

## THE HISTORICAL CONTEXT OF THE ORIGIN OF THE BROCHS<sup>1</sup>

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The problem of how, why and where the brochs appeared has long exercised Scottish archaeologists but until recently no really satisfactory solutions have been forthcoming for three reasons. In the first place no clear sequence of fort types had been worked out and demonstrated to be correct and without knowing exactly from what earlier structures the brochs developed, and where this happened, one cannot begin to understand the problem. Secondly our knowledge of the material cultures of the broch builders - as opposed to that of their secondary occupants - has been extremely sparse; it was non-existent in fact before the late 1940's. Thirdly the artefacts of pre-broch Iron Age communities were also hardly known, again with the exception of Jarlshof. Thus it was difficult to place the appearance of the drystone towers in an Iron Age culture sequence - either one based on pottery and finds or one based on a typology of the structures.

This situation has now altered drastically. Two independent lines of research have suggested to me new solutions, first to the problem of the structural development of the towers and, second, to that of the origin of the Iron Age material cultures of the Hebrides - the area now suggested by the first line of research as the birthplace of the brochs. When these separate theories are combined a new understanding of the historical context of the emergence of the brochs becomes evident.

There is no space here even to summarise the most probable interpretations of all aspects of broch studies and I shall take it for granted, first, that most of the structures were originally high enough to be classed as towers; second, that their crucial architectural feature was the high hollow wall with several superimposed mural galleries; and third, that they were primarily built to be intermittently occupied forts and not permanently inhabited farmhouses and were therefore descended from forts and not round dwellings. Evidence for all these assumptions is available.

Let us consider first and briefly the evidence for the structural origin and development of the brochs. In 1963 I examined a large number of them in various parts of Atlantic Scotland and it seemed to me then that the generally accepted view of their development - that the brochs of the Northern Isles were the earliest and produced secondary colonies in the Hebrides - should be reversed. A visit to Skye in particular emphasised to me how great was

the variety of gallery-walled stone forts in the Western Isles - in striking contrast to the situation in the far north where brochs are almost the only type of small stone fortlet found. It seemed obvious that the origin of the specialised brochs should be sought in the area where the greatest variety of comparable structures existed.

Having brought back from these field trips a mass of information on the size, proportions, structural design and topographical situation of upwards of 120 brochs it was possible to make some detailed comparisons between the brochs of different areas.

A simple scatter diagram was composed to show how brochs vary in several ways and it suggests several things. First the Hebridean brochs consistently have larger courts and thinner walls - both relatively and absolutely - than those of the northern counties (Caithness and Sutherland) and the Northern Isles. Indeed any broch which has a large court is more likely to be thin-walled. Second, most of the ground-galleried brochs are in the Hebrides and tend to have large courts and thin walls. Solid-based brochs can be similarly proportioned but their range of size is much greater. They are almost entirely confined to the far north and are generally more massively built with smaller courts than the others. This, with the structure of their wallbases, suggests that they were originally higher than the ground-galleried brochs.

The diagram suggests that the design of the brochs underwent change and development. Either the massive northern brochs could have been the earliest and the Hebridean ground-galleried forms were later offshoots from them - the traditional view - or the reverse happened. There is nothing to support the first view and everything to commend a Hebridean origin. Mousa, the best built and best preserved broch, occupies a distinct position in the diagram. It has a solid base with the smallest known central court (18 ft.) and the most massive walls in proportion (though not absolutely). It is quite impossible to believe that Mousa is other than the latest and best built broch and, that being so, the typological sequence should lead up to it.

There are many other architectural features - the design of door-checks, scarcement ledges, the positioning of stairways and so on - which support the view of the primacy of the Hebridean brochs. The topography of Atlantic Scotland could explain why ground-galleried forms gave way to solid-based. The Hebrides have many natural rock knolls which provide excellent defensive sites. Caithness and Orkney are flat and the lack of good defensive sites there doubtless stimulated the development of higher brochs - on more massive solid wallbases. Midhowe in Orkney supports this view. This was a typical

Hebridean ground-galleried broch but seems to have been built too high; at any rate its basal gallery began to collapse and had to be blocked with stone. It must have shown that the Hebridean style was not suited to great height and pointed the way to future developments - brochs with solid wall bases.

Any theory of broch origins must identify suitable earlier forts from which they could have developed. There are, in fact, plenty of possible ones in the west - and almost none in the far north - but serious consideration of these as prototype brochs has been held up by a false deduction. The undoubtedly late date of the galleried duns of Kildonan, Kintyre and Dun Cuier, Barra, were thought to show that all the so-called Galleried Duns of the west were later than the brochs. But this assumption was only valid if galleried duns were a homogeneous group of structures, which they are not. Neither of the two excavated sites possess the specialised broch high hollow wall and they are therefore irrelevant to the problem of broch origins. A small group of non-circular, open-sided fortlets do have this wall and I call them semi-brochs because of their close structural relationship with the brochs and also to distinguish them from all the other, more varied, low-walled galleried duns. The Semi-brochs are the obvious candidates for the progenitors of the brochs but until 1964 none of them had been excavated. Even so the undoubted pre-broch date of the so-called blockhouse at Clickhimin has been known for many years and this structure has some semi-broch architectural features. The early date of these fortlets - suggested by the Royal Commission in 1928 - was therefore always likely.

