## Irish Early Christian 'Wooden' Oratories —A Suggestion

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A number of archaeological excavations of early Christian sites in the Celtic province of Ireland, Scotland, Wales and the Scilly Isles (off Cornwall) have been shown to have postholes at their earliest levels, usually beneath stone oratories or chapels which succeeded them. It is by now virtually a tenet of archaeological truth to regard these post-holes as for the corner-posts of the walls of small wooden oratories, the sizes of which are calculated by drawing hyphenated lines between the plan of the post-holes. This approach is related to a belief that such buildings are framed structures with wooden walls such as that surviving at Greensted, Essex (Christie et al. 1979), or as represented as the Temple of Jerusalem in the Temptation of Christ scene in the late eighth century Book of Kells or even as described in the seventh century Life of St. Brigid by Cogitosus (Ralegh Radford 1977, 5-6). Thanks to the remarkable preservation of the tenth and eleventh century buildings of Viking-age Dublin, especially the intact house foundations which have been excavated in Fishamble Street, it is now perhaps possible to see the post-holes at the

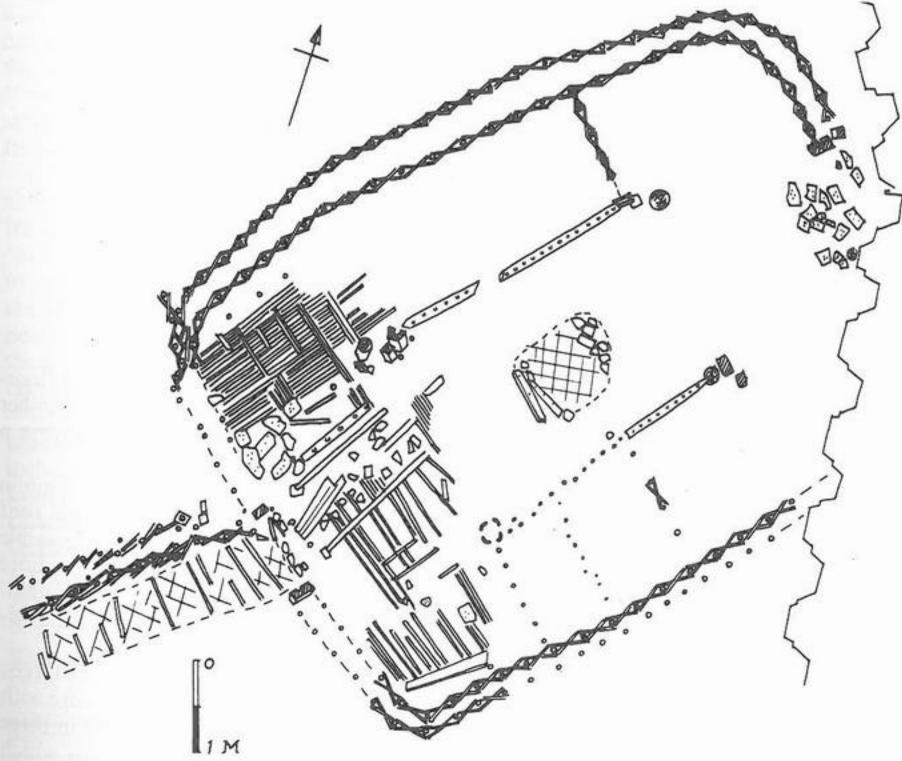


Fig. 1. Plan of tenth century Type 1 building, Fishamble Street, Dublin.

