

A BRONZE AGE GOLD BRACELET FROM THE LEE

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An unusual find of a Bronze Age gold bracelet was made at The Lee in 1993. The nearest parallel for the piece comes from Ireland. The bracelet had been deliberately distorted before being lost or buried.

Background

In May 1993 a gold bracelet was found by Mr D Critoph while detecting on land at The Lee. He immediately contacted the museum, which in turn notified the Coroner.

A site visit showed that the find had been made on gently sloping land and was not near any previously known archaeological site. In July, with the assistance of members of the County Museum Archaeological Group, a small area 1.4 × 2.3m was excavated around the find spot to a depth of c. 0.3m when 'natural' was encountered. The find had been recovered from a depth of about 0.18m.

The excavation determined that the find had probably lain within a brown humic loam. Modern artefacts contained within this loam suggested that it was a well worked ploughsoil. The whole lay over an undisturbed yellow silty clay containing large flints. It appeared unlikely that the object was strictly *in situ* since the slight slope, together with plough action, may have caused its migration.

On 23 February 1994 a Coroner's inquest was held at High Wycombe at which evidence was presented by Gillian Varndell of the Department of Prehistoric and Romano-British Antiquities of the British Museum. Although acknowledging the difficulty of determining from the discovery of a single object whether it had been lost or hidden with an intent to return and retrieve it, she advised that on balance it was likely to have been deliberately hidden. She noted the intrinsic value of the object, and cited the discovery of a group of fragments of two

Bronze Age neck rings which were also found in ploughsoil, but close together, near Chelmsford.

The jury accepted this view and decided that the object was Treasure Trove. This verdict established the object as the property of the Crown. Following customary practice the Treasure Trove Reviewing Committee then met, on 16 March 1994, to scrutinize the valuation of the object. Meanwhile, The British Museum agreed it would be appropriate for the County Museum to acquire the bracelet, which it was able to do with the aid of grants from The Museums and Galleries Commission/Victoria & Albert Museum, and the National Arts Collections Fund, to whom thanks are due. The bracelet is accessioned as 1994.56.1

The Bracelet

The bracelet is made of a rod of gold of circular cross-section (Plate 1). It has been tightly wound in on itself so could no longer be worn as a bracelet. The diameter of the rod varies along its length between 9–10 mm. If straightened it would be 253 mm long (Fig 1). It weighs 235.55g. The ends give the appearance of being slightly expanded which is due to a slight narrowing of the rod close to the end although the end itself is the same diameter as the most of the rest of the rod. The whole is covered in punched dots, generally of about 1 mm diameter and spaced roughly 1 mm apart. This spacing varies as at times they touch, but at times are more widely separated. Over the length there are between 12 and 14 continuous lines of dots. On the inside of the bracelet is an undecorated band about 5 mm wide



Plate 1: Gold Bronze Age bracelet from The Lee (County Museum)

where adjacent dots are slightly elongated indicating that the bracelet was formed into a curve prior to the decoration being added – the craftsman having difficulty in getting his punch to grip on the interior face. Both ends, which are flat, are also punched. On one end the dots are based around a St. Andrew's cross shape with dots infilling; on the other they are roughly arranged as chords. There is a 7 mm long scrape across the design at one point, apparently caused post-deposition, perhaps by plough action.

I am grateful to Mr. D. R. Hook of the Department of Scientific Research, British Museum, who has provided the following comment on the bracelet's composition:

The bracelet was analysed using X-ray fluorescence (XRF) and was found to contain approximately 87% gold, 11% silver and 2% copper. The analysis has a precision (i.e. reproducibility) of *c.* $\pm 2\%$ for gold, *c.* $\pm 10\%$ for silver and *c.* $\pm 30\%$ for

copper. Reliable figures for the accuracy of the analysis cannot be quoted due to the unknown degree of any alteration of the composition of the surface metal of the piece as a result of burial. In general, copper and some silver is leached out of the surface layers of a gold alloy during burial, giving an apparent increase in gold content. Any analytical technique such as XRF which measures the composition of the surface of an object would therefore be expected to give a result that was slightly too high for gold (and correspondingly low for silver and copper) compared with the body or 'true' composition. As the above analysis of the bracelet was carried out on unclean surface metal, it should therefore be regarded as semi-quantitative only.

