5. GENERAL DISCUSSION

Though the size of the excavation area was relatively small, it contained significant archaeological remains, with evidence of four main phases of development: the pre-13th-century settlement, a high-status ecclesiastic site and the footings of the 16th-century Royal High School all underlying the yard of the late 18th-century Old High School.

5.1 Phase 1 - Early medieval activity

The ditch forming the earliest phase of activity on the site was thought to represent either a property boundary or a defensive ditch. This ditch was exposed in the southern part of the excavation area although little of it was visible. The friary was supposedly situated on land that had previously been the location of the king's manor house (Cowan & Easson 1976:118). Therefore, it is possible that this ditch was related to this property. No artefacts were recovered from the fill of the ditch but based on stratigraphic relationships it clearly predated the 13th-century structures and burials associated with the friary. The placing of the friary wall within the ditch suggests that the ditch had been backfilled during the construction of the ecclesiastical site, probably as a single event, as no stratigraphy was observable within the ditch fills.

5.2 Phase 2 - The Dominican friary

5.2.1 The layout of the friary

The finding of the two foundation walls, C052 and C146 (Illus 5), are the first definitive archaeological evidence for the location of the Dominican friary in Edinburgh. These wall foundations, in conjunction with the three burial groups, have provided some evidence of the layout of the friary.

The alignment of the two stone walls with opposing internal elevations imply they represent the remains of a single building. These walls also demarcated the 88 inhumations into three separate burial groups within the excavation area, aiding the identification of the building and conversely the position of the burials within the friary.

It can be surmised from the topography of the site that the structure formed part of the north range of the friary, since the ground to the north of the excavation area quickly sloped down to the Cowgate, thus precluding the construction of any substantial buildings there. A potential robber trench (C156) in the south-west corner of the excavation area may represent the previous location of a further north-south friary wall, probably forming the internal wall of the west range, which would locate the excavations area towards the north-west corner of the friary complex. This indicates that Burial Group 3, on the sloping ground to the north of this, lay within an external graveyard. The mixed demography of the burials there is consistent with this representing the general graveyard for the burial of the local population. The cross-slab burial to the south of the structure in Burial Group 1 is also more likely to have occurred within the friary than the external graveyard, adding further evidence to back this supposition. Since the principal graveyard on most medieval ecclesiastical sites was to be found in direct conjunction with the church (Gilchrist & Sloane 2005: 32), it is very likely that the structure was the friary church.

The north-east to south-west alignment of these walls, 27° off true east-west is not an impediment to this theory. While churches were, in theory, aligned east-west, there was, in practice, a wide variation from south-east to north-west, to north-east to south-west. There has been a long-held belief that the orientation was based on the rising (or setting) sun on the feast day of the saint to which the church was dedicated and was therefore subject to seasonal variation. One study (Ali & Cunich 2001) found some correlation with this and suggested that other churches may have been aligned with solar observations at Easter or the equinoxes. However, other studies (Eeles 1914; Hinton 2006) have found no correlation with saints' days. It might be assumed that more practical factors were involved and that the orientation might simply relate to solar observation on the day construction began.

However, Hinton (2006) notes two factors of interest. Firstly, there was a significant variation in the orientation of churches between eastern and western England (churches in the west being, on average, 10° more off-true than churches in the east). He also noted that the chancels of churches located on slopes typically face downhill. He could offer no clear conclusions on why either of these phenomena should be so. In this context it is interesting to note that the Blackfriars site is located on the eastern side of a hill, the ground falling away to the east towards the Pleasance and, though subsequent building works have obscured the exact 13th-century contours, the orientation may well relate to the site topography.

The nature of the burials within the structure (Burial Group 2) is consistent with intramural church burials as seen at other sites. Burial within the church was a common aspect of ecclesiastical sites, seen at, for example, Stirling Priory (Page & Page 1996), Newcastle Blackfriars (Harbottle & Fraser 1987), Beverley Priory (Armstrong & Tomlinson 1987), Guildford Blackfriars (Poulton & Woods 1984) and the second Blackfriars site in Oxford (Lambrick & Woods 1976). The latter three of these contained both male and female burials. In all cases the burials were almost entirely made up of adults, as was also the case at the Old High School site. Burials could occur within other parts of religious houses, such as the chapter house, but these would be expected to be of friars (Gilchrist & Sloane 2005: 59).

A plan by architect Thomas Ross within Bryce's *The Blackfriars of Edinburgh* (1910) depicts the friary as comprising a long church to the north, with east, west and south ranges around a central cloister. This would appear to be based on the layout of other Dominican houses (Bryce 1910: 20) but in this case, it is broadly in agreement with the present archaeological evidence. The only difference observable at present is the slightly different orientation, with Ross depicting the church closer to true east–west than can now be shown to be the case.

