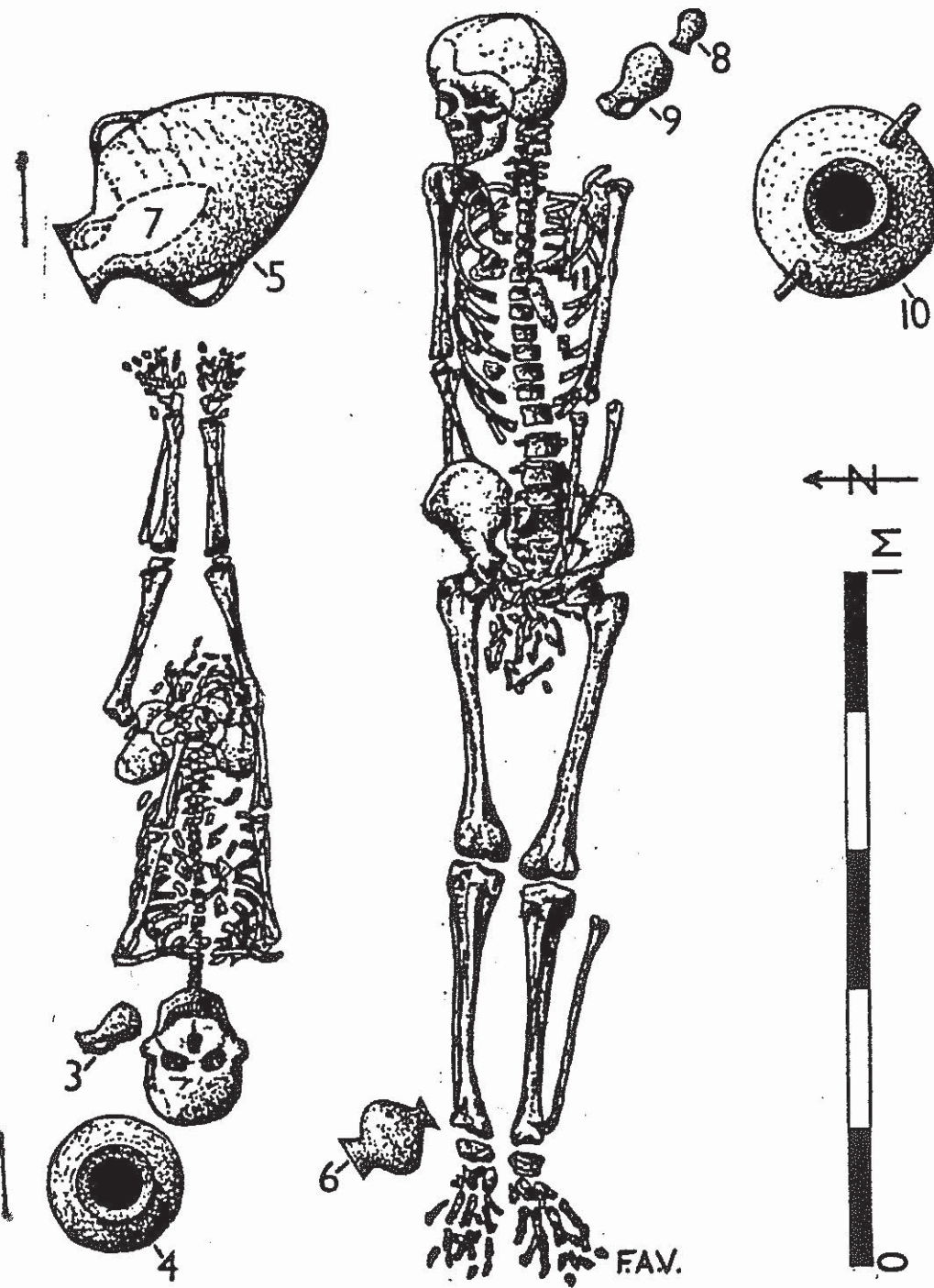


86 TAG 86 TAG 86 TAG 86 TAG 86 TAG 86 TAG

WINFRID & NICOLA SCUTT  
1, HILL COTTAGES  
BRIXTON TORR, PLYMOUTH  
DEVON PL8 2BE  
PLYMOUTH (0752) 880279

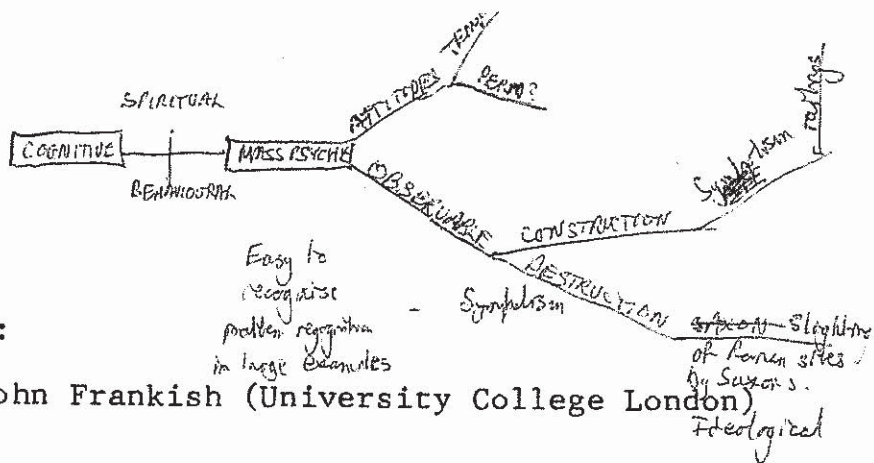


T  
A  
G  
8  
6

UNIVERSITY OF LONDON UNION

15-17<sup>th</sup> DECEMBER

86 TAG 86 TAG 86 TAG 86 TAG 86 TAG 86 TAG



TAG 86

University of London Union, Malet St, London WC1  
15th-17th December 1986

TAG 86 ORGANISERS:

Nick Thorpe and John Frankish (University College London)

The organisers would like to thank the following for their help in arranging this year's conference:

Prof. J. D. Evans (Institute of Archaeology), Prof. J. N. Coldstream (UCL), Dr P. Burnham (UCL), Pat Connolly (Institute of Classical Studies), Peter James (UCL), Franco Vartuca (Institute of Archaeology), Julia Clayton (Kings College London), Amanda Rumley (University of London Union), Peter