IX.—MUSEUM NOTES, 1970*

R. M. Harrison and P. A. Mellars

1. An Early Byzantine Bronze Stamp. Fig. 1; Pl. XXXII

The Museum of Antiquities of the University and the Society of Antiquaries of Newcastle upon Tyne has in its possession a cruciform bronze stamp (accession no. 1815.11), which was presented to the Society in 1815 by Mr. G. A. Dickson; it was said to have been purchased on the Island of Pharos at Alexandria.[1]

The stamp (Fig. 1; Pl. XXXII) is of cast bronze, its back smooth, its face decorated with five letters in high relief within a narrow raised border which follows the outline of the cross. The limbs of the cross each terminate in two canted flanges, which enhance its outline. Attached to the back of the cross is a ring-handle, also of bronze, with a bezel in the form of an inverted cone. The height of the cross (if the cross is set vertically) is 59mm., its width 52mm., its thickness (including the relief) 8-10mm. This thickness is increased to 43mm. by the ring-handle, which has an external diameter of 25.5mm., an internal diameter of 15mm.; the diameter of the bezel is 12mm. The letters stand *ca.* 7mm. in relief on an irregular sunken background, as does the border; both the border and the bars of the letters are raised to the same plane. The letters, one in each limb of the cross, one at the centre, form the two words ΦΩC, ZΩH, the former reading vertically, the latter horizontally. The *zeta* is reversed.

The formula ΦΩC, ZΩH (Light, Life) had a wide currency in the Eastern Mediterranean, particularly during

* Prepared for the press by Dr. D. J. Smith. Grateful acknowledgments are accorded to Professor R. M. Harrison and to Dr. P. A. Mellars for their contributions.

[1] *Cf.* the Society's Donations Book, 7th June, 1815, and *AA*[1] (1822), App. p. 6. I am grateful to Dr. D. J. Smith for inviting me to contribute this note, to Miss M. M. Hurrell for the drawing, and to my wife for the photographs.

the 5th and 6th centuries. The reference is either to *St. John* I, 4 ("In Him was life, and the life was the light of men") or to *St. John* VIII, 12 ("I am the light of the world: he that followeth me shall nôt walk in darkness, but shall have the light of life"). The use of the words to indicate Christ is mentioned as early as the 2nd century.[2]

The words occasionally occur singly,[3] occasionally side by side;[4] normally, however, they are arranged (as here) in the form of a cross, ΦΩC vertically, ZΩH horizontally, *omega* (with its apocalyptic associations) common to both. The cruciform version is found, for example, on a gold pectoral cross,[5] enamelled gold crosses,[6] gold earrings,[7] a bronze processional cross,[8] a bronze bowl,[9] a bronze cruciform clasp,[10] bronze crosses,[11] a bronze ring,[12] a lead pectoral cross,[13] a clay stamp,[14] a wooden box,[15] an illuminated

[2] Irenaeus, *Contra haereses* 1, 9, 3.

[3] E.g., H. Grégoire, *Receuil des inscriptions grecques chrétiennes d'Asie Mineure* I (Paris, 1922), no. 320 (Termessus). At Carpignano the letters ΦOC (*sic*) are set separately on the limbs of a crucifer nimbus in a painting dated 959: *cf.* A. Medea, *Gli Affreschi delle Cripte Eremetiche Pugliesi* (Rome, 1939), fig. 53.

[4] E.g., CIG 8845 (Tenos); also K. Kondakof, J. Tolstoï, S. Reinach, *Antiquités de la Russie Méridionale* (Paris, 1891), p. 521, fig. 477 (Chersonesos).

[5] O. M. Dalton, "A gold pectoral cross and an amuletic bracelet of the sixth century", *Mélanges offerts à M. Gustave Schlumberger* (Paris, 1924), II, pp. 386-90.

[6] M. C. Ross, *Catalogue of the Byzantine and Medieval Antiquities in the Dumbarton Oaks Collection* II (Washington, D.C., 1965), nos. 179H (6th century) and 100 ("a late period").

