THE START OF THE BRITISH LOWER PALAEOLITHIC: SOME OLD AND NEW THOUGHTS AND SPECULATIONS

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Introduction

It is now about 15 years since I wrote a general account of the British Lower and Middle Palaeolithic periods (Roe 1981): many things have changed in that time, while others have remained obstinately the same. It must surely be a good exercise to try to update one’s overview of the period from time to time, and this brief paper is a gesture in that direction, requested by the editors of this number. To carry out such an exercise properly would require much more space than is available here, so it is a theme to which I shall aim to return elsewhere in due course, and I will concentrate here mainly on the opening stage of the British Lower Palaeolithic. Notwithstanding the widening scope of Palaeolithic studies in recent years, any such overview is still largely a matter of interpreting the various lithic assemblages, which continue to make up the large majority of the evidence.

Any attempt at an overview of any part of the British Palaeolithic needs to be outward-looking, for the simple reason that Britain contains the northwestern extreme of the whole Old World Palaeolithic distribution. During the whole of the period, people must have reached the Pleistocene ‘British peninsula’ of western Europe from either a southerly or an easterly direction, since there are no possible contemporary sources to the north or west, and really early dates are hardly to be expected in Britain for the start of the Palaeolithic. Subsequently, there may certainly have been local developments, originated within Britain by people after their arrival there, but it has to be remembered that changes of climate and local environment during the Middle and Upper Pleistocene in the higher latitudes were many and profound, and there is no realistic likelihood that Britain was continuously occupied during any major segment of the Palaeolithic period. The question of alternation between a British peninsula and some form of ‘British Isles’ at certain times during the Pleistocene is also important in this connection, and is discussed from various points of view by contributors to the recently published volume Island Britain: a Quaternary perspective (Preene 1995).

As regards the Lower Palaeolithic, at glacial maxima conditions would have been too severely cold for a human presence in Britain (as, for example, when the Anglian ice-sheets were extended as far as the London basin). We should note too the view of Gamble (e.g. 1987) that the warmest parts of the interglacials were also unfavourable for humans in the northern half of Europe, though others have challenged this (see for example the discussion in Roebroeks et al. 1992). While there are undoubtedly British sites where underived artefacts occur in sediments of interglacial character (one need look no further than the Lower Loam at Barnfield Pit, Swanscombe, or Barham in
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Suffolk), it is certainly hard to point to British Palaeolithic sites (as opposed to finds of faunal or floral remains) that are undeniably associated with interglacial maxima. The story therefore seems likely to be one of intermittent human presence in Britain, with the various episodes of colonization perhaps coming from different directions and involving unconnected human groups. If these things are so, we certainly need to take western Continental Europe into consideration in explaining what we find in Britain, and we may sometimes need to look even further afield to achieve a full understanding.

For British Palaeolithic archaeologists, the principal changes over the past 15 years include a substantially altered understanding of the British Pleistocene sequence, the discovery of several major new sites, and important reinterpretations of old ones on the basis of new and definitive fieldwork. To that may be added the new kinds of information we have been able to extract from archaeological assemblages through the application of new techniques or new approaches, and comparable advances made by specialists in other departments of Quaternary Research - in the study of faunal or sedimentological evidence, or the extraction of chronometric dates, for example. I will here consider briefly what impact some of these things have had on my own view of the British Lower Palaeolithic of fifteen years ago, and I will devote most attention to what we have learned from the excavation or re-excavation of sites in Britain, with an eye also on some of the things that have been happening elsewhere. It will necessarily be a highly selective review.

Then and now

In the early 1980s, interpretations of the British Pleistocene sequence usually followed closely the scheme put forward by Mitchell et al. in 1973, and we were pleased enough to have their still quite new nomenclature of Cromerian, Anglian, Hoxnian, Wolstonian, Ipswichian and Devensian. But it was already becoming apparent to many people that, even allowing for climatic fluctuations within glaciations and perhaps also interglacials, there were not really enough names in that list to cover the unexpectedly large number of peaks and troughs on the Oxygen Isotope palaeotemperature curve, of which one particularly influential version (Shackleton and Opdyke 1976) had been published only three years after the work of Mitchell and his colleagues.

