THE MEgalithic Tombs OF IRELAND
Neolithic Tombs and their Art

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The earliest evidence of human activity in Ireland occurs mainly in the northeast of the country and has been assigned to the Mesolithic or Middle Stone Age, with radiocarbon determinations indicating a date prior to 6,000 B.C. for some sites. In this region, noted for its abundant supply of flint, excavations have yielded stone implements, some of which compare with Mesolithic artifacts of the Maglemose culture of northern Europe. Wooden artifacts must have been common but scant evidence of these survives. These early inhabitants lived mainly on the coast or along rivers and fed lives based on hunting and food gathering with fish, game, nuts and fruit forming their staple diet. By about the middle of the fourth millennium B.C., a completely new mode of life utilizing agriculture and stock-raising to control the food supply, reached Ireland. Closely associated with these great innovations, hallmark of the Neolithic or New Stone Age, was the practice of collective burial in great monuments of rough, unworked stone, known as megalithic tombs (Greek: megos, great; lithos, stone).

Megalithic tombs have for long attracted the attention of archaeologists, but it is only since about the turn of the present century that systematic surveys and programs of excavation have been undertaken. One such survey, conducted on a co-operative basis between the Ordnance Survey of Ireland and my late colleague, Professor Ruadhri de Valera of University College, Dublin, has been in existence for the past twenty years and is now in its final stages. It has been established that the megalithic tombs of Ireland number approximately 1,200 and that these fall into four distinct groups differing in their architecture, distribution patterns and associated artifacts. The groups, named after their principal distinguishing features, are known as Court-tombs, Portal-tombs, Passage-tombs and Wedge-tombs.

COURT-TOMBS

Court-tombs were the earliest megalithic monuments to be built in Ireland, and are part of a European tradition of tomb-buildings which also gave rise to the long barrows of Britain. Three hundred and twenty-nine Court-tombs have been identified in Ireland and these, in the main, are confined to the northern half of the country. They may take one of a number of variant forms and many are quite large and complex structures. The characteristic feature is the ceremonial courtyard, set in front of a gallery (burial vault) which is divided by jambs into two or more chambers. The court usually occupies the eastern end of a long, trapezoidal cairn of stones but sometimes there are courts and burial chambers at both ends of the cairn. Courts vary considerably in shape: completely enclosed forms, of oval or circular outline, are dominant in western coastal districts while U-shaped or more shallow courts are normal elsewhere. In rare examples, the court is centrally placed in the cairn with opposed galleries set on the long axis of the monument. Small subsidiary burial chambers, opening on to the long sides of the cairn, occur throughout the series, and in a few cases such chambers are found opening into the court.

An impressive monument at Creevykeel, Co. Sligo, excavated by the Fourth Harvard Archaeological Expedition to Ireland in 1935, exemplifies many features of Court-tomb architecture. The cairn here, originally about 55 m. in length, is of pronounced trapezoidal shape and is set with its broad end facing to the east. The edges are marked by lines of flat stones representing the foundation courses of revetment walls of dry-stone work which rose to a height of 2 m. or more. A narrow passage, 4.5 m. long, leads from the slightly concave front of the cairn to a great oval court measuring 15 m. long and 9 m. wide. The walls of the court are of orthostats set with their flatter surfaces facing into the court. This increase in height as they approach the gallery where six massive stones flank the entrance. The entrance is formed of two well-matched jambs, 1.5 m. high, which support a large lintel. The gallery is 20 m. long and 3 m. wide and is divided into two chambers by a second pair of jambs. The gallery lacks its roof but was originally a roof about 2 m. in height. Several boulders, resting on the orthostats of the front chamber, show the corbeling technique used in the construction of the roof. Behind the gallery are the remains of three subsidiary chambers, two opening to the north and the other to the south.

Many galleries have lost their roofs or a few excellent examples are preserved beneath the extensive blanket bogs of Sligo and Mayo. At Ballymullen, a recently excavated tomb on the northern coast of County Mayo, high-pitched slab corbels rise above the sides of the burial chambers to support flat roofstones. This monument consists of a coffin-shaped cairn, about 28 m. long, delimited by a dry-stone revetment, preserved in places to a height of 1.5 m. At the east a pear-shaped court, 7.5 m. by 3 m., also of dry-stone construction, leads to a gallery divided into two main chambers. An unusual feature is the presence of small side-chambers or transepts opening into the gallery beyond the segmentation. The entire monument was enveloped in peat which reached a depth of 2 m. at the edges of the monument. Before excavation, only the rear chamber with its transepts was visible through a hole in the roof.