On the assumption that the wall foundations are part of the north range, the area to the south of this must represent part of the cloister ambulatory. Again, burial within this area was a common practice at mendicant friary sites, such as at Beverley Priory (Armstrong & Tomlinson 1987), Cork Blackfriars (Hurley & Sheenan 1995), Guildford Blackfriars (Poulton & Woods 1984) and Oxford Blackfriars (Lambrick & Woods 1976) and in some cases was regarded as a special or desirable place to be buried (Gilchrist & Sloane 2005: 57). The inclusion of the cross slab grave cover to mark one of the graves is therefore entirely consistent with this assumption.

The evidence all points towards the structure

represented by walls C052 and C146 being the church located within the north range of the friary, and the excavation area representing part of the external graveyard, church interior and cloister ambulatory.

The other fragments of potential friary remains were a narrow stone culvert in Trench 5 and a pillar base in the lift shaft trench (see section 4.2.1). Given the layout as described above these would probably have been, respectively, outside the west range and in the vicinity of the south-east corner.

5.2.2 Structural remains of the friary

Gauging the size of the friary at Edinburgh has been constrained by the small size of the excavation area. The range of sizes of mendicant ecclesiastical sites found across the country seems to vary significantly. Extensive excavations at Guildford friary (Poulton & Woods 1984) provided one of the most complete ground plans of a Dominican ecclesiastical site. Here the friary covered 10 acres in extent, although this was regarded as modest in size compared to some. The second Dominican friary at Oxford covered almost 22 acres, though the first friary there was actually much smaller (Lambrick & Woods 1976). In contrast, one of the smallest known friary sites is at Newcastle-upon-Tyne, covering approximately 7 acres (Knowles 1920). In general, although seemingly small in comparison to the sizes of towns and cities today, the areas taken up by these friaries would have been considerable within the existing medieval towns. In Chester there were five ecclesiastical precincts present by the 14th century, which together took up almost a quarter of the medieval town (Greene 1992: 165). In Perth the Blackfriars owned much of the north-eastern suburb of the burgh, including the Royal Gardens (Milne 1891). In Edinburgh, the area taken up by the Blackfriars and the Greyfriars to the west would certainly have been significant.

There seems to be no standard size for the churches at these sites. The only gauge for the size of the church at the Old High School site comes from its width, which had an internal measurement of approximately 7.5m. This compares favourably with the church at Guildford (Poulton & Woods 1984). There the choir of the church was approximately 6.5m wide and the nave 12m wide. Excavations at

Beverley, North Yorkshire (Armstrong & Tomlinson 1987) revealed similar dimensions, with the west end of the church 6.5m wide internally, the walls being 0.95m thick, a similar measurement to that recorded in Edinburgh. The original form of the church at Beverley was an aisleless nave and choir forming a simple rectangular building aligned north-east to south-west with a postulated length of no more than 53m. There is too much variation in church proportions at other sites to extrapolate the possible length of the church from its width.

Although the sizes of these sites varied, the majority tended to be based on a comparable layout. The buildings of the friary at Newcastle included a church in the north range with a six- or seven-bay aisled nave; a square south cloister with lean-to walks; an east range, including a sacristy and possibly a chapter house with a warming house and dormitory above; a south range, including a refectory and kitchen and a west range with an external lavatorium and guest hall (Harbottle & Fraser 1987). At Oxford the site included a church to the north with an aisled nave and long choir, a cloister to the south with chapter house and range to the east side (Lambrick & Woods 1976).

The best idea as to the appearance of the friary at the Old High School comes from the few architectural fragments recovered and their comparison with other contemporary structures (see Illus 11–19). The quality of the decorated stone fragments recovered from the site and the floor tiles confirms that it was a substantial and well decorated building.

Three of the stonework fragments recovered from the excavation have been typologically dated to the mid- to late 13th century, possibly a little later than the c 1230 date for the foundation of the friary. This suggests the stone structures were potentially still under construction several decades after the foundation of the friary. The only evidence for later alterations is the collection of Flemish floor tiles. These appear to have been part of the church floor but were clearly added some time after the main phase of building, suggesting 15th-century refurbishment.

