

New light on Iron Age massive armlets

Fraser Hunter*

ABSTRACT

Unpublished armlets of the later Iron Age 'massive' tradition are described and discussed. Two are recent finds, the third an antiquarian discovery to which a Fetlar (Shetland) provenance can be restored; this casts light on the intellectual networks of the late 18th century, as well as being the first find of early Celtic art from the islands. A further armlet previously provenanced only to the Glamis area can be located to Templelands of Meikle, Perth and Kinross, from antiquarian sources. Current knowledge of this distinctive artistic tradition, its products, purpose and stimuli, are reviewed. An appendix catalogues other recent finds of Iron Age metalwork from north-east Scotland.

INTRODUCTION

In the later Iron Age in north-east Scotland, broadly between the firths of Moray and Forth, there arose a distinctive, vibrant regional metalworking tradition. It is one of the few clearly-definable regional artistic traditions in the British Iron Age, but has seen surprisingly little work, largely because its Roman Iron Age floruit and northern location place it beyond the interests of most scholars of Iron Age art. A full treatment of this material is in preparation, as part of a monograph on the Deskford carnyx. The aim of this paper is to put on record some unpublished finds and discuss key aspects of the tradition.

Massive metalwork gets its name both from the size of many castings and the tendency to use large three-dimensional forms in the ornament. The basic early study was by J A Smith (1881), whose division of the armlets into oval and folded types is still used. Joseph Anderson (1904) disentangled the rather confused early accounts and corrected some flawed provenances. The material saw little further study (with Leeds 1933, 126–36, being a notable exception) until Piggott's (1959) reinterpretation of the

Deskford carnyx and Robert Stevenson's (1966, 31–5) authoritative summary of Scottish Iron Age metalwork. Thereafter Morna Simpson/MacGregor produced a series of fundamental studies on both individual aspects and the tradition as a whole, concentrating especially on the decoration (Simpson 1968; Simpson 1970; MacGregor 1976). Subsequent commentators have largely followed MacGregor but with new finds and new approaches a reappraisal is now due.

The tradition as currently known comprises five main categories of material. The most striking products are the massive armlets, huge cast penannular hoops with expanded perforated terminals, of which around 30 are now known. The other main group is zoomorphic spiral bracelets, while smaller numbers of finger rings and harness strap junctions are known. The massive terrets, often linked to the tradition, appear to be rather later (Laing & Laing 1986, 211–14; Heald 2001, 692–3). The only piece of sheet metalwork yet known, and one of the most striking products, is the Deskford carnyx (Hunter 2001), clearly linked to the cast tradition by its decoration.

* National Museum of Scotland, Chambers Street, Edinburgh EH1 1JF

UNPUBLISHED MASSIVE ARMLETS

BOWS OF DOUNE, STIRLINGSHIRE (ILLUS 1-4)

This armlet is a typical folded type in rather poor condition. It was found casually in peat.

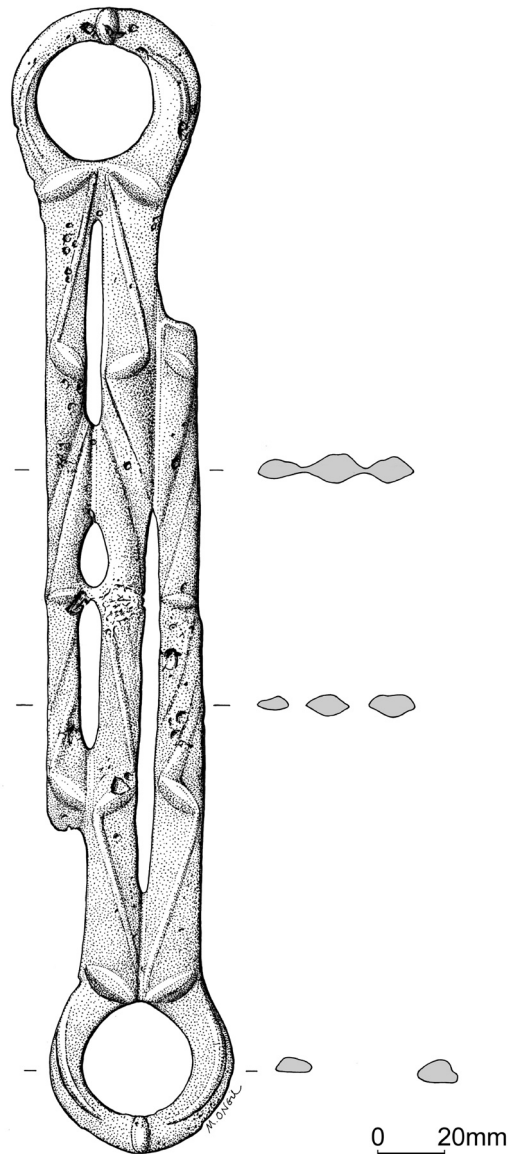
Description

Folded-type armlet, stripped to the metal core with no surviving patina; it appears to have been chemically cleaned after discovery. The casting was porous and is now extensively pitted with spongy areas. There are extensive gaps between the strands, but this probably arises from corrosion removing this thin metal rather than being an original feature.

The poor surface condition makes assessment difficult but the decoration appears to be well-executed, with well-defined trumpet shapes (with concave-convex profile) rather than ovoid lentoids.

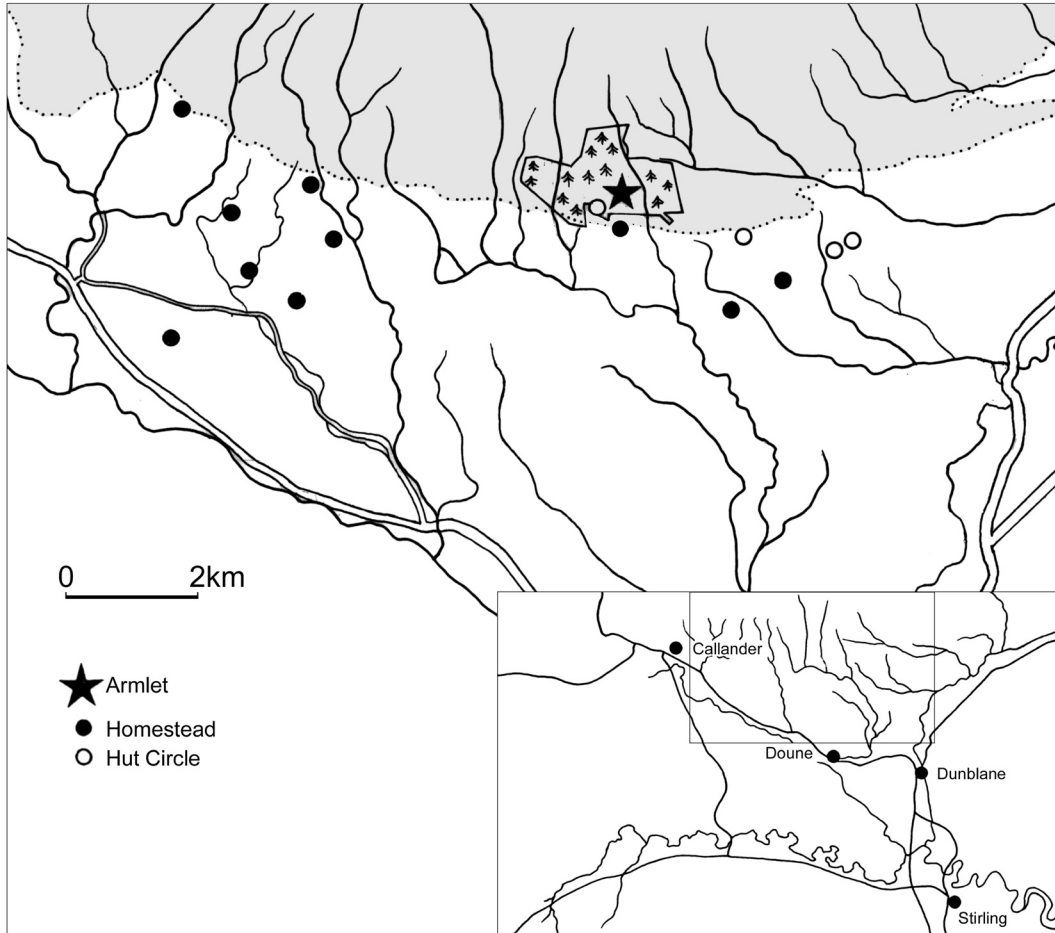


ILLUS 1 Location of massive armlets discussed in this paper. (1) Bows of Doune; (2) Lismore; (3) Fetlar; (4) Templelands of Meigle. Drawn by Marion O'Neil



ILLUS 2 Massive armlet from Bows of Doune, flattened out to show decoration. Drawn by Marion O'Neil

The terminal perforations are open, with no sign of any attachment for enamelled discs. The perforations (33 × 31mm and 35 × 34mm) are slightly teardrop-shaped, the point towards the strands. The terminals are decorated with opposed, overlapping trumpet pairs, the outer pair meeting in a conjoined head at the tip, the inner (and more prominent) pair joining the two trumpet heads from the strands. A marginal lip



ILLUS 3 Findspot of Bows of Doune, showing later prehistoric sites nearby (from RCAHMS 1994b, fig 10); shaded ground is above 250m. Drawn by Marion O'Neil

survives in places but is largely lost from use-wear. Similar terminal decoration is seen on the Lismore armlet (below) and on others from Aboyne and Perth (MacGregor 1976, nos 233, 250). The strands have three or four sets of opposed trumpet decoration. On the outer pair of motifs the trumpet bodies are defined by a raised crest between them; on the other two the bodies themselves are more clearly defined, with a hollow between. The central trumpet heads are vertical while the others are angled. The strands are lentoid in section, hollowed in the interstices.

The armlet has seen extensive use, as the decoration on one edge is markedly worn. This is most obvious on the terminals, but the strand on this side is also markedly attenuated. There is no sign of

any post-casting repair, although its condition inhibits assessment. External D 130 × 118mm, internal D 108 × 96mm, hoop H 47–51mm, terminal H 57mm, W 7.5–9mm (up to 12mm at high relief). Mass 566g. X-ray fluorescence (XRF) analysis (Tate et al, no date) showed it was a leaded gunmetal.

Find circumstances

The armlet was reported to the National Museum of Antiquities of Scotland on 7 August 1981, shortly after its discovery. It was found by Mr Thomas McCormack while carrying out forestry work on hill ground north of the farm of The Bows, near Doune. The findspot (illus 3; NN 7325 0795) was visited

by Trevor Cowie with the finder. The armlet was found lying almost free in a ploughed drill, and its original location within the profile of 0.5m of peat over a sandy till is unclear. It lies at an altitude of some 280m on a broad terrace of gently-sloping hill ground with extensive views south to Stirling and the Gargunock Hills. (Details drawn from a file report by Trevor Cowie.) More recent survey has located a range of prehistoric upland settlement in the area, including a homestead (akin to the Perthshire ringforts; Taylor 1990) and hut circle at slightly lower altitudes within a few hundred metres to the south and west (RCAHMS 1994b, fig 10). The armlet's location within peat would be consistent with a votive deposit. It was declared Treasure Trove and acquired by the National Museums (catalogue number FA 113; *Proc Soc Antiq Scot* 113, 653).

NEWFIELD, LISMORE, ARGYLL (ILLUS 4-7)

In 1995 an unusual massive armlet was found on the island of Lismore in Loch Linnhe. It was a casual discovery; fieldwork at the findspot produced little but speculations as to its fate. It is the smallest example yet known, and has only two strands rather than the usual three; it was probably for a child or youth. It was also well outside its home area, providing valuable evidence of contacts between the east and west coast during the Iron Age.