[7] *Ibid.*, no 133 (10th-11th century, but suspect).

[8] G. Schlumberger, "Monuments byzantins inédits", *Florilegium Melchior de Vogué* (Paris, 1909), p. 555 (from Syrian Homs); *cf.* Germer-Durand, "Epigraphie chrétienne de Jérusalem", *Revue Biblique* I (1892), pp. 587-8, for an apparently similar object from Bethany.

[9] O. Wulff, *Altchristliche und Mittelalterliche Bildwerke* II (Berlin, 1911), no. 1984, p. 93, pl. 16 (from Pergamon).

[10] M. Diehl, "Note sur un fermoir de bronze en forme de croix découvert à Korbous", *Bulletin archéologique* (1909), pp. 335-7 (Tunisia).

[11] E.g., G. Lefebvre, *Receuil des inscriptions grecques-chrétiennes d'Egypte* (Cairo, 1907), no. 762 (from Luxor).

[12] *Ibid.*, no. 770 (from Fayoum).

[13] J. Ebersolt, *Mélanges d'Histoire et d'Archéologie byzantines* (Paris, 1917), p. 111 (Istanbul).

[14] O. Wulff, *Altchristliche und Mittelalterliche Bildwerke* I (Berlin, 1909), no. 1437, p. 277, pl. 70 (from Egypt); the five letters of the formula are here oddly out of order.

[15] P. Lauer, "Le Trésor du Sancta Sanctorum", *Monuments ... Piot* XV (1906), pp. 94-5 (Rome).

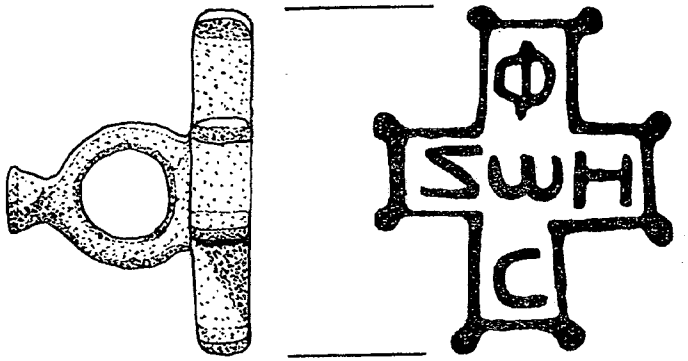


Fig. 1. Byzantine bronze stamp
Drawn by Mary M. Hurrell

manuscript,[16] and on buildings (some of them dated) in Syria[17] and Asia Minor.[18] Portable objects may have travelled, but the buildings are confirmation of the *ambiance* of this motif. The dated buildings are of the 6th century, as are, on stylistic grounds, the majority of the other buildings and objects cited; and the forms of the letters on our cross are consistent with a 6th-century date. A suggestion that these letters set upon a cross denote the Crucifixion[19] is attractive, particularly in view of the predominantly aniconic carving in Syria and Asia Minor at this period.

[16] Poitiers MS 17; *cf.* W. W. S. Cook in *Art Bulletin* VIII (1926), p. 208, fig. 11.

[17] E.g., W. K. Prentice, *Syria* IIIb, nos. 915 (Il-Anderîn, A.D. 559), 912 (Il-Anderîn), 893 (Abu Il-Kudur, A.D. 574/5); M. F. von Oppenheim, H. Lucas, "Griechische und Lateinische Inschriften aus Syrien, Mesopotamien and Kleinasien", *BZ.* XIV (1905), no. 36 (El Fan et Tahtānī, A.D. 576).

[18] E.g., R. M. Harrison in *Anatolian Studies* XIII (1963), p. 132 (Karabel in Lycia, with references also to Aphrodisias and Synnada).

[19] P. Perdrizet in *Revue des études anciennes* XIII (1911), p. 235, followed by Ebersolt and Dalton (notes 13 and 5, *supra*).

