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The 'Great Temple of Solomon' at Stirling Castle

by IAN CAMPBELL and AONGHUS MACKECHNIE

INTRODUCTION

In 1594, a new Chapel Royal was erected at Stirling Castle, for the baptism, on 30 August of that year, of Prince Henry, first-born son and heir to James VI King of Scots and his wife, Queen Anna, sister of Denmark's Christian IV.¹ James saw the baptism as a major opportunity to emphasize, to an international — and, above all, English — audience, both his own and Henry's suitability as heirs to England's childless and elderly Queen Elizabeth. To commemorate the baptism and associated festivities, a detailed written account was produced, entitled *A True Reportarie* and attributed to William Fowler. It provided a remarkable piece of Stuart propaganda, as testified by many subsequent reprints, including during the 1745 Jacobite Rebellion.² James no doubt had in mind the example of the celebrations at his own baptism in December 1566, which 'took the form of a triumphant Renaissance festival, the first that Scotland — and indeed Great Britain — had ever seen'.³ Despite apparently being constructed within a mere seven months, the new chapel achieved its aim of being both impressive and symbolic of the aspirations of the Scottish king (Fig. 1).⁴ It can claim to be the earliest Renaissance church in Britain, with its main entrance framed by a triumphal arch, flanked by Italianate windows.⁵ However, even more significant is the evidence that the chapel was deliberately modelled on the Temple of Solomon in Jerusalem.

The discoveries that the internal dimensions of the chapel match those given for the Temple in the Bible and that the form of the windows has Solomonic associations were published in 2000.⁶ The present article revisits the Solomonic connection in the light of new evidence, in particular, a contemporary letter calling the chapel Solomon's Temple. This puts it beyond doubt that the chapel was a conscious attempt to build a 'copy' of the Temple, not only in its dimensions but also in several of its architectural features, including the forms of the windows and principal entrance. The chapel is the most concrete demonstration of James's own vision of himself as 'Great Britain's Solomon', something which has hitherto attracted much more attention for the English part of his reign, but is now clear was already as strong before 1603. It will also be argued that the building was the prime catalyst for the foundation of modern freemasonry. In the first section, we describe the building in some detail, believing it to have been hitherto relatively understudied despite its importance. We believe such attention has been



Fig. 1. *Chapel Royal, Stirling Castle: principal façade* (© Historic Scotland, 2010)

rewarded by allowing us not only to recognize the ‘meaning’ of the principal doors and windows, but also to propose revisions to current understanding of the original forms of the roof and painted frieze, as well as bringing the previously ignored chambers beneath the eastern end into the argument.

HISTORY AND DESCRIPTION OF THE CHAPEL

Stirling was an ancient royal centre, and its medieval castle was a major stronghold. The castle continued to be considered very secure, even after its transformation under kings James IV (r. 1488–1513) and James V (r. 1513–42) into the most impressive Renaissance royal palace in Scotland.⁷ Its customary role as the place where the heirs to the Scottish crown, the dukes of Rothesay, were reared ensured the maintenance of its strong defences. After the Act of Union with England in 1707, which stipulated that it should be garrisoned by the new British army, Stirling was provided with massive new fortifications, which impacted upon the chapel, as we shall see.⁸

In fact, the medieval castle seems to have had two chapels, one small and one large. The former appears to have been sited at the south-west corner of the upper courtyard, the ‘Inner Close’. It was rebuilt by James IV in 1504–05 when its complement of chaplains was increased to three, but it was subsequently remodelled as a kitchen.⁹ The larger chapel, dedicated to St Michael, on the northern side of the same close, was the precursor to the 1594 chapel. Pope Alexander VI had granted James IV’s petition to make it a collegiate church in 1501, but the king does not appear to have made major structural changes to the existing fabric.¹⁰ On the basis of archaeological evidence, it appears to

have been orientated substantially off-square from the James IV-period King's Old Building to the west and Great Hall to the east. The fourth side of the courtyard to the south was occupied by James V's palace, which incorporated a pre-existing complex (Fig. 2).¹¹

The Scottish Reformation in 1560 led to the abandonment there of regular Catholic services. An attempt to celebrate mass on 14 September 1561, a month after Mary Queen of Scots returned to Scotland to begin her personal reign, was violently disrupted, and it appears that Mary subsequently considered moving the institution of the Chapel Royal to Holyroodhouse, something accomplished by her son in the following decade.¹² The last mention of a Catholic service in the chapel was the baptism of the future James VI in December 1566, seven months before his mother's forced abdication.¹³ By March 1568, a reformed minister, John Duncanson, already 'minister of the King's House' (or royal chaplain) at Stirling, was appointed vicar of the chapel there, and, around the same time, the Earl of Mar, Captain of the Castle, purged it of Catholic decoration and furnishings.¹⁴

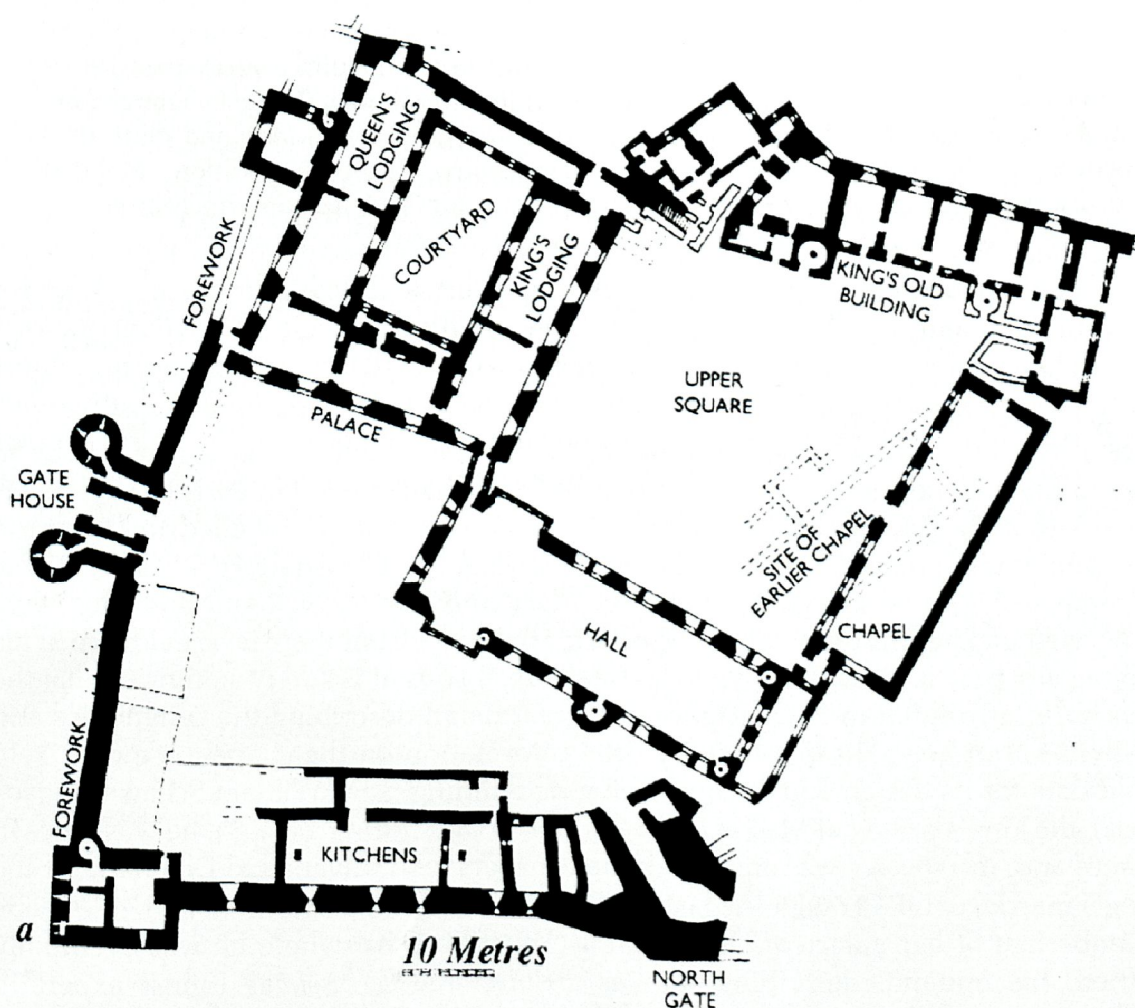


Fig. 2. *Stirling Castle, plan of Upper Ward* (from Richard Fawcett, *Scottish Architecture from the Accession of the Stewarts to the Reformation 1371-1560* (Edinburgh, 1994))

Duncanson resigned as minister at Stirling in 1571, probably in connection with the migration of the Chapel Royal to Holyrood, after which the Stirling chapel appears to have fallen into disuse.¹⁵ By 1583, the then royal Master of Works, Sir Robert Drummond of Carnock (in post 1579–83), proposed to James that the chapel was so ruinous that it should be demolished and replaced by a new building set further back to the north and realigned to make the close more nearly square.¹⁶

Nothing appears to have happened, until, as the *Reportarie* tells us:

The Noble and most potent Prince of Scotland, was borne in the Castell of Striuling [Stirling] vpon Tuesday, the 19. day of Februarie 1594. vpon which occasion the Kingis Maiestie, sent for the Nobles of his Land, and to all the capitall Burrows thereof, to haue their aduise, how he should proceed for the due solemnization of his Royall baptisme, and what Princes he should send to: When they were all compeired with great diligence and goodwill, hee proponed vnto them, that it was necessary, to direct out Ambassadors to France, England, Denmarke, the Lowe-Countries, the Duke of Brunswicke his brother in lawe, and to the Duke of Magdelburgh, the Queenes Maiesties Grand-father, and to such other Princes as should be thought expedient. Likewise, hee thought the Castell of Striuling, the most conuenient place for the residence of this most Noble and Mightie Prince, in respect that hee was borne there. [...] And besides all this, because the Chappell Royall was ruinous, and too little, concluded, that the old chappell should be vtterlie rased, and a new erected in the same place, that shuld be more large, long and glorious, to entertaine the great number of strangers expected. These propositions at length considered, they all with a free voluntarie deliberation, granted vnto his Maiestie, the summe of an hundreth thousand pounds money of Scotland.¹⁷

