CARRYING CORES TO GLOUCESTERSHIRE: SOME THOUGHTS ON LITHIC RESOURCE EXPLOITATION
by Alan Saville

Two recent finds of flint cores in Gloucestershire are worthy of note and prompt speculation. One of the cores (maximum dimension 126mm x weight 750 grams) comes from a Neolithic burial deposit in a chambered tomb at Hazleton, near Northleach, the other (max. dim. 133mm x wt. 1050g) comes from the excavation of a Romano-British farmstead with earlier occupation at Frocester, near Stroud, and is assumed to be of Neolithic/Early Bronze Age date. In both cases these large cores are already extensively flaked, and derive from hefty nodules. To judge from the nature of the unweathered cortex on each core, the raw material is fresh chalk flint, presumably mined. Gloucestershire itself has no such raw material, the nearest flint-bearing chalk being that of Berkshire, Oxfordshire and Wiltshire to the east and south. Derived flint from closer at hand, as in the glacial outwash deposits around Moreton-in-Marsh in north-east Gloucestershire, was undoubtedly exploited in prehistory, but could not provide nodules of the quality discussed here.

These two cores bring into focus the fact that in Gloucestershire, as in many other parts of England, flint must have been imported in nodule form to satisfy the needs of local knappers for producing general purpose tools. Prior to the Neolithic there is as yet no explicit evidence for the large scale quarrying or mining of lithic resources, and it is assumed that the Mesolithic knappers basically exploited surface exposures, perhaps following these in some cases by superficial diggings. These exposures may well have been more prolific than is now the case, and in some parts of England it is possible that local knowledge of resource locations was retained from late glacial times, prior to the maximum spread of the post-glacial forest, which would have reduced the visibility of the exposures. The major lithic raw material exploited by Mesolithic knappers was flint, but most frequently in redeposited forms, as gravel or beach pebbles and nodules from boulder clay or other drift deposits. Where flint was absent or in short supply a variety of cherts, quartzites and other rocks were knapped.

The movement of these raw materials during the Mesolithic was no doubt consistent for the most part with the mobility of the local population within its own territory, and with the curating of raw materials once obtained against seasonal requirements. The raw material, in unknapped form, was regularly transported from its source to a knapping location, probably functionally determined, but there is little to suggest that this process was organised in any sense other than by separate hunter-gatherer groups exploiting their own lithic resources. The relationship between tool size and raw material availability is notoriously a 'chicken-and-egg' problem, but in the Mesolithic it is apparent at the very least that the ability to manufacture and use tool-kits made from small-sized pebbles did obviate the necessity for any particular group to acquire large-sized nodules from outside its own territory.
There are remarkably few convincing instances of long distance movement of lithic resources in the English mesolithic, 'imports' usually being explicable as distinctive, finished items for which a variety of dispersal mechanisms could be envisaged during normal inter-group contact. In fact a pattern of settlement in a context of relatively static social groups and restricted territories, makes likely the introduction of completely new mechanisms for acquiring and dispersing raw materials, as well as for extracting them, in comparison with the mesolithic. At one end of the scale, a European movement of lithic artefacts such as jade axeheads could indicate a form of ceremonial, gift, or prestige exchange, but for the everyday acquisition of the basic raw material for local mundane tool manufacture - Gloucestershire's 1000 imported nodules per year - something more economically 'efficient' must surely be imagined. Unfortunately, the most obvious comparative data for such mechanisms of exchange come from more primitivist societies, where lithic exploitation and use has a clear parallel with prehistoric Europe, but where the social, economic and environmental context is so different to that of neolithic England that it renders highly contentious the transference of explanatory models. So how do we explain the process by which our Gloucestershire cores arrived?

An explanation is required in which the acquisition is regularised, and this could take place as part of complex exchange or 'market' activities occurring at recurrent inter-community gatherings. This would fit the now fashionable hypothesis that neolithic causewayed enclosures sometimes served as distribution centres, or redistribution mechanisms, for lithic raw material and finished tools being exchanged at the same time as ceramic products, food, livestock, etc., perhaps in the context of seasonal festivals. If four festivals per year are imagined, then it seems a clear unreasonableness to suggest the acquisition of 250 nodules for Gloucestershire at each, or acquisition at correspondingly lower levels if, as is more probable, more than one causewayed enclosure served Cotswold people every year. In such a context the acquisition and transport would presumably be at the personal/family level. Indeed, were the bulk movement of the resource imagined (demanding animal or water transport given the weight of the material) a dispersal mechanism more akin to organised trade would be appropriate. In the absence of evidence for this from the archaeological record, e.g. in the form of 'node' or core 'hoards', the previous hypothesis remains more satisfactory.