The analysis of the bracelet from The Lee falls into the range of compositions of previously analysed Bronze Age bracelets (e.g. Hook and Needham 1989 and Hartman 1970 and 1982); however the variations in composition of Bronze Age

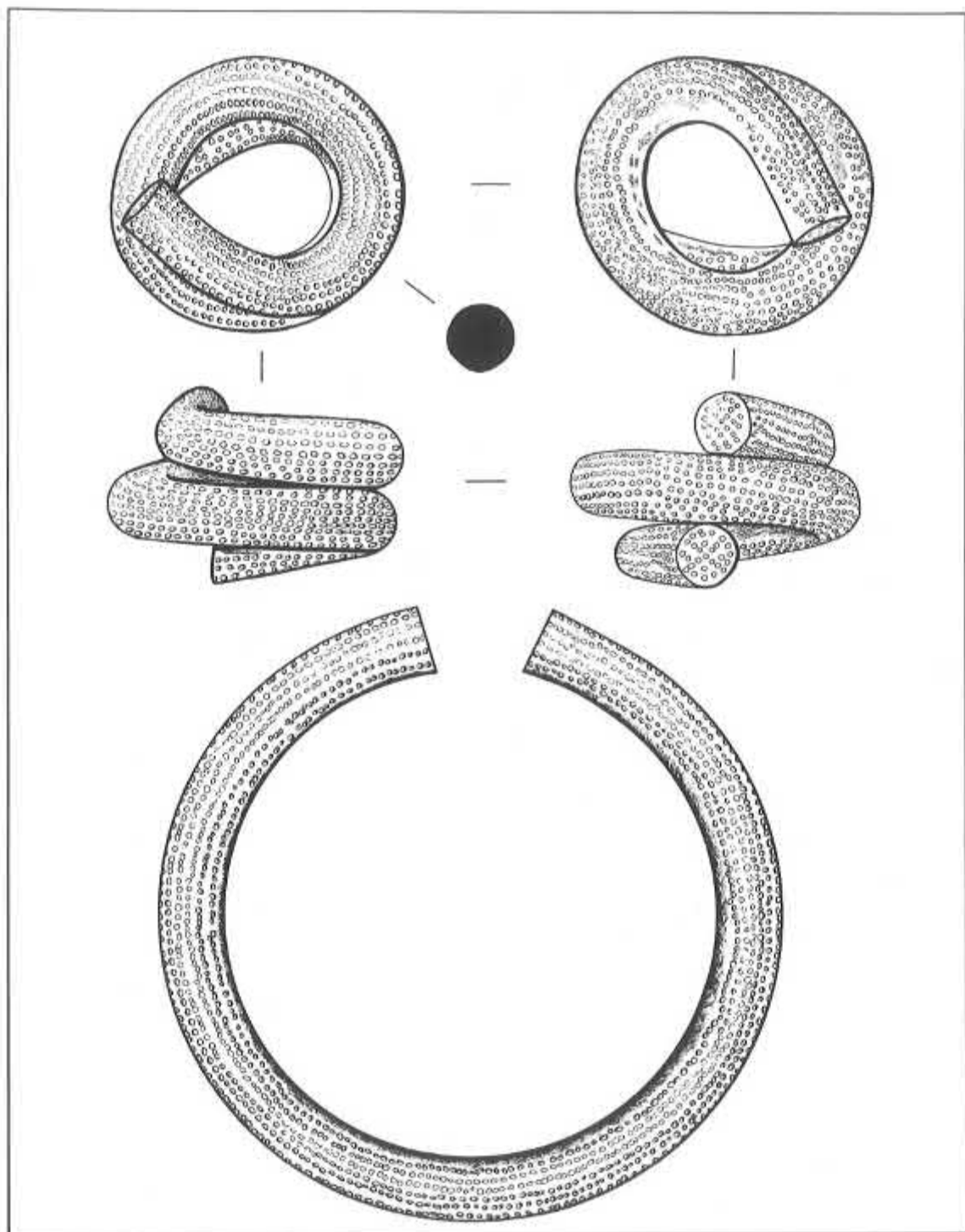


Figure 1: Gold bracelet from The Lee, and reconstruction drawing (scale 1:1). Drawings by Nicky Smith

