



Loch Tummel and Loch Rannoch route shows a marked absence of monuments of the Bronze Age and earlier whereas the Tay and the Earn routes were much frequented in the second millenium. On the other hand, the northern route was patronised by fort builders who have left their handiwork scattered in Strath Tummel and also in Glen Lyon which connects by a series of easy passes north to Loch Rannoch and west to Glen Orchy. These people were followed along the same route at a later date by early Christian missionaries from Iona.

The importance of the Tay and the Earn routes for the archæology of the second millennium in Scotland was first noted by Mr Lacaille<sup>1</sup> but the subject was first studied in detail by the late Sir Lindsay Scott.<sup>2</sup> Sir Lindsay assumed that the traffic was exclusively from the west and based his argument on the Irish and west coast affinities of archæological material from central and north-eastern Scotland. He should have made allowance for reciprocal traffic from the east coast at least to the limit of the fertile lands in Strath Tay and Strath Earn, for in both these valleys there is a type of monument, almost certainly of second millenium date, whose riverine distribution indicates inland and westward penetration from the coasts of the North Sea.

Since Professor Piggott published his distribution map of chambered tombs of the Clyde-Carlingford culture in 1954<sup>3</sup> outliers to his main area of concentration in south-west Scotland have grown steadily in numbers (fig. 2). A curious feature of the extension is the way in which the distribution of these tombs turns north from the Clyde isthmus instead of continuing eastward towards the Forth. It is not always profitable to look for the reason why prehistoric migratory movements made use of a particular route because the reason, if it exists, may not be capable of expression in terms of modern society. In the case of the second millennium use of the Tay and the Earn routes there is however justification in seeking to explain why people dragged their canoes over a 600-ft. watershed as must have happened between Glen Falloch and Glen Dochart. It is suggested that the main reason was the heavy oak forest then covering the carse clays above Stirling. Today the remains of this prehistoric forest are represented by extensive peat beds of which the largest and best known is Flanders Moss.<sup>4</sup> In the last hundred years much of the land underlying the peat has been reclaimed and the original limits of the forest are uncertain<sup>5</sup> but it must have come close to the chambered tombs on Stockiemuir<sup>6</sup> and Dunbartonmuir.<sup>7</sup> It is from this point that the distribution turns north following Loch Lomond and moving inland from the heads of Loch Long and Loch Fyne and up Loch Awe, crossing the watershed to Crianlarich and Tyndrum and pioneering the Tay and the Earn routes to the east.

Mr J. G. Scott has suggested that in their search for good agricultural ground

<sup>1</sup> *P.S.A.S.*, LXIII, 325.

<sup>2</sup> *P.P.S.* (1951), Part I, Paper No. 2, p. 16.

<sup>3</sup> *Neolithic Cultures of the British Isles* (C.U.P., 1954), 153, fig. 23.

<sup>4</sup> Cadell, H. M., *Story of the Forth* (1913).

<sup>5</sup> There is a noticeable absence of chambered tombs along Loch Katrine and Loch Vennacher and in the valley of the Teith probably indicating the proximity of the oak forest and the necessity to cross the watershed to the north.

<sup>6</sup> *P.S.A.S.*, LXXXIII, 230.

<sup>7</sup> *Discovery and Excavation, Scotland 1956*, 15.

