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REVIEWS

Lewis R. Binford, 2001. *Constructing Frames of Reference. An Analytical Method for Archaeological Theory Building Using Ethnographic and Environmental Data Sets.* University of California Press, Berkeley. xx + 563 pp, figs., tables, cloth. \$USD75.00.

This is a large book, both physically (it is more than 500 pages in length) and intellectually (it represents several years of labour by the author and summaries data derived from literally hundreds of hunter gatherer societies). The book is broken into 12 chapters followed by a short epilogue. *Constructing Frames of Reference* sets out to expand on observations originally made by Mauss and Beuchat that hunter-gathers show behavioural regularities that are, if not caused by large-scale environmental regularities, at least influenced by them. Rather than seek cause in the intention of hunter gatherer groups, Binford investigates variability in environmental properties, and how these relate to group sizes, mobility patterns, and the consequences for social patterning in settlements. Also considered are sharing and cooperation, mutualism and independence among societal segments, as well as the social relations of distribution.

In the second chapter, Binford defends his intention to understand the environment first. For him, planned or volitional action, what some archaeologists might term agency, as well as the idea of goal directed behaviour, behavioural plasticity and the capacity for culture are givens and therefore cannot be used as a source for explanation. Instead he proposes to use the niche concept to understand the articulation between the experimental world and the properties of human actors. Here readers will recognise a theme drawn from some of Binford's more recent writings, one that has placed him in opposition with those wishing to push a more post-processually informed view of hunter-gatherers.

The third chapter, the last of Part 1 of the book (Exploring Prior Knowledge and Belief), illustrates Binford's approach to conducting science and explains the methods for building frames of reference.

Chapter 4 begins the second part of the book, titled Methods for Using Prior Knowledge, and introduces the main data sections by documenting the environments in which hunter-gatherers now live or have existed until recently. The environments are characterised using such variables as climate and net primary productivity. In the following chapter, Binford projects ethnographic and archaeological information concerning hunter-gatherers onto the various

environmental “frames of reference” described in Chapter 4. A table, for instance, is provided that lists a variety of environmental variables (e.g. vegetation, soil) together with sociocultural variables (e.g. hunting, fishing, group size etc.) drawn from world hunter-gatherer ethnography. Three hundred and ninety separate hunter-gatherer groups are listed. Rather surprisingly, Binford shows that there are no hunter-gatherer groups in the world’s true deserts and very few in semi-desert scrubland communities. Instead, pastoralists and agriculturalists today inhabit these relatively non-productive habitats. Hunter-gatherers in the present world tend to occupy areas with relatively low biomass where ungulates are rare.

In Chapter 6 Binford seeks to create a baseline for analysing niche variability among ethnographically-documented hunter-gatherers. His goal is to produce a model for terrestrial hunter-gatherers that will illustrate how cultural systems (i.e., hunter-gatherer societies) respond in similar ways to similar environmental stimuli. This model is then used to project the subsistence base, degree of mobility and ethnic diversity that characterised the prehistoric hunter-gatherers who preceded agriculturalists in Europe.

The third part of the book, entitled *Recognizing Patterns and Generalizing about What the World is Like: The Transition from Pattern Recognition to Theory Building*, begins with a chapter entitled *Twenty-one Generalisations in Search of a Theory* (Chapter 7). Here Binford examines the hunter-gatherer database for patterns related to intensification paying particular attention to the size of the area occupied by hunter-gatherer groups, the number of people in these groups and the properties of the habitat for food acquisition. He argues that mode of transport is an important variable that must be controlled for and relates this to a group size model. As group size increases so does the cost of mobility, hence a minimal group size will be favoured. Variability in the way this group is made up will be conditioned by the demand for food and the organization of labour involved in obtaining this food.

In Chapter 8 Binford pursues group size further considering the division of labour by gender, family size, the presence of polygamy and the storage of food. Most hunter-gatherer groups show a minimal group size of between 5 and 24 persons (the exceptions are mounted hunters). Mobility, according to Binford, acts as an independent variable responding to changes in the system produced as a result of intensification. The final chapter in this section investigates household size allowing Binford to argue that this also reflects environmental variables, particularly those that relate to the primary function of houses to provide shelter.

The fourth part of the book, entitled *Putting Ideas, Second-order Derivative Patterning, and Generalisations Together: Explorations in Theory*

Building, begins by considering demographic packing, that is the inability for hunter-gatherers to use mobility as part of their subsistence strategy as population density increases. On the basis of the mobility model developed in earlier chapters, Binford is able to identify critical thresholds for terrestrial hunter-gatherers when population densities reach just under 10 persons per 100km, just over 13 persons per 100 sq km and around 22 persons per 100 sq km. At these packing thresholds, the division of labour changes with species obtained by males becoming less important.