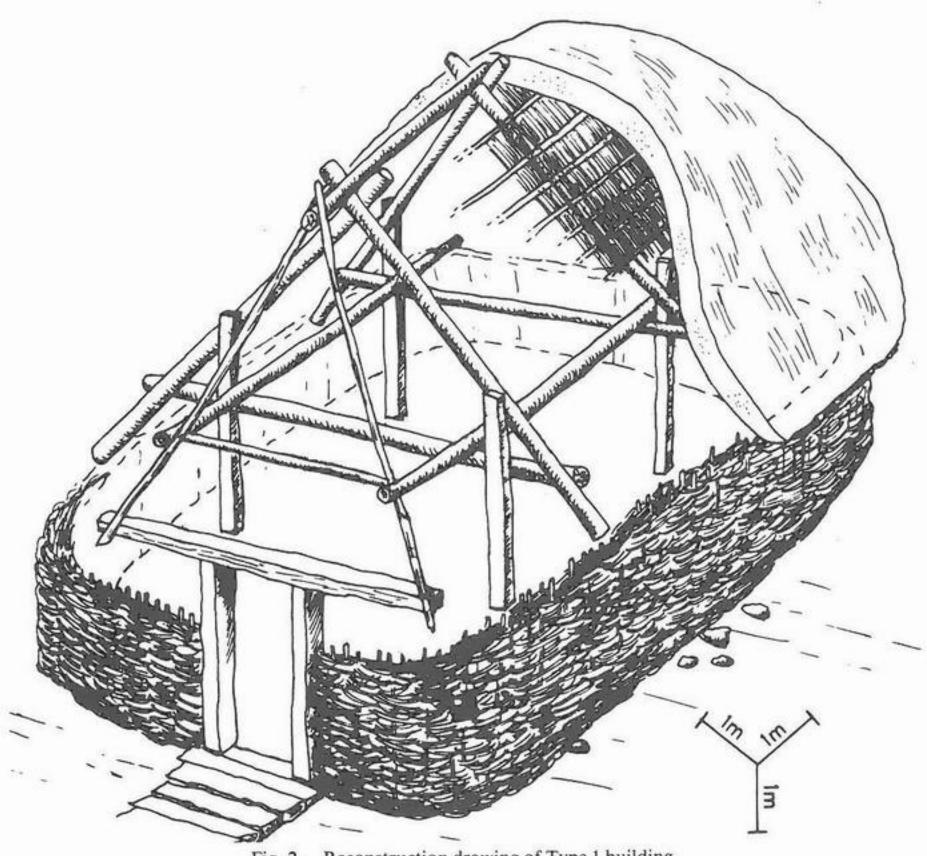


Fig. 2. Reconstruction drawing of Type 1 building.

oratory sites in a new light which suggests that these buildings were much greater in floorarea than has hitherto been considered and that, although probably constructed of timber and other organic building materials, the term 'wooden' is misleading and conveys a different form of construction from that which probably obtained.

Four main building types have been identified in tenth-eleventh century Dublin (Wallace 1982, 266-267, and forthcoming). Only Types 1 and 2 with their internal roof support systems are relevant to our present discussion. Type 3 comprises the possible semi-underground structures which have been excavated and which are likely to be more closely related to the native souterrain (R. B. Warner, pers. comm.) than to the Scandinavian-Germanic grubenhaus; Type 4 includes smaller rectangular huts, in which the post-and-wattle walls may have been load-bearing.

Type 1 (Fig. 1) is the Dublin Viking-age house par excellence. It is found at all levels, from the tenth century to at least the end of the eleventh. It is a rectangular structure with an average floor-space of about 8.50 by 4.50 m. Its open-plan floor is arranged in three strips along the long axis of the building. There is a doorway in one or both ends which leads in to a wide central strip or 'living-area' which is delimited on either side by a low

post-and-wattle or stave-built kerb which revets a raised bedding/seating area on either side. The fireplace is usually stone-kerbed and located at the centre of the 'living-area', roughly mid-way between the doors in the ends of the house. The bedding/seating area or pallr is usually separated from the central floor strip on a line on either side between two roof-supports. There are usually four roof-supports or, less frequently, four groups of roof-supports. These large posts are aligned in pairs and, if my reconstruction (Fig. 2) is correct, were surmounted by a horizontal cross-tie and a pair of coupled rafters. Most of the Type 1 buildings would have had two pairs of rafters. These would have been connected by purlins and possibly by a ridge-pole on to which a wattle network would have been woven to support a sod layer and its thatched covering. In only rare cases were more than two pairs of roof-supports (and by inference, two pairs of rafters) necessary. The roofs were probably pitched at a 40°-45° angle and the eaves came fairly near the ground. From the available evidence it seems that the walls comprised either one or two rows of narrow posts around which wattle strands were woven to a height of about 1.25 m. Such walls were probably not load-bearing and were mere skirts which demarcated and sheltered the floor area. The rounded corners of such buildings, the absence of corner-posts, the difficulty of wattling gables and the use of heavy door-jambs all strongly suggest that these buildings were hipped or slope-ended and not gabled, and that the weight of the roof-hip was transferred to the ground through the often apparently otherwise unnecessarily heavy door-jambs which were probably fitted with a suitably wide lintel to take the weight of the hipped roof from a pair of spars linking with the apex of the nearest pair of rafters. Although smaller and with a different arrangement of their floor-space and usually provided with a single door in the sidewall, a similar roof-support system was used in Dublin Type 2 buildings (Fig. 3) which appear to have been derived from the basic Type 1 form.

