Documentary evidence for domestic buildings in Ireland *c*.400–1200 in the light of archaeology

By HILARY MURRAY

EXCLUDING ARCHAEOLOGY, there are three sources of primary information concerning domestic buildings in Ireland in the period A.D. 400 to 1200; (1) historical references, (2) contemporary representations of buildings, and (3) stone skeuomorphs of wooden constructions. This article is an attempt to examine the documentary evidence, including written descriptions and drawings of buildings of the period, with reference to the archaeological material.

HISTORICAL REFERENCES TO BUILDINGS

The most detailed descriptions are well known as they have frequently been used in discussions of early Irish buildings, but the limitations of the source material¹ have not always been considered.

A major problem is that many of the sources were written in Old or Middle Irish, and the original meaning of a word is often lost. If the word has not survived into Modern Irish its meaning can only be guessed from the context in which it is found and from its possible roots in other languages. Clearly this presents some difficulty in understanding technical vocabulary. This is exacerbated by the fact that many of the main texts are only available in old, inaccurate editions and translations. A second problem, which applies to many of the early descriptions, is that the authors, who were describing structures which would be familiar to their contemporary readers, often omitted fundamental details. In *Crith Gablach*, of or example, the size of the houses is described by a single measurement, but as the ground plan is not specified, this could apply to the diameter of a circular building or to one dimension of a rectangular one.

A further difficulty arises in separating the original texts from the later glosses and commentaries which were added to them. A specific problem of the secular laws is that they represent an ideal, schematic, picture of a society which was probably already archaic when they were written down, as they were based on carlier oral tradition. Many of the details may be regarded as legal ideals, but

they must have been based on actual buildings and can be treated as a reliable source of information.

The secular sagas and poetry present different problems. Many of these contain deliberately exaggerated descriptions of the houses of rich or royal families. The stories were intended to entertain, and accuracy was of secondary importance. Many of them are only known in late written versions, but the internal evidence suggests that they stem from early, possibly Iron Age, oral tradition.³ As a result, the meaning of some details may have been lost in the later versions because the storyteller misunderstood the descriptions of archaic structures and confused them further by his own exaggeration. Basic details such as wall materials are, however, unlikely to have been altered.

In contrast, the descriptions of houses in the Saint's Lives and Penitentials are purely incidental to the intention of the writer and are probably reliable as there was no need for him to exaggerate or conform to a literary ideal. A few 'Lives', such as the *Life of Columba* by Adamnán, are of particular value because they can be closely dated by identifying events or people mentioned in them. Many are difficult to date, however, as they were rewritten on numerous occasions.

Apart from these difficulties of interpretation, the basic information from all the sources appears to be fairly reliable, and is considered, without further qualification, in relation to each of the main structural details of the buildings.

Ground Plan: Few of the references to buildings give any explicit description of the ground plan. This might indicate that it was felt to be unimportant, but it is more likely that one plan was so common in the area at the time of writing that it was unnecessary to specify it. As the earliest written sources date from the 8th century, it is probable that the descriptions generally apply to rectangular buildings as there is archaeological evidence of a growing preference for the rectangular plan during the Early Christian period. In the sources I have examined there are no references to circular buildings, with the possible exception of the palace at Cruachan. Several references appear to describe rectangular buildings. These are in stories written in the 12th century but probably derived from earlier oral traditions, so the date of the building is uncertain.

In Bruiden Da Chocae⁶ the destruction of a house is described:

[The enemy] kindle four vast fires in the Hostel, a fire at each point and each side thereof.

doighid ceithri teinnti dimóra isin mBruidin .i. teine gacha hairdi 7 gacha slessa di.

In the story *Boromha*, ⁷ the destruction of the house of Molling Luath is similarly described:

... now were four fires set to the house, one to every side. do ratait ceithre teinte iar sain sin teg .i. teine cacha slesa.

In a gloss added to one of the secular laws⁸ a house is described as having: four doors out of it, that the sick man may be seen from every side. ceitre dorais ass, conacadar in fer siric for cach leth.

Several of the sources describe the size of a house with a single measurement. It is not specified whether these buildings were rectangular or circular. Lucas⁹ has argued that the buildings were rectangular and that the measurement referred to the length. He suggested that the proportions of the buildings were fixed, either by convention or by the limitations imposed by an inability to span a wide roof. He supported this view by a reference to the story *Baile an Scáil*¹⁰ in which the size of a house is described:

Thirty feet was its length. deich traigid fichit a fod.

A comparison of two 8th-century descriptions supports the argument that these sources generally describe rectangular buildings. In the law *Crith Gablach*¹¹ the house of the *mruigfer*, whom Binchy regards as a normal small farmer, ¹² is described as:

a dwelling of twenty-seven feet. tech .vii. traiged fichet.

In the *Life of Patrick*¹³ by Tírechán, a church, which was clearly rectangular, was laid out in the following way:

Patrick measured the Church of God as sixty feet. pensabatque aeclessiam Deo Patricius pedibus eius lx pedum.

Both sources describe the size of a building with a single measurement and it is probable that they both refer to the same dimension. As the church was rectangular, this would imply that the house was also rectangular.

A law quoted by O'Curry¹⁴ suggests that, if the measurement was the length, the proportions of the building must have been 1.5:1. The law describes the proportions of wattle and wooden churches in the following way:

If it be an oratory of fifteen feet or less than that, that is fifteen feet in its length and ten in its breadth.

An examination of the length/breadth ratios of the more complete rectangular buildings of the period excavated in Ireland to date revealed two main types; a group of roughly square houses such as Carrigillihy, Co. Cork¹⁵ (6 × 5.20 m) and a group of buildings with a length/breadth ratio of roughly 1.5:1, such as Inishkea North, Bailey mor, House A, Co. Mayo (4 × 2.70 m), Beal Boru, Co. Clare (4 × 2.50 m) or Larne, Co. Antrim (5.20 × 3.70 m). It seems reasonable to attempt to reconstruct the wattle houses described in *Crith Gablach*¹⁶ with these proportions. The measurements given in this law for the houses of different grades of farmer ranged from c.5.20-9 m (17–30 feet — traigid).¹⁷ A reconstruction using the proportions 1.5:1 would give buildings ranging in size from 5.20 × 3.50 m to 9.10 × 6 m. This agrees well with the size of the excavated houses of this date, the majority of which ranged between 4 × 2.50 m and 7 × 6 m internally.