Our object is one of a fairly large class of bronzes[20] which are often called breadstamps. The diagnostic features are the raised letters in a raised frame on the face and a handle on the back. The frame can be square, oblong, cruciform, circular, or irregular, and the handle can be either a ring or a tenon. The ring-handle often (as here) has a bezel, and, if the first finger is inserted in the ring, pressure on the bezel can conveniently be applied with the thumb, supporting the view that these are stamps. The legends are sometimes personal names, sometimes religious formulae. Where findspots are known, they extend from Asia Minor to Egypt, and again their general date, on stylistic and epigraphic grounds, is the 6th century.

The association with bread is suggested by the discovery of stamped bread and presumed breadstamps from the Roman world, by the fact that eucharistic and other bread in Early Christian times is known to have been stamped, and by the specifically Christian form or inscription of many of these bronzes.[21] There are, too, objects of stone,[22] clay,[23] and wood,[24] of varying shapes and often with *incised* inscriptions, which are also (with more justification) regarded as breadstamps.

If our bronze were used as a stamp, the impression would of course be retrograde; but, to judge from Early Byzantine stamped bricks where retrograde and "progressive" inscriptions occur indiscriminately, this need not be significant, and indeed these bronzes have both forms. More important, perhaps, is the fact that the impression from our bronze would consist of *depressed* letters on a *raised* ground,

[20] E.g., O. M. Dalton, *Catalogue of Early Christian Antiquities ... British Museum* (London, 1901), nos. 486-94, and O. Wulff, *Altchristliche und Mittelalterliche Bildwerke* I (Berlin, 1909), nos. 895-902.

[21] F. J. Dölger, "Heidnische und christliche Brotstempel mit religiösen Zeichen", *Antike und Christentum* I (Munich, 1929), pp. 1-46; G. P. Galovaris, in *Reallexikon zur byzantinischen Kunst* I (Stuttgart, 1966), *s.v.* Brotstempel.

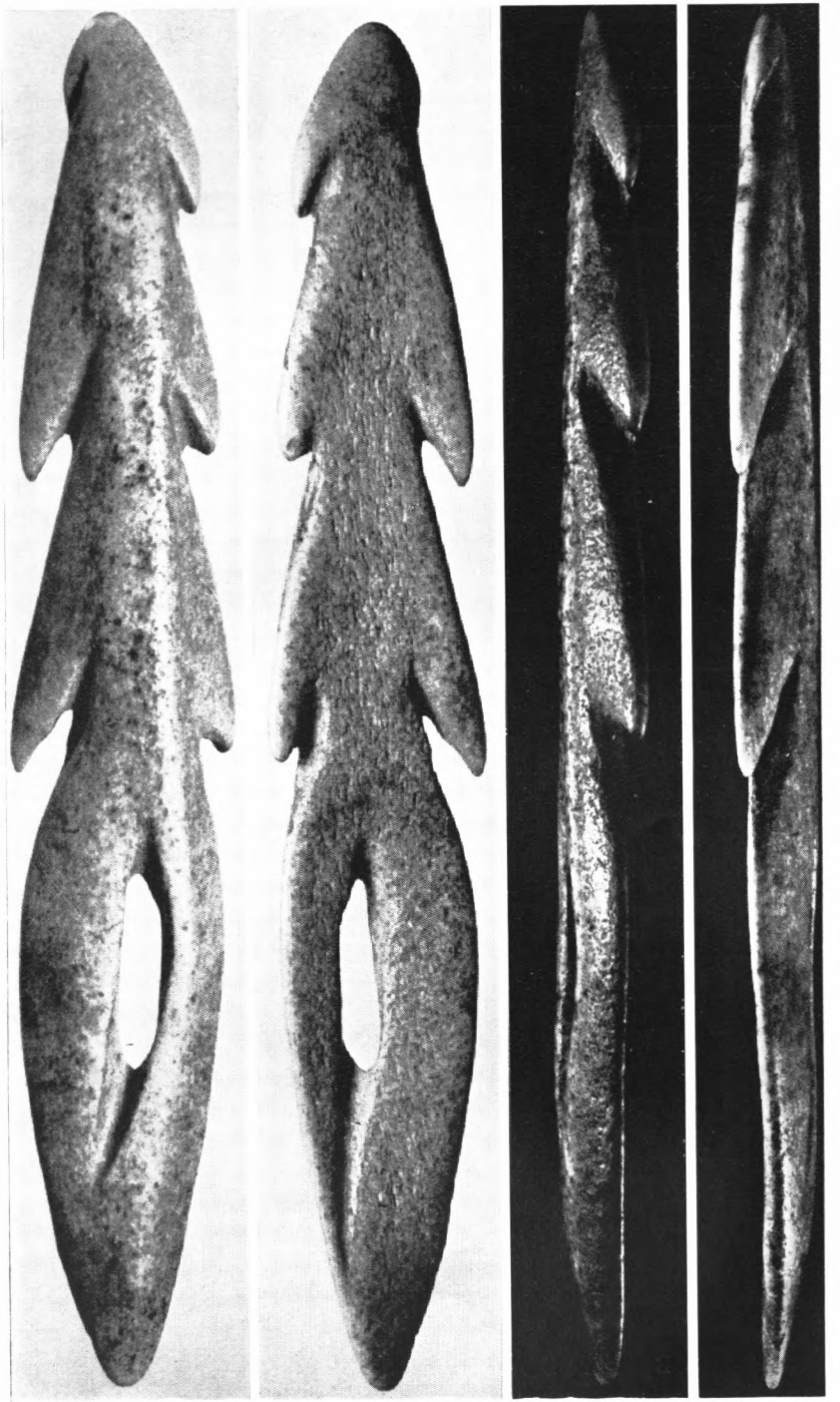
[22] E.g., E. R. Goodenough, "An Early Christian Bread Stamp", *Harvard Theological Review* 57 (1954), pp. 133-7.

