The Characteristic Features of Irish Architecture from Early Times to the Twelfth Century.

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The primitive building customs of a country—the product of its climate and available materials, of the genius and the manners and customs of its inhabitants—may develop to the dignity and form the basis of its national architecture. The influence of these primitive customs prevails, or is often discernible at least, in that architecture during the later stages of its development. In addition to the natural development in building which comes with material and cultural progress, other influences make their impression upon the architecture of a country; those of its arts in other media and the constructional methods and decorative motifs acquired by contacts with the architectural and other arts of foreign countries. These features, modified and absorbed, become part and parcel of the native architecture.

Great styles of architecture like the Romanesque and the Gothic, spread and held sway in their time over large areas with little respect to national frontiers. The national architectures within the spheres of the great styles are local variants of them. The relation is analogous to that of Genera and Species: the great style is the genus, a national or provincial style a species. While some few countries can lay claim to be the homeland of a genus, almost all have developed a native species.

Irish architecture is no exception to these broad definitions of the origin and manner of growth of a national style and in treating of its characteristic features attention will first be given to those which appear to be the most primitive and to have their origin in local conditions. Other features, of early or more advanced periods, whose origins are to be sought either at home or further afield, will be dealt with in their turn in an order roughly chronological. First in order come the “batter” and the “corbel-vault.”

The Batter. This word, the mason’s term for the inclination of a wall face inwards from the perpendicular is, perhaps, derived from the Old French batre, to beat down. The feature is of particular interest in Irish architecture because of its persistence from the earliest times almost to the present day. The Irish masons clung with remarkable tenacity to the practice of battering walls. The feature is observable in many of the small early churches, the structures of the Romanesque period, the monastic buildings of the later centuries and the castles of the fifteenth, sixteenth and early seventeenth centuries. It can be seen, though not in a pronounced form, in churches and other buildings erected so recently as the early part of the nineteenth century. Even today it is the practice of masons to give what they call a “turn of the line,” i.e., as much inclination as is represented by the width of the cord of the plumb rule, when building the quoins of stone structures.

Though, doubtless, the great majority of the early buildings of Ireland were of timber, it is not probable that the origin of the batter is to be found in that form of construction since there is no technical or probable reason for sloping inwards the walls of a timber building. Good reasons do exist, however, in buildings of either earth or dry masonry. In Egypt, where the batter is a most pronounced feature of the architecture, it is undoubtedly derived from the early buildings of Nile mud, but it is not necessary for us to seek so far afield for origins when more obvious clues lie nearer to hand. The existence in Ireland of many early buildings in stone without mortar and the technique in dry stone building existing here even to-day provide sufficient evidence for the solution of the problem. The early buildings are battered to provide security against the slipping and spreading of the un-mortared masonry; the principle may be discerned in its crudest application in the stone fences and road walls which are to be seen almost anywhere in the Irish countryside. The batter in the early churches built in mortar and in the more advanced work of the later periods is more subtle, a matter of a few inches in the height of the walls. In some cases it is barely perceptible. Generally the whole wall is inclined, there being no reduction in its thickness as it rises. Consequently, as has been proved by measurement, the interior dimensions of the buildings decrease from the ground level upwards. Among buildings in which the feature is present and which have been carefully surveyed are:
St. Kevin's Church, Glendalough, Co. Wicklow, all the walls of which have a perfectly regular batter of 13 inches, measured at the eaves level. The twelfth century churches at Kilmaine and Ardfeart (Templenahoe), Co. Kerry, where it amounts to about 2 inches at the same level. Taghmon Church, Co. Westmeath. This is a comparatively late example, but the feature with the corresponding decrease in interior dimensions is present.

The towers of almost all the abbeys and friaries, which are such characteristic erections of the fifteenth century, and castles, too numerous to mention, of that period and of the following century and a half are subtly battered. That the feature is specially Irish seems to be proved by its absence in the early Cistercian erections and the thirteenth century buildings of the English Pale and other places under English influence. It is little seen in England except in some of the towers of pre-Conquest (Saxon) churches, nor does it appear further afield. The usual English and continental method of giving grace to a tall structure is to divide it into storeys, diminishing each in width by a few inches. This diminution is usually made at a string or band course.