In 1964 and 1965 I excavated the semi-broch Dun Ardtreck on Skye specifically to test the theory of broch origins I had developed. Although excavation showed that no upper gallery was in fact preserved - so that no final proof of the presence of the high broch wall was available - the design and situation of the site leave little doubt as to its original nature. It is a D-shaped fortlet, the straight side being open and formed by the edge of an 80 foot high cliff. Ardtreck is exactly similar to Dun Grugaig, Glenelg, another D-shaped semi-broch on the edge of a steep drop; there the upper gallery of the broch wall is still partly preserved. Although many interesting results were forthcoming from the Ardtreck excavations the only point that matters here is the date of its construction. It was clear that it had been burnt and demolished at the end of its primary use, as a fort; the fused door-handle found in the entrance passage was eloquent evidence of the violence of its end. Some Roman sherds were found in the packing of the ramp which had been built up to the raised entrance passage immediately afterwards, to inaugurate the long period of domestic occupation of the demolished fort. Thus the archaeological evidence indicated that Ardtreck was probably built before the 2nd century A.D. and

was therefore at least the contemporary of the Hebridean brochs, if not earlier.

Seraps of charcoal collected from the rubble of the foundation platform gave a C-14 date for the construction of the semi-broch. This came out at  $115 \pm 105$  B.C., according to the best available half-life of carbon-14 and means that there is a 2:1 chance that Ardtreck was built between 325 B.C. and A.D. 95. There can now be no reasonable doubt that the semi-brochs were the progenitors of the round drystone towers.

If brochs originated in the Hebrides then it is the study of the material culture of this area - and not of Orkney and Shetland - which will throw further light on their emergence. Fortunately the excavation of the ground-galleried broch at Vaul on Tiree in the Inner Hebrides provided a long and valuable sequence of material cultures which started in pre-broch times and spanned the primary and secondary occupation phases of the tower. It has been known for some time that the only Iron Age pottery in Scotland which exhibits clear links - through its curvilinear decoration - with the Iron Age B pottery of southern England exists in the Western Isles. At Vaul this style - known now as Cletraval ware - was found in unequivocal broch construction levels. Since this style is uniquely Hebridean it follows that some time must be allowed for its various elements - including the arched 'eyebrow' ornament - to have coalesced into the standard local form. Hence this Iron Age B influence should have arrived before the Vaul broch was built. Some slight further evidence that it did was found on the site.

The source of this B element on Cletraval ware was vividly revealed when a group of sherds was reconstructed into one small vessel. It is an exact local copy of the eyebrow-ornamented, bead-rimmed bowl which is commonly found on Iron Age B sites in the Wessex area of southern England. The elaborately decorated lake village pottery from further west in Somerset has always seemed an improbable source for the decoration of Cletraval ware and is now seen to be irrelevant. It is also clear that everted rim jars - of which Cletraval ware is but one Hebridean version - were present in Atlantic Scotland much earlier, for example at the first fort at Clickhimin, Shetland. Thus only the curved ornament remains to be added to the western everted-rim pots at the time of the arrival of late Iron Age B influences and its origin in the Wessex bead-rimmed bowls seems certain.

There is moreover plenty of other evidence for a relatively sudden and apparently extensive influx of southern Iron Age B material culture to the Western Isles of which the most vivid is the distribution of bronze spiral

finger rings. They are confined to southern England and Scotland with a few in N. Wales. At Maiden Castle, Dorset, such rings are found only in the late B and the Iron Age C levels. One spiral finger ring was found in a primary broch deposit at Clickhimin and another in a secondary level at Vaul.

Parallelopiped bone dice - decorated with dot-and-circle motifs - are clear imports from southern England where they do not appear on sites earlier than Iron Age B times. Up here they are entirely confined to Atlantic Scotland. One came from a primary broch level at Clickhimin and two (unstratified) were found at Vaul.

Rotary querns also provide valuable information. Since Curwen wrote his classic paper in 1937 it has been accepted that the 'broch querns' - within the disc series with upright handle holes - were derived from the earlier beehive and bun-shaped querns of southern Scotland, with lateral handle holes. These presumably represented the gradual drift northwards of the beehive querns introduced to the Iron Age B cultures of southern England perhaps in the 3rd century B.C.

