# Aspects of the architectural history of Kirkwall Cathedral

Malcolm Thurlby\*

#### **ABSTRACT**

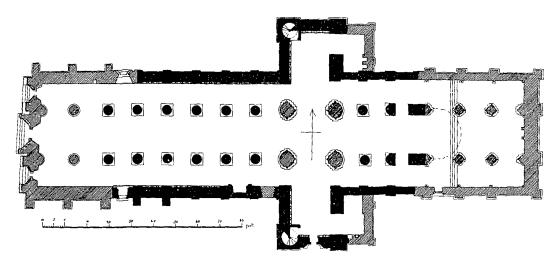
This paper considers the intended form of the Romanesque east end of Kirkwall Cathedral and presents further evidence for the failure of the Romanesque crossing, investigates the exact nature of its rebuilding and that of select areas of the adjacent transepts, nave and choir. The extension of the eastern arm is examined with particular attention to the lavish main arcades and the form of the great east window. Their place in medieval architecture in Britain is explored and progressive and conservative elements of the building are evaluated in the context of the use of the building.

#### INTRODUCTION

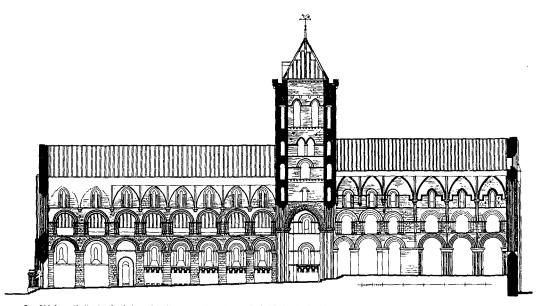
The sequence of construction of St Magnus's Cathedral at Kirkwall, Orkney, is complex and unusual. The basic chronology was established by MacGibbon & Ross (1896, 259–92) and the account in the Orkney *Inventory* of the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS 1946, 113–25) (illus 1 & 2). The Romanesque cathedral was begun by Earl Rognvald in 1137. Construction moved slowly westwards into the nave before the crossing was rebuilt in the Transitional style and at the same time modifications were made to the transepts including the erection of the present square eastern chapels. Shortly after this a start was made on the extension of the eastern arm before returning to work on the nave. At this stage no reason was given for the remodelling of the crossing and transepts in the late 12th century.

Aspects of this chronology have been refined by recent writers. Stewart Cruden (1977, 87–8; 1986, 119; 1988, 85) examined the extent of the Romanesque build and argued that the eastern arm was probably built quickly so as to accommodate the high altar and the shrine of St Magnus. He observed that 'in 1151 the founder and his bishop departed from Orkney on a two-year crusade to the Holy Land and back, an adventure which had been discussed with the king of Norway in 1148. It is unlikely that they would leave before the choir was completed and the relics of St Magnus enshrined within it' (Cruden 1977, 88). Cruden suggested that the original east end had an apse-echelon plan with an ambulatory returning across the eastern bay between St Magnus's Shrine in the apse and the high altar immediately to the west (Cruden 1977, fig 5; 1986, fig 12; 1988, fig 11). He dated the new crossing about 1170, after the presumed collapse of its Romanesque predecessor, and observed that 'the old arches adjacent to the new crossing were carefully re-fashioned' (Cruden 1977, 90).

<sup>\* 2</sup> Cooper Court, Brantford, Ontario, Canada N3T 6G2



ILLUS 1 Kirkwall Cathedral: plan (after RCAHMS 1946, fig 225)



ILLUS 2 Kirkwall Cathedral: longitudinal section (after RCAHMS 1946, fig 226)

Cruden's interpretation of the liturgical division of the Romanesque east end was challenged by Eric Cambridge (1988, 119-21), who found insufficient evidence for an ambulatory. Cambridge provided one of the most detailed accounts of the stylistic similarities and differences between Kirkwall and Durham, albeit without any discussion of the choir aisle rib vaults, a point subsequently addressed by Eric Fernie (1994, 272-3). Cambridge also presented a carefully reasoned interpretation of the iconography of Kirkwall Cathedral. Cambridge's account complements the stimulating essay on the entire fabric by Richard Fawcett (1988). Fawcett clarified aspects of Cruden's reading of the first great Romanesque campaign and suggested that the string-course on the aisle side of the easternmost Romanesque pier of the south choir arcade

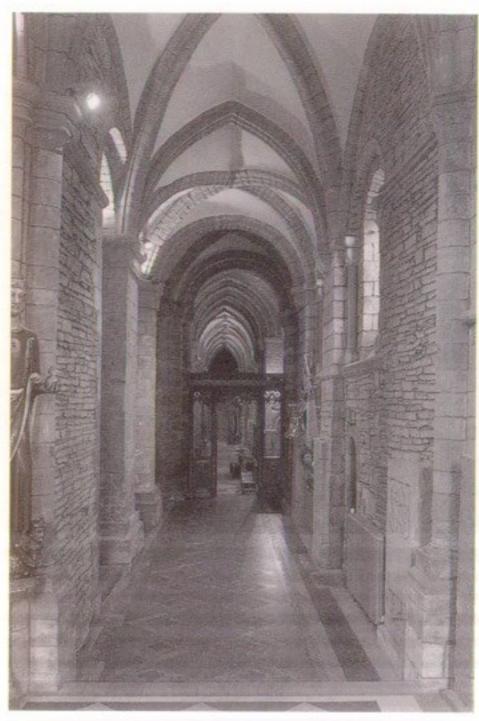
extends too far to the east to allow an apsidal termination to the aisle (Fawcett 1988, 89, pl 4a). He observed that work on the Romanesque nave aisles progressed in a rather faltering manner in contrast to the late 12th-century rebuilding of the crossing, the remodelling of the transepts and the start of the extension of the eastern arm which indicated 'both a new infusion of funds at a critical stage of the work, and also perhaps the intervention of a more dynamic driving force' (Fawcett 1988, 97). He then mooted that this new impetus might correspond with the election of Bishop Biarni Kolbeinsson after the death of William II in 1188. He continued: 'His long episcopate [1188-1223] would cover much of an important building period, and he would seem to have been a man of some energy' (Fawcett 1988, 97). The liaison is an attractive one but the implication is that the rebuilding was driven by liturgical and/or aesthetic considerations. This is almost certainly true for the eastern extension which was 'probably to accommodate the chapter of canons now planned as the basis for the cathedral constitution' (Cant 1972, 7) and which finds numerous parallels in contemporary churches in England to provide more space and a more glorious setting for major shrines (Draper 1979; 1980; 1987). The requirements of the canons may also explain the rebuilding of the transept chapels (Cant 1972, 7). However, it is difficult to imagine a liturgical reason for the rebuilding of the crossing. Moreover, the retention of the Romanesque work in the three-bay choir and in the transepts and nave suggests that the primary motivation for the major structural undertaking of the replacement of the crossing was probably not aesthetic.

#### THE INTENDED TERMINATION OF THE CHOIR AISLES

The arrangement of the main arcades of the Romanesque choir is unusual in that the easternmost freestanding pier is asymmetrical; to the east it is flat to correspond to the east respond, while to the west its segmental form agrees with the columnar pier to the west (illus 1-4). The arch of the eastern bay is narrower than either the first or second bay, counting from the crossing, and while its orders towards the choir have the same mouldings as the other two arches, the inner order is carried on paired head corbels rather than resting on the capitals as in the western bays (illus 5). Furthermore, there are two orders towards the aisle in the western and central bays but three in the eastern bay (illus 4). The inclusion of the third order has caused problems with the rib vault of the aisle. The rib cuts off the western springer of the outer order of the arch and even cuts into the springer of the second order (illus 3-5). No such problem occurs in the two bays to the west because the ribs there do not have to compete for space on the capital with a third order of the arch.

The vault of the east bay goes with the early Gothic extension to the east as witnessed by the form of the wall arch and the transverse arch between bays 2 and 3; the former does not hug the hood mould of the window as in bays 1 and 2, while the pointed form and complex mouldings of the transverse arch contrasts with the round-headed transverse arch between bays 1 and 2 with their simple angle rolls (illus 3, 4, 6 & 7). Furthermore, the crease at the apex of the web of the Gothic vault is also witnessed in the eastern severy of the vault of the second bay in contrast to the work to the west.

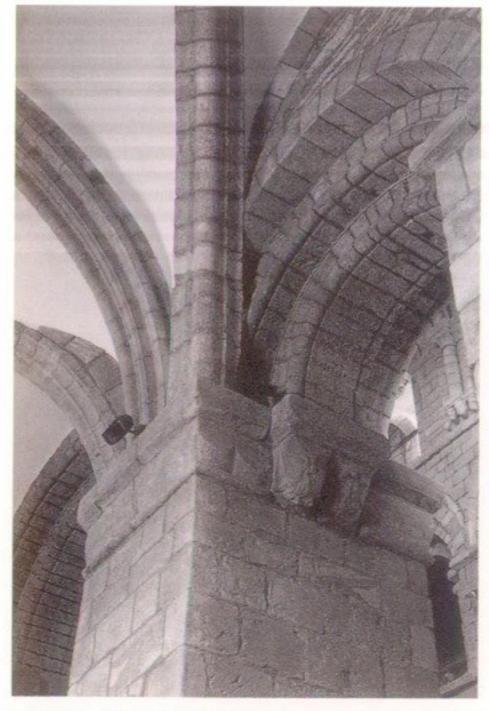
The different articulation of the pier and the arch in the Romanesque eastern bay may suggest that this space had a different function. This would seem to be confirmed by the clumsy junction between the Gothic rib and the outer order of the Romanesque arcade along with the absence of any trace of an earlier vault in the eastern bay. Why the different treatment of this bay? The answer is twofold. In the first place, the use of paired grotesque head corbels on the flat face of the pier bay is the same as the responds of the choir aisle vaults (illus 3-5). Such continuity in



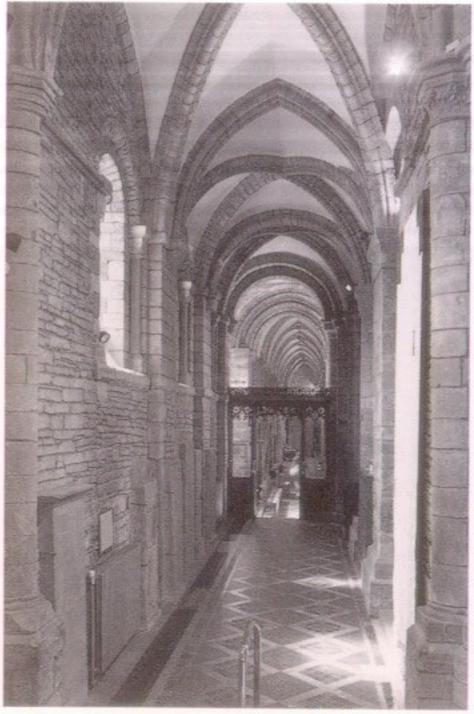
ILLUS 3 Kirkwall Cathedral: north choir aisle to west