Wall construction: Most of the descriptions of wall construction refer to the use of wood or wattle. This emphasis must, to some extent, be due to the area in which

the sources were written, and may have an eastern, lowland, bias. The archaeological evidence, which is mainly derived from the north-east and south-west of Ircland, shows a greater diversity in the materials used, including drystone and mud walls.

Many of the written sources simply refer to the use of wattles as a wall material without giving any details of the construction. For example, in the *Life of Columba*¹⁸ by Adamnán, which is dated to the 7th century, Columba is said to have sent monks to gather wattles for building a guest house:

At one time the Saint sent his monks to bring bundles of wattle from the field of a certain layman in order to build a guest house.

Alio in tempore sanctus suos misit monacos, ut de alicujus plebei agellulo virgarum fasciculos ad hospitium afferent construendum.

A few texts give more details. In the *Life of Colmán Ela*¹⁹ it is recounted that Baíthín saw a man:

fixing a single wattle and when a wattle was fixed he would go to fetch another to fix it in the same way. However, the house was gradually raised by him.

... ag cur slaite 'na aenar: 7 mar dochuiredh slat, do liccedh ar cenn slaite ele da cur mar an ccédna. Gidh edh do eirigh an tigh lais.

The law Bretha Comaithchesa²⁰ describes the construction of a wattle field fence:

It is to be twelve hands high. There are to be three bands of wattle on it, one at the top, one in the middle and one along the base. Each post is to be rounded at the top. They are pushed down by hand into the ground, and then they are each struck three blows with a mallet. The length of a foot as far as the joint of the big toe is to be left between every two posts. Each post is to be three hands high above the top band of wattle, and there is to be a blackthorn crest on the fence.

da dorond dec dia hairde: tri buncair índi. buncor for a hictar. ocus araile inde ara medon, ocus araile fair iar nuachtur. co rugud cach cuaille iar nuachtur. ocus lamcur doib co nach urfaema ín talam: ocus tri beimeanna fair da (f)arca (a ceand. Ocus) traig co ruige deil nordan itir cac da cuailli: tri duirnd fot in cuaille uasa anamain, ocus cir draigain fair.

The use of a blackthorn crest along the top of a fence is also mentioned in *Aislinge Meic Conglinne*. ²¹ This detail can be paralleled from the Dublin²² excavations, where a few strands of blackthorn were used on the base of several walls and some small pens had been totally built of blackthorn. It would appear to have been used as the equivalent of barbed wire.

In the Life of Brigit²³ there is a story of Brigit tricking Ailill into giving her one hundred horseloads of white rods (cét marclach do fhinnchaeluch)²⁴ which she used to build a house at Kildare. The use of the adjective 'white' appears to indicate that the wattles were peeled of their bark but this has not been observed on any of the excavated Irish sites with preserved wattles. The usual wood for wattles appears to have been hazel. A law,²⁵ which grades the various trees for their usefulness, relates that hazel was prized for its nuts and its wattles (a maes ocus a cáel).

Several references indicate the use of a stronger wooden construction. In the description of the palace of Cruachan in *Táin bó Fráich*²⁶ it is said that:

The house was made of pine. de gius dognith a tech.

Yew timber was used for some of the internal woodwork. Oak was also used in building; in the story *Leighes coise Chéin*²⁷ it is related that acorns were planted which:

grew into full sized oaks. Of these the carpenters made boards . . . and in short built a great monastery.

ocus tángadar ina ndarachaib móra. ocus dorignedar na sáir clára díob i cédóir...ocus dorignedar mainisdir mór.

Adamnán in the *Life of Columba*²⁸ refers to the use of both pine and oak in house building. The use of ash wood inside a church is mentioned in a miracle in the *Old Irish Life of St. Brigit*.²⁹ In some cases, as St Mullin's oratory in Co. Carlow, the entire building was constructed of jointed planks. In the *Life of St. Moling*³⁰ a miracle is recounted in which the carpenter Gobban turned the oratory upside down:

So the oratory was inverted; and not a plank of it went from its place, and no joining of any plank moved from another.

Dobeir Gobbán. tra. trelamh 7 acfaing fair. co ro himpadh in durtach. Ocus ní dechaidh clár asa inadh dhe. ocus ní ro cumscaigh dlúthadh cláir díb sech a céile.

Adamnán mentions a floor of wooden boards in Columba's hut on Iona³¹ and the *Penitental of Cummean*³² refers to wooden floors in several churches. Many of these wooden buildings may have been highly decorated. According to the *Life of St. Maedóc*, ³³ the church at Ferns was decorated with:

wonderous carvings and brave ornaments. go ndealbhadhaibh iongantachaibh 7 go ngresaibh bregha.

Although details of timber construction are generally lost to archaeology, a high standard of carpentry has been found on preserved timbers on crannog sites and from the Dublin excavations. There are few references to building materials other than wood. In the *Life of Patrick*³⁴ by Tírechán, sod or mud is mentioned:

He built a rectangular church there with earth from the ground because there was no wood nearby.

fecit ibi aeclessiam terrenam de humo quadratam, quia non prope erat silva.

A fort mentioned in the Voyage of Mael Duin³⁵ had:

great snow-white houses. Tige snechtaidi márgela.

This may refer to stone or possibly to daub on wattle.

Entrances: References to entrances can be examined in two groups: (1) those giving the number and position of entrances, and (2) those describing the doors.

There are few clear references to buildings with a single entrance although Adamnán's description of Columba's hut on Iona, in the *Life of Columba*³⁶ suggests that small huts and buildings usually had one entrance. Two entrances appear to have been quite common. In the 8th-century law *Crith Gablach*, ³⁷ the house of the *ócaire* (the lowest grade of freeman recognized in Irish law) was described as having:

Two doorways in it, a door for one of them, a hurdle for the other. $d\acute{a}(n)dorus(n-)and-comla(e)$ ar ala $n-a\acute{i}$. clíath ar alailiu.

Two later stories give some indication of the position of the entrances. According to the story of the *Voyage of Mael Duin*, ³⁸ dated to around 1100, voyagers approaching an island saw:

a great house therein on the seashore, and a doorway out of the house into the plain of the island, and another door opening into the sea, and against that door there was a valve of stone.

teach mor indti i traigh an mara, 7 dorus asan tig hi maigreidh na hinnsi. 7 dorus n-aill isan muir. 7 comla lecdha frisin dorus n-isin.

