
http://repository.nms.ac.uk/681

Deposited on: 23 October 2014
EXCAVATIONS AT BROOMEND OF CRICHLIE, 2005–7

Pottery
ALISON SHERIDAN

In the descriptions given below, all measurements are in millimetres, and abbreviations are as follows: E = estimated; Ht = height; L = length; RD = rim diameter; BD = base diameter; Th = thickness; W = width.

From the 2005–6 excavations

Pot 1 (illus 1.43) Twenty-six sherds and one fragment of a thin-walled, fine-textured Beaker; two conjoining sherds, and one sherd-plus-fragment conjoin, have now been refitted. Most of the sherds were found among unstratified, disturbed material near the shaft grave, while two sherds and the fragment were found in the filling of the south-eastern stone socket (C1029); the pieces show varying degrees of abrasion, with a few heavily abraded. Only a small part – perhaps around 5% – of the pot is present, but sufficient survives to show that this had been a sinuous-profiled and probably short-necked vessel with comb-impressed decoration arranged in zones of lattice design, interspersed with plain zones. The rim had been slightly everted and had probably been rounded. There is a zone of latticed comb impressions on its interior, and on the exterior two horizontal lines of comb impressions immediately below the rim form an upper boundary to the topmost zone of lattice design. There are at least three, and probably more zones of lattice design on the exterior, including one where the neck kinks out towards the belly and one on the belly; the lower belly is undecorated and the wall-base junction may have been gently pedestalled. One or more short combs, no wider than 1.75 mm, had been used to make the lattice design, and the closeness of the criss-cross lines varies from zone to zone. The rimsherd is too small to allow its diameter to be estimated, but the EBD is c 90 and the maximum diameter, at the belly, is 230 mm; neck diameters of c 170 and c 140 have been measured. Wall Th ranges from 7.5 to 11. The exterior is markedly reddish; the core has a band, of variable thickness, of dark to blackish-grey (indicating a rapid firing); and the interior is light- to medium brown. Inclusions are sparse (up to 3% in density),

The current location of the other urns found by Dalrymple’s diggers – seven, according to Watt’s account – is unknown, although parts of those urns may be represented among the sherds recovered in 2005–7.

The finds are described below by material and artefact type. No metal objects were found, and no copper staining on the cremated bones was noted, such as would indicate the former presence of a copper/copper alloy item.
Illustration 1.44
Pot 2 from excavation in 2005–6
Illustration 1.45
Pot 3 from excavation in 2005–6
small (up to $2 \times 2$ mm), and angular and sub-angular fragments of several mineral types, including quartzite, a black mineral, a creamy mineral (?feldspar) and a speckled creamy and black mineral. The clay may well have been levigated. The surfaces had been carefully smoothed before decoration, and the exterior had been polished to a low sheen.

In terms of Beaker typology this would probably count as an ‘S-profiled’ Beaker (according to Needham 2005) and fall within Clarke’s ‘Northern’ series of Beakers (Clarke 1970) and Shepherd’s ‘step 3’ or perhaps step 4 (Shepherd 1986. Note that the use of interior decoration – a rare feature on Beakers in general in Britain – is echoed on several Beakers from north-east Scotland, including those of steps 5 and 6: ibid, illus 20). A Beaker of comparable shape and with zoned decoration including latticed comb impressions from Sandhole, Fetterangus, Aberdeenshire has been dated to 3845 ± 32 BP (2460–2200 cal BC at 20, OxA-V-2172–23: Sheridan 2007a, fig 11.3.6, 110). It is conceivable that this Beaker was broadly contemporary with the ones buried in the large cists in the cemetery on the sandbank to the south. Given the location and condition of the sherds, it seems likely that the Beaker may originally have been in the shaft grave cist, to be smashed and missed by the workmen.