Galleries with transepts or single side-chambers occur at eight or perhaps ten sites in Mayo and Sligo and are found also among the Severn-Cotswold tombs in southern Britain. Such monuments have
been taken to indicate a curious relationship between the Irish and British longbarrow series and may betoken a common origin in Brittany where somewhat similar monuments are known on either side of the Loire River.

Still more likely is the case of the 329 Irish Court-tombs at present known are situated in the northern half of the county and it seems likely that dense forests, heavy soils and bad drainage in the central lowlands deterred expansion to the south. Scotland, sable from the north, and in particular the distribution lies in the northwest of Ireland, in the counties of Mayo, Sligo, Leitrim and Donegal. The region around Bunmahon in the northwest Mayo, contains a closely-knit group of 28 tombs, about 10% of the total and it probably the remains of a large group of attractive and long cairns with Irish features occur in Ann, Dule and Kintyre.

It is clear from the above account of the distribution lies in the northwest of Ireland, the group of long cairns now lived by the occupants of the two smaller cairns were found beside a second Court-tomb in the same townland and these produced radiocarbon determinations of 210 B.C. B.C. 45 for the structure. The house measures 11 m. by 6 m. and is only slightly the same dimensions as the houses of small farmers now lived by the occupants of the two smaller cairns were found beside a second Court-tomb in the same townland and these produced radiocarbon determinations of 2240 ± 100 B.C. and 2105 ± 130 B.C. Stone artifacts and pottery from the three structures were similar to material found in the tombs so far, for the first time, we may have uncovered examples of houses used by the tomb builders. Habitation layers discovered at three other Court-tombs suggest that more extensive excavation in the vicinity of these tombs of this class may reveal further domestic structures.

PORTAL-TOMBS

Closely related to the Court-tombs are a series of single-chambered monuments known as Portal-tombs. In such tombs, a pair of tall, well-matched jambs flanks the entrance and between these is often a door stile of which the staves are full of close, smooth. Above the entrance lies the heavier front of the single great roof stone which usually covers the chamber. Especially massive roof stones are characteristic. Examples weighing up to 4 tons are relatively common, while the largest, at Kernamore, in Co. Carlow, has been estimated to weigh 100 tons. The roof stones slope downwards from the entrance and rest on a low curb. The jambs and back stone are set in sockets and take the full weight of the roof. The sides of the chamber consist of flat slabs or boulders, set resting against the jambs and back stone. The spaces between the side stones and the roof are spanned by corbels, but few examples of these survive. In some tombs, e.g. Greengraves, Co. Down, a second, slender column of stone is used. This second stone usually rests on the side stones and supports the lower end of the principal roof stone.

The cairns of Portal-tombs are usually poorly preserved and, indeed, in many instances no surface indications at all survive. Twenty-five out of a total of 161 known examples have good evidence for long cairns and one of the few excavated cairns, Ballykeel, Co. Down, had the remains of dry-stone wall revetments. The chambers are normally set into one end of the long cairn but there is no evidence of the relationship of the chambers to the front of the cairns. One example, at Tidley in Co. Antrim, had a shallow cut court while the entrance at several other tombs was flanked by single stones. The evidence, such as it is, suggests that in front of some Portal-tombs, at least, there may have been courts similar to those found at Court-tombs in the east of the country.

At a number of sites one or more cairns are present. These are sometimes set opening onto the long sides of the cairns, as at Summer Hill, Warren, Co. Leitrim and Monkagh, Co. Longford. A notable group of Portal-tombs at Malle More, Co. Donegal, consists of two massive chambers, standing 90 m. apart with the ruins of four smaller chambers between them. Little of the cairn survives here but it is clear that the smaller chambers are at right-angles to the main cairn. A single Portal-tomb stands within the body of the cairn behind the massive terminal chamber, and a somewhat similar arrangement of chambers is present at Ballyreevan, Co. Tyrone.

The occurrence of long cairns, rudimentary courts and subsidiary chambers at Portal-tombs links these monu-ments closely with the Court-tombs and provides the basis on which the theory that Portal-tombs evolved from their more numerous relatives in Ireland. This is supported by the evidence of the finds from the tombs and their distribution. Though artifacts have come from only thirteen tombs, they are, in general, similar to those recovered from the Court-tombs. The pottery from one tomb included a highly decorated type of hanging-howl pottery which is characteristic of a series of Late Neolithic single burials found in the southeast of the country.