It will be apparent that the walls of buildings of *Types 1 and 2* are set out at a considerable distance from the roof-supports. The overall floor area can be clearly distinguished from the rectangular space or 'trestle-area' formed between the roof-supports. The 'trestle-area' is so called after the possible rectangular frame or trestle formed by the pairs of cross-ties and long-ties which it has been suggested were surmounted on roof-suports in the Migration Period buildings of Germany and Scandinavia (Klindt-Jensen 1955). If the post-holes of the Early Christian insular oratories were roof-support sockets as I believe them to have been, the 'trestle-area' of these buildings appears to have been mistakenly taken to represent the 'floor-area' in each case.

In five cases large post-holes which have been interpreted as evidence for 'wooden' oratories have been found under stone churches in Ireland (Harbison 1982, 627). These include two as yet unpublished examples excavated by Liam de Paor at Ardagh, Co. Longford, and at Iniscaltra, Lough Derg, Co. Clare, as well as two sites in Co. Kerry, Church Island and Reask, in which the succeeding stone building was an oratory of Gallarus type. At the fifth site, St. Vogue's, Co. Wexford, a conventional stone church appears to have succeeded the 'wooden' oratory. At Church Island, O'Kelly (1957-59, 59-63, 114-117) found five rock-cut post-holes, three giving the line of what he took to be the south wall of the building and two the north. He believed these posts belonged to a small rectangular building, about 3.00 by 2.00 m. and in the published plan connected the posts with lines to produce 'the area' of the building (O'Kelly, op. cit., Fig. 2). If the four corner post-holes can be taken as roof-supports instead of corner-posts of walls, and their diameter suggests that they should, it is possible that both pairs of supports were joined by a single horizontal cross-tie and surmounted by a pair of crossed and lashed or crossed