James gave the task of organizing the celebrations to Sir Patrick Leslie, 'Lord of Lindores' (d. 1608), and William Fowler (1560/61–1612).¹⁸ Sir Patrick, second son of the fourth Earl of Rothes, was a gentleman of the king's bedchamber but had no known qualifications for the role conferred on him for the baptism. Fowler, from an Edinburgh burgess family, was a courtier, poet and translator of Petrarch's *Trionfi*, which may go some way to explaining why he was chosen as co-organizer.¹⁹ He had studied in Paris in 1581 and is recorded at the University of Padua in 1592. In 1589–90, he travelled to Denmark, accompanying James VI on the latter's marriage to Christian IV's sister, Anna. Subsequently, he became her private secretary and Master of Requests. Some have suggested that he was the Master of Works for the chapel, but there is no evidence of his having any practical involvement in architecture.²⁰ Thus, it is surely significant that the *Reportarie*, attributed to Fowler, goes into great detail describing the ceremonies and festivities, but gives disappointingly little information on the chapel. A more likely candidate for its design and for overseeing its building is Sir William Schaw (c. 1550–1602), the king's principal Master of Works since 1583. During 1583–84, he was twice in France and, in 1589–90, was another of the courtiers who travelled to Denmark for the king's marriage. Like Fowler, he became a member of Anna's household, being made chamberlain of her palace at Dunfermline Abbey in 1593, where he was eventually buried, his epitaph, describing him as *architecturae peritissimus* ('most expert in architecture').²¹ The epitaph also describes him as royal Master of Ceremonies. The Master of Ceremonies certainly took part in James's baptism, but if Schaw was already holder of the office in 1594 it might seem odd that the *Reportarie* does not mention him

by name.²² Coupled with the lack of description of the new chapel, however, this could be evidence of a rivalry between Fowler and Schaw.²³

The new chapel was built partly over the site of its predecessor, but the opportunity was taken to realign it along the lines of Drummond's 1583 recommendations, although nothing was apparently done to level the site, so that a considerable difference in height remained between the east and west sides of the Inner Close. Probably at the same time, a glazed gallery (based perhaps on Drummond's earlier recommendations) was erected along the west (Inner Close) side of the Great Hall, with access into the hall through the insertion of a new central doorway, while balustraded walls extended along at least parts of the west and south sides of the close as can be seen on several eighteenth-century Board of Ordnance plans (Fig. 3).²⁴ Traces of the foundations of the west wall appear to be shown on the Royal Commission plan from the 1950s.²⁵ Both the east and west walls converge towards the south side of the courtyard, making the close an irregular trapezoid, with the chapel on the longest side. The effect would have been to enhance the apparent scale of the chapel, much as in Michelangelo's remodelled Piazza del Campidoglio, of fifty years earlier, which magnifies the visual impact of the Palazzo de' Senatori. The chapel itself is a simple rectangle in plan, externally measuring 34.3 m long by 11.4 m wide (Fig. 4).²⁶ The south front is built of ashlar, capped by a Classical cornice, beneath a slate roof (Fig. 1). A round-arched doorway, the principal entrance, occupies the centre of the façade, and is flanked by two pairs of Corinthian columns, each pair sharing a single pedestal, and having an entablature that is set forward over it (Fig. 5). Above the entablature there is an aedicule with a moulded frame enclosing a raised panel dated 1594. The aedicule was probably originally crowned with a pediment, assuming that is what is meant by the term 'pirament', which a building account of 1628/9 locates at the 'chapel door'.²⁷ Accounts from the same campaign (renovating the chapel in anticipation of a visit by Charles I, which eventually took place in 1633) refer to the painting of the whole entrance, including the columns, entablature and the 'housing' of the royal arms, as being executed by Valentine Jenkin.²⁸ To either side of the door are three biforate windows, each light being round-headed and each pair set within round containing arches. In the tympana of the windows can be seen traces of painted roundels, which once contained painted crowns and royal ciphers.²⁹ That the decoration is painted rather than carved is perhaps a consequence of the haste with which the chapel was erected.

The other three exterior faces are built of rubble masonry, with freestone dressings. The north wall has an eaves cornice, but with simpler mouldings than that on the main façade. Traces are also visible of a small blocked doorway opposite the main portal. The west wall has a wider central doorway, which is entered from a pend (vaulted passage) below a room linking the chapel to the north-east corner of the King's Old Work, a palace block built by James IV around 1500. The absence of any sign of a break in the masonry where the chamber meets the north-west corner of the chapel, and the presence of the same cornice as that of the chapel's north wall, suggest they were built in the same campaign. The west door has a simple chamfered edge. The east wall has a two-light window with the same mouldings as those on the south front but significantly taller and not set within a containing arch.³⁰ An unmoulded transom was almost certainly added later when the chapel was divided horizontally into barracks, since it is at the same level as the inserted floor, the line of which is still visible inside the chapel.

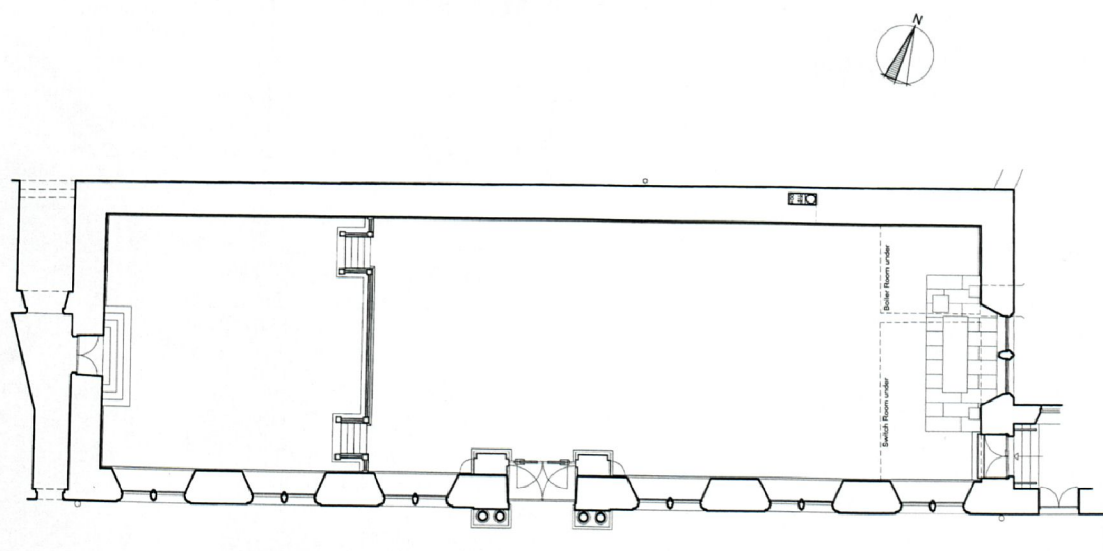


Fig. 4. *Chapel Royal, plan* (© Historic Scotland)

Both the east and west gables are crow-stepped (i.e. have stepped profiles) and contain very small rectangular windows, set within frames of two unmoulded jambs, to illuminate the loft space above the internal roof of the chapel. At the south-east corner of the chapel is a small chamber, which appears to have been an ante-room. A slight change in stone colour suggests it was not finished at the same time as the main part of the chapel, but the presence of tusking (i.e. stones left projecting from masonry in anticipation of a later continuation) at the chapel's south-east corner indicates it was intended as part of the original design.³¹ The profile of its eaves cornice, identical to that of the north wall, and the similarity of its gable's crow steps to those of the two principal gables, suggest it was built very shortly after 1594. In its south wall is a handsome round-arched doorway, with a simple chamfered surround, which would originally have opened into the west gallery, now represented by a modern mock-medieval timber pentice (a lean-to, open shelter). Internally, the ante-room has one door opening into the chapel on the west side and another on the east leading into the transe (enclosed corridor) on the northern side of the Great Hall, which is later in date but probably replaced an earlier one.