The distribution of the Portal-tombs like that of the Court-tombs, is concentrated largely in the northern half of the country, but there is an important extension down the east coast into the area of the late Neolithic single burials. Some fifty or more Portal-tombs, forming three main groups.
on the north and south coasts of Wales and in Cornwall, seem to indicate extensions across the Irish Sea from the concentrations along the eastern seaboard of Ireland. Portal-tombs, unlike other groups in the Irish megalithic series, have a distinct lowland distribution with 112 examples, or approximately 70% of the total, falling below an altitude of 200 feet above sea-level. Many are situated in valleys, close to rivers, and this is particularly apparent in the south-east where 24 examples occur close to one of four major rivers or their tributaries.

Despite the fact that Portal-tombs are relatively simple single-chambered graves, they include several examples which are among the most spectacular of Irish megalithic tombs. Archaeologists are often asked how such mighty roof stones were removed above their portals and, while we do not know the precise methods employed, it seems safe to surmise that ramps, rollers and leverage played a large part in the construction of the tombs.

**PASSAGE TOMBS**

Passage-tombs are a major element in the spread of megalithic tombs and are found throughout Atlantic Europe from Iberia to Scandinavia. In its classic form a Passage-tomb consists of a circular mound, surrounded by a kerb and enclosing a chamber approached through a passage. The passage is low and narrow while the chamber is higher and may be round, oval or rectangular in shape. Side or end chambers opening off the main chamber are often present in Ireland. Tombs with a cruciform plan are common but complex types, with more than one pair of opposed side chambers, are also known. Passages are roofed with horizontal lintels while the chambers are often surmounted by corbelled vaults. A simpler form of small, polygonal chamber, with a single roof stone laid directly on the chamber orthostats, is also well represented and often such tombs have little or no evidence of a passage. An outstanding feature of many Irish Passage-tombs, and of their antecedents in Brittany, is the presence of carved or pocked designs on the orthostats and roof stones.

Irish Passage-tomb art is abstract in form with circles, spirals, arcs, serpentine lines, lozenges and triangles being the more common elements employed. These devices are sometimes scattered more or less at random on the stones but often they are combined in elegant designs ingeniously adapted to the shape of the stones. Some designs, especially those which incorporate the ocellus or eye-motifs, are thought to be anthropomorphic. Certain motifs seem to be favored at particular tombs or cemeteries: spirals at Newgrange, concentric rectangles at Knowth and rayed circles at Dowth and the Loughcrew cemetery.

The meaning of the elements and designs used in megalithic art is unknown, but since the art is associated with burial monuments it is reasonable to infer that it had a sacred, funerary significance. Many elements of the Irish repertoire are found throughout Atlantic Europe, but in Iberia the art is found mainly on small ceremonial objects (e.g. ovoid plaques and small cylinder-tombs) and on pottery associated with the tombs. The Breton tombs, however, bear ornament similar in many respects to the Irish art, but some differences do occur. Representations of axes, for example, are closely defined on some French tombs but are not known in Ireland. Despite such differences the similarities between Irish and Breton art are so close that there can be no doubt that the two are directly related. This, combined with similarities of tomb architecture and grave furniture, points to the Gulf of Morbihan, in the south of Brittany, as the approximate place of origin of the Irish Passage-tomb series.

Unlike other Irish tomb types, Passage-tombs are situated on hillocks or ridges and are usually grouped in cemeteries. The actual number of Irish Passage-tombs is difficult to estimate since many round hilltop mounds, which could contain such tombs, remain unopened. A figure of about 300 seems probable but this, of course, is certain to be added to by future excavation. The tombs are largely confined to the northern half of the country but scattered examples occur in south Leinster and north Munster. Four major cemeteries, Bend of the Boyne, near Slane, Co. Meath, Loughcrew about 65 km. to the west, in the same county, Carrowkeel, Co. Sligo, 90 km. to the north-west of the last, and Carrowmore, on Sligo Bay, straddle the country from mid-east to northwest and account for almost 50% of the total number of tombs known.

