions have been seen as random noise superimposed on a base of patterned activity. In this necessarily functionalist view, Prehistoric peoples, as the most superior of animals, exhibit adaptive strategies, foraging strategies and niche occupancy.

While this is commonly accepted for the Mesolithic and before, it has not been applied to post-Roman Britain - in between ecological theory competes with socio-cultural theory. The current way of avoiding this issue is to take refuge in environmental management. What this encompasses varies from ecological truisms to the complexity of Feudal estate management. Two important questions must, however, still be addressed; the role of environmental perception and risk, and whether the nature of the data which can be used as criteria for management is cultural or environmental. This paper discusses these two questions in relation to environmental change, including flooding and the origins of the cultural landscape.

In conclusion, the question is posed as to whether we have thrown out the eco-baby with the environmental determinist bathwater. The role of environmental archaeology is not just to document the human impact and interpret it all as environmental management, but to investigate human response to the changing palimpsest of environmental opportunities and its relationship to cultural factors such as innovation. If environmental management is to mean anything in archaeology, it must be viewed as a cultural transformation and not as an ecological model.

ARCHAEOLOGY 2000: DARK RIDES OR GREEN FUTURES? Christopher Sparey-Green

Much of the debate in British Archaeology at present seems to concern issues only of organization and funding> The purpose of the profession seems to be conceived purely in terms of providing a service to the developer at the market price, competing for those projects dictated by the constraints of planning regulations on development. Any search for a higher purpose does not go beyond providing data and material for the 'Dark Rides' of the Heritage industry, a packaging of the past attractive as entertainment or painless education.

Only to the extent does Archaeology address issues of the present of what of environmental concerns and grim predictions for the future. Should we deliberately research into such topics as human impact on the ecosystem in the past, population change and conflict, the collapse of complex societies? Should Archaeology inform the environmental debate and, if necessary, present unpalatable and unattractive truths about our past, whatever the consequences for the market?

THEORETICAL PROBLEMS WITH ENVIRONMENTAL EXPLANATION IN ARCHAEOLOGY: A
VIEW FROM THE BALTIC: Liliana Janik

Environmental change is often put forward as the cause of changes in food procurement and food production. This paper discusses three problems with this theory. First is the question of choice, namely how and why particular communities decided to choose to exploit the environment.

Second is the problem of the relations between human beings and the environment, usually termed nature. Do these relations differ between hunter-gatherers and early farmers? Are the anthropological models which usually form the basis for investigating these relations relevant and sufficient given the nature of the archaeological material?

The third problem is the relationship between environmental reconstruction and archaeological reconstructions of the life ways of hunter-gatherers and early farmers. These questions will be discussed in the light of recently discovered archaeological examples from Latvia, Lithuania, Estonia and northeastern Poland.