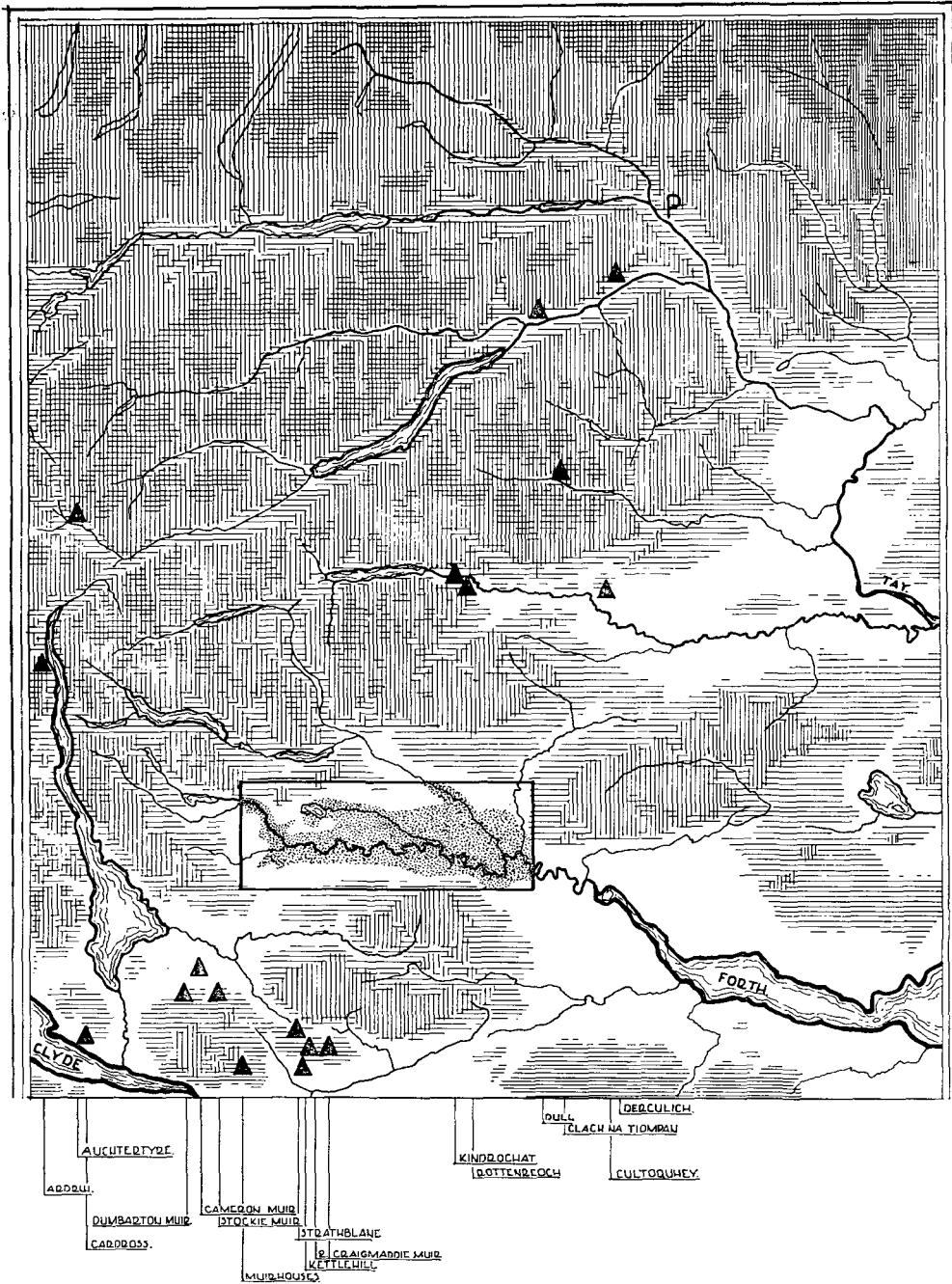


FIG. 2. Clyde-Carlingford chambered cairns in Central Scotland (with the exception of Derculich)

without the necessity for extensive forest clearance the Clyde-Carlingford people may have been forced into the central zone of the southern Highlands because the route up the Great Glen was closed to them. They were probably not the first chambered tomb builders to reach Scotland and Professor Piggott has suggested that the Great Glen route to the north-east had already been pioneered by Passage Grave builders.<sup>1</sup>

Mr Lacaille has described what may be the ruins of a long cairn at Stuckindroin<sup>2</sup> near Ardlui at the head of Loch Lomond and there is a similar site on the farm of Auchtertyre near Tyndrum.<sup>3</sup> From just west of Killin the chambered tomb builders could either follow Loch Tay or, by turning south through Glen Ogle, they could enter Strath Earn.

In Strath Tay two new sites of chambered tombs have been identified. The first is below the village of Dull.<sup>4</sup> There is little to be seen here apart from a portal entry and the tops of the stones of what may be a segmented chamber (Pl. XII, 1). The second site lies further east above the farm of Derculich.<sup>5</sup> All that remains *in situ* are the three uprights of the polygonal chamber of a passage grave (Pl. XII, 2).

There are four sites in Strath Earn between Comrie and just east of Crieff with an outlier in Wester Glenalmond.

The most westerly site is the long cairn at Kindrochat excavated by the late Professor Gordon Childe in 1929 and 1930.<sup>6</sup> Rottenreoch,<sup>7</sup> just west of Crieff, is an unexcavated site but the tops of slabs forming a chamber in the eastern end protrude through the turf.

At Cultoquhey,<sup>8</sup> between Crieff and Methven, the original Clyde-Carlingford tradition has degenerated into a segmented cist inserted into the periphery of a mound (Pl. XII, 3). The character of this mound is uncertain as it has not been examined. It is probably natural but appears to have had an artificial capping of earth and small stones. Pottery with characteristic finger-tip rippling was found at Cultoquhey. The fabric of the ware is thin and hard with a fine black slip and the rippling has been carried over a simple rolled rim. Parallels come from two habitation sites; at Lyle's Hill in northern Ireland and at Easterton of Roseisle in Morayshire. The ware is common in the Clyde-Carlingford type tombs of northern Ireland. With the pottery at Cultoquhey was an inhumed burial and a leaf-shaped arrowhead of flint. If there is a primary burial under the capping of the tumulus at Cultoquhey it would provide a relative time scale for the arrival of Clyde-Carlingford tomb builders in the area.

On moorland<sup>9</sup> behind the policies of Clathick House between Crieff and Comrie the end stone and cover-stone of a megalithic cist are exposed (Pl. XIII, 1). They lie on the summit of a low knoll which is natural but may have had an artificial capping of cairn material.<sup>10</sup> The similarity with Cultoquhey is enhanced by the tall end slab which in both cases projects several feet above the tops of the side slabs. Mr J. G.

<sup>1</sup> Piggott, *op. cit.*, 374.

<sup>2</sup> *P.S.A.S.*, LXII, 336.

<sup>3</sup> Nat. Grid NN/352288.

<sup>4</sup> Nat. Grid NN/808490.

<sup>5</sup> Nat. Grid NN/884527.

<sup>6</sup> *P.S.A.S.*, LXIV, 264-72, and LXV, 281-93.

<sup>7</sup> *P.S.A.S.*, LXXVII, 31.

<sup>8</sup> See *Discovery and Excavation, Scotland 1958*, Scottish Bibliography, 46.

<sup>9</sup> Nat. Grid NN/813235.

<sup>10</sup> A third Perthshire example of this method of giving a natural hillock the appearance of a cairn is at Cairntullich (Nat. Grid NN/874504) between Aberfeldy and Grandtully.