Pot 2 (Context 1075; illus 1.44) Complete Collared/Vase Urn, found inverted in a deep pit, close to the south-western stone socket. The urn contained the cremated remains of a young adult, probably female, together with an incomplete and burnt stone pendant (see below); the bone was radiocarbon-dated to 3525 ± 35 BP, 1950–1750 cal BC at 20 (SUERC-23675). Dimensions: Ht 291; RD 210–214; BD 100; Th $c 12$ on belly, 17 at base. Slender bipartite vessel, comprising a straight-walled neck/collar 73 mm high, terminating in a low cordon, and below this an evenly tapering body. The rim is gently squared-off, with a very shallow internal bevel; the fairly narrow base is flat inside and out, with a continuously curving wall-base junction on the interior. The rim bevel and exterior of the collar have been decorated with twisted cord impressions. On the rim bevel these are arranged as a continuous running chevron, and on the neck a design featuring horizontal chevrons is framed between one upper and one lower horizontal line, and extends from just below the rim to just above the cordon. The design varies around the circumference but features sets of horizontal chevrons: starting at a point where two sets meet (and have the lower triangle between them filled with two horizontal lines), there are – going clockwise – a set of ten right-facing chevrons; a set of twenty-two left-facing chevrons; a set of eleven right-facing chevrons; and a set of thirteen left-facing chevrons. The surfaces had been carefully smoothed and slipped on the exterior and interior, although lithic inclusions protrude through the surfaces, especially on the interior. The exterior is mid-brown with grey mottles; the core is not visible; and the interior is mid-brown with a black organic encrustation, extending up a third of the height, with sooty specks farther up. The lithic inclusions that had been crushed and deliberately added as a filler are mostly obscured, but where visible they seem to consist of angular fragments, up to $10 \times 4$ in size, of a blackish-brown stone and of speckled black and white local granodiorite. (Specimens of the same stone from Pot 5 were identified as such by Dr Simon Howard, NMS Natural Sciences; it is likely to have been obtained locally.) Patches of white accretion on the rim are probably bone dust.

The stylistic affinities of this urn, and of the other urns, will be discussed below.

Pot 3 (Context 1065; illus 1.45) Complete Collared/Vase Urn, found inverted, and resting on two granite slabs, in a cylindrical pit cutting the edge of the south-western stone socket. It contained the cremated remains of a child, radiocarbon-dated to 3475 ± 35 BP, 1890–1690 cal BC at 20 (SUERC-23673). Complete but for a short stretch of rim and upper neck. Dimensions: Ht 210; RD 187; max D (at base of neck) 204; BD 110; Th $c 15$ on belly, 22 at base. Bipartite vessel, comprising a straight, inclined neck $c 62$ high, kinking out to a fairly sharp carination; below that, the belly slopes a gentle curve towards a medium-width base that is flat on the inside and outside; the base–wall junction on the interior is a continuous curve. The rim is squared off and has a shallow internal bevel. The latter and the neck are decorated with twisted cord impressions. On the rim bevel these are arranged as arcs, while on the neck, framed by two horizontal lines top and bottom, there is a fringe of diagonal lines at the top; a row of C-shaped arcs along the centre; and a row of horizontal arcs at the bottom. The surfaces had been smoothed and slipped, but numerous lithic inclusions protrude. The exterior is medium brown with dark grey patches; the core, mid-grey, and the interior medium brown, becoming reddish-brown towards the base. There is a broad band of blackish encrustation running around the interior, extending in parts along
the whole height of the wall but not covering the base. The lithic inclusions consist of subangular fragments of a fine-grained, speckled, slightly glittery micaceous variety of granodiorite, up to 8.5 × 6.5 and at a density of c. 25–30%.

Pot 4 (Context 1124; illus. 1.46) Complete Collared/Vase Urn, found inverted in a cylindrical pit close to the shaft grave and containing the cremated remains of a child, radiocarbon-dated to 3510 ± 35 bp, 1930–1740 cal bc at 2σ (SUERC-23674). Complete, but has a horizontal crack around a fifth of the way up, probably running along a coil joint line. Dimensions: Ht 223; RD 195–198; max D (at bottom of neck) 237; BD 89; Th c. 14 at rim bevel, 25 at base. Slightly squat bipartite vessel, comprising a collar-like neck, 75 tall and straight to slightly bulbous, kinking out at its bottom to a prominent cordon. The belly curves in, in a sinuous line, towards a flat, fairly narrow pedestalled base that is flat inside and out, its inner
Illustration 1.47
Pot 5 from excavation in 2005–6
EXCAVATIONS AT BROOMEND OF CRICHIE, 2005–7

surface a continuous curve. The rim is squared off and expanded on the interior, and has a shallow internal bevel. The neck and upper belly are decorated with a fairly crudely executed design of incised lines, the lines up to 2 mm wide. The neck has a panel featuring two rows of running chevrons, with single horizontal lines at the top and bottom framing them and with an untidy horizontal line separating them. At some points the two rows form a diamond design; elsewhere the points fail to meet. On the upper row, the lower triangles formed by the chevrons are filled by two horizontal lines. On the upper belly, below a single horizontal line running along the lower edge of the cordon, there is a deep running chevron design. Although the surfaces had been slipped inside and out, they are interrupted by protruding lithic inclusions. The exterior is mid-brown with patches of blackish, non-organic sediment. The core is obscured by sediment but is probably red-brown and dark grey. The interior is mid-brown, reddish and buff in places, and with mid-grey firing clouds. There is a tiny patch of possible organic residue on the interior at the base-wall junction. The inclusions comprise abundant angular and subangular fragments of black, and speckled black and white granodiorite, up to 7.5 × 7.5, at an estimated density of 15–20%.