Just how far things have since gone in the expansion of the traditional British Pleistocene sequence to fit the Oxygen Isotope curve can be well seen in the recent account by D.R. Bridgland (1994) of the Quaternary of the Thames Valley, in which he interprets the terrace gravels and other features specifically in terms of the numbered Oxygen Isotope stages, with the maximum advance of the Anglian ice, correlated with Stage 12, providing one of the important markers. The immediately subsequent interglacial (Stage 11) is widely called Hoxnian, but Bridgland notes some difficulties in firmly identifying the interglacial deposits at the type site, Hoxne, with the warm period which at

Swanscombe directly follows the Anglian; we have to bear in mind that the Thames was actually diverted southwards to something like its present course by the Anglian ice advance, and the Swanscombe Lower Gravels should certainly have been deposited in the immediately post-Anglian return to warmer conditions. A cornerstone of most interpretations of the British Lower Palaeolithic up to the early 1980's was the supposition that the interglacial deposits represented at Hoxne, Swanscombe and Clacton all belonged to one and the same warm stage, even if they contained between them both Clactonian and Acheulian industries. Bridgland’s comments indicate that this may turn out not to be the case (cf. also the discussions relating to chronology in Singer et al. 1993). Other effects of a comparable nature can certainly be seen, when we follow the Middle Pleistocene forward in time after Stage 11.

For Bridgland, the period of time previously covered by the single name Wolstonian, and once regarded as a single cold stage with perhaps some milder oscillations, actuallycompasses the Oxygen Isotope stages 10 to 6 inclusive. It is hardly surprising that he invokes the Continental term Saalian, better to cope with the complexities, for on a minimal view there are now three substantial cold stages and two important warm ones to be accommodated here.

The important point for Palaeolithic archaeologists is that the archaeological sequence is accordingly far less constricted than it used to be, and this of course does not only apply to the Thames Valley. Thus, for example, one is no longer forced to choose between ‘Hoxnian’ and ‘Ipswichian’ as the only two possible dates for the interglacial channel at Wolvercote, in the Upper Thames Valley, with its highly distinctive industry of plano-convex style handaxes (Tyldesley 1986; Roe 1981, 118-28), which cries out for comparison with Continental European assemblages. Nor do we need to feel surprised that a certain industry with small handaxes made of local rocks in the cave at Pontnewydd in North Wales, first discovered back in the late 19th century, did not turn out to be the Mousterian of Acheulian Tradition of Last Glacial age that the few who were aware of it had mostly assumed, prior to the long and important series of excavations directed by Stephen Aldhouse-Green in the 1980’s and 1990’s, so much as a particularly interesting Late Acheulian of Stage 7 or 6 age (Green 1984; Aldhouse-Green 1995). As for Stage 7 interglacial, one of the most interesting new sites has been the Stanton Harcourt Channel, Oxfordshire, lying at the base of the Sunnington Radley Terrace complex of the Upper Thames (K. Scott, C. Buckingham and others, reports in preparation). An extraordinarily rich collection of faunal, floral and molluscan material has been recovered here, documenting warm conditions in which mammoth apparently flourished, although some straight-tusked elephant is also present. A few artefacts, including handaxes, have been found in situ in the Channel deposits, though unfortunately they have not so far proved to be derived, rather than in a primary association with any of the animal bones. As rich faunal and floral assemblages belonging to the different Middle Pleistocene warm periods are found, features that will enable us to distinguish between them in the absence of older dating evidence
should emerge, and it is also becoming possible to see how deposits with only limited amounts of faunal material could in the past have been wrongly assumed to be of the same age. It is a relief that occurrences of Hippopotamus in Britain still seem to be confined to the Stage 5e Interglacial though one has to beware of a consequent invalid assumption that sometimes seems to be made, namely that all Stage 5e deposits will necessarily contain Hippopotamus.