Chapter 11 investigates the social consequences of intensification. Evidence of increased complexity is seen in the presence of secret societies and social differentiation based on an individual's progress through age grade societies. There is also ownership by specific persons of highly productive locations and resources. More labour is put into harvest and storage, there is a decreased dependence on large animals and male foraging roles increasingly copy those of females particularly in relation to the collection and processing of plant foods. Other patterns of social change identified include increase round robin hosting and mutual participation in mortuary and educational events.

In *The Last Act Crowns the Play* (the title of chapter 12), Binford applies the model, building a theory of the self-organising process of intensification among hunter-gatherers. The model predicts a huge increase in mobility and the scale of landscape use by a single group, in line with, for instance, archaeological evidence up to and including the Natufian period. Binford argues that as predicted, the Younger Dryas (a relatively abrupt but short lived change in world climate back towards conditions more typical at the height of the last glacial) produced a raft of responses from hunter-gatherer groups; responses he argues that are predictable on the basis of the analysis of habitat variability among modern hunter-gatherers. The PPNA period in the Near East is a reflection of environmental changes that forced an already packed system into a critical state. Similarly, the Archaic period in the Oaxaca valley of Mesoamerica saw population levels (following Flannery) that sit between 4 and 11 persons per 100 sq km, just where Binford would expect them at a time when the archaeological evidence is consistent with groups of hunter gatherers attempting to increase plant productivity—changes that ultimately lead to the domestication of plants.

Binford ends with a short Epilogue where he emphasizes the procedures he has followed in *Constructing Frames of Reference*. For those readers who have trouble understanding the archaeological application of his work he offers the suggestion that archaeologists should be able to construct similar habitat variables for past environments to those that he has derived then use these to study archaeological sites and assemblages comparatively.

With a book of this size, written in a prose that has not gained much in clarity despite the author's increasing years, it is easy to dismiss *Constructing Frames of Reference* as a throw back to a past era of archaeological theorising. In the championing of the environment, the consideration of restricted mobility, population increase and intensification, there are echoes of Binford's late 1960s Post-Pleistocene Adaptations paper. But despite the book's length, at times complex analyses of data (often reported at precisions that are very difficult to believe) and dismissal of much of the theory that has dominated the rest of archaeology (if not hunter-gatherer studies) in recent years, the book is a substantial statement by a maverick who pioneered much of the modern approach to the archaeology of hunter-gatherers. Therefore it would be wrong to write this book off too quickly. It is definitively a big picture statement, quite different in scope from, for instance, hunter-gatherer studies that seek to apply principles of evolutionary ecology to explain small scale ethnographic events. Taken at the broadest level, there are regularities in the way we as humans interact with the environment and it is these that Binford is interested in explaining. The challenge for all of us is to understand the basis for these regularities and their evolutionary implications. In this sense Binford's book is an important first attempt at seeing the big picture at a global scale.

For archaeologists interested in applying Binford's observations the challenge will be to undertake the comparative analyses that he proposes in the epilogue. What the book does not address are the problems that archaeologists must face when attempting to match archaeological data with the ethnographic observations that Binford provides in *Constructing Frames of Reference*. As Binford himself has shown in his work published during the 1970s and 1980s, this is no easy task and requires a second set of frames of reference, those directed at understanding the formation of the archaeological record. In *Constructing Frames of Reference*, Binford offers few insights concerning how this might be achieved. It seems that he is leaving this challenge for others to pick up.

Simon Holdaway, Anthropology Department, University of Auckland

Susan Lawrence (ed.), 2003. *Archaeologies of the British: Explorations of Identity in Great Britain and its Colonies 1600-1945*. Routledge, London. xiii + 295pp., bibliography, figs, index, tables. \$337.95.

Archaeologies of the British is the 46th volume of the One World Archaeology series, publishing papers from conferences organised or related to the World Archaeological Congress. The series has covered a wide range of topics, time periods and locations, and this book follows the model, offering chapters with case studies including city plans and architecture as well as portable

material culture from around the globe. Susan Lawrence introduces the volume, outlining a post-colonial programme to study the evolution of British identity as it developed with Britain's imperial ambitions and its encounter with other groups. Britishness was, and remains, an evolving pastiche of voices talking across the globe.

The volume consists of two parts based on the "First" (1600-1800) and "Second" (1800-1945) Empires, and encompasses 16 papers, with additional introductory and concluding chapters. The focus of Part 1 is the internal dynamics of local ethnic and regional differences in response to the rise of the mercantile class and the genesis of the British identity while the second explores the results of colonialism in the international arena as the Second British Empire developed.

The first paper has Johnson laying down the challenge to historical archaeologists to reject simplistic notions of British identity that continue to be promulgated today. It is a strident call answered by some of the papers that follow. Graves' paper on civic ritual in Newcastle-upon-Tyne illustrates the internal tensions within England during this First Empire, using information on the changing organisation of the city as the fortunes of merchant elites changed during the 17th and early 18th Century.

