

author links the examined topics to current general debates on complexity science, such as the existence of tipping points or the concept of risk. This is a very interesting conclusion that suggests the way these work can help us understand not only the past but also the present.

Overall this volume is a welcome addition to the current debate within model-based archaeology. It is surprising, though, that the authors did not provide any example of evolutionary archaeology, arguably the only field of the discipline where formal models are the standard method of hypothesis testing. Uncertainty is an essential component of any evolutionary framework and for this reason archaeologists working on cultural evolution have tackled similar issues to the ones present in this volume, such as time-averaging (Premo, 2014), non-equilibrium systems (Kandler & Shennan, 2013), and model selection (Crema et al., 2014). This omission is probably a consequence of the growing adoption and diversity of simulations across the discipline. In this context, methodological discussions such as the ones addressed in this book are essential if we want to transform simulation into a useful tool for all archaeologists.

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Robert L. Bettinger, Raven Garvey and Shannon Tushingham. *Hunter-Gatherers: Archaeological and Evolutionary Theory* (London: Springer, 2015, second revised edition, 304pp., 25 b/w illustrations., hbk, ISBN: 978-1-4899-7580-5)

*Hunter-Gatherers: Archaeological and Evolutionary Theory* is a general text on hunter-gatherer theory, which aims to deliver a review of several concepts relating

to anthropological theory that deal with hunter-gatherers. Structured across three parts and nine chapters, the authors offer well-written, comprehensive introductions

to middle-range theory, Optimal Foraging Theory, Marxist and structuralist perspectives on hunter-gatherers, neo-Darwinian theory, and cultural transmission. Newly revised, the second edition includes expanded sections on foraging models and Neo-Darwinist theories, to reflect the development in these fields since the original publication in 1991. The structure and style of the book lends itself towards undergraduate and postgraduate teaching from the outset, with clear and critical summaries of complex theory presented in abstract form. The structure of the book itself suggests that teaching modules could easily be built around this volume, utilising it as a key text.

In terms of content, the book is heavily focussed on the anthropology and archaeology of North America. This allows the authors to draw on their own knowledge base both in terms of theory and in the use of specific case studies to illustrate its application. These case studies lack the detail seen in other reviews of hunter-gatherer theory (e.g. Crothers, 2004), the focus of the book being placed explicitly on theory. However, these examples do allow the authors' own experience and specialist knowledge to highlight critical strengths and weaknesses of theoretical approaches in practice. Additionally, the authors' approach allows specific areas (such as the Great Basin groups) to feature under multiple theoretical lenses, helping to explore the ways in which different bodies of theory produce different kinds of understanding.

As mentioned above, *Hunter-Gatherers: Archaeological and Evolutionary Theory* is divided into three main parts. Part I, 'Historical Approaches to Hunter-Gatherers', contains some of the most insightful and critical discussions of the entire book. This covers the progressive emergence of ideas on social evolution and hunter-gatherers, and a more focussed

discussion of Americanist hunter-gatherer research historiographies. In deploying a broad and balanced knowledge of the literature, historical authors, and wider social context, a critical narrative of the early development of hunter-gatherer studies is drawn out. In the process, a series of crucial points are made in relation to the historical origins of this body of theory in Britain and North America, which have a value for both students and researchers alike—an inherited set of principles and ideas which can, to this day, be found lurking beneath the surface of debates within the field.

Part II, 'Theories of Limited Sets', offers a very clear, thorough, and accessible summary of Middle Range Theory and Optimal Foraging Theory, using equations, graphical expressions, and prose to describe the form and development of these particular schools of thought. Middle Range Theory is expanded to encompass a discussion of foragers and collectors, and the roles that butchery and scavenging play in site formation. The discussions of Optimal Foraging Theory—a widely used corpus of formal models derived from behavioural ecology and based around assumptions of rational cost/benefit calculations—are more extensive, covering diet breadth, patch choice, margin value, central place, storage, and technological investment models. Throughout Part II, the focus is on theory, and although the archaeological and anthropological applications of these ideas are discussed (and used critically to illustrate the strengths and limitations of various approaches), this section steers clear of engaging with the fine detail of worked examples.

Part III, 'Theories of General Sets' focusses explicitly on providing an updated account of neo-Darwinian and structural Marxist approaches. It offers a strong critique of Marxist perspectives, hinging on

the lack of direct engagement with hunter-gatherers in early Marxist writing, beyond their ascription to broad evolutionary models of dynamism. Marx's explicit focus on class struggle is noted to inherently overlook the broad categorisation of hunter-gatherers as egalitarian within this evolutionary framework, with the caveat that the 'top heavy' hierarchies of the classic examples of 'complex' hunter-gatherers from the Northwest Pacific Coast were incompatible with Marx's ideas of a suppressed majority. Bettinger et al. tentatively advocate neo-Darwinian approaches to hunter-gatherers as more favourable, whilst still outlining the classic problems that altruism, competing interests, and the linking of genetics and human behaviour have posed for the acceptance of these approaches.

Whilst consistent in its North American focus throughout, in terms of theory and case studies, there are some issues of balance here which infringe on the volume's credentials as a representative overview of the topic (as is suggested by the broad-reaching title). In particular, the focus on North American approaches creates problems for the utility of this volume within a European context. The early chapters deal with a binary British/North American distinction in plotting the early development of hunter-gatherer theory, with no mention of influence of authors from other nationalities. This is a somewhat glaring omission, given the recognised prominence of Spanish (see Lambert, 1997), Portuguese (see Axelson, 1960), Dutch (Van Wyk, 2008), and Russian (Sirina, 2008) authors in the initial documentation of hunter-gatherer groups. The alternative approaches to hunter-gatherer research which developed in other regions of the world (see papers in Barnard, 2004) are not acknowledged, nor are the important contributions to contemporary hunter-gatherer theory made by Spanish and Portuguese writers (Barceló

et al., 2014; Hernando et al., 2011), amongst others. There is also a recurrent ambiguity in identifying 'American' and 'British' approaches within the text. Do these terms refer to the nationality of the author, the place of residence, or the geographical location of the subject material? Confusion over this makes it difficult to unpick some of the more brash statements concerning a lack of interest in hunter-gatherer studies outside of North America.