ILLUS 4 Kirkwall Cathedral: south choir aisle to west



ILLUS 5 Kirkwall Cathedral: south choir arcade, east pier from south-east

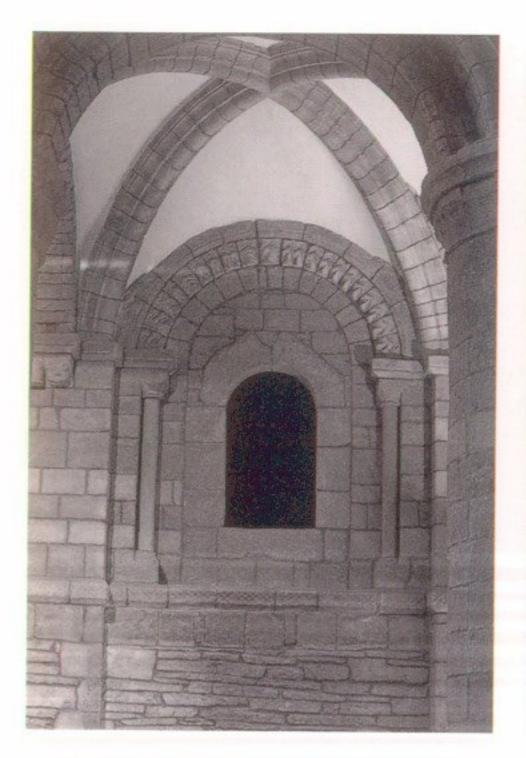


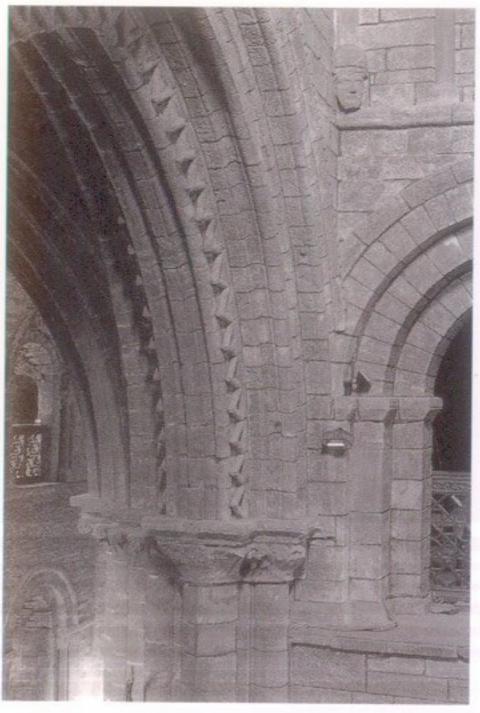
ILLUS 6 Kirkwall Cathedral: south choir aisle to WSW

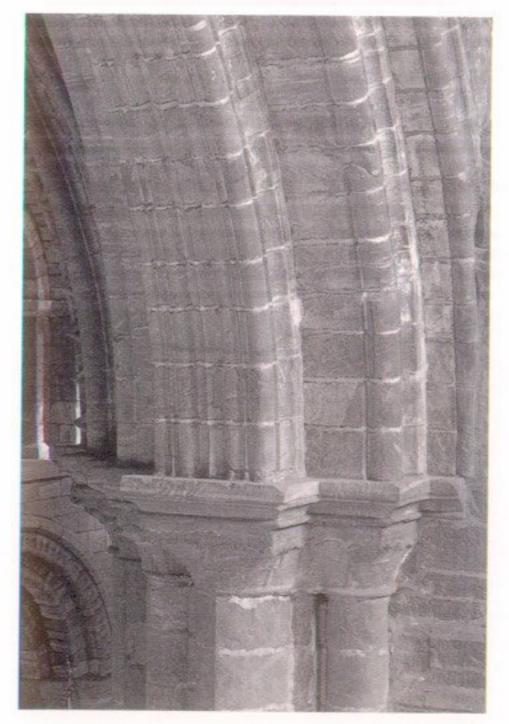
articulation suggests a continuity in function (Cambridge 1988, 119). Therefore it is plausible to reconstruct an ambulatory across the eastern bay of the choir to provide access to the shrine of St Magnus in the apse, as suggested by Cruden. The Kirkwall master mason thereby gave monumental architectural expression to a liturgical division that was probably created with wooden screens at Durham Cathedral to provide access behind the high altar to the shrine of St Cuthbert (Klukas 1983, 173-5; Fernie 1993b, 150-1). The segmental faces of the piers in the two western bays articulate the sanctuary, as at Norwich Cathedral and elsewhere (Fernie 1993a, 67; Hoey 1989, 255 n 53). The second aspect of the articulation of the eastern bay speaks of more ambitious intentions. The inclusion of rib vaults in the two western bays of the Romanesque choir aisles makes the former absence of a vault in the eastern bay hard to explain. It is physically possible that a Romanesque groin vault covered the bay but iconographically this is unlikely given that in the hierarchy of vault forms in the Romanesque and early Gothic periods the rib vault was seen as superior to the groin vault (Thurlby 1994a; Hoey & Thurlby forthcoming). There was almost certainly an altar in the niche beyond the eastern bay of both aisles and therefore the space was liturgically more important than the two western bays of the aisles. Concomitantly, if the aisle altar space was not articulated with a rib vault, a form that acted in so many cases as a permanent ciborium over the altar, how could the space have been marked as special? A tower is a plausible solution. Not only would this fit the archaeological evidence of the larger size of the eastern piers and the third order of the arcade towards the aisle, but also it makes sense iconographically. Eastern towers were almost certainly used at Durham Cathedral where their inspiration seems to have been imperial, perhaps via the east end of St Albans Abbey (Thurlby 1994b; 1995, 19; Thurlby in press; Jarrett & Mason 1995, 212-20). Transeptally placed towers without vaults are used as altar markers in Romanesque Exeter Cathedral (Orme 1986, 15; Thurlby 1991a). A reduced-scale reflection of this idea seems to explain the former existence of turrets on the Romanesque east front of Southwell Minster (Coffman forthcoming). The wider buttresses of the eastern bay of Romanesque Kirkwall would also accord happily with a tower (Fawcett 1988, pl 6). Be that as it may, the plan to construct towers was abandoned before work had advanced too far. There are no indications in the galleries, either on the piers or against the outside wall, of any reinforcement for towers, and the clerestory windows in the 'tower' bay are the same Romanesque form as in bay 2.

## THE LATE 12TH-CENTURY REMODELLING OF THE CROSSING AND TRANSEPTS

The piers and arches of the crossing contrast with the Romanesque work in the choir. The deeply cut, multiple mouldings of the pointed crossing arches are far removed from the relatively shallow roll-and-hollow articulation of the round-headed choir arcade arches (illus 8). The difference between the earlier and later 12th-century work is further appreciated in the inner order of the east and west arches which is flanked with saw-tooth chevron quite different from the shallow zigzags on the inside of the Romanesque choir aisle windows (illus 7). The desire to create more complex effects in the crossing arches is taken further by using two different moulding profiles, one for the north and south arches, the other for the east and west arches (illus 8–10) (Thurlby & Kusaba 1991). The crossing capitals are waterleaf except on the north-east pier which has rudimentary stiff leaf and, on the main east capital of the north crossing arch, a centrally placed head (illus 8–10). The capitals of the south respond of the arch from the north transept to the north choir aisle are adorned with various foliage forms including an elementary form of stiff-leaf albeit with rather limp stems (illus 11). These capitals contrast with the scalloped capitals of the







ILLUS 7 Kirkwall Cathedral: south choir aisle, west bay to south

ILLUS 8 Kirkwall Cathedral: east crossing arch, north capitals

ILLUS 9 Kirkwall Cathedral: south crossing arch, east capitals



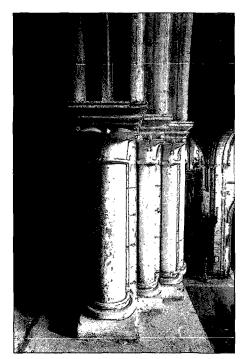
ILLUS 10 Kirkwall Cathedral: north crossing arch, east capitals

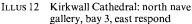


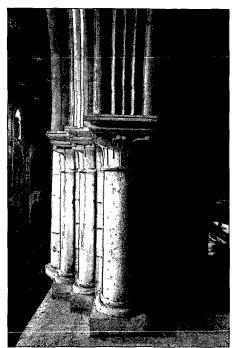
ILLUS 11 Kirkwall Cathedral: arch from north transept to north choir aisle

Romanesque build. Keeled shafts are introduced on the main axes of the crossing piers and proto-water-holding bases contrast with the shallow mouldings of the Romanesque bases.

The motifs used in the crossing relate closely to the early Gothic of the north of England, Scotland and Trondheim Cathedral. Keeled shafts appear under the influence from northern France in the choir arcades of Archbishop Roger of Pont l'Évêque's York Minster, begun soon after he took office in 1154 (Browne 1847, pl XXX, fig 3; Wilson 1986), in Scotland at Arbroath (Fawcett 1994, fig 3) and Dundrennan (Fergusson 1973, 239) abbeys before 1200, and in the 'chapter house' of Trondheim Cathedral after 1161 (Fischer 1965, 116; Wilson 1986, 97). Waterleaf capitals are normally associated with the Cistercians but examples are common outside the Cistercian realm as in Archbishop Roger's work at York Minster (Browne 1847, pl XXXI) and Ripon Minster (Hearn 1983, pl 13), in Scotland at St Andrews Cathedral (Thurlby 1994c, 53–4) and the nave of Jedburgh Abbey (Garton 1987, 79–80) and in the 'chapter house' and the transepts at Trondheim Cathedral (Fischer 1965, 112, 115). To counter the undue emphasis on Cistercian influence it is important to observe the use of chevron on the east and west crossing



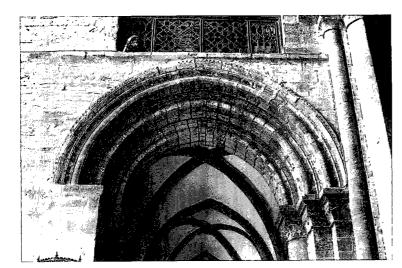




ILLUS 13 Kirkwall Cathedral: north nave gallery, bay 4, west respond

arches, a motif form used in various forms in Archbishop Roger's York Minster and uniformly in the former crossing of St Andrews Cathedral-Priory (Thurlby 1994c, pl VIIC).<sup>2</sup> The proto-stiff-leaf capitals of the north-east crossing pier are unusual in the context of northern early Gothic although there is a certain kinship with some of the capitals in the nave of Jedburgh Abbey where waterleaf types are also found (illus 11) (Garton 1987, pls 40 & 43). Also, the presence of the head on the main east capital of the north crossing arch at Kirkwall may be paralleled on the Jedburgh west doorway (illus 10) (Garton 1987, pl 10). The arch mouldings belong to the family with multiple rolls in the soffit established at Archbishop Roger's York Minster, and followed, for example, at Ripon Minster, Byland Abbey and Trondheim Cathedral (Wilson 1986, fig 5);<sup>3</sup> but the closest parallels for both types in the Kirkwall crossing are in the north nave gallery at Selby Abbey (illus 9 & 10, 12 & 13). Before discussing the date of the crossing we will examine the archaeology of the adjacent bays with the view to determining the reason for the introduction of a new crossing.