Scott has drawn attention to a similar site at Clach Andreis, Sworddale, in Ardnarmurchan where the head-stone of an unexcavated megalithic cist, almost certainly of Clyde-Carlingford type, rises 3 ft. above the adjacent side slabs (Pl. XIII, 2). All three instances may be connected with the standing stone which protrudes through

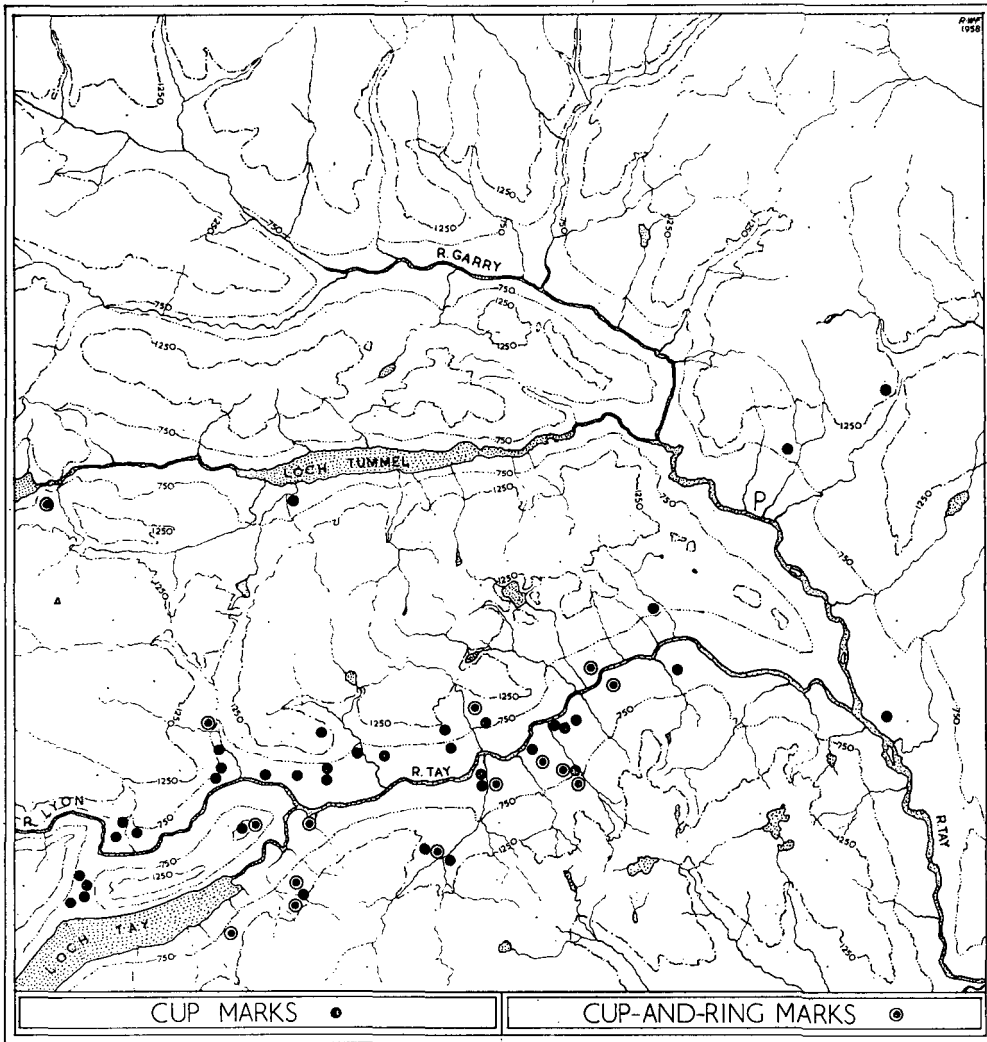


FIG. 3. Distributions of cup marks and cup and ring marks in Strath Tay

the cairn material 13 ft. west of the west end of the segmented chamber in the eastern end of the chambered tomb at Kindrochat.

The outlier in Wester Glenalmond is the long cairn of Clach na Tiompain excavated in 1954.<sup>1</sup>

<sup>1</sup> P.S.A.S., LXXXVIII, 112.

Certain relics from central Perthshire can be associated with the arrival there of builders of chambered tombs. Two highly polished jadeite axes come from sites on the second millennium routes. One was found on Comrie Farm at the east end of Loch Tay and the other was found at Lochearnhead.

Such axes occur within the general Clyde-Carlingford province and a fragment occurred in the blocking of the portal entry of Cairnholy I.<sup>1</sup>

Professor Piggott has pointed to an association between builders of Clyde-Carlingford tombs in County Antrim and a stone axe factory at Tievebulliagh.<sup>2</sup> Two axes from the Irish factory were found in the blocking of the forecourt of a typical Irish Clyde-Carlingford tomb at Dunloy and an axe of typical Tievebulliagh porcellanite has been found in Dunbartonshire within the Scottish Clyde-Carlingford province.

Recently the site of an axe factory has been located on the slopes of Craig na Caillich above Killin.<sup>3</sup> Here the flakes which constitute the working debris of the factory are bedded in peat and have become exposed as the peat eroded. Among a vast quantity of flake material a few roughed out axes have been found and also some larger blocks which show signs of primary trimming.

In view of this discovery it should be noted that two axes, one from Glen Falloch and the other from Crieff, which have recently been sectioned, probably derive from Great Langdale.

Strath Tay and its immediate environs carry one of the most remarkable concentrations of cup markings in Scotland. A field survey of these markings makes evident a distinction between sites which have cup-and-ring markings and sites which have cup marks only (fig. 3). Cup-and-ring markings tend to be on relatively high ground. Balmacnaughton, Braes of Taymouth, Urlar, Braes of Cultullich, Drummond Hill, Glassie Farm and Murthly Farm<sup>4</sup> are all sites which lie upwards of the 500-ft. contour. Cup marks on the other hand have a pronounced low level distribution and cluster most thickly on the flat ground which flanks the river east of the loch. And where cup-and-ring markings do occur on low-lying sites, such as Croftmoraig, Clochfoldich and Balnabeggan, the cup-and-ring marks are usually restricted to only one or two examples amid a large number of single cups. Elaborate cup-and-ring markings tend to be made more often on rock outcrops, as for example Braes of Cultullich, Balmacnaughton and Drummond Hill. Cup marks occur most frequently on free-standing boulders.

