Sources and further information are to be found in almost 700 endnotes and an extensive bibliography.

Shortcomings are mainly stylistic. No one is allowed to go unlabelled or uncharacterised, even when the effect is forced and does not advance the story. Everyone is treated kindly, including the Goddess and her devotees. Nonetheless, the 'tiddlywink man' may find his description cringe-worthy, while the 'gentle, dapper man from Yorkshire with a penchant for cream-coloured suits' must find his splutter-worthy, especially as he is a Lancastrian. The style sometimes verges on the provincial journalese of the 1950s. One almost expects 'archaeologist Bill Startin' to resurface a few pages later as 'Cambridge-based orphaned archaeologist Bill Startin, 43'. The text overdoses on T's; a one-third reduction in the first person would make the author an even more sympathetic companion.

For all this the work is a success. Its faults are a challenge to do better, whether to those who think they could tell the same story more effectively, to those who would like to see more palaeoenvironment and fewer megaliths, or to those who would like to do the same for the Lake District, the Fens or the west coast of Scotland.

Frances Healy, Department of Archaeology, University of Newcastle.


This book continues the admirable BAR tradition of publishing the products of PhD research. In this case Penny Spikins, then of Cambridge University, has set out to tackle the problems of 're-thinking the popular preconceptions and accepted means of interpreting Mesolithic activities', taking the archaeological and ecological record of northern England as her main scenario. The main title, however, is perhaps a little misleading in that the book does not set out to describe Mesolithic northern England in the traditional sense, with a detailed review and interpretation of the archaeological and environmental evidence. Readers of Lithics who might hope for site gazetteers, descriptions and analyses of chipped flint assemblages, raw material types and sources, lists of radiocarbon dates, site plans, faunal data etc., all nicely reviewed and reassessed with a dash of fresh field evidence, will be disappointed. Lithic evidence, for instance, is given passing mention only, with not a single stone tool even figured. Instead, the book takes the fashionable view that previous understanding, in this case of Mesolithic adaptations, has been developed upon an inadequate database and flawed interpretations - which have become embedded as accepted wisdom. Much of the volume is therefore taken up with a painstaking deconstruction of our preconceptions and their basis, and is followed by an attempt, using a geographical analysis of modelled woodland resources, to develop a new approach to the problem. A particular target of the research is a challenge to the oft-accepted notion that change in Mesolithic subsistence patterns was a consequence of gradual growth of population.

Each chapter is supplied with a concise and helpful abstract and conclusion. The opening chapters set the scene, firstly by expounding briefly the basic premises for population increase as an explanation for Mesolithic adaptation, suggesting that these are faulty, and then going on to set out how the book is structured to address this problem. The second chapter tackles the existing archaeological evidence, concentrating upon spatial and temporal distributions of sites and radiocarbon dates and the interpretations that have been built upon these, at national, regional and local scales. When scrutinised in detail it is argued that most of the evidence upon which such interpretations are based is suspect. In the north of England, for instance, both the density and distribution of sites are seen to be at the mercy of a range of biasing factors - differential exposure of sites, incomplete excavation, collector bias, raw material constraints - to name but some of the more obvious. It is apparently no coincidence that the supposed Mesolithic preferences for south-facing slopes on plateau edges and valley heads with a wide view are just those same locations where sheep prefer to cluster, conveniently eroding the peat mineral interface where flints are to be found. The polarity between upland and lowland distributions of evidence, upon which so much subsequent interpretation has relied, is found to be false.