Another cause for concern here is the consistency in the treatment of the relationship between broader social issues influencing researchers, and the success of specific bodies of hunter-gatherer theory. The attention to wider social context, so strong in Part I, is not continued into Parts II and III. This creates some fundamental problems for the arguments presented in relation to the various strengths and weaknesses of bodies of theory as the book loses sight of *why* academics were and are interested in studying hunter-gatherers in the late twentieth and early twenty-first century. Why study hunter-gatherers in industrialised and post-industrialised contexts? What relevance does this have to the challenges facing wider society? What does this society want, need, or benefit from the narratives that these approaches produce? If, as this book explicitly states, all models are wrong; then what measure is being used to assess the success of certain modelling techniques over others? When dealing with the historical development of hunter-gatherer theory these issues are tackled explicitly, but moving into the mid twentieth century and onwards, the descriptions of Middle Range, Optimal Foraging, and Neo-Darwinist theories rapidly seem to lose sight of this. Many of these topics are addressed explicitly by Cummings (2013), but references to this key text are notably absent. Furthermore, addressing these questions in relation to the nineteenth century

forms a central and productive theme within Part I and is used as an explanatory tool in assessing the historical strengths of specific approaches. Thus, the absence of this line of argument within Parts II and III becomes increasingly curious.

The book also struggles when dealing with other movements in archaeological and anthropological theory which are not seen as a primary focus for the book. These are given short shrift, with structural Marxist approaches, humanist objections to Optimal Foraging Theory, and postprocessualism being introduced to the reader only in so much as they can be dismissed with regard to their utility in explaining hunter-gatherer behaviour. This is problematic. In the case of postprocessualism, for instance, there is clearly an unacknowledged contradiction here in relation to the (accurately) highlighted lack of overarching general theoretical structure, and yet the huge impact of this movement within European archaeological theory and practice. Whilst many of the criticisms raised within *Hunter-Gatherers: Archaeological and Evolutionary Theory* are valid, there is occasionally a danger that major developments in hunter-gatherer historiography are dismissed—underplaying their importance within the discipline to the student reader.

This can be linked back to the above point: the lack of acknowledgement of the social context in which these narratives are received and consumed. It is often difficult to explain the impact of certain schools of theoretical thought based on their intellectual content alone—shared concerns with the wider world shape both the form and reception of particular theoretical approaches. The lack of appreciation of this fact becomes most glaring in relation to Marxist theory. The lack of engagement with Marx's work in the late twentieth century (presumably referring primarily to North America, given the unstated focus of

the book) is described as surprising, yet the legacy of McCarthyism and the ongoing tensions between Capitalism and Communism on the world stage might surely offer a more straightforward explanation for this lack of engagement in this particular context (Price, 2004).

The issues outlined above undermine somewhat the arguments presented within the book concerning the relative effectiveness of different theoretical approaches to hunter-gatherer studies. They do not, however, prevent this from being an intelligent and critically written account of an often confusing and counterintuitive body of theory, which has a huge value within higher education teaching contexts across the world. Whilst the North American focus means that the content discussed is far from exhaustive (and nor, for the record, do the authors at any point claim that it is), it does offer a fascinating and critically argued insight into the development of hunter-gatherer theory within US and Canadian research institutes, which is of great interest to the outside observer. Perhaps, then, the book could have been better titled to alert readers to this fact from the off, and avoid any confusion over the omission of more global contributions to the study of hunter-gatherer groups. As it is, it sits comfortably alongside a range of other relatively recent academic texts dealing with hunter-gatherers within both archaeological and anthropological contexts (Barnard, 2004; Crothers, 2004; Cummings, 2013; Cummings et al., 2013)—distinct in content and tone, without standing clear of the competition in terms of quality.

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Emilie Sibbesson, Ben Jarvis and Sarah Coxon, eds. *Insight from Innovation: New Light on Archaeological Ceramics. Papers Presented in Honour of Professor David Peacock's Contributions to Archaeological Ceramic Studies* (Southampton Monographs in Archaeology, New Series 6. St. Andrews: The Highfield Press, 2016, xxxvi and 277pp., 85 colour and b/w illustr., 13 tables, ISBN: 978-0-9926336-4-6)

This book originates from a conference held in 2012 in David Peacock's honour on the initiative of the Southampton Ceramics Research Group, which stems from Peacock's lifelong engagement with ceramics at the University of Southampton. It consists of fifteen chapters which have innovation as the leading theme. This refers not only to innovative developments in analytical techniques and interpretative frameworks, but also to new light on how people in the past interacted with ceramics, as stated by Jarvis, Sibbesson, and Coxon in the 'Editors'

Introduction'. By focusing on the ethnography of pottery production and on the application of scientific techniques to the study of archaeological ceramics—in particular petrographic methodologies as a tool for the characterization and provenancing of materials—*Insight from Innovation* aims to point out how these two themes have been revolutionized by David Peacock's outstanding, innovative work in the field of ceramic studies. This work has influenced scholars working in different areas and on different epochs from prehistory to the medieval period, as underlined