The three huge mounds of Newgrange, Knowth and Dowth, which dominate the Boyne valley, represent the greatest architectural achievements of the Passage-tomb people in western Europe. The peat-shaped mound at Newgrange measures about 80 m. across and may originally have been some 15 m. in height. It is delimited by a kerb of oblong boulders, many of which are decorated. Three of these, including the famous entrance stone, are of exceptional artistic merit. The passage, 19 m. in length, leads from the broad end of the mound to a cruciform chamber measuring 5.5 m. by 5.5 m. Each of the three recesses is furnished with a great stone basin. The roof of the chamber consists of an elaborate corbelled vault which achieves a height of 6 m. Many of the passage and chamber orthostats are ornamented and there is an especially elaborate
design on the roof stone covering the eastern recess of the chamber. A triple spiral, on an orthostat of the end recess, echoes a similar design on the entrance stonework of the kerb. The great ring of perhaps 35 pillar stones which surrounded the mound seems to have been a later addition erected by Beaker people in the Early Bronze Age.

The Knowth monument with its 17 or more satellite tombs stands about 1.3 km. to the northwestern of Newgrange. The Knowth mound is comparable in size to that of Newgrange but covers two tombs set back to back, with only a couple of meters between them. An incurving of the kerb at the east and another at the west marks the entrances to the passages leading to the chambers. The western tomb was 34 m. in overall length and consists of a long passage which bends to the south as it approaches the chamber which is almost square in plan. Many of the orthostats and a few of the roof stones bear ornament. The kerbstone at the entrance is decorated with a design of concentric rectangles and this design is repeated on the sill and back stone of the chamber.

The eastern tomb is about 40 m. in overall length and consists of a passage leading to a cruciform chamber. A beautifully decorated basin-stone stands in the right-hand recess. The Knowth monument, though not yet fully excavated, has already produced the greatest corpus of megalithic art yet found at a Passage-tomb. The kerbstones in particular appear to have been selected for simple well-balanced designs.

The third great monument in the Boyne valley is at Dowth, almost 2 km. to the northeast of Newgrange. This, the largest of the three mounds, has not been excavated. It covers two tombs, set about 20 m. apart in the western sector. The tomb at the north has a passage 14 m. long leading to a cruciform chamber 6.50 m. wide and 3 m. high. An L-shaped extension, leading from the southern recess, is without parallel elsewhere. The short passage of the second tomb leads to a circular chamber, 5 m. in diameter, with a single side-recess. Some orthostats and kerbstones bear ornament but this is sparse and not as well executed as that at Newgrange and Knowth.

Findings from Irish Passage-tombs are remarkably consistent. The characteristic type of pottery, Carrowkeel ware, consists of rather coarse, rounded-bottomed bowls decorated with looped arcs executed in a series of impressed stabs. Large mushroom-headed pins, of bone or antler, stone beads and pendants, some of the latter in the shape of pestle-hammers, are common and attest to the deposition of personal ornaments with the dead. Small stone or chalk balls, found at many sites, have been interpreted as fertility objects. Unlike deposits in other types of Irish tombs, tools and weapons of flint or stone are virtually unknown as primary burial deposits. Large stone basins are a characteristic feature of Irish Passage-tomb furniture and seem to have performed some function in the burial ritual. Crema-
tion was the normal burial mode but occasionally unburnt bones are found and in some cases these may be secondary deposits. Well-preserved deposits found at a few excavated tombs show that some monuments accommodated large numbers of burials. The great quantity of cremated bone found in the small Passage-tomb on the Hill of Tara, Co. Meath, has been estimated to represent a hundred or more individuals.

The earliest Passage-tombs occur in Britain, dating to about 3500 B.C. or even earlier, in places they were still being constructed in the third millennium B.C. contemporaneously with the Irish series. Few radiocarbon determinations are yet available for Irish Passage-tombs. Newgrange has produced two, centering on 2900 B.C., the tomb at Turs was dated to 2,200 B.C. These few determinations, for what they are worth, indicate a general late Neolithic date for Irish Passage-tombs.

We still know little about the dwellings of the tomb builders. It has been suggested that the cemetery pattern of the tombs and the great size of some of the monuments imply settled communities of considerable size who, perhaps, lived in townships akin to that at the Los Millares cemetery in Spain. Such sites have not been identified in Ireland but it is possible that a collection of 47 hut sites on one of the limestone ridges of the Carrowkeel cemetery, in Co. Sligo, may represent a settlement of Passage-tomb people. Habitation layers and stake holes have been found under three tombs, but these may have been only temporary abodes used by the tomb builders.