This description suggests that the entrances were opposite one another, with a permanent door on the windy, seaward, side. Aislinge Meic Conglinne, ³⁹ a late 12th-century story which may be based on earlier material, describes two doorways in the guesthouse of the monastery of Cork:

wind and snow and rain about the door; so that the wind left not a wisp of thatch, nor a speck of ashes that it did not sweep with it through the other door. gáeth ocus snechta ocus fleochud ina dorus. coná fárcaib in gáeth sifind tuga nó minde lúatha cen scúabad lee dar in dorus aile.

Such references are of particular interest in relation to Irish vernacular architecture as, in the north and west of Ireland, two opposed entrances were common in traditional buildings.⁴⁰ Opposed entrances have been found in excavated buildings,⁴¹ but are not common.

In the story *Echtra Thaidg mheic Chéin*, 42 there is a description of a house: with four choice doors of bright gold. cona cetra doirrsib dígraise datháille do'n ór fhorloiscthe.

Similarly, in a law on compensation⁴³ it is decreed that a house has to have:

four doors out of it that the sick man may be seen from every side. ceitri dorais ass, conacadar in fer siric for cach leth.

Both of these references are fairly late, but they indicate the possibility that some rectangular houses had a door in each wall. There is no archaeological support for this.

In the story Togail Bruidne Da Derga, 44 Da Derga's house is described:

There are seven doorways into the house . . . but there is only one shutter in it and that shutter is turned to every doorway to which the wind blows.

Atáit. vii. ndoirsi isa teach . . . 7 ní fil acht oenchomlaid n-airi 7 im-suíthear in chomlai fri cech ndorus día mbí in gaeth.

This description may be exaggerated in order to enhance the story or it may depict a rather special type of building.

Several of the references quoted describe the use of a single door-valve on the entrance facing the wind. In the *Voyage of Mael Duin*⁴⁵ this was of stone. In the house of the *ôcaire*, described in *Crith Gablach*, ⁴⁶ one entrance had a door-valve, probably of wood, the other entrance had a hurdle. A miracle in the *Life of Columba*⁴⁷ by Adamnán recounts that light could be seen:

escaping through chinks of the door-valves, and through the key-holes. per rimulas valvarum et clavium foramina erumpentes noctu visebantur.

The use of a wooden door to windward, and a wicker or straw mat door on the sheltered side, is well known in the oral tradition of Irish vernacular architecture.⁴⁸

Doorposts (aursain) are mentioned in several sources such as Crith Gablach⁴⁹ but in the sources examined there were no written descriptions of the method used to hang the door. Key-holes and locks are mentioned but, with the exception of Columba's cell,⁵⁰ the examples examined refer to churches or to the outer gates of enclosures.

Hearths: Hearths situated inside domestic buildings are mentioned in several sources, for example in a law on property,⁵¹ in Aislinge Meic Conglinne⁵² and in the Life of Columba⁵³ by Adamnán. Only three of the references examined specify that the hearth was central and these refer to the rather exceptional buildings, Bricriu's house⁵⁴ and Maeve's palace at Cruachan.⁵⁵ The use of stones for cooking is mentioned in the Life of Munnu⁵⁶ and for heating drinks in the Life of Lug.⁵⁷ The Life of Berach⁵⁸ describes how stones for heating water were put on the fire in the refectory of the monastery. Similarly, in Aislinge Meic Conglinne⁵⁹ it is recounted:

the bath tub of the guest house, with the water of the night before in it, with its stones, was by the side of the door-post.

Lothomur in taige aíged co n-usci na haidche remi ind, cona clochaib hi taíb na hursand.

Other internal details: There are references to three types of internal divisions in the house: (1) the imdae⁶⁰ (bench for sitting and sleeping, or occasionally a room), (2) the cuile, cúil and cúilteach, ⁶¹ and (3) the airchae⁶² (possibly a part of the building although it may be a front yard).

Richmond, 63 in his discussion of the pre-Norman Irish house, argued that the interior was divided into a central aisle with closed compartments, the *immdai*, on either side. This interpretation was largely based on *Crith Gablach* in which the house of the *aire túise* was described:

Twenty-nine feet is the size of his house, nineteen feet his airchae. Eight immdai in his house with their full furnishing.

Noi traigid .xx. a thech. a noi .x. a airchae: ocht n-imdai isin tig cona n-ogthinchur . . .

The word *imdae* has variously been translated as 'room, couch, bed or compartment'. An examination of the contexts in which it occurs suggests that it was often the equivalent of the 'benches' identified in excavated houses, such as those from Dublin, and may be interpreted as an area for sitting or sleeping, which could be partitioned off when privacy was desired. In *Crith Gablach*⁶⁵ regulations concerning the penalties for damaging an *imdae* suggest that it was filled with straw, and sometimes had two or more posts as part of its framework.

What is subject to a penalty in regard to an *imdae*. If it be a wisp from a pillow, its penalty is a good cushion. If it be a wisp from any part below this, its penalty is a good skin rug. If it be a wisp from the feet, its penalty is paid in good shoes. If it be a wisp from the wall, new rushes for the strewing of it . . . The penalty for (harming) the two posts is one chattel.

Dírech n-imda(e): diam dlaí di chi(u)nn adairt. direnar dagcerchaill; diam dlaí di neoch bís fo suidiu, direnar daggamun: diam dlaí di chossaib. direnar dagassaib: diam dlaí di fraig, aín nue dia esair: . . . Dí loairgg direna(i)tar séot.

In the story Togail Bruidne Da Derga66 there is a description of:

an imdae more beautifully decorated than the other imdai in the house. A silvery curtain around it and ornaments in it.

... and imdae 7 ba caíniu a cumtach oldáta imdadae in tigi ol chena. Seól n-airgdidi impe 7 cumtaigi isinn imdae.

This is similar to the description of the *leba*⁶⁷ in Credhe's house mentioned in *Agallamh na Senorach*, ⁶⁸ where there was:

Another bed with tent-like curtains of bright flax blue and with slender copper rods. Leba eile . . . co pubaill co (mbriocht mb)uga. co caemshlataib créduma.

There were also:69

four posts round every bed cetra huaithne um gach leabaid

The similarity of the descriptions suggests that, in one of its meanings, the *imdae* was the equivalent of the *leba*, an area for sleeping with two or four vertical posts holding rods on which curtains could be hung when necessary. This is probably the meaning of the word *imdae* in the description of the house of the noble aire ttise, in Crith Gablach⁷⁰ which mentions:

eight imdai in his house with their full furnishing ocht n-imdai isin tig cona n-ógthinchur.