However, the series of rotary querns found at Vaul has disproved this hypothesis. It is known that the lateral-handled, bun-shaped querns were still in use in southern Scotland in the 2nd century A.D.: they are found there on Roman sites. Now a classic disc quern, with parallel top and grinding surfaces and an upright handle socket, came from a low level inside the Vaul broch. Almost certainly it belongs to a slightly pre-broch occupation and, from the other dating evidence available, can hardly be later than 50 B.C. It thus antedates the S. Scottish bun-shaped forms - from which it is supposed to be descended - by at least 150 years.

Since there is no evidence for the earlier presence in the Western Isles of the lateral-handled querns from which the Vaul example might have evolved, it follows that this flat, disc form was probably imported from southern England with the other material described. Other such material which seems to have been brought north includes triangular clay crucibles and perhaps long-handled bone weaving combs. However, the situation with the combs is complicated by a possible drift of such artefacts north-westwards from the Yorkshire area. The Scottish long combs need to be studied afresh.

Some negative evidence helps us to pin down the time of the arrival of the Wessex B influences more closely and confirms that this happened in late B times, early in the first century B.C. For example almost no English-style ring-headed pins are known from Atlantic Scotland and none have been found

in brochs or wheelhouses. They are found in the southern mainland to which area - like the lateral-handled querns - they were probably gradually assimilated from south of the border. In Wessex these pins seem to have gone out of use in early Iron Age B times. Secondly a peculiar type of La Tène III fibula - derived from the Continental Nauheim form - is very common in the Wessex area, but is totally absent from Scotland except for one in the south-west. These fibulae are not found in earlier contexts than Iron Age C in the south and are probably dateable only to the first half of the first century A.D. Their absence in the north shows clearly, I suggest, that Wessex B traits must have come north earlier and were not due to people fleeing from the Roman Conquest.

We have now clarified two important archaeological phenomena - first that the brochs developed in the Hebrides, probably on Skye, out of the semi-brochs, which were themselves the end-product of several centuries of local stone fort building. Secondly it is clear that there was a large-scale influx of late Iron Age B cultural traits from the Wessex area into the Hebrides, probably in the early first century B.C. and at least slightly before one early Hebridean broch was built. The obvious question which now arises is - was there a connection between these two phenomena? Did the arrival of the new cultural stimuli from southern England encourage the development of the impregnable tall round tower - that ideal refuge for an agricultural community - from the relatively crude semi-brochs? There is both direct and indirect evidence to suggest that this is what happened.

First, what brought the Iron Age B Wessex equipment northwards - trading or migration and settlement? The range and type of equipment - pottery, ordinary domestic gear and ornaments - suggests that a migration of families was involved, though there need not have been very many. But to suggest a migration over such a distance one must point to a cause which would impel families to leave their flourishing farms on the chalk downs of Wessex and take the maritime road to the Isles. We have such a cause in the incursions of Belgic tribes into south-east England in the first century B.C. Although it is true that Doctor A. Birchall has shown that little Belgic archaeological material can be dated before 50 B.C., Allen's coin evidence still seems to me to demonstrate clearly that some Belgae were coming over at the end of the 2nd century B.C. But of course this was to Kent and Essex - not inland into the Wessex region. The distribution of Gallo-Belgic coinages and their British derivatives suggests that it was not until 80-70 B.C. that large-scale penetration of Wessex occurred and this seems to be the likeliest time for those Iron Age B families there who could not bear the decline in status which must have accompanied the arrival of powerful new tribes to set out for new homes.

In the Hebrides we have seen that the circumstantial evidence of the Cletraval pottery style suggests that Wessex Iron Age B migrants arrived some time before the Vaul broch was built. Yet there is direct evidence from the typological sequence of forts itself which shows precisely at what point within it the southern influences arrived. This is the appearance of the guard chambers. Many brochs have one or two such cells opening off their entrance passages but several semi-brochs clearly have nothing at all comparable. Only Dun Ardreck has a crude guard room and this is little more than an extension of the mural gallery up to the passage. Round, corbelled guard chambers - designed as separate entities in their own right - do not appear before the brochs.

They are only likely to have come from the south where a number of forts in Wales and southern England have this feature. The cluster in N. Wales may be the result of the intensive search for them there because of the excavations at Dinorben hillfort. One is now known from Wessex - in the Iron Age A period at Rainsborough Camp, Northamptonshire - and more will surely be located there. Thus even from the structural evidence alone can one infer that new ideas in fort construction and design reached the Hebrides from Wales or Wessex simultaneously with the emergence of the round broch tower out of the semi-brochs. This complements the evidence of the material cultural sequence perfectly and confirms that the brochs first appeared soon after Wessex B migrants arrived, say about 75 B.C.

#### Notes

1. This is a slightly shortened version of the lecture given, which was itself an abbreviated version of a full length paper. This paper should be in Vol. 2 of The Glasgow Archaeological Journal.

#### References

- MacKie, E.W., 'Radio Carbon Dates and the Scottish Iron Age', Ant. XLIII (1969), 15.
- MacKie, E.W., 'Brochs and the Hebridean Iron Age', Ant. XXXIX (1965), 266.