The ashlar of the crossing piers courses without interruption through the west responds of the choir-arcades, and east responds of the nave arcades, and the responds of the arches from the transepts to the choir and nave aisles. The pointed arches from the transepts to the nave aisles are coeval with the crossing; the soffit moulding is a variant on the east and west crossing arches with keeled rather than plain angle rolls (illus 8, 14 & 15). Against the aisle wall, however, the arches spring from paired Romanesque head corbels, as in the choir aisles, the eastern bay of the Romanesque choir arcade, and the arches from the transepts to the choir aisles (illus 3, 4, 11 & 14). The latter are round-headed and have Romanesque detail in spite of being carried on the late 12th-century crossing piers. The arches from the transepts to the choir and nave galleries have

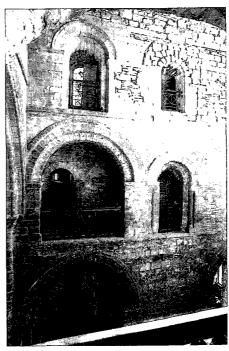


ILLUS 14 Kirkwall Cathedral: arch from south transept to south nave aisle

ILLUS 15 Kirkwall Cathedral: arch from north transept to north nave aisle, south capitals

ILLUS 16 Kirkwall Cathedral: south transept, interior from south nave gallery





plain round-headed orders, like the choir gallery arches, but the subdividing pier in the back plane of the wall has a quatrefoil plan with intermediate angle fillets and waterleaf capitals that go with the crossing (illus 16) (Fawcett 1988, pl 10). Related waterleaf capitals are used in the transept clerestory windows next to the crossing but not in the other transept clerestory windows. Similarly in the choir the westernmost clerestory windows have waterleaf capitals and are slightly bigger than the two Romanesque windows to the east which have scalloped capitals (illus 17).

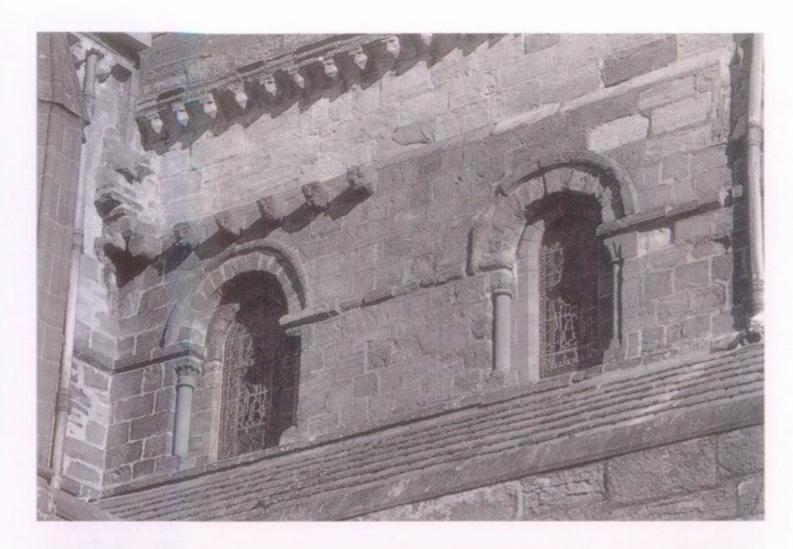
The picture that emerges is one of a total rebuilding of the crossing coupled with a selective remodelling of adjacent areas. This suggests the failure of the original crossing tower which is

borne out by evidence of patching in the transept clerestories and the constructional details of the main arcade arches which flank the crossing and the arches from the transepts to the choir aisles (Cruden 1977, 90; 1986, 119–20; 1988, 82).

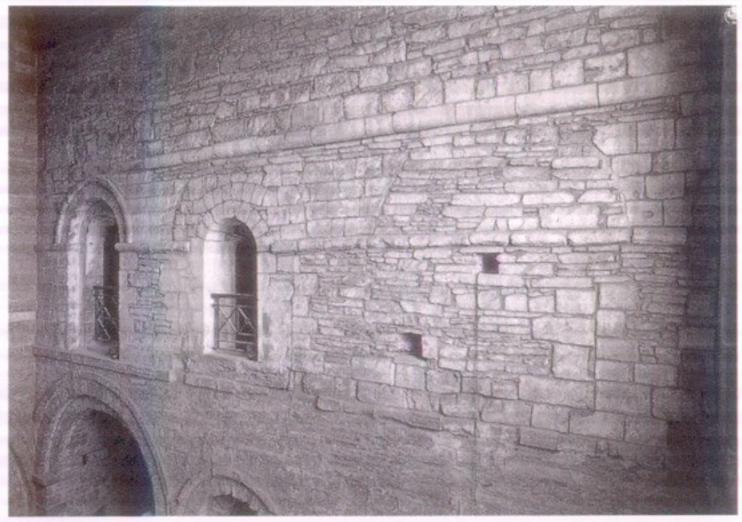
The clerestories of the south transept have undergone more patching than the north. On the east side of the south transept there is a change from late 12th-century ashlar to Romanesque rubble between the first and second clerestory arches from the crossing (illus 16 & 18). The second window is surrounded by the scar of the former Romanesque opening. The former third window is now completely blocked. In the west clerestory the first arch is ashlar-built and, as on the east side, there is a break between this ashlar and the second window (illus 19). The latter is an reduction of the Romanesque original the scalloped capitals of which are immured in the infill. The arc of the original window is still clear.

The arches from the transepts to the choir aisles represent a careful reconstruction of the Romanesque originals. The evidence is clearest in the north transept where the original work is recognized in the arch in the white masonry on the left of the second order and the hood-mould and the corresponding sections in the red stone of the first and third orders (illus 11). To the right of the alternating red and white orders the stonework is late 12th-century. The division of work in the south transept arch is less clear because red stone is used throughout the work. However, the change is discernible after six stones from the right in the hood mould and after 11 stones of the third order where the newer work is recognized by the crisper edge to the single billet ornament. Above, in the south transept the arch to the choir gallery is totally rebuilt according to its Romanesque form but with the addition of reinforcement at the back plane of the arch in the form of the subdivision of the arch (illus 16). The adjacent arch is original Romanesque. In the north transept the arch to the choir gallery also retains its Romanesque form and, apart from the same infilled subdivision as in the south transept, it is virtually impossible to tell the earlier from the later 12th-century work (illus 20). Similarly, at clerestory level there is no obvious differentiation but because the south jamb of the clerestory arch courses with the ashlar in the spandrel of the north crossing arch then it must be late 12th-century; a remarkable piece of antiquarianism! On the west wall there is analogous conservatism; there seems to be a change in the hood-mould of the gallery arch at about 1 to 2 o'clock (30–60 degrees to the right of vertical) but otherwise no differences can be detected. At clerestory level there is a break in the regular coursing just to the right of the first opening which must mean that the first arch is late 12thcentury and the remainder of the clerestory retains its original Romanesque form (illus 21).

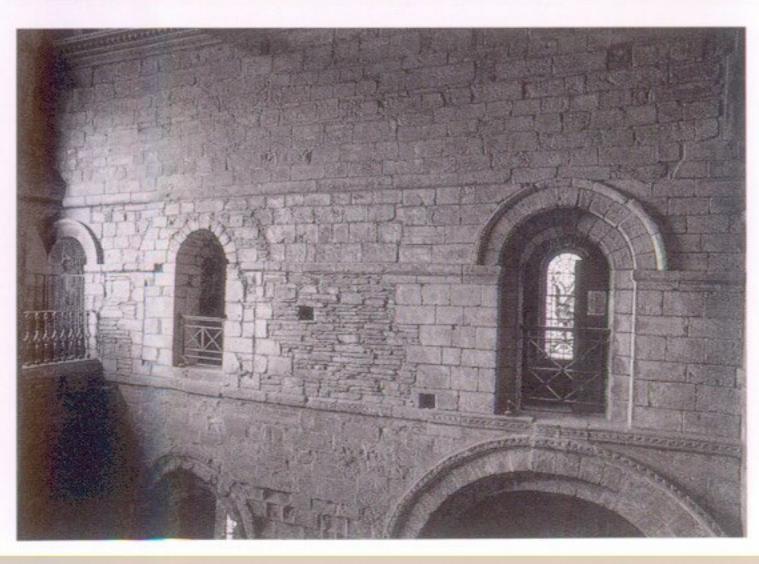
Similar attention to the recreation of the Romanesque design is seen in the choir and nave bays immediately adjacent to the crossing. In the west bay of the south choir arcade six voussoirs of the hood-mould, counting from the eastern springer, are of white stone and belong to the original Romanesque build while after this red stone is used in the rebuilding (illus 22). The detail on the red stone is much sharper and is accompanied by a similarly crisper appearance in the late 12th-century billet-ornamented stones of the outer order. On the inner two orders the Romanesque detail has been carefully reproduced, although the later 12th-century stones are somewhat larger than the older work. The break in the arch is accompanied by a change of coursing in the spandrel. In the stonework to the left of this break the wedge-shaped course, three courses below the gallery string-courses, suggests that settlement started soon after the initial construction as in the first bay of the nave at Selby Abbey (Fernie 1995; Harrison & Thurlby 1995). A change is also seen in the capital type, from scalloped octagonal in the western pier to a simple waterleaf on the round capital of the respond. In the gallery the break comes after five stones of the hood-mould, a change from a quirked chamfer to a shallow chip-carved chevron. There is a change in the ashlar above; the late 12th-century stones are larger as are the voussoirs