With all the new information and realignment of interpretation in the referred to here, it is somewhat surprising to note that Philip Gibbard, in his recent book on the Pleistocene of the Lower Thames Valley (1994), has deliberately decided against making correlations with Oxygen Isotope stages for Hoxnian-Wolstonian-Ipswichian-Devenian succession to accommodate all the sites he describes. Thus, for example, he lists (op. cit., 185) some 13 occurrences of interglacial sediments in the Lower Thames Valley, which for Bridgland (1994), the same sites were all variously attributable to Oxygen Isotope Stages 9 and 7, and none of them to Stage 5e. Areas of disagreement still remain concerning the British Middle Pleistocene, but one wonders whether it will be possible for anyone to sustain an ‘unexpanded’ view for much longer.

The British Lower Palaeolithic sequence

The message of the preceding section is simply that there is now far more flexibility and room for manoeuvre, and a far better basis of knowledge, for anyone wishing to outline a British Lower Palaeolithic succession, than there was in the early 1980’s. Interest in artefact typology was already well on the wane by the end of the 1970’s, and has continued to decline, perhaps not yet to the point where such things become due for rediscovery and a new lease of life. In 1981, I suggested that the earliest stage of human occupation in Britain involved both an Early Acheulian, with crudely made handaxes worked by hard-hammer flaking only (as for example at Fordwich or Kent’s Cavern), and the first occurrences of Clactonian, with cores, flakes and choppers, lacking any trace of handaxe manufacture. I regarded these as two separate entities, both apparently beginning ‘earlier than the Hoxnian Interglacial’ (i.e., following the scheme of Mitchell et al. 1973). There followed a long phase best broadly regarded as Middle Acheulian , with a variety of industries, some specialising in pointed handaxes (as in the Middle Gravels at Barnfield Pit, Swanscombe), others in ovates (as in the Upper Loam at Swanscombe, or Bowyer’s Lodge), and others with other special features, such as a strong component of cleavers (as at Baker’s Farm or Cuxton); such variants did not display a clear and consistent order of occurrence in Britain, though in the important Swanscombe sequence it was the pointed handaxes that came first. There was subsequently a rather scarcely represented Late Acheulian or Micoquian stage, which seemed
to me at that time likely to be of ‘Ipswichian’ age, and was only really well represented at the Wolvercote site already mentioned above. Also, a few pure ‘Levalloisian’ industries could be found in Britain from the ‘Wolstonian’ onwards, representing special circumstances: there was an earlier version with large oval flakes, best seen at Baker’s Hole, Northfleet, and a later more blade-like facies, as at Creffield Road, Acton, or Croydon. ‘Levalloisian’, however, was ordinarily to be regarded simply as a knapping technique, which might be used whenever required by people who were aware of it, but who usually made other industries, especially Acheulian or Mousterian ones. The remarkable and unique ‘classic flake-tool industry’ of High Lodge was somewhat enigmatic, publication of the site being still awaited, but I believe it most likely to be some kind of ‘archaic Mousterian’, for which I thought certain Continental parallels could be detected, and I guessed accordingly that it might date from a mild period within the ‘Wolstonian’.

Subsequent work at several sites has demanded modifications to that scheme, not least its opening stage, which is our main concern here; two have been particularly important in this respect: Boxgrove, and High Lodge. The particular impact of these can be considered next.

Boxgrove. The outstanding work by Mark Roberts and his team over several years at this magnificent site (Roberts 1986, 1990; Roberts et al. 1994) has given the British Lower Palaeolithic a real boost on the international stage, and has yielded a flood of invaluable information, of a quality fully in keeping with the discovery of well-preserved and minimally disturbed Middle Pleistocene land surfaces, occupied by humans and animals. Attempts to date the site chronometrically do not appear to have given really satisfactory results, but there are good arguments (notably those based on the microfauna) to indicate that the principal archaeological levels belong to the close of a warm period which is earlier than the Anglian glaciation, and therefore earlier than the whole of the sequence at Barnfield Pit Swanscombe. This gives particular interest to the typological and technological status of the handaxe industry, which is dominated by finely made ovate implements (in a broad sense), with abundant evidence for the use of ‘soft-hammer’ technology, and ‘tranchet finish’ techniques. The ‘soft-hammer’ evidence is not open to doubt: not only are numerous classic ‘soft hammer’ flakes (some of them conjoinable) preserved in one area at Boxgrove where handaxes were manufactured, but in another part of the site, where freshly made handaxes and other artefacts are associated with animal bones that bear traces of butchery, recent excavation has produced at least one actual soft hammer of bone, with minute flint fragments embedded in an area of it which also shows clear percussion damage (M. Roberts, paper given at the ‘Southern Rivers’ meeting, London, 1994). Boxgrove appears to offer us a glimpse of actual British ‘Early Acheulian’, in a chronological sense, and it could hardly be more different, within the range of handaxe industries, from the crudely made industries of Kent’s Cavern, Fordwich and the rest which constituted my own
proposed British Early Acheulian of 1981. At that time, one could not point to any occurrences of 'soft-hammer' technology that were certainly of 'pre-Anglian' or even 'pre-Loxmiin' age (still in the senses of Mitchell et al. 1973).