Pot 5 (mostly from pit Context 1022; illus 1.47) Around ninety sherds, plus several fragments, constituting 10–15% of an undecorated Collared Urn. Most were found in pit 1022, beside the south-easterly stone socket, and it may well be that Dalrymple’s workmen found the urn here and reburied it when it broke in pieces; the relatively slight degree of weathering of the fracture surfaces are consistent with such an interpretation. Dimensions: ERD c 270; max D (at bottom of collar) 290; EBD c 100; Th c 15 at neck, c 10 on belly; the urn may have been fairly tall. Tripartite, with a slightly bulbous, inward-sloping collar, at least 62 tall, that kinks out and overhangs at its base; a slightly concave, probably upright neck at least 50 tall, ending in a gentle carination; and a belly that may taper in a straight line to a narrow flat base. The base-wall junction on the interior is a continuous curve. The rim is slightly inturned, gently squared off, and has rounded, slightly expanded edges; it has a shallow, slightly dished internal bevel. The urn is undecorated. The surfaces had been carefully smoothed and coated with a thin slip, although some lithic inclusions protrude through the exterior, and rather more through the interior. Parts of the exterior on the neck and belly have a low sheen, as though the pot’s surface had been polished when leather-hard. The exterior is a reddish-brown, grading to a lighter reddish buff on the collar; the core is dark grey; and the interior varies from a mid grey to mid-brown and reddish-brown. There are small patches of blackish encrustation on the interior. The lithic inclusions consist of abundant angular fragments, up to 17 × 10.5, of the speckled variety of granodiorite as seen in Pot 4. One sherd from Pot 5 (SF 51) was subjected to organic residue analysis by Lucija Šoberl of Bristol University, using solvent extraction followed by gas chromatography, mass spectrometry and isotope ratio mass spectrometry. (A full report by Šoberl and Evershed is in the archive; the quotes below are taken from this report.) The sherd yielded an abundance of preserved organic compounds, with a lipid concentration of 68μg g⁻¹. The lipids confirmed the presence of degraded ruminant fat ‘which could derive from meat or milk being prepared inside’, although no compounds indicating cooking at over 300ºC were detected, and experimental work is currently being undertaken to test whether the presence of such lipids could relate to the sealing of the pot’s interior with milk upon firing. ‘For the time being we have to interpret the results of lipid analysis from [this pot] with caution.’

Pot 6 (illus 1.48) Two rimsherds plus around 50 body sherds, all undecorated, of an urn of indeterminate type. Most were found in the filling of the 1855 excavation just to the south of the north-western portal stone – the area that had previously produced the battle axehead (see below), Pot 9 and two un-urned deposits of cremated bone, according to Dalrymple. Whether Pot 6 had been associated with the battle axehead cannot be determined. The rimsherds are too small to
allow reliable estimation of the urn’s diameter. Wall thickness is 13.5–14. The surfaces had been carefully smoothed and slipped, and parts (at least) of the exterior polished to a low sheen; some lithic inclusions protrude through the surfaces. The sherds are laminar, with a hackly fracture surface. The exterior is light brown and the core and interior are blackish. Patches of black organic encrustation are on the interior. Inclusions are angular and sub-angular fragments, up to $2.15 \times 9.5$, of glittery, speckled, fine-grained black and white mica-rich granodiorite, at a density of 20–25%. One sherd from this pot was subjected to organic residue analysis, as described for Pot 5, by Lucija Šoberl. No organic compounds were detected.

Pot 7 (C1100, SF 201, not illustrated) Two conjoining (and now refitted) sherds from the tapering belly of an urn, found along with Pot 8 and a burnt pin fragment found in the filling of the 1855 excavation just to the south of the north-western portal stone. Th 16; E diameter at this point: 240. The sherd is small – only $38 \times 35$ – but it is clear, from its colour, texture and lithic inclusions, that it represents a different urn from the ones described above and below. The exterior and interior surfaces are a light pink-orange brown and the core is salmon pink; the sherd had broken along a coil joint plane along its lower edge. The surfaces had been carefully smoothed, possibly by wet-smoothing. The fabric is fairly hard but heavily abraded, and lithic inclusions are sparse and small, with just one larger inclusion – a rounded fragment of a dark, slightly glittery stone, $5 \times 3$. The other inclusions comprise one piece of micaceous stone and several sub-angular fragments of a creamy mineral and a speckled whitish and dark mineral; all may have been present naturally in the clay.