The *imdae* can also apparently be a bench enclosed by horizontal planks, such as the *chóemdae* (large *imdae*) in the house of the *ócaire* (the lowest grade of freeman recognized in Irish law), described in *Críth Gablach*⁷¹ as having:

an oak plank between every two chóemdai. clár ndara iter cach dí chóemdai.

Occasionally the word *imdae* appears to be used to describe a larger area, which can be interpreted as a separate room. For example, the story *Togail Bruidne Da Derga*⁷² mentions:

twelve men on silvery hurdles all around the room. dá fer déc for clíathaib airgdidib imon imdai sin ima cúaird.

A second series of references mention the cuile, cúil and cúilteach. These have been examined in detail by Lucas who cites a number of examples to suggest that all three were predominantly used for the storage of food, although occasionally a sick person might sleep there. Several references indicate that they opened into the main part of the house and the derivation of the words cúil (corner, recess, back) and cúilteach (back-house) both suggest that they might be annexes on to the back of the building. If the word cuile, which is derived from Latin culina, originally had a separate meaning this appears to have been lost by the time the descriptions were written. The airchae may also have been annexed to, or part of,

the main house. In Crith Gablach⁷³ the house of the mruigfer (a normal small farmer) is described as:

a dwelling of twenty-seven feet with an airchae of seventeen feet. tech .vii. traiged fichet. aircha(e) .vii. traiged nde(e)c.

It is worth noting that the same measurements were given in *Vita Tripartita*⁷⁴ for a house and store or kitchen (*cuile*). There is a slight indication that the *airchae* was used to store food as, according to *Crith Gablach*, ⁷⁵ the *ócaire* divided his food rent in it. Binchy ⁷⁶ suggests, however, that the text may be corrupt at this point. Lucas ⁷⁷ has argued that there is insufficient evidence to identify the *airchae* with the *cuile* and he suggests that the *airchae* may have been a forecourt rather than a structure.

Among other internal details, windows are occasionally mentioned. At Maeve's palace at Cruachan:⁷⁸

There were sixteen windows in the house, each with a bronze shutter. Bátar sé senistri déc issin tig, 7 comlae humae ar cech n-aí.

According to the story Fled Bricrend, 79 Bricriu's hall had senistre glainide. Henderson 80 translates this as 'glass windows', but the basic meaning appears to be 'clear windows', so it does not prove the pre-Norman use of window glass in Ireland. I know of no archaeological evidence for its use in pre-Norman Irish domestic buildings.

The story Fled Bricrend⁸¹ also describes how Bricriu built a balcony (grianán)⁸² against the side of the house. The use of the word grianán suggests that it could have been an open-air verandah. This is supported by the fact that, when the balcony collapsed, Bricriu fell into the courtyard.

Roofing: References to the framework of roofs give little indication of their structure. The word *cléithe*⁸³ is frequently translated as 'ridge-pole', although in many cases the context could refer to any roof timber. In two of the references examined, the translation appears justified. The story *Aedh Baclamh*⁸⁴ relates:

we saw the *cléithe* of a house come towards us on the sea and under that beam a house was built.

bhfacamar clethe an tighi chugainn forsin fairrgi. Dorónadh leamsa teach fá an gclethe sin.

In Crith Gablach, 85 the house of the ócaire is described as:

wattle to the lintel, a pair of rafters (literally⁸⁶ a feather or wing) between every two sections of wattle from the lintel to the cléithe. fi(d)thi co fordorus; ete iter cach dá fithe ó suidiu co cléithe.

Several other words were used in the sources to describe roofs, but their exact meaning is not clear and they give little indication of the roof structure.

Thatch⁸⁷ is often mentioned as a roof covering material. In several cases, recds or rushes are specified, as in *Vita Tripartita*⁸⁸ which describes a house being demolished so quickly that:

a rush of the thatch was not put on it before it was demolished. nithárrad simni tuga fair. ocus robrisiud...

Crith Gablach, 89 dictating how clerics were to build the house of a king who had entered the church, relates that each man was to supply:

a cartload of wattles and a cartload of rushes. carr coil carr oine.

None of the sources examined specifically mention the use of straw for thatch. Binchy translates the word *tuige*⁹⁰ as thatch, covering or straw, but the basic meaning of the word is 'covering' and its translation as 'straw' must be derived from the context in which it is found. In a law⁹¹ concerning the compensation due for theft, *tuige* appears to mean 'straw' but its use for thatch is not mentioned:

If it be straw that has been stolen, it is to be considered for what purpose the owner had it, if it was to burn it there is a fine of five chattels for it, if to be consumed by cattle there is a fine of man trespass for it, if to be put on beds under people there is a double fine for it.

masa tuigi, a fégadh cá fáth ris i raibe ac ris bunaidh hí acht más dá loscad. is cuic seoit; más dá caithium dindeilib, is fiach duine chaithe; más dá buain fo daínib, is diablad.

Wooden shingles⁹² are also mentioned as a roof covering. In *Tain bó Fráich*⁹³ Maeve's palace is described as having had:

a roof of shingles on it outside. Ba tuga slinned boi fair dianechtair.

The use of wooden shingles is supported by the evidence of contemporary representations of buildings. The word *slinn*, translated here as 'shingle' could equally well refer to a 'tile' or 'slate' roof.

In the Life of St. Moling 94 it is related that:

Moling went to ask him for some of the Yew of Ross. Of the tree Molaisse gave him the roofing for his oratory.

Docoid dano Molling d'iarraidh neich fair don Eo Rosa. Dorad Molaisi síniudh a dairthaighi dó don crund.

This may refer to the use of yew shingles, but it is possible that it simply means the timbers used in the framework of the roof.

In a 12th-century story the *Expulsion of Mochuda from Rahen*⁹⁵ it is related that one of the monks was forgotten while the others went to lunch:

He was angry at this, and sent a shovelful of earth from the trench through the skylight of the refectory, so that some of it fell into the trencher and cup of every monk indoors.

ro lonnaigedh siumh disuidhi. co ndocuirestair lan na sluaiste uada asin cladh don úir dar forlés an proinntige, co ndarainic a cuid a mias-cuadh cech manaigh bói istigh.

In this description, the skylight (forlés) 96 was clearly an open hole in the roof, which was probably intended to allow smoke to escape and to let some light and air into the building.