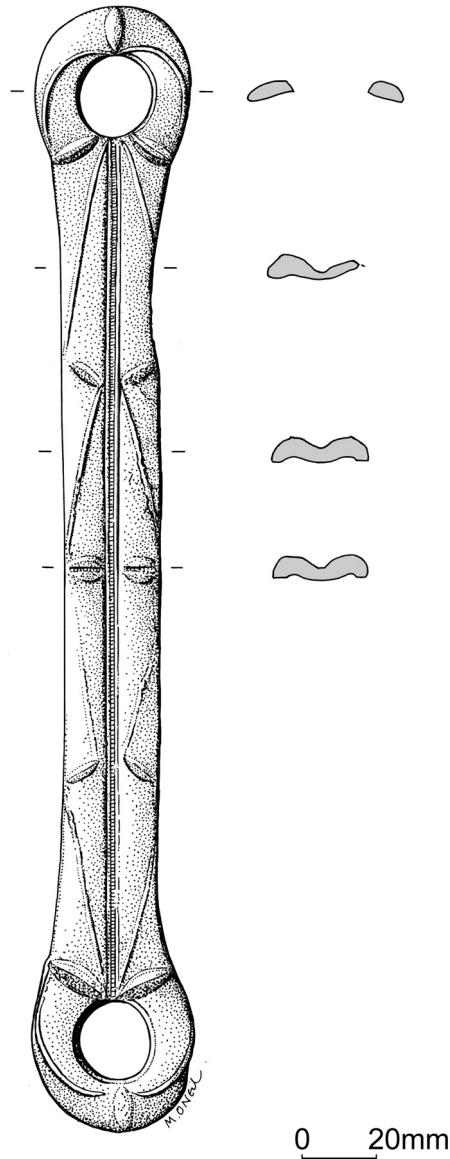
Description

The armlet is of the oval type. It consists of two strands rather than the normal three, cast as a unit, with enlarged perforated terminals. It is 85 × 74mm in



ILLUS 4 Massive armlets from Bows of Doune (left) and Lismore. Photo by Neil McLean, © Trustees of the National Museums of Scotland

internal dimensions (97 × 93mm externally), 27mm broad at the rear and 42mm at the terminals. The perforations in the terminals are 20mm in diameter, with no evidence of enamelled insets. Behind each terminal, on one side only, is a restricted area of wear, one more pronounced than the other, a maximum of 35mm broad and up to 5mm deep. The weight is



ILLUS 5 Massive armlet from Lismore. Drawn by Marion O'Neil

224.7g. The object's condition is reasonable: a good patina survives in places, but corrosion has pitted and slightly distorted much of the outer surface.

Decoration is typical for massive armlets. The terminals have opposed overlapping paired trumpet motifs (similar to Bows of Doune), while the strands each have a pattern of four long keeled diagonals joining lentoid bosses, evoking trumpet-pair motifs; centrally on each strand there is a vertical lipped moulding with incised details in the groove. The channel between the strands has a row of well-preserved ladder incision, flanked (where the patina is intact) by a shallow incised line which forms the inner boundary of the decoration on each strand. There are marks on the inner surface from forming the original wax model. Surface XRF analysis indicated the alloy was a gunmetal, a copper-tin-zinc alloy, with a small amount of lead.

This is the smallest such armlet yet discovered, 15mm less in diameter than the next smallest, and is the only one known with two strands. The Perth armlet has been reconstructed as a two-strand example (MacGregor 1976, no 250), but examination of its rear makes it clear that it was cast with three folded strands but has lost most of the hoop. It is a valuable addition to the class, both as an unusual example and as evidence of contact between the north-east and the west coast – there is one other find of such metalwork from the area, a bronze coiled zoomorphic bracelet from Duntulm, Skye (MacGregor 1976, no 215). It also reinforces the westerly connections seen in the Newry (Co Down) armlet (Raftery 1983, 177): Loch Linnhe lies at the end of the Great Glen, the natural communication route between the Moray Firth and the west coast and Ireland.

Find circumstances

The armlet was found on Sunday 19 March 1995 by Mr Donald MacLean, a local builder, while taking a stroll along the ridge behind the house of Duncan and Freda MacGregor. In September–October 1993, the MacGregors had demolished an old byre behind the house and built an extension. As building work progressed, the spoil was shifted to the top of a rocky ridge running north-east/south-west behind the house, about 100m away. Mr MacLean was walking past this spoil when he stepped in a slight hollow at its edge; stepping on the edge of the armlet, it flipped up and hit his foot. Recognizing it as something unusual, he picked it up and showed it to the farmer, Duncan MacGregor, thinking it could be an old horse brass.

Mr MacGregor could not identify it, and left it in his pickup, where his wife found it a few days later, realized its significance and promptly informed the National Museums. The findspot was investigated on 30–31 March by the writer and Tam Ward.

Building of the extension involved demolition of the remains of the old byre and some ground-breaking work. Subsequently (in June 1994) an area to the south-west of the extension, up to c 18m from the house, was levelled to make a drying green. This had been the old stackyard; in the process, the drystone dyke surrounding the yard was removed. The spoilheap therefore contains material derived from an area of some 24 × 10m, and includes rubble



ILLUS 6 Massive armlet from Lismore. Photo by Ian Larnier, © Trustees of the National Museums of Scotland

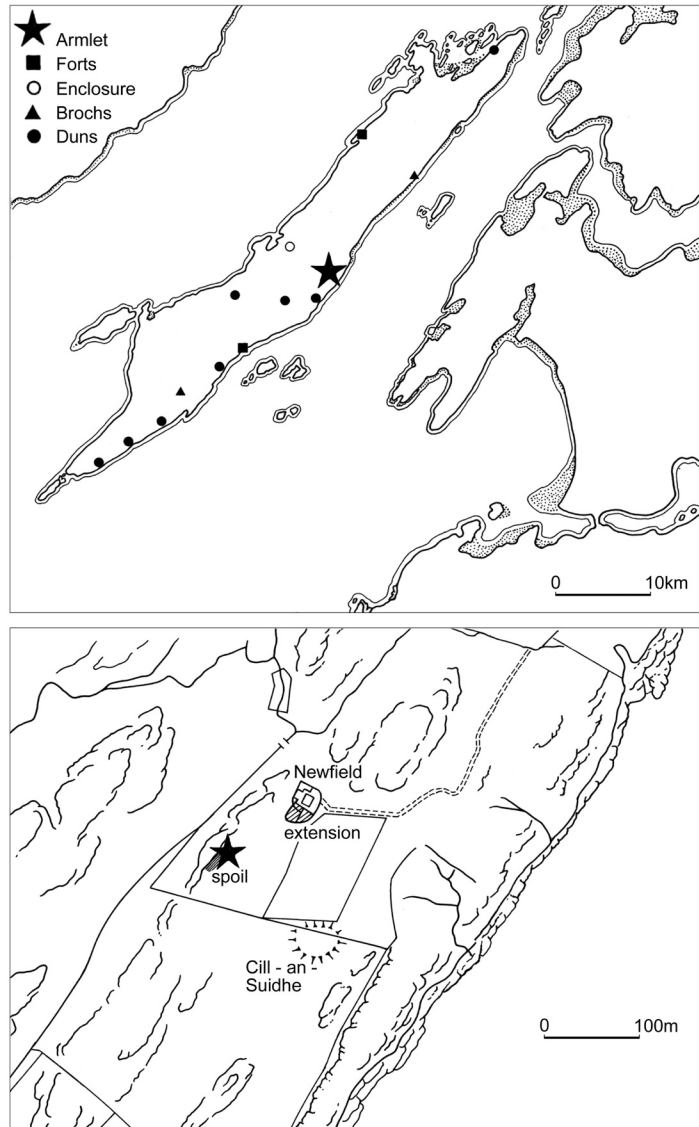
from the steading. The spoilheap was dumped on the rocky ridge behind and to the south-west of the house, slightly to the west of the summit and tipping down the west side. It covered an area of c 18 × 8m, and was up to 1m deep in places. Mr MacLean could pinpoint the findspot to within a metre: it lay at the north-east edge of the spread. There are three main possibilities for the object's original findspot (illus 7): (1) it came from the ground under or around the Newfield extension; (2) it was disturbed on the ridge by the earth-moving; (3) it had been discovered some time ago and left in the byre, being incorporated in the remains upon demolition.

Option 3 is felt to be unlikely, as there would probably have been some local memory of such a discovery – the farm has been in the family since

1901. Option 2 is also considered unlikely, for two reasons: conversation with the driver of the dumper truck revealed that the ground had been firm during the shifting of the spoil, and hence disturbance of ground around the spoilheap is less likely; while excavation of a trial trench around the findspot indicated the armlet was lying in the tail of disturbed spoil, here up to 20cm deep below the current ground surface. This strongly suggests that the armlet had arrived on the ridge incorporated in the spoil. Option 1 therefore seems most likely. The grid reference of the extension is NM 8482 4065.

In addition to the excavation of the trial trench, the entire surface area of the spoilheap was metal-detected for non-ferrous finds. The northernmost 5m of the heap, near the findspot, were examined in more detail, being extensively turned over by spade and metal-detected; given the depth of penetration of the metal-detector, virtually all the spoil from the immediate area of the armlet discovery was checked. No finds of archaeological significance were recovered. The disturbed area around the Newfield extension was also metal-detected. Again, no archaeologically significant finds were recovered. However, there is a possibility that further artefacts remain under the extension itself, and this should be borne in mind in any further development work in the area.

Newfield lies on a slight terrace at the foot of the low rocky ridge, at an altitude of around 30m OD. It overlooks a lower-lying area of agricultural land which slopes down to the shore. In common with much of the island, there are extensive views east to the mainland. The site lies immediately south of the confluence of two burns. The only archaeological site noted in the immediate vicinity is the circular



ILLUS 7 Findspot of Lismore armlet. Upper, known or likely Iron Age sites on Lismore; lower, detail of findspot. Drawn by Marion O'Neil

enclosure of Cill-an-Suidhe (also known locally as Cladh nan Rìgh, the burial place of the kings), interpreted by RCAHMS (1975, no 229) as an Early Christian burial ground and chapel. There are no known Iron Age sites in the immediate vicinity, although the island has some fine brochs and duns. The nearest, Sean Dùn, is some 750m to the south-west (RCAHMS 1975, no 193).

The convoluted discovery history of the Lismore armlet throws no real light on the reason for its deposition, although with such intact items votive intent is likely, and the proximity to the confluence of two burns may have been a significant location. The armlet was declared Treasure Trove and acquired by the National Museums of Scotland, with the assistance of the National Heritage Memorial Fund (catalogue number FA 119).

PENNANT COLLECTION (FETLAR, SHETLAND)
(ILLUS 8–12)

Lurking in Cambridge University Museum of Archaeology and Anthropology (D.1912.63) is an unnoted massive armlet acquired from the collection of the 18th-century traveller and writer, Thomas Pennant (1726–98). Study of antiquarian sources allows it to be identified as the only survivor of a lost hoard of up to six armlets from Fetlar, Shetland. It is highly unusual, not just for its findspot but its technology; the casting was a flawed one, and in order to effect repairs it was cut in half and converted into a two-part hinged armlet. This technique is similar to that seen on southern Scottish metalwork such as the Plunton Castle bracelet and the Stichill collar (MacGregor 1976, nos 210–11).

Description

Massive armlet of folded type, modified by cutting into two halves which were hinged together; the decoration does not match up, with around 30mm of the armlet being cut out. This arose because of problems with the casting – X-rays show that it is highly porous, there are extensive repairs to the terminals, and one side of the armlet around the middle is pitted and wasted. Overall D as hinged, 124mm; terminal D 87–88.5mm; hoop H 65.5mm; terminal perforations D 30mm. Mass 727.8g.

The patina varies from moderate to poor – much of the surface is uneven and rather pitted. The inside surface shows toolmarks and contouring from the wax model. The outer surface is well-finished where it is better preserved. The armlet has clearly seen use: the decorative lips are worn, as is the strand end on piece A, and the catch mechanism has been replaced (see below).

The armlet was analysed by non-destructive XRF by Dr Katherine Eremin (NMS). As the surfaces were corroded they only give an indication of the basic alloy composition, but the alloy appears to be

a gunmetal with a small amount of lead: the surface has around 5% Zn, 1–2% Pb and Sn varying from 6 to 20%.