Finally, it can be suggested that the proposed scale of traffic in lithic resources may further insights into neolithic society, for example in the sense that organised exchange might carry implications of control. Certainly the demand within a context of relatively static social groups and restricted territories, makes likely the introduction of completely new mechanisms for acquiring and dispersing raw materials, as well as for extracting them, in comparison with the mesolithic. At one end of the scale, a European movement of lithic artefacts such as jade axeheads could indicate a form of ceremonial, gift, or prestige exchange, but for the everyday acquisition of the basic raw material for local mundane tool manufacture - Gloucestershire's 1000 imported nodules per year - something more economically 'efficient' must surely be imagined. Unfortunately, the most obvious comparative data for such mechanisms of exchange come from more primitivist societies, where lithic exploitation and use has a clear parallel with prehistoric Europe, but where the social, economic and environmental context is so different to that of neolithic England that it renders highly contentious the transference of explanatory models. So how do we explain the process by which our Gloucestershire cores arrived?

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construction of earthworks, fences and monuments not just for defence but also to suit the requirements of group identity and coherence. Control of lithic resources could help to explain the development of 'wealth' and social stratification at an inter-personal and an inter-community level. The 'affluence' of southern England in later prehistory may stem ultimately from the combination of good farmland and superior flint resources.

MISCELLANEA

PRODUCING A HORSESHOE-SHAPED SCRAPER

In conjunction with field-courses on archaeology, it has been my practice to introduce students to flint implements, and to include a demonstration of (my own) flaking techniques. With most unpromising material - cobbles of flint and Greensand chert from local beaches - I have found that, using a hammerstone, the real problem is to obtain the initial platform from which, by percussion, useful flakes may be struck. Having succeeded, and obtained some suitable flakes, I find that to convert them into conventional scrapers, it is not necessary to use a hand-held hammer. Holding the platform end of the flake, with the bulbous-face downwards, and tapping the opposite end sharply on the hard surface of the hammerstone, it is comparatively easy to produce a well-flaked scraper end. Apart from wear and patination, my products are almost indistinguishable from the genuine article, but I am not, of course, suggesting that this demonstrates that the method was used by prehistoric man. However, it does work, and in south Devon where many artefacts are made from beach pebble material, it may have some relevance.

Ted Masson Phillips

FORTHCOMING CONFERENCES

1. OXFORD. Recent Work on the Mesolithic, 11-13 March 1983. Details from Archaeology Secretary, Department for External Studies, Rewley House, 3-7 Wellington Square, Oxford OX1 2JA.

2. CARDIFF. The Neolithic and Early Bronze Age in Southern England - Recent Applications of Theory and Methodology, 21-23 March 1983. Details from Conference Organisers, Dept of Archaeology, University College, PO Box 78, Cardiff, CF1 1XL.

3. BRIGHTON. Fourth International Flint Symposium, 10-15 April. Details from Dr R N Mortimore, Brighton Polytechnic, Dept of Civil Engineering, Geotechnical Section, Cockcroft Building, Moulscoomb, Brighton, BN2 4GJ.

RECENT PUBLICATIONS RELEVANT TO LITHIC STUDIES

The favourable response to the inclusion of this section in the last issue has prompted a much more ambitious listing this time around. I am grateful for help in compilation to: Stephen Green, Frances Healy, Martin Hemingway, Mike Pitts, Caroline Wickham-Jones and Gillian Wilson. The listing, despite its length, cannot be regarded as anywhere near comprehensive, and contributions will be welcome from any LSS member, especially covering Irish and European mainland publications. The objective is to make the cumulative listing as comprehensive as possible for publications dated from 1980 onwards.

BRITAIN AND IRELAND: REGIONAL STUDIES

1. SOUTH AND SOUTH-WEST ENGLAND