A skylight is also mentioned in the description of Maeve's palace at Cruachan in the story *Táin bó Fráich.*⁹⁷ *Togail Bruidne Da Derga*⁹⁸ mentions a wicker hut which was built:

without any door but only a window and a skylight. cen dorus nann eter. acht seinister 7 forleas nama.

DISCUSSION

The information concerning pre-Norman Irish houses which can be derived from these contemporary sources can most easily be understood by attempting to reconstruct three different types of building. I have based these on the fairly full description of the house of the *ôcaire* (the lowest grade of freeman recognized in Irish law) and the *aire túise* (farmer of noble grade) and of the palace of Maeve at Cruachan. Where details are lacking, the descriptions are supplemented by the evidence from other sources which have been quoted.

The house of the ócaire: The ócaire was the lowest grade of freeman recognized in Irish law and can be regarded as a small farmer with slightly less property than the average man in Irish law. 99 His house is described in the 8th-century law Crith Gablach: 100

It is wattle to the level of the lintel. There are a pair of rafters (literally: a feather or wing) between every two sections of wattle (or every two wattles) from the lintel to the ridge(?). There are two doors; a wooden door on one, a hurdle on the other. The house is without internal partitions (literally: hurdles or wattles) and without bed-frames. There is a palisade of wattles around it. There is an oak plank between every two benches (large *imdai*) . . . Its size is nineteen feet, the size of the front yard(?) is thirteen feet.

fí(d)thí co fordorus: ete iter cach dá fíthe ó suidiu co cléithe: dá (n)dorus (n-)and-comla(e) ar ala n-aí. clíath ar alailiu; os hé cen chlíatha cen tulggu; udnocht coil imbi; clár ndara iter cach dí choemdai...noí traigi(d).x. a mét side; trí traigid.x. a (a)ircha(e).

This house was probably rectangular and c.5.80 m long with a yard (airchae) 4 m long. As there is some evidence to suggest the use of the proportions 1.5:1, the house may have been $c.5.80 \times 3.90$ m. The use of two entrances, with a wooden door for the windward side and a hurdle for the sheltered side, is well known in Irish vernacular architecture. Other references suggest that the doors were placed opposite one another, but it is not clear whether they were in the gable or the lateral walls. The walls were of post-and-wattle construction. The roof may have had a ridge (cléithe) with rafters from the ridge to the top of the wall, but it is possible that cléithe only refers to the highest point of the roof without the specific meaning 'ridge'. There is no evidence to indicate whether the roof was hipped or gabled; both forms are found in the contemporary representations. Other sources indicate that a house of this size would probably have had a thatched roof of rushes or straw. Windows and skylights were used in some buildings, but they might not have been used in all smaller houses.

There were no internal partitions, but areas for sitting and sleeping, which can be interpreted as benches, were delimited by horizontal planks and probably filled with straw. The hearth is not mentioned, but other sources refer to hearths inside the house.

The house of the aire túise: The aire túise was a noble and his house, although similar to that of the ócaire was larger.¹⁰²

The size of his house is twenty-nine feet, nineteen feet is the size of his front yard(?). There are eight bed cubicles in the house with their full furnishings. Not traigid .xx. a thech, a not .x. a airchae: ocht n-imdai isin tig cona n-ogthinchur.

The size of this house can be estimated as $c.8.80 \times 5.90$ m, with a yard (airchae) c.5.80 m long. The other main difference between this and the house of the ócaire was the provision of eight imdai, which in this case can be interpreted as bed-cubicles, with posts at two or four of the corners to support rails for curtains. The imdai were probably usually open to the centre of the house, but could be curtained when privacy was required. Richmond, 103 using the same descriptions from Crith Gablach interpreted the house of the aire tuise as an aisled hall with four permanent cubicles on either side of a central passage and with a single entrance in one gable wall. This reconstruction can be criticized on several grounds; (1) there is no evidence that, in a normal house, the *imdai* were permanently separated from the living area and (2) there is no evidence for their position. Richmond's interpretation appears to be based on the plans of the 'Banqueting' hall of Tara' (Teach Miodhchuarta) in the Book of Lecan¹⁰⁴ and the Book of Leinster. These are not reliable representations of pre-Norman houses, however, but schematic plans used to illustrate the grades of society. Due to his reconstruction of the *imdai* as permanently enclosed cubicles, Richmond had to interpret the single measurement as the width of the house. The overall measurements of his reconstruction were, therefore, $c.18.30 \times 8.80$ m. He appears to have ignored the references to two entrances.

Maeve's palace at Cruachan: The descriptions of Maeve's palace at Cruachan in the story Fled Bricrend¹⁰⁵ and in $T \acute{a}in b\acute{o}$ Fr $\acute{a}ich^{106}$ present a picture of a larger and very different type of building. O'Brien dated the extant versions of Fled Bricrend¹⁰⁷ to about 1100, with some later interpolations, but suggested that the story was first written down in the 8th century from earlier oral tradition. According to Greene, 108 Táin bó Fráich is one of a series of stories based on Táin bó Cúailnge which was probably first written in the 7th century from earlier, even 4th-century tradition, although the earliest extant versions date to around 1100. Both descriptions of Cruachan appear, therefore, to date to at least the 8th century and they are so similar that one is probably a copy of the other. The description in $T \acute{a}in$ bó Fr $\acute{a}ich^{109}$ is as follows:

This is what the house looked like: Seven rows and seven *imdai* from hearth to wall in the house all round the house. The front rail of each *imdae* was made of bronze. The partition was of red yew all planed and mottled. There were three bars of bronze in the ceiling of each *imdae*. Seven pillars of bronze stretched from the ox cauldron to the highest point of the roof. The house was built of pine with a roof of shingles (or tiles or slates?). There were sixteen windows, each with a bronze shutter. There was a copper cover over the skylight. Four copper posts overlaid with bronze stood around the *imdae* of Aillil and Maeve, which was in the centre of the house. Its two front rails were of silver overlaid with gold.

Ed a écosc in taige: sechtordd and secht n-imdai ó thein co fraig isin taig imme cúaird. Airinech di chrédumu for cech imdai; aurscartad derggibair fo mrechtruncain uile. Trí stéill chrédumai i n-aulaith cecha imda, secht stíalla umai ón damdabaich co cléithe issin tig. De gíus dogníth a tech. Ba tuga slinned boí fair dianechtair. Bátar sé senistri déc issin tig, 7 comlae humae ar cech n-aí. Cuing umai darsa forlés. Cethéora ochtga humai for imdai Ailella 7 Medba, immdernide de chrédumu uili, is sí i certmedón in taige. Dá aurainech arggait impe fo díor.