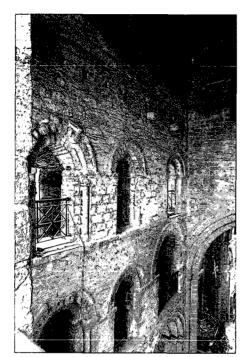
ILLUS 17 Kirkwall Cathedral: south choir clerestory, west bays



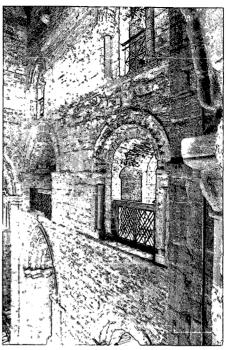
ILLUS 18 Kirkwall Cathedral: south transept, interior, east clerestory



ILLUS 19 Kirkwall Cathedral: south transept, interior, west clerestory



ILLUS 20 Kirkwall Cathedral: north transept, interior to south-east from north clerestory

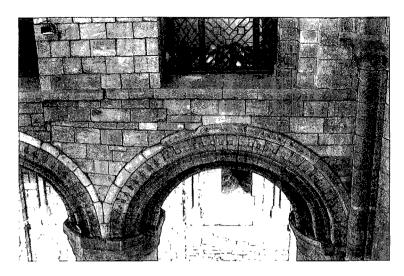


ILLUS 21 Kirkwall Cathedral: north transept, interior to south-west from north clerestory

of the two inner orders just as in the main arcade arch. The western bay of the clerestory is completely late 12th-century. On the north side, the clerestory matches the south, while the break in the gallery comes after just three stones of the hood-mould and is accompanied in the middle and outer orders of the arch with the use of some white stone in the original work which is absent in the rebuilt work. In the main arcade the break is after five white voussoirs of the hood-mould otherwise the change is almost unnoticeable except in the simple foliage trail on the moulded capital of the respond which contrasts with the octagonal scalloped capital of the western pier.

In the nave the very same principles are involved: to retain the springers of the arches above the first piers and then rebuild the majority of the arch out from the crossing tower. On the south side in the main arcade the only change of detail is seen after nine stones of the outer order when the incised Romanesque chevron is abandoned in the late 12th-century work (illus 23) (Cruden 1977, 90; 1986, 119–20). In the north nave arcade chevron remains on just four voussoirs of the outer order. No ornament is detected in the arches of the eastern bay of the nave gallery.

How are we to account for the nature of the rebuilding of the crossing and adjacent areas in which, on the one hand, up-to-date motifs are introduced and yet, on the other hand, some elements were carefully reconstructed to virtually their original form? Pointed crossing arches were probably used primarily for structural reasons to give a more efficient transfer of the weight of the tower to the crossing piers. A similar consideration seems to have determined the use of the pointed arches between the transepts and the nave aisles (illus 14). Work on construction of the nave aisle vaults had not begun in the earlier campaign and therefore, after the failure of the tower, work could begin with the latest, and what was presumably considered to be a technologically superior, design with pointed transverse arches and semicircular diagonals

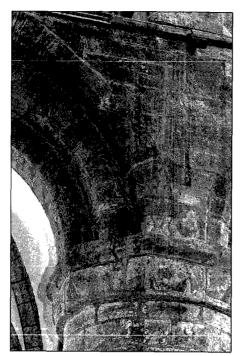


ILLUS 22 Kirkwall Cathedral: south choir arcade, west bay from north

(illus 24). In both choir aisles the vaults in the second bay from the west remained unaffected by the failure of the tower (illus 3 & 4). Therefore, rather than demolish this work, the vault in the western bay was rebuilt according to the Romanesque pattern (illus 7). Concomitantly, the arch from the transept to the choir aisle was reconstructed to the former design (illus 11). For the upper storeys of the side walls of the transepts there was little consideration for fashionable design. It was essentially a matter of consolidation, although the subdivisions of the arches to the galleries do sport waterleaf capitals.

The absolute date of the remodelling of the crossing has to be determined with reference to motifs employed and to the archaeology. Of the motifs the proto-stiff-leaf capitals of the north-east crossing pier are the most progressive and are unlikely before the 1180s. Indeed, they might well be used to support Fawcett's attribution of this work to Bishop Kolbeinsson after 1188 rather than the 1170 suggested by Cruden. This conforms with the archaeological evidence which indicates that the Romanesque crossing was removed rather than collapsing, hence the reinforcement of the clerestory windows in the south transept rather than their rebuilding.

For the new rectangular transept chapels, the south transept doorway and the transept gables, a different approach is witnessed, one which expresses, even flaunts, the latest style. The transept chapels are entered through round-headed Romanesque arches which appear to be untouched in the late 12th-century remodelling (illus 25). It has been suggested that these arches led into apsidal chapels in the Romanesque cathedral (RCAHMS 1946, 113; Cruden 1977, fig 5; 1986, fig 12; 1988, fig 11). The doorways from the east triforia of both transepts to the roof space of the chapels seem to belong to the Romanesque fabric which suggests that chapels, apsidal or squared, were planned if not completed in the original scheme. Be that as it may, the chapels were rebuilt in the late 12th century. The arch on the eastern plane of the wall naturally follows the round-headed form of the barrel vault between the two arches, but the mouldings are the same as on the inner order of the east and west crossing arches, minus the chevron (illus 25). The eastern arch rests on corbels as do the chamfered vault ribs while the pointed windows have a plain continuous inner order and a richly moulded outer order on waterleaf capitals and detached shafts (illus 26). Stiff-leaf foliage bosses are used in the vaults of both chapels. The significance of the chapels is clearly articulated on the exterior where not only the pointed windows contrast with the Romanesque work but, more particularly, the shafted turrets are quite different from the



ILLUS 23 Kirkwall Cathedral: south nave arcade, bay 1, west springer



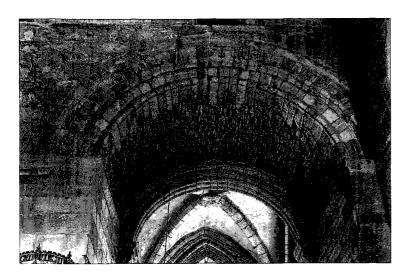
ILLUS 24 Kirkwall Cathedral: north nave aisle to east

Romanesque vocabulary (Fawcett 1988, pl 6). The decision to use up-to-date motifs accords with the liturgical importance of the altar space within the chapel and serves to differentiate it from the transept in which spatial integrity was retained with the reproduction of the Romanesque detail.

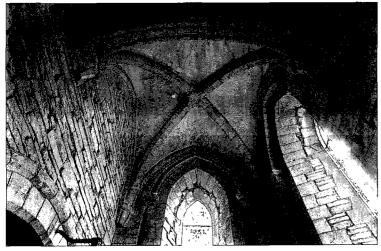
The south transept doorway is very weathered but enough remains to tell of its astounding richness (illus 27). Of four orders, the inner one on coursed triple shafts, the others on detached shafts and waterleaf or moulded capitals. Except on the jambs of the inner order where red stone is used exclusively, the jambs and voussoirs alternate red and white stone. The arch mouldings are very complex with dogtooth on the second and fourth orders. The whole was doubtless deemed appropriate for the portal facing the Bishop's Palace. On the inside of the doorway are crocket capitals with a ring beneath the abacus in the French manner (illus 27) (Jalabert 1932, 190–208). While the upper part of the south transept façade is the work of Richard Spence in 1856 (Gifford 1992, 318), the north transept front retains its medieval masonry. The clerestory there belongs to the late 12th-century programme and is built in ashlar in contrast to the rubble below (illus 29). The round-headed windows are in keeping with those below but the detached shafts with mid-shaft rings and crocket capitals represent something new (illus 30). Furthermore, the arch mouldings are different in the two windows, a trait paralleled in consecutive orders of the presbytery arcades.

# THE EARLY GOTHIC EAST END

The extension of the eastern arm of the cathedral conforms with a late 12th- and 13th-century trend to provide greater space and usually a more glorious setting for a major shrine. The lavish



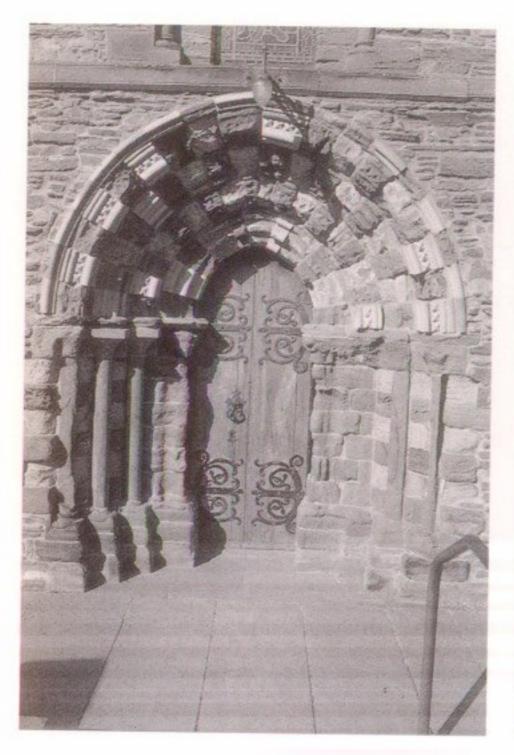
ILLUS 25 Kirkwall Cathedral: arch to south transept chapel

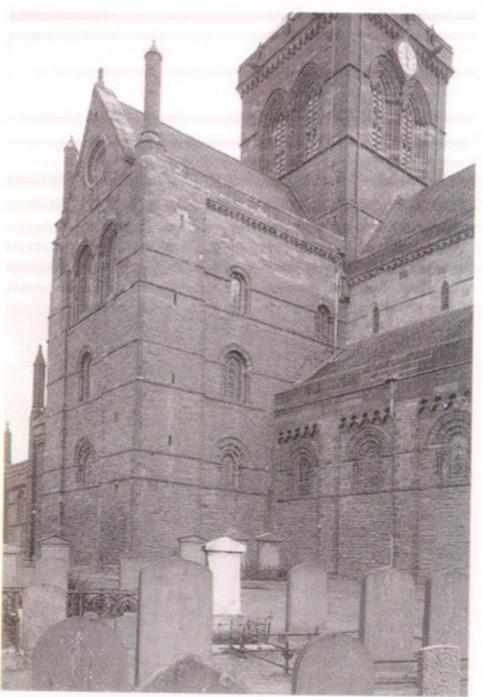


ILLUS 26 Kirkwall Cathedral: south transept chapel vault

east end at St Andrews was conceived as an updated version of the shrine setting of St Cuthbert at Durham Cathedral (Cambridge 1977; Thurlby 1994c). The early Gothic eastern arm at Canterbury Cathedral provided an elaborate home for the shrine of Thomas à Becket (Kidson 1993; Hearn 1994; Hoey 1995b). St Oswin was given a new setting at Tynemouth Priory (Draper 1980, 82). At Trondheim Cathedral, the mother church of Kirkwall, the Octagon was begun in 1183 to house the body of St Olav (Fischer 1953, 181–3; 1965, 127–88). The trend went on well into the 13th century as at Worcester Cathedral (1224–32) for St Oswald and St Wulfstan; Ely (1234–51) for St Ethelreda; Westminster Abbey (1245–69) for Edward the Confessor; and the Angel Choir of Lincoln Cathedral (1256–80) for St Hugh. At Kirkwall, in addition to consideration for the setting of St Magnus's shrine, the extended east end provided more room for the canons and facilitated the placement of the choir stalls east of the crossing (Cant 1972, 7; Fawcett 1988, 97).