Several episodes of phasing were recorded at Beverley from an early timber hall through to the establishment of a walled cloister and north and east ranges. It was suggested that this level of building work indicated a reasonably high level of prosperity. Similar episodes of expansion and improvement were recorded at Chester (Greene 1992: 165), revealing five phases of construction. Again, the earliest phase was a simple aisleless structure with subsequent developments finally resulting in a building with a broad nave incorporating two aisles with a tower over the crossing. This seems to be the most common form of friary church, in which the premium was placed on the capacity of the nave for preaching. The large site at Oxford also saw multiple phases of construction (Lambrick & Woods 1976). The general trend for expansion and enlargement of the friary sites seems to prevail in many cases, although not in all. At Newcastle Blackfriars just a single phase of building was identified (Harbottle & Fraser 1987).

The friary at Edinburgh was destroyed in June 1559 during the Reformation and the archaeological excavation showed that much of the building has since been removed. There was no evidence of any in-situ floors and little stone debris that could be related to the upstanding northern church wall. It appears that once the friary had been demolished much of the reuseable stone was robbed, possibly during the construction of the 16th-century Royal High School and the Flodden Wall (Bryce 1909a: 71). This robbing of stone was particularly evident in the northern part of the site, where most of the friary wall had been removed along the line of the later Royal High School wall, apart from the one section that had been incorporated into the later building.

5.2.3 Observations on the burials

Medieval souls were perceived as bodies marked by rank, sex and occupation (Bynum 1995: 10), and these central tenets are thought to directly affect the material preparations of the corpse and the grave, including its location (Gilchrist & Sloane 2005: 6). The burials recorded at mendicant friary sites are typically mixed in terms of sex and age, indicating that they represent the local population, not just the brethren of the site. The locations of the burials across a range of different areas within the friaries is also a common feature. At Edinburgh the burials were recorded within three separate areas interpreted as:

- the cloister ambulatory Burial Group 1
- the friary church Burial Group 2
- the external graveyard Burial Group 3

The dating of six of these inhumations indicated that the burials ranged from the establishment of the friary in the early 13th century up to, and probably beyond, its dissolution in the 16th century.

Burial within the cloisters was certainly commonplace at mendicant friaries (Hurley & Sheenan 1995; Armstrong & Tomlinson 1987; Poulton & Woods 1984; Lambrick & Woods 1976). Gilchrist & Sloane (2005: 57) suggest that they were the spiritual core of the friaries, being evocative of eternal paradise and the lost gardens of Eden. It is unsurprising then that this was a favoured place of burial. Hurley & Sheenan (1995) suggest that the east cloister ambulatory linking the church with the domestic area was favoured for the burial of patrons, based on the evidence of a distinct group of burials found in this area at Cork. In Edinburgh the claustral burials seem to be located at the west end of the north cloister, though there was little excavation in other areas with which to compare this. A tomb burial (male 35-45) in the cloisters at Oxford Blackfriars (Lambrick & Woods 1976) interred close up against the south wall of the north aisle may signify that this was another preferred or special place reserved for wealthy patrons.

It was noted in the claustral burials at Oxford (ibid) that the majority had been buried within coffins, leading to the suggestion that the cloisters were reserved for friars on this site. The four burials excavated within the cloisters at Beverley Priory (Armstrong & Tomlinson 1987) were also all male, indicating these too may have been monks. In contrast, at both Cork (Hurley & Sheenan 1995) and to a lesser extent at Edinburgh, a mix of males and females were identified, implying these were patrons rather than monks.

Whatever the character and demography of the claustral burials, their location implies they were probably people of relatively high status. Certainly, the discovery of the cross slab over Sk19 would imply this. This tallies with the evidence from Oxford and Cork, both of which recorded stone-lined graves and coffined burials in the claustral area. The cross slab at Edinburgh can be dated to the 12th or 13th century, and the radiocarbon dating of the skeleton

associated with it suggests a date in the second half of the 13th century is most likely. This places it relatively early in the history of the friary. Given its decoration, it seems likely that the slab was meant to be seen. It may have formed part of the floor surface to the cloisters although no specific wear or weathering has been noted. It is possible it was only visible for a short period prior to being covered over either by later alterations to the friary site or due to later interments.

The burial of adult men and women rather than friars within the church also seems to have been a normal practice of the mendicant orders (Lambrick & Woods 1976; Armstrong & Tomlinson 1987; Hurley & Sheenan 1995; Page & Page 1996). These were likely to have been rich benefactors to the friary. At Stirling Priory, it was known that in 1425 Murdoch, Duke of Albany, and others were interred beside the high altar (Page & Page 1996: 893). The high number of burials in stone-lined graves (60 out of 109) or associated with cross slabs (eight) found within the church at Cork (Hurley & Sheenan 1995) also imply high-status individuals being buried here. It seems that in return for their patronage these rich benefactors were afforded desirable burial plots. At Oxford documentary sources suggest that both male and female benefactors of religious houses were buried in prominent positions such as in front of a particular altar they had actively supported (Bryce 1909b: 317). At Newcastle there are several grave recesses in the north and south walls of the nave, indicating the importance of these locations for burial (Harbottle & Fraser 1987). It is more unusual to find child burials within the church, although at Oxford the west end of the chapter house in particular seemed to have been reserved for this purpose (though not exclusively).