[23] E.g., Dalton, *Catalogue* (*cf.* note 20, *supra*), nos. 917-22.

[24] E.g., *ibid.*, no. 982.

Byzantine Bronze Stamp. See Note 1

Phot: Elizabeth Harrison



The Whitburn Harpoon (Scale × 2). See Note 2

Phot: P. A. Mellars and University Library, Newcastle

whereas surviving stamped objects of this period in the Eastern Mediterranean (silver plate, pottery, bricks) invariably have *raised* letters on a *depressed* ground; and, on a malleable substance, this latter method would appear to be the more efficient. The fact that no stamped object has so far been found which can be associated with these bronzes strongly suggests that they were applied to perishable material; but, pending such a discovery, the nature of this material remains in doubt.

In sum, this stamp is a product of the Eastern (perhaps South-Eastern) Mediterranean, and its date is about the 6th century. It is a particularly well-made example of a familiar type, whose precise function, however, is unknown.

R. M. HARRISON

2. AN ANTLER HARPOON-HEAD OF 'OBANIAN' AFFINITIES FROM WHITBURN, COUNTY DURHAM.[25] Figs. 2, 3; Pl. XXXIII

The earliest traceable reference to this object appears in Robert Munro's book *Prehistoric Scotland* published in 1899. In searching for parallels for material from the newly-excavated shell-midden sites in south-west Scotland he records (p. 57): "Recently, when on a visit to the Antiquarian Museum at Newcastle-upon-Tyne, I saw a bone harpoon labelled as having been picked up on the shore at Whitburn in 1852. It is very similar to the Oban specimens." Munro's note is accompanied by a small and rather inaccurate drawing of the harpoon, set alongside illustrations of similar implements from the Druimvargie rock shelter at Oban, and Caisteal nan Gillean on the island of Oronsay. Further references to the Whitburn harpoon were

[25] I am indebted to the following people for supplying information or assisting in other ways with the preparation of this note: Mr. W. Bulmer, Dr. J. D. Cowen, Mr. R. A. S. Cowper, Mr. W. Dodds, Mr. E. A. Francis, Miss R. B. Harbottle, Miss H. Heaney, Mr. E. S. Higgs, Dr. W. G. Jardine, Mr. S. Payne, Dr. D. A. Robson, Mr. D. B. Smith, Professor T. S. Westoll.

made by Munro in 1908[26] and 1912,[27] and by a number of later workers,[28] but these add nothing in the way of either description or illustrations to Munro's original account.

