

Short articles



Surface finds of palaeoliths from near Petworth, West Sussex

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INTRODUCTION

Surface reconnaissance by Robert Kowalski of 69ha of arable fields on the north side of the West Rother river, south-east of Petworth, near Haslingbourne and Strood, has resulted in the recording of worked flint, much of which is mesolithic or later (David and Kowalski 2019 this volume pp 1–29).

This short report records several pieces which, by virtue of their typology and physical condition, are likely to be of lower or middle palaeolithic age and merit separate attention. A biface collected by Mr Nicholas Smith from nearby Wyncombe Hill (Fig. 1.1; Table 1) is also included.

FINDS

1. An ovate biface, roughly pointed at one end, more rounded at the other (Fig. 1.1; PAS reference SUSS-64EE9A). It is moderately worn, with an anciently battered perimeter, and stained opaque brown but not patinated.
2. An ovate biface, almost discoidal, with a small portion of original cortex surviving on the circumference (Fig.1.2). Its flake beds and arretes are heavily worn, indicating that the piece was formerly in a mobile river gravel. One face has a mottled patination which is stained yellow/brown, while the other face is lightly stained dark-brown/yellow but is unpatinated (some white patination survives on part of one edge, steepened by retouch, where there is also some recent damage).
3. A bifacially-worked flake of brown/dark-grey flint, with all-over centripetal flaking on the convex dorsal surface and partial invasive scalar retouch on the flat ventral surface (Fig. 2.1); there is no evidence of Levallois technology. It is moderately worn. Length: 64.4mm; breadth: 52.6mm; thickness: 17.9mm; weight: 58g.
4. A small, thick flake, with a steep, convex dorsal surface, thinning to a coarsely retouched and roughly pointed distal end (Fig. 2.2). The latter is defined by inclined retouch scars; the flat ventral surface is plain, except for a couple of intrusive flake scars at the proximal end. The dorsal surface has a mottled patina, stained yellow/brown. While all surfaces are worn, the dorsal retouch scars are less weathered and patinated than the rest of this surface.
5. A fragment of a biface, possibly the butt end of an ovate/cordiform implement, patinated creamy white, stained light yellow; heavy wear on upstanding parts of one face only; thermally fractured with incipient fracture lines (Fig. 3).
6. A fragment with a flaked convex dorsal surface suggestive of a biface, although the surviving part of the ventral surface is unworked. It is of flint stained opaque tan/yellow and worn all over; fractured recently along thermal lines of weakness.
7. A flake fragment, one surface of which retains the convex form and flaking of a formerly larger implement that was slightly worn and patinated. It may therefore be part of a palaeolithic biface but a more recent age cannot be excluded.
8. A hard-hammer-struck flake of grey flint with a mottled creamy and opaque patina; the dorsal arrete is heavily worn; there is recent damage at the periphery.
9. A hard-hammer-struck flake with large plain butt; dark-grey flint with some cortex; mottled patination on ventral surface; moderate wear over all surfaces.
10. A hard-hammer-struck flake of dark-grey, unpatinated flint, worn all over.

Table 1. Finds of possible palaeoliths from near Petworth.

No	NGR	Site name	Identification
1	TQ 0198 1878	Wyncombe Hill	Ovate biface
2	SU 98097 19917	Haslingbourne West	Ovate biface
3	SU 982 202	Haslingbourne West	Biface/side-scraper
4	SU 97943 19824	Haslingbourne West	Retouched and pointed flake
5	SU 98628 19702	Strood (west)	Biface frag
6	SU 98250 19848	Haslingbourne West	Biface frag?
7	SU 98712 19734	Strood	Biface frag?
8	SU 992 193	Strood (east)	Flake
9	SU 98209 19930	Haslingbourne West	Flake
10	SU 98210 20006	Haslingbourne West	Flake