The burials within the graveyard provided the densest concentration as well as being the most mixed in terms of sex and age. This is typical of most known sites, although at the Dominican friary at Drogheda, Co. Louth (Halpin & Buckley 1995) the graveyard burials were predominantly males, with very few infants or juveniles. The only infant burials here were located close to the edge of the walls of the friary building. The burials at Edinburgh were representative of a graveyard location, although again the small size of the area excavated diminished the quality of any statistical analysis or comparisons with other sites. The two dated burials from this group at least implies a long sequence of use from the earliest period of the friary up until its dissolution, and potentially later.

The four burials of perinates within the graveyard (Sk03, Sk70, Sk80 and Sk82) are thought to be unchristened babies inserted after the graveyard had fallen into disuse. This is not an uncommon finding, the practice having been repeated on a number of sites (Gilchrist & Sloane 2005: 67). Where a religious prohibition against the burial of the unchristened infants in the parish cemetery was strictly upheld an old graveyard was still regarded, in some sense, as hallowed ground. This may also account for a perinate burial (Sk14) in the cloisters. This practice was also identified in the burial record at the three friary sites in Aberdeen, Linlithgow and Perth (Stones 1989a: 111), which all saw the continued use of the respective graveyards after the Reformation.

Although a significant number of burials were recorded at the Old High School site very few were complete, with many also in a poor condition, limiting the quality of the pathological data. They displayed generally typical traits of medieval populations. A synthetic study by Gilchrist and Sloane (2005: 210) identified several common traits within medieval burial groups, mostly caused by malnutrition, stress and chronic infections, poor hygiene and wear and tear from hard work. Certainly, the burials in the church and the graveyard at Edinburgh had a moderate proportion of individuals displaying signs of chronic disease or debilitating injury, although the claustral burials were not markedly any healthier, as may have been expected from a group of apparently high-status individuals. These traits have also been identified from the human remains excavated at two other local medieval burial grounds in Edinburgh, St Giles' Cathedral and St Mary's Church, Constitution Street (Henderson 2006; Franklin et al 2019).

Incidences of trauma were also relatively common across the three burial groups at the Old High School site. Twenty-three of the in-situ individuals had experienced at least one fracture of a bone; three fractured bones from the unarticulated assemblage were also recorded. Of those where the sex was identified the majority displaying trauma were male (12 men, four women). No single type of trauma predominated, although injuries to the legs and feet were slightly more common than those to the arms and hands. The predominance of injuries to males is typical, men of this period generally leading more active lives and undertaking more dangerous work.

5.3 Phase 3 - The Royal High School

The two stone wall foundations associated with the Royal High School roughly matched the cartographic evidence, confirming the location of this building. Finds, including 16th-century pottery fragments, within a large robber ditch indicated that this feature was probably in-filled during the construction of the school. This ditch may even have been a foundation trench for the friary from which the stone was removed to be used in the construction of the school building. Unfortunately, only a small length of this ditch was investigated and its stratigraphic relationship to either the friary or the school was not consolidated.

A sketch showing the north and east elevations of the school building in Steven's *History of the Old High School* (1849; published over 70 years after the school's demolition) depicts the earlier school as a two-storey building constructed of rubble stone and having a gabled roof. The north (front) elevation included a central projecting entrance topped with a crow-stepped gable and flanked by two projecting rounded stairwells with conical tile roofs.

When the Royal High School was demolished to make way for the larger 1777 Old High School, it seems it was taken down to foundation level, with no evidence of floors remaining. Spreads of mortar-rich demolition rubble were found beneath modern overburden and levelling for the present-day car park. These were probably deposited when the Royal High School was demolished.

5.4 Phase 4 - The Old High School

The construction of the Old High School formed the final phase of major development in the area, with the front elevation of the building surviving relatively true to its original form. Original drawings of the building held at the National Records of the Historic Environment show little alteration to this elevation of the school. The records and recent survey of the building confirm that from the 19th century onwards the interior of the school was modified and extended on several occasions. The archaeological evidence for this phase was dominated by service pipes, boundary walls and stone-lined culverts to all sides of the building. The areas monitored to the front of the Old High School contained several stone culverts of unknown date, though several were constructed of brick and are therefore likely to be 19th- to 20th-century in date.