The proportions of the presbytery elevation continue those of the Romanesque church (illus 2), an aspect of continuity insufficiently recognized in the history of architecture but one



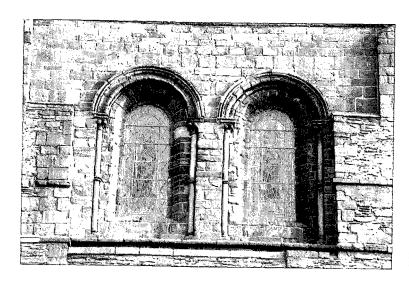




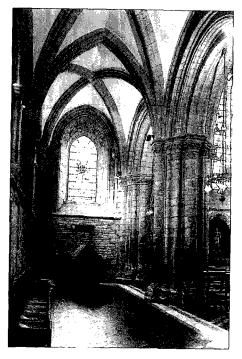
ILLUS 27 Kirkwall Cathedral: south transept, south doorway

ILLUS 28 Kirkwall Cathedral: south transept, south doorway, interior, east capital

ILLUS 29 Kirkwall Cathedral: north transept, exterior from north-west



ILLUS 30 Kirkwall Cathedral: north transept, north clerestory windows



ILLUS 31 Kirkwall Cathedral: north presbytery aisle to east

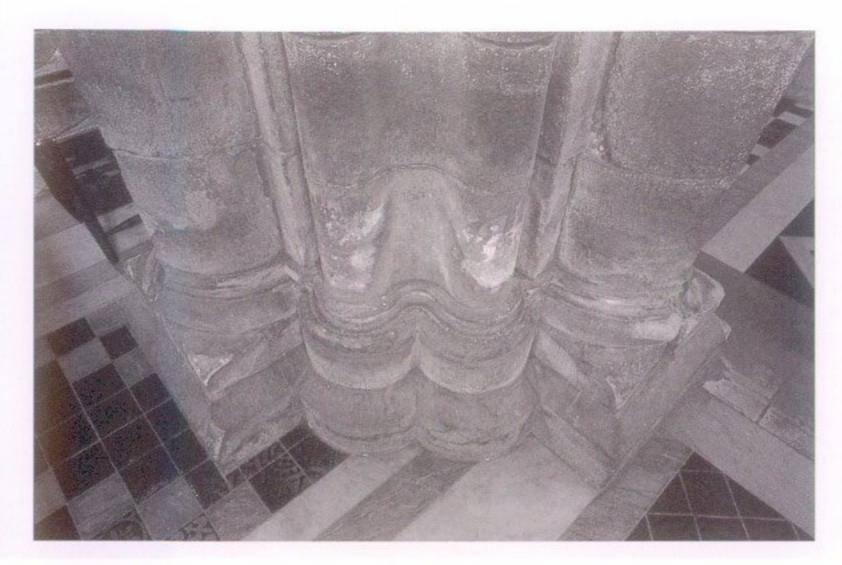
which may be compared, for example, with Chichester, Ely and Lincoln cathedrals. Roundheaded arches continue in the main arcades even though pointed arches were used in the crossing. However, individual motifs of the main arcades are far removed from the Romanesque work not least in the pier design (illus 31). The principle of design is established in the east responds which evolves from a regular compound pier with larger shafts on the cardinal axes, keeled on the west, and the two intermediate smaller shafts. In other words, they follow the same design principle as the crossing piers (illus 8 & 10). The free-standing piers of the arcades modify this form with a

hollow between the minor shafts to create a soft, rippling effect (illus 31–3). This change is accompanied by one in the plinth design from a single step beneath both minor shafts in the east responds to rounded plinths beneath each minor shaft in the free-standing piers. The fully developed water-holding base mouldings are typologically more advanced than in the crossing piers (illus 32).

The capitals of the main arcade piers and the aisle responds are extremely varied and include moulded types and a range of different types of foliage some inhabited with human heads and others with grotesques (illus 33-8). Several capitals conform to the strict order of the French crocket type (illus 33 & 34) (Jalabert 1932, 190-208), while other rather weak and sometimes sinuous forms desperately need a hefty dose of fertilizer to grow into a full stiff-leaf (illus 35-7) (Gardner 1927; Wynn-Reeves 1952). The waterleaf which proliferated in the crossing and adjacent remodelled areas is absent from the presbytery. However, the appearance of heads in some of the presbytery capitals, an unusual feature, is presaged on the main east capital of the north crossing arch (illus 10, 33 & 34). Similarly, the channelled spiky lobes of the foliage of the main capital of the south respond of the arch from the north transept to the north choir aisle is close to the foliage between the heads on the south-west of capital S2 in the presbytery (illus 11 & 37), while the limp, crossed stems of the former reappear on the left capital of the east respond of the presbytery north arcade (illus 11 & 35). This suggests that little time elapsed between work on the crossing and the start of the presbytery and even that the latter may have been started before the crossing repairs were completed (RCAHMS 1946, 119; Fawcett 1988, 98). The closeness of the two campaigns is further emphasized by the repetition of the inner order of the arches from the transepts to the nave aisles in the inner order of the presbytery arcades, while the other two orders of the former provide the basis for the outer order of the latter (illus 15, 31 & 36). Similarly, in the second order of the presbytery arcade the separation of the central rolls with an angle fillet relates to the inner order of the north and south crossing arches (illus 9, 10 & 34). The only motif in the presbytery arcades not found in the crossing area is the fillet on the angle roll of the third order.

Beneath the great east window there is a three-bay pointed dado arcade with keeled shafts, moulded capitals and stylized foliage paterae in the spandrels (illus 37). This enrichment indicates that the high altar and possibly the shrine of St Magnus would have been placed away from the wall in this area of the presbytery (Fawcett 1988, 97–8).

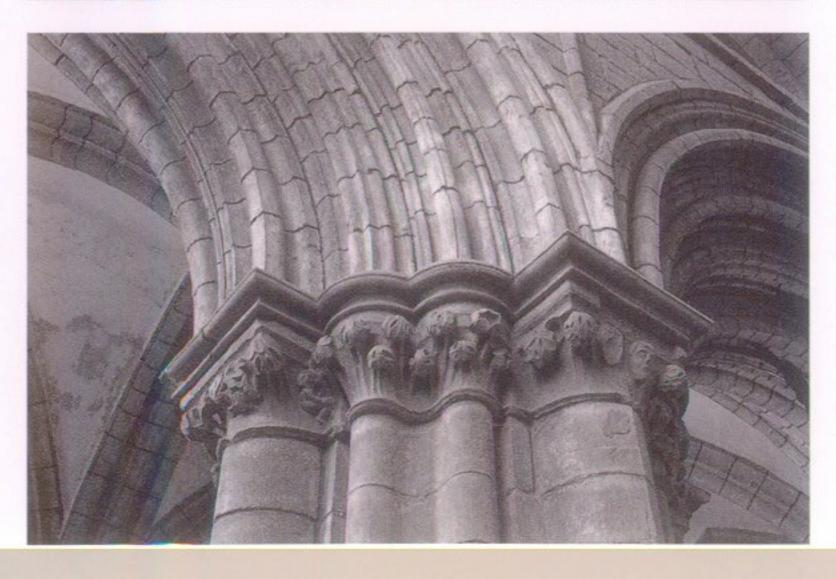
External parallels provide a context for the Kirkwall presbytery arcades and substantiate their attribution to Bishop Kolbeinsson. Neither the free-standing piers nor the east responds are precisely paralleled elsewhere, but this is hardly surprising given the remarkable inventiveness in pier design of the period (Hoey 1986; 1987; 1994). The compound east responds some closest to the south nave arcade piers of Holyrood Abbey although at Holyrood only the west respond has a keeled central shaft (illus 31, 40 & 41) (Hoey 1994, 89–93). For keeled shafts there is the tradition of the clustered piers in northern early Gothic starting with the eight-shafted clusters (from the choir of York Minster as rebuilt by Archbishop Roger of Pont l'Évêque (1154-81) (Browne 1847, pl XXX, fig 3). Closer to Kirkwall are the 12-shaft clusters of the transept east arcades at Dundrennan Abbey in which there are larger keeled shafts on the cardinal axes with smaller intermediate paired shafts (illus 31 & 42). Typologically the Dundrennan piers and the penultimate pier of the Holyrood south nave arcade (with chamfered rather than right-angled stones between the shafts) take their place between the east responds and the free-standing piers of the Kirkwall presbytery arcades. For the hollow between the minor shafts a number of early Gothic parallels might be cited such as the choir aisle responds at Noyon Cathedral, the south presbytery arcade at New Shoreham, Sussex, the chancel arch responds at Angmering, Sussex,



ILLUS 32 Kirkwall Cathedral: prebytery, north arcade, base N2



ILLUS 33 Kirkwall Cathedral: presbytery, north arcade, capitals N2 from south-east



ILLUS 34 Kirkwall Cathedral: presbytery, south arcade, capitals \$1 from north-east



ILLUS 35 Kirkwall Cathedral: presbytery, north arcade, east respond capitals from north-west



ILLUS 36 Kirkwall Cathedral: presbytery, south arcade, capitals S1 from north-west

the north nave arcade piers at Bayeux Cathedral, and the south pier of the north transept east arcade at Ripon Minster, Yorkshire (Hoey 1987, 252). Whether any of these had a bearing on the Kirkwall piers is a moot point, but given the many permutations of clustered-pier designs in early Gothic architecture in northern Britain it seems most likely that the Kirkwall variation should be attributed to the inventiveness of the talented master mason.

