TRIBRACHS AND RELATED ARTEFACTS: BACKGROUND, REPLICATION AND CONSIDERATION OF A POSSIBLE MINIATURE EXAMPLE FROM BASINGSTOKE, HAMPSHIRE

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ABSTRACT

This article describes the discovery and recognition of a small, but unique, not to mention controversial, group of flint artefacts that have in recent years, almost as if by default, disappeared from archaeological literature. The striking feature about these extremely rare pieces is the unusual form, coupled with neat flaking and a perception that special care must have been taken regarding their manufacture. We demonstrate that while there are certainly some difficulties in replicating the form, no special techniques are required and the awkward looking concavities would have been quite within the compass of an individual used to knapping, for example, stone axes. While the available data is catalogued and discussion extended to consider whether, for example, size plays a role, the controversy concerning date and authenticity remain.


Keywords: Tribrach, Neolithic, early Bronze Age, lithic typology, artefact replication, flint knapping

INTRODUCTION

Tribrachs, sturdy but carefully fashioned and well knapped artefacts with three pointed arms or branches, represent an extremely rare and little known category of lithic tool. Only three examples are recorded from the British Isles, all unfortunately as chance finds and in each case from an insecure context. Not surprisingly there has been some controversy concerning whether the artefacts formed part of a genuine prehistoric cultural assemblage from the British Isles or whether they were imported by collectors or as travel souvenirs. The lack of further discoveries, particularly during the last forty years which has seen intensive archaeological fieldwork in the country, might be held to support the latter view, although it should be noted that at least sixty four years elapsed between the recovery of the first and second find and this could simply reflect the extreme rarity of these artefacts.

TRIBRACHS: A BRIEF HISTORY

The first recorded example was recovered in the Isle of Wight and exhibited to the Society of Antiquaries by Colonel Augustus Lane Fox in 1871 (Anon 1871: 113–114). The three pronged implement is about 203mm in diameter by 63mm thick in the centre, and a striking feature was that one arm was longer than the other (Figure 1). It had been in the possession of a Dr Martin of Ventnor, before being donated to the Ryde Museum where

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Lane Fox had encountered it. Despite pursuing the matter locally its precise provenance was left a little obscure and Fox could do no more than indicate that it came from either Ashey Down, near Brading, or somewhere near Ventnor. The account appears to have stimulated Albert Way, then of the Blackmore Museum, Salisbury (later the British Museum) into immediately writing a lengthier piece, for he had encountered the piece before and was able to clarify matters. It was Way who first utilised the terms tribrachial implement and tribrach (Way 1873) to describe a flint artefact with three separate arms or branches. He often took the opportunity of sketching the artefacts that were exhibited at meetings at the time and amassed a huge collection of drawings since arranged into three folios according to material (Way mss Society of Antiquaries). He also appears to have acquired drawings made by others, for he recorded that in the case of a drawing of the artefact in question he ‘had no record of the source whence I obtained the sketch’ (Way 1873) but noted that it must have been sometime after 1850 when the Ryde Museum had been established. The crucial point about the drawing was that it contained the legend ‘Object of flint found on the beach near Ventnor, Isle of Wight, and now in the museum at Ryde’. In support, he referred to a publication by Charles S Lockhart entitled ‘General Guide to the Isle of Wight’ that was published in 1870 and which also mentioned the implement as having been presented to the museum by Dr Martin of Ventnor and continued that ‘This well-chipped weapon was found at Ventnor by Dr Martin, and looks like a barbed spearhead. It is large and heavy, and of rare (if not unique) shape’. By 1873 the find was described in the museum as having a provenance on Ashey Down, Brading and Way alleged that the change of provenance had been made on the authority of the Curator, and President of the Ryde Philosophical Society, Benjamin Barrow who had excavated a barrow cemetery on Ashy Down in 1854. Way pointed to the fact that the unusual flint artefact was not mentioned in the published account of the cemetery (Barrow 1855). Inspection of the accession registers by Dr Martin’s brother on behalf of Way revealed that the item had been presented to the museum in 1853 along with other artefacts and that it had indeed been found on the beach at Ventnor.