Whatever the form of their habitations, the Passage-tomb folk seem to have enjoyed a varied diet. Wheat is attested at three tombs while pollen evidence from the bog below the Carrowkeel cemetery suggests early land clearance and the possibility that cereals were grown there. Bones of domestic ox, sheep or goat and pig were found at about a dozen sites, while hunting is shown to have been popular by the discovery of the bones of deer and other wild animals and fox at fourteen sites. Shellfish of various kinds, including oyster, were clearly an important item of the diet and shell deposits were found not only at coastal sites but also far inland at the cemeteries of Loughcrew, Carrowkeel and Belmoral Mountain.

**WEDGE-TOMBS**

The last group of megalithic tomb builders to arrive in Ireland built a relatively simple burial monument known as a Wedge-tomb. These tombs consist of a main chamber, frequently with a short portico or antechamber at the front and...
occasionally a small end chamber at the rear. A few examples, like that at Ballyhedmondall, Co. Dublin, have both porticoes and end chambers. The chambers form a long, relatively narrow gallery which decreases in height and width from front to rear. The front consistently faces in a general southwesterly direction. The division between the portico and the main chamber is usually by a slab inset in the gallery walls and reaching roof height, but sometimes jams are employed here. The roof is formed of slabs laid directly on the chamber orthostats. The gallery is fre- quently flanked by one or more lines of outer walls and this often tends to con- verge more sharply to the rear than the gallery sides. The front of the gallery opens onto a straight orthostatic façade. The short covering cairn is often delimited by a kerb. The galleries vary considerably in length. Some are as short as 60 ft. while the largest, at Labbacallee, Co. Cork, was at least 13.75 m. in length. Some 70 tombs which form a specialized group on the limestone uplands of the Bereen region of Co. Clare lack the standard portico. In its place are two slabs, one blocking about two-thirds of the front and the second serving as a doorstone.

A total of 387 Wedge-tombs are known in Ireland but only nineteen examples have been excavated. Communal burial was still practiced by the Wedge-tomb people and both cremation and inhumation are attested. Many sites were poor in finds and indeed eight tombs produced no primary pottery. Becker ware from eight sites together with barbed and tanged arrowheads from three others places these tombs in the early Bronze Age. Though Becker is the dominant pottery in the tombs, occasional finds of Neolithic sherds indicate an overlap with earlier cultures. Metal finds from four sites may be primary deposits.

The allées couvertes of Brittany provide excellent prototypes for the Irish Wedge- tombs. These French monuments are of similar design to their Irish counterparts and features such as porticoes, and cham- bers, sepolts stones, double walling and kerbs are all represented. The finds from the Bereen tombs include Becker flat-bottomed coarse ware akin to that found in some Irish tombs as well as barbed and tanged arrowheads, and support the view that the allées couvertes are ancestral to the Irish series.

A study of the siting of Wedge-tombs shows that the builders preferred light well-drained soils and avoided lowland drift-covered regions which may have supported thick forests. It seems reason- able to infer that the Wedge-tomb people based much of their subsistence on stock- raising rather than agriculture. Indeed the great concentration of tombs on the limestone plateau of northwest Co. Clare shows a remarkable coincidence with the best winter grazing in the region. Similar though smaller occupations of good wintertime lands have been noted elsewhere throughout the distribution.

The Wedge-tomb distribution extends, in considerable force, into the southwest of the country, an area not exploited by earlier tomb builders. Their presence here may be explained, to some extent, by the occurrence of numerous deposits of copper ores on the peninsula of Cork and Kerry. Ancient copper mines have been identified at several sites in this region and one of a series of mines at Mount Gabriel, Co. Cork, has yielded a radiocarbon date of 1500 ± 120 B.C. (V92-06). Wedge-tombs are associated with copper deposits elsewhere, in Co. Tipperary, Wicklow and Mayo.

The remarkable western bias of the Wedge-tomb distribution is in marked contrast to that of all tombs of the Early Bronze Age. These cists contain single burials accompanied by Food Vessel and Urn pottery and represent a second great episode in the early part of the Irish Bronze Age. The cist people, who appear to have entered the northeast of Ireland from southern Scotland, spread through much of the eastern half of the country. Unlike the Wedge-tomb builders they show a marked preference for lowland situations and are especially associated with glacial ridges of sand and gravel. The two distributions are largely complementary and, for the most part, are mutually exclusive. The picture is one of two communities living side by side but each preserving its own distinct traditions. Some mingling is indi- cated by the occasional presence of Food Vessel or Urn pottery in the Wedge- tombs, but it is clear that each group kept largely to its own territory.