The architecture of buildings is the subject of three other papers in this section of the book. Green looks at houses in northeastern England to illustrate regional differentiation in architecture in response to the development of the Georgian Order, while Leech discusses the development of the Garden House in Bristol as the merchant class spent its growing wealth in English cities. Klingelhofer's analysis of Elizabethan country houses in Ireland shows how architecture reflects the sometimes tenuous hold the English elite had on its nearby early colonised neighbour. This interest in architectural forms is also carried into Part 2 with Seretis' chapter on the British colonial management in Cyprus and the interplay between the late Victorian imposition of control over a population itself dealing with previous Greek and Ottoman imperialism. She argues how this later encounter differed from the earlier colonial enterprises such as 17th Century North American and 18th Century Australia.

Southern, in the first part of the volume, and Lydon in the second, offer two interesting community-based studies. Southern's case study focuses on the Single Sister's Choir house set up for a Moravian religious order in mid-18th Century Yorkshire, while Lydon follows the story of 19th Century Coranderrk Aboriginal Station in Australia. Both explore the very personal tensions between the communities and their encompassing social orders. The chapters in Part 1 all emphasise how developing early capitalists were reorganising the physical as well as social landscape during the 17th and 18th Centuries.

It is really only in Part 2 that much in the way of actual excavation-derived information is described. Analyses of ceramics from Wales (Brooks), South Africa (Malan and Close), and Canada (Lafleur) illustrate the importance of this material cultural class to historic archaeologists. The three papers illustrate some of the variability in approaches: Brooks' paper uses pottery to examine the relationship between the Welsh identity and English constructions of Britishness within Great Britain itself, and therefore continues the themes outlined in Part 1. Out in the South African colony, Britishness is contrasted with the other colonial powers vying for control in the area. Lafleur describes the excavation of the Vallerand Company premises, a large store and ceramics manufacturing distribution agent in Quebec during late Victorian times, and offers an intriguing story of how the colonial distribution networks were operating.

Symonds' uses case studies from the Outer Hebrides of Scotland and Nova Scotia to examine the causes and effect of Highland Scots emigration on the British colonial effort. The result is to pursue the complexities of different groups from Scotland as they shape and are shaped by the colonial process.

Mytum's chapter explores how British culture and identity influenced the treatment of the dead in colonial situations. He notes that although regional variation is apparent, there were rarely radical departures. Most importantly however, he shows that the cultural traffic was not one-way and that colonial endeavour was to influence burial practices back "home".

A departure from the rest of the volume is Wijesuriya's interesting paper on the history of archaeological heritage management in Sri Lanka. This chapter examines how archaeology itself fits within the British colonial regime. In this it complements Merrington's chapter on the use of pageantry within Britain, creating an imperial identity during the 19th Century. The chapters illustrate the value of studying how the British Empire was actively involved not only in its plans for the future but in the recreation of its own past and of those under its influence.

The volume concludes with Beaudry's paper highlighting the author's rejection of Deetz's (among others) programme of the study of colonialism via a global comparative method and the positioning of the volume in that light. She stresses the multi-dimensional nature of the creation of the British identity and the requirement to carry out the investigation into British identity itself.

That the papers derive from conferences ultimately makes the volume less satisfying than the topic itself deserves. Given the strong thematic and theoretical plan that Lawrence is able to present in the introduction, the papers themselves offer only eclectic glimpses of the possibilities and make the deficiencies more glaring. This is highlighted elsewhere by Lawrence (2003) and Neville Ritchie (2003) who seem to find the global comparative method

effective in comparing the Southern Hemisphere rugby-playing colonies with North America.

Lawrence's own contribution in the volume, looking at the material cultural dimension to the creation of the lone "bushman" and its integration into Australian nationalism, does seem to rise above the rest of the volume. It is hard to resist the use of archaeological data to explore the history behind national icons such as Crocodile Dundee, which now form a major component of Australian cultural exports. Archaeologists working in the South Island of New Zealand clearly have an opportunity to carry out a similar examination into the origin of that "Southern Man".

For New Zealand archaeologists there are some useful pointers in the volume and some comparative case studies to explore, but those interested in examining Britishness in the local context will probably find more inspiration in local productions such as Belich's *Making Peoples* and more particularly *Paradise Reforged*. These offer strongly argued theories on the development of the "Britain of the South" and New Zealanders' engagement with becoming a "Better Britain". *Archaeologies of the British* offers a patchy introduction to the topic of Britishness but helps to establish archaeological investigation of the British identity as a viable avenue of research. It leaves open the need for a more coherent examination of the wide range of archaeological data that could be brought to bear on the topic, and of course what New Zealand historical archaeologists' contribution to this might be.

References

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- Simon Bickler*