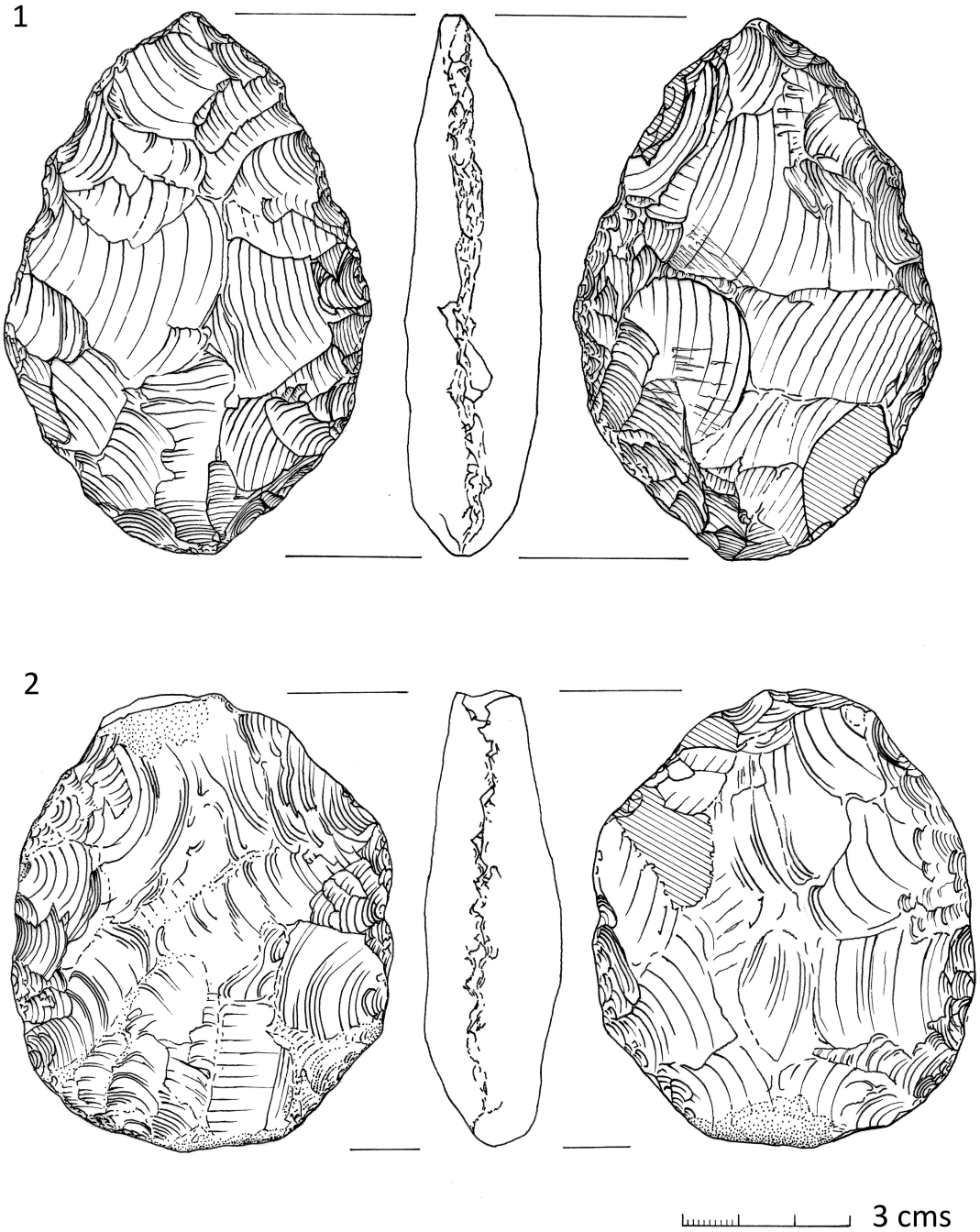
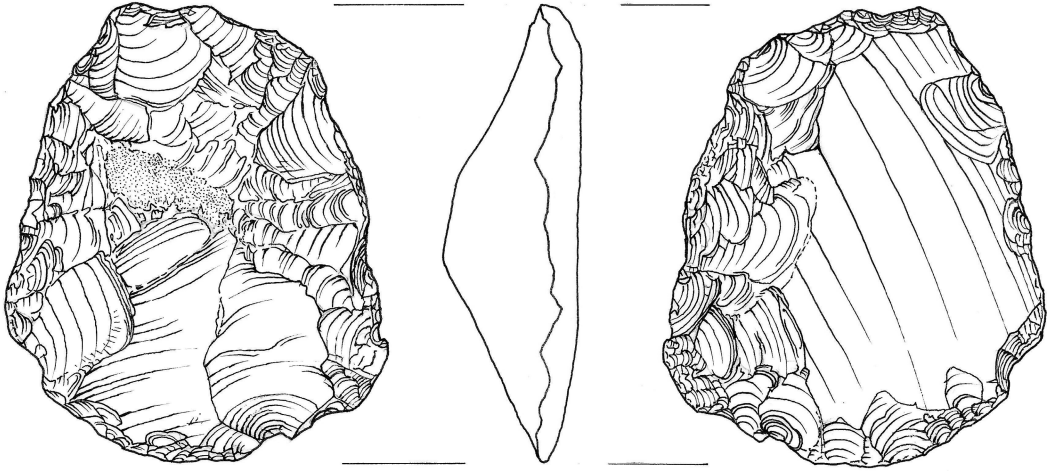
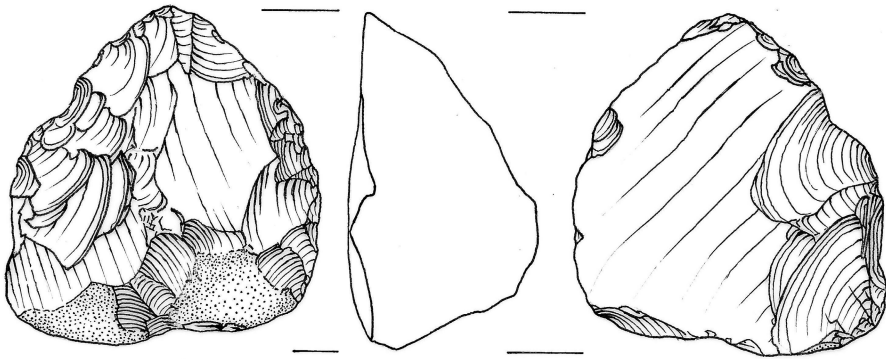