Ball (UCL), William Ford (UCL), Keith Andreotti (UCL), Anna Burnet (UCL), Judy Medrington (Institute of Archaeology), Louisa Gingell (UCL) and Natasha (Institute of Archaeology).

Behavioural - responses to people & environment  
Spiritual - love, hatred, etc  
Mental - rationality, practical influence

} Internal understanding

Mass psychology can follow from a social action. The political circumstances and manoeuvring against A ~~state~~ for Catholics followed among protestants England followed these high church dislike

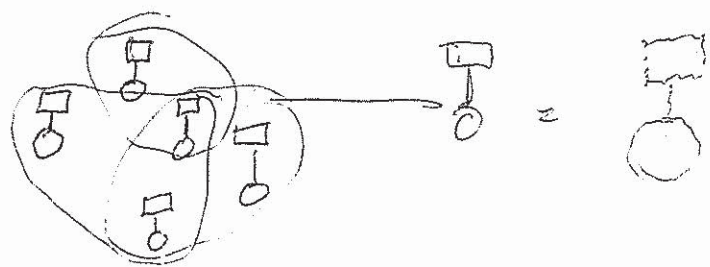
Richard Braithwaite  
- in Philosophy of Science.

Mood for War  
Decorative styles / Mood of Africa + colour

Tired / Bored of Empire  
Aggressive, unbridled revival of  
Very large nations eg. Germany + Japan

Does Cognitive Map include shared attributes shared by groups of people.

The Mappa - shared



Guides - Archaeological Constraints.