It would appear that at some point during the present century the harpoon was lost sight of in the collections of the Black Gate Museum. Curators of the museum both before and after the last war made unsuccessful attempts to locate it and for some time it was feared that the object might be permanently lost. It eventually came to light again in 1968, when it was noticed by Mr. Graham Robson whilst sorting through collections in the coin cabinet of the Black Gate Museum. It was found still attached to a piece of card on which the provenance was recorded in exactly the terms quoted by Munro—i.e. "picked up on the shore at Whitburn in 1852"; the label also recorded that the object was donated to the museum by the Reverend Walker Featherstonhaugh—a well known local collector who contributed a large amount of prehistoric material to the collections of the Society of Antiquaries of Newcastle in the later part of the 19th century.[29] Subsequently, the harpoon was transferred to the new Museum of Antiquities at Newcastle University (under the accession number 1968.14.A) where the present Keeper of the Museum, Dr. D. J. Smith, drew the attention of the writer to it.[30] Since Munro's original publication scarcely does justice to the particular interest of the implement, it seemed worthwhile to illustrate and describe the piece in some detail.

Unfortunately, thorough searching has failed to reveal

[26] *Arch. Jour.* LXV (1908), 231, fig. 236.

[27] R. Munro, *Palaeolithic Man and the Terramara Settlements in Europe* (1912), 270, fig. 236.

[28] E.g., D. A. Garrod, *The Upper Palaeolithic Age in Britain* (1926), 184; J. G. D. Clark, *The Mesolithic Age in Britain* (1932), 14; V. G. Childe, *The Prehistory of Scotland* (1935), 16; C. T. Trechmann, *P.P.S.* II (1936), 166; A. D. Lacaille, *The Stone Age in Scotland* (1954), 241; etc.

[29] Between 1851 and 1853 the Reverend Featherstonhaugh was chaplain to the borough gaol at Newcastle. Subsequently he moved to Stonegrave, Yorkshire (1854), Hartburn, Northumberland (1855), and finally Edmundbyers, Co. Durham, where he spent the rest of his life. *Cf. AA*[3] X (1913), 219-20.

[30] I am informed that remains of a paper label "bearing a printed figure 2 in 19th century type" were also found adhering to the specimen.

any further information concerning the original discovery of the harpoon. There is no record of its accession in the old donations book of the Black Gate Museum—although as these records are known to be incomplete this is of little significance.[31] A search for correspondence or other literature relating to the Featherstonhaugh collection was also unrewarding, and there appears to be no reference to the object in any of the contemporary issues of the *Proceedings* of the Society or of *Archaeologia Aeliana.* Despite the lack of more detailed information relating to the discovery, however, there appears no reason to doubt the provenance recorded on the original labelling of the specimen.

On the basis of independent diagnoses by three faunal specialists it would appear that the harpoon is manufactured from deer antler and not from bone as Munro originally suggested.[32] The harpoon is of biserial form, having three sharply pointed barbs along one edge, two similar barbs on the other edge, and bearing an elongated, oval perforation in the butt end (Pl. XXXIII); clear traces of a third barb can be seen close to the tip on the left hand margin, but this is scarcely prominent enough (at least in its present form) to be functional. The total length of the piece is 87.5mm., its maximum width 14.6mm., and maximum thickness 4.6mm.; its present weight is 4.3gm.

A firm identification of the species of deer from which the antler was obtained is not possible from the surviving indications, though red deer is perhaps the most likely candidate.[33] One face of the implement is markedly convex and evidently reflects the original curvature of the circumference of the antler. The other face is almost perfectly flat (apart from a slight concavity in the area of the lowermost barbs and perforation) and shows traces of the inner,

[31] The donations book contains no records for the years 1866, 1871, 1879, 1880 and 1881, and there are omissions in other years.