On the hillside east of Tombhuie Cottage and above the main group of cup-and-ring marks at Braes of Taymouth are two boulders some distance apart<sup>5</sup> which carry an unusual design of gapped circles (fig. 4 and Pl. VI).<sup>6</sup> They bear a remarkable similarity to the designs on the kerb-stones of the chambered tomb of Knowth in Ireland (fig. 5) and their significance is best appreciated by referring to a paper written by Eoin MacWhite in 1945.<sup>7</sup> In discussing Irish Bronze Age rock scribings

<sup>1</sup> P.S.A.S., LXXXIII, 153.

<sup>2</sup> op. cit., 174 and 288.

<sup>3</sup> Unpublished but see *Discovery and Excavation, Scotland 1955*, 35. Information kindly supplied by Mr P. R. Ritchie.

<sup>4</sup> Gillies, W. A., *In Famed Breadalbane* (Perth, 1938), 23-27.

<sup>5</sup> Nat. Grid NN/792448.

<sup>6</sup> Gillies, op. cit., 26.

<sup>7</sup> *J.R.S.A.I.*, LXXVI (1946), 59-80.

MacWhite distinguished between the art of the so-called Galician Group and Passage Grave art. In Ireland examples of the former group are found all along the

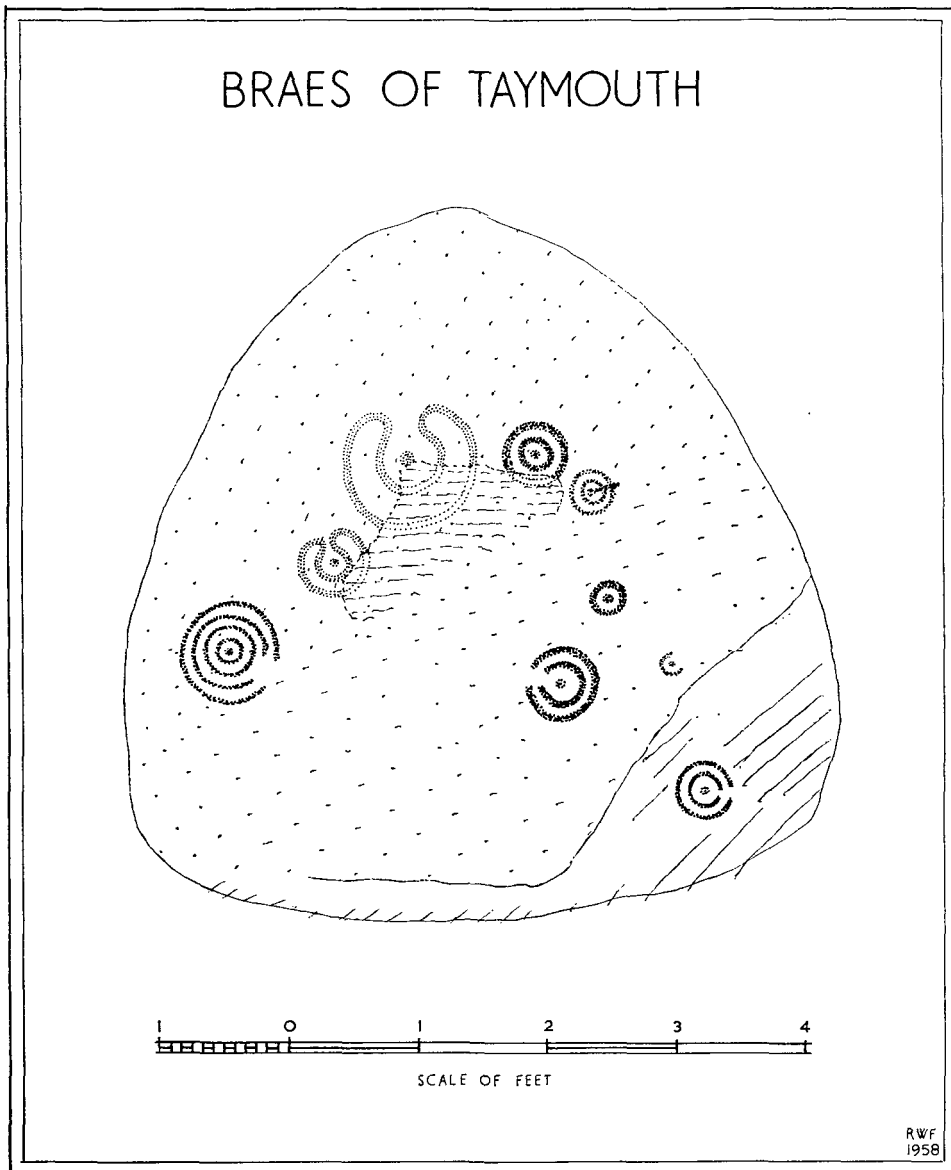


FIG. 4. Cup and ring marked boulder at Braes of Taymouth

coasts of Kerry with an extension into Donegal and secondary concentrations on the coasts of Cork, Waterford and Wicklow. MacWhite suggested that the art of the Galician Group, as the name implies, was a type of rock carving introduced into

southern Ireland from north-west Spain and northern Portugal. The parallels he produces in the respective areas are convincing. Because those areas in Ireland where art of the Galician Group is found are also the areas richest in copper and gold the suggestion is made by MacWhite that the people responsible for the first were exploiting the second. Cup-and-ring markings are not part of the design repertoire of Passage Grave art but are commonly found in the Galician Group. But overlapping of the two idioms must have occurred early and MacWhite interprets the gapped circles on the kerb-stones at Knowth as examples of Galician art in a Passage Grave context. In spite of MacWhite's distribution map of Galician