Familiar with artefacts from central America that were housed in the collection at Salisbury, Way pointed out that while some bore a resemblance in terms of overall knapping and the presence of strange shapes, the form of the Ventnor artefact and the material in which it was made was entirely different. Both Lane Fox (Anon 1871: 114) and Way (1873: 32–33) considered it to be of local flint, Way consulting local geologists and a lapidiary and going so far as to suggest that it came from the lower levels of the upper chalk, pointing to Bembridge Down as a potential source. When the material of the Ventnor artefact was compared to that of implements of foreign manufacture the difference was striking and it was considered highly unlikely therefore that the tribrach was of remote manufacture. However, despite Albert Way’s paper suggesting that the artefact was genuine, Sir John Evans remained sceptical and was still cautious in 1897, when the revised edition of his work ‘The stone implements of the British Isles’ simply stated that ‘a sort of tribrach, is said to have been found on the Isle of Wight’ and pointed out that fancy flint implements ‘of much the same character’ had been found in Yucatan, Honduras and Russia (Evans 1897: 77–78).

A second tribrach, forming part of Thomas Layton’s Collection and now in the Museum of London (Accession Number O674) was recovered from Southall, Middlesex (Smith 1917–18: 3) during quarry ‘excavations for ballast’. Made of black and grey flint with a lustrous surface, it too possessed one arm that was slightly longer than the other, and was just a little smaller in size than that from Ventnor, being between 170mm and 175mm from point to point.
to point, and a maximum of 44mm in thickness. The ends of the arms appear to be more rounded than the Ventnor example but otherwise the two implements are quite similar. Layton (1819–1911) was actively collecting from the mid-1850s until his death and most of his material was recovered from dredging operations along the Thames, although some were made on dry land, notably, in this case, a palaeolith from Southall which is the only other item from the locality. A further tribrach from Cavenham, Suffolk said to be in the collection of W.C. Wells was described by Smith (1917–18: 3) as much smaller than the Southall example, being only 82mm from point to point, but little else is known of it.

Wide ranging search of collections in Britain has failed to identify further examples. Strictly speaking some of the Y-shaped implements with wide, concave, neatly retouched scraping edges (e.g. from Banstead, Surrey (BM 1935: 11–14, 39 & 40)), or the unifacial example from Grimes Graves (Peake 1916: 280) that may be the one referred to by Smith (1917–18: 3), or the more common crudely knapped Y-shaped tools and axe forms (Gardiner 1984: 28; 1987: 61), might be incorporated under this heading. However, the fine bifacial knapping distinguishes tribrachs from these other tools.
**A MINIATURE TRIBRACH?**

An unusual flint implement from Basingstoke, Hampshire, with features that are similar to those of a tribrach is present amongst archaeological material in the Willis Collection held by Hampshire Museum Service at Chilcomb House, Winchester. It is identical in every way except that compared to the others it is small and remarkably slight and therefore in size and knapping technique resembles arrowheads of the Neolithic and Early Bronze Age (Figure 2).

Extremely finely knapped and of slender proportions, it measures a maximum of 42mm in length by 42mm in breadth, and is 7mm wide at the centre. Weighing only 10 grams, it has been bifacially flaked to form three shallow and extremely fine concave edges with arms between, each of which would have ended in a point. However, the tip of each arm is missing; in every case having broken off at a similar distance from the estimated end point. The even white patina that extends across the breaks suggests that these are unlikely to be recent, and it may be that the points were broken off either deliberately or in use. Like the tribrachs mentioned above, one arm is slightly longer than the other two, the measurements from broken tip to the opposite edge being 34mm, 35mm and 39mm respectively.