On each terminal there are three prominent expanded lips with a central groove, joined by crescents. Similar terminal designs are found in both the oval and folded series, with examples from Auchencroft, Stichill and Seafield (MacGregor 1976, nos 235, 244, 246). The lips are considerably worn and the central grooves all but invisible. Where the terminal meets a strand of the hoop there is a prominent lentoid with a concave–convex profile like a trumpet-motif end. Each strand is decorated with perpendicular lentoids joined by diagonal ridges; on adjacent strands they run in mirror image. Again the lentoids are concave–convex, as if the design was conceived as a series of trumpets but executed in outline only (the diagonals) except for the high-relief lentoids. Each strand is bounded by a low raised ridge, worn or absent on the outer edges. Between strands these frame a channel carrying incised S-twist cable decoration.

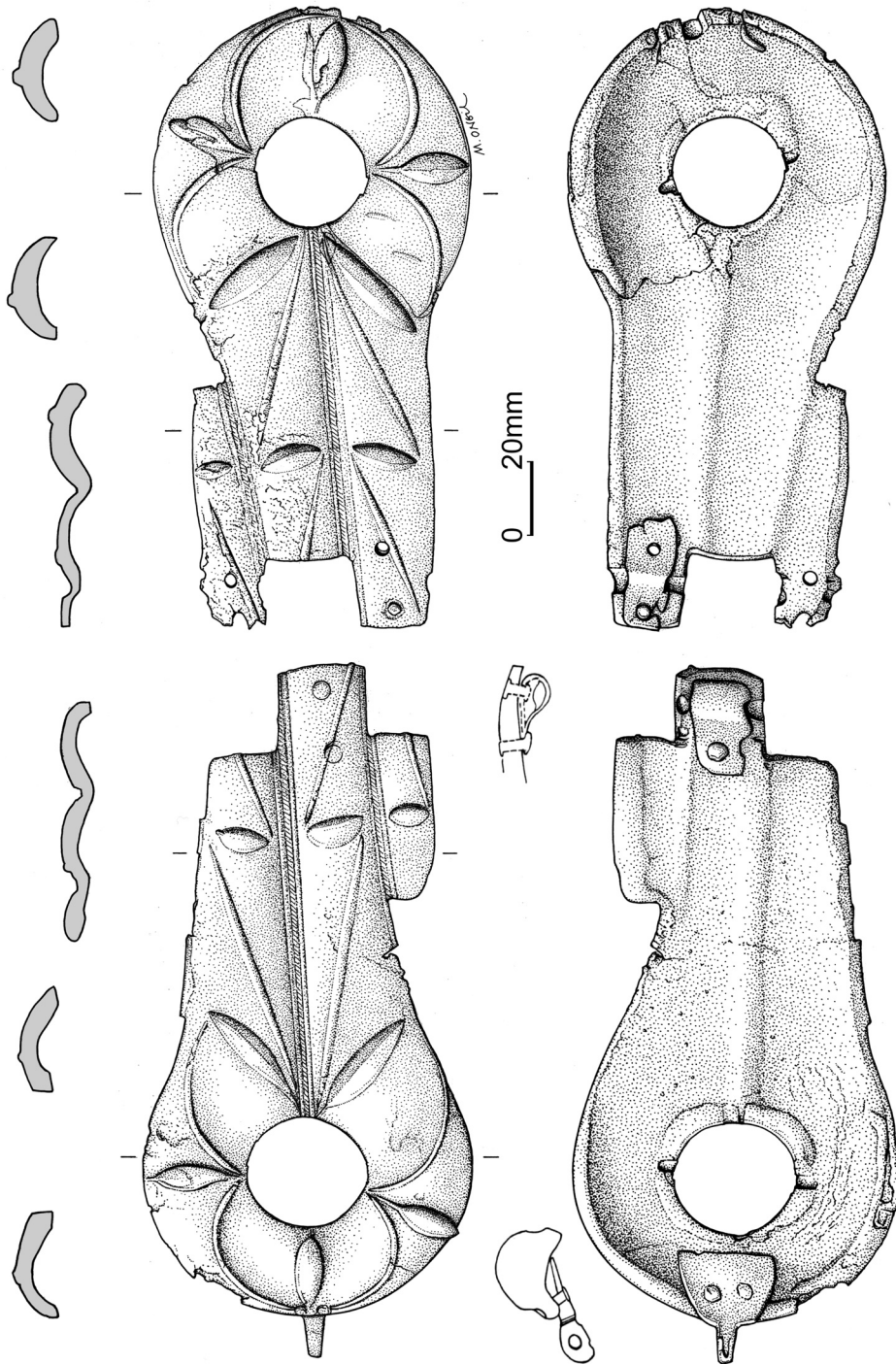
The terminal perforations have thickened edges with a pair of opposed semi-circular grooves 3mm in diameter on the underside, set in a slightly squared recess. This would accommodate the fastening mechanism of an enamelled disc. The surviving fittings suggest this had two squared perforated tangs on its reverse; the disc would be inserted from the front of the armlet, with a retaining pin seated in the grooves on the frame rear and fitting through the tangs to secure the disc. While the frame edge on B has vertical edges, half the edge of A's terminal (nearer the hoop) has been filed at an angle from the rear, creating a bevelled edge which is presumably a modification to assist the fit of the enamelled disc.

There have clearly been problems in the casting, as extensive parts of both terminals have been repaired and the central section has been cut out and reset as a hinge, with catch fittings on the terminals.

Post-casting repair of the terminals

Assessment of post-casting repairs is complicated by the high quality of some of them combined with the relatively poor condition of the surface, making them hard to spot. What follows is the most likely reconstruction based on X-rays and microscopic examination, but there are points of detail which remain unclear.

Piece A has not seen substantial post-casting repair. There are areas where the casting is poor,



ILLUS 8 Massive armlet from Fetlar. Left, piece A; right, piece B. Drawn by Marion O'Neil

notably about a quarter of the outer edge which is distorted by substantial air bubbles. In an attempt to repair this, metal has been run in behind the terminal at this point. Cracks at the terminal–hoop junction have been left unrepaired.

Piece B apparently saw two repairs. The clearest indication is at the junction with the hoop, where there is a very visible line from the central hole along the edge of the trumpet moulding terminal, looping around the end of a crescent and reaching the outer edge. An additional discrete patch on the inner edge of the same moulding was cast in as part of the same repair. However, the other edge of the larger repair is not evident, apparently because a second repair has removed it. This indicates the first repair must have extended to the area which later held the catch.

The second repair is seen on the reverse (which shows two areas of run-in metal) and on the X-ray, but the visible traces on the outer surface are not totally clear. It starts and ends at the terminal hole, where the cut through the metal is stepped or angled, presumably to aid attachment. From the top (as drawn) it runs across a crescent, apparently cuts into (and partly recasts) a lip, and then follows the outer edge of another crescent; it does not run to the outer edge, and so the original surface must have been stepped or angled to allow recasting within the original edge; its course is unclear at this point, but it is picked up again running straight across the blank area above the middle lip. Other surface traces around this lip were originally thought to indicate this area was also recast, but there is no clear sign of this on the X-ray.

Modification of the hoop

Weaknesses and porosity in the casting are visible both macroscopically and on X-rays. It is clear that the flaws must have been unworkable: this probably became apparent during manufacture, for instance when the armlet was being bent into a circle. At this point, the decision was taken to cut a stepped 30mm section out of the centre, creating a lapped joint – the edges interlocked, with a shallow groove cut into them and sheet strips riveted as hinges on the protruding strand ends, two on one half and one on the other. This created the setting for a pin (now lost) which would join the two pieces together and allow them to work as a hinge. The patina on the sheets and rivets matches that of the armlet, showing these were ancient repairs. Two strips and three rivets survive; one rivet hole has been largely lost through subsequent edge-damage on the most porous part of the casting. The rivets

(4mm in diameter) are countersunk solid cylinders, their outer surfaces elegantly shaped to match any decoration they are drilled through. The sheet strips are somewhat crudely cut and one appears to have a remnant rivet hole on the edge, implying it was reused. On the outer strands the sheets are riveted across the groove; on the middle one, the outer edge is folded under itself. Shallow incisions on the strand inside edges are probably from marking out the repair.

At the terminals an attachment plate was added to one side (A) and a fastening mechanism to the other (B). The cast catchplate is trapezoidal with a perpendicular perforated loop protruding from the edge. The loop has been partly shaped by hammering; the perforation is 4mm D. It is riveted to the underside of the terminal by two crude



ILLUS 9 Massive armlet from Fetlar. Photo by Duncan Anderson, © Trustees of the National Museums of Scotland

solid cylindrical rivets; their crudeness (and some burring of the adjacent decoration) suggest the plate had to be reattached at some point. A rectangular recess 5mm wide and 5mm deep was cut into the opposite terminal to take the catch; small slots either side gripped a circular-sectioned wire, part of which remains, which slipped through the perforation in the catch. Two pairs of slight incised grooves either side of the fastening are remains of earlier wire-holders which wore away and had to be replaced, implying again a long life for the remodelled armlet.

Analysis cast some further light on the repairs. The first repair on terminal B had a somewhat lower zinc content, while the second was closely similar to the main alloy. The plates used for hinges were also different, and differed from one another, suggesting this was expedient reuse of scraps lying around: that attached to B had less zinc and more tin, that on A had less tin than the body. The attachment plate on A used a similar alloy to the main body, and may have been cast for the purpose. All the rivets were bronze.

Provenance

The Pennant armlet had been lurking in Cambridge since 1912. It came ultimately from the collection of Thomas Pennant, the 18th-century Welsh natural historian and travel writer who toured Scotland in 1769 and 1772. The annual report of Cambridge University's archaeology museum (Anon 1914, 7, 32) records it as part of the collection of David Pennant (Thomas's son) from Downing Hall, the family home, loaned to the museum by the Earl of Denbigh (Pennant's great-grand-daughter was the Earl of Denbigh's wife), and subsequently donated (Anon 1926). There are no details of its provenance in these accounts (it appears as 'one armlet (imperfect)' and 'a very fine bronze armlet with La Tène decoration'), but there were other Scottish items in the collection: stone and bronze axes from Shetland and an 'annular brooch' simply listed as 'Scotland'. The armlet's prior history is discussed later, but the presence of other material from Shetland in the donation adds credibility to the provenance reconstructed below.

While its provenance history has been lost, there are good grounds for suggesting it comes from a hoard of perhaps six armlets from Fetlar, Shetland. Two strands of evidence combine to suggest this. The first is an unpublished illustration by Adam

de Cardonnel (1746/7–1820) in 1789–1800 of two halves of a broken folded-type armlet attributed by him to Orkney (illus 10; Cardonnel, no date, vol 1, plate XI). The caption reads:

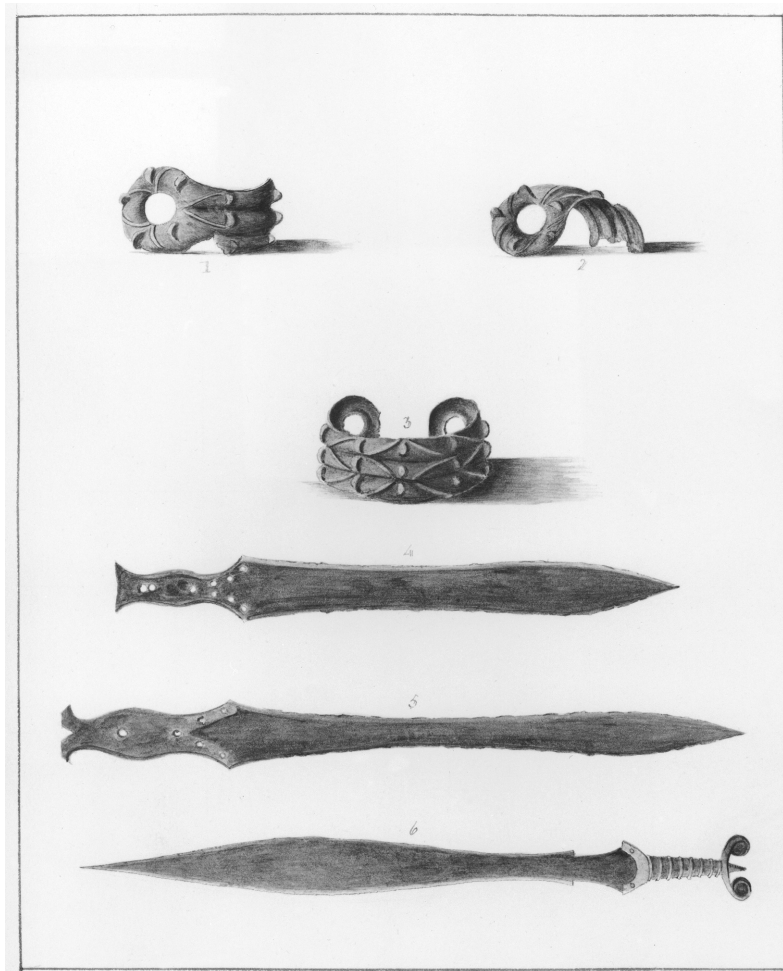
Fig 1 & 2. Fragments of an article which composed the Arms of a Roman boxer, and was fastened on the Elbow with a leathern thong. These with several other pieces of the same kind were found in Orkney.