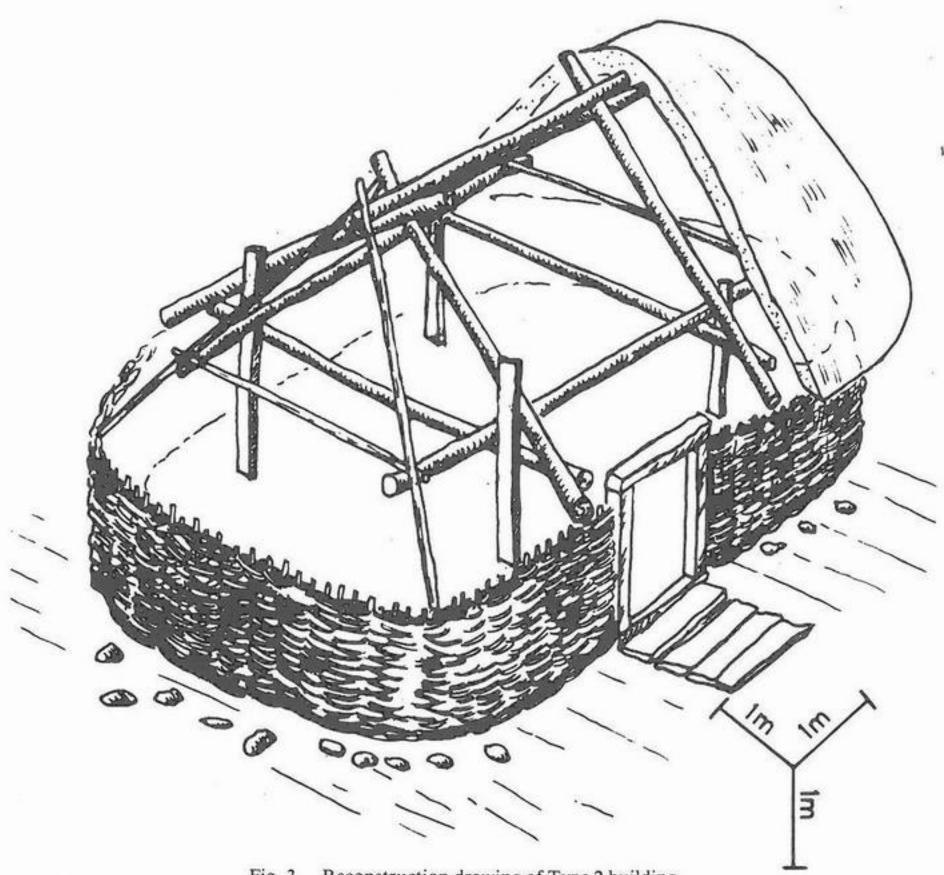


Fig. 3. Reconstruction drawing of Type 2 building.

and pegged rafters or couples. In such a sturdy construction, an overhang of about 0.75 to 1.00 m. on either side of the roof support would be expected, judging by Dublin domestic building standards. The absence of socket-holes for door-jambs or of post-holes for wall-posts need not argue against the acceptance of such a reconstruction of this building, as reference to the excavated Dublin evidence shows that in contrast to the roof-supports, which usually had to be bedded in 0.35 to 0.45 m. sockets, wall-posts were only driven into the ground to a depth of 0.10 to 0.15 m. Wall-posts of the light scantling with which we are familiar in Viking Dublin would have left little trace in a dry site like Church Island, especially if only driven to such a shallow depth. It is also possible that sod walls were used, as appears to have been the case in the early historic dwelling at Drumaroad, Co. Down (Waterman 1956, 76-78). These would have left little trace. The absence of door-jamb sockets to support the weight of the hipped roof is not an obstacle to the acceptance of the Church Island oratory as a thatched hipped building, when it is considered that the Dublin *Type 2* building usually had an entrance in one of the side-walls and not the end-wall, and that the weight of the hip could not in such a case be transferred

to the ground through the jambs but rather that the eave must have been horizontally

braced against the nearest roof-supports.

Even if a minimum of 0.75 m. is added to either side of the 2.00 m. span between the Church Island roof-supports, a minimum width of 3.50 m. has to be entertained. A relatively wide 'trestle' span of 2.00 m. suggests an even wider floor dimension by analogy with the Dublin evidence. Similarly, a 1.00 m. or 1.50 m. overhang beyond the roofsupports at the ends would suggest that instead of a 3.00 m. length, the building may have been well over 5.00 m. long. It is perhaps significant that the burials which are contemporary with the oratory under discussion were all located well outside the more extensive

floor-area which is proposed here.

The Church Island oratory, for which O'Kelly (1973, 11) accepts Thomas's (1967, 177) seventh century date by reference to the Ardwall Isle site in Scotland need not be as "diminutive" as O'Kelly thought and could be very close to (and possibly greater than) the 5.79 by 3.78 m. area of the stone oratory that replaced it. The excavator need not have been as worried about the occurrence of this building in "a treeless area" if it is agreed that apart from the roof-supports and other roof-timbers, most of the building could have been of post-and-wattle and sods or both, as well as thatch. Sods might well have been used, especially in low-walled buildings in exposed places like Church Island. Whatever about the social implications, it would seem that the balancing, erection, lashing or pegging of coupled rafters and the application of roof-timbers probably would have been beyond the compass of the one man O'Kelly supposed (1957-59, 116) had built the oratory. It would surely have taken at least as many men to build an oratory of timber, post-andwattle and thatch as to build its stone successor which the excavator could not imagine having been erected by "even two men". Perhaps "a communal hermitage" (Waterman 1967, 67) with a mainland back-up of man-power and raw-materials should be considered instead of just a one-man operation. If this be the case, not all the people who are buried in the cemeteries excavated at such places need be regarded as pilgrims, as Thomas (1971,

79) suggested.

