BOOK REVIEWS


These proceedings originated in a symposium at the 66th Annual Meeting of the Society for American Archaeology held in New Orleans, entitled ‘Prehistoric Extraction: technology and social context’. The symposium was organised jointly by staff from English Heritage and the Midwest Archaeological Center of the US National Park Service.

The main purpose of the symposium, and subsequently this volume, was to present new evidence from the Old and New Worlds on different forms of raw material procurement, focusing on the mines and quarries of prehistoric and pre-industrial communities. The organisers encouraged the presenters to attempt to move beyond traditional typotechnological concerns to allow inclusion of the social context of ancient mining in the analyses, thus providing a more holistic picture of prehistoric and pre-industrial raw material procurement. Ethnographic evidence was suggested by the organisers as an important source of information to shed light on ancient quarry sites.

The proceedings include 14 papers, seven of which discuss matters relating to the Neolithic flint mines of south-east England. The remaining chapters deal with prehistoric and pre-industrial mining in north-east Scotland, Ireland, North America and India. There are papers focusing almost exclusively on the functional and technological organization of mining activities, as well as their geological background (e.g. LaPorta, Chapter 8), and there are papers focusing almost entirely on the social, or ideological, element of extraction processes (e.g. Topping, Chapter 5). However, most of the contributions are hybrid forms, including substantial elements of both. The majority of the papers are based on archaeological material, occasionally with a strong ethnographic or ethno-archaeological element, but Chapter 9 (Scott & Thiessen) is mainly an account of fairly recent, and to a degree present, events, although with obvious archaeological implications. This review focuses on a selection of the most distinctive, as well as the most topically and methodologically diverse, papers.

Alan Saville’s contribution (Chapter 1) forms part of the ongoing discussion of the secondary flint sources of north-east Scotland. Although the region’s acidic soil prevents the survival of organic material, such as middens, the complete lack of other domestic remains (hearth, pottery) supports the general separation of prehistoric quarrying from domestic activities, as also suggested in several of the volume’s other papers. It has been difficult to date the mining operations at the Buchan Ridge Gravels, but the discoidal and Levallois-like cores presented by Saville in this paper bolster previous Late Neolithic dates (cf. Ballin forthcoming). He suggests that mining of the slightly sub-standard inland flint resources of the Buchan area was initiated to meet an increased need for relatively large nodules for Late Neolithic petit tranchet derivative arrowheads. This proposal finds support in the fact that, in the Late Neolithic period, chalk flint was imported into Scotland from the south, probably mainly as raw material for this type of arrowheads (Saville 2003: 47).

Gabriel Cooney’s contribution (Chapter 2) presents a Neolithic andesite porphyry quarry on Lambay Island, Ireland. The location is a stone axe quarry, and, in contrast to other similar sites, the grinding and polishing of axes appears to have taken place at the site, rather than at the domestic settlements where the axes were going to be used. Cooney discusses a complex
pattern of deposition, including some porphyry in pits and some in the form of a final low cairn, supplemented by the deposition of worked jasper and beach pebbles. One of the main purposes of this paper is to ‘place mines and quarries in a more informed context’ by including non-functional aspects in the interpretation of quarries. He does, however, warn against completely disregarding mundane considerations, as the point of departure for axe production must be something as simple as the need for axes. His use of interpretational models has an element of ‘cherry-picking’ about it, possibly because the allocated space did not allow the presentation of more substantial amounts of evidence. Being titled ‘Quarrying and deposition’, many readers would probably have expected more information on the actual quarrying — of which there is none.