3 is an intire one of the same sort. At regular distances round are nobs raised about ½ an inch from the surface. They are all of brass. The diameter ab. 5 inches.

Although not a perfect match, the illustration is remarkably similar (if it was 'one of several', it need not be the surviving one). He illustrates an intact one below, apparently of oval form and apparently from the same find, although the text is not entirely clear.¹

Cardonnel's antiquarian interests have not received detailed treatment, and there appears to be little archive material surviving (Goodwin & Bell 2004). However, he was the author of two major books (Cardonnel 1786; 1788–93), and contributed what is probably the first excavation report in Scottish archaeology, on the Inveresk Roman bath house (Cardonnel 1822); he was also curator of this Society's museum from 1782 to 1784, and had his own collection (Cowen 1967; Cardonnel, no date, xv). When Captain Grose visited Scotland in 1789–90 to study its antiquities, Cardonnel assisted him greatly, a fact acknowledged by Grose (1797, xx) and recorded by Robert Burns (Kinsley 1971, 449) and a contemporary watercolour (illus 11).

The unpublished manuscript of *Relicta Antiqua*, now in the NMS library (CC 937 CAR), represents his major archaeological output. This little-known work has never received the detailed study necessary to contextualize it. It is a two-volume series of watercolours with extended captions, featuring a selection of (primarily prehistoric) artefacts and monuments, prefaced by a text which includes both quotations from other authorities and a few of Cardonnel's own interpretations. The artefacts, where ownership is stated, come from a range of sources: this Society, various private collections including those of George Paton, Thomas Pennant and Robert Riddell, and Cardonnel's own material. Dates on some of the illustrations indicate it was built up gradually over the period c 1789–1800 (the plate with the armlet is not dated). This is indicated also by the form of his name, which is Adam de Cardonnel on the first volume but A M L De Cardonnel on the second,



ILLUS 10 Illustration of massive armlets by Adam de Cardonnel. © Trustees of the National Museums of Scotland

reflecting the nomenclature he adopted on inheriting an estate in Northumberland in 1791 (Craster 1907, 322, note 6).

It is uncertain whether Cardonnel actually travelled to the Northern Isles. The absence of illustrations of any Orcadian monuments in his *Relicta Antiqua* is striking, although he did donate to this Society 'one of the ploughs used in Orkney, of a remarkably slight construction' in 1782 (Smellie 1782, 84, no 190). However, he clearly had knowledge of the archipelago's antiquities. *Relicta Antiqua* includes an illustration of a Roman glass cup from a burial on Westray, now in NMS (Curle 1932, 395), and a steatite cremation urn which ended up in

his own collection (Cowen 1967; Sheridan 2005) but which originally, according to the notes to the plate, was in the collection of George Paton (Cardonnel, no date, 2, plate X). Both the glass vessel and the urn were first recorded by the Rev George Low, an Orkney minister who was a correspondent of both Pennant's and Paton's, supplying the former with information and specimens from the Northern Isles (Anderson 1879; Seccombe & Grout 2004; Sweet 2004, 225–6). His key part in the story will become apparent later.

Cardonnel's illustration of these finds reflects the antiquarian information exchange network which was operating at the time. A surviving scrapbook



ILLUS 11 Adam de Cardonnel and Frances Grose on an antiquarian outing to Tantallon Castle (from NLS Acc 12139, p 35, no 175 'Tantallon Castle. A de C and Mr Grose' by C J Harford). © Trustees of the National Library of Scotland

(apparently the only one extant; NLS Acc 12139) provides a vivid insight into his working methods. It contains an eclectic mix of prints, cuttings, original illustrations and the occasional letter. The illustrations include both his own work and those sent to him by a range of correspondents. It is often difficult to identify the source, as he generally cut the illustration out of any accompanying letter, but they include C J Harford, Alexander Reid, Robert Riddell and Cardonnel's wife.² A number of these illustrations were used as source material by Cardonnel and copied for use in *Relicta Antiqua*; this includes the Westray Roman glass cup, represented in the scrapbook (p 97, no 350) in an ink drawing signed 'McBaine [?]'. Although the original drawing of the armlets is not preserved, it is likely that he knew of them too from his correspondence. Whether at first or second hand, this contact is likely to have been George Low. Surviving sources do not prove any direct contact between the two men, but their connected worlds are seen in the cases of the urn and the glass vessel above, and Low

seems to have been the prime Northern Isles source for southern antiquarians. However, there are oblique hints of direct connections. Cardonnel's scrapbook includes an original watercolour showing an unusual bird's eye perspective view of the monuments of the Stenness area. This is a variant of one illustrated by Anderson (1879, xxii–xxvi) and tentatively linked by him to Low.

While these connections remain tentative, it is to the Rev George Low we must turn for the second key strand in exploring the armlet's provenance. Low (1747–95) went to Orkney to act as a private tutor in Stromness, and subsequently became minister of Birsay and Harray; he was also a Corresponding Member of this Society. His main interests lay in natural history but, although diffident of his abilities (Cuthbert 1995, 45), he was a valuable recorder of antiquarian matters, probably stimulated by the Orcadian visit of Sir Joseph Banks in 1772, when Low acted as a guide and observed their excavations (Anderson 1879, xxix, xxvii; Cuthbert 1995, 30–5).

It may indeed have been Banks who recommended Low to Pennant as an appropriate man to provide a description of the Northern Isles, which had been omitted from Pennant's own *Tours* (Anderson 1879, xxvii; Cuthbert 1995, 35). Pennant sponsored Low to tour Shetland in 1774, with the aim of having the resulting observations published. The sorry tale of Low's manuscript is recounted elsewhere (Anderson 1879; Cuthbert 1995), but it was not published until almost a century after his death. Correspondence indicates that he sent Pennant zoological and antiquarian specimens, normally through George Paton in Edinburgh (Anderson 1879, xxxii; Cuthbert 1995, 69, 71).

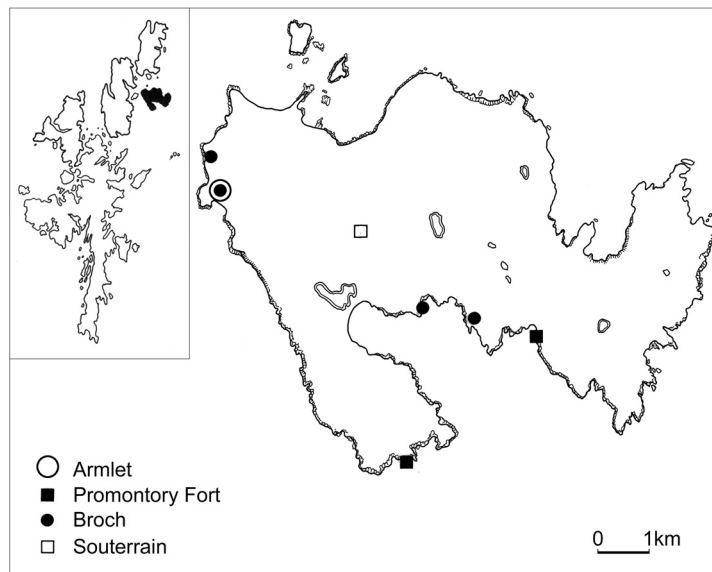
On his Shetland trip, Low visited Fetlar. His correspondence (7.9.1774) notes that 'I have pick't up a number of matters, several stone weapons, and *antiquities of brass*' (Anderson 1879, xlvii; my italics), while his account of Fetlar expands on this. He refers to a hoard from a bog comprising 'six pieces of cast brass ... seemingly designed for fetters. *Three of them were jointed*, the other three whole' (Low 1879, 166; my italics), which he speculates may be connected to material from a Spanish Armada wreck. This account resonates with Cardonnel's note that the fragments he illustrated 'were found with several other pieces of the same kind'. No other 'brass objects' are referred to in Low's published letters or account on either Orkney or Shetland. It seems that Low sent these items to Pennant: a letter from Low to Paton (27.2.1776) reads 'I wrote Mr Pennant when with you for a sketch of the brass matters sent up ...' (Anderson 1879, lvi), implying they were no longer in his possession, while one from Pennant to Paton (29.4.1778) notes 'I hope in time to get him [Low] information about the brass things' (ibid, lxii). Pennant in fact published them without illustration in a brief reference (1784, xxxiii–xxxiv).

While inevitably circumstantial in the absence of Low's own illustrations, it sounds very much like Cardonnel and Low refer to one and the same find. The argument is strengthened by an unpublished manuscript of Low's

Tour in his own hand, held in the NMS Library (MS 914.111 L). This is similar, but not identical, to the published account, containing both additions and omissions. After describing a broch mound at Brough Lodge, the relevant passage reads as follows:

Near this last about the year 1772 or 73, in a moss, six pieces of curiously cast brass were found wrapt in a raw hide, and sunk a good way below the surface. The figure of these is very singular and the workmanship fine, the relieve bold. The figure will be best understood by an inspection of the plate [not present], three of them were jointed, the others whole. Possibly they may have been designed for fetters and *the hole in each end* may have been for running a chain thro' after fixing the fetter on a leg or an arm; which would effectually prevent its being withdrawn (MS 914.111 L, 310; my italics).

Reference to perforated terminals makes it near-certain that these are indeed massive armlets; tantalisingly, no illustrations are present in the manuscript. We must then assume that Cardonnel confused the provenance, perhaps thinking that anything of Low's must be Orcadian, or arising from misinformation from Pennant (who in his *Arctic Zoology* (1784, xxxv) mistakenly locates Westray in Shetland). While a detailed study of Cardonnel's manuscript is necessary to clarify his sources, and much of his work appears sound, it is clear that there



ILLUS 12 Findspot of the Fetlar armlet and known Iron Age sites (from MacKie 2002 and CANMORE). Drawn by Marion O'Neil

are some errors: for instance he misattributes both Roman inscriptions he illustrates (RIB 2115, from Birrens, and RIB 2121, from Newstead) to Galloway, no doubt because he did not annotate his sources clearly, as his scrapbook shows.

It thus seems certain that Low's account refers to the items from Pennant's collection now in Cambridge, and that Cardonnel illustrated items from the same hoard but confused their provenance. Further archival research may clarify matters, but it seems a Fetlar provenance can be restored with some confidence. Low's description puts the findspot near the probable brooch of Brough Lodge on the western end of the island (illus 12; RCAHMS 1946, 62, no 1238; MacKie 2002, 119). It provides another example of massive metalwork moving beyond its local area, pointing to connections between the north-east and the Northern Isles which are otherwise poorly known; indeed these are the only pieces of early Celtic art known from Shetland. As six objects are recorded, this is the largest hoard of these armllets by some distance, although it is unclear whether Low's three jointed objects refers to three armllets or three halves. In either case this indicates at least two repaired armllets, suggesting the repair seen on the Cambridge armllet was not a one-off treatment but an accepted way of repairing flawed castings.

