THE KENTISH PECULIAR? LATER BRONZE AGE POLISHED FLINTS FROM MAIDSTONE, KENT

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ABSTRACT

The title of this paper, as many readers may remember, borrows from that of a paper published in the 1990 volume of Lithics. That was by Hazel Martingell and it described her research into a little-considered type of flake, the 'squat' flake, which she had increasingly become aware of amongst the lithic collections of Essex. This report describes a further type of flake; one that exhibits many similarities to those described by Hazel Martingell. These share very similar technological and morphological characteristics but there are also very noticeable and important differences. The first, perhaps of little significance but reflected in the title, is that they were found in Kent, another, of much greater significance, was that many had been highly polished. So far as is known by this author, no other examples of these types of flakes have hitherto been recorded from Britain.


Keywords: Polished flint flake, polishing stone, Late Bronze Age, deposition, function, decorative, ceremonial, Maidstone, Kent

INTRODUCTION

This report describes and discusses a ‘cache’ of flint flakes discovered during an archaeological excavation at West Borough School in Maidstone, Kent (NGR: TQ 7390 5515; Figure 1). The excavations were conducted by Pre-Construct Archaeology during September and October 2004 in advance of the school’s redevelopment. A full report detailing all aspects of the excavations will be published shortly (Holden forthcoming).

The site is located on a large eastward facing spur of land formed by a loop of the River Medway. It occupies high ground, situated just below the 70m contour and its underlying geology comprises the Hythe Beds of the Lower Greensand Formation. There are extensive views southwards and eastwards over the Medway valley and the confluence of two of its tributaries, the rivers Loose and Len, an area that subsequently formed the focus for the growth of the city of Maidstone.

THE EXCAVATION

The excavation revealed indications of activity at the site from the Middle Bronze Age through to the Roman period. Principal features identified included a large ditch measuring 3m to 4m in width and 1.7m deep, traversing the site in a northwest–southeast direction (Figure 2). This produced pottery dating from the Middle to the Late Bronze Age and further features of this date were found scattered across the site, including a pit located close to the

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ditch that contained a complete Deverel-Rimbury Bucket Urn. After the ditch had fully infilled, an Early Iron Age ditch, part of a rectilinear enclosure, was cut along its southern edge. Other Early Iron Age features were also dug into the top of the infilled ditch, demonstrating that it had completely infilled by this time.

Figure 1: The site location. Scales 1:200,000; 1:50,000; & 1:1,000 respectively.
THE LITHIC MATERIAL

During the excavations, 78 struck flints were recovered. Twenty-eight of these were found scattered across the site, mostly singly or in small quantities. These typically exhibit later Bronze Age or Iron Age characteristics and include thick, short flakes, opportunistically reduced cores and irregularly retouched flakes (e.g. Herne 1991; Young & Humphrey 1999; Ballin 2002; Humphrey 2003). These are likely to have been associated with the later prehistoric activity identified at the site and they are discussed in more detail in the forthcoming publication of the excavations (Holden forthcoming).

The struck flint ‘cache’

The remaining 50 struck flints, alongside a small honestone, were recovered from within the above-mentioned large linear ditch. Due to the unusual nature of this group, it is worth examining its contextual associations in further detail. The ditch had witnessed at least three episodes of natural silting before being levelled with a mass of Greensandstone rubble. It would appear that the ditch had been open for some time, slowly accumulating silt, before being deliberately backfilled with the rubble. This may have originated from a stone bank or
revetment that had been toppled into the ditch, apparently representing an intentional act of decommissioning or erasing the ditch.

The flints and honestone were found during section cleaning as a small cluster close to the interface of the Greensandstone rubble layer and the underlying natural silting deposits, 0.73m below the machined surface of the ditch (Figure 3). They were all confined to within an area measuring approximately 0.30m across and the excavator suggested that they had the appearance of having been in a container such as a bag or box, no traces of which had survived. Despite further examination, no indications were found that the flints came from a later intrusion cut into the ditch and the excavator was satisfied that they had genuinely been deposited into the ditch just prior to it having been backfilled with the Greensandstone rubble.