High Lodge. The fieldwork at High Lodge between 1962 and 1968 produced results that proved very controversial, as between archaeologists and Quaternary geologists, that the supplementary campaign of 1988 was required before the issue of dating was resolved, and publication eventually took place four years later (Ashton et al. 1992). The outcome offers both confirmatory and supplementary evidence in respect of the Boxgrove conclusions just mentioned. At High Lodge, the actual passage of the Anglian ice-sheet disturbed and indeed transported fine clast-silt deposits of pre-Anglian age, which contained the well-known flake industry, in fresh condition. When the ice subsequently melted, these deposits were covered by glaci-fluvial sands and gravels, in which may be found a number of handaxes, derived from some nearby Acheulian site or sites (which must also have been of pre-Anglian age) and redeposited at High Lodge. Here then are two further demonstrably 'early' British Lower Palaeolithic assemblages, and their nature is again not at all what would once have been anticipated at such a date. The flake tools in the industry of the clast-silts show retouch of an 'elegance and regularity that is not to be found in the Clactonian of Clacton or Swanscombe, though the technology that yielded the flake blanks is quite a simple one (Ashton 1992). Possibly the high quality East Anglian flint has contributed to the sophisticated appearance of the flake tools, but it is hardly surprising that they were so often regarded as Middle Palaeolithic in the past, and that comparisons were sometimes made to tools found in the 'Quina' variant of F. Bordes' scheme for the southwest French Mousterian. As for the handaxes, they are again ovate, many of them finelly made; when I made a metrical analysis of them many years ago, I found them to be closely similar in points of detail to the ovates from the far more prolific site of Warren Hill, which is less than a mile away from High Lodge, and might, one supposes, even be the very source from which they were derived to be redeposited at the latter site. The gravel at Warren Hill can now be regarded as a part of the Ingham Sand and Gravel and accordingly is of pre-Anglian age (Wymer et al. 1991), something that was not clear in 1981, and handaxes occur at all levels within it.

Discussion

Boxgrove and High Lodge have given a new dimension to our view of the early Lower Palaeolithic of Britain, largely by virtue of the clear indications at each of a pre-Anglian date. It is important to note, however, that they have not actually replaced what was already there, but have simply added to it. There is still the Clactonian, with its hard-hammer cores and flakes, and there is still the crudely made Acheulian of sites like Kent's Cavern and Fordwich, with heavy, thick, narrow handaxes devoid of soft-hammer flaking, also arguable in some cases as being of pre-Anglian age. Clearly, there are different ways in which such variety at the start of the British Lower Palaeolithic might be explained, and we are probably not yet in a position to choose between them on the basis of factual evidence. The different industries might all be the work of a single population, the variation merely reflecting different situations related to function, environment or raw material, or they might represent the distinctive outputs of different human groups, with different technological or stylistic approaches to the manufacture of stone tools. This is not of course a new controversy, but it might be seen as an expansion of an old one: the debate still continues as to whether Clactonian and Acheulian are really separate entities in Britain (cf. for example Ashton and McNabb 1992), here we are considering two radically different kinds of Acheulian, plus the earliest of the assemblages which have been called Clactonian, and the unusual High Lodge flake-tool industry, all apparently at least broadly contemporary within a part of the Middle Pleistocene that is earlier than Oxygen Isotope Stage 12. I do not have space here to discuss in detail the dating evidence for all the sites involved, but I believe what has just been said to be a correct summary.