Fig. 1. Biface handaxes found at Wyncombe Hill (1) and near Haslingbourne (2).

1



2




 3 cms

Fig. 2. Biface/sidescraper (1) and retouched flake (2) from near Haslingbourne.

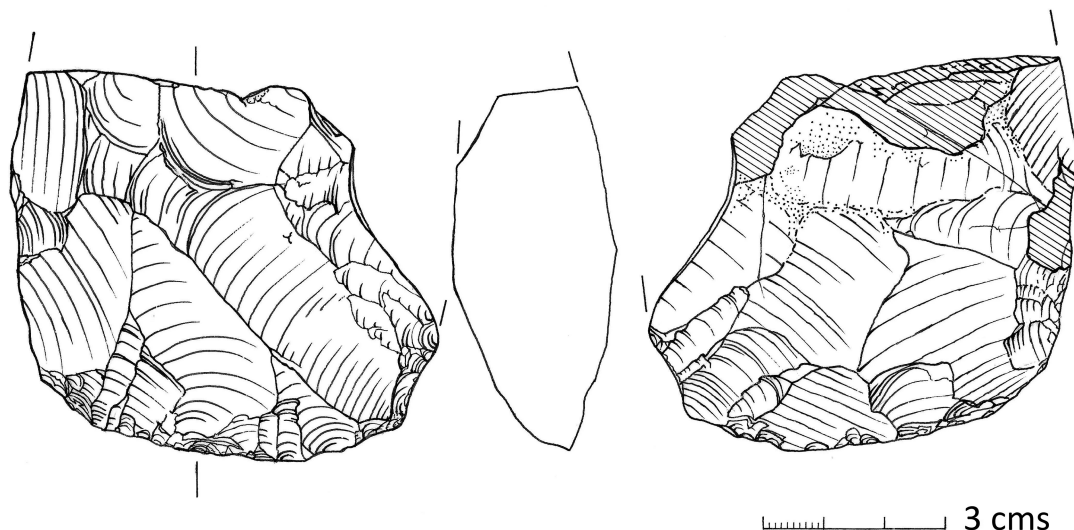


Fig. 3. Biface fragment (No 5) from Strood.

DISCUSSION

This small and heterogenous group is united by the presence of a significant, if variable, degree of surface wear, and most pieces are discoloured by staining and patination. On a typological basis, six are probably lower–middle palaeolithic, of an age somewhere within the last half a million years of the Pleistocene, while four others, [7–10]), may well be of the same age bracket, although a Holocene date cannot be discounted.

The only piece where some further speculation may be warranted is [3], which is of a shape, size and type of modification reminiscent of those ascribed elsewhere to the late middle palaeolithic (LMP, c. 60–40ka BP). The stepped scalar flaking along one side of the ventral surface, together with the convergent flaking on the dorsal surface, is reminiscent of implements presumed to be of this age from Oldbury in Kent (Cook and Jacobi 1998), and at Lynford in Norfolk where they are dated to 65–55ka BP (Boismier *et al.* 2012).

Much closer to home, at Beedings, just 10km east of our findspot and also on the Lower Greensand, is a ‘unifacial handaxe ... or partially bifacial double side-scraper’ which, although larger than our specimen, shares with it a shape and technology which has been confidently attributed to the LMP (Jacobi 2007, 239–240, fig. 12). The exact context for this latter find is unclear, but an LMP presence at Beedings has since been confirmed by the excavation of a small stratified assemblage of artefacts that includes a discoidal core and a flake with scalar retouch, pre-dating 32 ka BP (Pope *et al.* 2013, and pers. comm.).

Other handaxes from nearby include at least one *bout-coupé*, from West Chiltington, and a possible second example from Billingshurst, both within 12km of our findspot (Tyldesley 1983; 1987, 74–75). Handaxes such as these are mostly allocated to the LMP (White and Jacobi 2002; Ashton and Scott 2016); and both [3], small though it is, and the Beedings specimen might share an affinity with them.

Unfortunately, of course, surface finds lack context. The earlier rolled material may derive from terrace deposits, such as those once exposed at Fittleworth and at Coates, across the valley, the probable source of at least three rolled implements recorded by Garraway Rice (1905, 199–203; Woodcock 1981, 304). Our potential LMP specimen was found on a quite level spur of cultivated ground, near the lip where this descends down to the Haslingbourne Stream, which winds southwards to join the West Rother about a kilometre away, with springs nearby.

How it came to be there is unclear, although a strong possibility must be that it was once incorporated in valley-fill sediments disturbed and re-distributed by the digging of the adjacent Petworth Canal in 1795, and the subsequent maintenance work carried out until the canal was abandoned in 1826 (Vine 1995). Other finds from near the former canal include [6], [9] and [10].

In sum, these new finds contribute to the modest numbers already recorded for the southern Wealden area and, notably, add at least one to those of probable LMP age that cluster on the Lower Greensand (Pope *et al.* 2015, Figs 1 and 3, Table 3). That such casual finds continue to crop up reinforces the significance of this substrate, both for its potential to expose such items, which may still survive in Late Pleistocene deposits there (*ibid.*), as well as the possibility that its particular topography may have held appeal to Late Neanderthal people.