It is impossible to determine the urn type from this small sherd.

Pot 8 (illus 1.49) Two sherds, from the rim and body of a burnt accessory vessel, found along with Pot 7 and the burnt pin fragment in the filling of the 1855 excavation just to the south of the north-western portal stone. ERD $c$ 120; Th 7–12. The rim is slightly everted, with a deep straight internal bevel and a shallower external bevel; the overall profile cannot be determined, but it is likely to have had a flat base. The interior rim bevel is decorated with a
band of horizontal incised chevrons, framed top and bottom by single lines and by single rows of impressed dots beyond these. The exterior bevel has a row of similar impressed dots between two horizontal lines, and farther down the body two zones of horizontal chevrons are visible, framed once more by horizontal lines, and with a row of dot impressions between these lines. The surfaces had been fairly carefully smoothed. The exterior colour is partly obscured by burnt-on sandy sediment, but appears to be a pinkish-buff; the core is salmon pink and pale grey; and the interior is salmon pink on the body and pink-buff on the rim bevel. Inclusions are small (generally less than \(2 \times 2\)) and sparse (\(\approx 3\%\)); they include a creamy mineral (feldspar) and tiny mica platelets. See below for a discussion of comparanda.

**Finds from Dalrymple’s excavation**

**Pot 9 (NMS X.EP 1, plus four sherds from NMS X.EP 3; illus 1.50)**  Around two-thirds of an urn of Collared/

Illustration 1.50
The two vessels supposedly from the 1855 excavation, together with a watercolour painting of the urn from Tillybin. The painting is reproduced by permission of RCAHMS

Vase type, found inverted, resting on a small flat stone and covered by a similar stone, just to the south of the north-westerly orthostat (position ‘3’ in Dalrymple 1884, fig 1). Ht 238; R.D \(\approx 220\); max D (at bottom of neck) 230; BD 90; Th \(\approx 12.5\). Slender bipartite vessel, slightly oval in plan, comprising a short, concave-walled neck/collar \(\approx 45\) mm high, terminating in a low cordon, and below this a body that tapers evenly to a fairly narrow flat base. The internal wall-base junction is a continuous curve. The rim, expanded at its inner and outer ends, has a straight, sloping bevel on its interior and a narrow vertical bevel on its exterior edge. These bevels, along with the neck and upper belly, are decorated with carefully made impressions of plaited cord; they are arranged in a criss-cross pattern on the neck and upper belly, with a pair of horizontal lines above and below on the neck. On the external rim bevel there is a band of narrow horizontal chevrons, framed above and below by a horizontal line, and on the interior rim bevel there are faint chevrons. The surfaces had been carefully smoothed and slipped on the exterior, and probably on the interior as well. The exterior is medium-brown, with a small patch of blackish-brown encrustation on the neck. The core is blackish-grey, and the interior is medium-brown and dark grey. The pot had been restored some considerable time ago, and this has both affected the interior colour and made it hard to detect whether there is a thin encrustation on the interior, as seems likely. The lithic inclusions consist of angular fragments, mostly small but some as large as \(7.5 \times 4.5\), of blackish, glittery, fine-grained mica-rich granodiorite; some of the fragments have white speckles. The density is around 7–10%. One of the loose sherds in NMS X.EP 3 had broken along a coil joint line.