FINAL PROGRAMME

Monday 15th December

Manning Hall Site and Non-site Analysis and the Interpretation of Field Survey Data  
Organisers: S. Keay & J. Schofield  
Chair: R. Foley  
2.00 - 3.30 pm J. Schofield: Archaeological 'Sites' and Short-sighted Archaeology: an Introduction  
M. Wagstaff: The Archaeological 'Site' from a Geographical Perspective  
J. Richards & R. Entwistle: The Physical and Chemical Properties of Soils as an Aid to Functional Interpretation  
S. Keay & M. Millett: The Ager Tarraconensis Survey, Eastern Spain  
3.30 - 4.00 pm -Tea Break  
4.00 - 5.00 pm G. Astill & W. Davies: East Brittany Survey - Oust/Vilaine Watershed  
M. Bowden & V. Gaffney: Skimming the Surface or Scrapin the Barrel: Observations on the Nature of Surface and Sub-surface archaeology  
M. Allen: Finding sites and Analysing the Landscape: A Geographical Approach to Archaeological Problems  
DISCUSSION

Badminton Court Expert Systems and Archaeological Classification

Organiser: S. Ross  
Chair S. Ross  
2.00 - 3.30 pm S. Ross: Expert Systems in Archaeology: Roman Potter as a Case Study  
K. Baker: Archaeology and Expert Systems: Some Problems Encountered During Practical Work  
T. Taylor: Experts: Archaeologically Unique Objects and Supertaxonomy  
3.30 - Tea Break

DINNER: 5.30 pm at Palms Restaurant, ULU

Tuesday 16th December

Manning Hall Transcending the Palace and the Polis: Field Survey in Greece

Organisers: L. Foxhall and H. Forbes  
Chair: L. Foxhall  
9.45 - 11.00 am C. Gaffney: Archaeogeophysics and Field Survey: Context or Contention?  
P. James: The Application of Mineral Magnetic Analysis to Soil Studies in Methana  
J. Prag: How Diagnostic is Pottery from Surface

Survey? Archaeologist's Flair and Chemist's Wizardry

- 11.00 - 11.30 am - Coffee Break  
11.30 - 1.00 pm R. Osborne & L. Foxhall: Document or Artefact: Inscriptions in the Context of Field Survey  
J. Bintliff & A. Snodgrass: Off-site scatters - a Detailed Comparison of Greek Survey Data and from elsewhere in Europe and the Eastern Mediterranean  
H. Forbes : Commando Anthropology: Ethnoarchaeology and Field Survey  
DISCUSSION

Badminton Court Now that the Past is Gone - Some Contemporary Approaches to Swedish Prehistory

- Organiser: T. B. Larsson  
Chair: T. B. Larsson  
9.45 - 11.00 am M. Malmer : Archaeological Typology - Gone or Coming  
E. Arwill Nordbladh: Oscar Montelius and the Liberation of Women  
DISCUSSION - R. Bradley  
11.00 - 11.30 am - Coffee Break  
11.30 - 1.00 pm H. Lundmark : The Growth of Hierarchies in Low-Centralised Societies - Some Archaeological Problems  
M. Widgren : Geographical Approaches to Field Systems in Swedish Prehistory and Early History  
DISCUSSION - R. Bradley

LUNCH: 1.00 - 2.00 pm

Manning Hall The Archaeology of Context and Structured Deposition

- Organiser: N. Thorpe  
Chair: N. Thorpe  
2.00 - 3.30 pm B. Attewell & V. Denham: The Proper Study of Context Practice and Theory  
N. Thorpe : Putting Meaning into Context  
M. Johnson : The Domestic Unit in Rural England, 1400 - 1700 AD  
C. Richards: Rub, Rub, Rub; Scrub, Scrub, Scrub: Rituals of Everyday Life  
3.30 - 4.00 pm - Tea Break  
4.00 - 5.00 pm J. Thomas : West Kennet in Context  
A. Herne : Monuments, Material Culture and Social Form: Bandkeramik and Beaker at Les Fouaillag  
DISCUSSION

