6. AS REPRESENTED BY THE SOLENT RIVER: HANDAXES FROM HIGHFIELD, SOUTHAMPTON

F.F. Wenban-Smith

ABSTRACT

Wymer suggested in 1968 that the archaeological sequence from successive terraces in a major Pleistocene drainage basin such as the Thames could serve as a model for the British Lower and Middle Palaeolithic as a whole. Although sites such as Hoxne, High Lodge and Boxgrove have now demonstrated this is not the case, no comparable study of archaeological change within the sequence of a different drainage basin has taken place. If certain premises concerning the relation of lithic typology/technology to Palaeolithic behaviour are accepted, then the potential exists ultimately for the investigation of issues such as range and mobility, as well as date. Study of material from Highfield in Southampton has revealed both internal diversity at one location within a single terrace unit, and distinctive features absent in the Thames sequence. This demonstrates the regional nature of the gross Palaeolithic cultural record, and highlights the necessity for the construction of frameworks of cultural change beyond, and at a finer spatial resolution than, the Thames Valley. It also emphasises the importance of improving understanding of the chronological and spatial resolution of artefact collections from river terrace deposits if their interpretive potential is to be expanded.

INTRODUCTION

The small case study presented here arose out of a re-examination of the material from Red Barns, Portchester (Wenban-Smith *et al.* 2000). The lithic technology at the site was dominated by the production of pointed plano-convex handaxes. The dating evidence, however, was limited, being restricted to "some time post-Boxgrove, *c.* 500,000–5,000 BP" on lithostratigraphic grounds, and "some time in the range Oxygen Isotope Stage 11 to 7, *c.* 425,000–200,000 BP" on biostratigraphic (a horse bone) and chronometric (amino acid epimerization) grounds. In view of the distinctive plano-convex handaxe technology, it seemed worth considering whether this could contribute to dating the site more accurately within this range.

The use of certain tool types as type-fossils to characterise the age or cultural affinity of assemblages has had a bad press over the last 50 years. Bradley & Sampson (1986), for instance, have suggested that the use of typology for dating purposes is now wholly superseded by harder Quaternary sciences and their "battery of dating techniques" (*ibid.* 29). If only this was always so, but sadly, and especially in the Solent region, this vaunted battery has often failed to produce results. Whether or not handaxe typology, or lithic technology generally, is even potentially useful for dating depends upon a range of premises concerning the production of lithic artefacts. Before the 1960s, these were generally regarded as so self-evident that they were left implicit. Then L. and S. Binford (1966 & 1969), in particular, challenged these assumptions, partly by merely pointing out their presence. At the same time they provided an alternative functional paradigm to explain broadly synchronic lithic variability within a region. Following this theoretical assault, improved dating of several Lower Palaeolithic assemblages from Britain — Hoxne (Wymer 1974 & 1983), High Lodge (Ashton *et al.* 1992) and Boxgrove (Roberts *et al.* 1994; Roberts & Parfitt 1999) —

confirmed that existing models, such as Wymer's (1968), for the nature and trajectory of cultural change within the British Lower Palaeolithic needed to be rethought. Despite these challenges, the notion of periods within the British Lower/Middle Palaeolithic characterised by distinctive lithic technology or tool-types has proved remarkably resilient. Shackley (1977), Tyldesley (1986 & 1987) and White (1998a) continued to relate certain specific types of handaxe to populations with specific cultural traditions (in the sense of a repertoire of technological practices/habits acquired, developed and transmitted within the context of a community) operating in particular regions at particular periods. And many workers, including this writer, continue to regard the distinctive assemblages labelled as Clactonian (Wenban-Smith 1998; White 2000) and Levalloisian (Bridgland 1996) as representing the product of particular cultural traditions in the same way.

The first part of this paper reviews some premises and behavioural models on which the use of lithic typology and technology in dating must be predicated. If certain premises are provisionally accepted, there is a case for attempting the construction of regional frameworks of technological and typological change, based on broad relatively datable litho-stratigraphic units such as fluvial terrace formations. This can provide a framework for both the dating of material from less securely dated geological contexts, and potentially also the basis for the investigation of the range and mobility of Lower/Middle Palaeolithic populations.

The remainder of the paper focuses on a case study of handaxes from a single site in the Highfield area of Southampton. The starting point of this investigation was the idea that handaxe typology *might* potentially be applicable in dating Red Barns more accurately. Consequently a sample of material from different Solent River terraces in Southampton was examined. This small-scale preliminary study did not, however, reveal any plano-convex handaxes so this approach to dating Red Barns was abandoned. The samples of material studied from the different terraces were, however, remarkable for the diversity of handaxe types and the recurring presence of typological and technological oddities unfamiliar to the writer, more familiar with material from East Anglia and the Lower Thames. Consequently a follow-up study was conducted, in which all the material from one locality in one terrace was examined.

LITHICS AND DATING

Early in the history of Palaeolithic archaeology, several initial assumptions concerning the lithic material culture that constitutes its main evidence in the present day were taken entirely for granted. Central amongst these was the notion of a "culture" in which a community linked by a shared social milieu produced distinctive types or assemblages of lithic artefacts following the cultural tradition of the community. Subsidiary assumptions included the notion of continual (although slow) cultural progress, and the projection of a subjective aesthetic of quality and refinement onto the lithic artefacts. Together with the broad chronological framework provided by geological context, these principles provided the basis for the initial organisation of the Palaeolithic archaeological record into the classic pan (northwest) European framework of Lower, Middle and Upper Palaeolithic, and for identifying stages within this broad framework, on the basis of *instruments caractèristiques*, or type fossils (de Mortillet G. & A. 1900; Breuil & Koslowski 1931 & 1932).