The ditch produced pottery of Deverel-Rimbury traditions dating to approximately 1500BC to 1000BC from throughout its fills (Rayner 2005). Stratigraphically, the ditch’s infilling must have occurred prior to the Early Iron Age (600BC to 400BC) when a number of features of that date were cut into its backfill.

The ‘cache’ comprises 50 struck flakes and a single mud- or siltstone honestone (Figures 4 & 5). The flakes are all made from good quality black flint with a thick, slightly weathered chalky cortex and occasional heavily recorticated thermal scars, suggesting that the raw materials were obtained from derived deposits located close to the parent chalk (Gibbard 1986). The flints’ colour, texture and cortex are notably homogeneous and it would appear that only a few nodules from the same source had been used. All of the flakes are in a good, sharp condition with no suggestion of wear and with only very limited post-depositional damage evident.

The flakes are technologically homogeneous, they had all been retouched and many had been polished. With the exception of their polish, their technological attributes can be closely matched with flakes from industries dating to the later parts of the Bronze Age and into the Iron Age (Fasham & Ross 1978; Saville 1981; Smith 1987; Brown 1991; Herne 1991; Bradley & Brown 1992; Young & Humphrey 1999; Greatorex 2001; Ballin 2002; Humphrey 2003). They are mostly broad, short and thick and have wide and obtuse striking platforms, comparable to Martingell’s (1990) ‘squat’ flakes (see Tables 1 & 2 & Figure 6). Striking
platforms mostly consist of earlier flake scars although ten utilize cortex or ancient thermal scars, and visible points of percussion and developed Hertzian cones are commonly present. It is likely that the flakes were all detached with hard hammers. All but three of the flakes have pronounced bulbs of percussion and all possess either hinged or retouched distal terminations. It is possible that formation of the hinged distal terminations was at least partially intentional as all of the polished flints have blunt, rounded distal ends and, as evidenced on both unpolished and polished flakes, their distal ends were often retouched to further bevel them. Dorsal faces occasionally retain cortex although most consist of single flake scars. These are often markedly concave due to the previously removed flakes’ pronounced bulbs of percussion and this frequently required the trimming of the core face/striking platform edges in order to remove the worst excesses of the resultant overhangs. Generally, the dorsal scars are aligned in the same direction as the flake and it appears that the flakes were mostly removed by ‘burrowing’ into the core, each flake being removed from directly behind the previous one. In order to allow for a succession of suitably shaped flakes to be detached, the core would have required trimming and reshaping, and this would have generated quantities
of débitage, none of which accompanied the flakes.

Figure 5: Polished flints. Scale 1:2.

All of the flakes had been shaped by heavy scalar retouch into sub-rectangular or, more commonly, trapezoidal-shaped tablets. Figure 6 indicates that although the flakes are broadly of similar dimension, the polished flakes tend to be slightly narrower than the unpolished
examples. This may suggest that some of the unpolished flakes had not been as fully or extensively retouched as the polished ones and these may represent partially finished examples. The retouch is generally quite coarse but it has been undertaken very precisely, resulting in the flakes having very straight edges. The location of retouch is varied and occurs on between one and three of the flakes’ sides, occasionally including the bulbar end. The retouch appears to have been undertaken principally in order to provide a trapezoidal-shaped flake. In at least one case a lateral edge had been snapped off; again, apparently in order to achieve the desired shape. It is evident that the final shape of the flake was considered more important than the location or extent of the retouch, or the precise methods employed in producing this shape.

Twenty of the flakes, or 40% of the ‘cache’, have been polished to varying degrees (Figure 5). The polishing was undertaken on both faces, concentrating along the distal termination and extending inwards between 3mm and 41mm from the flake’s distal edge, although the extent of the polish is usually uneven on each face. Several have remnant patches of cortex near the distal end and these had also been polished. The polishing was undertaken whether or not there was cortex present.