Should we be surprised at the occurrence of finely made ovates in Britain prior to the Stage 12 Anglian cold event, say around 500,000 years ago? Not really, if one looks far enough afield. In sub-Saharan Africa, widely regarded as the ultimate source of the European Acheulian, handaxes of such a kind can be seen before the end of the Lower Pleistocene, for example at Kariandusi in Kenya and in some of the sites towards the base of Bed IV at Olduvai Gorge in Tanzania, while the really archaic-looking Acheulian industries (such as El-HP at Olduvai, or Peninj) tend to have dates well in excess of a million years; indeed, some recent reports suggest that the oldest dates for Acheulian industries in East Africa go back certainly as far as 1.4 million years ago and perhaps even to about 1.7 million years ago (Ashaw et al. 1992; Roche and Kihunja 1994). The rock types are different, of course, in Africa, and have their own effects on implement morphology and technology. But from that starting point, it should not be too hard, if one wished, to construct arguments that would leave one surprised not by the presence in Britain of 0.5 million years ago of fine ovates, but by the occurrence anywhere at so late a date, even in Britain, of archaic-looking handaxe assemblages, not to mention simple core and flake industries like the Clactonian itself.

What of these early British ovate handaxes themselves - are they just the same as those in the Middle Acheulian industries with ovate preferences, such as occur in the Upper Loam at Swanscombe (Barnfield and Rickson's Pits), or at Elveden in Suffolk? Given the current disquiet for anything that might be thought of as typological analysis in the study of handaxes, few people are likely to have looked recently at the structure of the groups in the Ovate Tradition of the British Lower Palaeolithic that I proposed so many years ago (1968; 1981). It is very interesting to note that High Lodge and Warren Hill
both fell in my Group VII (ovates tending to have blunt or square ended planforms, with soft-hammer working and occurrence of tranchet finishes, but absence or extreme scarcity of twisted profiles), while the Middle Acheulian industries just mentioned were in Group VI, (ovates with a tendency to more pointed planforms and a high incidence of twisted profiles).

Another member of Group VII was Highlands Farm, in the Caversham Ancient Channel gravels, now seen to be a part of the Anglian Black Park Terrace. Apart from the ovates of the measured sample, which are mainly in fresh condition, the gravel at Highlands Farm also contains a substantial number of archaic-looking handaxes, usually much more worn, and large numbers of cores and flakes in the Clactonian style (see also Wymer 1968, 191-4). All these are jumbled together, and almost certainly represent the sweepings of a pre-Anglian landscape, though in the circumstances it is hard to make any provable statements about the relationships between the three elements. At Hamstead Marshall in the Kennet Valley, another gravel of Anglian age contains handaxes in a derived state, archaic types and some ovates, the former rather more worn than the latter (Roe 1981, 151-2; see also Bridgland 1994, 145-9). At Warren Hill, the prolific collections of handaxes are dominated by the Group VII finely made ovates already referred to, which are in fresh condition, but the same gravels contain a number of heavy, archaic-style handaxes, mostly much abraded. The Groups were of course defined back in the 1960's on morphometric criteria, and the dating evidence for the various member sites was very sparse; now, as we have seen, somewhat more is available. No-one has yet made a metrical analysis of the Boxgrove handaxes, but they certainly include ovates with square-ended planforms, and tranchet finishes are common.

I deliberately inserted the word 'speculations' into the title of this paper, to cover the making of comments of the foregoing kind, when there would be no space to document them properly. At most, they may serve to start or to fuel discussion of some of the issues. One might accordingly go on to speculate that the four components of the opening stage of the British Lower Palaeolithic to which I have drawn attention are real, and independent of each other. There are instances where they occur in isolation, and when found together in gravel, there are at least some signs of differences in physical condition. I myself certainly still believe the Clactonian to be separate from the Acheulian, but will not repeat the reasons here. Given the geographical situation of Britain, with which I began, might these different industries perhaps arrive independently in Britain late in the Lower Pleistocene, from separate sources in Europe?