The description in *Fled Bricrend* ¹¹⁰ is very similar:

There were seven circles and seven imdai from hearth to wall. The front rails were made of bronze and the partitions of red yew. There were three bars of bronze in the roof of the house. It was built of oak with a shingle (or slate or tile) roof. There were twelve windows with a covering of glass. The imdae of Aillil and Maeve was in the middle of the house. It had front rails of silver around it and posts of copper. secht cúarda and ocus secht n-imdada o thein co fraig. Airinich créduma ocus aurscartud dergibair. Tri stéill chréduma i taulaich in taige. Tech darach co tugi slinned. Di senistir déc and co comlathaib glainidib friu. Imdui Ailella ocus Medba immedon in tige. Airinig airgdidi impe ocus steill chréduma.

Allowing for exaggeration, the basic description could be interpreted as a circular house, built of oak or pine with a roof of wooden shingles. Both the hearth and the important area of the house, where Aillil and Maeve lived, seem to have been at the centre of seven concentric circles of posts. The seven strips of bronze from the cauldron to the roof-tree (cléithe) could be interpreted as an innermost ring of posts around the fire where the cauldron was probably situated. In this case, it seems likely that cléithe is used in the sense of the highest point of the roof, rather than 'ridge-pole'. Although the interpretation of the circular plan depends entirely on the phrases secht cuarda (seven circles) and imme cúaird (all round), it is supported by the fact that the resulting building is very similar to Bersu's reconstruction of the excavated house at Lissue, Co. Antrim.¹¹¹

CONCLUSIONS

The buildings discussed represent the houses of two grades of farmer and an outstanding royal site. The value of these descriptions depends on the limitations of the historical sources. The houses reconstructed from these sources and from the archaeological evidence, share some features but do not form a coherent picture. Part of the explanation may be the social and geographical bias of the written sources. They rarely describe poorer houses or specialized buildings and appear most often to be concerned with the north, east and midlands of the country. The archaeological evidence, however, includes a wider social range of buildings, some structures which probably had specialized, non-domestic functions, and even temporary structures.¹¹²

DOCUMENTARY REPRESENTATIONS

Teach Miodhchuarta in the Book of Lecan and the Book of Leinster: 113 In both the Book of Lecan and the Book of Leinster there are plans of the Teach Miodhchuarta or 'Banqueting Hall' of Tara. These illustrate a poem which gives a brief and

exaggerated description of the building and relates the order of precedence of the people inside. The plan in the 12th-century Book of Leinster is a rectangular area divided into five longitudinal columns. In the outer two columns on each side there are lists of the social grades. In the central column there is a drawing of a man cutting meat from a spit and rough pictures labelled 'fire' and 'light'. A gap in the border at the centre of one of the shorter sides may have been intended to indicate the door.

The plan in the *Book of Lecan* has more pretensions to architectural detail. The basic layout is the same as in the *Book of Leinster* but the names of the different social grades are in boxed compartments. In the central column of the plan there are labelled drawings of three fires, a cauldron, a lamp and candles. The door, which is also labelled, is in the middle of one of the shorter sides of the rectangle. Two dots on either side of the door may represent jambs. Inside the entrance, there is an open hall at right-angles to the central passage.

Richmond¹¹⁴ interpreted these plans literally, but as their main function was to illustrate the poem and show the order of precedence of the social grades, architectural accuracy was incidental. The details which can be identified may depict 12th-century features and cannot be used as primary evidence for the pre-Norman period.

The drawing of the Temple in the Book of Kells: Some authorities have argued that the Book of Kells is of Northumbrian or Pictish origin, 115 but as it is still commonly regarded as an Irish manuscript, 116 the drawing of the Temple is relevant to a study of Irish buildings. The drawing 117 shows the side view of a building with the gable walls partly flattened out in an odd perspective. The ground plan of the building is rectangular with a framed door in the middle of the side wall. The wall material is not clear, but bands of decoration at the top and bottom of the wall may indicate the use of a wall-plate and ground-sill. The steep roof has a short ridge and hipped ends. Both end pairs of rafters cross at the ridge and terminate in animal-headed finials. The decoration on the roof appears to indicate shingles or tiles. Schmidt 118 interpreted this building as having external buttresses, but the drawing does not support this reconstruction. As this is intended as a representation of the Temple, it is probable that it depicts an oratory rather than a domestic building. It is important, however, to note the form and pitch of the roof, the apparent use of sill-beams and the fairly sophisticated carpentry.

The level of craftsmanship used in normal domestic buildings might, in general, be simpler; but the drawing of the Temple does indicate the range and level of techniques which were available to carpenters of the period and which can be considered in reconstructions based on the archaeological evidence.

NOTE

The Society is grateful to the British Academy for a grant towards the publication of this paper.

NOTES

- ¹ For a general assessment of the written sources for Early Christian Ireland see K. Hughes, Early Christian Ireland: Introduction to the Sources (London, 1972)
 - ² D. A. Binchy (ed.), Crtth Gablach (Medieval and Modern Irish Series, XI, Dublin, 1970). ³ K. H. Jackson, *The Oldest Irish Tradition: A Window on the Iron Age* (Cambridge, 1964).
 ⁴ A. O. and M. O. Anderson, *Adomnan's Life of Columba* (Edinburgh, 1961).

⁵ Eleven of the Early Christian sites excavated in Ireland up to 1977 have yielded both circular and rectangular buildings. On five of these sites the rectangular buildings were stratigraphically later than the circular ones. On the remaining sites the exact relationship was not clear but in no case was a circular building definitely later than a rectangular one.

6 W. Stokes, 'Da Choca's Hostel', Revue Celtique, XXI (1900), 322, lines 15-16. Translation: ibid., 323. ⁷ S. H. O'Grady (ed.), Silva Gadelica: A Collection of Tales in Irish, 2 vols (London, 1892), 1, 372, lines 9-10. Translation: ibid., 11, 410.

⁸ Ancient Laws of Ireland, 6 vols, Rolls Scries (Dublin, London, 1865-1901), 1, 19-20. Translation: ibid.,

131.

⁹ A. T. Lucas, 'Contributions to the History of the Irish House: A Possible Ancestry of the Bed-Outshot (Cúilteach)', Folklife, VIII (1970), 87.

10 E. O'Curry, Lectures on the Manuscript Materials of Ancient Irish History (Dublin, 1861), 619. Translation: ibid., 621.