Beneath the eastern end of the chapel are two small chambers, the northern one almost square, the other rectangular, and both now containing services plant, which makes examination very difficult (Fig. 6). The rubble dividing wall between them does not appear to be keyed into the inner face of the east external wall, which might suggest it was added later. However, each chamber can be reached from outside by similar lintelled doorways with chamfered surrounds, consistent with a date of c. 1600, which implies that two chambers were always intended.³²

The interior of the chapel is now very plain, with probably none of the original decoration preserved (save beneath the overpainting of the frieze), a result of its being put to other uses after 1707 (Fig. 7). By 1887, MacGibbon and Ross's description of the chapel reported that its interior was 'cut up with modern partitions and floors so as to



Fig. 5. *Chapel Royal, detail of principal entrance* (© Historic Scotland, c. 2000)

form stores, and a new roof has recently been substituted for the old one, which was probably of open timber-work, so that the original features of the chapel are now unrecognisable'.³³

During the twentieth century, the chapel was gradually restored, beginning with the stripping out of the internal divisions in the 1930s. This revealed the painted entablature which ran around the building below the springing of the original ceiling, interrupted by the east window and a corresponding *trompe-l'œil* window in the west wall, where the decoration also extends up into both gables. Like the exterior painting, the decoration was part of the 1628–29 Jenkin repainting, which restored the original 1594 scheme.³⁴ The frieze of the entablature contains cartouches bearing the Honours of Scotland and

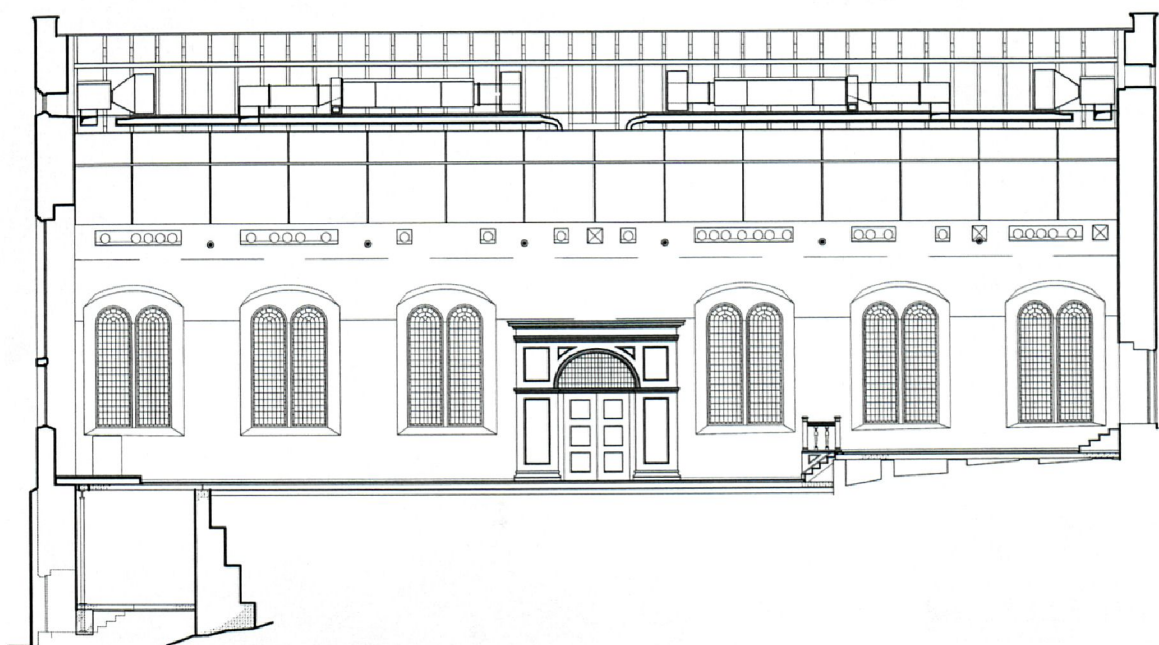


Fig. 6. *Chapel Royal, longitudinal section* (© Historic Scotland)

ciphers alternating with roundels, with fruit and flowers in between. The ciphers comprise the initial 'I' (for *Jacobus*) and the Arabic numeral '6' in monogram, followed by the initial 'R' (*rex*), indicating that there was no updating of the decorative scheme for Charles I's visit (Fig. 8).³⁵ The roundels as restored are filled with the same grey paint as the ground of the frieze but, given their large size and prominence, it seems inconceivable that they did not originally contain some sort of figural representation, most probably portrait busts. Indeed, very faint ghosts of possible outlines still appear to be discernible in some of them.³⁶

The twentieth-century restoration culminated in the 1990s with the construction of a new roof with a semi-polygonal profile, which follows the line of the upper edge of the decorative paintwork in the gables. This profile is corroborated both by the surviving 1620s paintwork scheme and by a drawing dated 1719, which shows the chapel roof in section (Fig. 9). It depicts the five-sided ceiling profile, and, over it, roof-ties which would have secured the boarding, set as low down as the ceiling void would allow. The 1990s roof has been left undecorated but it is known from the 1628–29 account, tantalizingly, that Jenkin was instructed to repaint the original roof 'as it was before'.³⁷ Fortunately, however, we have a description from Robert Johnston (1567?–1639), who states that the walls were 'magnificently adorned with pictures, sculptures and other ornaments', while the ceiling was 'garnished with gold'.³⁸

A feature omitted from the 1990s reconstruction was the tie-beams, or joists, which the section drawing shows set horizontally on the wallheads and connected to the rafters at their bases so as to complete triangles.³⁹ Without ties, the roof would have exerted pressure both downwards and outwards and pushed the walls apart, so ties were necessary for structural stability.⁴⁰ That such joists existed is confirmed by the 1628–29



Fig. 7. Chapel Royal, interior looking east (© Historic Scotland, c. 2000)



Fig. 8. *Chapel Royal, detail of painted frieze* (© Historic Scotland, c. 2000)

account which says that they should be painted blue and decorated with flowers and 'anticks'.⁴¹

The principal feature of the lower zone of the chapel interior is that the western part of the floor is today about 90 cm (3 ft) higher than the rest (Fig. 6). Some of this difference is caused by the ground level beneath the chapel rising to the west, but the platform extends further eastwards than otherwise warranted to make it square in area. It is unknown whether the platform was intended to serve some purpose at the baptism, but this is possible. Fowler states that:

In the midst of the Chappell Royall within the partition, where the King's Maiestie, the Ambassadors, and Prince with his conuoy were placed, there was a new pulpite erected: The same was richely hung with cloth of gold: All the pavement within this partition was Prince-like laide with fine tapestrie.⁴²

It would thus be tempting to assume that the partition corresponded with the raised platform, but Fowler explicitly states that James sat 'at the North-east end', that is, the opposite end of the chapel.⁴³ One might wonder if this was a mistake for north-west, but it receives apparent confirmation from a second documentary source, the 'Ordering of the Chapel for the baptism' setting out the anticipated arrangements and probably dating to early August. This not only repeats that the king's seat was in the north-east corner of

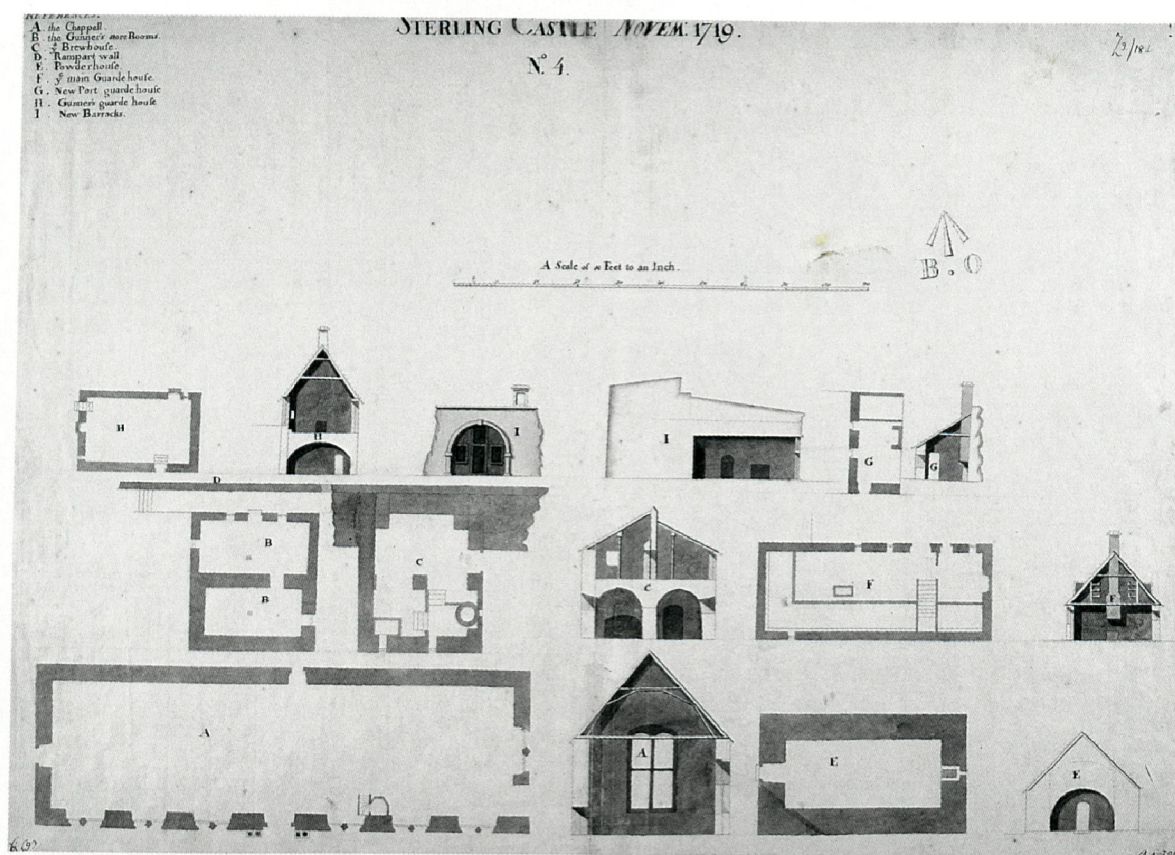


Fig. 9. Thomas Moore, 'Sterling Castle, Novemr: 1719 No. 4', detail of section through the Chapel Royal (National Library of Scotland, Map Room, Edinburgh MS 1646 Z.02/18d)

the chapel, but that 'in the east end of the kirk to the southward on his majesty's left hand shall be dressit a seat for the Queen of England [...] where her ambassador to the baptism shall be placed', thereby leaving little room for doubt.⁴⁴ The same account tells us that the king's seat was to be placed on a platform of two steps, and on the same platform, to the west, a chair for the French ambassador. It is not made explicit if all the other ambassadorial seats shared the same platform but it is very likely since a few lines later we read: 'Item, all the stage whereupon the said seats are to be placed, to be covered with tapestry, and all the rest of the floor in front of the seats within the choir to be covered in like manner.' The 'choir' was to be enclosed by a 'barrier' and there was to be '[a] form [bench] set on the east side of the pulpit for the lords, knights and other strangers that shall be appointed within the barrier, accompanied with those of his Majesty's Council who may not have the commodity to be placed within the "daskis" appointed for the nobility.' Thus it seems that a platform was installed in the eastern part of the chapel, corresponding to the sanctuary in a conventional Catholic or Anglican church, with an area in front, enclosed by a barrier, corresponding to a choir. No mention at all is made of the western raised platform, which was accessible from the door in the west end-wall, facing the King's Old Building. It has been interpreted as a royal loft for the queen.⁴⁵ However, Anna of Denmark took no part in the actual baptismal ceremony, in accordance with normal Scottish royal practice.⁴⁶