At St. Vogue's, Carnsore, Co. Wexford, O'Kelly's plan (1975, 20 and Fig. 9) shows four post-holes joined by hyphenated lines to postulate the floor area of what he considered to be a tiny 2.25 by 1.50 m. building. He thought this might have been an oratory on the lines of Church Island or Thomas's site at Ardwall Isle in Scotland. Harbison (1982, 628 and Fig. 3) properly doubts that such a small structure "which is so much smaller than even the smallest of the surviving stone churches or oratories" could have fulfilled such a role. He took another look at the twenty-nine post- and stake-holes in O'Kelly's plan (1975, Fig. 9) and suggested that one of the corner-posts of O'Kelly's suggested oratory should be taken in conjunction, instead, with three large outlying postholes thus producing a floor area of about 6.25 by 4.25 m. Admirable though Harbison's scepticism is, he falls into the same trap as O'Kelly and Thomas in taking large post-holes to relate to wall-posts rather than roof-supports. Further examination of the St. Vogue's evidence suggests that both roof-supports and wall-posts are represented in the range and depth of the post-holes and sockets. Unfortunately, the report does not indicate the positions of the deepest holes, a crucial drawback for pin-pointing the whereabouts of possible roof-supports. There appear to be two buildings represented by the post-holes one facing East-West (i.e. the suggested oratory) and another larger structure oriented Northeast-Southwest. It would appear that the group of post-holes for which O'Kelly opted is more plausibly related to an oratory, not only because Harbison's selection appears to draw on the post-holes of two different buildings, but because the latter's projected floor-area is so large (about 8.50 by 6.00 m.) and out of step with the measurement for the admittedly few parallels; this is especially so if about a metre of roof-overhang beyond the roof-supports is added to all four measurements. Accepting the posts for which O'Kelly opted, and regarding the four 'corner' posts of his rectangle as roof-supports rather than wall supports, a measurement of about 4.50 by about 3.25 m. can be suggested for the St. Vogue's structure, estimating by analogy with the excavated evidence found at Dublin.

It is possible that the pair of 0.30 m. deep, 0.25 m. diameter, post-holes excavated at Reask, Co. Kerry, by Fanning (1981, 86, 154-155 and Fig. 6) were roof-supports of a Church Island-type oratory. Their location at a monastic site, their diameters and relative depth in the ground as well as the span represented by the distance between them (that is, if they are to be considered together), is consistent with their probably having been sockets for the retention of uprights on which a pair of coupled rafters could have been surmounted in the manner here suggested for the oratories. As no trace of a second pair of roof-supports came to light, it is impossible to confidently accept them as pertaining to a 'wooden' oratory.

Ardwall, an early Christian island site of Irish type off the Southwest coast of Scotland, produced a "slight timber construction" which Thomas (1966, 90-91) interpreted as "a wooden chapel or oratory----the first of its kind to be exposed demonstrably as the predecessor of a stone-built chapel on the British mainland". Thomas (1967, 170) cites historical references to the building of such chapels "in the Irish fashion" in eighth century Northumbria, at the time of Bede. At Ardwall, Thomas (1967, Fig. 26, p. 139) took an area of about 3.25 by 2.28 m. as the "suggested outline" of the oratory. If his post-holes C and E, and A and G, in the published plan, were pairs of roof-supports, there would be no need to explain away G as an external supporting-beam. D and F look like props or struts rather than roof-supports, and, although it is on the line of a long-tie or purlin which would have linked the north ends of the cross-ties on the roof-supports, B seems to have no direct roof-supporting function. Going on the evidence of the Dublin buildings already mentioned, there is nothing inconsistent about having one of the spans between the roof-supports (that between A and G) wider than the other (that between C and E). The Dublin excavation evidence sometimes shows one roof-support set slightly outside a parallelogram formed by the other three, where it was probably deliberately placed to brace or buttress the thrust of the roof and its weight against an incline in the natural topography or against the prevailing wind. The fact that the line of A and G at Ardwall is parallel to the line of C and E, emphasises the possibility of coupled rafters having been surmounted on these pairs of roof-supports, the resultant 'trestle-area' being trapezoidal with the enclosing floor-area being possibly rectangular, the correction, adjustment or, more likely, precaution represented by the apparent outlier being contained within the overall shell of the building rather than reflected in its walls or external appearance.