¹¹ Op. cit. note 2, 8.

12 Op. cit. note 2, 77–78.

13 W. Stokes, The Tripartite Life of Patrick (London, 1887), 307, lines 24–25.

14 E. O'Curry, in W. K. Sullivan (ed.), On the manners and customs of the ancient Irish: A series of lectures

**E. O Curry, in W. K. Sullivan (ed.), On the manners and customs of the ancient trish: A series of tectures delivered by the late Eugene O'Curry (London, 1873), 48-49.

15 Carrigillihy, Co. Cork. M. J. O'Kelly, 'An Early Bronze Age Ring-fort at Carrigillihy, Co. Cork', J. Cork Hist. and Archaeol. Soc., Lvi (1951), 69-71, 86, Fig. 1; Inishkea North, Co. Mayo, F. Henry, 'Remains of the Early Christian Period on Inishkea North, Co. Mayo', J. Roy. Soc. Antiq. Ireland, Lxxv (1945), 137-40, 150, Fig. 8; Beal Boru, Co. Clare. M. J. O'Kelly, 'Beal Boru, Co. Clare', J. Cork Hist. and Archaeol. Soc., Lxvii (1962), 6-7, Fig. 4; Larne, Co. Antrim. D. M. Waterman, 'A Marshland Habitation Site near Larne, Co. Antrim, Ulster J. Archaeol., 3rd ser., xxxiv (1971), 66-70, Fig. 4,5.

¹⁶ Op. cit. note 2.

17 traig (Irish): (a) the human foot, step; (b) foot as a measurement of length (Contributions to a Dictionary of the Irish Language, Royal Irish Academy). The measurement can be estimated as 25–30 cm.

Op. cit. note 4, 328, para. 54b. Translation (adapted): ibid., 329.
C. Plummer (ed.), Bethada Náem nErenn. Lives of Irish Saints, 2 vols (Oxford, 1922), 1, 179, para. 34. Translation: ibid., II, 173.

²⁰ Op. cit. note 8, IV, 112, lines 8–15. Translation (adapted): ibid., IV, 113.
²¹ K. Meyer, Asslinge Meic Conglinne. The Vision of Mac Conglinne (London, 1892), 87, lines 13–15.

²² I am grateful to A. B. O'Ríordáin of the National Museum of Ireland for information regarding the wattle from the Dublin excavations.

²³ W. Stokes, Lives of the Saints from the Book of Lismore (Oxford, 1890), 47, lines 1570-77.

24 finnchaelach (Irish): finn: white. caelach: twigs, wattles. Often translated as 'peeled wattles' (Contributions to a Dictionary of the Irish Language, Royal Irish Academy).

25 F. Kelly, 'The Old Irish Tree-List', Celtica, x1 (1976), 109.

26 W. Meid (ed.), Táin Bó Fráich (Medieval and Modern Irish Series, xx11, Dublin, 1967), 3, lines 69-70.

²⁷ Op. cit. note 7, 1, 299, line 29. Translation: ibid., 11, 336.

²⁸ Op. cit. note 4, 452, para. 100a, 454, para. 100b.
²⁹ M. A. O'Brien, 'The Old Irish Life of St. Bridgit', Irish Historical Studies, 1 (1939), 126, para. 20. 30 W. Stokes, 'The Birth and Life of St. Moling', Revue Celtique, XXVII (1906), 288, para. 47. Translation: ibid., 289.

ai Op. cit. note 4, 258, para. 29a.

32 L. Bieler (ed.), The Irish Penitentials (Scriptores Latini Hiberniae, v, Dublin, 1963), 132, para. 26.

³³ Op. cit. note 19, 1, 188, para. 34. Translation: ibid., 11, 182.

³⁴ Op. cit. note 13, 327, lines 5–6.
³⁵ W. Stokes (ed.), 'The Voyage of Mael Duin', Revue Celtique, 1x (1888), 476, line 6. Translation: ibid.,

477.
36 Op. cit. note 4, 502, para. 119a, 510, para. 122a.
37 Op. cit. note 2, 4, lines 100–101. Translation: E. MacNeill, 'Ancient Irish Law. The Law of Status or 287.

- Op. cit. note 35, 468, lines 3-5. Translation: ibid., 469.
 Op. cit. note 21, 11, lines 13-16. Translation: ibid., 10.
 C. O'Danachair, 'Traditional Forms of the Dwelling House in Ireland', J. Roy. Soc. Antiq. Ireland, CII (1972), 81.
- 41 For example see Carrigillihy, Co. Cork, op. cit. note 15; Church Island, Co. Kerry, House 2. M. J. O'Kelly 'Church Island near Valencia, Co. Kerry', *Proc. Roy. Irish Acad.*, LIXC (1958), 73-75, 124-25, Fig. 4,15.