To complete this description it is worth listing the chapel furnishings as recorded for the baptism. The pulpit, as already reported, was placed in the middle of the screen, separating the enclosure within which the king and ambassadors sat from the remainder of the building. The 1719 Board of Ordnance plan (Fig. 9) shows a pulpit situated on the south wall between the first and second windows to the east of the main door, but this pulpit was probably installed after the baptism. Some have tried to connect a surviving wooden pulpit in the castle with the baptism, but it is rather plain for such an occasion (although, if covered with cloth of gold, as Fowler reports, this would hardly have mattered), but others have suggested it pre-dates the present chapel.⁴⁷ Below the pulpit was a desk, in front of which was a table for the Honours of Scotland (the crown, sword and sceptre). The other movable furnishings referred to in the *Reportarie* included 'a royall seat of estate' for James, flanked to left and right by chairs for the ambassadors, some with desks in front, while, outside the partition, the lesser guests, 'the Gentlemen of England, Denmark, Almaine [i.e. Germany], Flanders, and Scotland', sat on 'ornate fourmes'. Finally, we should mention that the walls were hung with 'costly tapestries', as this accounts for the lack of painted decoration on the lower parts of the walls.⁴⁸

ANALYSIS OF THE CHAPEL'S ARCHITECTURE

Deborah Howard was the first to appreciate fully the Classical character of the chapel. She pointed to the 'almost Florentine' appearance of the windows, having in mind early Renaissance palaces such as the Palazzo Medici, while, for the entrance portal, she suggested that the ultimate source may have been the ancient Roman Arch of the Sergii at Pula in modern Croatia. This had first been published in Serlio's *Terzo libro* of 1540 (Fig. 10), and again, in a more decorated form, by Du Cerceau in 1549. Howard argued the arch was of a type used for celebratory, triumphal or royal entrances and entries.⁴⁹ She noted, for instance, that the Arsenal Gateway, built in Venice in 1460, which closely resembles the Pula arch, was later 'transformed into a monument to the Republic's triumph at Lepanto in 1571': a victory that James VI celebrated by writing an epic poem about it. Howard also pointed out that the Pula formula was used closer to home for Philip II's triumphal entry to Antwerp 1549, when the arch was surmounted by statues of Philip II and Charles V carrying a huge globe.⁵⁰ Engravings of that arch were published in 1550.⁵¹ A third possible source suggested by Howard for the door is the frontispiece of a book.⁵² Certainly, frontispieces with coupled columns are common enough, examples including that in Andrea Palladio's *Quattro libri* of 1570, but none known to the authors is closer to the Stirling arch than the Pula and Antwerp arches. To Howard's potential sources can be added another, namely the arch published by Francesco Colonna in the *Hypnerotomachia Polphili* in 1499, an English translation of which was published in 1592, only two years before the building of the chapel. Up to the entablature it follows the general type of the Pula arch, but differs above in having a large attic over which a pediment extends the arch's full width.⁵³

Thus Schaw had a rich tradition to draw on for the Stirling arch, but it is clear that Serlio's and Du Cerceau's illustrations of the Pula arch and De Schrijver's of the Antwerp arch are the closest in general form and proportions, and are so similar to each other that it is impossible to say for certain which was the direct model for Stirling. The

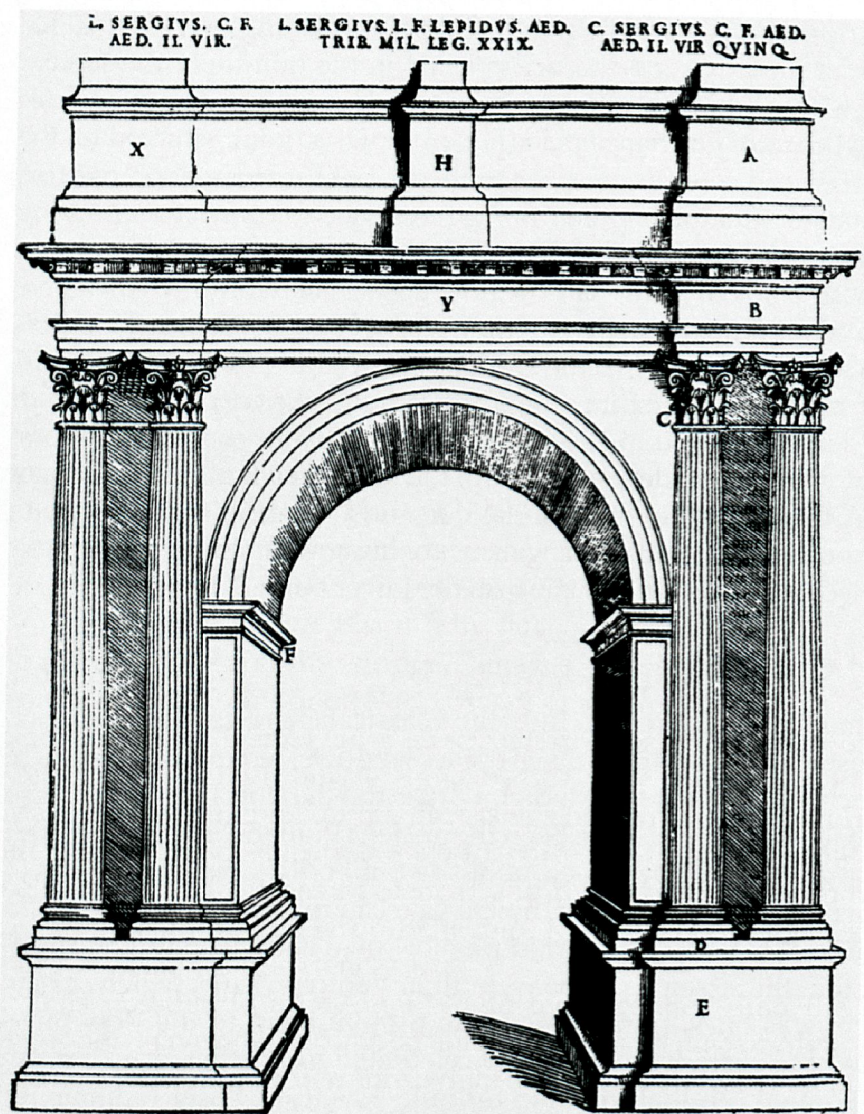


Fig. 10. Sebastiano Serlio, elevation of the Arch of the Sergii at Pula, from Sebastiano Serlio, *Tutte l'opere*, Book III (Venice, 1618)

Stirling arch does, however, differ in one striking aspect: whereas the Pula arch has no keystone and that at Antwerp has only a small scrolled bracket, the Stirling arch has a large keystone with a rimmed edge on three sides and a *cyma reversa* at the top. On it rests a rectangular panel, wider than it is high, interrupting the architrave and frieze of the main entablature. Like the keystone, the panel has a rimmed edge, which at the top is formed by the *cyma reversa* moulding of the main cornice, projecting over the panel. Both the panel and the keystone almost certainly had framed insets, either painted, or in the form of a thin sheet of marble or bronze, like the marble slab set within an aedicule on Schaw's own tomb. We will return to the significance of the keystone later on.

Behind the purely formal resemblances of the windows and portal to classical sources, strong symbolic resonances with Solomon's Temple can also be clearly discerned in the chapel, and the first we should revisit is the correspondence of their plans. The Bible

gives two accounts of the building of the Temple of Solomon. The primary one is in the First Book of Kings (1 Kings 6) but a summary with some variations also appears in the Second Book of Chronicles (2 Chron. 3). Both agree that the temple proper measured 60 cubits long by 20 wide, with 1 Kings adding that it was also 30 cubits high.⁵⁴ In addition, it had a porch or vestibule at the east end, which 1 Kings says was 20 cubits wide by ten deep, although 2 Chronicles makes it 20 cubits square and 120 high.⁵⁵ The normal ancient Hebrew and Greek cubit was well known to be of six palms or twenty-four digits, while Vitruvius tells us that a foot was four palms or sixteen digits.⁵⁶ Thus the most widely disseminated Bible commentary of the later Middle Ages and Renaissance, the *Postilla super totam Bibliam* of Nicholas of Lyra (c. 1270–1349), which was also the first to be printed in 1471 and was popular with Catholics and Protestants alike, informs us that 'the usual cubit was a foot and a half'.⁵⁷ This makes the Temple, according to the dimensions given in 1 Kings (including in its length the ten cubits of its porch, making it 70 cubits in total), 105 feet long by 30 wide and 45 high. In comparison, the internal length of the Chapel Royal is 31.69 m, the width is 9.03 m, and the height to the ceiling is about 13.55 m, which in feet (standard in the United Kingdom since 1824) equates to $103.96 \times 29.63 \times 44.44$, a remarkably close correlation (Fig. 11). It should be pointed out that we do not know what the exact length of the foot used for the chapel was. The foot was not a legal measure in Scotland until after 1685, although there are examples of its use in the sixteenth century.⁵⁸