Acknowledgments

Credit goes above all to Robert Kowalski for generously sharing his many well-recorded discoveries and for making this report possible. The landowner, Lord Egremont, and Brian and Lee Dallyn, of Strood Farm, are warmly thanked for their permissions. Nicholas Smith kindly allowed me to add his find from Wyncombe Hill. Nick Ashton and Francis Wenban-Smith are thanked for examining the artefacts and for sharing



comments on identifications and affiliations. Matt Pope kindly read the text and commented very helpfully. It is intended that the flints will be lodged at the Collections Discovery Centre, Fishbourne Roman Palace, West Sussex.

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Three palaeolithic flints recovered from excavations at East Sussex Fire and Rescue Service and Sussex Police Headquarters, South Malling, Lewes

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INTRODUCTION

An archaeological watching brief was maintained by Archaeology Services Lewes between December 2017 and February 2018, associated with development at The Gatehouse, East Sussex Fire and Rescue Service and Sussex Police Headquarters, Church Lane, South Malling, Lewes, East Sussex, BN7 2DZ, centred on TQ 4165 1122.

The site is to the north of Lewes, on the north-east side of the River Ouse, looking down Church Lane from the west side. It is situated within the western border of an Archaeological Notification Area (DES 8832), designated due to the potential remains of Roman occupation, Saxon settlement and burials, as well as the Roman road about 100m south of the site.

Historical evidence and early mapping indicate that the area was not developed until the late 17th century. The underlying geology is Holywell Nodular Chalk Formation and the site lies at an approximate height of 18m above sea level.

Four areas were monitored. Area 1 recorded the foundations of the former north wall of The Gatehouse, which was built on colluvium. Area 2 recorded disturbed ground, with communications cables to the emergency call centre running through it at a shallow depth. Area 3 proved to be of significant interest, with the top of a periglacial feature (304) recorded 1.40m below ground level. Three middle palaeolithic flints were recovered from the spoil of these natural features. Area 4 exposed no features but recovered small amounts of residual prehistoric flintwork, as well as Roman, medieval and post-medieval pottery.

The main aim of this short report is not to discuss the full extent of the excavations but to report on the recovery of the flint from (304), at an approximate depth of between 1.6–2.3m. Precise dating of these artefacts has proved difficult. A pollen assessment undertaken by Reading University failed to establish a cold stage indicator for the soils and whether they pre-date or post-date the Holocene period; the nature of the deposit led to poor preservation of any pollen that was present.

THE ARTEFACTS by Dr Matt Pope

All three flakes are manufactured from flint and there is nothing to suggest that any of the flints were obtained from multiple sources or, indeed, that they could not have been produced from the same nodule.

CONDITION

All three artefacts are relatively fresh and unabraded. Flake 1 is remarkably fresh and Flake 2 and Flake 3 show some minor ancient abrasion to the edges. The degree of abrasion rules out high-energy depositional processes and would be consistent with a minor degree of movement within a Head Deposit, or for the movement of Head Deposits over the surface of the artefact. None of the artefacts show evidence of frost shattering or spalling (pot lids).

PATINATION AND STAINING

All three artefacts are partially patinated and stained an opaque, creamy-white colour. Flake 2 is the most patinated, at 60%, while Flake 3 is the least patinated, at around 30%. None of the artefacts are evenly patinated on both dorsal and ventral faces, suggesting that processes were happening unevenly across the artefact's surface in each case. The incomplete nature of the patination could suggest that the artefacts were patinated slowly, within the sediment body or, more likely, the condition leading to patination was restricted.

Both patinated and unpatinated areas appear to be lightly stained a pale-orange colour. Localised modern damage on Flakes 1 and 3 reveals white, patinated flint just below the surface, which shows this orange staining to be very superficial in depth, and in addition to the patination process. Surface staining is usually mineral in origin and is broadly uniform across all three artefacts; it does not, in any case, represent an indication of prolonged exposure to iron-rich sediments that one might expect with a fluvial deposit.