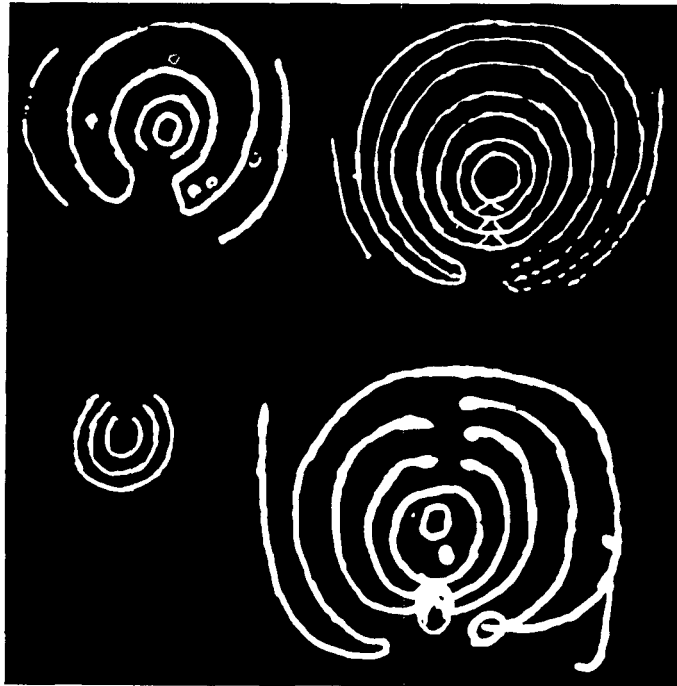


FIG. 5. Gapped circle designs from Knowth (after Macalister) Reproduced by kind permission of The Royal Society of Antiquaries of Ireland

art in Scotland it seems probable that what was brought over here was a mixture of the two traditions. There is something suspiciously like an eyebrow pattern on the second Tombhuie stone (Pl. XIII, 3). It and the rectilinear device on the same stone are typical designs of Passage Grave art.

MacWhite ascribes cup-and-ring markings to the Scottish Middle Bronze Age and associates them with the makers of food vessels. In support of this idea he quotes instances of short-cist burials with food vessels where the cover-stones have been inscribed in the Galician Group idiom. But designs on a cover-stone are not necessarily contemporary with the cist and in Strath Tay there is no coincidence



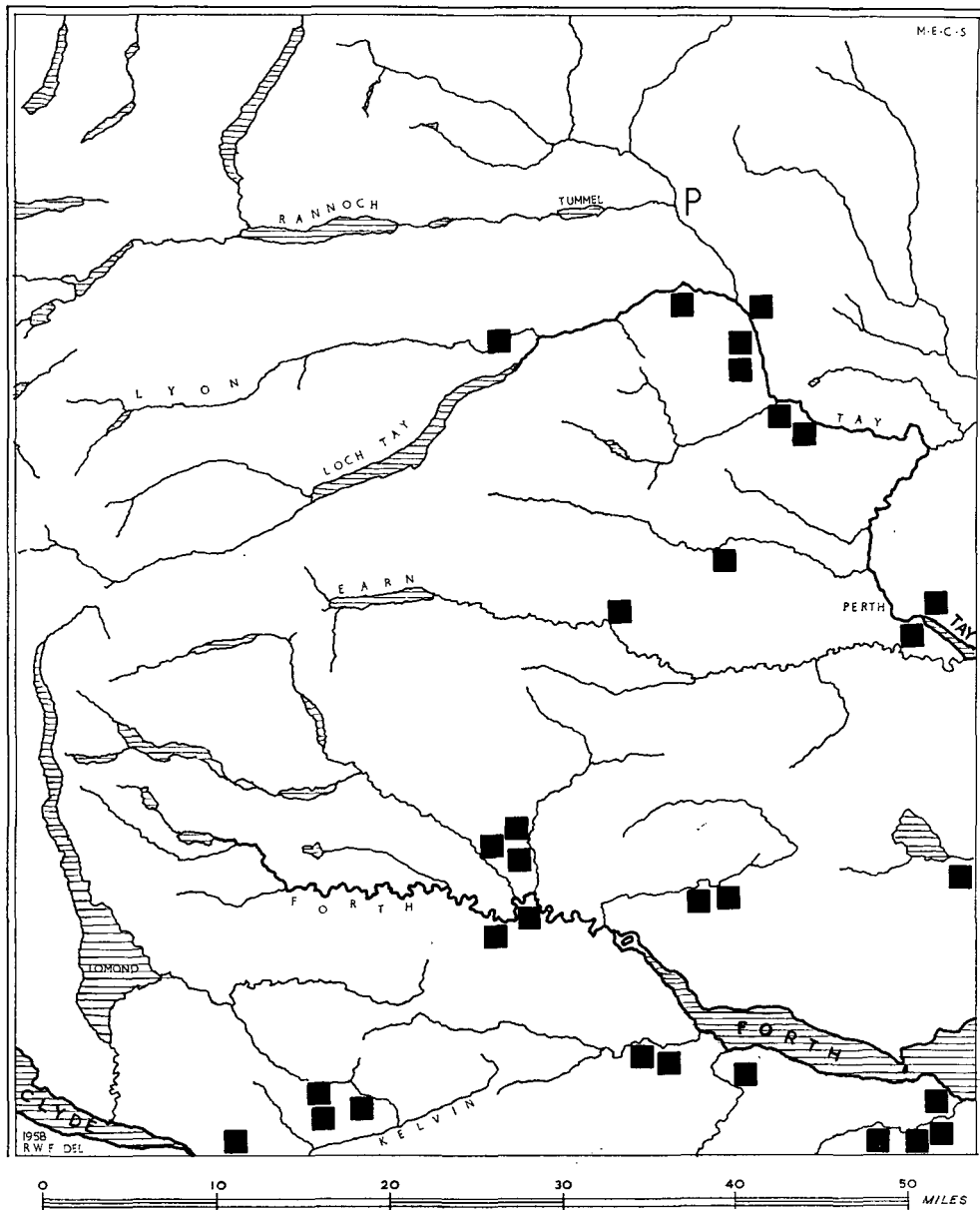


FIG. 6. Distribution map of food vessels in Central Scotland

between the distribution of food vessels and that of cup-and-ring markings. The latter appear to have entered Strath Tay from the west along the same route as that followed by the chambered tomb builders. East of Strath Tay cup-and-ring markings are sporadic and there are none of the calibre of Balmacnaughton, Urlar or Braes of Cultullich. Westward they are found at a number of sites along the north shore of Loch Tay and there are superb examples in Glen Lochay west of Killin.