For the capitals one might compare the main arcade capitals of Wells Cathedral (c 1175–1220) in which there is an analogous variety of foliage as well as various creatures inhabiting the capitals. More importantly in Scotland are the west portals of Jedburgh and Holyrood abbeys in which there are some crocket types and creatures albeit not of the same species as Kirkwall (illus 43) (Garton 1987, 74, pl 10 & 21).

The multiplicity of the arch mouldings again recalls the Holyrood nave, but the inner order at Kirkwall is conceived on a flat plane with keeled angle rolls rather than on a triangular sequence finishing in a single soffit roll (illus 31, 34, 40 & 41). In this regard the Kirkwall design conforms to principles established in the north of England as early as the 1150s in the choir of



ILLUS 37 Kirkwall Cathedral: presbytery, south arcade, capitals S2 from south-west

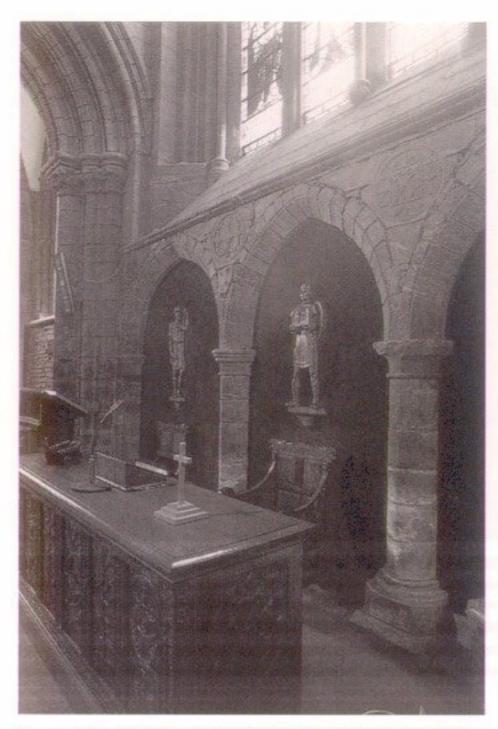


ILLUS 38 Kirkwall Cathedral: presbytery, south arcade, capitals S2 from north-east

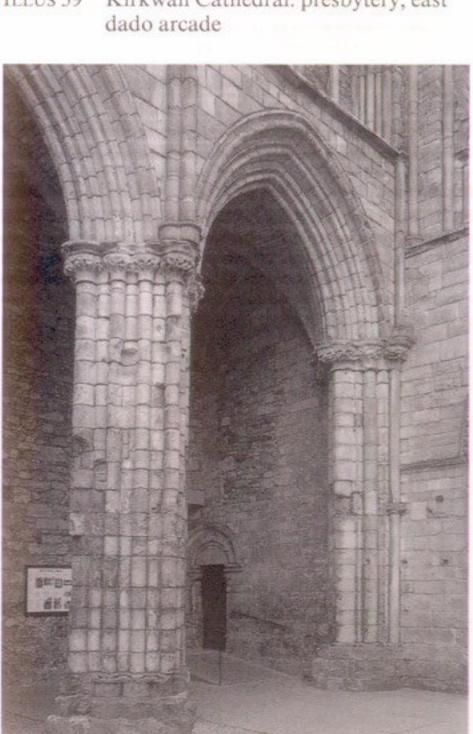
Archbishop Roger of Pont l'Évêque's York Minster (Wilson 1986, 96, fig 5), and used in Scotland in the nave of Jedburgh Abbey (Garton 1987, pl 44), the transepts at Dundrennan (illus 42) and, of course, the crossing arches at Kirkwall. It may also be significant that similar mouldings appear in the chapter house of Trondheim Cathedral (Fischer 1965, illus on 111-12, 115-16). There are four orders of mouldings at Kirkwall rather than three at Holyrood and the Kirkwall mouldings are more varied. This variety is presaged in the arch from the south transept to the south nave aisle at St Andrews and was probably seen as a mark of design sophistication (Thurlby 1994c, pl VIc).

There is precedent for the pointed dado arcade beneath the east window at Arbroath Abbey (Fawcett 1994, pl XIB), which was based in turn on an intersecting version at St Andrews Cathedral (Thurlby 1994c, 48), while for the decorated spandrels there is a parallel in the dado arcade of the north transept east aisle at Hexham Abbey (Pevsner & Richmond 1957, pl 21b).

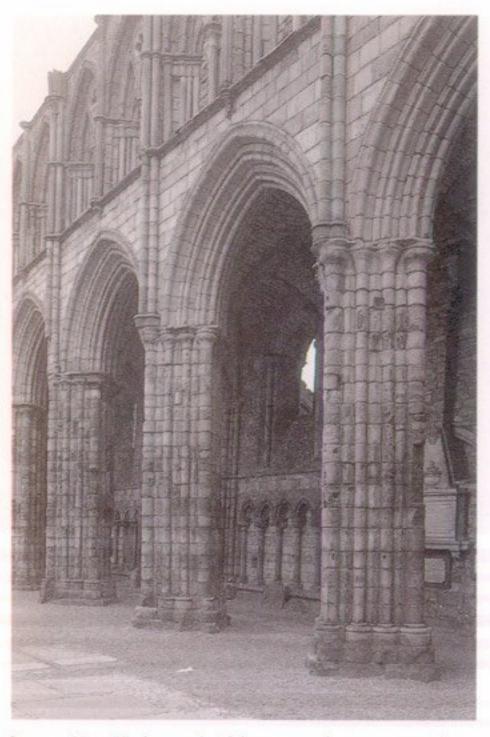
The gallery is in sharp contrast to the lavish main arcade and has simple stepped piers, as on the north side of the Romanesque choir, with simple steps in the arch on the north side and



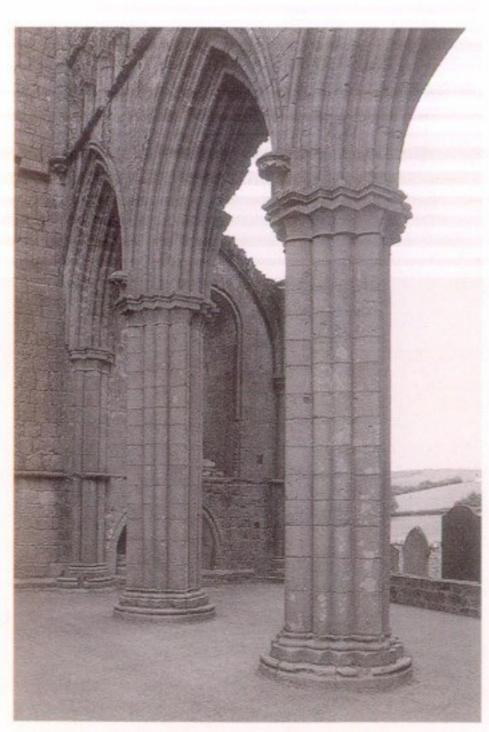
ILLUS 39 Kirkwall Cathedral: presbytery, east dado arcade



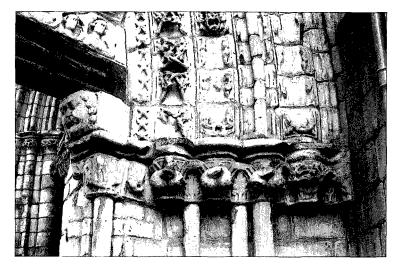
ILLUS 41 Holyrood Abbey: south nave arcade, west bay



ILLUS 40 Holyrood Abbey: south nave arcade



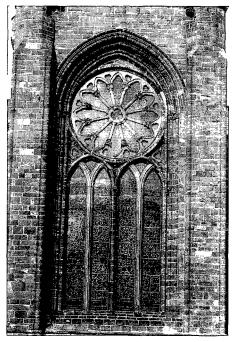
ILLUS 42 Dundrennan Abbey: north transept, east arcade



ILLUS 43 Holyrood Abbey: west portal, R capitals

ILLUS 44 Kirkwall Cathedral: east window

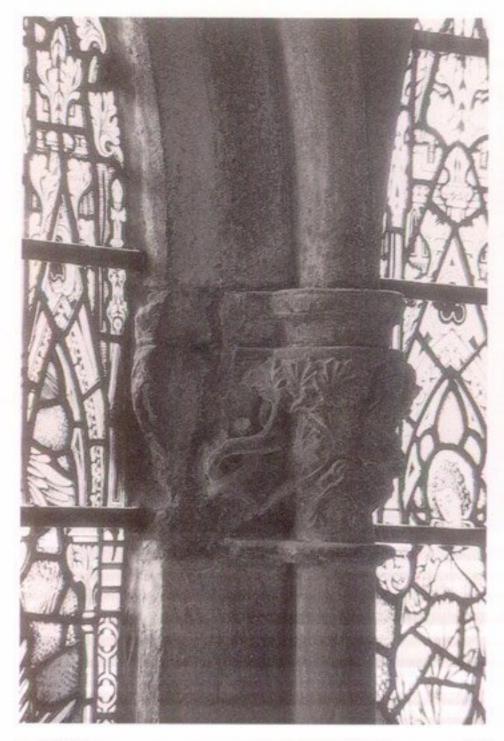
ILLUS 45 Kirkwall Cathedral: east window, interior, north enclosing arch capitals

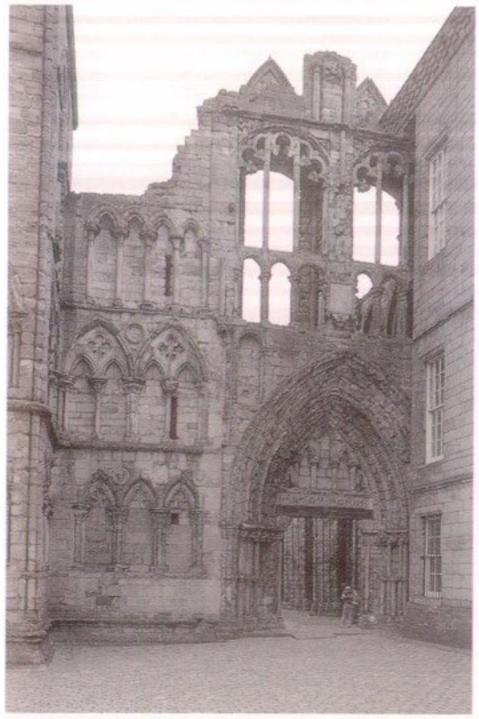




chamfered orders on the south (illus 2). Does the change mark an economy or an attempt at visual unity with the choir when a screen would have masked the presbytery arcades from view from the west?