For whatever reasons the batter was first adopted, it was undoubtedly retained as a grace, an architectural refinement, giving a sense of stability and aesthetic satisfaction. A good example, and one which may—though outside the chronological limits of this article—be cited in proof that the feature was used to satisfy the eye is the tower of the Franciscan Friary at Adare, Co. Limerick. Only so much of the tower as would be visible above the roof is battered. From this level downwards, where it would be hidden by the roofs, the building is quite perpendicular.

The conspicuous presence of the batter in the Round Towers must also be mentioned. Without it they would lack all grace and the sense of stability. It seems to be combined in some of the towers with a slight entasis or swelling as in the Classic column, but no measurements sufficiently accurate to prove its existence in these structures have as yet been taken.

The Corbel Vault. Of at least equal antiquity to the batter is the corbel vault; the roof of solid stone built, not on the principle of the arch, but on that of encorbellement. For the present purpose corbels may be defined as stones laid flat, or nearly so, projecting beyond their supports to carry other corbels above them. A vault formed by a succession of corbels from each side of a building till they meet at the centre is a corbel vault. The feature is by no means exclusively Irish. It is, indeed, a natural and obvious expedient for the covering in of spaces of moderate dimensions and one which would suggest itself to, and be adopted by primitive builders if reasonably flat stones of adequate dimensions were available to them. The classic example is the tholos tomb at Mycenae, in Greece, called the Treasury of Atreus or Tomb of Agamemnon, built, perhaps, about 1500 B.C. There are many examples in other places abroad and the principle was used by the cairn builders of the Bronze Age in Ireland, notably at Newgrange, Dowth and Sliabh na Caillighe in County Meath. We possess a number of buildings presenting a clear chain of development through the centuries.

First, apart from the Bronze Age examples, comes the simple bee-hive hut, the clochán (Fig. I). There are many of these little buildings in the south-west, the most considerable and perfect group being on Skellig Michael, off the coast of Kerry, were on a shelf elevated some 600 feet over the Atlantic, are eight more or less perfect clocháns. In the typical hut the corbel principle is well applied, in fact, the structure is composed entirely of corbels from the foundations to the covering stone. Each course of stones, laid without mortar and nearly horizontal, overlaps inwards by a little the course below. Gradually the building narrows till the apex of the vault can be closed by one stone and the 'dome' is then finished by more courses to secure the covering or closing stone and complete the external outline. All the stones slope outwards a little to direct the rain away from the interior and as a precaution against inward collapse during the erection of the building. The normal clochán is circular or nearly so in plan, though forms roughly oval or oblong with rounded corners are also found. It is easy to understand how unsuitable to such a building would be the arch form of construction. Not only would the downward slope of the joints of the arch invite and direct the rain into the interior, necessitating some external covering, but heavy abutments would have to be provided to resist the outward thrust of the arch itself. The tendency towards collapse in the corbel structure is inwards, but in a small circular building of corbels an inward movement but serves to wedge or tighten together the inner ends of the stones; each course, is, in effect, a completely circular arch lying in a horizontal plane.
The step in the transition from the round to the rectangular plan is the oblong with rounded angles. In this form the interior apartment is nearly rectangular but the corners of the interior quickly become rounder as they rise.

The completely rectangular plan was attained in a number of small oratories, of which the only perfect example remaining is that remarkable little building, the oratory at Gallarus, near Kilmalkedar, in County Kerry (Figs. 1 and 2). Built without mortar, of stones carefully selected, partially wrought and ingeniously fitted together, it has stood for perhaps more than 1,200 years. It still defies the moist gales of Kerry, for it is, even now, bone-dry within in the wettest weather. From the outside not unlike a turf stack in appearance, it is internally a roughly pointed vault. The cross section at the centre, indicated by the dotted lines, shows the slight deformation which has taken place in the sides midway in their length. This slight inward sagging shows externally as a slight hollow. These are the visible indications of the new constructional problem to be overcome, inherent in a corbelled building of completely rectangular plan. As, in effect, the sides of the building are simply walls inclined inwards the resistance afforded by the wedging in each course of the circular clochán is lacking. It is because of this defect that other similar oratories in the Dingle peninsula have collapsed in their upper parts, only the very superior workmanship of Gallarus, the large stones used and their careful fitting have saved it from the same fate.