There are two further points to be mentioned on the internal dimensions. One is that the raised internal platform at the west end is square and therefore corresponds in position and area with the Holy of Holies in the Temple. The second is that the depth of the back wall of the two subterranean chambers under the east end is about 4.5 m, i.e. 10 cubits, which is the same depth as the porch of the Temple according to the 1 Kings account. The possible significance of this will be discussed later.⁵⁹

Turning to the chapel windows (Fig. 1), it has to be said that they do not accord with those described in 1 Kings. The Latin *Vulgate*, which St Jerome translated directly from the Hebrew text, describes them as *fenestrae obliquae*, which can be translated as 'slanting windows', while the parallel passage in the Greek version of the Old Testament, the *Septuagint*, can be translated as 'hidden peep windows'.⁶⁰ This is usually taken to mean splayed or, as described in the *Geneva Bible* of 1560 and the *Bishops' Bible* of 1568, the two English translations most popular with Protestants before the King James Bible of 1611, 'windowes brode without and narowe within'.⁶¹ However, the chapel windows are very comparable with those in a woodcut of the Temple from a sixteenth-century edition of the Bible incorporating Nicholas of Lyra's *Postilla*.⁶² The rear elevation of the Temple is shown with three windows to each of three storeys, and the windows are biforate with roundels above and set within containing arches (Fig. 12). Mark Girouard suggested the same source for the comparable windows at Wollaton Hall, Nottinghamshire, built from 1580 to 1588.⁶³ Such a derivation probably stems from a confusion of the description of Solomon's Temple with that of his palace. In the account in the *Septuagint* (fuller than that in the *Vulgate*), we read that the palace had three storeys, and 'space on space' three times.⁶⁴ 'Space' is usually understood to mean window. Exactly what 'space on space' means is not obvious but it appears that the illustrator of the first illustrated printed edition of the *Postilla*, published in Nuremberg

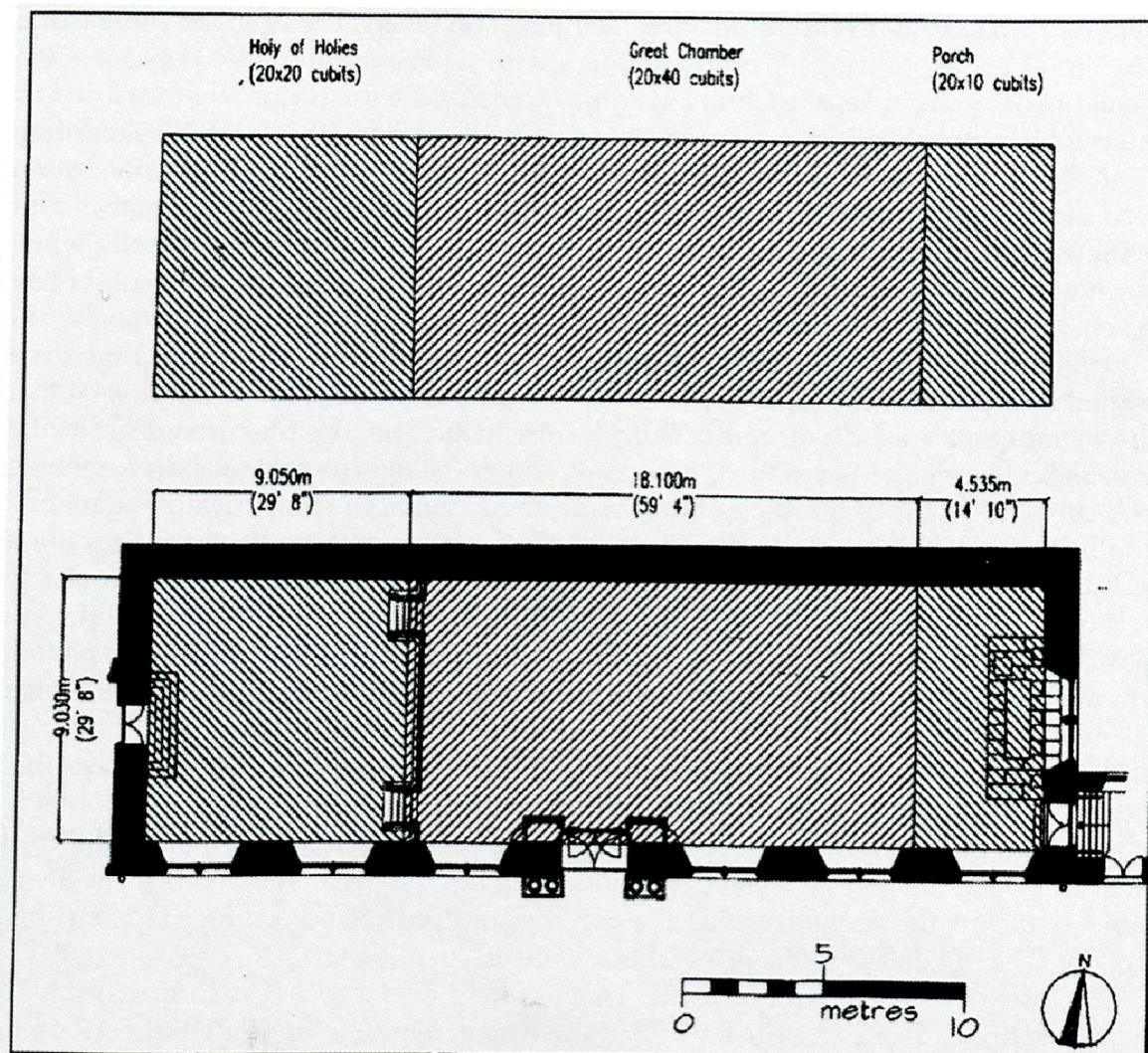


Fig. 11. Chapel Royal and Solomon's Temple plans compared, from Goodare and Lynch (eds), *The Reign of James VI* (Edinburgh, 2000)

by Anton Koberger in 1481, took it to mean 'paired windows'.⁶⁵ Clearly, this is the source of the form of the windows at Stirling and, one also suspects, their disposition in groups of three.

The Temple, too, accounts for the siting of the main entrance at Stirling, which makes no sense in traditional church planning. The Vulgate says that the 'door for the middle side, was on the right hand of the house' (*ostium lateris medii in parte erat domus dextrae*), but one possible interpretation is that the main door was in the middle of the Temple's right side. The door in question was, in fact, a minor one giving access to the middle part of the Temple, but this is not clear from the context.⁶⁶ In addition, the Venerable Bede initiated a long and rich tradition of equating this door with the pierced right side of Christ, while Nicholas of Lyra helpfully comments that the right side would be on the south, just as it is at Stirling.⁶⁷ However, Nicholas also adds a caveat that the first century Jewish historian, Josephus, speaks of a door at the east corner.⁶⁸ Conflating the two

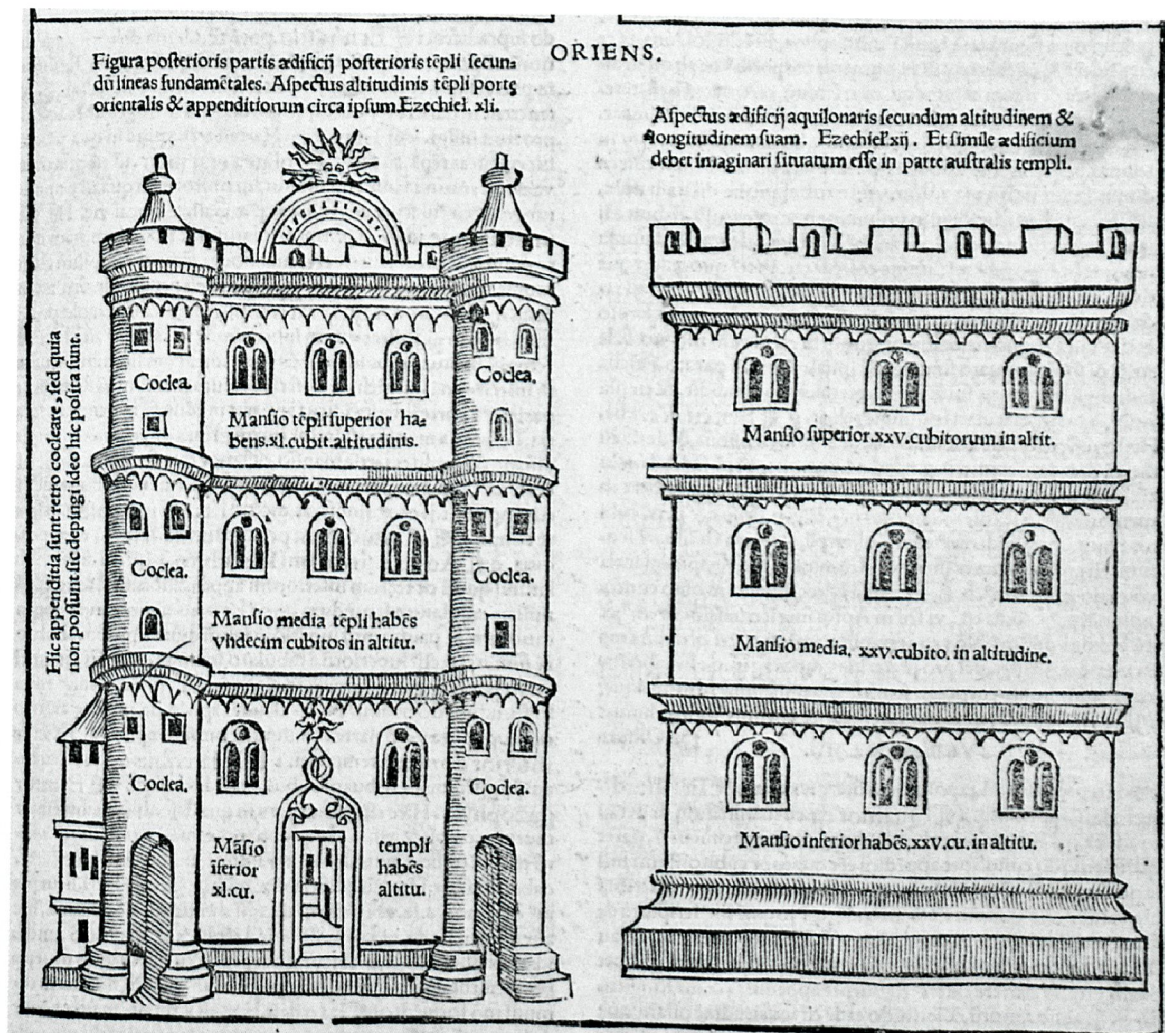


Fig. 12. Biblia Sacra cum Glossa ordinaria et Nicolai Lyrani *expositionibus* (Lyons, 1545), vol. 4, f. 275r (Glasgow University Library, Bh6-a.6)

statements, one arrives at the south-east corner, which at Stirling is the location of the door to the antechamber.