Food vessels look like an intrusion from the east (fig. 6).

If, as MacWhite suggests, there is some connection between Galician art and prospecting for copper and gold then the distribution of cup-and-ring marked sites in Strath Tay has significance. Copper and gold have both been mined at Tomnadason above Ardtalnaig on the south shore of Loch Tay. Gold occurs at the west end of Loch Earn and near Loch Freuchie in Glen Quaich.<sup>1</sup> Glen Quaich lies across the watershed to the south of Loch Tay and the old route which links the two valleys passes near to the cup-and-ring marked sites of Balmacnaughton, Tombhuie and Braes of Taymouth.

But if the drawing of cup-and-ring marks on rock outcrops is some sort of sympathetic magic for the location of ores<sup>2</sup> these prospectors must have arrived in Strath Tay at the beginning of the second millennium close on the heels of the chambered tomb builders<sup>3</sup> and certainly before the Middle Bronze Age food-vessel culture in the area.

Along the shores of the Moray Firth a number of flat axes of copper and bronze are typologically very early and some are decorated in the Irish style. Moreover their distribution is similar to that of open stone moulds for casting flat axes but the axes and moulds have a mutually exclusive distribution to short-necked beakers. This contemporaneity must indicate the arrival of early metallurgists in north-east Scotland soon after 2000 B.C. If Irish smiths were moving in the wake of chambered tomb builders pioneering the route to the north-east via the Great Glen there is every reason to assume similar circumstances in the Clyde-Carlingford province of the central Highlands, the only difference being that in the north-east the flat axes were being traded to pockets of beaker makers in Aberdeenshire, Banff and Elgin whereas in central Perthshire the absence of a beaker market restricted the activities of the early metal traders to prospecting for ore.

Further confirmation of MacWhite's association between Galician art and early metal working comes from Wigtownshire and Kirkcudbrightshire, which he regards as areas of primary extension for Galician art in Scotland. Straight butted flat axes of southern Irish type occur in this area and a site on Wigtown Bay yielded copper ingots in the form of unfinished flat axes near the outcropping of surface copper lodes.<sup>4</sup>

Burial monuments other than chambered tombs are either large cairns of water-worn stones or else earth tumuli of varying sizes. Of the former group the only

<sup>1</sup> *P.P.S.* (1951), Part I, Paper No. 2, App. II.

<sup>2</sup> Piggott and Henderson, *Scotland Before History* (Nelson, 1958), 61.

<sup>3</sup> Despite the gapped circles on the two Tombhuie stones it might be permissible to link the artists with the polygonal passage grave at Derculich. After all, the two art traditions had already mingled in Ireland and the builders of the Boyne tombs may well have been the tycoons of the early metal trade.

<sup>4</sup> *Stat. Acc.*, Parish of Whithorn, xvi, 285, fig. on p. 286.

example which has been examined is in Glen Cochill near the summit of the watershed between Dunkeld and Aberfeldy. This cairn has recently been completely removed but had originally been 60 ft. in diameter with a circumference demarcated by a ring of contiguous boulders. Beyond this there had been a circle of free-standing boulders set at irregular intervals. The primary burial had consisted of a short cist covered by a massive capstone. The cist had been completely filled with fine river gravel from which no relics were recovered. The cover-stone had slipped due to the partial collapse of one of the underlying side slabs and from the lowest

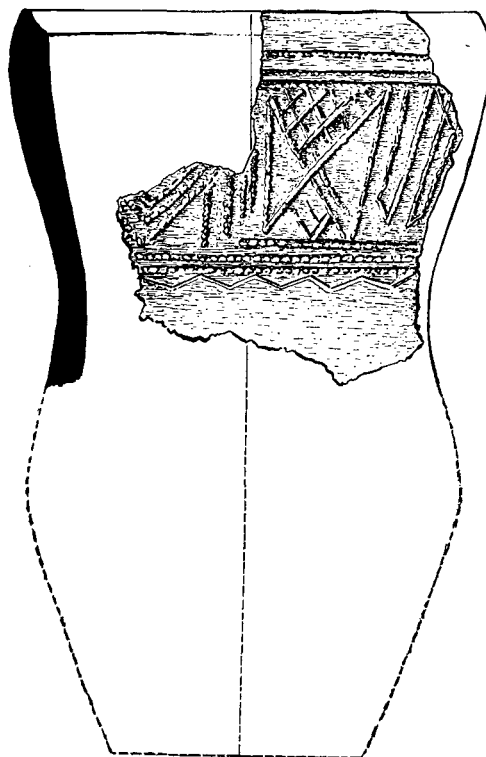


FIG. 7. Reconstructed beaker from short cist under Carn Ban in Glen Cochill, Perthshire (Drawn by Mrs Alison Young, F.S.A.)

point of the upper edge of the cover-stone fragments of a long-necked beaker were found (fig. 7). The paste of the beaker is coarse and poorly made and the inner bevel of the rim is reminiscent of food-vessel ceramic. The monument had been known locally as Carn Ban or The White Cairn and quantities of white quartz had been incorporated among the cairn material.