Although the overall tripartite division of the Palaeolithic into Lower, Middle and Upper has proved reasonably robust, more detailed subdivision of the Lower and Middle Palaeolithic into stages based on material culture has proved elusive, continually undermined by i) improving understanding of the Pleistocene chrono-stratigraphic framework and the place within it of certain lithic assemblages, and ii) changing perspectives on the relationship between human behaviour and material cultural variability. In Britain, Wymer's (1968) model for the Lower/Middle Palaeolithic sequence, based on material from the terrace sequence of the Thames Valley, has been contradicted by the assemblages from sites such as High Lodge (Ashton *et al.* 1992), Hoxne (Wymer 1974 & 1983) and Boxgrove (Roberts *et al.* 1994; Roberts & Parfitt 1999). And on the theoretical side, workers such as Binford (1983) have argued that tool-making, using and discard behaviour is liable to be patchily distributed around a landscape, corresponding to the distribution of different resources and activities, leading to the possibility that the same human group could leave typologically and/or technologically different archaeological signatures at different locations across its range. Several workers have also argued, albeit questionably (cf. Wenban-Smith 2000a), that the typological and technological variations of the Lower/Middle Palaeolithic record are not in fact deliberately imposed shape or technical preferences, but merely the unintended products of varying intensities of re-sharpening (Dibble 1987), the application of a generalised bifacial knapping approach to raw material of varying shape and quality (Ashton & McNabb 1994; White 1998b), or the result of investment in technology as part of a role in sexual selection (Kohn & Mithen 1999).

The recognition that Palaeolithic technology and typology a) did not change through time in Britain as once expected and in accordance with Wymer's (1968)

model, and b) was potentially subject to a range of functional, social and situational influences, does not, however, necessarily mean that useful chronological indicators are absent from the Lower and Middle Palaeolithic archaeological record; nor that human groups have not carried out distinctive cultural practices whose products can provide useful indicators of their presence in particular regions during certain time periods. After all, the finding of a coke can on the moon would reasonably lead to a presumption of a post-19th century human visit. What is necessary is to support any proposed frameworks as far as possible by independent dating evidence, and to work with rather than against the characteristics of the Palaeolithic archaeological record in conjunction with explicit assumptions about the processes behind, and interpretive potential of, the data being recorded.

With respect to handaxes, Wymer (1968) and Roe (1968, 1976, 1981) have emphasised the internal stylistic coherence of those few handaxe assemblages that have been collected under controlled conditions from known contexts, such as from the Middle Gravels at Swanscombe (Wymer 1968) and the Wolvercote Channel (cf. Tyldesley 1986). This point is reinforced by more recent studies of material from Boxgrove and Red Barns (Wenban-Smith 2000b). Given the careful attention to shaping in many of these handaxes, reflected in the removal of numerous minute chips and resulting in neat symmetrical and repeatedly similar forms, it is hard to imagine that their form does not correspond to a preconceived vision. Even workers such as White who generally regard the nature of the raw material blank as conditioning the final form of a handaxe, accept that certain forms such as twisted ovate were deliberately imposed (White 1998a). The fundamental premise can be adopted, therefore, that when a handaxe is knapped, its shape reflects a pre-conceived preference acquired within, and derived from the customary practice of, the social fabric of a network of interacting individuals (cf. Gamble 1993 & 1995), containing elements of form and technique which are deliberately imposed, whether consciously, or unconsciously through habit.

Given acceptance of the concept of imposed form in handaxes, and deliberately applied technological repertoires such as Levalloisian, further significant issues affecting the use of lithic artefacts for dating concern:

- *Cultural tradition* — The notion of cultural tradition and its relation to lithic production.
- *Range* — The spatial range of socially linked breeding communities, or population networks.
- *Technological variety* — The extent to which the material cultural output of a population network included varied handaxe forms and knapping strategies.
- *Technological texture* — The degree and spatial scale of homogeneity of technological output within the network range.
- *Stability* — The chronological scale over which spatial range and technological output varied.

Cultural tradition

One view of cultural tradition sees it as the deliberate practice of customs and production of specific artefacts that define a self-identifying group. In this sense, the "Clactonians" know they are Clactonians, and as such would always follow the established customs of core reduction, avoiding assiduously the manufacture of handaxes, except possibly as a flagrant destabilising revolutionary act. This caricature broadly reflects the 19th and early 20th century approach, and is widely derided. However, cultural tradition can also be used in the sense of a repertoire of common cultural practices socially acquired and transmitted within the context of a Palaeolithic population network. Such practices would not be deliberately intended to assert identity, but would merely reflect normal ways of doing things, learnt and transmitted through observation and emulation in the context of whatever range of situations led to lithic production. In this sense, a Clactonian cultural tradition merely reflects a shared technological repertoire dominated by the *ad hoc* manufacture of flakes from cores and a range of crude flake-tools, and lacking the habit of making handaxes.

Range

Such a population network would have operated within a particular region. Gamble & Steele (1999) have attempted to put some gross figures on the likely regional ranges of Lower and Middle Palaeolithic hominid groups, and, based on a combination of comparative mammalian studies and archaeological evidence from the sites of Arago and Grotte Vaufrey in France, have produced a figure of *c.* 1,000–2,000km^2, which equates roughly to a square with sides 30–45km or a circle of diameter 40–50km. This provides an initial ballpark figure for an idea of the spatial scale at which it might be appropriate to seek regional chronological sequences, at the same time as suggesting the futility of attempts to produce pan-British or pan-European sequences.

