RECENT RESEARCH ON THE EUROPEAN PALAEOLITHIC: A REPORT ON AN INTERNATIONAL DISCUSSION SEMINAR HELD AT CONNAUGHT HALL, UNIVERSITY OF LONDON, 6 - 7 January 1988

by Esmee Webb (Organiser)

This two-day meeting was designed to discuss the current state of research into different aspects of the Palaeolithic in Europe, particularly the earliest industries to inhabit plants and animal domestication, which was attended by approximately fifty people, mostly staff and students from British and continental universities, but also including independent researchers and amateurs. Belgium, France, Hungary, Israel, Italy, the Netherlands, Poland and Portugal, as well as the United Kingdom, were represented. A summary of the main themes, new ideas and conclusions is given here.

The first three papers discussed recent efforts to establish a chronological framework for the European Palaeolithic. Charles Turner (Milton Keynes) discussed the problems of attempting to correlate the available fragmentary terrestrial evidence with the deep sea oxygen isotope record, arguing that although the Holsteinian or 'great' interglacial can be correlated with both isotope stage 51 (420 - 370 ka), because that stage was the last time, prior to stage 5e, when the ice volume equated with the present interglacial, and with stage 7 (250-190 ka), on the basis of its complexity, the older correlation is preferable.

Both attributions cause problems for the interpretation of different classes of archaeological information, as Esmee Webb (Perth, WA) noted in her discussion of the chronology of late Middle and early Upper Pleistocene events suggested by recent radiometric datings. For example, the date for the hominid fragment from Vertesszöllös (Siman pers. comm.) would suggest that it falls into stage 7, as would those from Arago (Chaline 1981), Zilhão (Frontén and Frontén 1980), Steinheim and Swanscombe (Saab and Collins 1975), yet these are rather different physical types (Stringer 1981). However, all these finds have been assigned by most authors an 'Holsteinian' age on lithostratigraphic grounds. Clearly evidence for some of the interglacials recorded in the isotope record is missing from the land. The problem of whether archaeological sites attributed to the Holsteinian/Hoxnian belong in stage 11 or later interglacials remains to be resolved. A consensus seems to be emerging amongst archaeologists that, while it is still legitimate to use the terms 'Würm' and 'Riss' to mean isotope stages 5d/4-2 and 6 respectively, the terms 'Mindel' and 'Grenz' to mean very loosely to mean 'sometime in the Earlier Middle Palaeolithic'.

The earliest securely-dated sites in Europe and the Levant remain Isernia-la-Pineta, near Rome, where simple flake tools were stratified in non-magnetized sediments dated to >700 ka (Coltorti et al. 1982) and Ubeidiya, in the Jordan valley, also dated in a non-magnetized series to 1.1 Ma (Goring-Morris pers. comm.). Both of these sites are located on natural routes for the Lower Palaeolithic contents dispersal out of Africa into Europe. Unfortunately, as Luis Raposo (Lisbon) reported, dated analogous evidence is not available from the Iberian Peninsula, although Lower Palaeolithic material has been found which is thought on lithostratigraphic grounds to date to the early Middle Palaeolithic.

Paul Callow (Cambridge) reviewed the Lower Palaeolithic of north-west Europe in the light of recent excavations, dates from which would suggest that these criteria are useless as a guide to chronology. For example, the sophisticated Acheulean industry from Boxgrove, Sussex, excavated by Roberts, now seems generally accepted as being of the order of 400 ka, and probably the oldest Palaeolithic site in Britain. However, the industry also includes undoubted Acheulean cores and flakes.

This suggests, first, that Ohel (1977, 1979) may have been right after all, even if for the wrong reasons. First, second, that the archaeological evidence from Clacton, Hoxne and Swanscombe should be reviewed. John Wymer's forthcoming Hoxne report is eagerly awaited.

The transition between Lower and Middle Palaeolithic now appears as confusing as the evidence presented by the earliest industries. Conventionally, it used to be argued that the Upper Acheulean, made presumably by archaic Homo sapiens, disappeared at the end of the Riss glaciation, which can credibly be correlated with isotope stage 6 (160-120 ka), and was replaced by 'Würm 1' times by Mousterian industries. This scheme will no longer work. In the first place evidence from sites such as Fontnewydd (Green 1984) suggests that Neanderthals were alive and well in north-west Europe by about 200-250 ka. Moreover, those radiometric dates available from recently excavated sites such as Abri Vauvyrey (Rigaud 1982) and Hausheim-Saint-Vaast (Tuffreau 1979) and Middel Breda (Callow and Cornford 1986) suggest on stratiigraphic and stratigraphic grounds that industries clearly attributable to the Middle Palaeolithic were already established by stage 6.