Badminton Court Island Archaeology - Microenvironments and Macrosystems

- Organiser: J. Frankish  
Chair: J. D. Evans  
2.00 - 3.30 pm J. Frankish & J. Lambrianides: Island Interaction: The Case for Piracy in the Aegean Bronze Age  
M. Patton : Cultural Change in an Insular Context: A Channel Island Case Study  
J. G. Evans: Island Field Systems in Western Britain  
DISCUSSION  
3.30 - 4.00 pm - Tea Break

Badminton Court Miscellaneous

- Organiser: TAG 86 Organisers  
Chair: J. Frankish  
4.00 - 5.15 pm K. Dark : A Method of Classification  
O. Ortman : Problems and Possibilities when Working with an Ethnical Concept in Archaeology  
T. Steele : Evolutionary Perspectives in Comparative Psychology: Language and Society in Hominid Evolution  
DISCUSSION

DINNER: 5.30 pm at Palms Restaurant, ULU

Wednesday 17th December

Manning Hall Towards a Cognitive Archaeology

- Organisers: J. Bell and C. Peebles  
Chair: J. Bell  
9.45 - 11.00 am C. Renfrew: The Mental Map as a Theoretical Entity  
E. Melas : Emic Approach, Empathy and Objectivity in Archaeological Research  
C. Peebles: Rooting Out Latent Behaviourism in Prehistory  
11.00 - 11.30 am - Coffee Break  
11.30 - 1.00 J. Bell : Methodological Individualism in Cognitive Archaeology  
M-S. Lagrange: Knowledge Integration Processes within the Framework of Expert Systems: Some Epistemological Issues Raised by a Case Study in Seldjukid Iconography  
E. Zubrow : Cognition and Generative Grammar: an Archaeological Case Study  
DISCUSSION

Badminton Court This is Medieval Archaeology?

- Organiser: D. Brown  
Chair: D. Brown  
9.45 - 11.00 am S. Driscoll: Texts as Artefacts: Implicit Meanings in the Book of Deer  
S. Roskams : Medieval Towns and the Social Definition of Space - the Example of York  
O. Lunde : The Medieval Town as a Single Site  
11.00 - 11.30 am - Coffee Break  
11.30 - 1.00 pm C. Gerrard : Central Places in Medieval Somerset  
A. Vince : Problems of Reconstructing Trade Patterns from Archaeological Data  
P. Graves : Literacy and the Liturgy: Religious Reading and Practice in Medieval England

LUNCH: 1.00 - 2.00 pm

CONFERENCE ENDS

## ABSTRACTS

### SITE AND NON-SITE ANALYSIS AND THE INTERPRETATION OF FIELD SURVEY DATA

John Schofield (Dept. of Archaeology, Univ. of Southampton): ARCHAEOLOGICAL  
`SITES` AND SHORT-SIGHTED ARCHAEOLOGY: AN INTRODUCTION

In the introduction to this session, I shall attempt to define three main problems:

1. The question of why we need to isolate `sites` at all - assuming for the moment that `site` is an archaeological correlate for the settlement unit. Is there not a viable alternative which places an emphasis on the distribution of artefacts rather than the discovery of `sites`?

2. The question of chronology, as the whole concept of `site` is in fact a declaration of temporal unity within a scatter. Can we really talk in terms of `dating` surface scatters? Might we suggest that the class of material is the all important variable upon which chronology depends? Do post-prehistoric ceramics for example allow a finer chronology to be used than may be the case for chipped stone?

3. The final problem which we need to discuss is whether a standard methodology might not be advantageous for the interpretation of regional land-use systems. One of the major advantages of field survey over more traditional methods of archaeological recovery is that it demonstrates the range of human adaptations between regions. Surely this is only really of value when comparisons can be made between regions and hence invariably between projects and project designs. If five projects are compared and all apply very different ideas of what represents a `site`, then any further analysis is made very difficult. Furthermore we need to be aware of what our results actually represent. Is there a standard relationship between surface and sub-surface archaeology, or will the geomorphology of an area dictate the overall pattern of settlement?