Comparison indicates that it does not fall into one of the widely accepted categories of flint arrowheads. Few arrowheads have concave edges. Some tranchet derivative arrowheads, both chisel and oblique types, have one or two such edges, but the cutting edge on these is not retouched and usually convex (Green 1980; Clark 1935). Hollow-based bifacially flaked arrowheads are rare in Britain, but even in Ireland where there are greater numbers (Green 1980: 146; Flanagan 1965: 94 & Fig. 8; 1967: 25 & Fig. 1) the sides are straight or convex, and they are altogether much longer in proportion to their width. Another possibility to consider is whether the Basingstoke artefact is some form of barbed and tanged arrowhead with the tang missing. There is no sign of a tang having been broken off; neither does the specimen appear to have been re-knapped. Again most barbed and tanged arrowheads have straight or convex sides, although Green’s (1980: 122) Sutton type (n) have an extremely shallow concave outline, but again these are much longer implements in comparison to their width, and do not match the deliberately constructed sides of the Basingstoke example.

It might be possible, regardless of size, to include all four examples within the same category on account of the excellent bifacial knapping, the careful shaping of three separate arms with concave edges between, and one arm being slightly longer than the other two suggesting that it was used one way up. If so, the Basingstoke specimen becomes just one in a size range; perhaps a miniature version; just as miniature axes (e.g. Field 1982; Gardiner 1987: 61) are accepted as within the normal scope of Neolithic axes. The distribution of these implements is right across lowland Britain and no clustering can be detected, although they remain so rare that a single new example from the highland zone would dramatically change the picture. None have been found in a closed context, and none can be assigned a date except very generally by comparison of the knapping techniques. While the Basingstoke example may extend the range of sizes known, as often is the case, it raises many more questions than it resolves.

There is little to be learned of the context of the Basingstoke example. It is marked simply L.B. and is accessioned as No 3421/2. This number associates it with a second implement, No 3421/1, a ground flint chisel, and with a series of other flint implements (Accession
Numbers 3409–3424), which are part of the G. Willis Collection and said to have been recovered from ‘Down Grange long barrow and White House’. The latter implements include nine borers, eight fabricators, ten adzes, two axes, two axe fragments, a blade core, and sixty-seven scrapers, and the nature of the assemblage suggests that it was recovered from the surface, one of many such surface collections amassed by Willis from the Basingstoke area. Whether this is so for the two implements separately accessioned, the “tribrach” and flint chisel, is less clear, although the fact that ‘L.B.’ is marked on the “tribrach” suggests that it at least came from the immediate vicinity of the long barrow. At this stage it is impossible to be certain whether the “tribrach” can be considered part of a surface scatter of flint implements, or as part of the funerary activity.

Figure 2: Small tribrach-like implement of arrowhead proportions found on the surface on or in the immediate vicinity of the Down Grange long barrow, Basingstoke

Now ‘discredited’ as a long barrow (RCHME 1979: xxxiii), the Down Grange (Basingstoke Down) ‘long barrow’ (NMR No SU 65 SW 43) was situated 3km south-west of Basingstoke at SU 6114 5055, in open fields c. 0.5km north of Down Grange, and 1km west of the White House. It is now considered to be a multiple group of confluent round barrows (RCHME 1979: xxxiii), this identification being based on an air photograph of soil marks, taken after the mound had been partially ploughed out. However, other interpretations are possible. For example, the spacing between each of the dark spots arranged in linear fashion, correspond with one of the many phases of cultivation visible on the photograph, and could easily represent the ploughing of a turf core or other feature irregularly revealed by furrows. The area has since been re-developed for housing;
however, even if the central feature was indeed a long barrow, the air photograph clearly shows that other round barrows were present and, assuming that the “tribrach” was indeed recovered from one of these features it still allows a date spanning the Neolithic and Early Bronze Ages. The other known examples provide no clue in this respect.

