not local manufacture? The published descriptions of Group I petrology seem to allow for Norwegian erratics in the east Yorkshire boulder clays to be considered as a potential source for this Group. In this respect, it may be significant that, as Stephen Pierpoint (1980, 190) has recently remarked, Group I celt in Yorkshire are commonest on boulder clay soils. There is clearly need for research here. This research should consider celt shape and function, and possible geological sources. Both of these aspects require new work: neither the archaeological nor the geological information is available. I stress the absence of suitable petrological data. Until remarkably recently, field geologists have concentrated strongly on mapping solid deposits. Data on drift are consequently thin, as it were, on the ground. Even modern surveys demand additional work from the archaeologist, for only he can assess the suitability of erratics, if present, for working into implements.

In sum, thin section contemplation tells us nothing about the working properties of stone, and neither do geological maps indicate the suitability of outcrops for quarrying. We cannot hope to understand the use of raw materials in prehistory unless we try to replicate this use.

Acknowledgement

Readers of BAR S120 will recognise my debt to Hilary Howard for much of the inspiration behind this article.

References


Palaeolithic sites are comparatively rare. Typical examples are thin scatters of crude, heavily patinated flakes on high ground, generally Middle Palaeolithic in aspect. Upper Palaeolithic material has recently been found in other arid regions of Jordan but, although it is almost certainly represented in the Black Desert, it has not been possible so far to assign any of the survey material to this period.

Despite the obvious problems of locating small microlithic sites in such an area, a number of epipalaeolithic camps and knapping floors have been found. Samples are too small in most cases to date these on typological grounds, but some variety in artefacts between sites can be detected. Material from these includes backed bladelets, lunates - some with Helwan (bifacial) retouch, awls, borers and small scrapers. At least one of these sites is almost certainly early Natufian in date.

With the aceramic Neolithic period, around the 8th and 7th millennia, flint industries seem to reach their floruit in the area. Pressure-flaked Amaq points - a type common throughout Syria and Palestine - bifacially worked spearheads and a wide variety of tanged arrowheads are found in association with the most elaborate of the animal traps described above. These traps are known as 'kites' because of their long trailing guiding walls they resemble the child's toy of that name (Plates 1 and 2). Knapping floors, in some cases very large, are found on any hilltop which commands a good view over open country or up wadis - anywhere in fact where game can easily be spotted and their movements monitored. Bipolar cores and fragments of tanged points are the most common finds on these floors, but particularly good vantage points sometimes have microlithic material as well.

One of the most common - and probably the most enigmatic - type of site is also tentatively assigned to this period, i.e. the 'burin site', so called because of the very high frequency of concave truncation burins to be found on them. Scatters of burins, together with the occasional flake scraper, borer or bifacial knife are found in and around corrals within the basalt region and also often on open and exposed sites in the Ard el es-Sawwan or flint desert surrounding the lava.

Evidence for later periods, at least from the lithic angle, is scanty at best. The Late Chalcolithic/Early Bronze Age is represented only by the large 4th millennium fortified town of Jawa, whose flint industry is identical to the Cananean well known in Palestine from sites such as Jericho and can be found in western Syria as far north as the Amaq plain on the modern Turkish border. Very little evidence for local desert industries of this period has yet been found.

What makes the basalt region unusual is that it seems to have been the centre of a rather special desert tradition which carried on almost into historical times regardless of developments in the fertile areas. This desert economy was based on game exploitation, achieving quite a high level of sophistication in the construction of the 'kite' systems. Whether sites in the desert belong to indigenous nomadic peoples or whether hunting was a seasonal activity practised by groups from outside the basalt region is not yet clear, but the technology of the industries does indicate a
specialized local tradition linked to, but not identical with, those from adjacent areas.


ARTICLES

THE PREHISTORIC SOCIETY SPRING CONFERENCE 1982: AN AFTERVIEW

by Roger Jacobs

So far I have met only one lithic analyst who claims not to have been at this meeting on 'The Archaeology of Hunter-Gatherers' held at the Museum of London on the 20th-21st March. Other faces whom I did not see could easily have been lost among the more than two hundred people whose names appeared on the list of delegates. Perhaps this will be remembered as the 'Year of the Conjoins' - a competition clearly won by Tony Marks with the reduction sequences from his remarkable site at Boker Tachtit in the Negev. The papers presented can perhaps best be grouped under a number of topic headings.

A Home and 'near Home'

Nick Barton and Chris Bergman gave the first results of their work at the Mace/Campbell late-glacial site on Hengistbury Head and on the early mesolithic Powell site nearby. They reported conjoins, not in the expected sequence, that for this Conference was made up of participating archaeologists would be cut back to site for dismemberment, while other potentially greater meat contributors would be butchered at the kill and away from where archaeologists would be likely to excavate. Reindeer economies? Kate suggested that in the upper palaeolithic, while certain categories of site, for example those established in caves or shelters, would tend to be discovered and excavated, other classes could either escape detection or be removed from the archaeological record.

A similar point was made by Peter Woodman in a paper entitled 'Mobility and territoriality in the Irish mesolithic'. He hypothesized that with curation of artefacts, discard on the uplands of Northern Ireland might be too low to register archaeologically. Peter stressed the individuality of, but similarities between, microlithic populations from Lough Boora and Mount Sandel, both dated about 9000 years ago, and the change that came over Irish lithic industries at about 8000 BP towards a 'larger blade and flake' technology. He suggested that this transformation mirrored a population that had built itself up to such a level - by analogy with Tasmania perhaps as high as a thousand - that necessary contact with an outside world had become minimal. He incorporated into this Irish 'social territory' the Isle of Man, further away than adjacent parts of Scotland, but too small to have maintained a viable population structure in isolation. Recent work in Northern Ireland suggests the activities of task groups in procuring raw materials from coastal sources for use inland, with the re-distribution of flint helping towards an estimation of annual territory size.

Relevant also to the British Isles was perhaps the most speculative paper to be offered at the Conference - 'Living with the bears: regional variation in the European palaeolithic', by Clive Gamble. In this contribution he developed a scenario 'Down by the riverside' within which man played a bit-part instead of his more accustomed role as superstar. A rarity of large carnivores and human fossils in riverside deposits in western Europe - 'Swanscombe' is one of two exceptions - is a reflection of the high competition in this part of the landscape. Rather than being consumed at a riverside kill, prey was transported back to dens to be enjoyed at leisure, or at least in peace. Handaxes, both as artefacts and as predictable sources of flakes, allowed man the speed to take advantage of carcasses and natural mortalities. In the second part of his paper, permafrost was taken as encouraging the incidence of cave use for 'denning' in late Devensian Europe. A high incidence of denning correlated...