The main idea therefore in this brief presentation is to `set the scene` for the various papers and discussions which are to follow, raising a number of points which I consider may be worthy of further discussion towards the end of the session. My intention will be to raise points which are particularly significant in terms of the cross-cultural emphasis which this session has tried to produce.

Malcolm Wagstaff (Dept. of Geography, Univ. of Southampton): THE  
ARCHAEOLOGICAL `SITE` FROM A GEOGRAPHICAL PERSPECTIVE

Despite the obvious geographical connotations of site and its widespread use by geographers there has been almost no writing about it either as a concept or as a component of landscape. Meaning has been assumed and apparently taken for granted, though definitions are offered in the standard geographical dictionaries. Accordingly, this paper will advance a largely personal view of how geographers have used the term site and what operational steps have been taken to define it. Much seems to depend on the nature of the problem being investigated and the choice of an appropriate scale on which to examine it. For geographers there may be the additional complication of their favourite source, namely the topographic map. Throughout the paper reference will be made to the author's own experience

in trying to study aspects of human, chiefly rural settlements.

Julian Richards (Trust for Wessex Archaeology) & Roy Entwistle (Dept. of Archaeology, University of Reading): THE PHYSICAL AND CHEMICAL PROPERTIES OF SOILS AS AN AID TO FUNCTIONAL INTERPRETATION

Comparative geophysical and geochemical data recovered from surface lithic scatters in the Stonehenge area have facilitated the construction of a range of site formation models based on recoverable patterns of accumulation and discard.

This paper will demonstrate the capability of such data to provide an independently valid assessment rather than merely acting as an adjunct to solid artefactual data.

Simon Keay (Dept. of Archaeology, Univ. of Southampton) & Martin Millett (Dept. of Archaeology, Univ. of Durham): THE AGER TARRACONENSIS SURVEY, EASTERN SPAIN

The aim of this survey is to study the development of the settlement pattern in the hinterland of Tarragona, North-eastern Spain, throughout antiquity. Especial attention is being paid to the impact of the foundation of the Roman Provincial capital of Tarraco on the distribution and intensity of the pre-Roman settlement pattern. Given the large size of the selected area (893.15 sq km), the area of survey is being systematically sampled by six 1 km wide transects. These run from W to E at 3 km intervals, taking in contrasting topography and vegetation between Tarragona and Sierra De Miramar.

At the moment, most field-surveys in the Western Mediterranean are content to identify sites subjectively on the basis of occasional potsherds, or what `seems` to be a lot of pottery. In the Ager Tarraconensis, the chronology of certain categories of pottery dating to between the third century BC and the sixth century AD are well defined. Thus, the pottery was divided into four broad chronological categories. The aggregate picture was used to establish the background `picture` of pottery loss throughout the transect. Abnormal densities of pottery for each period were then separated out. These are conventionally defined as `sites`, and are calculated by measuring the density of pottery in each period as an octile value. This is similar to the arithmetic, except that it does not allow the density pattern for the transect to be distorted by excessively high densities - or its total absence - in certain fields. In this way for instance, more ephemeral sites of less dense Iberian pottery are not obscured by more substantial sites of far denser Roman Republican Amphorae.

Grenville Astill (Dept. of Archaeology, Univ. of Reading) & Wendy Davies (Dept. of History, UCL): EAST BRITTANY SURVEY - OUST/VILAINE WATERSHED

This project is designed to investigate the relationship between landscape, land-use and settlement in eastern Brittany, during the last two thousand years; it is focussed on the communes of Ruffiac, Treall, St-Nicolas-du-Tertre and Carentoir, as a core for intensive study (192 sq km), while the seven communes surrounding the core will be sampled to include the whole of the Oust/Vilaine watershed. The project is multidisciplinary, and draws upon the expertise of geographers, soil scientists and toponymic and architectural specialists, but primarily involves the study of published and















faculties (such as spatial judgements and language acquisition). Such an approach demands that the functional architecture of the brain and necessary mental limits be taken into account. Within these functional limits, representations can be treated as 'real', and knowledge can be counted as objective and itself a product of evolution. Finally, contemporary constructs about prehistory can be judged against products of a real past that, to quote Collingwood, are "encapsulated in the present". In this way the triad of mind, knowledge and history can be reincorporated in the notion of prehistory.