Other examples of this type of burial occur (fig. 8). Near Loch Hoil the cairn stands at the summit of a high pass. The cairn at Ardtalmaig 200 yds. from the south shore of Loch Tay has been surrounded by a peristalith like the Glen Cochill example. A third cairn, now largely destroyed but originally between 40 and 60 ft.

in diameter, lies on moorland above the farm of Margmore far up the Urlar Burn.

Two examples lie outside Strath Tay but on its eastern and southern borders and may be regarded as part of the same group. The first, a great cairn 80 ft. in diameter, lies on the east bank of the Fender Burn north-west of Monzie Farm on high plateau country above Blair Atholl and on the edge of agricultural land at a

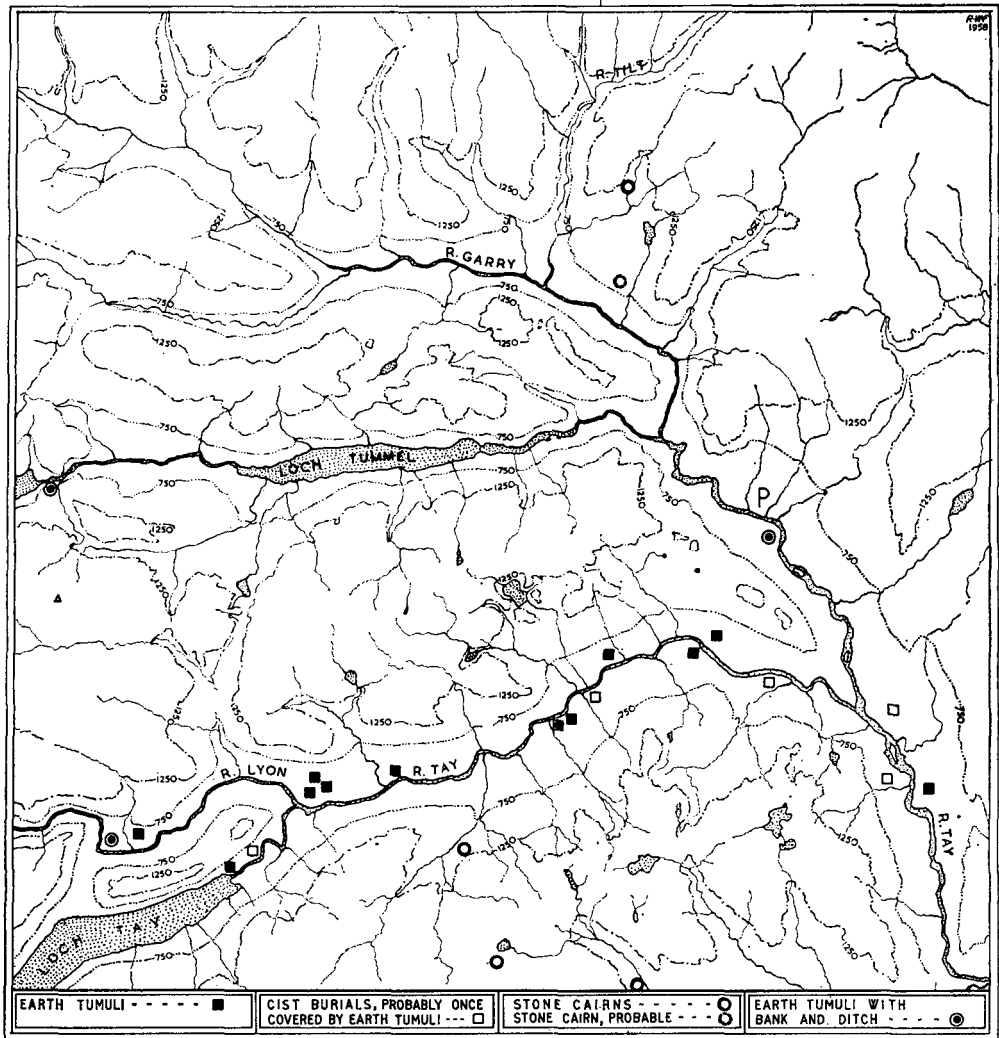


FIG. 8. Distribution map of cairns and tumuli in Central Perthshire

height of 1,000 ft. above sea level. The second is on high ground close to 1,600 ft. above sea level on the southern ridge which overlooks Newton Bridge in Wester Glenalmond. What must be a cognate structure from its size and situation lies on the edge of high moorland on the farm of Strathgroy above Aldclune. Here the monu-