METRICAL AND TECHNICAL ATTRIBUTES

(see Fig. 1)

Flake 1: 97mm x 44mm x 200mm

This is an elongated, blade-like flake bearing the flake scars of three previous removals from its dorsal surface, but also retaining cortex across approximately 50% of the dorsal surface. Two smaller flake scars to the immediate right of the striking platform suggest a previous episode of flaking, possibly to prepare the removal itself.

The flake appears to be a bold removal, apparently trimming the edge of a core or nodule, perhaps after two blows in the same direction failed to achieve the required reduction effect. Hard-hammer removal is suspected, but the platform and bulb of percussion could also indicate a bold, soft-hammer removal.

Flake 2: 86mm x 54mm x 19mm

This is a relatively flat, ovate flake, taken from the surface of a previously flaked nodule or core. The dorsal surface shows 10 flake scars, nine from a flaking episode immediately prior to removal. The 10th appears to be from a previous flaking episode across this surface.

The ventral surface shows the remnant of a flake scar, which might be a remnant from the lower surface of the core or nodule. The striking platform appears to be cortical, which is strange, given how much previous flaking had occurred on the piece prior to removal. The striking appears to be hard-hammer, but has been very deftly executed, removing a largely flat flake.

Flake 3: 62mm x 51mm x 22mm

This is a squat, thick flake from the edge of a much-reduced core or nodule. Despite its small size, the dorsal face shows nine previous removals along a migrating platform towards the proximal end of the flakes. Three failed removals truncate in a hinge fracture before the blow removing the flake successively thins this part of the core or nodule, removing the failed, flaked surfaces.

The hammer appears to be hard but the removal was carefully controlled. Indeed, the three previous failed removals seem to have occurred due to a conservative estimate in how much force was needed, rather than lack of skill.

Conclusion

None of the three flakes show any evidence of modification for use as flake tools. However the size and shape of Flake 2 lend themselves for use as a cutting tool without modification. Despite this, all three should probably be considered as waste flakes in the production of tools or blanks for tool manufacture.

The artefacts could all have been produced during handaxe manufacture but, given the lack of clear evidence for bifacial working, soft-hammer reduction or convexity of the flaked surface, the evidence for this is very weak.

Conversely, there is scarce evidence of platform preparation and the ordered working of surfaces one might expect from highly-structured, middle palaeolithic methods of working (Levallois technique). Despite this, there is an attention to working the surface of the cores or nodules hinted at within these flakes that is certainly indicative of an approach to core working used in the middle palaeolithic. The possibility of these flakes originating from simple prepared cores should be considered.

DISCUSSION

These three flakes should be considered as an assemblage linked by source and behaviour. It is perfectly possible they belong to the same broad occupation episode or, indeed, the same reduction sequence.

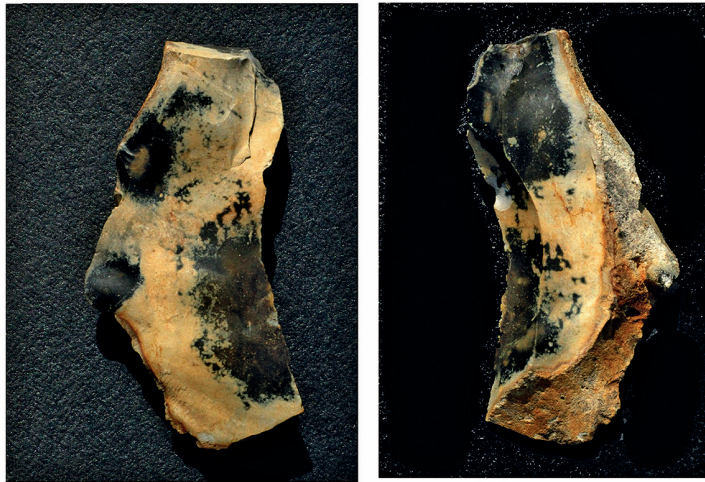
The concern with working surfaces would be more suggestive of middle palaeolithic flake production, rather than handaxe manufacture of 'Clactonian' core working. The assemblage would, therefore, be consistent with the British middle palaeolithic period.