James A. Bell (Dept. of Philosophy, Univ. of South Florida): METHODOLOGICAL INDIVIDUALISM IN COGNITIVE ARCHAEOLOGY

Prehistory commonly means history without the benefit of written records. That fact has encouraged archaeologists to sidestep, or at least de-emphasize, speculation about the thoughts of prehistoric peoples. This tendency has dovetailed with the holistic approaches to explanation that dominate the social sciences, i.e., with the assumptions that super-human forces underlie social structure and that humans have no cognitive agency over them. To postulate theory about static structure or dynamic change with holistic method is to search for forces transcending humans. Cognitive archaeology, the goal of which is to make statements about the thoughts of prehistoric people, rests on the assumptions that thoughts do have agency - they are not just reflections of, or 'superstructure' upon, underlying forces - and that statements about groups are best understood when reduced to statements about individuals ~~composing~~ groups. These and related ideas constitute individualistic method, or methodological individualism. To offer new theories about prehistoric people, then, cognitive archaeologists are breaking away from holistic method and embracing individualistic method. That drama and its ramifications are the focus of this paper.

Part I outlines methodological individualism and contrasts it with holism. Numerous examples are offered along with a discussion of the advantages and disadvantages of each. Though different and inconsistent, it is not fruitful to become entrenched in a debate about the supposed truth or falsity of each method; like all methodological views, they are tools and not empirical statements. The discussion will thus focus on how and in what contexts they are worthwhile assumptions for theory building. Part II is devoted to identifying both the specific benefits of methodological individualism for cognitive archaeology and the limits it imposes on cognitive archaeology. While statements about thought can be made, and a partial structuring of cognitive processes is conceivable, it will not be possible to 'reconstitute' prehistoric minds. It is not just that the available record is scant or non-existent - which it is - but that it would breach the limits of individualistic method. Individualistic method will also be contrasted with empathetic method. They differ markedly despite sharing some common purposes. The conclusion will offer practical guidelines for employing individualistic method, speculate on the ramifications of it on other areas of theoretical archaeology, and implore archaeologists to use it and holistic method as helpful tools rather than impose them as dogmas.

Marie-Salome Lagrange (CNRS, Paris): KNOWLEDGE INTEGRATION PROCESSES WITHIN THE FRAMEWORK OF EXPERT SYSTEMS: SOME EPISTEMOLOGICAL ISSUES RAISED BY A CASE STUDY IN SELDJUKID ICONOGRAPHY

The experiment described here has been conducted in collaboration with Monique Renaud, research engineer in computer science, from the Laboratoire d'Informatique pour les Sciences de l'Homme (LISH), CNRS, Paris. The inference engine with which we have worked is SNARK by Pr. Jean-Louis Lauriere, from the University of Paris 6 (see Lauriere 1986). This system, recently commercialised on IBM PC, is implemented at the Centre Inter-Regional de Calcul Electronique (CIRCE) at Orsay.

Expert systems have recently been used to simulate archaeological reasoning in various case studies (see Lagrange and Renaud 1983 and 1985, and Gardin et al. 1986). The purpose of the present application is to model cumulation (integration) processes in the case of a synthesis of several divergent interpretations published a propos of the same archaeological object.

Data used for this experiment are six already existing expert systems, reproducing different iconographic interpretations of an engraved Seldjukid stele (13th century AD, Konya, Anatolia). The rough application of all six rule bases, merged into one, to the common fact-base (i.e. approximately 80 rules, applied to a 160 lines fact-base) functions without mishap, but produces no new information whatsoever.