<table>
<thead>
<tr>
<th>All Flakes</th>
<th>Length (mm)</th>
<th>Breadth (mm)</th>
<th>Width (mm)</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>39.7</td>
<td>39.4</td>
<td>9.0</td>
<td>16.3</td>
</tr>
<tr>
<td>Maximum</td>
<td>54.0</td>
<td>63.0</td>
<td>15.0</td>
<td>49.0</td>
</tr>
<tr>
<td>Minimum</td>
<td>19.0</td>
<td>18.0</td>
<td>5.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.3</td>
<td>10.5</td>
<td>2.2</td>
<td>9.0</td>
</tr>
</tbody>
</table>

*Table 1: Metrical Dimensions of all flakes from the ditch*

*Figure 6: Length (mm): Width (mm) of Polished and Unpolished Flakes*
As suggested by the retouching, it would appear that a trapezoidal shape for the finished polished flake was most desired, although square, tapered and expanding polished flakes were also present. What may have been of even more concern was the oblique angle made between the polished edge and the flake’s axis. The obliqueness is consistently present and averages around 70º, suggesting that, whatever its purpose, it was a required feature of the finished implement (Table 2).

<table>
<thead>
<tr>
<th>Polished Flakes</th>
<th>Length (mm)</th>
<th>Breadth (mm)</th>
<th>Width (mm)</th>
<th>Weight (g)</th>
<th>Flake axis as measured from polished edge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>40.1</td>
<td>32.4</td>
<td>8.3</td>
<td>11.1</td>
<td>68.0º</td>
</tr>
<tr>
<td>Maximum</td>
<td>53.0</td>
<td>44.0</td>
<td>11.0</td>
<td>23.0</td>
<td>80.0º</td>
</tr>
<tr>
<td>Minimum</td>
<td>19.0</td>
<td>18.0</td>
<td>5.0</td>
<td>4.0</td>
<td>50.0º</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.7</td>
<td>8.9</td>
<td>1.3</td>
<td>5.6</td>
<td>7.1º</td>
</tr>
</tbody>
</table>

Table 2: Metrical Dimensions of the polished flakes from the ditch

The polish appears to be in various stages of completion and varies from a rather coarse grinding, leaving a dull finish with prominent striations, to a shiny and highly reflective finish where striations are not visible, even under low-power magnification. With a few flakes only one side had been polished, and then only coarsely. On others, both sides had been coarsely polished but fine polish was either absent or sporadic, and others had fine polish limited to only one side. These, alongside the unpolished flakes, may represent progressive stages in the manufacturing process and this allows the process of manufacture to be reconstructed. It would appear that suitably shaped flake blanks with blunt, hinged distal terminations were selected from what presumably must have been a mass of knapping debris, and were then retouched along one or more sides into the desired shape. They were then initially polished using a coarse, flat, grinding stone, possibly the honestone recovered alongside the flakes, leaving a flattish matt face with visible striations. They were then progressively polished with finer graded materials until a bright, mirror-like finish was obtained; this was concentrated and most fully developed around the distal end. The final polishing continued into depressions and concavities on the flake face, and had presumably been accomplished using a soft cloth and abrasive powder, such as leather and ochre.

The honestone consists of a rod of yellow-brown gritty, fine sand/siltstone, worn from use and having a roughly triangular shaped cross-section. It measures 38mm x 11mm x 10mm and weighs 6.3g. Its gritty inclusions are too coarse to have provided the final polishing of the flakes but it may have been used for the initial grinding.

**DISCUSSION**

This assemblage appears to contain pieces from all stages leading to the production of the distally polished flakes. At present, they appear to be unique, with no known parallels in the published literature. They were shown to members of the Lithic Studies Society committee in October 2005 who, despite the breadth and depth of their knowledge of lithics, could suggest no parallels.

