look at the composition of the whole assemblage in terms of the local dynamics that have influenced their formation.

References


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Lower Palaeolithic Finds at Wood Hill, East Kent: A Geological and Geomorphological Approach to an Archaeological Problem.

Julie Scott-Jackson

Background

Human occupation of the chalkland hilltops of southern England, with the cappings mapped as Clay-with-flints, provides a dimension to the Palaeolithic archaeological record which has yet to be fully appreciated. My previous research has led me to believe that hilltop areas mapped as Clay-with-flints represent the most ancient relatively stable landsurfaces in Britain (Scott-Jackson 1991a). These deposits seem not to have been directly affected by glacial or alluvial activity but nevertheless have been subjected to processes associated with both periglacial and temperate environments. With this proviso therefore, these deposits may be considered to have been stable since the late Cromerian (Catt 1986). An understanding of the processes acting upon and within the areas mapped as Clay-with-flints (which often includes brick earths) and chalklands forms an essential part of my doctoral research on Lower and Middle Palaeolithic artefacts in relation to the deposits mapped as Clay-with-flints and the Chalklands of southern England.

One focus of my research is to record all the surviving patches of Clay-with-flints in southern England, and to note past finds of Palaeolithic artefacts certainly or possibly associated with them (Scott-Jackson 1991b, in prep). Another is to seek particular occurrences that might be followed up in detail to provide case-studies for archaeologists and other Quaternary researchers. These case studies are to be designed to address the following hypotheses:

1. Given the relative stability of the deposits, that more or less in situ Lower or Middle Palaeolithic sites should exist on some of the chalkland hilltops capped with the deposits mapped as Clay-with-flints;

2. That some of the current models used to explain patterns and levels of erosion and deposition of the Clay-with-flints on hilltops may require substantial adjustment;

3. That there are a number of factors that would indicate whether any given Clay-with-flints capped hilltop would warrant detailed survey or excavation. Some examples of these factors are: the presence or absence of sur-
face-finds of stone artefacts on the hilltop itself; the shape and location of the hilltop, as a feature of the general topography of the immediate area; the geographical relationship between the Clay-with-flints hilltops that have produced surface-finds of stone artefacts within a specific area; the pattern of distribution of the hilltop surface-finds relative to the local distribution of Palaeolithic finds at lower levels and the proximity of essential resources such as good quality flint or fresh water.

A small excavation on Wood Hill, Kingsdown, near Deal, East Kent, conducted in 1993 offers the first example of such a case study.

Previous Investigation

In 1984/85, Keith Parfitt and Geoff Halliwell of the Dover Archaeological Group had conducted a series of excavations (trenches of approximately 1m x 1m or 1m x 2m) on Wood Hill as part of their general investigation of the Dover/Deal area (Halliwell and Parfitt 1993). Although a variety of apparently Palaeolithic artefacts were recovered, at this time neither Keith Parfitt nor Geoff Halliwell considered himself a Palaeolithic expert and few people seemed to be interested in the finds. Subsequently, as nothing could be done with the material, the artefacts and the site archive were stored by Dover Archaeological Group (Parfitt et al. 1984/5).

Following a chance discussion at a Lithic Studies Society meeting with Geoff Halliwell and a visit to Wood Hill, I agreed to write up and publish more fully the results of the 1984/85 excavations within the context of my own research. The area satisfied several of the identifying criteria as stated in hypothesis three and provided the basis for an in depth study to address hypotheses one and two. It was clear, therefore, that a further investigation at Wood Hill would be desirable. To this end I organised the 1993 excavation.

The 1993 Project

The 1993 excavation plan was to dig a single 3m x 1m trench between the previous 1984/85 scattered 1m x 1m and 1m x 2m trenches (Fig. 1) which had been marked out, in preparation for this project, by Keith Parfitt and Geoff Halliwell. As well as addressing the hypotheses as stated, it was also hoped to answer some of the questions posed by the 1984/85 excavations.

Methodology

The method of excavation employed in the 1993 excavation is different to that in general use on Palaeolithic sites. Although this was an archaeological project, the method of excavation has been essentially designed from a geological and geomorphological perspective. The aim of the project required not only the location of artefacts in situ (hypothesis one) but also an
The level of detail required for a later three-dimensional reconstruction of the deposits meant that the 3m x 1m trench had to be divided into three 1m x 1m squares (designated A, B and C in Figs 1 and 2). Within each square a 1m x 0.25m 'control column/spit' was marked out. Each square was then excavated in 5cm spits. Every struck flake (artefact) was fully recorded then bagged. All pebbles or pieces of natural flint the deposits meant that the 3m pebbles was faunal and floral remains are very unlikely to be preserved. In addition, approximately 3 tonnes of soil were removed for detailed processing and analysis.