The operations needed in order that the cumulated expert - called SUPERIKON - might synthesise information, and thus produce additional interpretations, are described. An automated 'conciliation' between divergent interpretations is proposed. This example involves the building up of an elaborate association network between concepts in order to rationalise decisions relative to the compatibility (or incompatibility) between concepts. The elicitation of such networks is not only necessary for the sake of AI procedures, but also a convenient manner to measure the reliability of archaeological inferences, in a context of plausibility and controversy.

(Refs: Gardin, J.-C. et al., 1986 - Systemes experts et sciences humaines. Le cas de l'Archaeologie (Eyrolles: Paris, in press). Lagrange, M.-S. & Renaud, M., 1983 - "L'interpretation des documents figures en archaeologie et histoire de l'art", in Image et Ceramique Grecque (Publication de l'Universite de Rouens, No. 96). Lagrange, M.-S. & Renaud, M., 1985 - "Intelligent knowledge-based systems in archaeology", Computers and the Humanities 19. Lauriere, J.-L., 1986 - "Un langage declaratif: SNARK", Technique et Science Informatiques 3.)

E. Zubrow (Dept. of Anthropology, SUNY, Buffalo): COGNITION AND GENERATIVE DESIGN GRAMMAR: AN ARCHAEOLOGICAL CASE STUDY

This paper considers some recent advances in cognitive studies which are relevant to archaeology. Presently, there are two distinct approaches. One is based upon linguistics and cognitive psychology while the other is based upon Artificial Intelligence and modelling human cognitive processes by machines. From the former this paper examines Lakoff on categorisation and irregularities and Schank and Abelson on scripts and understanding. From the latter, Hopfield's linear threshold functions, Boltzman's teachable



that applications of this sort have dual implications because they mark a shift away from narrative presentation of historic data and also bring the documents and techniques under scrutiny. This, in turn, could be of benefit to the prehistorian.

Alan G. Vince (Dept. of Urban Archaeology, Museum of London): PROBLEMS OF RECONSTRUCTING TRADE PATTERNS FROM ARCHAEOLOGICAL DATA

Evidence for the transport of artefacts may often be taken to indicate cross-cultural activity, whether it be on a very local or an international scale. The discovery of 'imported' objects into an area can be taken as evidence, for, amongst other things, migration, invasion or commerce. In medieval archaeology there is often enough data of sufficient variety to allow a more considered, and thus hopefully an accurate reading of such evidence.

However, the different types of evidence available to the medieval archaeologist are not always complementary. What the archaeology suggests the documentary evidence may refute, and vice versa. Historical sources are valuable for recording the mechanics, as well as the items, of movement and trade and thus provide clues by which to interpret the archaeological evidence.

With specific reference to work carried out in London and the Welsh Border Counties, this paper will examine the broad themes of artefact movement. It will draw on a variety of evidence, and a variety of methods of retrieving such evidence. These themes are considered to be of interest to archaeologists of any period, and this paper will likewise hopefully put across points of similarly wide-ranging relevance.

C. Pamela Graves (Dept of Archaeology, Univ. of Glasgow): LITERACY AND THE LITURGY: RELIGIOUS READING AND PRACTICE IN MEDIEVAL ENGLAND

Medieval archaeologists should awaken to the special advantages inherent in a documented period. We are not dealing merely with a prehistory which is closer to us, and should not, therefore, expect to apply the methodologies of prehistory. Neither can we expect the complexity of medieval social history to be read straight from documents. They were not writing their own history for the benefit of posterity, but were rather using documents as an integral part of their whole material culture. The difference is that in documents lie a key that one literary society may use in understanding the material remains of another. In my paper I shall look at the English parish church and how an understanding of the liturgy, derived from texts, opens a more specific understanding of how these structures operated and were integrated into the wider social context. Liturgy is the time and the space and the action in which social relations are made manifest. I will show how, in a specific context, liturgical texts and associated documents are instrumental in the revelation of relations of power, and hence a means of reproducing them.

The restrictions of prehistory cause to be written broad technological sequences and general statements of history, but we should realise that our data gives the potential for specific, detailed contextualisations. The archaeological study carried out here will show how the combination of factors time, space and action are the unique interpretation and response of a past community in making their own lives.