The clearest message to emerge from these papers was that we cannot rely on the Palaeolithic artefacts to provide more than the harshest cultural chronology. That equally we cannot trust implicitly in the ages now being produced by radiometric techniques of many of which are still in their experimental stages, and that many problems still remain to be ironed out of the lithostratigraphy. Finally, all of Europe as a whole and of archaeological sites in particular. At present one can select to cite only those which fit one's preconceptions because there is little objective possibility of assessing the validity of the few dates available. The way to solve our very serious chronological problems is not to throw every conceivable radiometric technique at any site in the attempt to prove it is as old as the excavator believes, as has been done at Petralona (Wintle and Jacobs 1982), nor is it to attempt to date the fragmentary remaining deposits at key archaeological sites, particularly if there is any doubt about the stratigraphy. It is instead to carry out planned dating programmes, using as many techniques as possible, in which the samples are selected by the scientists who will proceed to test the course of excavation. Only thus can a body of dates be built up comparable to that based on radiocarbon now available for the Upper Pleistocene and later periods, which will enable us to eliminate the anomalies.

Far too little is known, outside the Iberian Peninsula itself, about the archaeology of Portugal. The survey of recent work on the Portuguese Lower and Middle Palaeolithic by Luis
Raposo was, therefore, particularly welcome. None of the sites he discussed has been dated radiometrically, however human occupation of the Atlantic coast clearly goes back into the Middle Pleistocene. Apart from some dubious 'pebble tools', about which he was rightly sceptical, the earliest artefacts are archaeologically identical to the material-finds of the Aurignacian, indeed a slightly earlier industry which is now widely regarded as comprising two components: an early Palaeolithic industry (the Gravettian, which appeared after 30,000 BP) and a later facies, which they now link to the Gravettian, which appeared after 30,000 BP.

None of the papers dealt exclusively with the Middle Palaeolithic sensu stricto, which reflects, I think, current controversy over the Upper Palaeolithic chronology (Webb 1988) and the models so far used to explain techno-typological variation in these industries. In Portugal, for example, there is no classic 'Mousterian' facies (as defined in France because there sites have produced typologically classifiable retouched tools).

Cathérine Fari2Y (Paris) argued that new interpretative approaches will be needed before assemblages attributed to the period c. 200-30 ka begin to be understood, but clearly there was some measure of cultural continuity with Spanish industries overlapping the 'Mousterian' at its beginnings, c. 150 ka (Rosen 1982), while debate continues over the nature of the Middle to Upper Palaeolithic transition at its end (Trinkaus 1983). The paper by Patrizia Gioia (Rome), arguing that the Uluzzian represents a two facies of the Aurignacian, is relevant in this regard. She emphasises that the Uluzzian is clearly stratigraphically earlier than the Aurignacian in Italy, and that it reflects a different kind of hominid, from the Middle Palaeolithic. Katalin Simán (Budapest) discussed another possibly transitional industry, the Szeletian of central Europe (Allsworth-Jones 1986), which Hungarian archaeologists have argued to be already an Upper Palaeolithic industry and which, they now regard as comprising two components: an early facies which has techno-typological links with the central European Middle Palaeolithic with battens, but which disappeared without trace before 30,000 BP; and a later facies, which link to the Gravettian, which appeared after 30,000 BP.

Our ability to identify such cultural hiatus depends partly on the discriminative quality of the artefact typologies on which our industrial attribution are based, but also on the precision of the chrono-cultural framework. It is possible to explain 'leaf-shaped' points by extreme bifacial pressure-flaking of 'core-stripped' blanks, or by more complex flake strategies. However, as Charles Turner has pointed out (1985, 1988), there are serious theoretical problems with the scheme they have created. Unfortunately, it has been widely used by archaeologists to create a monolithic system of cultural phases which will be difficult to dismantle, given the frequent inertia of archaeological thinking on matters chronology. As Spooner and in discussion, archaeologists must ensure they are up-to-date on the more strictly biostratigraphic literature.