The use of the mortar made it possible to construct on a small scale corbel vaults of straight-sided form. The roof of the small chancel of St. Lua's Church, Friar's Island (Fig. 1) re-erected at Killaloe some years ago, is an example. The space spanned, however, is so small and the structure so massive in proportion that no inward sagging is in evidence. The small cavity apex of the roof is a structural expedient to lighten the vault and is the germ of the larger spaces to be found in later roofs of greater size.

If the corbel principle was to be retained for the roofs of rectangular structures of larger size—and the Irish mason seems to have been wedded to the corbel principle for such purposes—it was necessary to find a way to overcome the inward sagging tendency of the roof slopes at the critical point. The mason found the solution in what may be termed the propping arch.
The sections of the roofs of St. Columb’s House, at Kells, Co. Meath, and St. Kevin’s Church at Glendalough (Fig. 1) show, at the crown of the inner vault, a breadth of rough arching. Its function is to prop the heavy opposing roof slopes as well as to close the vault. This arch has little thrust, no more indeed, than is due to its own weight, it is being thrust upon rather than thrusting. Any load upon it would induce a thrust and possibly buckle the roof slopes outwards. Hence the contrivance of the open space over the arch large enough in these cases to be used as an apartment. The upper slopes of the St. Kevin’s roof are less steep than those below, which may be an indication of two stages in the building operations.

The final development of the solid stone roof in Ireland is to be seen in Cormac’s Chapel at Cashel (Fig. 3). It is of very steep pitch and is built of a light porous stone, a calcareous tufa, with an outer vence of sandstone. The vault is an irregular pointed arch, the joints of which, however, have a smaller angle with the horizon than would be the case in a true arch. The roof slopes, though nearly straight, are not quite regular. This appears to have been done with a view to reducing the weight by reducing the thickness of the stone work wherever it was possible to do so without sacrificing strength in the structure.

**ANTEAe.** Another feature of Irish churches, not confined to the early examples, for it is found in some of so late a date as the middle of the twelfth century, are those pilaster-like projections of the side walls beyond the gables called by architects *anteae*. There are several theories as to their origin. By some writers they are derived
from the pilaster of Greek and Roman architecture, others hold that they are translations into stone of the corner posts of timber prototypes and thus derived from timber architecture. Another theory is that they represent the pilaster-like end-walls of the megaron, the Mediterranean house, examples of which have been unearthed at Mycenae, Tiryns and Troy. The Classic pilaster probably derives from the megaron, so possibly all the theories possess a measure of truth. The little church on St. Maedara’s Island (Fig. 4) might be instanced in support of theories of origin in either wood or stone. The antae in this example support the projecting barge of the stone roof; the whole gable may therefore represent, in stone, the posts and roof structure of a house wholly of wood or, like the megaron, with stone walls and a timber roof. The gable walls in this case are little more than fillings between the strongly marked antae and the barges. The Cathedral of Glendalough has antae of considerable projection which are widened at the top in curious fashion, possibly to provide a secure base for a heavy timber roof truss standing in advance of the gable walls. St. Cronan’s Church at Roscrea also has antae at the top of which are clear indications of the steep slope of the original timber roof. There can be little doubt that the function of these projections—and of the corbels which are found at the bases of the gables of the primitive churches which have not got antae—was to support external roof trusses or barge boards of wood.

**Fig. 3.**—Cormac’s Chapel, Cashel: Section of roof.

**INCLINED JAMB OF OPENINGS.** The simplest form of door or window opening is that spanned by a single stone or lintel and is common to all primitive buildings. Most of the doorways and many of the windows of the type in early Irish building, however, are of a form which is not so common. They are narrower at the head, under the lintel, than at the sill level. The usual diminution in width in doorways is about three inches. It has often been stated that the object of the reduction in width was to reduce the span and therefore increase the strength of the lintel stone. As the lintel is often the most massive stone in the whole building, more than adequate in dimensions and strength for its purpose, this explanation is not altogether satisfactory. Further, it does not apply in the case of the usually very narrow window openings with
inclined jambs in the same churches. A point which seems to have escaped notice is that the jamb inclinations are roughly parallel to and harmonise in appearance with the batter of the walls. Where a relieving arch is used over the lintel it is usual to find that the latter is not a remarkably massive or deep stone.