TEMPLELANDS OF MEIGLE, PERTHSHIRE

A provenance can also be restored with some confidence to another antiquarian find. Jervise (1857, 245) refers in passing to a 'fine bronze armilla, of the serpentine pattern' from Templelands of Meigle (see also RCAHMS 1994a, 155). The recorded weight (1lb 12½oz, c 800g) indicates it was a massive armllet rather than a spiral bracelet: armllets of folded type were often described as serpentine (eg Smith 1881, 326). There is (or rather was) a folded armllet weighing 1lb 12oz in the Earl of Strathmore's collection at Glamis Castle, with an imprecise but apparently local provenance (Smith 1883). Within the limits of the available records, the coincidence of weight and form suggest this is one and the same armllet. Unfortunately, it is now lost; MacGregor (1976, no 241) found no trace of it, and more recent enquiries by the writer have also drawn a blank. A cast of it survives in NMS, made in 1901 before it was returned to its owner.

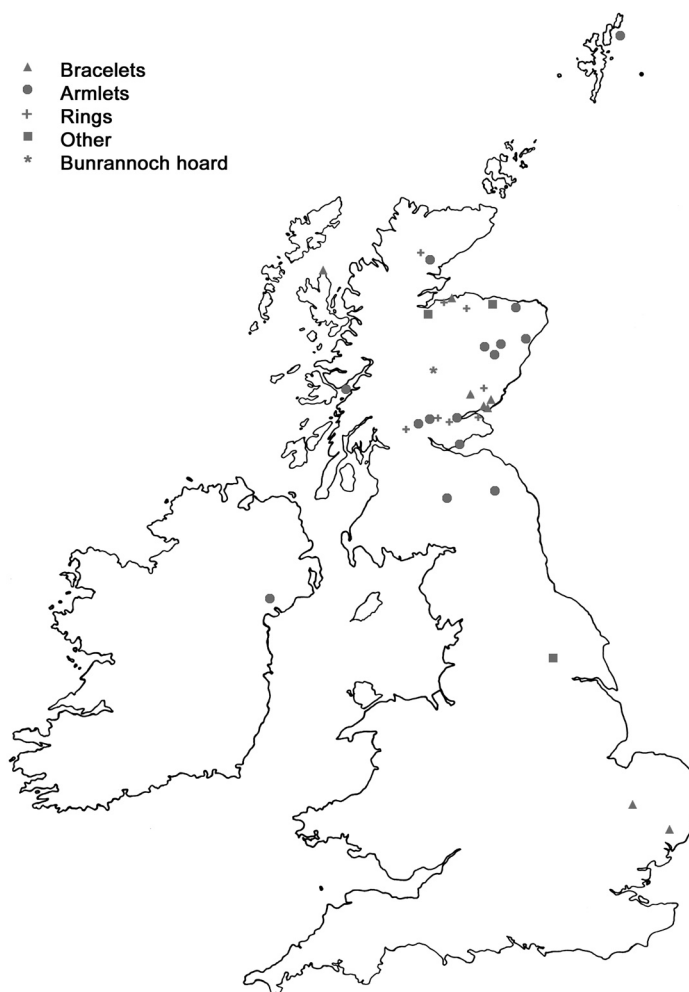
CHARACTERIZING THE MASSIVE METALWORK TRADITION

The above finds throw light on various aspects of the massive metalwork tradition. The following discussion summarizes key points which will receive detailed treatment elsewhere. Illus 13 provides an updated distribution of all massive-tradition finds. This reinforces their strong concentration between the Moray Firth and the Forth. Within this broad tradition there are regional variations either side of the Mounth: spiral bracelets concentrate strongly around the Tay, while the oval-style armllets focus north of the Mounth and the folded-style to the south (Kilbride-Jones 1980, 154).

CONTACTS

The outliers show something of the wide-ranging connections available to people in the north-east. Given the high-quality nature of the material, these are likely to have been political or diplomatic contacts at the upper levels of society, sometimes at long range (eg Fitzpatrick 1989). These could involve the movement of objects or of people, for instance in marriage alliances or fosterage (cf Karl 2005), a plausible explanation for the youth-sized Lismore armllet. Of course some objects may have passed through several hands to reach their findspot, but it shows that connections over several hundred miles could be created. Similar contacts are seen in material such as glass beads (Guido 1978, 85–9; Henderson 1991, 125 & fig 5).

The two new armllet finds from the Atlantic zone, far from their home area, are likely to be the tip of an iceberg. There was no significant tradition of metalwork hoarding in the Atlantic to preserve the material for study (Hunter 1997, 110–11): only one piece of massive metalwork was known previously from the area, and there is little other Celtic art to supplement this. However, it is clear the Atlantic zone was not isolated: a significant proportion of the La Tène brooches known from Scotland are site-finds



ILLUS 13 Distribution of massive metalwork; there is an additional spiral bracelet, provenanced only as 'Scotland' (F Hunter/C Angus)

from this very area (eg Hull & Hawkes 1987, 131, 150–1, 177–8; Ballin Smith 1994, 223–4), while skeuomorphs of decorative bronzework are known in ceramics and whalebone (MacGregor 1976, no 292; Ross 1994, 247–8, no 7114). Current approaches to the archaeology of the area have tended to focus on architecture at the expense of artefacts. If the evidence is simply taken at face value this is understandable but consideration of the biases in the record suggests

that prestige artefacts played a more significant role in the Atlantic Iron Age than is normally realised. The armlets from Lismore and Fetlar are rare indicators of what were probably more common connections.

DATE

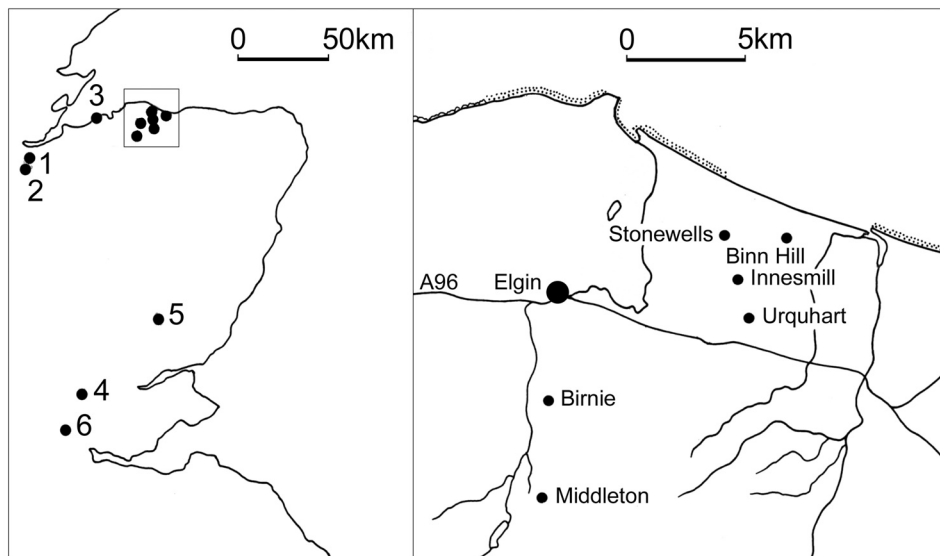
A range of datable associations, which will be reviewed in detail elsewhere, point to a

first–second century AD flourit for massive metalwork. A key problem is the relationship of this tradition to Rome: do its origins pre-date contact with the Roman world? Some items are clearly Roman-influenced, notably the finger rings which adapt Roman-style bezels (Simpson 1970), while metal analyses show that many include significant levels of zinc, derived from remelted Roman brass (Tate et al, no date; cf Dungworth 1996, 407–10). It thus seems the bulk of the products are Roman Iron Age in date. However, there are signs of earlier origins, for instance in the pre-Flavian dating of the Snailwell bracelet (see Fitzpatrick 1989), while a number of the objects show no zinc content and thus could pre-date the local arrival of Roman metal. On current evidence this tradition seems to start shortly before the Flavian period and flourished in the late first–second century AD. Dating its end is more difficult, and individual items could have had long lives, but there is as yet no good evidence to extend its production beyond the early third century AD (Hunter 2001, 80). Thomas’

identification of massive armlets on Pictish stones (1963, 57, fig 6) lacks credibility, both from the marginal resemblance and from the distribution, which is at odds with that of massive metalwork.

RELATIONS WITH ROME

The proximity of the Roman world is crucial to understanding this tradition. It was not only a key source of raw materials, but also arguably the stimulus for production. As MacGregor (1976, 177–8) has noted, the sheer quantity of decorative metalwork in north Britain in the first two centuries AD is remarkable. It can be argued that this outpouring of very visual indigenous metalwork is a direct response to the social threat posed by Rome – an example of societies under stress using conspicuous symbols to create and reinforce their own identity in the face of external threats (cf Hodder 1982, 186–7; Jones 1997, 113–15, 123–4; for fuller discussion, see Hunter forthcoming a).



ILLUS 14 Findspots discussed in the appendix. (1) Aldourie; (2) Dores; (3) Culbin Sands; (4) Muthill; (5) Purgavie; (6) Craigdownings, Bridge of Allan. Drawn by Marion O’Neil

USE

It has been queried how practical the armlets were to use (Wilson 1863, 138; Smith 1881, 325). In fact, apart from the two largest, all show signs of use-wear, with worn areas behind the terminals. While it is possible that some did at times adorn statues, this evidence of repeated use implies most were worn on a regular basis by humans, not images. As Smith (1881) long ago argued, their size suggests armlets were male ornaments, while zoomorphic spiral bracelets were female. The rare occurrence of small examples of both armlets and bracelets (from Lismore and Hurly Hawkin; Taylor 1982, 226) indicates that child- or youth-sized versions were also made, suggesting status ornaments custom-made for children.

Such ornate metalwork can be interpreted as elite ornaments, but the surviving quantity of it suggests it was not highly exclusive. This suggests a much more segmentary society, with power relations at a relatively local level, and local rather than regional elites.

CONCLUSION

The finds reported here are important additions to the corpus of early Celtic art in Scotland and to our knowledge of the 'massive' tradition. They have cast new light on the movement of such high-quality metalwork within Iron Age Scotland, on the technological skills in making and repairing them, and on the societies who were creating and using these artistic masterpieces. The Fetlar armlet has also opened a fascinating window on the antiquarian world of the late 18th century. The massive metalworking tradition is an artistic legacy of tremendous importance to the study of the Scottish Iron Age, and one which deserves to be more widely appreciated on a broader canvas. It is hoped that the publication of this material and the forthcoming detailed treatment of the tradition will go some way to assisting this.

APPENDIX: UNPUBLISHED FINDS OF IRON AGE DECORATIVE METALWORK FROM EASTERN SCOTLAND

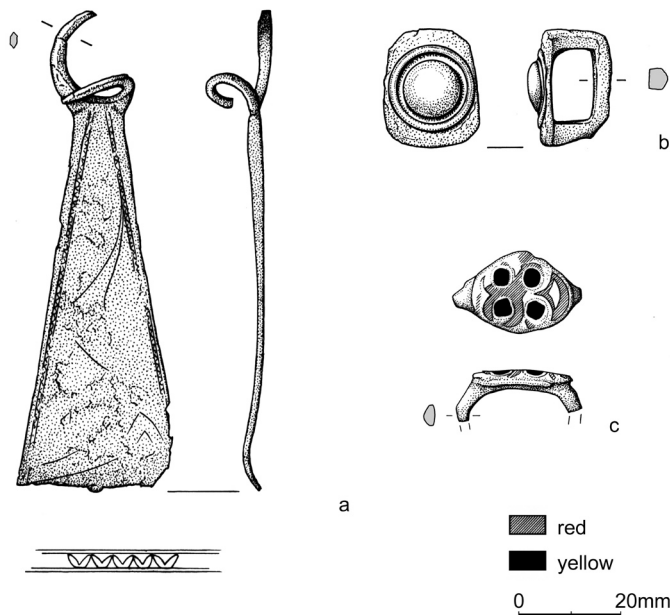
In recent years there have been a number of other finds of Iron Age metalwork, as yet unpublished, between the Forth and the Moray Firth (illus 14).³ They are catalogued and discussed below. Most are metal-detecting finds: in some instances only four-figure grid references are given to protect the find locations. Researchers may obtain full details from NMS or the relevant museum. All are copper alloy; where specific alloys are given, these are from surface XRF analysis.