Technological variety

The variety and distinctiveness of the lithic technology and typology distributed by a group around its range has major implications for its subsequent recognition. One could postulate networks whose bifacial products were dominated by single forms, for instance pointed or ovate. Alternatively one could suggest a network that habitually made two functionally complementary forms of handaxe, for instance one very pointed and one very ovate. Or it is possible that handaxe shape was highly variable according to specific short-term functional/social needs. Additional potential complications are the nature or presence of any associated flake/core production: for instance an unstructured *ad hoc* approach, or a Levalloisian approach; and if Levalloisian then flake or blade, recurrent or linear.

The archaeological record can be of use here. It is clear from the assemblages from less disturbed and better provenanced sites that despite a certain amount of variation in size and refinement, there was usually a clear preference for specific handaxe forms and knapping approaches. Within the Boxgrove collection, which includes probably the largest and most tightly chronologically controlled handaxe assemblages excavated in Britain, there is a total absence of pointed handaxe forms with thicker, less worked butts, and a tiny amount of flake/core production. Conversely, pointed handaxes predominate in Wymer's (1964 & 1968) excavated assemblage from Swanscombe (Middle Gravels), and ovate forms similar to those from Boxgrove are absent. Handaxe assemblages from other sites such as Wolvercote, Red Barns and Hoxne (both Upper Industry and Lower Industry) are also generally dominated by specific shapes and repetitive technical approaches.

The argument could, however, be made that undisturbed sites, even those covering the area and time-span of Boxgrove, represent particular landscape contexts and their associated functions, leading to predominance of a certain handaxe shape. This presumes a) that the distinctive handaxe shapes recognisable in the Palaeolithic record are not functionally equivalent, and b) that lithic manufacture and discard is tied to the location of tool-use. While extremely pointed handaxes clearly have an optimum piercing function not shared with more rounded-edged forms, the majority of handaxes have both points and areas of rounded edge, and there is wide scope within this general bifacial construct for isochrestic variation between different shapes of similar functional adequacy. Nonetheless the possible mutual functional exclusivity of ovates and ficrons raises an interesting area for further research, first to investigate their functionality, and second investigate the facts of the spatial and chronological resolutions of assemblages containing one, other or both forms. Re point b) there is evidence at sites such as Boxgrove and Red Barns for the transport of handaxes around the landscape away from their locations of manufacture, which suggests they were already shaped to accommodate whatever situations might arise. Furthermore, the consistency of handaxe shape in assemblages such as the Swanscombe Middle Gravels, which have been gathered from a wider catchment area than an undisturbed site, supports the concept of a preconceived shape preference, albeit subject to variation in size and refinement.

Therefore it seems reasonable to adopt, as a working premise — one which could easily be revised on the basis of field discoveries — a model in which Palaeolithic population networks did habitually have a restricted repertoire of preferred handaxe forms and/or flake/core knapping strategies. The form/s or strategy/ies of choice may have drifted through their social transmission, context and functional needs, and only occasionally may sufficiently distinctive shapes (twisted ovate or plano-convex) or techniques (Levalloisian) have arisen to be noticeable as distinct to one particular period in a region. A further empirical dimension to this issue is that, if a certain distinctive pattern of handaxe or knapping technique is repeatedly observed in deposits of one particular date in a proscribed region, one could reasonably infer, until proven otherwise, that that handaxe shape or knapping strategy has chronological implications, whether or not one accepts the range of premises outlined here to support the use of lithic typology and technology in dating.

Technological texture

One of the problems identified by L. and S. Binford (1966 & 1969) with the culture-historical paradigm was the heterogeneity of behaviour within a territory, and the consequent spatial variability of the archaeological record. Although the Binfords' analysis was aimed at explanation of broadly synchronous assemblages of different proportions of the same tool-types within a region, the same general approach could be expanded to cover assemblages of different tool-types (such as pointed or ovate dominant), or different knapping strategies (such as Levalloisian flake/core or handaxe dominant). This is indeed a problem if one is looking solely at undisturbed evidence from a restricted area. This has often been regarded as the most desirable because of its chronological integrity, but the occurrence of different situations or resources at different locations within the landscape *could* have created a correspondingly varied archaeological record, if one adopts a predominantly functional premise for typological and technological variability. However, such undisturbed sites are rare, and the great majority of the Lower and Middle Palaeolithic record consists of

transported artefacts gathered and mixed by fluvial processes. Despite regular breast-beating over the consequently impoverished nature of this evidence, its disturbance paradoxically helps the Palaeolithic archaeologist by creating exactly the homogenous archaeological record that is needed to defuse this problem by gathering a representative sample of the material cultural output in the catchment range of the fluvial context in question, provided the scale of the catchment is sufficient to include the range of variability in lithic production.

Stability

The final problem to consider is the tension between the chronological scales of technological change and depositional formation. One of the notable features of the Lower/Middle Palaeolithic archaeological record is the longevity of the basic biface and flake/core repertoire. As mentioned above, undisturbed sites are generally associated with a distinctive and repetitive technological repertoire. These may, however, represent no more than a few hours activity. The unit 4b and 4c landsurfaces at Boxgrove, presumed to contain material from maybe up to 100 years (Roberts *et al.* 1997; Roberts & Parfitt 1999) are also notable for the consistent manufacture of ovate tranchet-sharpened handaxes. So it is reasonable to presume stasis in a technological repertoire over *c.* 2–4 generations. However, sedimentary units such as terrace formations represent tens of thousands of years, although it is uncertain over how long a period they actually formed, and to what extent they incorporate derived material predating the period of formation. Over such a long period a single population network with even a very slow rate of change in knapping behaviour could manifest a range of different cultural traditions. Thus single terrace formations could include typologically and technologically varied material representing the product over a long period of a single population network. However, if significant change is slow enough, irregular enough, or distinctive enough, as it generally appears to be, there is still the possibility of picking up meaningful chronological patterning from the study of terrace units.