Whether or not the flat east front (Fawcett 1988, pl 5) was inspired by Archbishop Roger of Pont l'Évêque's eastern extension at York Minster is a moot point — Browne's plan shows the east wall thicker than the aisle walls (Browne 1847, pl XII) — but at least the form was a very popular one in early Gothic great churches in the north.







ILLUS 46 Kirkwall Cathedral: east window, interior, middle capital

ILLUS 47 Kirkwall Cathedral: east window, interior, north sub-arch capital

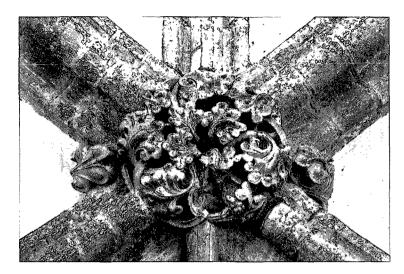
ILLUS 48 Holyrood Abbey: west front

One of the most notable features of Kirkwall Cathedral is the great east window (illus 44) (Fawcett 1988, 101–2). Large façade windows are associated with Gothic fronts in Britain from the west front of Lincoln Cathedral (Russell 1986), Peterborough Cathedral and Binham Priory (Thurlby 1991b), to Lincoln Angel Choir, Ripon Minster, York Minster and elsewhere. Of these the earliest to be dated by documentary evidence is Binham which was completed by 1244, although Peterborough and Lincoln — both now filled with later tracery — probably date from the 1230s. Therefore, if the Kirkwall east window is an integral part of Bishop Kolbeinsson's presbytery and was completed before his death in 1223, it takes on great importance for the history of Gothic architecture in Britain.

The plate tracery of the rose and the subarcuation of the two mains light are clearly restored, but there can be no doubt that the essential form of the window as a whole is original. That it is contemporary with the presbytery is demonstrated by careful internal analysis (illus 44). In the first place, the junctions of the jambs and sub-arches, the plate tracery in the spandrels beneath the rose, and the springers of the lower half of the rose, are each formed with single stones which can only be part of a single integral design and execution. The mouldings of the enclosing arch of the window, both inside and out, repeat the filleted angle roll flanked by two hollows and thinner outer rolls of the third order of the presbytery main arcade (illus 32 & 45). The moulded capitals of the enclosing arch are the same as on the north-east capitals of pier S2 in the presbytery main arcade (illus 38 and 45). The central capital of the sub-arches is inhabited in the manner of some of the presbytery arcade capitals, this time with a beast and rider, and it has hollowed spiky lobed leaves like the south-west capital of pier S2 (illus 37 & 46). The north capital of the sub-arch has foliage crockets with central pointed lobes and spiralled side lobes exactly as in the south-east capital of pier N2 of the presbytery main arcade (illus 33 & 47). Such close correspondences indicate that the works are contemporary.

The east window of Kirkwall is therefore the earliest extant example of a major traceried façade window. What are the sources of the design? In the 1160s at St Andrews Cathedral the east front is dissolved into three tiers of three large round-headed windows (Thurlby 1994c, 48-50) and by the 1190s a pointed variant existed at Arbroath Abbey (Fawcett 1994, 63). In the south transept façade at Arbroath tall paired lancets — equivalent in height to the combined transept gallery and clerestory — are surmounted by a rose window in the gable, while a ruined huge rose window occupies the entire upper part of the west front. As with other aspects of Bishop Kolbeinsson's work at Kirkwall, the architectural context extends south to Yorkshire. Rose windows surmounted triplets of separate round-headed windows in the east front at Kirkstall Abbey (Harrison 1995, fig 4) and the west front of Fountains Abbey (Coppack 1993, 40-1, fig 25). The latter had a wheel design with round-headed arches on the spokes. Closer to Kirkwall are the rose on the west front at Byland Abbey, as reconstructed by Stuart Harrison and Paul Barker, and the south transept rose of York Minster (Harrison & Barker 1987, fig 7). In particular the trefoil arches and trefoiled piercings of the spandrels of the inner circle of the York rose are so like Kirkwall that the restoration fo the latter must surely be trusted (Gifford 1992. 320). What is remarkable at Kirkwall is that unlike any of the Yorkshire designs the lancets and the rose are integrated into a single window. Its design is progressive not only in the early Gothic of Britain but also of France. It must be noticed, however, that the dissolution of the upper part of the Kirkwall façade into tracery does find a near-contemporary analogue in Scotland in the west front of Holyrood Abbey, even though the details are different (illus 48) (Wilson 1984, 135–8).

The parallels between the nave and the west front of Holyrood Abbey and the Kirkwall presbytery are both intriguing and tantalizing. On the one hand, they represent what must have been regarded as an ideally rich aesthetic for a building of the highest order. On the other hand,



ILLUS 49 Kirkwall Cathedral: presbytery high vault, east boss



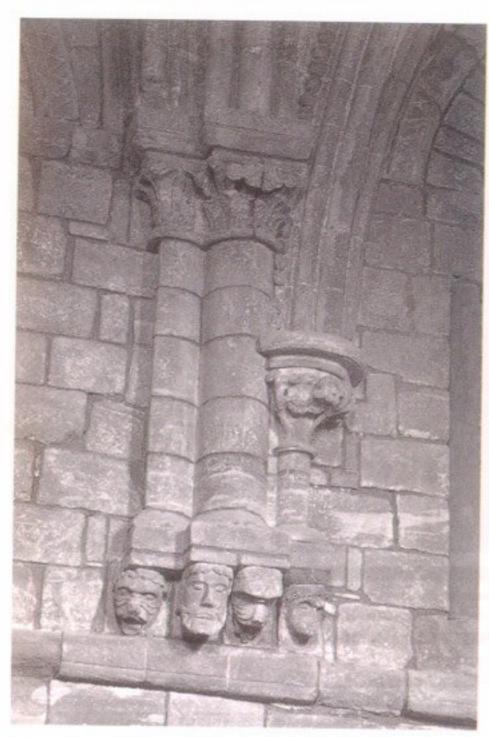
ILLUS 50 Kirkwall Cathedral: choir high vault, capital N2

what do they tell us about the exact nature of the connection between the two buildings? The lavish articulation in both cases represents the wishes of the patron while details such as pier forms and arch mouldings were in the charge of the master mason. Are the details close enough to suggest that the same master mason worked on both buildings? Do they suggest the sharing of one or more craftsmen? Or are the similarities so general as to be dictated by the patron? The use of compound piers rather than the virtually ubiquitous northern cluster pier is sufficient to suggest shared craftsmen. And this is supported by the resemblances between certain capital types, arch mouldings, and even the daring void in the traceried façade. However, nowhere do the

details seem sufficiently close to indicate the work of the same master mason. Perhaps the master mason of one building had previously served in a junior capacity at the other and if that was the case it raises the question of relative dates. Holyrood is not documented but there is general consensus that it should be dated between about 1195 and 1230 (Wilson 1984, 130; Hoey 1994, 89-92), in other words contemporary with the Kirkwall presbytery. On the one hand, the arch mouldings and foliage capitals of the Kirkwall presbytery are typologically earlier than the south nave arcade and aisle at Holyrood. On the other hand, there are waterleaf capitals in the north nave aisle dado arcade at Holyrood which, as we have seen, were abandoned in the Kirkwall presbytery. Add to this the problem of the lost square-ended eastern arm of Holyrood from which there may exist fragmentary keeled shafts (Wilson 1984, 139; Hoey 1994, 90-1), and the question of priority seems insoluble.

Fawcett suggested that the high vault of the eastern arm was not planned when work began on the presbytery (Fawcett 1988, 102-3). In support of his case he cited changes in the wall shafts which divide the presbytery bays, from thin single shafts in the main arcade spandrels to thicker single shafts on the gallery piers, to triple shafts in the gallery spandrels and into the clerestory (Fawcett 1988, pl 12). He then observed that the clerestory throughout the eastern arm was raised to accommodate the high vault (Fawcett 1988, pl 5 & 6). Fawcett may be right, but an alternative reading is worth considering. His first point demands a sense of absolute 'logic' which is hardly symptomatic of early Gothic architecture in Britain (Hoey 1986; 1987). It is just as likely that the staggering of the wall shafts resulted from the desire to have thin shafts in the main arcade spandrels so as to maximize the impact of the main arcade piers and arch mouldings. That a high vault was intended for the eastern arm as an integral part of Bishop Kolbeinsson's programme is suggested by the high vault capitals in the choir which are variants on waterleaf and simple acanthus themes (illus 50 & 51) (RCAHMS 1946, 124). In contrast, the north-west capital of the presbytery vault is of the stiff-leaf type with a round abacus as in the presbytery main arcade, while the remainder of the presbytery high vault capitals are moulded as in the north-east capital of presbytery arcade pier S2 (illus 38 & 52). Therefore, it would appear that work on the high vault capitals of the choir was started soon after the crossing and transept were completed, and that the presbytery vault capitals were by the same craftsmen as the arcade capitals below.<sup>4</sup> Be that as it may, the vault was not completed immediately because the bosses are carved with a rich array of stiff-leaf (illus 49). A chronology for stiff-leaf in Scotland has not been established, but obviously the foliage of the bosses is much later than the rudimentary foliage of the presbytery arcade capitals. Perhaps the change in foliage types should be equated with a delay while the clerestory wall was raised throughout the eastern arm. The latter would have been necessary because the geometry of the high vault had not been accurately determined in relation to the height of the clerestory. Incredible as this may seem at first, it is not entirely surprising that difficulties were experienced given the different bay sizes in the eastern arm (illus 2). That there was no ideal solution is indicated because the nave high vault was built at a lower level than in the eastern arm (illus 2), while in the nave aisles the vaults rise higher than in the choir aisles (illus 3, 4 & 24). Moreover, high stone vaults are rare in Scotland in the early Gothic period. St Andrews presbytery and Holyrood nave were planned for high vaults from the first but the remaining vaults there were (re)built respectively from 1418 to 1443 (Thurlby 1994c, 48-50) and from 1460 to 1483 (Wilson 1984, 133). This raises the possibility that the early Gothic vaults were either not completed or were built in wood, and serves to emphasize the ambitious nature of the Kirkwall project.