Having thus dismissed the archaeological record as flawed, the third chapter approaches the issue of Mesolithic subsistence by 'working up' from resources, that is by assessing the potential availability of useful plants and animals and trying to determine how this may have influenced subsistence. However, direct evidence for contemporary resource exploitation is extremely limited and interpretation has relied excessively upon ethnography to fill the gap. A review of the range of plant and animal resources potentially available during the Mesolithic follows, drawing attention to the shortcomings of subsistence models which depend too heavily on the exploitation of any particular resource. Whilst shellfish, red deer, and hazel nuts have each been fashionable in their turn in discussions of
subsistence, there is no 'key' resource and attention is drawn to other categories of food, such as smaller mammals (the advantages of hedgehogs, for instance, have apparently been mostly overlooked). It is concluded that the panoply of changing resources, and the effects of unpredictable cultural factors, place serious limitations on the realistic modelling of subsistence. In these circumstances only a coarse-grained approach is therefore feasible, and this is what is attempted later on. Before this, however, chapter four tackles in detail the ecological and ethnographic analogies that have provided so much of the basis for ideas about subsistence. Inevitably, and not without precedent, much of this basis is found to be shaky for one reason or another. Indeed, if a keyword was sought for this chapter and the next it might well be the word 'problematic' as this and its synonyms recur often, whistling away at orthodoxy. Sometimes it seems to be a fine, if not quite circular, line to tread - for instance faintly damming ethnography in one breath, yet resorting to ethnographic information to do so in another.

So, if the foundations of our notions of Mesolithic subsistence are so problematic, what can be done about it? The approach adopted here, foreshadowed earlier, is to treat the dynamic environment as the baseline for developing a preliminary model of subsistence. Chapter five sets out the basis for this attempt, a geographic modelling of changing woodland conditions. Radiocarbon dated pollen data are combined within a GIS with base map information on soil preferences and topography to create a sequence of twelve successive models (maps) of probable woodland types spanning the earliest to latest Mesolithic. The effects of relative competitiveness of tree species, their known succession, temperature change and the growth of peat, each contribute to the computed distributions which are summarised into three phases of development, broadly equated with the early, late and 'terminal' Mesolithic. The march of birch > pine > oak northwards and upwards with time is confirmed, with lime coming to predominate over the lowlands in the terminal phase and peat beginning to develop on the uppermost uplands. This broad generalisation is explored in considerable detail. The implications (chapter six) follow from the observation that both the diversity and abundance of resources are at their most favourable during the early phases of woodland succession, coincident with early Mesolithic expansionism into the north of England (and into Scotland). In the later phases, lowlands would have become densely wooded and less hospitable, leaving the more open and diverse woodland of higher altitudes to provide a more attractively abundant and reliable resource base. This latter effect may in part account for the apparent concentration of late Mesolithic sites, and the pollen evidence for clearance activities, on the Pennines and other upland areas. The lack of evidence for 'base camps' at these altitudes is not felt to be conclusive and there is some discussion of the possible fallacies in the simple equation of the ubiquity of microliths, and relative lack of scrapers, with short-term hunting activities. It is suggested that re-analysis of lithic assemblages, using for instance microwear and residue analysis, might be one way to improve our characterisation of upland adaptations in this period. The evidence for population change (movement and pressure) in response to the migration of the resource base is as yet too open to speculation to lead to any definite conclusions on the main issue with which the book opened. Subsistence patterns would have been dynamic and very variable, and it is concluded that there is 'little to support the concept of gradual population increase as a common or development across W Europe as a whole'. In northern England the author herself favours population increase in the early Mesolithic followed by regionally variable 'trajectories of population change', depending upon specific environmental changes. More detailed and dynamic modelling of such changes is called for, to tackle such complexity. Developing the geographical approach, using the analytical strength of GIS, is one way forward.

If you are a dedicated student of the Mesolithic this book is well worth reading. It provides a very sound account of the premises upon which current ideas about Mesolithic subsistence are built up. Much careful thought has gone into deconstructing these, opening up the familiar assumptions to a detailed scrutiny and offering some different perspectives on well-worn themes. For those who do not require a detailed level of involvement, it is rather a pity that the main issues have not been made more accessible: there is quite a bit of repetition throughout, reiteration no doubt for the sake of clarity, but the essential material could have been beneficially condensed into a single journal article. Or perhaps two, because the use of GIS here is indeed a new approach and, although this first attempt has not produced startling insights, it is clearly a technique that has potential in future. There are many parameters that need to be injected into the programme to elaborate future analyses towards more comprehensive and realistic outcomes. One would like to see the model account for faunal resources, seasonality and coastal influences, for instance, extended over the whole of Britain, but this is ambitious! One must not forget, too, modelling is all very well, but that models require testing against reality and that such tests should in turn provide fresh data for improved models - so there is a need,
thankfully, also to engage directly with the evidence in the field and the laboratory.