Taken together therefore, and notwithstanding these recognised problems, these premises provide a basis for approaching a constrained region with widespread and chronologically differentiated fluvial deposits and seeking to investigate, initially, whether any patterns of typological and technological change emerge. If such patterning is found, then that would lead to an initial model for a regional chronological framework of lithic material cultural change, subject to further investigation and independent testing by more firmly rooted Quaternary scientific methods. If such a framework proved robust in the face of subsequent investigation, it could then in turn provide the basis for an investigation into the spatial range and chronological longevity of any distinctive cultural traditions, and by association their associated population networks.

RED BARNS

In the case of Red Barns, the nature and situation of the site were particularly suitable for this type of investigation. The site is located on the edge of the Solent River, on high ground overlooking what would have been the estuarine floodplain or delta towards its mouth. If plano-convex handaxes, several of which have been found out in the nearby Warsash area (Burkitt *et al.* 1939; Shackley 1970), could have been shown to be associated with a particular terrace of the Solent River, many of which are well mapped and spatially differentiated in the Southampton area *c.* 20km to the west, then that might have helped in dating the Red Barns site, which is not itself associated with any raised beach or fluvial deposits. Unfortunately, examination of a sample of handaxes from Solent terraces 3–6 (following the terrace nomenclature of Edwards *et al.* 1987) in the Southampton area failed to produce any sign of plano-convex handaxes, let alone a predominance in any one terrace.

This exercise did, however, demonstrate the great variety of handaxe shapes recovered from these terraces, as well as the recurring presence of shapes and technological oddities unfamiliar to the writer, more used to material from East Anglia and the Lower Thames. Consequently a second study was conducted, in which all the material from one locality in one terrace was examined to investigate the nature and typological/technological diversity represented. The site chosen for this study was Highfield, for three main reasons:

- The previous trawl of material had uncovered some interesting pieces with a Highfield provenance.
- There was a reasonably large collection of Highfield material readily accessible in the main Southampton City Museum.
- Published sources indicated a reasonably secure and restricted provenance for Highfield material (Dale 1896; Doughty 1978).

HIGHFIELD

Site provenance and stratigraphy

Highfield is a small area of Southampton, bounded to the west by Southampton Common and to the east

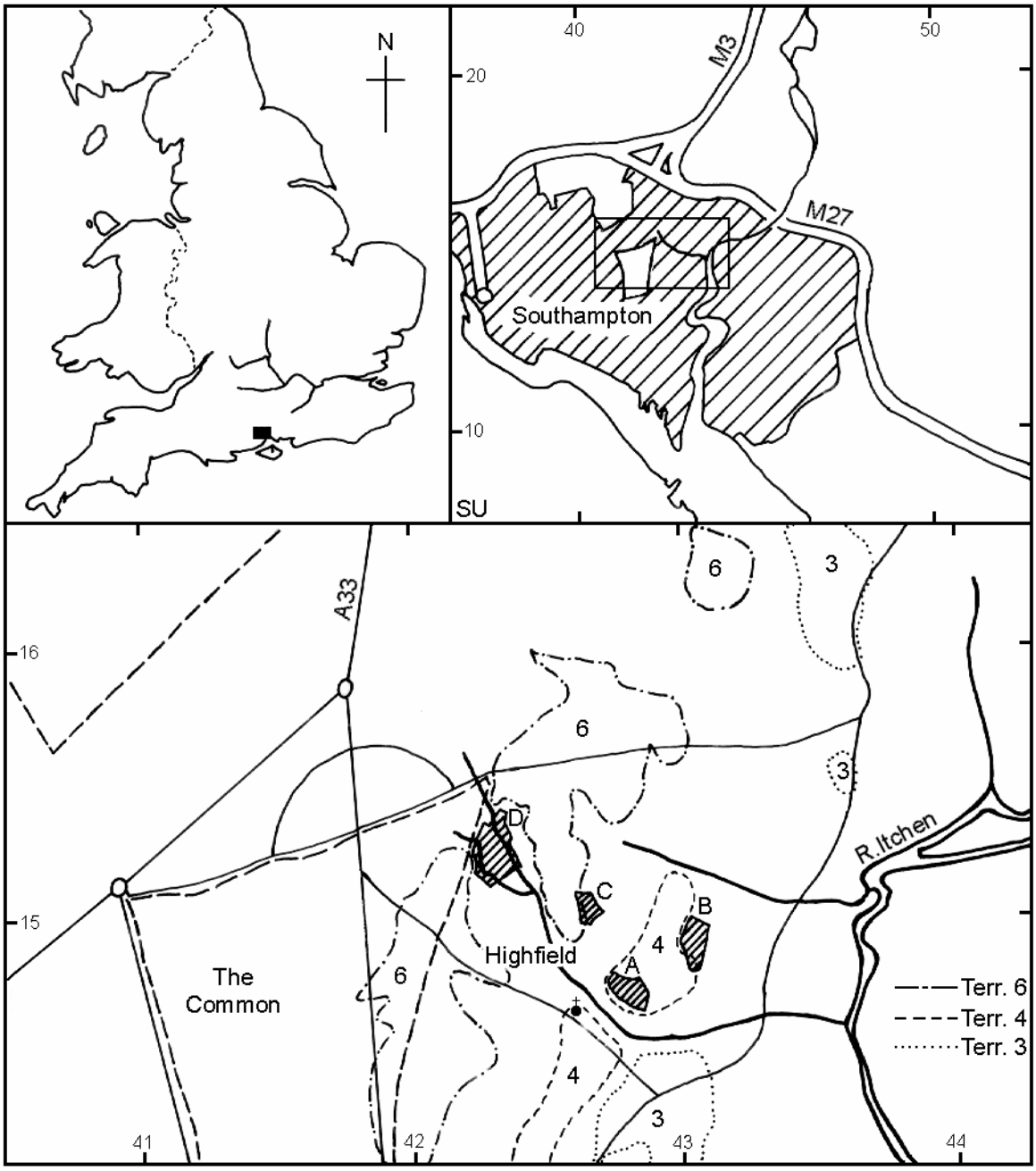

Figure 6.1: quarrying locations A–D in Highfield and Pleistocene terraces after Edwards et al. *(1987)*