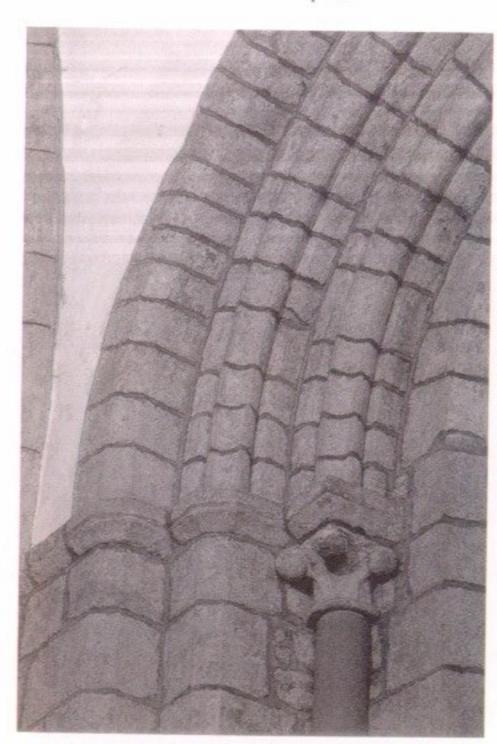
The inclusion of a ridge rib in the high vault may once again indicate a Yorkshire link given the appearance of this motif in the north transept chapels at Ripon Minster (c 1180) (Hearn 1983,



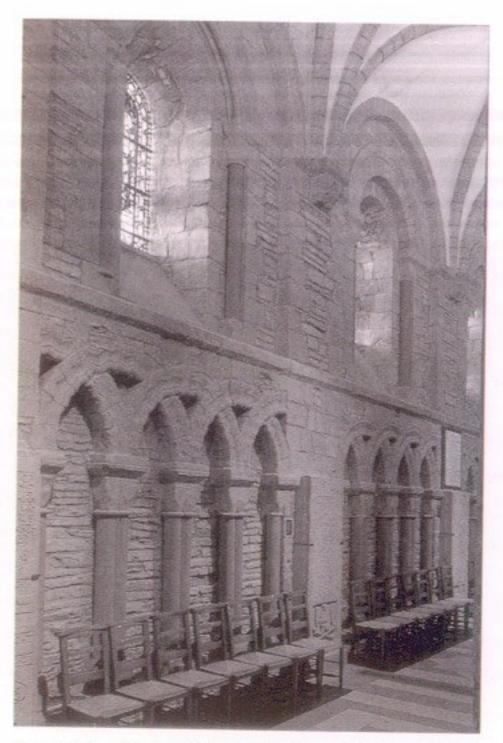
ILLUS 51 Kirkwall Cathedral: choir high vault north-east capitals/presbytery high vault north-west capital



ILLUS 52 Kirkwall Cathedral: presbytery high vault capital



ILLUS 53 Kirkwall Cathedral: south nave aisle interior, bay 6, detail window capital



ILLUS 54 Kirkwall Cathedral: north nave aisle interior, bays 3 & 4

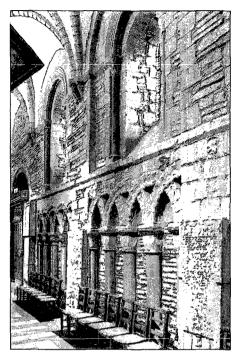
pl 22). However, for the ridge rib in a high vault we have to look further south to St Hugh's Choir and eastern transepts at Lincoln Cathedral, begun in 1192, where there are also a number of features in common with Holyrood (Wilson 1984).

Before considering the significance of certain motifs in the presbytery, the continuation of building in the nave will be examined to provide a better context for discussion of stylistic differences.

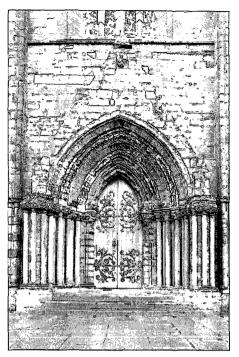
#### THE COMPLETION OF THE NAVE

Fawcett's detailed analysis of the sequence of the nave requires no further comment save to draw attention to the use of the channelled rolls in the second and third orders of the interior mouldings of the windows in bays 3-5 in the south nave aisle (illus 53). This motif is not used further east in the building but it was popular in Archbishop Roger's York Minster and the related work at Trondheim Cathedral (Wilson 1986, fig 5) and as such serves to reinforce the parallels already cited with those buildings. What does require emphasis is the uniformity of the nave design (illus 2) (Sharret & Sharret 1985, pl 111). As Fawcett observed in his opening paragraph, Kirkwall Cathedral has the 'appearance of being an essentially Romanesque building' even though 'much less of the building is in fact Romanesque than first appearances might suggest. The latter masons of the cathedral took the architectural forms established by their predecessors as the guide for their work and, despite the inordinate length of time it took to complete, the end result is a building of remarkable homogeneity' (Fawcett 1988, 88). Of course, there are differences between phases as in the dado arcade fifth bay of the north nave aisle where the late 12th-century waterleaf capitals contrast with the scalloped capitals further east, and bold rolland-hollow mouldings replace the earlier chevron (illus 54 & 55). However, the basic form of the paired shafts and moulded intersecting round-headed arches continues unabated. Similarly, mouldings are introduced to the second order of the window arches in bays N4-N6 in place of the unmoulded further east (illus 54 & 55). These mouldings do not have a precise parallel in the late 12th-century work elsewhere in the church, but the keeled angle rolls and thinner rolls belong to the same family as the presbytery arcades. And yet they form a minor element of the nave aisle window in which the continuity of the basic design established in the eastern bays of the nave is all important.

The sense of uniformity is even more obvious in the nave arcades and galleries. In the former, apart from the change from octagonal scalloped to round moulded capitals, the cylindrical piers remain the same throughout the nave and there are only minor changes to the simple three-order arches. Allied simplicity is carried through at gallery level. Aside from minor deviations associated with the late medieval completion of the nave (Fawcett 1988, 109-10), the only major changes in the nave are in the portal in the sixth bay of the north aisle and the three western portals (illus 56). In these portals, so carefully analysed by Fawcett (1988, 106-9), we encounter a richness which is quite alien to the interior of the nave and yet so similar in spirit, if not in exact detail, to the main arcades of the presbytery. How are we to account for such similarities and differencies in what was probably contemporary work? The principle is the same as in the choir transepts where articulation is allied to function. Just as the transept chapels were more elaborate than the main body of the transepts so as to emphasize their function as altar spaces, so the highly articulated main arcades and east window of the presbytery marked the most important space in the church around the high altar and the shrine of St Magnus. It naturally follows that the relative simplicity of the nave should reflect its lesser liturgical significance. And just as an elaborate doorway was introduced in the south transept facing the bishop's palace so



ILLUS 55 Kirkwall Cathedral: north nave aisle interior, bays 4 & 5



ILLUS 56 Kirkwall Cathedral: west front, central portal

the north nave doorway and especially the west front portals present a strikingly rich public façade.

These aspects of continuity and change at Kirkwall Cathedral are by no means an isolated case. To cite two examples: much of the nave of Peterborough Cathedral was built by Abbot Benedict (1177–94) according to the pattern established at the outset of construction in 1117/8 (Peers 1906). This only gave way to the early Gothic in the spatially separate western transepts. Similarly, at Wells Cathedral there is remarkable uniformity in the nave design in spite of the 'break' in construction detected by Bilson (1928), but the processional doorways, west front and north porch are all stylistically different from the nave. Even though the latter is bonded with the aisle wall it is often attributed to a different master mason (Brakspear 1931, 16).

#### CONCLUSION

The Romanesque fabric of Kirkwall Cathedral has long been connected with Durham Cathedral and related buildings. This study suggests that the liturgical arrangement of the original east end followed that at Durham and that the association with the resting place of St Cuthbert was to have been further emphasized with eastern towers. The latter were never realized, instead attention was turned to the remodelling of the crossing and transepts in which conservative and progressive elements were used according to structural or liturgical function. This work was probably undertaken early in the episcopate of Bishop Kolbeinsson. He was also responsible for the extension of the eastern arm with its magnificent main arcades and plate tracery window in the façade. We have compared features of this work with Holyrood Abbey, Archbishop Roger of

Pont l'Évêque's York Minster and allied buildings, and with Trondheim Cathedral. For Cant (1988) the latter played a rather more important role than we have suggested which is entirely plausible given the diocesan connection between the two buildings. Be that as it may, the 'chapter house' and upper parts of the transepts at Trondheim represent something entirely new in Norway and are undoubtedly the work of masons associated with Archbishop Roger at York Minster. Therefore, rather than thinking just in terms of a Trondheim-Kirkwall connection we might adapt one of Eric Fernie's conclusions on the church at Egilsay (Fernie 1988). Fernie suggested that the design of Egilsay 'belongs to a family of buildings originating in North Germany and linked by the North Sea'. For Kirkwall the North Sea would also have provided the vital link, whether with Durham for the Romanesque design or with Yorkshire, Holyrood and Trondheim in the time of Bishop Kolbeinsson.

# **ACKNOWLEDGEMENTS**

I should like to thank Jim Rousay, Custodian of Kirkwall Cathedral, and Liz Johnston, Assistant Custodian, for giving me unlimited access to the upper parts of the fabric without which this study would have been impossible. I am also grateful to Dr Richard Fawcett for generously sharing his views on various aspects of the fabric and for his assistance with archival matters in Edinburgh. Research funds for this project were provided in part by the Social Sciences and Humanities Research Council of Canada.

## **NOTES**

- 1 Cambridge (1988, 119-22) presents a case against an ambulatory. His reading of the two western bays of the choir as a double bay is unconvincing because of the considerable difference in the size of the bays (illus 2).
- 2 Cunningham 1976, 37; Stalley 1995, 11.
- Wilson's (1986) emphasis on the Gothic missionary activities of the Cistercians in northern Britain had a good pedigree with Bilson (1909), Bony (1949), Webb (1956, 82–4), Kidson et al (1962, 62–6), and Fergusson (1975; 1984, 69–90), but already in the 1970s Jane Cunningham suggested that 'the Cistercians and their contacts were not the only means by which foreign up-to-date influences were brought to the north of England' (Cunningham 1976, 37). For Hearn (1983) the patronage of Archbishop Roger of Pont l'Évêque was more important for the beginning of northern Gothic but at Ripon rather than at York Minster [see review by Thurlby, J Soc Architect Hist, XLV (1986), 68–9; and correspondence in ibid, XLVI (1988), 101–2]. Recently, in his study of the early Gothic fabric of Selby Abbey, Roger Stalley (1995, 11) stated that 'Cistercian architecture in the North had less impact than is sometimes imagined'.
- The shafts of the choir high vault capitals are carried on grotesque and human head corbels. The summary detailing of the human head on the north-east corbel of the choir high vault (illus 51) compares favourably with a loose corbel from Jedburgh Abbey c 1180–90 (Thurlby 1981, pl 29b).

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