By analysing the samples in this way, I hope to collect sufficient information to address questions such as: How could Palaeolithic artefacts become incorporated into or remain on the surface of the Clay-with-flints deposits over many thousands of years, during both glacial and interglacial periods; what has happened to the sediments since they were deposited; and is there a correlation between particular facies of Clay-with-flints and the occurrence of Lower and Middle Palaeolithic artefacts on/in these deposits in southern England?

Preliminary Findings

A field visit by Dr Roe confirmed that the artefacts are indeed Lower Palaeolithic and some of the waste flakes appear to be biface trimming flakes. Substantial quantities of tiny debitage fragments have been produced from the small amount of soil sieved so far. It may be possible that more than one episode of Lower Palaeolithic occupation is present but, bearing in mind the ways in which post-depositional movement of artefacts can take place, this remains an open question until further analysis has been completed. One concentration of material, located in spits one/two of Square C of the trench, contained most of the artefacts, waste flakes and debitage found on the site. The discovery of burnt flint amongst the material from spits one/two may prove interesting. Another concentration in spits eleven/twelve of Square B held just a few waste flakes and a fine complete biface (Fig 2). No archaeological material that is not Lower Palaeolithic appears to be present.

The 1993 excavation at Wood Hill was very successful and much useful material was recovered. Detailed analysis of this material will continue for several months but preliminary findings seem to address the hypotheses and to have answered some of the questions previously posed by the 1984/85 excavation. The chalkland hilltops, capped with the deposits mapped as Clay-with-flints in East Kent, Hampshire and other areas, will be the continued focus of my Lower and Middle Palaeolithic studies. Compilation of the Gazetteers (Scott-Jackson 1991b, in prep), has demonstrated that existing records of Lower or Middle Palaeolithic artefacts are often incomplete. I would therefore be grateful to hear of any Lower or Middle Palaeolithic artefacts recently found, or previously unrecorded, on areas mapped as Clay-with-flints on the chalklands of southern England.

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References


Reduction Models and Lithic Variability in the Middle Palaeolithic of Southwest France

P.B. Pettitt

Introduction

The study of Neanderthal behaviour is a central topic in current discussions of the origins of anatomically modern humans and the apparently concomitant 'Middle to Upper Palaeolithic transition'. A major theme of the debate relates behavioural changes reflected in the archaeological record to cognitive development within anatomically modern human groups either as they move out of Africa or emerge locally from regional archaic populations (e.g., papers in Mellars and Stringer 1989; Mellars 1990; Stringer, Aitken and Mellars 1993).

The organisation of lithic technology is a major unit of comparison between the 'archaic' Mousterian populations of Europe (Neanderthals sensu lato) and 'moderns' (Cro-Magnon). Research into Mousterian technology has progressed for over a century, and has largely been dominated by the work of François Bordes, who grouped assemblages into major variants on the basis of typological and technological traits (Bordes 1953, 1961). Broadly, these main variants reflect the dominance of scrapers in a non-Levallois (Quina Mousterian) or Levallois context (Ferrassie Mousterian), the dominance of denticulates (Denticulate Mousterian) or of bifaces and backed knives (Mousterian of Acheulian Tradition or MTA), or are defined in a negative sense as possessing low frequencies of all of the above typological forms (Typical Mousterian). Although Bordes later admitted that such variants are conservative (1981), and form points in a continuum of variation (Geneste 1985), they have remained as a useful heuristic system. Recent interpretation of assemblage variation has tended to take a holistic view of this assemblage patterning, relating technology to raw material procurement and transport (Geneste 1985, 1989), settlement type and occupation intensity (Rolland 1981; Rolland and Dibble 1990; Dibble and Rolland 1992), subsistence strategies (Stiner and Kuhn 1992) and other variables in the context of a dynamic adaptive system.

A major hypothesis to arise out of this 'holistic paradigm' are the tool reduction models of Harold Dibble and Nicholas Rolland, which have been outlined in a series of publications with two joint syntheses to date (Rolland 1977, 1981; Dibble 1984, 1987a, 1987b, 1988a, 1988b, 1989; Rolland and Dibble 1990; Dibble and Rolland 1992). Although the predictions of the reduction models have only been tested against a relatively small database in Southwest France and the Near East, they have been surprisingly well-