The triumphal arch treatment of the chapel's main door also relates to the Temple, albeit not to the descriptions of it in the Bible. The entrance doorway was also reconstructed in the *In Ezechielem explanationes*, the great three-volume commentary on the Temple begun by Jerónimo de Prado (1547–95) and completed by Juan Bautista Villalpando (1575–1608). There it is shown in the form of an arch framed by paired Composite columns (Fig. 13), and, while its correspondence with Stirling may not be exact in that the columns have no pedestals and the entablature does not project over them, there is nonetheless a strong generic similarity.⁶⁹ It might seem problematic that the doorway bears no relation to the biblical accounts of the front of Solomon's Temple, which had the freestanding twin bronze columns of Jachin and Boaz guarding the entrance. It might also seem problematic that the *Explanationes* did not even begin being published until 1596, which was two years after the building of the chapel. Yet a

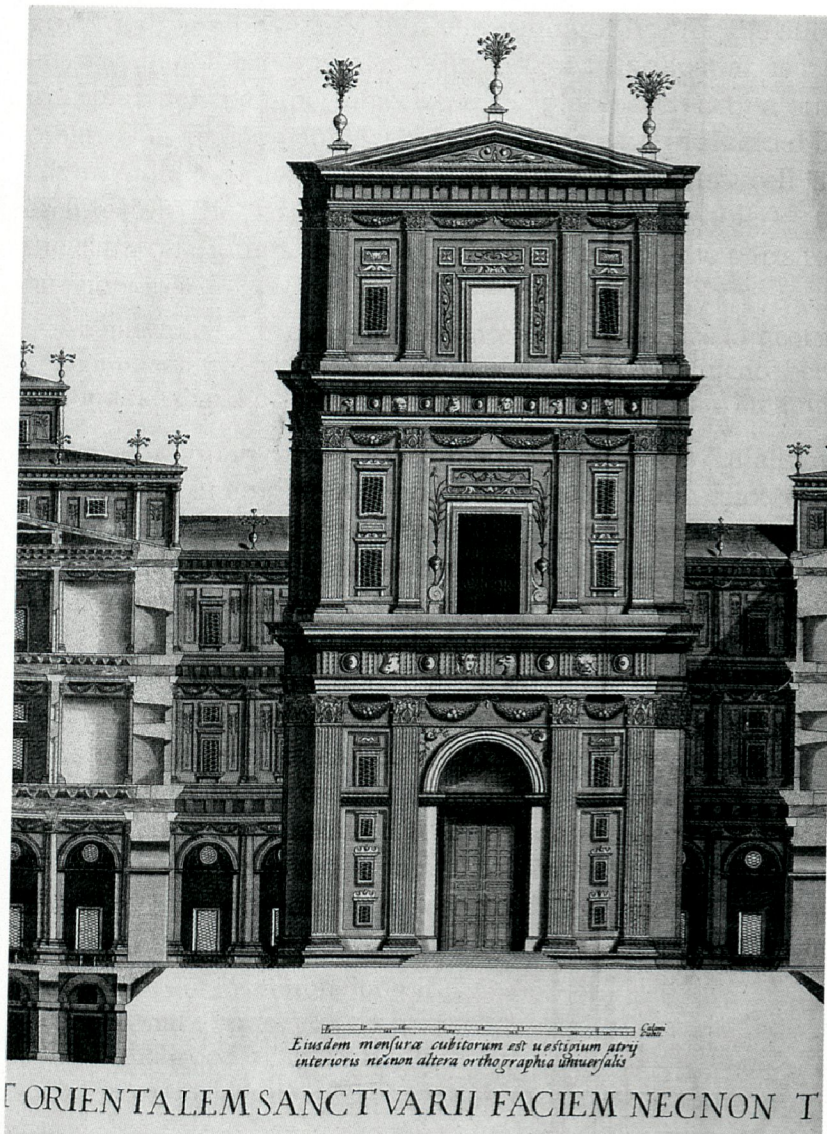


Fig. 13. J. Prado and Villalpando, In *Ezechielem explanationes* (1596–1605), II/ 2, p. 245 (National Library of Scotland, Edinburgh, W.2.2)

possible answer to both these puzzles lies in Prado and Villalpando's sources for the doorway, which are Roman coins overstruck during the Second Jewish Revolt led by Bar Kochba against the Romans (AD 132–36), as these represent the Temple as a façade with a round arch flanked by two pairs of columns supporting an entablature (Fig. 14).⁷⁰ These coins were not published in the many sixteenth-century books on ancient numismatics, although a forgery purporting to show the Temple of Solomon was.⁷¹ However, Prado and Villalpando state that there were two examples in Venice, a silver one in the collection of Federico Contarini and a bronze one in the collection of the 'Patriarch of Aquileia'.⁷² This latter was either Giovanni Grimani, who was patriarch from 1585 until 1593 and whose collections were renowned, or just possibly his successor Francesco Barbaro, patriarch from 1593 until 1616.⁷³ Since it was common practice for scholars or travellers of sufficient social standing to be shown aristocratic collections, it is very possible that knowledge of the Bar Kochba coins in Venice, or of



Fig. 14. Silver quarter shekel, minted in Judea, AD 133–35 (British Museum, London, Department of Coins and Medals, inv. 1888 0512.36)

some other collection, could have been available to an educated Scot, who then conveyed it to William Schaw. The most obvious candidate to have seen the Venetian coins is William Fowler, who is not only recorded at the nearby University of Padua in 1592, as was mentioned above, but also appears to have been buying books in Venice in 1593.⁷⁴

There is no contradiction in regarding the portal as being based both on the Arch at Pula and on the Temple façade, especially since the former was itself sometimes connected with Jerusalem. Jacopo Bellini had used the type to frame his drawing of *Christ before Pilate* in his Louvre Album, begun about 1430.⁷⁵ Something similar, which may also betray knowledge of the coin obverse, is used for the gate of Jerusalem, in a painting by Andrea Micheli (Il Vicentino) of the capture of the city by Vespasian and Titus, executed between 1580 and 1583 in Palladio's Palazzo Barbarano in Vicenza.⁷⁶

WHY THE CHAPEL'S RESEMBLANCE TO SOLOMON'S TEMPLE WAS IMPORTANT

It was not unusual for a church to be modelled on Solomon's Temple. The proportions of Old St Peter's (begun c. 333), the archetypal church for western Europe, were taken from the Temple.⁷⁷ It was an especially common model for royal and palace chapels, such as the Sistine Chapel in Rome, begun 1475, and the chapel of King's College in Aberdeen, founded in 1500. In the latter case, a particular interest in the Temple is demonstrated by the inscription informing us that the foundation stone was laid on 2 April, the date believed to correspond with that on which Solomon's Temple was founded.⁷⁸ It has also been pointed out that the ancillary building abutting the chapel's south wall resembled the timber structure around the Temple as depicted in one of the Koberger woodcuts.⁷⁹ For James IV (r. 1488–1513) to imitate Solomon, the archetypal wise and peaceable monarch, was commonplace for Christian (and indeed Islamic) rulers. But for his great grandson, James VI, the identification seems to have been made particularly forcibly. Best known is the sermon preached at his funeral in 1625 by the Bishop of Lincoln, *Great Britains Salomon*;⁸⁰ but the theme was already well established soon after the start of his English reign, as is clear from a 1604 sermon of John Gordon, a Scot who James had made Dean of Salisbury. Gordon's sermon, *Enotikon*, compares the component kingdoms of the British Isles to the kingdoms united by David and

Solomon and adduces a Hebrew etymology for Britannia.⁸¹ Such thinking had architectural consequences, as Vaughan Hart has made clear, with London being seen as the New Jerusalem and St Paul's Cathedral as the Temple.⁸²

However, the Solomonic theme was already strong in the Scottish court even before 1603. At the ceremonial entry into Edinburgh in October 1579, marking the beginning of James's reign at the age of fourteen, there was a tableau depicting the Judgement of Solomon.⁸³ In 1580, the poet Alexander Montgomerie described James, in his 'Navigation' forming the introduction to a masque, as 'So sapient and ying [young] a king, A Salomon for richt and judgment'.⁸⁴ And at the entry of Anna of Denmark to Edinburgh, after her coronation at Holyrood in May 1590, there was a tableau equating Anna with the Queen of Sheba and James as her Solomon.⁸⁵ For our purposes, however, a clinching piece of evidence is a letter dated 17 July 1594, in which it is reported that 'the Chancellor and rest of the council at Edinburgh have sent to solicit his Majesty that the baptism may be at Edinburgh as the ambassadors cannot be furnished at Stirling and the great Temple of Solomon which is a building cannot be completed before the day "prefixt."'⁸⁶ The writer of the letter, the Scottish courtier John Colville (?1542–1605), was 'one of the most consistent suppliers of information to Queen Elizabeth's government concerning the political affairs of Scotland during the last quarter of the sixteenth century'.⁸⁷ Yet, while it is gratifying to have documentary proof that the Chapel Royal was explicitly modelled on the Temple, this raises the question why nothing was made publicly of the fact either at the baptismal celebrations or subsequently.