François Djindjian (Paris) discussed the beginnings of the Aurignacian in Europe. This technocomplex is now generally recognised as the earliest 'true' Upper Palaeolithic manifestation in western Europe, where it is clearly intrusive (Djindjian 1986), but its origins remain as obscure as ever. This was one of many problems which the Russians, had they been able to attend, might have helped to clarify. Those radiocarbon dates now available suggest that Aurignacian assemblages developed some 10,000 years earlier in eastern and central than in western Europe, indeed a culture which spread from east to west, which is sometimes linked to the invasion of Europe by H. sapiens sapiens moving from the Levant northwestwards (Meil1ars and Stringer forthcoming). However, although industries called Aurignacian exist in the opinion of Levantine specialists (Bergman pers. comm.) they are not analogous to the European Aurignacian and cannot be interpreted as its possible precursor.

In Italy, it might have been expected that glacial environmental conditions would have been ameliorated by the Mediterranean and that people could have lived there more easily than farther north, however the evidence available suggests that human occupation was not continuous. Margherita Mussi (Rome) argued that the peninsula was abandoned for several millennia between its occupation by early Aurignacian people before 30 ka and its reoccupation in late Gravettian times after 25 ka. It is possible that the extensive continental shelf which would have been exposed by eustatically rising sea level for the observed hiatus has yet been proposed, however Mussi did emphasise the cultural isolation of Italy during the early Upper Palaeolithic. Regular outside contact was not maintained until late Gravettian times, as demonstrated by mobile art, discussed by Daniela Zampetti. In Portugal, by contrast, João Li lhio (Lisbon) demonstrated a comparable sequence from earliest Aurignacian to final Magdalenian. Presumably the greater land area available in the Iberian peninsula permitted continuous occupation by human groups who would by no means have been protected from climate oscillation by movements of the Polar Front in the North Atlantic (Ruddiman 1988).

Marcel Otte (Liège) considers that the Gravettian shows the influence of earlier traditions, suggesting that it can be locally derived (Otte 1986; Kozlowski 1986). Similarly, he suggested that the high-cost bifacially pressure-flaked Solutrean 'leaf-shaped' points might have been a response by people using a basically Gravettian technology to enforced social crowding during the last glacial maximum, when environmental conditions confined them in south-west Europe and increased the need for inter-group differentiation. He argued for the existence of two main areas of influence during the late glacial: one in the Paris Basin and another in the Low Countries, where the Gravettian is found, the other in north Germany and Britain, where tanged points of the Hambourgian/Cresswellian tradition are common. These two complexes appear to have overlapped both in space and time, particularly in the Low Countries, although Charles Turner warned against his basic assumption that the late glacial climatic phases (Bölling, Dryas, Alleröd, etc.) could be presumed to represent penecontemporaneous blocks of time.
such vegetational changes were diachronic and not distinctively present everywhere in Europe.

These papers clearly demonstrated that for much of the last glaciation many parts of Europe were probably only marginally suitable for human occupation, for example Poland, discussed by Janusz Kozlowski (Gdansk) and Yugoslavia, by Vladimir Golovanov (Belgrade). Certainly the archaeological record is patchy over most of central and north-west Europe during the Upper Palaeolithic. Given the amount of fieldwork that has now been carried out in these countries (Kozlowski 1983; Otte 1982; 1987), these gaps in the cultural record are likely to represent real human absences. If the evolutionary biologists are correct in suggesting that speciation occurs primarily in small, isolated, outlying populations (Dawkins 1986), by analogy we might logically expect to see greater cultural differentiation and economic diversity in these marginal regions. Such an argument was put forward by both Zvelebil and Goring-Morris (see below) to explain facets of late glacial archaeological diversity.

The remaining five presented papers surveyed aspects of the human adaptive response to changing environmental conditions during the late glacial. In the Italian Alps, Michele Lanziger (Ferrara) discussed Epi-Gravettian evidence for seasonal transhumance between lowland winter camps and high altitude summer camps. Similar research has been carried out by Berit Eriksen (Aarhus) for south-west Germany. Sofia Sulikowska (Warsaw) (article charted changing settlement patterns in the Osnabrueck-Vistula basin during the same period (12 - 10 ka), suggesting that the area was more densely occupied during the Younger Dryas than the Allerod period, the reverse of expectation. Human groups in these times were likely mobile, able to exploit a wide range of ecological conditions from temperate forest to tundra and capable of maintaining long-distance trading contacts, up to 600 km, if this was their strategy as is any guide. Gavvo Bonsall (Edinburgh) argued on the basis of his excavations in the Inner Hebrides that people colonised Scotland with a Late Palaeolithic technology before the Loch Lomond Readvance, rather than in the Mesolithic after it, as is usually assumed.