Ardwall, like Church Island and St. Vogue's, yielded no apparent trace of the low post-and-wattle or sod wall which would have been located under the eaves of the raftered roof in the reconstruction suggested here. At least, the contemporary burials are set back sufficiently from the roof-supports to have allowed the 1.00 to 1.50 m. overhang which might be expected in such a roof. By adding such an overhang to the 'trestle-area'. a possible floor area of the order of about 5.25 by almost 4.00 m. can be entertained. This is a measurement which is close to the later stone chapel at this site, a pattern of succession already noted at Church Island. Oratories of the Church Island—Ardwall type have been

identified more recently by Thomas on the Scilly Isles and by Hague at Bury Holmes in south Wales. At Bury Holmes, four post-holes of a pre-twelfth century wooden structure were taken to be the 'corner' post-holes of a 3.35 by 3.05 m. building (*Invent. Glam.* 1976, 15 and Fig. 5). Although there appears to have been no evidence for surviving walling outside the post-holes, it is probable that these were for roof-supports and that the original floor area of this building was something in the order of 5.50 by 4.50 m. which appears to be somewhat greater than the 5.33 by 3.42 m. area of the later rectangular stone church at this site.

In justifying the use of the Dublin archaeological evidence to re-interpret the area of these oratories, it is worth remembering that Thomas (1966, 101) noted that the 3:2 length to breadth proportions of his measurement for the Ardwall oratory is paralleled by Leask's (1955, I, 49-51) observation of similar proportions in Irish stone churches. Even if it is now conceded that Thomas's measurements refer to the 'trestle-area' rather than the 'floor-area', it is assumed that these proportions also apply to the greater area. This is interesting, especially as Murray (1979, 83) formed a similar conclusion about the Dublin

houses excavated by Ó Ríordáin before 1976.

There appears to be both positive and negative evidence from the relevant Early Christian sites that have been discussed which argues for the reinterpretation of what have hitherto been seen as wall-posts of small wooden buildings as roof-support sockets of larger thatched buildings with hipped roofs and low side-walls on the lines of the tentheleventh century buildings which have been excavated in Dublin. The relevant post-holes, it is argued, should probably be regarded as sockets for roof-supports because of their large diameters and comparative depth, their occurrence in parallel, transversely-aligned pairs in which they appear to have been positioned to accommodate coupled rafters, and because the spans which separate them fall generally within the range of that provided by the Dublin domestic building evidence. In addition, it can be argued that the smallness of the structures as reconstructed by O'Kelly and Thomas tells against such structures ever having been used as buildings, let alone oratories, while the absence of wall evidence can be put down to the use of post-and-wattle (the posts of which did not penetrate sufficiently deeply to be found in archaeological excavation) or sod, or both. Driven posts, such as wall-posts, do not penetrate as deeply and cannot be expected to be as clearly represented in the archaeological record as posts inserted in specially-dug holes such as was the usual method with roof-supports of the Dublin buildings.

The major obstacle to the acceptance of the presently proposed reconstruction of the oratories is not the absence of the walls where the Dublin buildings' evidence would suggest they should be, for such evidence might not survive in dry and disturbed conditions. Rather, it is the occurrence of post-holes along the line of the excavator's suggested south wall at St. Vogue's and the north and south walls at Church Island. These could reinforce the excavator's belief that the large post-holes retained wall uprights. This phenomenon does not have to be explained away at Ardwall Isle (the site which most clearly supports the suggested roof-support system and large floor-area for these oratories) where the single post-hole (B) on the excavator's suggested north wall may have been for an auxiliary roof-support. Alternatively, if it was paired with an opposing timber which was disturbed by the southwest corner of the Phase III Chapel, it could be the survivor of a possible third pair of roof-supports. However, as it is rather unlikely that such a small structure would have required a third pair of coupled rafters, it is probably safer to think of the post at B as an auxiliary roof-support. The same explanation may fit the posts at Church Island and St. Vogue's, especially in view of the relative narrowness

of their diameters compared with the 'corner' post-holes (taken here to be roof-support sockets). The non-occurrence of such extra post-holes on all the sides of these structures and their relative proximity to one another argues against their having been wall posts. The difficulty of weaving wattle strands around posts of such apparently large diameters would be another argument against their having been wall-posts except that as our Dublin evidence shows, large post-holes were often back-filled and are not accurate indications of the sizes of the posts which they accommodated.

If the walls of these buildings were made of a continuous row of earthfast posts or if they were erected on horizontal ground sills, there should be a continuous sunken channel in the ground between the 'corner'-posts instead of the few post-holes which have been found. On balance, it seems best to regard the extra holes as sockets for the retention of auxiliary roof-supports props for sagging roofs or, as Thomas (1967, 139) suggested for the erratically located post-hole D at Ardwall Isle, they could have fulfilled other functions such as acting as struts for fixed structures. Incidentally, apart from their location beneath stone oratories and the general conformity of their orientations to Christian practice, the most convincing archaeological proof that such structures were oratories must be the absence from them of hearths and domestic refuse including animal bones.