[32] I am indebted to Messrs. E. S. Higgs and Sebastian Payne of the Department of Archaeology, Cambridge University, and Mr. G. W. I. Hodgson of the Hancock Museum, Newcastle, for these identifications.

[33] If red deer antler was in fact employed, then the surface must have been heavily rubbed down to remove the rough, irregular "skin" of the antler.

cancellous tissue. It may be assumed that the splinter of antler from which the harpoon was made was brought to its overall, lozangic outline partly by cutting and scraping with a flint knife, and partly by grinding on a rough stone; however, subsequent abrasion and polishing of the surface (possibly by the action of the sea) has removed all traces of the original tooling from the surface of the piece.

The methods employed to produce the barbs and basal perforation will be apparent from the photographs on plate XXXIII. It will be noted that the grooves which define these features were invariably cut from both faces of the tool, and that the grooves on the domed surface are in most cases appreciably deeper than those cut from the flatter face. In cross section the grooves vary from U-shaped to (in at least one case) sharply V-shaped. These grooves were presumably cut with the aid of a pointed stone tool, although whether the implement employed was a regular burin or merely a sharp-edged flint flake can hardly be determined from the form of the incisions. The shape of the grooves used to produce the perforation—almost straight on one edge and convex on the other—may provide some hint as to how the engraving tool was manipulated.[34] As regards the technique used in shaping the barbs, it will be noted that this contrasts strikingly with that employed in the manufacture of uniserially barbed points of "Maglemosian" type recovered from several Boreal and Pre-Boreal contexts (*c.* 5,500-8,300 B.C.) in Britain; in the case of the latter implements the barbs were invariably formed by cutting or sawing upwards and inwards from the edge of the tool.[35]

As Munro emphasized over 70 years ago,[36] the obvious parallels for the Whitburn harpoon are provided by finds from the "Obanian" shell-midden sites of south-west Scotland. A particularly close resemblance is apparent between

[34] A small but well defined notch can be seen on the lower margin of the perforation; this may well have been cut by the line to which the harpoon head was attached when in use.

[35] *P.P.S.* XXII (1956), 9-16.

[36] R. Munro, *Prehistoric Scotland* (1899), 57.

Fig. 2. Harpoon-head of Red Deer Antler from MacArthur's Cave, Oban (1 : 1)

Reprod. from *P.S.A.S.* 29 (1894-95), 223, Fig. 11, by kind permission

the Whitburn specimen and one of the harpoons from the MacArthur Cave at Oban (see Fig. 2). Although the latter implement is somewhat longer than the Whitburn specimen and differs in possessing four instead of three pairs of barbs,[37] the overall similarities in form and technique of manufacture between these two pieces are beyond dispute; in particular, attention may be drawn to the smallness of the uppermost barb on the left hand side of each specimen, and the placing of this at an appreciably higher level than that of the corresponding barb on the opposite edge.[38] More general resemblances can be seen between the Whitburn harpoon and implements from other Obanian settlements (Caisteal nan Gillean and Cnoc Sligeach on Oronsay, and Risga in Loch Sunart), though to judge by the complete specimens it would appear that the so-called "harpoons" from the latter sites were not normally perforated.[39] In fact, the single specimens from the MacArthur Cave and Whitburn would appear to be the only barbed points of Obanian type which *do* carry perforations, and which can therefore be regarded as harpoons in the strict sense.[40]

There remains the interesting question of the geological provenance of the Whitburn harpoon. Assuming that the object was in fact found on the beach there would appear to be two main possibilities: either, (a) that the harpoon was washed up by the sea from submerged deposits just off the present shore; or, (b) that it was eroded out of deposits exposed in nearby cliffs.

[37] *P.S.A.S.* XXIX (1895), 223-4, fig. 11.

[38] All seven of the barbed points from the MacArthur Cave are said to be made from antler; in contrast, all except one of the specimens from the other Obanian sites (Caisteal nan Gillean, Cnoc Sligeach, Risga and Druimvargie) would appear to be made of bone. Cf. *P.S.A.S.* LXXXIX (1955-6). 92.