Marek Zvelebil (Sheffield) presented a highly speculative paper suggesting that, whereas Late Palaeolithic hunter-gatherers probably were forced by the harshness of living conditions at the time to maintain egalitarian social groups, in the Mesolithic people, far from being noble savages, were forced by the changing post-glacial environmental conditions into increasingly differentiated and hierarchal social structures. His thesis is difficult to substantiate, thinking of the Sungir' burials for example, and generated much lively discussion. It nonetheless merits consideration.

Finally, Nigel Goring-Morris (Jerusalem) argued that in the Levant and the Near East hunter-gatherers probably were forced by the harshness of living conditions at the time to maintain egalitarian social groups, in the Mesolithic people, far from being noble savages, were forced by the changing post-glacial environmental conditions into increasingly differentiated and hierarchal social structures. His thesis is difficult to substantiate, thinking of the Sungir' burials for example, and generated much lively discussion. It nonetheless merits consideration.

The paper by P.M. Dolukhanov was full of good ideas discussing the inadequacies of the concept of 'culture' as an explanatory paradigm in archaeology and argued that two spheres of influence existed during the Palaeolithic, the Mediterranean area and the north-central European Plain. I was a little startled, however, to find 'Basque-Caucasian' suddenly proposed as the exact contemporary of the formling human species of the formative period, while Indo-European became the lingua franca of early agriculturalists! Papers by L.V. Golovanova on the Achaeulian of the Caucasus, A.A. Simitsyn on pithões enquesiadas and S.A. Vasiliev on the archaeology of north-eastern Asia, were more concerned with factual matters and concentrated more on explanation than description. Clearly, had they been able to attend, their abstracts might have been more consistent. I particularly regret not having ecological balance that, by 10,000 BP, Levantine hunter-gatherers were forced to diversify their economic base and cultivate their food supply.

The underlying themes to emerge from these papers were:

1. Artefact typology, once an end in itself, is now used merely as a means to the end of explaining past human behaviour. The determination of the processes by which stone tools were made, the extraction and distribution of the raw material on which they were made, and the use to which they were put are now of primary consideration. Typology alone has been demonstrated to be inherently unable to solve any of the chronological or socio-economic questions with which Palaeolithic archaeology is now concerned.

2. Environmental data, both floral and faunal, have always played a larger part in stone age studies than in the later archaeological periods, however the information they offer is now used with increasing sophistication in the creation of consciously structured models aimed at the interpretation of past economic systems; not just to provide a chronological framework. Archaeology is slowly coming to grips with the complexities of the Pleistocene seen from a foraminiferal perspective and beginning to be able to answer the complex questions concerning past socio-economic systems which it has always attempted to ask.

Unfortunately, although it had been my explicit aim to invite as many speakers from Eastern Europe as possible, and funds had been successfully sought sufficient to finance the stay in London of up to a dozen East Europeans, who were duly invited, it was not possible to ensure that sufficient northerners attended. The necessary exit procedures in time to attend. Only the speakers from Hungary and Poland were able to present their papers in person. However, it is expected that most of those unable to attend will submit their papers for publication in the conference proceedings. It was particularly unfortunate that the Russians, from the Archaeological Institute in Leningrad, were unable to attend, since their abstracts suggest that their approach to archaeological problems is rather different from those with which we have become familiar in the west.

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been able to meet Vasili'ev, given my interest in the PalaeoIndian colonisation of North America to which his work in Siberia is directly relevant.

All the papers given at the meeting will be published together with additional papers solicited both from those invited speakers who failed to attend and from additional researchers from both eastern and western Europe, either known to me personally or recommended by those speakers who did attend. If any reader feels that he or she has research on hand which falls within the conference topic, a detailed abstract should be sent to me at the address below as soon as possible. The resultant volume will provide a comprehensive, up-to-date guide to current thinking by native researchers on problems in Palaeolithic archaeology throughout Europe, and should prove very useful to all those interested in this topic. A publisher is actively being sought for what is likely to prove a sizeable tome, since it will comprise about forty papers, each up to twenty pages long. If anyone has any constructive suggestions, do please let me know. So far, I have approached Pium and the Presses of the Universities of Chicago, Edinburgh and Sheffield, since they all have well-established reputations for speedy, low-cost but high quality publication in the archaeological field. It is hoped that the book will appear early in 1989.

Altogether, despite the absence of so many East European speakers, about ensuring whose attendance at future meetings I have learned a lot, the conference was, according to those who attended, a resounding success. I am relieved that my efforts culminated so happily for all concerned, particularly since I am leaving England at the beginning of July for a new career at the University of Western Australia in Perth, where I shall continue my interest in the analysis of human responses to environmental change by conducting research into Late Pleistocene Aboriginal settlement patterns.