For those people disappointed not to have more information and discussion about lithic assemblages, they must presumably await the publication of the author’s researches at March Hill for which much that has been said in this book will no doubt provide a wholesome context.

Andrew David, English Heritage Archaeology Centre, Fort Cumberland


Proceedings of major international conferences like the UISPP have by their nature some inherent limitations: the papers are loosely structured around a common theme, the editing is limited and a reader can be left wondering whether and how the individual components might fit together in a coherent picture of the current state of play on the issue at the heart of the volume. In the book reviewed here these shortcomings are accentuated by the lack of an editors’ introduction to the volume, although the first section of Conard’s paper could well serve as such. Despite these reservations, the diversity of the contributions to this volume reflects the multiplicity of approaches to the question of European Middle Palaeolithic (hereafter MP) and African Middle Stone Age (hereafter MSA) settlement systems. This is a new field that is still looking to find its footing in both theoretical and methodological terms. Even though the contributions to this volume were written in 1996, most of them are still relevant in the sense that they address issues that continue to be at the heart of research in this sub-field. Although the papers here are by necessity short and the data have had to be presented in summary form, the volume in its entirety can serve as an introduction to a wide range of research on MP and MSA settlement systems and the references given serve well as a guide to further reading on individual projects.

In geographical terms, this volume falls far short of covering all of the Old World. Asia, for example, is not represented at all but for one paper on the Levantine Mousterian. Of the remaining papers, two are on sub-Saharan Africa, one on North Africa and seven on Europe (one additional paper is based entirely on ethnographic material from various continents). Arguably this heavy bias in favour of Europe is not merely a limitation of the volume but reflects the historical development and the current state of Palaeolithic research dynamics (i.e., availability of rich regional datasets in Europe, disproportionate numbers of researchers working in Europe and a more marked move in Europe beyond chronostratigraphic systematics). It is, however, disappointing that the MSA is covered only by two papers.

Readers of Lithics will find this volume particularly relevant to their interests not only because a couple of papers (Rolland, Shea) specifically address the issue of the interpretation of Mousterian lithic assemblage variability in France and the Levant, but also and primarily because lithic finds, due to their durability, often form the basis of discussions of Palaeolithic settlement patterns. In one way or another the papers in this volume address issues such as: (1) high- and/or low density lithic scatters in the landscape and their interpretation, (2) high and low visibility lithic scatters and their relevance to hominin behaviour and/or post-depositional processes, (3) variability in primary flaking technologies and formal toolkits with reference to nature of sites (open-air vs. caves and rockshelters), topographic setting of sites, postulated function of sites, climatic fluctuations, (4) lithic scatters and the structuring of hominin activities within a site or across a region.

The majority of papers in this volume address inter-site relationships and adaptations over a regional scale and only two (Binford, Yellen) focus on intra-site spatial patterns and organisation of activities. In typical processual fashion, Binford moves from ‘certain near-constant [...] characteristics of the human species’ (p.229), such as posture and anatomy, to projections on the spatial patterning of archaeological debris around hearths and from there to the generalisation that, in contrast to earlier hominids, fully modern humans divide living space in modular units that correspond to family groups. He suggests that this generalisation can be used as a way to separate fully modern human from non-modern human sites. Yellen takes a different route but ends up in a similar point. After a somewhat tedious summary of the taphonomical analysis of a ca. 90,000 years old postulated ‘living floor’ in eastern Zaire and a short reference to ethnographic data, he concludes that the ‘living floor’ in questions resulted from a nuclear, family based, pattern of intra-site organisation of activities. The implication (or, the assumption) here is that the MSA evidence from this region reflects modern human behaviour. Considered together these two papers demonstrate that it is difficult to see how generalisations like the one proposed by Binford can do anything other than