As only the roof-supports, roof-timbers and possibly the door-jambs in the early oratories were timber beams, and as so much of the remainder of such buildings probably consisted of post-and-wattle, sods and thatch, the description 'wooden' seems inappropriate especially as it conveys an image of carpentry/joinery, timber-framing and building in wood. Buildings constructed in the latter method may truly be described as 'wooden', but this is a different tradition from that represented in the buildings in Viking-age Dublin and, it is suggested, in the early oratories which have been discussed here. For this reason the term 'wooden' should be dropped from such descriptions in future. This is not to deny that there were not also well-carpentered, framed wooden churches in Ireland in the later first millennium. There is literary evidence for the use of boards and joints in the seventh century Hisperica Famina (Harbison 1982, 626), in the roughly contemporary Life of St. Brigid (Ralegh Radford 1977, 5-6) and as well in the probable eighth century *Life* of St. Samthann of Clonbroney, Co. Meath (Plummer 1910, 14), which describes a large portable prefabricated oratory. The depiction of an Irish church as the Temple of Jerusalem in the Book of Kells and of timber-built churches on the tops of ninth-tenth century High Crosses also bear witness to carpentry-built churches. The skeumorphs on the High Crosses depict two types of wooden buildings—one with gable elbow-crucks and one with a hipped roof. The latter may have been a carpentry-built development of the oratory type postulated for Church Island and the other sites, and may have retained its internal roofsupports despite the apparent load-bearing potential of its framed walls as depicted on the High Crosses. For what they are worth as architectural evidence, all the Irish houseshaped shrines represent hip-roofed buildings, probably of domestic type to judge by the smokeholes which appear to be skeumorphically depicted in their ridges. The cruck building was apparently so popular that gabled stone buildings which were probably derived from it continued to portray the crucks and their junction at the ridge by antae which projected from the endwalls and by carved stone finials on the tops of the gables.

There appear to have been two basic building traditions which relied on wood in Early Historic Ireland. Lynn (1978, 37) does not distinguish between these and consequently implies that all the churches built of wood were carpentry-built and, further, that the introduction of improved carpentry techniques made possible the adaptation by the Irish of

rectangular buildings. The evidence of the Dublin buildings and, it is suggested, of the earlier oratories of Church Island type show that instead of carpentry influencing building type and design, rather that possibly indigenous building techniques and traditions of using raw materials which had been tried and tested for centuries in prehistoric round-houses were now simply transferred to buildings (both churches and dwellings) of rectangular plan. There need have been nothing inferior about the building tradition which relied on internal roof-supports and post-and-wattle or sod walls as the palace built in 1172-73 for Henry II's stay in Dublin, was built of post-and-wattle (Byrne 1973, 52) and was probably little more than an enlarged version of our *Type 1* buildings. The *Teach Cásca* or 'Banqueting Hall' purporting to be that of *Tech Midchuarta* at Tara as represented in a twelfth century sketch-diagram in the *Book of Leinster* was probably similar.

Waterman's discovery of what he took (1967, 55 and 67-68) to be the drystone foundations of an earlier ecclesiastical building of wood beneath the standing stone church at Derry, Co. Down, at a primary level associated with an extensive inhumation cemetery, probably means that not all the earliest oratories were of the Church Island/Ardwall Isle type but that some were also built in the carpentered tradition for which there is more convincing literary and iconographic evidence than there is archaeological. Otherwise, the archaeological evidence suggests that the earliest oratories built in wood were of the Church Island/Adwall type, a tradition for which there is also some literary support (e.g. Anderson 1961, 259, 329, 453). If the large post-holes of the insular Early Christian sites can be accepted as roof-support sockets, it follows that the relevant buildings, or rather their roofs, covered a much greater floor area than heretofore suspected. This leads to the conclusion that Ireland's and the Celtic Church's original 'wooden' oratories were not as small as is generally believed but that they corresponded in size to the stone structures which often succeeded them. Put another way, the scale and size of Ireland's stone churches was probably based very closely on the post-and-wattle prototypes.

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