The answer may well lie in William's Schaw's main claim to fame as the inventor of modern freemasonry, with the issuing of the First Statutes on 28 December 1598 and the Second Statutes at Holyroodhouse on the same date in 1599.⁸⁸ The Second Statutes include a stipulation that every initiate should be tested in 'the art of memorie and science thair of'.⁸⁹ This refers to the ancient skill of memorizing large quantities of information by use of the mnemonic technique of imagining a building, and disposing the information to be memorized, in the different components of the buildings, such as rooms, or the bays in a colonnade, or the aedicules in an elevation. As Frances Yates established, the art of memory was developed in Antiquity, originally for practical purposes, such as learning speeches, but during the Middle Ages and Renaissance became linked with hermetic philosophies and acquired mystical significance. Giordano Bruno was perhaps its most famous exponent, but one of his principal disciples was Alexander Dicsone (1558–1603/4).⁹⁰ Dicsone moved in court circles both in England and Scotland, and is likely to have known both Schaw (a fellow Catholic) and William Fowler, author of the *Reportarie*, who graduated from St Leonard's College, St Andrews, a year after Dicsone in 1578.⁹¹ Fowler refers in a list of 'My Works' to a treatise on 'art of memorie', and, in a note, to teaching James VI the art of memory.⁹² Thus, the designer of the Chapel Royal, the principal organizer of the baptismal ceremonies, and the king himself, were all at the very least interested in the art of memory, if not trained practitioners.⁹³

David Stevenson argues that the art of memory was necessary for freemasons because much of their lore was transmitted orally, being regarded as 'too secret to be committed to writing'.⁹⁴ Inevitably, however, some Masonic catechisms were eventually written

down, the earliest extant dating from 1696. One section deals with the lodge of the man being questioned and includes the following:

Q. How stands your lodge? A. East and west as the Temple of Jerusalem.

Q. Where was the first lodge? A. In the porch of Solomon's Temple.

The dialogue goes on to discuss the location of various other features within the lodge.⁹⁵ It is clear that the lodge being described is not a real but a symbolic building, and Stevenson concludes that Solomon's Temple is the basis of the masonic imaginary temple of memory.⁹⁶ In the light of such evidence, it is hard not to see the building of the Chapel Royal, for the construction of which Schaw had assembled masons and wrights from across Scotland, as the prime catalyst which led to his creation of modern freemasonry four years later. Stirling is named in Schaw's 1599 Second Statutes as one of the three premier lodges of Scotland, and in 1627–28 its members included masons who worked on royal works at Dumbarton, Edinburgh and Stirling castles and Linlithgow Palace.⁹⁷ A decade later, in 1637, Sir Anthony Alexander, royal Master of Works and General Warden of all the masons of Scotland, held a court (a general meeting ostensibly to deal with the regulation of operative masonry) at Stirling. He died within the year and was succeeded as Master of Works and warden by his brother, Henry, subsequently third Earl of Stirling, who called another court in 1638.⁹⁸ Apart from one minor record of 1642, nothing more is heard of the lodge of Stirling until 1708. Its site is not known but there must be a strong suspicion that it met in the Chapel Royal. Thus, the lack of public reference to the Stirling Chapel being a copy of Solomon's Temple could be explained by its significance within freemasonry.

The masonic connection, moreover, helps us interpret one aspect of the baptismal ceremony and two of the physical features of the chapel. For example, the seating of James in the north-east corner of the chapel makes sense when one learns that the initiation of candidates into freemasonry takes place in the north-east corners of lodges. The candidate becomes 'a perfect and upright man and Mason, the representative of a spiritual Corner-stone, on which he is to erect his future moral and Masonic edifice'.⁹⁹ The foundation stones of masonic lodges are always laid in the north-east corner, a tradition which may be borrowed from earlier Christian practice, since Christ is identified, in Psalm 118, with the stone which is first rejected by builders but later chosen as the chief cornerstone.¹⁰⁰ The significance of the north-east corner, according to masons, is that the north is associated with darkness and the profane world, while the east is associated with order and light.¹⁰¹ It will have been noted that the north wall of the Chapel Royal contains no windows, while the east wall has the largest.

The cornerstone is also often equated with the keystone in Masonic tradition. Although there is no warrant in canonical scripture for linking keystone and cornerstone, in the pseudepigraphical (i.e. falsely attributed) *Testament of Solomon* (third century AD), the stone rejected by the builders in Psalm 118 becomes the stone chosen by Solomon to complete the Temple at its apex. This tradition found its way into the late medieval *Speculum humanae salvationis*, a very popular illustrated typological poem on the Bible, which was a sourcebook for artists in different media, including stonemasons.¹⁰² Freemasons also believe that the keystone of the arch of Solomon's Temple was inscribed with 'ten letters in precious stone work'.¹⁰³ Such a tradition



Fig. 15. *Chapel Royal, detail of the keystone over the principal entrance* (© Historic Scotland, 2008)

would, therefore, account for the prominent keystone, with its missing panel, over the chapel's main entrance (Fig. 15).

Lastly, the reference in the early masonic catechisms to the first lodge having been in the porch of Solomon's Temple may explain the cellars under the east end of the chapel, which, as we have observed, occupy the same area. Their subterranean location may be an attempt to keep the lodge secret but may also refer to the grave of Hiram, the Master of Works at Solomon's Temple, who, according to Masonic legend, was murdered by three apprentices. One eighteenth-century version of the catechism says that Hiram was buried in the Temple 'under the west window looking to the east'.¹⁰⁴ This would not fit the location of the cellars well, but other sources are vaguer as to where the body was buried within the Temple.¹⁰⁵ Given that the Chapel Royal appears to have housed the prototypical lodge one cannot necessarily expect every feature of it to accord with later masonic tradition.

From what has now been said, it can be concluded that the Chapel Royal was a building of outstanding significance, its dimensions and ornaments having both a classical and biblical provenance. It has been demonstrated, in particular, that the chapel was intended to be a copy of Solomon's Temple, as part of James VI's sustained attempts to emulate the archetypal wise monarch. It has also been argued that the fact that its significance has not been hitherto recognized is not so much an accident of history, as more a deliberate attempt to keep it secret, because of the chapel's pivotal role in the foundation of modern freemasonry.

ACKNOWLEDGMENTS

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Fig. 2 © Richard Fawcett

Figs 3, 9, 13 © Trustees of the National Library of Scotland

Fig. 12 © University of Glasgow, Department of Special Collections

Fig. 14 © Trustees of the British Museum

NOTES

1 Most unfortunately, an important source of information on James VI's interest in Solomon and freemasonry was discovered too late for its insights to be incorporated in the present article: Marsha Keith Schuchard, *Restoring the Temple of Vision: Cabalistic Freemasonry and Stuart Culture* (Leiden, Boston and Cologne, 2002).

2 William Fowler, *A True reportarie of the most triumphant, and royal accomplishment of the baptisme of the most excellent, right high, and mightie prince, Frederik Henry; by the grace of God, Prince of Scotland Solemnized the 30. day of August. 1594* (Edinburgh, 1594). An Anglicized version was also published in London in the same year. Our references are to the reprint in William Fowler, *The Works of William Fowler*, ed. Henry W. Meikle, 3 vols, Scottish Text Society, n.s., 6, 7, 13 (Edinburgh, 1914–40), II, pp. 169–95. On Fowler, see S. M. Dunnigan, 'Fowler, William (1560/61–1612)', *Oxford Dictionary of National Biography*, online edn (henceforth ODNB) (Oxford University Press, September 2004; online edn, October 2006), at <http://www.oxforddnb.com/view/article/10015> (accessed on 5 July 2010). On the Reportarie, see R. Bowers, 'James VI, Prince Henry and A True Reportarie of Baptism at Stirling 1594', *Renaissance and Reformation*, 29/4 (2005), pp. 3–22.

3 Michael Lynch, 'Queen Mary's Triumph: the Baptismal Celebrations at Stirling in December 1566', *Scottish Historical Review*, 69 (1990), pp. 1–21 (p. 2). The 1566 baptism also broke with precedent in taking place months after James's birth, which allowed the elaborate celebrations to be planned. His mother Mary's baptism took place within days of her birth in 1542, as did that of the future Edward VI of England in 1537. In both cases the baptisms were essentially private or court religious ceremonies: see Susan Watkins, *Mary Queen of Scots* (London, 2001), p. 13, and *Literary Remains of King Edward the Sixth: Edited From His Autograph Manuscripts with Historical Notes and a Biographical Memoir*, ed. John Gough Nichols (London, 1875), pp. cclv–cclxii.

4 For a detailed description of the chapel, see The Royal Commission on the Ancient and Historical Monuments of Scotland (henceforth RCAHMS), *Stirlingshire: an Inventory of the Ancient Monuments*, 2 vols (Edinburgh, 1963), I, pp. 186–87 and 211–13, no. 192. See also Richard Fawcett, *Stirling Castle* (London, 1995), pp. 73–75; and John Gifford and Frank Arneil Walker, *Stirlingshire and Central Scotland* (New Haven and London, 2002), pp. 683–84.