by Portswood (Figure 6.1). It is centred on a pub, post-office and church, all with the epithet "Highfield", and at the junction of Highfield Lane, Highfield Avenue and Highfield Road, all of which are marked on OS maps of the early 20th century. It is hence a restricted and spatially well-defined locale. Figure 6.1 also shows the recent mapping of Pleistocene terraces (Edwards *et al.* 1987), with terraces 6, 4 and 3 all present in the Highfield area. The most common labelling for artefacts from the locale is just "Highfield", although several are labelled "Highfield Church", and two specimens are labelled "west of stream" and "Highfield Brick Pit" respectively. Quarrying has been carried out at four locations in the area since the first OS mapping of the 19th century (Figure 6.1: A, B, C and D). Site A is beside the stream flowing immediately northeast of Highfield Church and clearly corresponds with the location where Dale (1896) reported the opening of a quarry and the recovery of over 100 artefacts. Site B is labelled as a "Brick Pit" on some OS maps, and is also marked on several as the location of a Palaeolithic floor found in 1915. Doughty's (1978) investigation confirmed that although some genuine artefacts were recovered at the site, most of the alleged artefacts from the "floor" are in fact unworked pieces of flint, which is an unfortunate irony since this continues to be the only site in Southampton where development has been halted to allow Palaeolithic excavation. Both sites A

and B are dug into deposits from terrace 4.

Site C is only *c.* 300m to the north of site A, but is dug into the side of terrace 6. It is labelled as a "Sand Pit" on OS maps. There are no records of handaxe finds from the site, and Doughty reports that no finds were made during the construction of university buildings at the location, despite the presence of archaeologists looking for palaeoliths. Site D is labelled as a "Brick Pit and Yard". There are no records of finds from the site, and it is clear from the mapping that it is located in a place where the Pleistocene deposits of terrace 6 have been eroded through to the underlying Tertiary Bracklesham deposits, which constitute clays and sandy clays. These were presumably the target of the brick-making, so this site can also be discounted as a source of Highfield artefacts.

It seems safe, therefore, to presume that all Highfield artefacts came from terrace 4, and that the great majority came from the Highfield Church quarry. No records exist of the stratigraphy at the site, other than Dale's reference to "gravel". Doughty shows a section through the deposits at the Brick Pit at Site B based on a privately published pamphlet (Nicholas 1916). This shows a few feet of gravel capped by a horizontally laminated sandy and clayey horizon one foot thick. The deposits at Site A were probably thicker since it is closer to the valley side of the terrace, and one can provisionally assume that there was a single body of gravel which produced the artefacts at the site. Edwards *et al.*'s (1987) survey identifies the remaining deposits at Site A as being between 1 and 5 metres thick, and it is possible that fieldwork could re-expose the surviving deposits to clarify the stratigraphic sequence, as well as investigate for further artefacts.

Lithic assemblage

In total, 72 artefacts were examined, representing every artefact in the Southampton City Museum collection with a Highfield provenance. Their original source, in terms of collector, was unknown in most cases, although several specimens were identified as from the collections of Dale, Nicholas or Toogood. All of the artefacts were handaxes, which undoubtedly reflects collector bias, rather than a true indication of the archaeological content of the site. Their condition was recorded as one of four categories, mint, fresh, slightly rolled or very rolled (Table 6.1), and they were classified by shape following Wymer's (1968) scheme (Table 6.2).

The great majority of the handaxes were rolled, none were mint and only seven were fresh. This corresponds with the typical situation for material recovered from a fluvial gravel, where some artefacts get buried comparatively quickly with little damage, whereas others through chance get reworked more often and consequently battered more severely. There was no indication from differential groups of condition, stain or patination that the collection represented anything other than a typical range from a single fluvial gravel context.

Category	*Description*	*Number*
Mint	As freshly knapped with edges razor sharp and tiny scars crisply defined	-
Fresh	Sharp to handle, with very slight damage/abrasion to sharp edges, ridges and scars	7
Slightly rolled	Some notching and battering of sharper edges, with ridges and scars slightly abraded	19
Very rolled	Intense notching and battering of all edges, plus heavy abrasion of ridges and flake scars	46

Table 6.1: condition of Highfield handaxes

The shapes of the handaxes were remarkably varied (Figures 6.2–6.3), with good examples of most of the different types recognised by Wymer. Figure 6.2 shows the four handaxes recorded specifically from the Highfield Church Pit; all four are generally pointed and two (ii and iv) are sufficiently pointed to qualify as ficrons. In the whole assemblage, the most common form (33%) was "classic pointed", over 4" long, straight-sided and well-made; and there were also eight classic ficrons (11%) with a sharp point and concave sides. Alongside these pointed forms was a range of more rounded and ovate forms, including sub-cordates (18%), ovates (18%), cleavers (7%) and a finely worked *bout coupé* specimen. The five handaxes shown in Figure 6.3 exemplify the variety of forms in this small assemblage, ranging from the extraordinary ficron of no. i, through the huge cleaver of no. ii to the perfectly circular disc of no. iv. The ficron measures 224mm from tip to base, which may place it amongst the 10 longest handaxes recorded in Britain, following the form-book of MacRae (1987).