[39] A. D. Lacaille, *The Stone Age in Scotland* (1954), 206-45, figs. 82, 86. 87, 104.

[40] Additional barbed points of distinctive Obanian type are recorded from the bed of the river Dee at Cumstoun, near Kirkcudbright, and from the river Irvine at Shewalton, Ayrshire. Both of these represent stray finds and both are said to be manufactured from red deer antler. Cf. Lacaille, *op. cit.*, 156-7, 287-8, figs. 57, 128.

Although there is clearly no definitive way of deciding between these alternatives, it would seem that the former possibility is the more likely. Remnants of submerged peat or "forest" deposits have been observed at low tide at several points along the Northumberland and Durham coasts, and substantial traces of such a formation have in fact been observed less than one mile to the south of Whitburn in the area of Whitburn Bay.[41] According to C. T. Trechmann, this deposit extends for at least half a mile, and in places attains over six feet in thickness. It is said to have yielded fragments of birch bark, hazel nuts, red deer antler and charcoal, but so far no definite artifacts have been recovered from it. In a section examined by Trechmann in 1935 he observed the peat to be partly underlain by, and partly interbedded with, deposits of "grey clay";[42] the latter observation is particularly interesting since a small but unmistakable patch of a pale grey, fine-grained deposit can still be seen adhering to the surface of the harpoon in the inside of the perforation.[43] It may also be observed that the exceptionally well preserved state of the implement would argue in favour of its having been incorporated within a continuously water-logged deposit throughout the greater part of its existence.

Unfortunately, very little direct evidence for dating the submerged peat in the Whitburn area is available. A fragment of red deer antler obtained from the base of a very similar deposit at West Hartlepool, 18 miles to the south of Whitburn, yielded a series of radiocarbon dates ranging from 6,150 to 6,750 B.C., but of course other parts of the

[41] *P.P.S.* II (1936), 166-7; *Procs. Yorks. Geol. Soc.* XXVII (1947), 29-31. See also *AA*[1] II (1832), 100; D. A. Woolacott, *Geology of North-East Durham* (1897), 77-81.

[42] *P.P.S.* II (1936), 166-7.

[43] Dr. D. A. Robson of the Department of Geology, Newcastle University, reports that the samole represents a fine-grained silt, composed chiefly of minute grains of quartz, but containing also some opaque substances which may be iron compounds. The sediment was almost certainly laid down in slow moving water, but its origin cannot be defined with any greater precision than this.

deposit could be considerably younger than this.[44] However, the eustatic rise of sea level which resulted in the submergence of these offshore deposits is thought to have reached its peak by around 3,500 B.C., so this might be regarded as a *terminus ante quem* for any objects recovered from these formations.

With regard to the second possibility referred to above —that the harpoon derives from deposits exposed in the nearby cliffs—I am informed by Mr. D. B. Smith, of the Institute of Geological Sciences, Leeds, that deposits of water-laid clay have indeed been observed outcropping in the cliffs near Whitburn. However, these sediments would appear to be of glacial or late-glacial age (showing evidence of pronounced solifluction subsequent to their formation) and moreover appear to be entirely lacking in organic remains. Of course, it could be that somewhat different deposits were exposed in the cliffs at the time of the discovery of the harpoon over 100 years ago, but taking into account all the available indications it seems much less likely that the object derives from such a source than that it comes from the offshore, submerged deposits discussed above.

In summary, the chief interest of the Whitburn harpoon is that it appears to extend the distribution of barbed points of characteristic "Obanian" type well outside the restricted area of south-west Scotland to which they are otherwise confined (Fig. 3).[45] Taken in conjunction with the perforated antler "mattock heads" recovered from the carse-clay deposits of the Firth of Forth, it suggests an extension of Obanian-type settlements at least as far as the east coast of northern Britain.[46] In addition, the discovery of the harpoon actually on the present-day foreshore serves to reinforce

[44] *Radiocarbon* III (1961), 41-2. The lower part of the submerged peat at West Hartlepool also yielded a substantial series of Mesolithic flints, including at least one microlith, micro-burins, and a characteristic "tranchet"-type axe. Cf. *P.P.S.* II (1936), 163-4; *Procs. Yorks. Geol. Soc.* XXVII (1947), 28-30.