Speculation can always get even wider (or wilder), if one wishes. If there were indeed such a variety of contemporary lithic traditions in Europe early in the Middle Pleistocene, why might that be the case? If the continent were really first inhabited only some 0.5 million years ago (cf. Roebroeks and Van Kolfschooten 1994), why did not the colonists arrive with only the newest technological skills that were current at that date wherever they came from? In fact, there is a growing body of evidence to suggest that the first movement of humans out of Africa had taken place well before 1.5 million years ago; some would even say before 2.0. If we consider here only sites that are on the immediate threshold of Europe, the most recent dating of Dmanisi in Georgia, with hominin remains and artefacts, indicates a figure of 1.8 mya. (Gabunia and Vekua 1995) and in September 1995 an international conference at Orce, in southern Spain, was shown excavated Lower Pleistocene sites where unquestionable artefacts are associated with animal bones; the dating cannot be less than c.1.0 mya, and could yet prove to be as early as the 1.6-1.9 mya that has been claimed (cf. also Roe 1995). At both Orce and Dmanisi, the lithic industries are of unsophisticated character, with cores and simple flake tools; handaxes are absent. These and certain other occurrences elsewhere in the world make it possible to speculate that humans were already moving out of Africa and spreading in different directions, prior to the appearance of the first handaxes in the African record. There is also no obvious reason to suppose that there was only a single early human exit from Africa; indeed, it seems far more likely that at least some of the routes continued to be used at least intermittently over long periods, resulting in the gradual dispersal of various kinds of humans with various kinds of artefact traditions. Not all these human groups need subsequently have encountered each other, and if their traditional tool-kits were effective for their purposes, the artefact types may have remained essentially unchanged over long periods of time (as seems to have been the case in the Lower Palaeolithic of the Far East, for example). Whether any of the earlier migrant groups may have entered Europe proper and achieved long-term survival there, or whether there were merely occasional entries into Europe during the Early and Middle Pleistocene from areas beyond, as a secondary form of colonisation, so to speak, perhaps remains to be seen at this stage, and may require discovery of new sites or re-dating of old ones to become clear - the same sort of process that has been happening in Britain over the past 15 years, clarifying our views in the ways to which I have referred. Meanwhile, speculation must always remains speculation, and some may feel that such thoughts are too far-fetched to be useful.

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TECHNOLOGY OF EARLY PALAEOITHIC WESTERN EUROPE: INNOVATION, VARIABILITY AND A UNIFIED FRAMEWORK.

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Introduction

There are three main problematic areas in the technology of Early Palaeolithic Europe, around which research tends to revolve. Each of these areas has a long pedigree, and the history of Palaeolithic research tends to emphasize them. These are:

1. Biface occurrence and variability;
2. The origin, function and variability of Levallois core technology;
3. Middle Palaeolithic flake assemblage variability (the 'Mousterian Problem')

There is a problem in this field that whilst lithic research still directly addresses these issues, each is approached individually: there is an absence of an overall conceptual approach to the technology of the period. Thus, the variability production forms a central component of current debates regarding supposed differences between Achellean biface assemblages and Clactonian/nicone industries; but this occurs in isolation from recent studies of Middle Palaeolithic technology which instead look forward to the emergence of the Upper Palaeolithic. Forming an overlap between these two extremes, recent research into Levallois technology has emphasised great technological variability and a long chronological range. In this sense it is purely descriptive, and very few papers actually address why Levallois techniques were used in the first place.

The effect of these individual approaches is to compartmentalise the Early Palaeolithic, even though this takes place within the framework of an evolving population. Our main concern here is to take an homogenising approach to the period, examining these three fields within a unified technological framework, in relation to a archaic population of Europe. We advocate a unified approach to the Early Palaeolithic as an area of study in its own right; rather than as a collection of disparate studies of Lower Palaeolithic technology or of a Middle Palaeolithic defined for comparison with the Upper Palaeolithic. Whilst, the 'Mousterian debate' of the late 1960s and early 1970s was ostensibly about the causes of lithic variability it seems to have had much more to say about the limitations of our own classificatory systems than Early Palaeolithic behaviour (Pettitt 1995). In short, we are concerned to interpret the technological behaviour