Amongst the general variety, two particular stylistic or technical quirks recurred sufficiently frequently to become noticeable. First was the frequent presence of an elongated butt, usually left minimally or un-worked, for bluntly pointed and sub-cordate specimens (e.g. Figure 6.3(ii); Dale 1896, Plate I, no. 6). Dale (1896: 263) also describes this as a typical feature of Highfield implements. Second was the presence of three pointed handaxes of identical shape but varying size made by unifacial working of side-struck Levalloisian-like flakes (Figure 6.4).

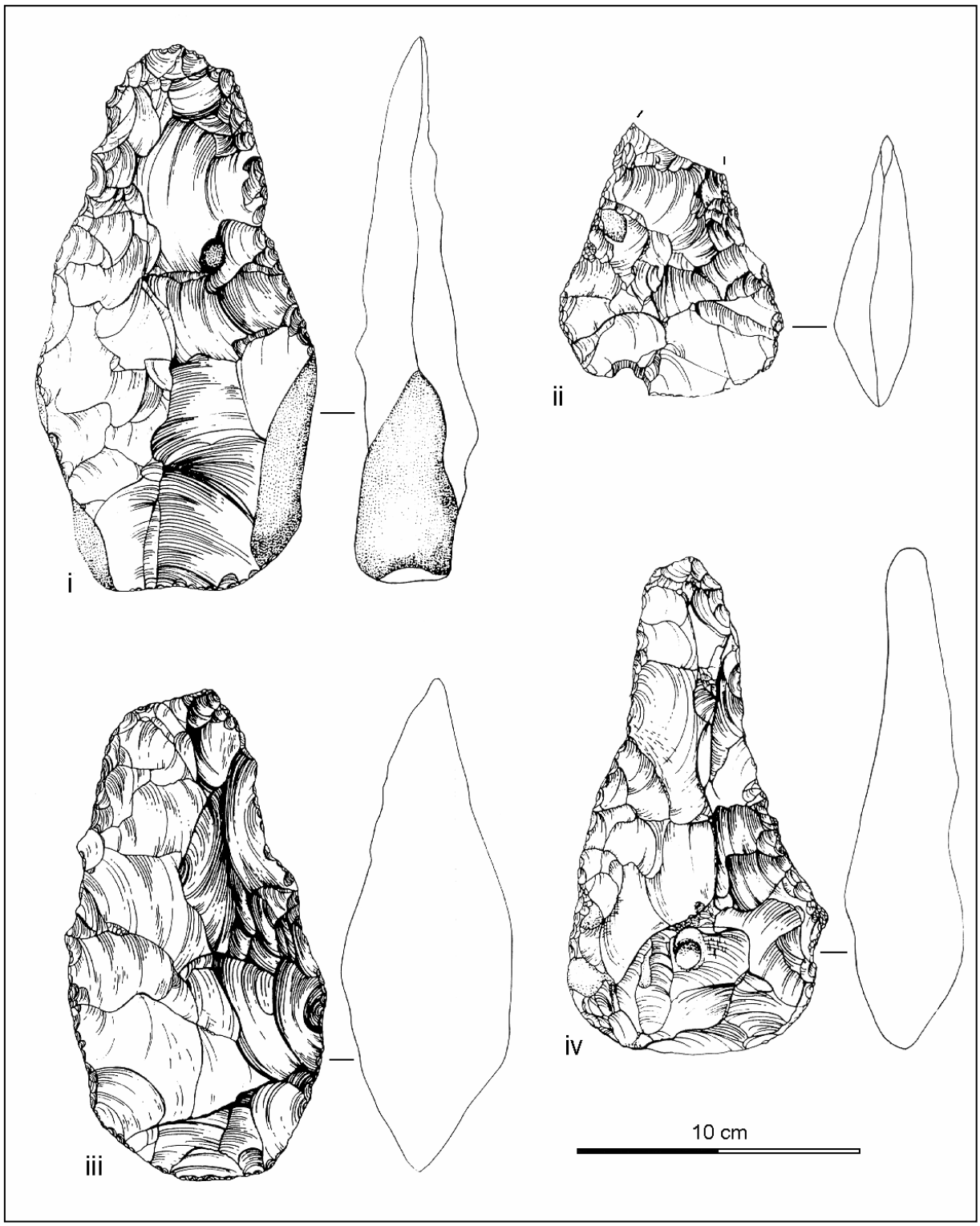

Figure 6.2: handaxes from Highfield Church Pit — i) narrow sub-cordate with minimally worked butt, ii) broken ficron, iii) narrow sub-cordate with worked butt, iv) ficron (illustrations by Barbara McNee)