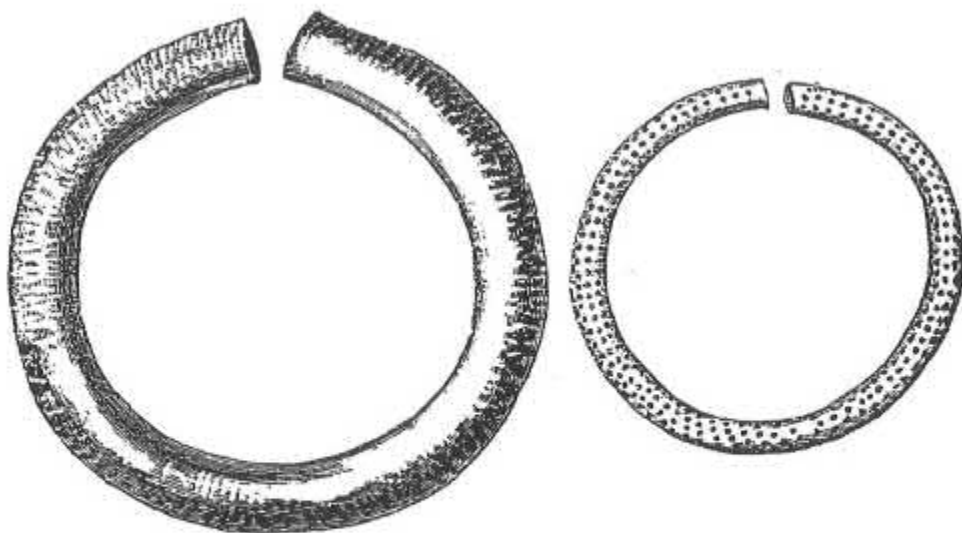


Figure 2: Two bracelets from Trimleston, County Meath (illustrations from *The Dublin Penny Journal* Vol 1 no. 52, (1833), 413)

bracelets do not appear to be obviously related to style or findspot.

Discussion

Considering the amount of gold in the item, the surface decoration is unsophisticated. The process of coiling such a substantial bar would have required some strength or expertise, although the purity of the metal would help.

As the reconstruction drawing shows, the internal diameter of the bracelet is greater than a modern bracelet and, if it were worn at all, it could have been worn as an arm ring.

With a single find lacking context, discussion as to whether the object was hidden simply for safe-keeping or concealed as a votive deposition is unlikely to reach any useful conclusion. Although there have been many discoveries of groups of Bronze Age gold objects, substantial numbers also occur as single finds and the majority have little or no context. That the object is no longer functional might argue either for it being 'killed' – an argument put forward, for instance, for groups of bent weap-

only deposited in wetland areas, or that it is part of a smith's stock. In view of the weight of the piece but the relative crudity of the decoration, there is a possibility that it might not have left the goldsmith's possession, the simple decoration being a doodle or trial piece, a precursor to reworking into something more sophisticated.

This is the third bracelet find of this date from Buckinghamshire; previous finds are a late Bronze Age flat coil-ended example from Milton Keynes, found in 1990 (BCM ref CAS 3176), and a pair of bracelets with expanded terminals from Waddesdon (Kendrick 1941)

The standard corpus of British Bronze Age gold is that of Joan Taylor (1980) who attributes the earliest rod-section bracelets, of which there are a great many, to the Middle Bronze Age (Taylor 1980, 66) a period in which Eogan also finds them common (Eogan 1967, 133). The great majority are undecorated or are decorated only with engraved lines (Eogan 1994, 50) Although use of the punch is not uncommon on Bronze Age metalwork it is very rare on bracelets. The nearest parallel to that from The Lee appears to be an example found near the Castle of Trimleston, County Meath (Taylor 1980,

County Meath 16). This bracelet is also a plain gold bar with unexpanded ends and was found with a plain gold ring. The punched design, as with the Buckinghamshire example, covers only the visible part of the bar; its ends are not punched. I am grateful to Mary Cahill of The National Museum of Ireland for providing these details. The piece weighs, however, only 2oz 1dwt 4gr (Armstrong 1933, no. 412), 116.69 gms, interestingly very close to half the weight of the Lee piece (49.54%). In comparison with published weights of Bronze Age gold The Lee piece is substantially heavier, weighing two to three times more than the individual weights of over 200 bracelets – admittedly of various types – recorded by Eogan (1994, 148–158), and incidentally heavier than most other gold items of this date, apart from a few bar torcs (e.g. Eogan 1994, 127–129).

Closer dating of such a simple piece must await the discovery of examples with better associations; however a date in the second half of the first millennium BC may not be an unreasonable guess.

Acknowledgements:

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