[45] The frequently-quoted "harpoon" from the Victoria Cave, Settle, Yorkshire, is not closely comparable with the Scottish specimens and may well be of much earlier date.

[46] *P.S.A.S.* LXXXIX (1955-6), 93-5.

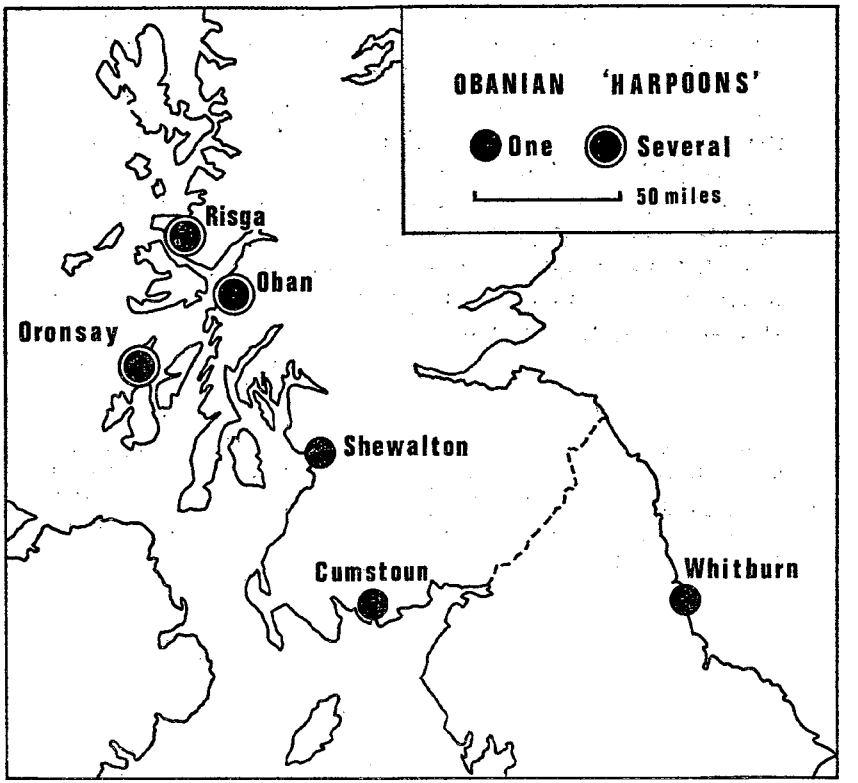


Fig. 3. Distribution map of barbed bone and antler points of "Obanian" type in Britain
Drawn by P. A. Mellars

the impression that these tools were associated with a specifically coastal form of economy.

Regrettably, evidence for the chronology and broader cultural affinities of the Obanian settlements remains as unsatisfactory as ever. Well-documented associations of the shell-midden deposits with the so-called "25 foot" raised beach formation in Scotland[47] suggests a dating somewhere

[47] A. D. Lacaille, *op. cit.*, 199-245.

between *circa* 5,500 and 3,500 B.C., but absolute age determinations are clearly needed to fix the chronology of these sites with greater precision.[48] In considering the cultural affiliations of the Obanian, a further difficulty arises from the extreme poverty of the flint industries recovered from the shell-midden sites; coupled with the uncertainty of the chronological evidence, this makes it particularly difficult to assess the relationships between the human groups who occupied the Obanian settlements and those who manufactured the well known microlithic industries represented abundantly at inland sites.

P. A. MELLARS[49]

[48] *Scottish Geographical Magazine* LXXX No. 1 (1964), 9-10; *Trans. Inst. British Geographers* XXXIX (1966), 19, 29, 86, 121, etc.; also unpublished information kindly supplied by Dr. W. G. Jardine of the Geology Department, Glasgow University.

[49] Sir James Knott Fellow in the Department of History, University of Newcastle upon Tyne.