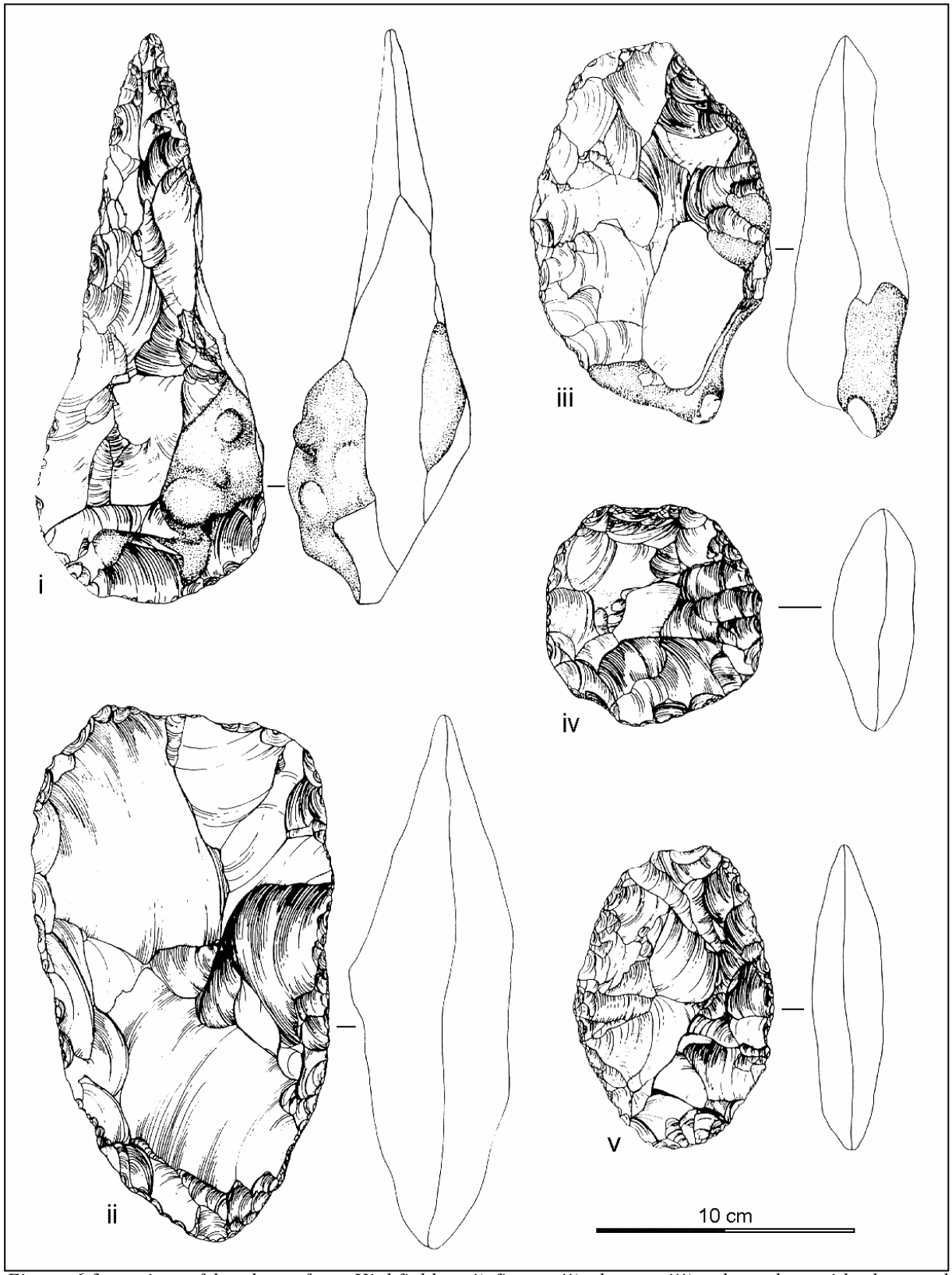

Figure 6.3: variety of handaxes from Highfield — i) ficron, ii) cleaver, iii) sub-cordate with elongated butt, iv) discoidal ovate, v) ovate (illustrations by Barbara McNee)