 42 Op. cit. note 7, 1, 351, line 5. Translation: ibid., 11, 393.

 43 Op. cit. note 8, 1, 130, lines 19-20. Translation: ibid., 1, 131.

```
<sup>44</sup> E. Knott (ed.), Togail Bruidne Da Derga (Medieval and Modern Irish Series, VIII, Dublin, 1975), 9,
para. 20
   <sup>45</sup> Op. cit. note 35, 468.
   46 Op. cit. note 2, 4, lines 100–101.

47 Op. cit. note 4, 502, para. 119a. Translation: ibid., 503.
   <sup>48</sup> For 19th-century examples see A. T. Lucas, 'Wattle and Straw Mat Doors in Ireland', Studia
Ethnographica Upsaliensa: Arctica, 11 (1956), 27.
   49 Op. cit. note 2, 9, lines 216-17.
   <sup>50</sup> Op. cit. note 4, 502, para. 119a.
   <sup>51</sup> Op. cit. note 8, 111, 264.
   <sup>52</sup> Op. cit. note 21, 15.

Op. cit. note 4, 256, para. 28b.
G. Henderson (ed.), Fled Bricrend: the Feast of Bricriu (Irish Texts Soc., 11, London, 1899), 2, lines 13-14.

    Op. cit. note 54, 68, lines 19-20.
    C. Plummer (ed.), Vitae Sanctorum Hiberniae, 2 vols (Oxford, 1910), π, 228, para. 6.

   <sup>57</sup> Op. cit. note 56, 11, 211, para. 17.
   <sup>58</sup> Op. cit. note 19, 1, 30, para. 40.
59 Op. cit. note 21, 11, lines 22–23. Translation: ibid., 10.
60 imdae, plural imdai (Irish): (a) compartment or cubicle containing couches for sleeping; (b) bed, couch; (c) grave, tomb; (d) resting place in general (Contributions to a Dictionary of the Irish Language, Royal
Irish Academy).
chóemdae : co : large. imdae : bed, etc.
   61 cuile (Irish): related to Latin culina, kitchen, storehouse. cúil (Irish): corner, recess, back. cúilteach
(Irish): back-house.
   62 airchae (Irish): air: before. cae: way, place. See Lucas, op. cit. note 9, 95. Usually translated as
'annexe' or 'outhouse', but it may mean 'yard' or 'enclosure'.

63 I. A. Richmond, 'The Irish Analogies for the Romano-British Barn Dwelling', J. Roman Studies, XXII
(1932), 98–99.
      Op. cit. note 2, 16, lines 400-402. Translation: adapted from MacNeill, op. cit., note 37, 299.
   65 Op. cit. note 2, 9, lines 229-32, 236. Translation: adapted from MacNeill, op. cit. note 37, 292-93.
66 Op. cit. note 44, 30, para. 99.
67 leba (Irish): (a) harbourage, protection; (b) bed, cubicle, sleeping apartment, couch, nest of animals (Contributions to a Dictionary of the Irish Language, Royal Irish Academy).
   68 Op. cit. note 7, 1, 111, lines 36–37. Translation: ibid., 11, 120.
69 Op. cit. note 7, 1, 112, line 5. Translation: ibid., 11, 121.
   70 Op. cit. note 2, 16, lines 401-402. Translation: adapted from MacNeill, op. cit. note 37, 299.
   <sup>71</sup> Op. cit. note 2, 4, line 102.
   72 Op. cit. note 44, 33, para. 103.
73 Op. cit. note 2, 8, line 193. Translation: adapted from MacNeill, op. cit. note 37, 291.
   <sup>74</sup> Op. cit. note 13, 236, lines 21-22.
   <sup>75</sup> Op. cit. note 2, 4, line 104.
   <sup>76</sup> Op. cit. note 2, 28.
   <sup>77</sup> Op. cit. note 9, 95.
  <sup>78</sup> Op. cit. note 26, 3, lines 71-72.
  <sup>79</sup> Op. cit. note 54, 4, line 11.
<sup>80</sup> Op. cit. note 54, 5. glainide (Irish): made of glass or crystal, clear (Contributions to a Dictionary of the Irish Language, Royal Irish Academy).
   <sup>81</sup> Op. cit. note 54, 4, lines 8–15.
82 grianán (Irish): grian: sun. grianán: sunny chamber, bower, soller, open balcony (Contributions to a Dictionary of the Irish Language, Royal Irish Academy).
   83 cléithe (Irish): (a) roof-tree, ridge-pole, by syncdoche used for dwelling, building; (b) top, crown
(Contributions to a Dictionary of the Irish Language, Royal Irish Academy).
   84 Op. cit. note 7, 1, 72, lines 8–10. Translation: adapted from ibid., 11, 75.
  85 Op. cit. note 2, 4, lines 99-100.
86 ete (Irish): literally: feather, plume, wing. In the context of roofs ete possibly had a technical meaning.
A pair of rafters could resemble a wing. See Binchy, op. cit. note 2, 28.
    <sup>7</sup> tugae, tuige (Irish): (a) act of covering, cover, protection; (b) act of roofing, thatching, by transference:
thatching material, straw (Contributions to a Dictionary of the Irish Language, Royal Irish Academy).
  88 Op. cit. note 13, 156, lines 8–9. Translation: ibid., 157.
89 Op. cit. note 2, 22, line 573. Translation: ibid., 68.
   90 Op. cit. note 2, 67.
91 Op. cit. note 8, 111, 150. Translation: ibid., 111, 151.
   92 slinn (Irish): shingle, tile, flat stone; glossed by Latin imbrex (Contributions to a Dictionary of the Irish
Language, Royal Irish Academy).
   <sup>93</sup> Op. cit. note 26, 3, line 70.
   94 Op. cit. note 30, 280, para. 34. Translation: ibid., 281.
   95 Op. cit. note 19, 1, 301, para. 5. Translation: ibid., 11, 292.
```

96 forlés (Irish): lés: light, radiance, light of day. forlés: roof-light, skylight (Contributions to a Dictionary of the Irish Language, Royal Irish Academy).

⁹⁷ Op. cit. note 26, 3, line 72.

98 Op. cit. note 44, 19, para. 6. Translation: ibid., 19.
99 Op. cit. note 2, 101–102.

¹⁰⁰ Op. cit. note 2, 4, lines 99–105.

¹⁰¹ Op. cit. note 48, 34.

¹⁰² Op. cit. note 2, 16, lines 400–402.

¹⁰³ Op. cit. note 63, 102–103.

104 G. Petrie, On the history and antiquities of Tara Hill (Dublin, 1839), 172-87, Pl. VIII, IX.

105 Op. cit. note 54, 68, 70.
106 Op. cit. note 26, 3, lines 65–75.
107 M. A. O'Brien, 'Fled Bricrend', in M. Dillon (ed.), *Irish Sagas* (Cork, 1968), 68–69.
108 D. Greene, 'Tain B6 Cúailnge', in M. Dillon (ed.), *Irish Sagas* (Cork, 1968), 97–98.

¹⁰⁹ Op. cit. note 26, 3, lines 65-75.

- op. cit. note 54, 68, 70, para. 55. Translation: ibid., 69.

 111 G. Bersu, 'The Rath in Townland Lissue, Co. Antrim: Report on Excavations in 1946', Ulster J.
- Archaeol., 3rd ser., x (1947), 42-47.

 112 I am very grateful to Próinseas Ní Chatháin, Dept. of Irish, University College, Dublin, for her help with the Old Irish material in this article.

¹¹³ Op. cit. note 104.

Op. cit. note 63, 98-99.

114 Op. cit. note 63, 98-99.

115 For example, see T. J. Brown, 'Northumbria and the Book of Kells', Anglo-Saxon England, 1 (1972), 219-46.

116 For example see F. Henry, The Book of Kells (London, 1974), 218.

117 F. Henry, Irish Art in the Early Christian Period to 800 A.D. (London, 1965), 87-88, Fig. 9. 118 H. Schmidt, 'The Trelleborg house reconsidered', Medieval Archaeol., XVII (1973), 65.