**Pot 10 (Two sherds from NMS X.EP 3; not illustrated)**  Two sherds, from the tapering lower belly of an urn; their colour and texture indicate that they do not belong to any of the urns described above. The diameter at this point is \(\approx 200\), and the wall Th, \(\approx 12.5\). The surfaces had been carefully smoothed and probably coated with a thin slip on the interior and exterior. The exterior, and outer part of the core is light brown and slightly orange-brown; the rest of the core and the interior, black. There is a thin organic encrustation on the interior. The inclusions are of angular fragments of finer-grained black and white speckly granodiorite, up to \(9.5 \times 5\), and at a density of 15–20%.
Pot 11 (Two sherds from NMS X.EP 3; not illustrated)
One small sherd (26 × 23 × 12.5) plus a smaller, spalled sherd, from an urn with a greyish exterior. The larger of the two is decorated with diagonal incisions on its exterior. The surfaces had been carefully smoothed and the lithic inclusions comprise fine-grained, black and white speckled granodiorite, including one large fragment 14 × 7.5 in size. The decoration is very similar to that on NMS X.EA 137, the upper third of a collared urn that was acquired from Watt in 1865, a decade after Dalrymple’s excavations at Broomend of Crichie. It is registered in the Museum as having come from that site, and an illustration of it features in Coles’ 1901 account of Dalrymple’s excavation (as fig 31), in which it is stated that it came from beside the north-easterly orthostat (no 2 on his fig. 28). It matches the NMS X.EP 3 material not only in its decoration but also in its lithic inclusions. However, some uncertainty must remain over whether the urn had indeed come from Broomend of Crichie, as it bears a suspiciously
close resemblance to an urn that had been found in at Tillybin, several kilometres away to the SSW, in 1834. By chance, a watercolour showing this urn and its associated accessory vessel recently came to light in an antiquarian notebook, and thanks to the kind offices of Iain Fraser of the RCAHMS, it is reproduced here as illus 1.50, beside a photograph (illus 1.51) and the line drawing of NMS X.EA 137. The resemblance is striking, and the estimated rim diameter of 9.5” (240mm) on the Tillybin illustration is close to the 200mm rim diameter of NMS X.EA 137. The Tillybin accessory vessel was acquired by the National Museum from the Watt Collection (NMS X.EE 27), so the urn may well have been in Watt’s possession as well. It is possible that the provenance had accidentally been switched from Tillybin to Broomend of Crichie while the urn was in Watt’s possession; alternatively, NMS X.EA 137 genuinely is from Broomend, and we are dealing with two virtually identical urns. The decorated sherd from NMS X.EP 3, acquired from Dalrymple (via the Earl of Kintore) in 1856, argues in favour of the latter. The question is unlikely to be resolved.

The ‘Collared/Vase Urns’ from Broomend of Crichie are of interest as they may form part of a regionally specific group of Early Bronze Age urns that do not fit comfortably within the traditional classification of either Vase Urns (also known as Food Vessel Urns) or Collared Urns, although they have features relatable to both design traditions – and indeed to some Cordoned Urns. It is for this reason that Cowie described Pot 9 as an ‘atypical’ Vase Urn (Cowie 1978, 103): it shares the generalised bipartite shape and the expanded bevelled rim form with Vase Urns, while its simple decorative scheme is more reminiscent of Collared Urns. Longworth chose not to include that pot in his corpus of Collared Urns (1984). The difficulty of pigeonholing these urns serves to remind us once more that urn design was not as rigidly constrained as the traditional typological scheme of ‘Vase, Collared, Cordoned and Bucket Urn’ suggests (Sheridan 2007b). The dates for the Broomend of Crichie urns suggest that they were made when Vase Urn design was dying out and when the Collared Urn design tradition had been adopted and locally adapted. Comparanda for the Broomend of Crichie Collared/Vase urns can be found within a 30km radius, at Seggiecrook (see below) and in the Haddo House Estates (NMS X.EA 191). As for the urn that fits more comfortably within the Collared Urn class, Pot 5, in terms of existing Collared Urn classificatory schemes, Pot 5 would fall within Longworth’s ‘Secondary Series’ (1984) and Burgess’s ‘Late’ group (Burgess 1986). Comparanda include Grandtully, Logierait, Perth and Kinross (Longworth 1984, no 1997), whose associated cremated bones have been radiocarbon dated to 3580 ± 60 BP (GrA-21743, 2130–1750 cal BC at 2σ: Sheridan 2007b, 182).

Although represented by only two sherds, it is clear that the accessory vessel, Pot 8, is recognisable among the larger examples of this class of pot. A relatively local parallel is offered by the pot from Tillybin that accompanied the urn discussed above (illus 1.50); a more distant parallel is the burnt pot from Temple, Midlothian, found with a Collared Urn (Longworth 1984, urn no 1942). The fact that the Broomend of Crichie and Temple pots have been burnt suggests that they had been on the pyre. It has been suggested elsewhere (Sheridan 2007b) that accessory vessels may have been containers for the material (eg glowing embers) used to light the pyre, to be placed subsequently on the pyre.

Lithic artefacts

RICHARD BRADLEY

Illus 1.32 shows the distribution of lithic artefacts within the deposits disturbed in 1855. With one exception, they are confined to the area bounded by