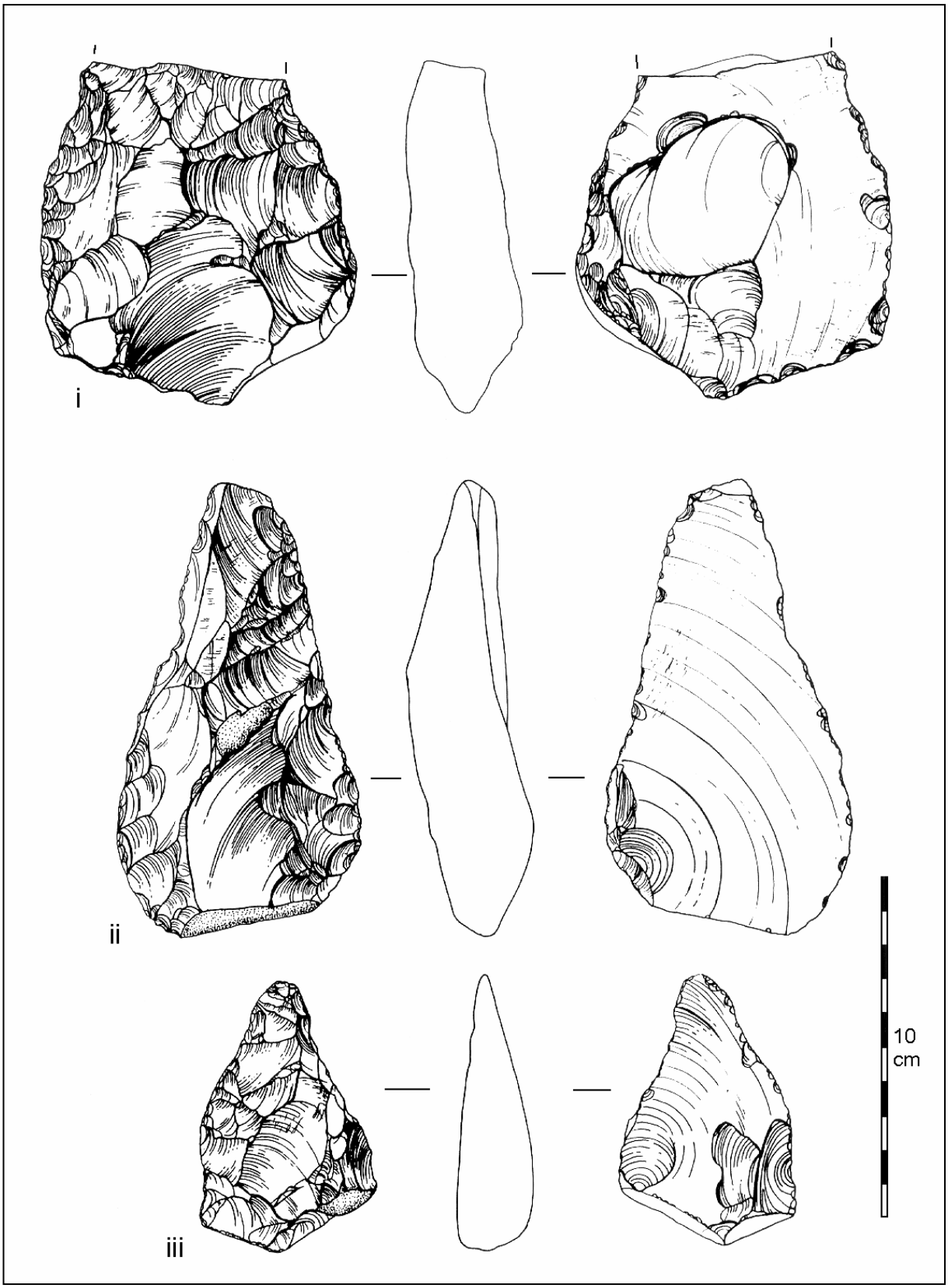

Figure 6.4: i–iii) pointed handaxes on unifacially worked side-struck flakes (illustrations by Barbara McNee)

Wymer type	*Description*	*Number*
-	Indeterminate	2
-	Rough-out \ abandoned	1
D	Large and crude	2
F	Classic pointed	24
G	Sub-cordate	13
H	Cleaver	5
K	Ovate	13
M	Classic ficron	8
N	Bout coupé	1
-	Pointed on side-struck flake	3
Total		72

Table 6.2: types of Highfield handaxes

DISCUSSION

The range of tool-types revealed in the Highfield assemblage does not conform neatly to the hoped-for model for Solent terraces, in which intra-terrace homogeneity would combine with inter-terrace heterogeneity to produce a nice framework of regional techno-typological change. This is, of course, only a tiny pilot study of a range of material whose common provenance is somewhat uncertain, and which has been undoubtedly subject to strong bias by collectors in their desire to retain distinctive and unusual specimens. It is however premature to write off the model outlined above on the basis of a sample from a single terrace, as a) it is possible that within the context of similar samples from other Solent terraces in Southampton, a pattern might emerge, and b) the range of material recovered could reflect unrecognised stratigraphic breaks in terrace 4, or the presence within terrace 4 of derived material from a sufficiently long period of time for significant changes in handaxe typology to have taken place. It is of course also possible that the suggested model is plain wrong, and that the variety of handaxe shapes produced reflects the varied repertoire of a single cultural tradition practiced by the population in the Solent region during the formation of terrace 4. As discussed above, more controlled recovery of material from fluvial terrace units has usually produced more typologically coherent assemblages. Furthermore, the two typological/technological quirks recognised may be just the sort of stylistically distinctive but functionally insignificant variation that could serve as a type-fossil for a particular period in a region *subject to a basis in further research*. If sufficient evidence is produced to both undermine the premises on which it is based and to confirm that such a regional model does not correspond with the patterning of the archaeological record, then that's science.

The most obvious source of such evidence would be further examination of assemblages from specific locations and horizons within fluvial terrace deposits. If an improved understanding of the spatial and chronological texture of Lower/Middle Palaeolithic material culture is to be developed, then a key area for further research has to be the investigation of the depositional processes associated with the formation of the river terrace deposits that contain the bulk of the evidence. Knowledge in three main areas — catchment range, timescale of deposition, extent of secondary derivation — is fundamental in assessing, for instance, whether an artefact assemblage represents i) a local sample from a short time-span in one part of a population range ii) a homogenised sample from a single population and cultural tradition across its range, or iii) a homogenised sample across such a long time-span that it may embrace significant technological change within the cultural tradition of a single population network. Only in the light of such basic facts can further progress be made in assessing the relative reasonableness of the many behavioural premises that must underlie any interpretation of lithic material.

CONCLUSIONS

Despite the richness of material from the Solent region, little research has been carried out, and no synthesis has been produced of typological and technological characteristics and change within the well-mapped Solent River terrace system. The impetus for such work may have been diminished following the collapse of Wymer's pan-British model based on Thames terrace deposits, based on anachronistic results from High Lodge, Hoxne and Boxgrove. However, if one takes account of the likely sub-national scale of meaningful patterning, it is possible that finer-grained research at a regional scale could bring hitherto unsuspected patterning into focus. The preliminary study carried out here, although producing highly varied material from a single terrace unit, also produced stylistically distinct technological and typological quirks which could serve as a basis for recognising a distinct phase in the Lower/Middle Palaeolithic of the Solent basin.

ACKNOWLEDGEMENTS

I am very grateful to Duncan Brown and Karen Wardley of the Southampton City Museum service for their help in finding the Highfield material in their store, allowing me to spend time studying it and letting me borrow pieces for illustration. Thanks are also due to my co-editor Rob Hosfield for tolerating the late appearance of this paper and for helpful comments on an early draft, although I take full responsibility for all its remaining inadequacies. Finally, a great debt of gratitude is owed to Barbara McNee for finding the time to diversify from penguins

and produce the lithic illustrations.

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