Acknowledgements

This meeting was made possible by grants of supporting funds from the following organisations, whose assistance is gratefully acknowledged: the British Academy, the British Council, the Great Britain-East Europe Centre, the Great Britain-USSR Association, and the Royal Society.

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REFERENCES


Chaline, J., 1981, 'A la recherche de l'absolu', L'Archéologie 158, 50 - 58

Coltori, M., and eleven others, 1982, 'Reversed magnetic polarity at an early Lower Palaeolithic site in central Italy', Nature 300, 173 - 6


Djindjian, P., 1986, 'Recherche sur l'Aurignacien du Périgord à partir des données nouvelles de la Ferrassie', L'Anthropologie 90, 89 - 106

Green, R.S., (ed.), 1984, Pontnewydd cave: a Lower Palaeolithic hominid site in Wales. The first report (Cardiff, National Museum of Wales Quaternary Monograph 1)


Kozlowski, J.K., 1983, 'Le paléolithique supérieur en Pologne', L'Anthropologie 87, 49 - 82

Kozlowski, J.K., 1986, 'Gravettien in central and eastern Europe', Advances in World Archaeology 5, 131 - 200


Ohel, M.Y., 1977, 'On the Clactonian: re-examined, redefined and interpreted', Current Anthropology 18, 329 - 331

Ohel, M., 1981, 'The Clactonian: an independent complex or an integral part of the Acheulean', Current Anthropology 20, 685 - 726

Otte, M., 1981, Le Gravettien en Europe centrale (Bruges, Dissertationes Archaeologicae Gandenses 20)


Otte, M., (ed.), 1987, Le Paléolithique supérieur européen (Liège, ERAUL)

Renault-Minkovsky, J., L'environnement au temps de la préhistoire: méthodes et modèles (Paris, Masson)

Rigaud, J - Ph., 1982, 'Le Paléolithique en Périgord: les données du sud-ouest Sarladais et leurs implications', thèse de Doctorat d'Etat es Sciences, Université de Bordeaux I, Talence
FLINT AND STONE IN NEOLITHIC BRITAIN, CARDIFF
25 - 27 March 1988
by Frances Healy

Nearly sixty participants, including two from the Netherlands and two from the United States, gathered for the first joint meeting of the Neolithic Studies Group and the Lithic Studies Society. The weekend was admirably organised by Tim Darvill, Stephen Green, Alan Saville and Alasdair Whittle, supported by Elizabeth Walker of the National Museum of Wales.

An opportunity to handle material from Hazelinde Warren's excavations at Great Langdale elucidated the debitage techniques employed at the site, while Stephen Green suggested that the evidence recorded in Warren's original report may indicate an organization of work comparable to that now reconstructed for the Langdale quarries.

Alan Saville's opening address charted the past progress and remaining shortcomings of Neolithic studies and emphasised the continuing need for higher and more consistent standards of recovery, recording and curation of lithic material, without which its value for the overall understanding of the period cannot be realised.

The subsequent papers, abstracts of which are reproduced below, left participants competing for discussion time and raised several salient points:

1. The extra-functional significance of at least the finer stone and flint axes, seen in the costs of extraction and manufacture, in their final mode of deposition (for example in hoards or in contexts from which they could scarcely be retrieved, such as the bed of the Thames or the East Anglian Fens), and in the presence of exotic axes in areas which had more than adequate local supplies (for example Group VI axes in Ireland).

2. The operation at a single source of different working methods at differing levels of efficiency, although at both Great Langdale and the Sussex flint mines it remains to be seen whether these variations are of chronological or socio-economic significance. It remains also to relate them to variations in scales and patterns of distribution over time.

3. The value of seeing lithic procurement and use in the context of local geography and settlement. Richard Bradley painted a vivid picture of the working of Great Langdale tuff as an aspect of the use of upland summer pasture by communities cultivating the Cumbrian plain and of their communal monuments as centres from which the axes passed into wider circulation. On a more modest scale, John Schofield's division of the Meon valley (Hants) into zones of extraction and settlement and my own use of East Anglian settlement assemblages and fieldwalked collections as a key to the use and dispersal of Grime's Graves flint adopted a similar approach.

4. Our still lamentably poor understanding of flint mine sites. This is at least in part due to the nature of the material extracted from them. Flint, at least in Britain, is seldom macroscopically attributable to a particular source, and, more