In terms of regional context, the recovery of palaeolithic debitage in such fresh condition from an identifiable geological context, is significant. In East Sussex, only a small number of palaeolithic artefacts have been recovered from a geological context in the post-war period and these are the first to be found in more than a decade (Woodcock 1981). In the 1970s the Ouse Valley produced a collection of mint-condition and refitting flakes from Head Deposits at Meeching Road (Bell 1976; Pope and Maxted 2008, Pope and Brown 2016).

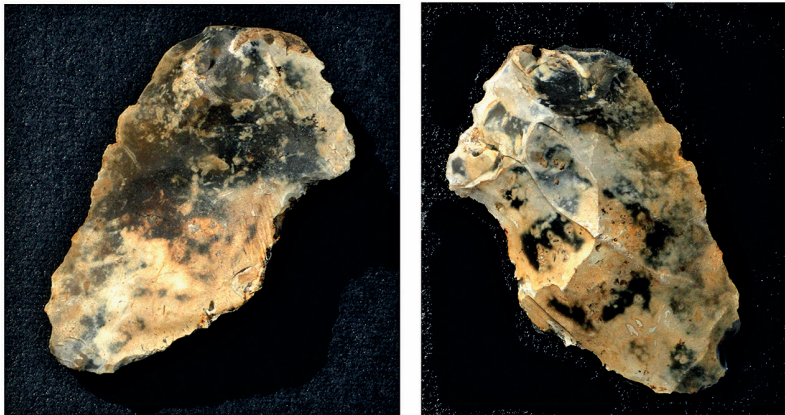
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Flake 1



Flake 2



Flake 3

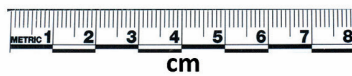
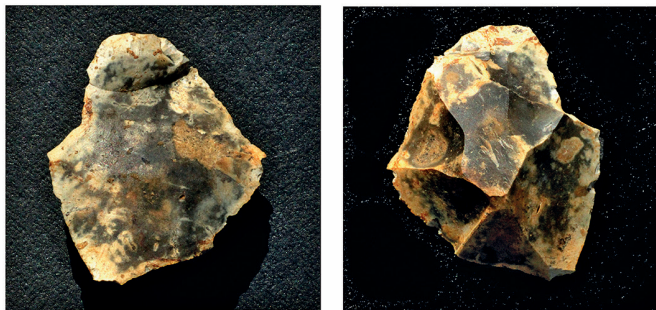


Fig. 1. The three palaeolithic flakes recovered from the excavations.

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A Nauheim derivative brooch from Rocky Clump, Stanmer, Brighton

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Rocky Clump is a small stand of trees within which are two large, erratic sarsen stones, hence its name. It is situated in Stanmer Park, Brighton (NGR TQ 328101) and the trees are believed to be part of the 18th-century landscaping of the estate.

Initial investigations of this site by Brighton and Hove Archaeological Society (BHAS), organised by W. Gorton, C. W. Yeates, K. Goodchild and C. F. Skeggs, revealed ditches, pits, post-holes and inhumations ranging in age from Iron Age to Saxon (Gorton and Yeates 1952–1958, 1961, 1988; Skeggs 1981, Gilkes 1997). BHAS has continued regular excavations in the area, confirming the initial assessment of the site as a small, low-status, late Iron Age/Romano-British settlement (Funnell 1991–1997, 1998–2013).

In 2011, during a phase of these excavations in a field to the south of Rocky Clump, a particularly well-preserved brooch was discovered in the chalky fill of an enclosure ditch. Apart from any applied material decoration which may have become detached (e.g. tinning, paint or enamel) the brooch appears complete and in excellent condition (Fig. 1).