Peter Topping’s paper (Chapter 5) is probably one of the volume’s core contributions, being closest in tune with the conference organisers’ declaration of aims and objectives (above). Based on North American ethnographic data, he attempts to create an interpretative framework for the study of Neolithic flint mines in England. By the use of a selected case study (Shaft 27, Cissbury, Sussex), he draws parallels between features and finds from a British flint mine and those of Native American quarries, and a believable scenario or model is produced, in terms of the social and ideological context of prehistoric raw material procurement. In Table 5.2 he compares ethnographic and archaeological evidence, and a likely, generalized ‘cycle of events’ is put forward, including: 1) cleansing rituals; 2) offerings; 3) extraction; 4) post-extraction prayers and offerings; 5) artefact production; 6) ceremonial use of [some] artefacts; and 7) rites of renewal. This model is probably relevant to prehistoric quarry research in general, and the author’s limitation of the interpretational framework’s relevance to ‘Neolithic’, ‘flint’ and ‘English’ mines is overly modest.

Philip LaPorta’s paper (Chapter 8) is an almost entirely materialistic, or functional, approach to the discussion of mining in prehistoric or pre-industrial societies. His contribution, which is illustrated by an ethnographic case, is in line with Cooney’s (above) warning against disregarding mundane considerations. His list of general geological criteria for the development of bedrock quarries is useful, as is his schematic plan of a typical quarry with related task areas (Fig. 8.1). No matter how complex an ideological super-structure prehistoric people developed around their quarrying activities, lithic and stone raw materials exist in a geological reality. However, LaPorta also advocates the acceptance of a terminology based on that of modern mining, with key concepts being ‘expressions’, ‘motions’ and ‘movements’, which, in simplified terms, describes more or less advanced quarrying activities. Unfortunately these terms are less than fully transparent, and instead of these concepts, which largely describe the extent of mining operations, the reviewer would prefer the general application of Weisgerber’s (1987) terminology (slightly adjusted in Ballin 2004), describing the forms of the operations (surface or underground; various types of vertical and horizontal movement).

Douglas Scott and Thomas Thiessen (Chapter 9) present archaeological and historical evidence relating to the recent (late 1800s to the present day) extraction in Minnesota of catlinite ‘pipestone’. Although it should be remembered that catlinite was intended for exclusive use in the ceremonial sphere, their account of the social context of the quarrying operations is in line with the social contexts defined in relation to the mining of ‘general purpose’ raw materials (Topping, above). Their list of ‘attendant rituals’ may also have general implications for the understanding of prehistoric raw material procurement: 1) the quarry is sacred and the quarriers therefore camp away from the outcrop; 2) a three-day purification ritual is carried out; 3) offerings are made to propitiate the guardian spirits and
seek permission to extract the wanted stone; 4) sexual relations with women are to be avoided during this period; 5) exclusion of women from the quarry while mining was on-going; and 6) the quarrier had to be a man above reproach (compare this list with Toppings generalized ‘cycle of events’, above).

In terms of the development of an interpretative framework for the study of prehistoric mining, the above papers are clearly the volume’s most substantial contributions. However, the remaining papers add important elements to the understanding of the topic, or to the development of the methodology for this specialist field. In Barber & Dyer (Chapter 3), the use-value of aerial reconnaissance is evidenced; Barber (Chapter 6) provides a valuable chronology of English flint mining; Clark & Martin (Chapter 7) present a solid discussion of the technological, social and ideological facets of Native American copper mining on Lake Superior; Drake, Cobb & Butler (Chapter 10) analyse the spatial organisation of sites relating to stone tool production (quarries, workshops, workshops with mounds, and habitation/workshops); and Field (Chapter 11) compares recent gunflint mining with Neolithic flint mining and discusses the social implications of the observed differences.

In general terms, The Cultural Landscape of Prehistoric Mines is a well-produced and well-balanced book. With its selection of papers focusing on the material basis of prehistoric mining, as well as papers focusing on the social and ideological super-structure of prehistoric raw material procurement, it has fulfilled its main aim of providing, or at least supporting the development of, a more holistic approach to the interpretation of prehistoric mines and quarries. Although several of the papers are markedly skewed, either towards the material (geological, technological) background of procurement sites or towards the social/ideological ‘wrapping’ of prehistoric mining activities, it is the reviewer’s hope that a consensus can be reached on the need of an interpretational approach including both elements. The keywords of the present review must be: highly useful and recommendable.

References


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