INVERNESS-SHIRE

Fragment with incised 'mirror-style' decoration, Aldourie (illus 15a; NGR: NH 602 364)

Triangular cast flat plate, broken and slightly bent at the wider end with a broken suspension loop at the apex. Decorated on both faces, although this is almost totally lost on one face. Each edge is bounded by a slender raised trumpet flanked internally by a channel with arcading. Traces of incised ornament survive on one face only. The lines are defined by a series of short disjointed strokes. Much of the pattern is destroyed, but the curves and voids created by the surviving fragments are paralleled in southern British mirror-style ornament (eg Stead 1996, illus 61); there is, however, no surviving trace of basketry hatching. The suspension loop varies in section, flattening perpendicular to the plane of the object at the top, where it is broken. Slender trumpets decorate the half of the loop's circumference nearest the plate, the heads butting those which define the plate's edge. Its composition is a typical pre-Roman Iron Age alloy of tin-bronze with some antimony, arsenic and silver. L 91mm, W 28mm, T 3mm, loop internal diameter *c* 15mm.

There is no doubt this is a piece of Iron Age decorative metalwork, probably an import from southern Britain given the stylistic parallels: such decoration is very rare in Scotland, being found only on some items in the hoard from Balmacellan, Kirkcudbrightshire and the ritual scoops from Burnmouth, Berwickshire (MacGregor 1976, cat 281, 342). In its fragmentary state its function is uncertain, but it is unlike any other Iron Age items known to this writer. The loop is clearly for suspension, but breakage makes it hard to assess what the object



ILLUS 15 (a) Aldourie object (with detail of decorative margin below); (b) Dores strap mount; (c) Middleton ring. Drawn by Marion O'Neil

was. It was intended to be viewed from two sides, and some form of pendant decorative fitting is a possibility. This decorative style flourished in the first centuries BC/AD.

Items of Iron Age metalwork are very rare in Inverness-shire, although there is a small hoard nearby from Drumashie (*Proc Soc Antiq Scot* 58, 11–13). Aerial photographs show a palisaded enclosure on a low rise close to the findspot (P Weeks, pers comm). Found by Richard Brand while metal-detecting in 1998; allocated to Inverness Museum through Treasure Trove (TT 124/99; INVMG 2001.016; *DES* 2000, 50).

Strap mount, Dores (illus 15b; NGR: NH 59 35)

Rather crude strap mount, sub-square rather than the normal oval, with a boss motif with a raised border and a square loop on the rear. The type is typical of northern England and southern Scotland but examples so poorly made are rare, raising the possibility that it could be a local copy. In either scenario, it provides evidence of contacts to the south. L 22mm, W 18mm, H 16mm. Found by David Watmough while metal-detecting in 2003; allocated

to Inverness Museum through Treasure Trove (TT 26/03; INVMG 2004.020.001; *DES* 2004, 71).

To these should be added a fine cruciform harness mount, originally enamelled, from excavations of a later prehistoric site at Culduthel, Inverness in 2005 (R Murray, pers comm; *British Archaeology* 92, 6).

MORAY

'Massive' enamelled finger ring, Middleton (illus 15c; NGR: NJ 2065 5470)

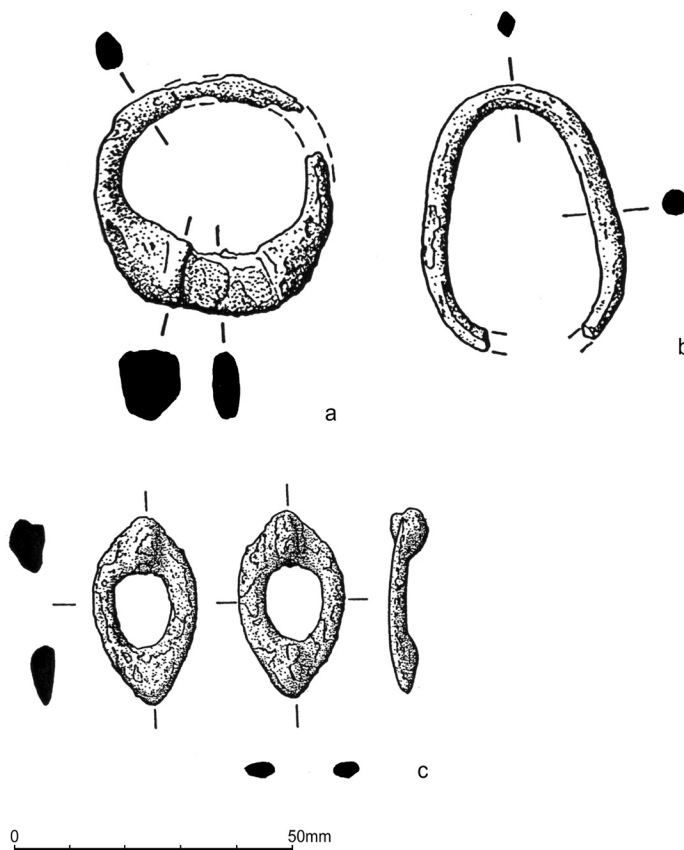
Oval enamelled bezel from a finger ring with remains of hoop, broken slightly below the shoulders. Champlevé enamel with four yellow dots set in a square arrangement, surrounded by an orange/red field which contains four reserved peltae between and behind the dots. The colour of the field varies from red to orange, probably from post-depositional effects. The edge is worn and in places lost; much of the enamel is also lost. Alloy: leaded

bronze, minor zinc. L 24 mm, W 15.5mm, H 10mm.

The type is attested by a thin but widespread scatter of finds across Scotland, concentrated in the north-east. It was inspired by Roman bezelled finger rings, although the designs are characteristically native and place the series in the massive metalworking tradition (Hunter 1998, 344–5). Found by Hugh Gordon while metal-detecting in 1997; allocated to Elgin Museum via Treasure Trove (TT 102/97; ELGNM: 1998.11; *DES* 1999, 64).

Various finds, Birnie (illus 16; NGR: NJ 210 585)

Ongoing excavations at a long-lived later prehistoric settlement site at Birnie, just south of Elgin have produced, *inter alia*, a range of Iron Age metalwork. This is illustrated here without detailed description, as it will be fully catalogued in the final publication. (For an interim statement on the site, see Hunter 2002.) The finds are all connected with horse harness: a button and loop fastener which is a variant of Wild (1970), type III, similar to the Purgavie example (below); a bridle bit ring; and a simple terret. All are exceedingly rare north of the Forth; indeed, these are the first examples from



ILLUS 16 Terret (a), bridle bit ring (b) and button & loop fastener (c) from Birnie.
 Drawn by Alan Braby

north of the Mounth. Again they suggest contacts to groups south of the Forth.

Brooch, Binn Hill, Garmouth (illus 17; NGR: NJ 30 65)

Two unusual metal-detecting finds were initially reported as coming from near Binn Hill, Garmouth (DES 2002, 84), but this record is in error; they were not found together, and are not associated. The brooch from the Binn Hill will be published in detail elsewhere in a study of Iron Age brooches in Scotland; it is a unique example with a flattened lentoid enamelled bow and zoomorphic foot joined to the bow. Found by Alistair McPherson while metal-detecting in 2001; allocated through Treasure Trove to NMS (TT 83/01; NMS FA 128); on long-term loan to Elgin Museum.

Beaded torc fragment, Urquhart
 (illus 18a; NGR: NJ 29 62)

A cast bead from a beaded torc was found to the south-east of Urquhart. It is in poor condition, with much of the original surface lost. Tapering in section, with a corrugated edge; each of the seven raised ribs has grooves on its flanks, giving them a tripartite profile. Central circular perforation; wear has enlarged the top margin on one side, damaging one of the ribs. This area, on the inside of the curve, would have received most stress during use. It is hollow-cast. D 30mm, T 12.5–15.5mm, perforation D 9.5mm. Alloy: bronze.

Beaded torcs are a classic central British type, the distribution strongly focused between the Forth and the Severn Wash (MacGregor 1976, 113–15, map 15; updated in Hunter forthcoming b). Their extent is becoming clearer as stray beads are recognized in site contexts more regularly (eg Croom 1998). This is the first example recognized from north of the Forth, and at a stroke expands the distribution by some 200km. It is a valuable marker of contacts with groups to

the south, and a demonstration of the biasing factor of hoarding habits, as the north-east hoarding tradition apparently excluded exotic metalwork. Thus it is only the growing number of fragmentary stray finds like this which indicate the two-way contacts. Cropmarks, including a possible ring ditch, are recorded within a few hundred metres of the findspot (NMRS NJ26SE 31 and 88). Found by Alistair McPherson while metal-detecting in 2001; allocated through Treasure Trove to NMS (TT 83/01; NMS FA 129); on long-term loan to Elgin Museum.

Enamelled bead, probably from a beaded torc, Culbin Sands (illus 18b; NGR: c NH 98 60)

D-sectioned ring, slightly curved in internal section, the exterior shaped to form two faces either side of a central circumferential decorated ridge. Its slightly



ILLUS 17 Brooch, Binn Hill. Length 54mm. © Trustees of the National Museums of Scotland

tapering section suggests use in a beaded torc (compare the pattern on the Emsay, Yorks, torc, and a similar single bead from Hanging Shaw, Selkirk; MacGregor 1976, no 200, 280). For discussion, see the Binn Hill example above. Wear obscures details, but the central ridge comprises a reserved running-wave pattern within a channel defined by red enamel. Red enamel also survives (very partially) on the faces in two areas, but the pattern cannot be discerned. D 18mm, H 6.5–8.5mm, perforation D 6.5mm. Surface SEM analysis (by Laurianne Robinet) indicated that the alloy was bronze with low lead, and the red enamel was coloured by copper oxide. The running wave pattern within the enamel appears to have been tinned. Stray find, circumstances unknown (Elgin Museum, ELGNM: 1967.26)

Triskele-decorated stud, Stonewells (illus 18c; NGR: NJ 284 653)

Hemispherical stud, hollowed underneath, with a flat rectangular tang L 14mm, 7 × 2mm in section. The stud is decorated with three incised circumferential lines as a border, within which is a triskele defined by three arcs. Alloy: bronze, minor zinc. D 25mm, H 17mm. This type of decorated stud finds ready parallel in other late Iron Age examples, eg from Airieolland, Wigtonshire (although without a tang; MacGregor 1976, no 173). They have been suggested as sword pommel studs, but a range of decorative functions is possible. Found by R Krawczyk while

metal-detecting in 1998; allocated to Elgin Museum via Treasure Trove (TT 57/98; ELGNM: 1990.30.3; *DES* 1999, 64). A saddle quern is recorded from the same field, suggesting there may have been a settlement there (*DES* 2002, 84).

Enamelled mount, Innesmill (illus 18d; NGR: NJ 288 639)

Low hollow dome topped by a rounded knob, with two circumferential fields of enamel, originally in three colours but one has decayed. The upper field alternates blue and the lost colour, the lower yellow and the missing colour. Much of the original edge is lost, but a small rectangular-sectioned rivet is preserved in one area. Alloy: leaded bronze, trace Zn, As, Ag, Sb. D 31mm, H 13mm. Found by Alistair McPherson while metal-detecting in 1997; allocated through Treasure Trove to Elgin Museum (TT 91/97; ELGNM: 1998.11; *DES* 1999, 64).

The stud was found within 100m of a stone circle (Coles 1906, 198–201); it is tempting to see it as a deliberate offering left near a hallowed site of antiquity (for a parallel, compare the Roman Iron Age cache of charms from an earlier cairn at Monquhitter, Aberdeenshire; Stevenson 1967). A sestertius of Vespasian was also found close to the circle (Bateson & Holmes 2003, 249), while possible ring-ditches are recorded some 200m to the east (NMRS NJ26SE 40).