The brooch is of La Tène III design and of a type known as a Nauheim derivative. Parallels can be seen in Hattatt 1982, 59: Fig. 17.12; Hattatt 1985, 24: Fig. 9.239; Bayley and Butcher 2004,



Fig. 1. The brooch after conservation.

54: Fig. 37.1 and Mackreth 2011, Vol. 2, 10, Plate 7). According to entries in the Portable Antiquities Scheme Database (PASD), these brooches are common in the south-east of England and were probably made locally as well as imported from the continent during the period from about AD 25 to AD 100 (e.g. SUSS-12B291).

The example found at Rocky Clump is made from a single piece of grey-green copper alloy with pin, spring, bow and catch plate complete. It is smaller than many, being only 39mm long. The pin is square in cross section, 1.6mm wide at the midpoint and originates from the centre of a bilateral four-coil spring with internal cord, the elements of which have diameters between 1.6 and 2.0mm. The bow is flattened into a sub-triangular shape which is widest (5.7mm) where it emerges from the spring in an abrupt arch and tapers, without re-curve, to a point at the foot. It is 1.4mm thick at the midpoint and the foot is bent and flattened to form a thin, plain, sub-triangular, solid catch plate, 10.5mm long and 5.4 mm at its widest. The bow is decorated with fine, but poorly executed incised lines parallel to and about 1.0mm inside its edges and has a group of five bold, transverse incisions, about 0.35mm wide, extending from near the midpoint, 5mm towards the foot. The edges of these bold lines are slightly raised, indicating that they may have been stamped into the metal rather than incised.

Many Nauheim derivative brooches have featured as finds in Iron Age/Romano-British excavations in Sussex (e.g. James, 2018, 62, Fig. 10.20) and the PASD contains numerous examples of this type of brooch as isolated finds in the south-east of England. Many of these have longitudinal decoration along the edges of the bow and transverse lines, raised or incised, across the width of the bow (e.g. IOW-9DA026). Some have a single group of transverse lines (e.g. HAMP-D37359, SUSS-078043) and some have multiple groups (e.g., SUSS-B18AF6). There appears to be little consistency in the pattern of these designs other than that the region towards the foot of the bow is strongly favoured for transverse lines and the lines tend to be equally spaced within a group.

It has not gone without notice, however, that the spacing of the transverse decoration on this brooch appears to form a geometric pattern, with the space between the outer transverse lines being divided by a threefold, recursive reduction of one third. This can be followed with reference to Fig. 2, where the ratios of CB:AB, DC:AC, and ED:AD are approximately 1:3 or 0.33 (measurements along the longitudinal midline made under a microscope give values of 0.32, 0.35 and 0.33 respectively).

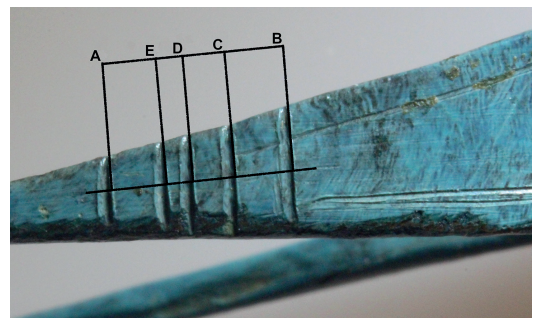


Fig. 2. Detail of the transverse decoration (A–B = 5mm).

This specific arrangement of transverse lines may well be the serendipitous result of the engraver creating an intuitively pleasing design. Speculatively, it may be a deliberate artistic device, similar to a heraldic *mise en abyme* (Snow 2016), but here based upon a recursive inclusion of a reduced design within itself, like a set of Russian dolls, or similar to a mathematical, geometric replacement rule leading to aesthetically pleasing designs (Burns 2006). Only the identification of other brooches exhibiting this type of simple, recursive design would help to resolve these possible explanations.

Although excavations at Rocky Clump are continuing, this brooch is such a fine example, with unusual decoration, that early publication was thought warranted and I gratefully acknowledge the agreement of the site director, John Funnell.

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