The polishing of flint tools is one of the defining characteristics of the Neolithic. This technique is largely confined to prestigious implements, such as axes, chisels and knives and, very occasionally, other implements, such as scrapers and arrowheads (Green 1980; Manby 1974). However, this technique has not been documented as continuing beyond the Early
Bronze Age, furthermore the polishing of flakes in the manner described here is not attested during any period. The flakes were recovered from a securely dated, later Bronze Age, context. That they were found as an integral group makes it highly implausible that they might be of earlier date but residually deposited. Other explanations, such as that they had been curated over a considerable period before being placed in the ditch or, conversely, that they are more recent and had been somehow intrusively inserted into the ditch, would seem very unlikely but cannot, of course, be entirely dismissed. However, they are technologically most comparable with flakes from similarly dated later Bronze Age industries (e.g. Fasham & Ross 1978; Saville 1981; Smith 1987; Brown 1991; Herne 1991; Bradley & Brown 1992; Young & Humphrey 1999; Greatorex 2001; Ballin 2002; Humphrey 2003), with the single, but significant, exception of their polish. There are no other known parallels for the polishing of struck flints from the later Bronze Age. Possibly the closest recorded parallels were flint flakes described by Clark as "sub-rectangular forms, three sides of which are blunted, the fourth retaining the primary flake-edge unretouched" and recovered from a Bronze Age site at Mildenhall Fen in Suffolk (Clark 1936: 46, Fig. 10.3 & 10.4.). Although of similar form, these exhibited no traces of polish.

The assemblage therefore represents an intriguing and so far unique set of artefacts. Their production involved considerable expenditure of time and effort and, where present, the final polishing is accomplished to a very high degree, resulting in an almost mirror-like quality. It is much finer than that usually seen on earlier polished stone implements and than would have been required for providing a working edge; the edges, in any case, are very rounded and blunt. They could have been used for burnishing pottery or other items, although none show any traces that they had been used as such and they were polished to a far higher degree than would have been necessary. In addition, their very rarity, perhaps even uniqueness, would also argue against them being used for any commonly conducted tasks. It is perhaps more likely that they were produced for ornamental, aesthetic or ceremonial reasons. Their trapezoidal shape would have enabled them to have been mounted close together with the polished sides forming a continuous edge, as has been suggested for composite sickles. Alternatively, their shape would have allowed them to be sewn onto cloth or a belt as separate or contiguous plates. It is, of course, entirely possible that they were produced as a curiosity, perhaps purely as a display of workmanship. As no parallels to these unique artefacts have yet been found, any interpretation remains speculative.

Whatever their intended use, they appear to have been deposited into the ditch just prior to it being levelled and, in this respect, it is tempting to suggest that they represent a special or ‘closing’ deposit, placed into the ditch to commemorate its demise. Although unique in that these examples are polished, there are indications elsewhere that during the later Bronze Age unusual deposits of worked flint were occasionally inserted into or placed upon earlier structures (e.g. Bradley 1972; Fasham & Ross 1978; Saville 1981; Smith 1987; Herne 1991; Pollard 1998 & 2002; Seager Thomas 1999; Greatorex 2001; Ballin 2002; Bishop & Mortimer in prep.). The frequently noted association of such assemblages with earlier monuments is often explained as the expedient use of raw materials fortuitously exposed by earlier construction. In many respects these flintworking assemblages do appear utilitarian; they are often crudely and simply produced and rarely contain obviously prestigious items. Nevertheless, there are dangers of over-emphasising the distinction between rational activity and ritual intent (e.g. Hill 1993; Brück 1999; Bradley 2003), and closer considerations of the nature of those assemblages and circumstances surrounding their deposition may suggest that assuming a purely functional explanation is too simplistic. In many of the cases cited here it is possible that the assemblages were deliberately created for the specific purposes of deposition.
(cf. Needham 1993) and they may have been used in ritual or ceremonial activity, often appearing in circumstances where they may have acted as part of a process of symbolically ‘closing’ or decommissioning old or redundant monuments and structures.

The flakes reported here are exceptionally intriguing but so far very perplexing. To conclude, therefore, I would like to echo the final sentence of Hazel Martingell’s 1990 paper, that to continue with this study, I would be very interested to hear about any similar polished flakes that are known of or become available through future excavations from any part of Britain.

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