There are examples of the simplest form of lintelled doorways in Limerick, at Kilrush and Donaghmore churches (the latter has been repaired in part at some period) and at Mungret, Kilquane and Clonshire. (See Westropp, Proc. R.I.A. XXV, 1905). There are several in Clare also, such as Termon Cronan, Tomfinlough and Templemore (Kells). (See Westropp, Proc. R.I.A. XXII, 1900).

Of the many examples in other districts, those of Trinity Church, Glendalough, Co. Wicklow (Fig. 5. a) and Killeevy, Co. Armagh (Fig. 5b), both built in granite, and Kilgobnet Church, Aran (Fig. 5. c.), built in the local limestone, are chosen for illustration.

![Fig. 4.—Church, St. M ann a’s Island, Galway.](image)

The inclined jamb continued as a regular feature of openings up to the end of the Romanesque period and is found in doorways, chancel arches and windows, in conjunction with the round arch which is characteristic of the style. Striking examples amongst many are: the chancel arch of St. Caimin’s, Iniscealtra, Lough Derg, the charming doorway at Clonkeen, Co. Limerick, and the great west doorway at Clonfert, Co. Galway, the masterpiece of the Irish style. When the inclination is absent from the doorways of the period it may generally be assumed that a re-construction has taken place. This is the case in the fine doorway at Killeshin, Leix (Fig. 9), where there are other indications confirmatory of a re-building.

In more advanced examples of the lintelled doorway there is a raised border or frame, the architrave, around the opening. This is a flat band of small projection. It is found in its most highly decorative form in the buildings of Greece and Rome. Ultimately it is derived either from the door frame of wood or the stone posts and lintel of the door openings of the Cyclopean style of early Greece. Good examples are
the west doorways of the Cathedral and Our Lady's Church at Glendalough; St. Fechin's Church at Fore, Co. Westmeath (Fig. 6a), Clonamery, Co. Kilkenny (Fig. 6b), and Tomgraney, Co. Clare (Fig. 6c). At Fore and Clonamery there is a cross in relief over the door, carved on the lintel in the first case and over it in the second. The Fore example bears a remarkable resemblance to some of the sixth century in Central Syria, and in the Coptic churches of Egypt. There are even more elaborate doorways of the type at Aghowle, Co. Wicklow, where the architrave is double and is decorated with a row of bosses; and at Maghera, in Derry, the finest example, richly decorated and having a sculptured lintel.

![Fig. 5.—Lintelled Doorways. (a) Trinity Church, Glendalough, Wicklow. (b) Killeevy, Armagh. (c) Kilgobnet Church, Arun, Galway.](image)

**Window Heads.** The very narrow window openings of many churches of both early and late dates are generally spanned by a single stone in which the round head of the window has been wrought. This was the simplest method of obtaining the desired shape. It overcame the difficulty of forming voussoirs to a small radius and is, in effect, more permanent than such small stones would have been. Evidently permanence was a principal consideration for the 'back arches,' that is, those to the inner side of the openings, which are usually wider than the window owing to the spaying of the jambs, are often spanned by a single large stone wrought to an arch form. There are examples of part of the round arch being cut out of the underside of a single stone in the doorways of the Round Towers of Kilmacduagh and Monasterboice. The triangular headed window is not uncommon but sometimes occurs in both churches and Round Towers. It is usually formed of two stones leaning against one another, but there is one case, at Cashel, where the triangle is wrought out of a single stone.

![Fig. 6.—Lintelled Doorways with Architraves. (a) St. Fechin's Church, Fore, Westmeath. (b) Clonamery, Kilkenny. (c) Tomgraney, Clare.](image)
IRISH ROMANESQUE FEATURES. The architecture of the Romanesque period in Ireland owes its individual character to features of detail which, though not confined to this country in their occurrence or all of native origin, are used here in a particular manner or with more frequency than in buildings of the same period abroad. It is in the character of the ornament and the forms of the parts of the structures that the distinctively native style is to be found. As has been said already, the use of inclined jambs to openings persisted throughout the period and it remains therefore to deal with the other matters of detail.