PERTSHIRE

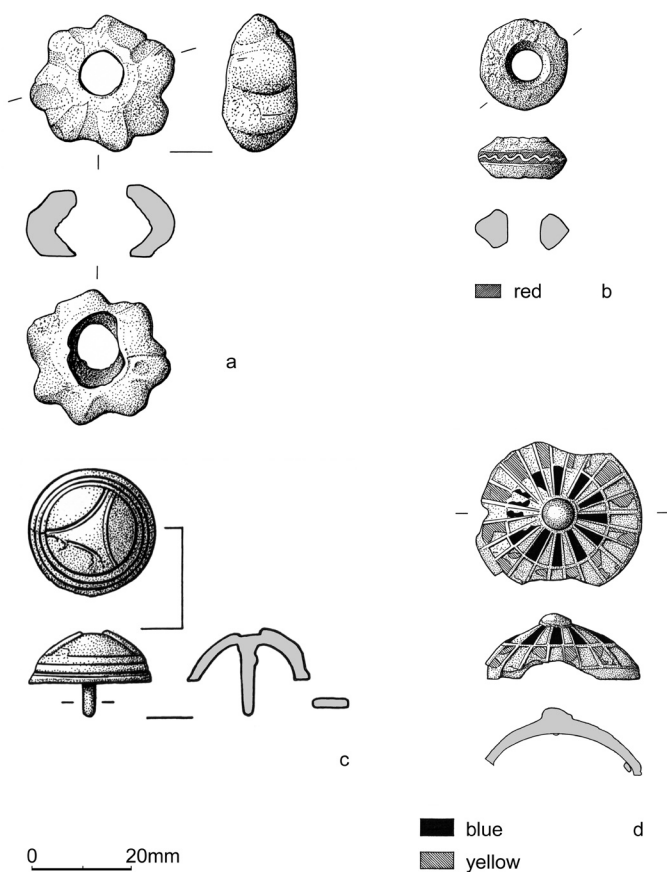
Sword hilt fittings, Perthshire (illus 19a)

The hilt guard and pommel of a sword of Piggott's group IV (1950), now in Perth Museum (reg no 1350), were first published by MacGregor (1976, nos 159–60). Sadly, their findspot is unknown, although presumably local. Re-examination indicates that the decoration is more complex than MacGregor's illustration indicates, and they are re-published here in full.

The hilt guard is of Piggott's crown type (1950, group IVb), and is plain with a raised basal ridge. The underside is slightly hollowed with marginal ridges and an oval perforation for the tang (16 × 7mm). From the top, two small hollows either side of the perforation are most probably points to suspend the core which created the perforation. There is evidence of post-casting finishing, especially file marks at one end. The interior is noticeably less finished than the

exterior; the surface is worn, but shows some use-wear in the form of cuts to the top edge. L 47mm, D 18mm (top), D 12mm (base), H 20mm. Alloy: leaded gunmetal.

The centre of the pommel mount has a sub-rectangular perforation (5 × 4mm) for the tang tip, with a flattened and abraded area (c 11 × 9mm) where this was hammered flat to secure it. The central truncated conical motif is decorated with an incised basal circumferential line and a series of incised radial lines. On the sides this has been worn and flattened from use. Below this on each side are two crude conjoined trumpet motifs flanked by debased trumpet lobes; these in turn are flanked at the junction with the wings by rather better-defined pairs of trumpet lobes. The wings themselves bear a faint pattern of incised lines in a symmetrical zig-zag pattern. Both wings have ribs in them and the edges are burred; two cuts at the edge probably represent use-damage. The mount was a lost-wax casting. Irregularities in modelling the wax are clear on the hollowed inside; one area has an air bubble from casting. L 50mm, W 20mm (hollow min W 10mm), H 22.5mm. Alloy: leaded gunmetal.



ILLUS 18 (a) Urquhart beaded torc fragment; (b) Culbin Sands beaded torc fragment; (c) Stonewells stud; (d) Innesmill mount. Drawn by Marion O'Neil

Tankard handle fragment, Muthill (illus 19b; NGR: NN 88 16)

Tankard handle fragment, broken in the middle of the hand-grip. Circular terminal with broken rectangular lug on rear; the flat-arched handle broadens and flattens, with a rib underneath for strength and a slightly concave upper surface. Little of the original surface survives; there is no remaining trace of any decoration. The edges of the hand-grip are almost totally lost, and it would once have been wider. L 40mm, T 20mm, H 25mm. Such handles are a typical Iron Age artefact type, used singly or in pairs on wooden tankards. They continued into the Roman Iron Age, and some are known from Roman sites; the broad range of the type is first century

BC–second century AD. This is only the fifth known from Scotland, but they occur over a wide area, from Orkney to Kirkcudbrightshire (MacGregor 1976, nos 287, 290–1 (her no 289 is probably Early Historic); Hunter 1996, 113). Found by William Melville while metal-detecting in 2003; allocated to Perth Museum via Treasure Trove (TT 3/03; DES 2003, 110; PMAG 2004.1).

ANGUS

Button and loop fastener, Purgavie (illus 19c; NGR: NO 30 55)

Unusual openwork button and loop fastener. The teardrop-shaped loop is formed by two double-ended

conjoined trumpets, a style typical of the Late Iron Age of north Britain. The loop is broken where it turns upwards. The surfaces are worn, but the lower ‘lip’ where the trumpets join is defined by incised lines. H 28mm, W 22.5mm, T overall 11.5mm (button 6mm), tang section 4.5 × 5mm.

This is a variant of Wild (1970), type III, but with an openwork head rather than a boss. Such fasteners are typical of southern Scotland and northern England in the first–second centuries AD, and this example is likely to be an import. They were used in both Iron Age and Roman contexts, and could have arrived in Angus either from contacts with southern tribes or the Roman army. There is another, more northerly example, from Birnie, Moray (*infra*). Found by metal-detecting in 2003; allocated to Angus Museums through Treasure Trove (TT 52/03; Kirriemuir Museum, K2006.1; DES 2004, 21).

STIRLINGSHIRE

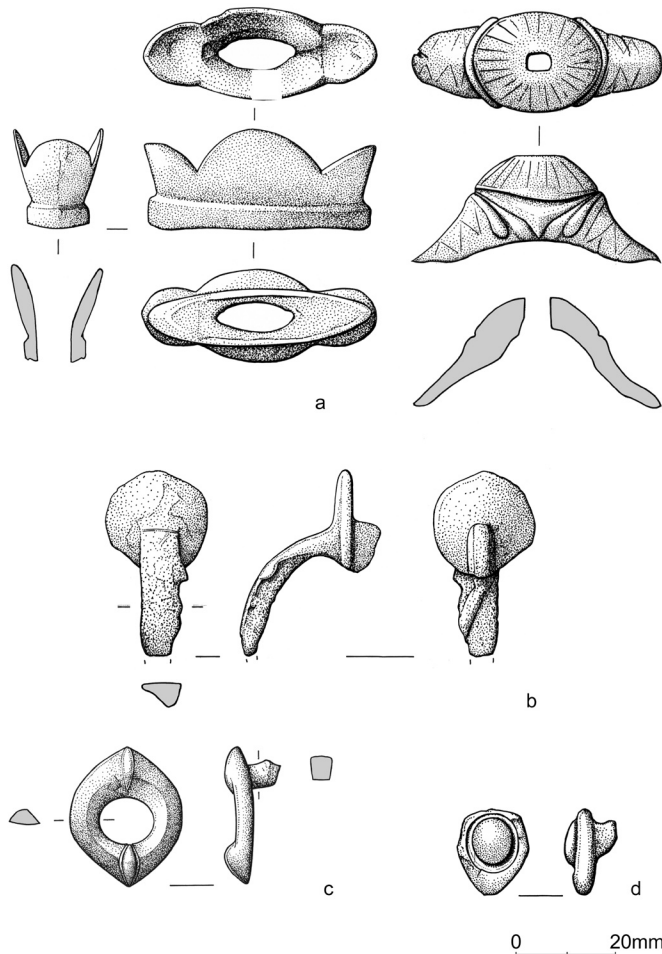
Button & loop fastener, Craighdownings, Bridge of Allan (illus 19d; NGR: NS 77 98)

Fragmentary button and loop fastener of teardrop form (Wild 1970, type III). In its current state it is unclear whether there is enamel in the channel surrounding the boss. The loop is lost, although the attachment point remains, and the whole piece is very worn. As noted earlier, such fasteners are unusual north of the Forth, although there is an example from the Roman fort of Strageath in Perthshire (Frere & Wilkes 1989, illus 78 no 85). 17 × 14mm. Found by Mr J Smith while metal-detecting in 2003; allocated to Stirling Museum via Treasure Trove (TT 54/03; reg no 20,508).

DISCUSSION

Apart from their individual interest, the major significance of these objects, mostly found

by metal-detecting, is that they provide a valuable counterpoint to the much better-known finds of the massive metalworking tradition. The latter are invariably from hoards or other deliberate deposits which were structured in such a way that they excluded external objects (Hunter 1997). In the finds listed here, many of which were fragmentary and probably discarded, we see evidence of the contacts implied by the distribution of massive metalwork but which have been elusive in the home area. There is central British metalwork, represented by button and loop fasteners, beaded torc fragments and a terret, and southern English material, in the enigmatic fragment from Aldourie. There is also



ILLUS 19 (a) Perthshire sword hilt fittings; (b) Muthill tankard handle; (c) Purgavie fastener; (d) Craighdownings fastener. Drawn by Marion O’Neil

an addition to the corpus of locally-made finger rings, from Middleton, and a unique brooch, hard to parallel and arguably a local product. This recent dramatic increase in metal-detecting discoveries has made a major impact on our ideas about the north-east in providing this evidence for contacts. For the Moray Firth area this represents a doubling in the evidence for Iron Age metalwork in the last ten years, providing an expanded dataset of considerable potential.

ACKNOWLEDGEMENTS

This work, spread over more than a decade, has accumulated a number of debts. The stimulus was the discovery of the Lismore armlet, and I am grateful primarily to Freda McGregor, whose efforts brought it to wider notice, to the finder, Donald MacLean, and to the Comann Eachdraidh Lios Mòr (Lismore Historical Society). My colleague Trevor Cowie kindly made available his notes on the Bows of Doune armlet, and also drew my attention to the Cardonnel manuscript and to the Cambridge armlet; without his wandering eye, the detective work would never have been started. I was aided in this by Chris Chippindale and Anne Taylor in the University Museum of Archaeology and Anthropology at Cambridge, who loaned the armlet for study and chased up background references; and, for various clues en route, by Lindsay Allason-Jones, Jane Couatts, James Graham-Campbell, Jack Hunter, Stephen Lloyd and Andrew Martin. Research on other recent finds was facilitated by Stuart Campbell, Mark Hall, Jenny Shiels, Patricia Weeks and the various finders. Drawings are by Marion O'Neil unless otherwise noted, with considerable assistance at the digitizing stage from Craig Angus. I am grateful to David Clarke for comments on a draft of the article.

NOTES

- 1 Only one other find of armlets is known at this date: an intact oval one and a broken half (now lost) from Stichill (MacGregor 1976, nos 246–7). The ones illustrated by Cardonnel are clearly different from these.
- 2 C J Harford has not yet been traced. Alexander Reid (1747–1823) was born to a minor landed family at Kirkennan, near Dalbeattie. He is best known for his miniature of Robert Burns,

painted shortly before the latter's death, but also produced a number of portraits and landscapes, mostly of local scenes; several of the latter were etched for publication. He toured Dumfries and Galloway with Riddell and Grose, illustrating their manuscript accounts (Corson 1930; Muir 1931; Foskett 1972, 464; Dodgson & Burnette 2004). Robert Riddell (1755–94) of Friar's Carse, near Dalswinton, was a well-known antiquarian and literary patron, who assisted Grose and was a friend of Burns (Mackay 2004).

- 3 One recent find from Moray has entered the record as a possible piece of Iron Age metalwork, but should be dismissed. This is the decorated ring pendant from Clarkly Hill, Burghead (*DES* 2000, 59). There was always some ambiguity over its identification, and the discovery of examples with better-preserved decoration confirms it is in fact late Georgian or Victorian in date (Campbell 2007). I am grateful to Stuart Campbell for drawing recent finds to my attention and for discussion of the type.