The function of these few examples remains perplexing and is very unclear. Way (1873: 29) suggested that the longer arm may have served as a handle, or as the part that was hafted, although he readily admitted that the implement could just as easily have been used the other way around. All this is clutching at straws and equally no use can be suggested for the smaller implement presented here. However, the neat and precise manufacture in each case suggests a deliberately contrived form. Given the lack of examples that have come to light, everyday functions might be considered unlikely to be appropriate and perhaps a ritual or specialized technical application could be imagined. Alternatively it remains conceivable that they are zoomorphic and, for example, with the long arm pointing downwards could represent a stylized bos skull.

THE REPLICATION OF A TRIBRACH

As a part of a Lithic Studies Society visit to the Isle of Wight on the 6th October 2007, it was possible to examine the Ventnor example displayed in the Carisbrooke Museum and the event allowed one of us (HLW) as part of a knapping demonstration, to attempt, albeit unsuccessfully, to replicate a tribrach. Prior to the event, a first attempt at knapping a tribrach had proved successful (Figure 3) and the following account briefly outlines the techniques employed in the successful replication and considers some of the problems encountered with the unsuccessful attempt on the day in question.

A large flake of good quality black flint from the Lynford Quarry, near Brandon, Suffolk, was selected as the blank. It was sub-triangular in form with ridges roughly located over the intended location of two of the artefact’s arms; the blank was only marginally larger and thicker than the finished artefact. Flaking was initiated with a red deer antler hammer in the manner typical of biface manufacture. A series of small abrupt removals were made
onto the dorsal surface to provide a platform to strike invasive flakes into the ventral surface. Following the removal of flakes across the ventral surface, a platform was established on the edge ventral surface to facilitate the removal of flakes across the dorsal surface. The platform was strongest towards the centre of the three sides that were required to become concave. The establishment of slight platforms and alternate flaking of the ventral and dorsal surfaces was repeated, with each series of removals further defining the concave edge and correcting the centre line of the artefact. As the form of the artefact developed and the concave edge became deeper, it became progressively more difficult to accurately remove flakes. Where the removal of flakes by direct percussion proved difficult, an antler punch was employed. Once the desired form had been achieved protrusions on the artefact were removed by pressure flaking. The entire process from blank to finished artefact took just over an hour. The finished artefact measures between 100mm and 105mm point to point and is 22mm thick.

The replicated tribrach, described above, is approximately half the size of the example recovered from Ventnor. The knapping demonstration at Carisbrooke Museum was, therefore, used as an opportunity to attempt the manufacture of a larger tribrach comparable in size to the Ventnor example. A large nodule of good quality Suffolk flint, measuring approximately 250mm diameter by 100mm thick, was selected for knapping. The initial removals were made with a large quartzite hammerstone and were intended to thin the nodule. During this process it became apparent that the ideal blank would be a thin tabular nodule, and that the nodule selected would be challenging to knap. As the nodule required thinning, a substantial platform was established around the edge of the flint, but this substantially reduced the nodules diameter. The high angles established to thin the nodule also subsequently hindered bifacial flaking with an antler hammer and the establishment of a balanced centre line through the artefact. The size of the artefact was further reduced with each round of flaking, and whilst a triangular form was established, the flint was never adequately thinned to create concave edges. Ultimately the awkward high angles resulted in knapping errors that proved difficult to remove and the attempt was abandoned.

These attempts at replication demonstrate that the selection of an appropriate blank or piece of raw material is essential for successful knapping. The desired blank should be thin, perhaps only marginally thicker than the end product, free from faults and unnecessary irregularities. Tabular rounded nodules would be ideal for the production of larger tribrachs, whilst smaller examples may be manufactured on large flakes. It is also apparent that the techniques of working are comparable to those employed in the manufacture of Neolithic axes and that the débitage is also of a similar character. The production of concave edges is not unduly problematic and can readily be achieved through direct percussion, although the use of a punch assisted the accurate removal of flakes and awkward protrusions. These artefacts are, therefore, perhaps not as difficult to manufacture as their form suggests, but remain an unusual form only infrequently manufactured in the past.

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John Wymer believed the Basingstoke example to be an unusual form of arrowhead. Discussion on this matter or on tribrachs in general is warmly welcomed by the present writers.

REFERENCES