SUPERFICIAL DECORATION. The most marked characteristic of the decoration is its low relief. It envelopes the forms, the pilasters, pillars, capitals, arch rings and other surfaces, without interrupting them by marked prominences or sinkings. (See columns and hood mouldings at Clonkeen, Fig 7; arch-rings and capitals at Killeshin, Figs. 9 and 10). That the technique is a continuance of the Celtic art tradition cannot be doubted. There is great variety of decorative motifs and a delightful quality of imagination in their application. It is not the purpose of this article, however, to describe in full detail these motifs or search for their origins. To do so would require a full length study.

Fig. 7.—Clonkeen, Limerick : Doorway of Church.

MOULDINGS. The technique of low relief appears also in the mouldings of capitals and bases of pillars, the roll-mouldings and fillets at the angles of pilasters and arch rings, and the larger rolls or three-quarter columns. These are often little more than a rounding off of the square angles of the stones combined with angular or rounded fillets. Rows of small bosses, called by writers pearls, pellets or beads, are combined with the round mouldings (see Killeshin, Figs. 9 and 10) and seem to have some connection with or to be derived from the rows of dots used decoratively in illuminated MSS.
BASES. The moulded and decorated bases of pillars and pilasters are the least artistically satisfactory features of the style. They seldom have the vigorous character and bold projection called for by their function and usually to be found in them in fully developed architecture. Some have the appearance of inverted capitals (Figs. 11, a, b, c and d, Glendalough), others are rude and indeterminate in form and others again have refined and varied detail. The projection, like that of the capitals, is generally small. Bolder projections, however, would have obstructed the usually narrow openings, a practical reason for not adopting them. One type, which appears to be specially native, is of bulbous form with or without a small spur or claw at the angle between the round base and the square plinth below. It is to be found in the early example at Rahan (larger church), Offaly (Fig. 8), at Killeshin (Figs. 9 and 10) and in a late case at Baltinglass Abbey, Wicklow (Fig. 11, g), discovered some years ago.

Fig. 8.—Rahan, Offaly: Capital and Base.

Fig. 11.—Bases. (a), (b), (c) and (d), Glendalough, Wicklow; St. Saviour’s. (e) Trim, Leix: Round Tower. (f) Rahan, Offaly (small church). (g) Baltinglass Abbey, Wicklow.

CAPITALS. The three forms of capitals most common in the north-western province of the Romanesque, France and Britain, are (a) the cube rounded off on the lower side, usually called the cushion cap; (b) the scalloped cap derived from it, and (c) a crude edition of the classic Corinthian capital with rudimentary volutes at the angles and foliage derived from the ananthus leaf. The first named does not occur very frequently in Ireland, but varieties of (b) are not uncommon. There is one example of (c) much weathered, in the west door of St. Flannan’s Oratory at Killaloe where, however, it is associated with an arch moulding found nowhere else in Ireland. Where there are single pillars of either half, three-quarter or full circular or polygonal plan, each has its own separate capital in the normal way. The pillars, if more than one in number, may be grouped so closely together that the capitals touch. These single capitals vary considerably in design. The peculiar type which is found at St. Caimin’s, Iniscealtra, and Clonkee, Co. Limerick, and Aghadoe, Co. Kerry, seems to be a quite native product. It is hard to describe, but is to be seen in the illustration of Clonkee (Fig. 7). Various forms of the scalloped cap are to be found at Cashel, Co. Tipperary, and Monaincha, Offaly. Capitals in the form of a single human head are the type found at St. Cronan’s Church, Roscrea, and, decorated with several small heads, at Freshford, Co. Kilkenny. In the great doorway at Clonfert Cathedral animal heads in pairs or groups decorate many of the capitals. What appears to be the earliest and most characteristic form, however, is that in which the capitals are grouped together in one continuous band, like a frieze, following the recessions of the jambs of the opening. It might well be called the frieze capital. The form arises naturally from that of the stonework which it crowns; the pilasters or breaks (known architecturally as orders) decorated superficially and wrought at the angles into rolls or pillars of varying dimensions but seldom truly circular. Each of these is expressed at the angle of the “frieze” capital by a human head and the spaces between or beside the heads are filled with ornament. This is often interlacement of the moustache and locks of hair from the head—sometimes a decoration of palmettes or other
Fig. 9.—Killeshin Church, Leix Western Doorway.
floral motifs. Zoomorphic bands of Scandinavian type are also found. What is probably the earliest capital of the type is to be found in the larger church at Rahan, Offaly (Fig. 8) and some are also to be seen at Annaghdown Galway, but the most perfect are at Killeshin Church, Leix (Figs. 9 and 10).