REFERENCES

ABBREVIATIONS

- DES* – *Discovery and Excavation in Scotland*.
Edinburgh: Council for Scottish Archaeology
NLS – National Library of Scotland
NMS – National Museums of Scotland
NMRS – National Monuments Record of Scotland
RIB – Collingwood & Wright 1965

- Anderson, J 1879 'Introduction', in Low, G, 1879, xiii–lxxiv.
Anderson, J 1904 'Note on a late Celtic armlet of bronze now presented to the National Museum; with notes on the identification of two other late Celtic armlets in the museum, and on a massive bronze armlet recently found in Sutherlandshire', *Proc Soc Antiq Scot* 38 (1903–4), 460–6.
Anon 1914 *Twenty-eighth Annual Report of the Antiquarian Committee to the Senate and lists of accessions for the years 1910, 1911, 1912*. Cambridge: Museum of General and Local Archaeology and of Ethnology (reprinted from the *Cambridge University Reporter*).
Anon 1926 'Report of the Board of Archaeological and Anthropological Studies', *University Reporter*, 3 March 1926.

- Ballin Smith, B 1994 *Howe: Four Millennia of Orkney Prehistory*. Edinburgh (=Soc Antiq Scot monogr 9).
- Bateson, J D & Holmes, N M McQ 2003 'Roman and medieval coins found in Scotland, 1996–2000', *Proc Soc Antiq Scot* 133, 245–76.
- Campbell, S 'Pendant ring update', *The Searcher* 257, 26–7.
- Cardonnel, A de 1786 *Numismata Scotiae, or a series of the Scottish coinage, from the reign of William the Lion to the Union*. Edinburgh, George Nicol.
- Cardonnel, A de 1788–93 *Picturesque Antiquities of Scotland*. London, self-publication by author.
- Cardonnel, A de no date [c 1800] *Relicta Antiqua. Being a collection of the remains of ancient crosses, obelisks, funeral monuments, arms, urns, beads, amulets &ca, &ca of different nations which have been found and discovered in Scotland*. Manuscript in NMS library (CC 937 CAR), 2 vols.
- Cardonnel, A de 1822 'Description of certain Roman ruins discovered at Inveresk', *Archaeol Scot* 2, 159–67.
- Coles, F R 1906 'Report on stone circles surveyed in the north-east of Scotland, chiefly in Banffshire, with measured plans and drawings', *Proc Soc Antiq Scot* 40 (1905–6), 164–206.
- Collingwood, R G & Wright, R P 1965 *The Roman Inscriptions of Britain I. Inscriptions on stone*. Oxford, Oxford University Press.
- Corson, F R 1930 'Alexander Reid of Kirkcannan', *Trans Dumfries Galloway Nat Hist Antiq Soc* (third series), 16 (1929–30), 75–87.
- Cowen, J D 1967 'A steatite vessel from Orkney', *Arch Aeliana* (fourth series), 45, 189–92.
- Craster, H H E 1907 *A History of Northumberland, volume viii. The Parish of Tynemouth*. Newcastle, Andrew Reid.
- Croom, A T 1998 'Torc beads from South Shields Roman fort', *Arbeia J* 6–7 (1997–8), 60–3.
- Curle, J 1932 'An inventory of objects of Roman and provincial Roman origin found on sites in Scotland not definitely associated with Roman constructions', *Proc Soc Antiq Scot* 66 (1931–2), 277–397.
- Cuthbert, O D 1995 *The Life and Letters of an Orkney Naturalist: Reverend George Low 1747–95*. Orkney, The Orkney Press.
- Dodgson, C & Burnette, A 2004 'Reid, Alexander (1747–1823)', in Matthew, H C G & Harrison, B (eds) *Oxford Dictionary of National Biography*, 46, 377–8. Oxford, Oxford University Press.
- Dungworth, D B 1996 'The production of copper alloys in Iron Age Britain', *Proc Prehist Soc* 62, 399–421.
- Fitzpatrick, A P 1989 'The submission of the Orkney Islands to Claudius: new evidence?', *Scottish Archaeol Rev* 6, 24–33.
- Foskett, D 1972 *A Dictionary of British Miniature Painters*, vol 1. London, Faber & Faber.
- Frere, S S & Wilkes, J J 1989 *Strageath: Excavations Within the Roman Fort 1973–86*. London (=Soc Promotion Roman Studies monogr 9).
- Goodwin, G & Bell, A 2004 'Lawson, Adam Mansfeldt de Cardonnel', in Matthew, H C G & Harrison, B (eds) *Oxford Dictionary of National Biography*, 32, 881. Oxford, Oxford University Press.
- Grose, F 1797 *The Antiquities of Scotland*. London, Hooper & Wigstead.
- Guido, M 1978 *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*. London (=Soc Antiq London, Res Rep 35).
- Heald, A 2001 'Knobbed spearbutts of the British and Irish Iron Age: new examples and new thoughts', *Antiquity* 75, 689–96.
- Henderson, J 1991 'Industrial specialization in late Iron Age Britain and Europe', *Archaeol J* 148, 104–48.
- Hodder, I 1982 *Symbols in Action*. Cambridge, Cambridge University Press.
- Hull, M R & Hawkes, C F C 1987 *Corpus of Ancient Brooches in Britain: Pre-Roman Bow Brooches*. Oxford (=Br Archaeol Rep, Br Ser 168).
- Hunter, F 1996 'Recent Roman Iron Age metalwork finds from Fife and Tayside', *Tayside & Fife Archaeol J* 2, 113–25.
- Hunter, F 1997 'Iron Age hoarding in Scotland and northern England', in Gwilt, A & Haselgrove, C (eds) *Reconstructing Iron Age Societies*, 108–33. Oxford, Oxbow.
- Hunter, F 1998 'Copper alloy', in Main, L, 'Excavation of a timber round-house and broch at the Fairy Knowe, Buchlyvie, Stirlingshire, 1975–8', *Proc Soc Antiq Scot* 128, 338–46.
- Hunter, F 2001 'The carnix in Iron Age Europe', *Antiq J* 81, 77–108.
- Hunter, F 2002 'Birnie: buying a peace on the northern frontier', *Curr Archaeol* 181, 12–16.

- Hunter, F forthcoming a 'Artefacts, regions and identities in the northern British Iron Age', in Haselgrove, C & Moore, T forthcoming *The Later Iron Age of Britain and the Near Continent*. Oxford, Oxbow.
- Hunter, F forthcoming b 'A Romano-British beaded torc fragment from Wishaw Hall Farm, Warwicks', in Booth, P & Powell, A B (eds) *The Archaeology of the M6 Toll, 2000–2002*.
- Jervise, A 1857 'Notices descriptive of the localities of certain sculptured stone monuments in Forfarshire, &c., – Meigle, Essie, Glamis, Thornton, and Cossins. Part II', *Proc Soc Antiq Scot* 2 (1854–7), 242–51.
- Jones, S 1997 *The Archaeology of Ethnicity*. London, Routledge.
- Karl, R 2005 'Master and apprentice, knight and squire: education in the "Celtic" Iron Age', *Oxford J Archaeol* 24(3), 255–71.
- Kilbride-Jones, H E 1980 *Celtic Craftsmanship in Bronze*. London, Croom Helm.
- Kinsley, J (ed) 1971 *Burns: Poems and Songs*. Oxford, Oxford University Press.
- Laing, L & Laing, J 1986 'Scottish and Irish metalwork and the "conspiratio barbarica"', *Proc Soc Antiq Scot* 116, 211–21.
- Leeds, E T 1933 *Celtic Ornament in the British Isles Down to AD 700*. Oxford, Clarendon Press.
- Low, G 1879 *A Tour Through the Islands of Orkney and Shetland*. Kirkwall, William Peace & Son.
- MacGregor, M 1976 *Early Celtic Art in North Britain*. Leicester, Leicester University Press.
- Mackay, J A 2004 'Riddell, Robert, of Glenriddell', in Matthew, H C G & Harrison, B (eds) *Oxford Dictionary of National Biography*, 46, 911–12. Oxford, Oxford University Press.
- MacKie, E W 2002 *The Roundhouses, Brochs and Wheelhouses of Atlantic Scotland c 700 BC–AD 500: Architecture and Material Culture. Part I: the Orkney and Shetland Isles*. Oxford (=Br Archaeol Rep, Br Ser 342).
- Muir, J 1931 'Alexander Reid: Gallovidian laird and miniaturist of Burns; an appreciation', *Trans Dumfries Galloway Nat Hist Antiq Soc* (third series), 17 (1930–1), 157–161.
- Pennant, T 1784 *Arctic Zoology. Vol I*. London, Henry Hughs.
- Piggott, S 1950 'Swords and scabbards of the British early Iron Age', *Proc Prehist Soc* 16, 1–28.
- Piggott, S 1959 'The *carnyx* in Early Iron Age Britain', *Antiq J* 39, 19–32.
- Raftery, B 1983 *A Catalogue of Irish Iron Age Antiquities*. Marburg (Veröffentlichung des Vorgeschichtlichen Seminars Marburg 1).
- RCAHMS 1946 *Inventory of the Ancient Monuments of Orkney and Shetland, Vol III: Inventory of Shetland*. Edinburgh, RCAHMS.
- RCAHMS 1975 *Argyll: an Inventory of Ancient Monuments, Vol 2: Lorn*. Edinburgh, RCAHMS.
- RCAHMS 1994a *South-East Perth: an Archaeological Landscape*. Edinburgh, RCAHMS.
- RCAHMS 1994b *Braes of Doune: an Archaeological Survey*. Edinburgh, RCAHMS (Afforestation Land Survey).
- Ross, A 1994 'Pottery report', in Ballin Smith, B, 1994, 236–57.
- Secombe, T & Grout, A 2004 'Low, George', in Matthew, H C G & Harrison, B (eds) *Oxford Dictionary of National Biography*, 34, 549–50. Oxford, Oxford University Press.
- Sheridan, A 2005 'An Early Historic steatite urn from Orkney: new information on an old find', *Archaeol Aeliana* (fifth series), 34, 158–67.
- Simpson, M 1968 'Massive armlets in the North British Iron Age', in Coles, J M & Simpson, D D A (eds) *Studies in Ancient Europe*, 233–54. Leicester, Leicester University Press.
- Simpson, M 1970 'Some Roman-Iron Age finger rings', *Proc Soc Antiq Scot* 102 (1969–70), 105–8.
- Smellie, W 1782 *Account of the Institution and Progress of the Society of Antiquaries of Scotland*. Edinburgh, Society of Antiquaries of Scotland.
- Smith, J A 1881 'Notice of a massive bronze "late Celtic" armllet and two small objects of bronze (horse-trappings), found with a Roman bronze patella, at Stanhope, Peeblesshire, in 1876; with an account of other bronze or brass armlets found in Scotland', *Proc Soc Antiq Scot* 15 (1880–1), 316–61.
- Smith, J A 1883 'Notice of a massive bronze armlet, the property of the Right Hon. the Earl of Strathmore', *Proc Soc Antiq Scot* 17 (1882–3), 90–2.
- Stead, I 1996 *Celtic Art in Britain Before the Roman Conquest*. London, British Museum.
- Stevenson, R B K 1966 'Metal-work and some other objects in Scotland and their cultural affinities', in Rivet, A L F (ed) *The Iron Age in Northern Britain*, 17–44. Edinburgh, Edinburgh University Press.
- Stevenson, R B K 1967 'A Roman-period cache of charms in Aberdeenshire', *Antiquity* 41, 143–5.

- Sweet, R 2004 *Antiquaries: The Discovery of the Past in 18th-Century Britain*. London, Hambledon & London.
- Tate, J, Barnes, I & MacSween, A no date 'Analyses of massive bronze armlets', in Bryce, T & Tate, J (eds) *The Laboratories of the National Museum of Antiquities of Scotland, Volume 2*, 89–94. Edinburgh, NMAS.
- Taylor, D B 1982 'Excavation of a promontory fort, broch and souterrain at Hurly Hawkin, Angus', *Proc Soc Antiq Scot* 112, 215–53.
- Taylor, D B 1990 *Circular Homesteads in North-west Perthshire*. Dundee, Abertay Historical Society (Publication 29).
- Thomas, C 1963 'The interpretation of the Pictish symbols', *Archaeol J* 120, 31–97.
- Wild, J P 1970 'Button-and-loop fasteners in the Roman provinces', *Britannia* 1, 137–55.
- Wilson, D 1863 *Prehistoric Annals of Scotland*. London, Macmillan & Co.