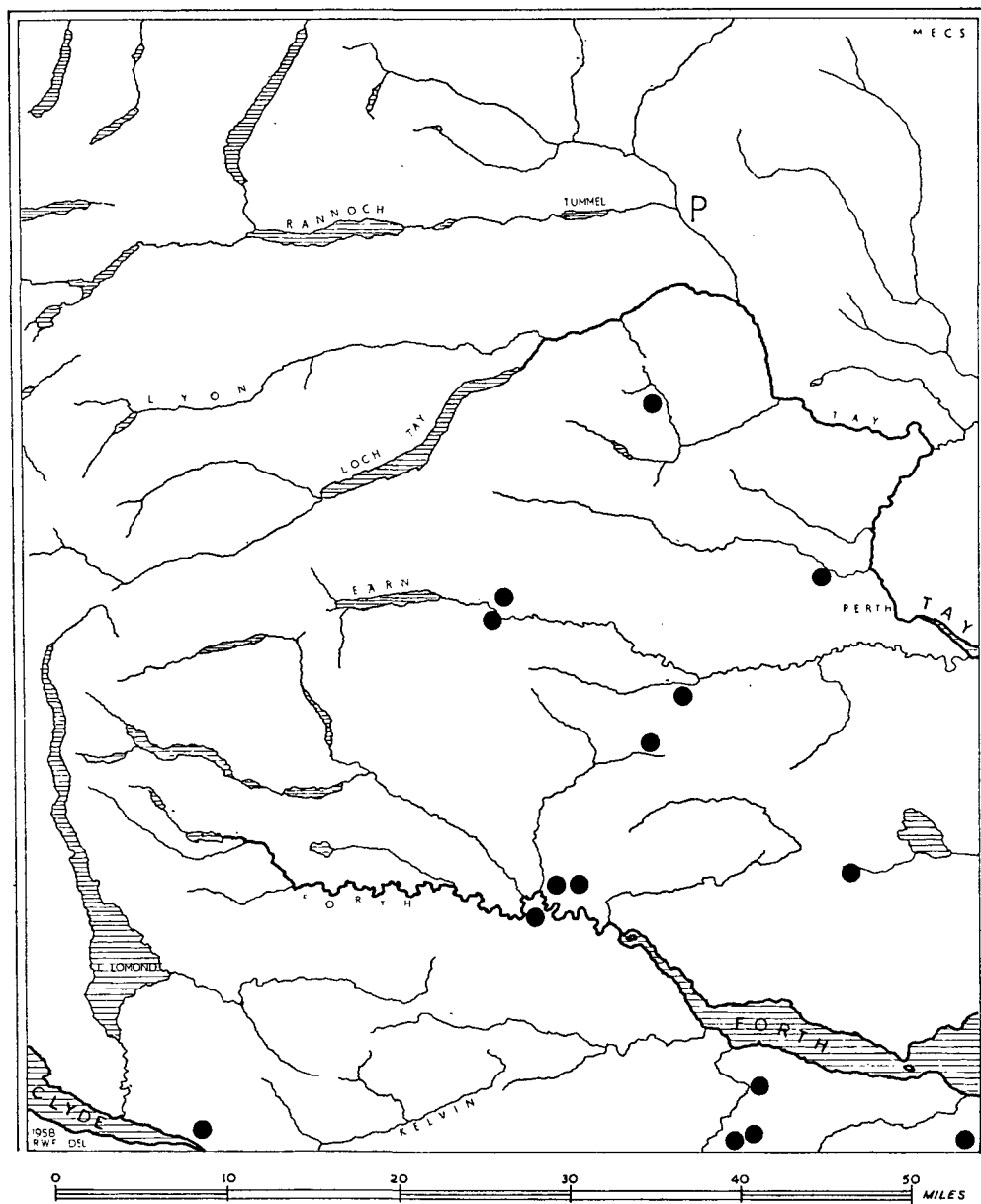


FIG. 9. Distribution map of beaker pottery in Central Perthshire

ment appears to be a gigantic tumulus of earth but like two of the previous examples it has a peristalith.

With one exception all these monuments lie on high ground, above and well above the 500-ft. contour.

The Glen Cochill cist yielded beaker sherds of a type not hitherto found north of the Forth and Clyde isthmus and therefore unrelated to the main Beaker province in Aberdeenshire.<sup>1</sup> Long-necked beakers are associated further south with handled beakers and one of two beakers from a cist burial at Balmuick in Strath Earn was handled.

Apart from Glen Cochill, Strath Tay has no other examples of beaker pottery (fig. 9) despite intensive agricultural operations along the bottom of the valley. If the great stone cairns contain long-necked beaker burials, if their siting has no ritual significance, then their positioning may indicate that by the time they arrived in Strath Tay the valley and the available agricultural ground in the vicinity was already occupied.

A number of earth tumuli occur in both Strath Tay and Strath Earn. Unlike the great stone cairns their distribution is markedly low level, being on or near the river banks. Unfortunately none have been properly examined. Most of them have been planted with trees as amenity features and several are so ploughed down as to be almost invisible. Large examples of 30 ft. and over occur at Farleyer, Ballechin and Clochfoldich. Smaller examples occur on the river flats below Dull where there are three, on the south bank of the river at Cairntullich and at Lundin Farm. Beyond Strath Tay they are not found to the westward beyond the limit of the fertile lands at the east end of Loch Tay, but there are numerous examples to the eastward in the lower reaches of the Tay and the Earn. Well-known examples occur at St Martins north of Perth, at Almondbank west of Perth, at Mains of Fordie near Caputh and at Lawlton near Coupar Angus.

Their low-level distribution suggests that they belong to an intrusive culture penetrating inland from the east coast and using the broad valleys of the Tay and the Earn for the mechanics of their expansion. Without excavation it is profitless to guess at their authorship but the absence of Beaker burials in the lower reaches of the Tay and the Earn suggests that these tumulus burials may be in part contemporary. The absence of beakers from eastern Perthshire is explicable only if there was already here an alien but contemporary people hailing like the Beaker people from across the North Sea.

I am indebted to Mr R. W. Feachem for drawing the distribution maps, figs. 2, 3, 6, 8 and 9 and for the presentation of the markings on fig. 4.

<sup>1</sup> But see *P.S.A.S.*, LXXXII, 68, and fig. 17, 1 and 2.





*(Photograph by kind permission of Miss A. S. Henshall)*

1. Remains of chambered tomb at Dull, Strath Tay



*(Photograph by kind permission of Mr and Mrs J. G. Scott)*

2. Remains of a polygonal burial chamber at Derculich, Strath Tay



*(Photograph by kind permission of Miss A. S. Henshall)*

3. Segmented megalithic cist at Cultoquhey near Crieff





*(Photograph by kind permission of Mr and Mrs J. G. Scott)*

1. Megalithic cist at Clathick near Crieff



*(Photograph by kind permission of Mr and Mrs J. G. Scott)*

2. Megalithic cist at Clach Andreis, Swordale, Ardnamurchan

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3. Cup and ring and gapped circle design on a boulder at Tombuie, Braes of Taymouth