There are cases in which the jambs are not crowned by a capital but rise directly to the impost moulding. In these the angle rolls are sometimes finished by a dragon's or bird's head as it were gripping the roll in its mouth. There is a carved stone at Clonmacnoise (Fig. 12) which belonged originally to such a position, and another in situ at the Nun's Church which are remarkable for their fanciful detail. In them grotesque heads of this kind appear to be preparing to swallow the bands of chevrons and fillets, each of which ends in a reptilian head.

The Chevron. The chevron is the most common enrichment of the north-western Romanesque, used in Norman architecture as a stock ornament with wearisome reiteration. In the writer's view it is derived from the timber architecture of northern Europe though positive proof is lacking. It is also much used in the Irish Romanesque, but treated in a great variety of ways: as an ornament in low relief, in compound form, with the units separated by angular fillets or a row of pellets or pearls (Figs. 7, 9 and 10); and, in arch-rings, with the points looking outwards rather than downwards (see the second order at Clonkeen, Fig. 7) as is most usually the case in Norman work. Indeed few decorated arches in Irish churches but contain at least one ring of chevrons pointing outwards.

Fig 10.—Killeshin Church, Leix, West Doorway: South Jamb, Capitals and Soffits of Arches. (Reproduced with the permission of the Royal Society of Antiquaries of Ireland).

Heads as Decorations. The human heads are much used, not only as component parts of capitals, or even bases (Fig. 11, e) but on the voussoirs of arch-rings and as decorative features as in the gable of the west doorway of Clonfert Cathedral. Animal heads used to decorate voussoirs, stops of hood-mouldings and impost mouldings are of frequent occurrence.
THE TANGENT GABLE. This is suggested as a suitable name for the high-pitched gable or pediment, the sides of which spring, at a tangent, directly from the extrados or back of the hood mouldings of several Irish Romanesque doorways. There are four certain examples; at Roscrea, Killeshin (Fig. 9), Clonfert and Donaghmore (Tipperary), and it is possible that the doorway at Inchagoill, Galway, was once similarly crowned. The doorway of the Round Tower at Kildare seems to have had such a gable. There is but one similar in England (at Lullingstone, in Somerset), situated very far west and, therefore, possibly due to Irish influence.

GABLE FINIALS. Very few of the gables of the churches of the period remain unruined or unaltered, but of their crowning features, the winged finials, many examples remain as loose fragments, notably at Iniscealtra. (Fig. 13, a). The ornament from the Temptation scene in the Book of Kells (Fig 13, d) suggests, as also do the similar ornaments to the gables of some of the High Crosses, that this was the usual fashion of finishing the apexes of gables. The form is probably derived from timber architecture; from the crossing and decoration of the gable barge boards at their upper extremities.

![Fig. 12.—Clonmacnoisè, Offaly: Carved Fragment.](image1)

![Fig. 13.—Gable Finials.](image2)

(a) Iniscealtra, Clare. (b) St. Macatha's Island, Galway. (c) Clones, Monaghan. (d) Book of Kells Ornament. (e) Freshford, Kilkenny: Holy Well.

PELLETS OR PEARL ORNAMENTS. Rows of small round bosses, like beads or pearls, are used with remarkable frequency as a decoration; between bands of chevrons, between angular or round fillets, as borders to small panels or spandrels (Figs. 7, 9 and 10), between the mouldings of bases, etc. Modifications are the pyramid form—not unlike the Gothic nail-head but much smaller—and the flat disc with or without a dimple in the centre (Fig. 11, a and b). They have a remarkable resemblance, which can hardly be accidental, to the borders of dots which are so often found in Irish illuminated MSS. Their comparative rarity in Norman architecture is an argument in favour of a native origin for this feature.

ROMANESQUE FEATURES RARELY FOUND. That notable feature of Romanesque architecture on the Continent and in Great Britain, the tympanum, carved or plain, filling the semi-circular head of a doorway, is rare in the Irish style. It occurs in the north and south doorways of Cormac's Chapel, Cashel, in the west doorway at Kilmakedar, Kerry, and at Britway in Cork. The Billet, a moulding very common in Norman architecture is rarely found here, the Beak-head and Chain are unknown as are also the Diaper and Rosette in their Norman forms.