5 Deborah Howard, *Scottish Architecture: Reformation to Restoration, 1560–1660* (Edinburgh, 1995), pp. 30–35.

6 Aonghus MacKechnie, 'James VI's Architects and Their Architecture', in *The Reign of James VI*, ed. Julian Goodare and Michael Lynch (Edinburgh, 2000), pp. 154–69 (pp. 163–65).

7 John G. Dunbar, *Scottish Royal Palaces: the Architecture of the Royal Residences During the Late Medieval and Early Renaissance Periods* (East Linton, 1999), pp. 40–55; Miles Glendinning, Ranald MacInnes and Aonghus MacKechnie, *A History of Scottish Architecture from the Renaissance to the Present Day* (Edinburgh, 1996), pp. 9, 13–19.

8 RCAHMS, *Stirlingshire*, I, pp. 212–13.

9 Dunbar, *Scottish Royal Palaces*, p. 41.

10 Ibid.

11 For the siting and planning of early Tudor royal chapels, see Simon Thurley, 'The Cloister and the Hearth: Wolsey, Henry VIII and the Early Tudor Palace Plan', *Journal of the British Archaeological Association*, 162 (2009), pp. 179–95.

12 Charles Rogers, *History of the Chapel Royal of Scotland: With the Register of the Chapel Royal of Stirling, Including Details in Relation to the Rise and Progress of Scottish Music and Observations Respecting the Order of the Thistle*, Grampian Club, vol. 20 (Edinburgh, 1882), p. lxii.

13 Lynch, 'Queen Mary's Triumph', p. 10.

14 Rogers, *Chapel Royal*, pp. lxxv–lxxvii.

15 Ibid., p. xciv. Fowler's report that the provost and prebends sang at the baptism must mean those from the Holyrood chapel, although the terminology seems to hark back to the pre-Reformation collegiate establishment (Fowler, *Works*, II, p. 182).

- 16 Henry M. Paton (ed.), *Accounts of the Masters of Works for Building and Repairing Royal Palaces and Castles: Volume I 1529–1615* (Edinburgh, 1957), pp. xxvii–xxviii and 310–11.
- 17 Fowler, *Works*, II, pp. 169–70.
- 18 Leslie was the lay commendator of Lindores Abbey from 1574, but it appears that it was his son, also Patrick, who was created a lord of parliament with the title Lord Lindores in 1600; see 'Lindores' at <http://www.electricscotland.com/history/nation/lindores.htm> (accessed on 5 July 2010).
- 19 See Dunnigan, 'Fowler, William (1560/61–1612)'. It seems odd that William Schaw, who is recorded as the king's Master of Ceremonies on his epitaph in Dunfermline Abbey, is nowhere named in connection with the baptismal ceremonies, although the Master of Ceremonies did have a role (Fowler, *Works*, II, p. 181); nor is he named as designer of the chapel.
- 20 Rogers, *Chapel Royal*, p. lxxxii; followed by Fawcett, *Stirling Castle*, p. 74.
- 21 David Stevenson, 'Schaw, William (1549/50–1602)', ODNB at <http://www.oxforddnb.com/view/article/24799> (accessed on 6 July 2010). See also David Stevenson, *The Origins of Freemasonry; Scotland's Century 1590–1710* (Cambridge, 1988), pp. 26–32. The epitaph also describes him as royal Master of Ceremonies.
- 22 Fowler, *Works*, II, p. 181. Fawcett, *Stirling Castle*, p. 74, believes Leslie to be Master of Ceremonies, but provides no evidence.
- 23 Schaw, a Catholic, had become Master of Works in 1583, after Robert Drummond of Carnock was dismissed, apparently for having been implicated in the Ruthven Raid, the attempt led by the Earl of Gowrie to impose an extreme Presbyterian regime on Scotland; see Stevenson, *Origins*, p. 28. Drummond's son, John, was married to Fowler's sister, which may have been the cause of the hostility; see Michael R. G. Spiller, 'Drummond, William, of Hawthornden (1585–1649)', *Oxford Dictionary of National Biography* (Oxford University Press, 2004; online edn, October 2007) at <http://www.oxforddnb.com/view/article/8085> (accessed on 7 February 2011).
- 24 It is difficult to imagine anyone going to the trouble and expense subsequently, and there is no documentary evidence to suggest a later date. There is some variation in the character and extent of the walls as drawn. The plan we illustrate (National Library of Scotland [henceforth NLS], MS 1646 Z.02/16a: <http://www.nls.uk/maps/military/57.html>), which appears to be essentially a survey plan, with only one intended alteration, shows the west courtyard wall extending the whole length and the south wall only extending half the length of the courtyard, and as solid rather than punctuated by blank circles like the west wall, which we interpret as either balusters or the spaces between them. The parallel plan, 'Stirling Castle, representing schemes to fortify the main entrance and the nether bailey' (NLS, MS 1646 Z.02/16b), shows the south courtyard wall as the same length but now punctuated by circles like the west wall, which ran only half the length of the courtyard. This may be explained by another plan 'Ground floor of the palace at Stirling Castle' (NLS, MS 1646 Z.02/17) which includes, shaded in pink, a proposed new building occupying the southern half of the west side of the courtyard. Although this was not built, the balustraded west wall could have made been demolished to make way for it.
- 25 RCAHMS, *Stirlingshire*, I, p. 212, fig. 83.
- 26 Kent Rawlinson remarks that the vast majority of pre-Reformation English chapels were single-cell, which may have been deliberate to distinguish them from parish churches and other greater churches; see *The Medieval Great House*, ed. Kent Rawlinson, Malcolm Airs and Paul Barnwell, *Rewley House Studies in the Historic Environment*, 1 (Donington, 2011), pp. 171–99 (p. 178). However, in Scotland, the picture is less clear, since pre-Reformation rural parish churches were often single-cell; see RCAHMS, *Argyll: An Inventory of the Ancient Monuments*, 7 vols (Edinburgh, 1971–92), III, p. 30.
- 27 *Accounts of the Masters of Works for Building and Repairing the Royal Palaces and Castles*: II, 1616–1649, ed. John Imrie and John G. Dunbar (Edinburgh, 1982), p. 236: 'Item mair fra him ane bat and prik to the pirament at the chaippell dore and tua uther battis under with iiii battis of yrone to the chimnay heid at the princes tower all weyand 10 pund and half pund at iii lib. the staine wechtinde xxxix s. vi d.'
- 28 *Ibid.*, p. 256: 'Item the foir entrie of the chaippill with the pillaris and haill ordour thair of with the armes housingis crownellis [= coronets? / pediments?] and siferis [= ciphers] with tua new tafrellis[?] boards] to the housing.'
- 29 RCAHMS, *Stirlingshire*, I, p. 212; Imrie and Dunbar, *Masters of Works*, II, p. 256: 'Item the window heidis [= heads] the seiferis and crownis [crowns] with the af settis [offsets] to be new giltit [gilded] and layit over with oyle cullour.'
- 30 RCAHMS, *Stirlingshire*, I, p. 192.
- 31 *Ibid.*
- 32 In the longer south chamber, there appeared to be a lintel with recess below to the north of the doorway.

Machinery prevented us getting closer to see if this might be the remains of a third, central, doorway.

33 David MacGibbon and Thomas Ross, *The Castellated and Domestic Architecture of Scotland From the Twelfth to the Eighteenth Century*, 5 vols (Edinburgh, 1887), I, p. 478.

34 Imrie and Dunbar, *Masters of Works*, II, p. 256: 'Item the Chaippill Ryall all to be new paintit in the rufe in the forme it was before and betuix the rufe and the wall pletis to have ane course of pannallis armes and badgeis round about conforme to the rufe and ane border under all these to be done weill and sufficientlie.'

35 RCAHMS, *Stirlingshire*, I, p. 213, but wrongly interpreting the '6' as a 'C' for Charles.

36 The authors are very grateful to one of the castle custodians, Ross Blevins, for pointing out these traces to us. They deserve much further investigation.

37 See n. 29 above. The roof profile appears to have been unusual. The Great Hall of Kirby (1575) in Northamptonshire, England, also has a five-sided roof profile. See John Alfred Gotch, *Early Renaissance Architecture in England* (London, 1891), fig. 147.

38 Edinburgh, NLS, MS 35.1.12, f. 153v: 'sacellum Sterlini reficit, auro distinguit lacunaria [usually means coffered ceiling] exornat parietes opere magnifico, ac summo artificio, pictores [meaning 'paintings' rather than painters?], sculptores ['sculptures' rather than sculptors], et caeteros elegantiores artifices adhibet'; cited in Rogers, *Chapel Royal*, p. lxxxi. The NLS, *Summary Catalogue of the Advocates' Manuscripts* (Edinburgh, 1971) p. 62, no. 749, says that the manuscript is an eighteenth-century copy of Johnston's 'Rerum Britannicarum Historia', but the hand appears seventeenth-century and, in the published version, the reference to the chapel is missing from the account of the baptism; Robert Johnston, *Historia Rerum Britannicarum, ut et multarum Gallicarum, Belgicarum et Germanicarum, tam politicarum, quam ecclesiasticarum, ab anno 1572 ad annum 1628* (Amsterdam, 1655), p. 192.

39 The drawing appears to indicate the joists to have been shallow, though it would be a mistake to interpret the drawing as being closely measured in every detail, since, for instance, it omits the chapel's east door (represented on the plan of the same drawing). One would expect that both joists and rafters were probably in reality deeper than represented.

40 The same constructional principles evidently guided the roofing of better-known structures such as Hendrick de Keyser's Zuiderkerk in Amsterdam (1614) or his Noorderkerk (1620–22) in the same city, both likewise with deep ceilings and consequently necessary tie-beams. See W. Kuyper, *Dutch Classicist Architecture* (Delft, 1980), pls 22, 28, 30.

41 Imrie and Dunbar, *Masters of Works*, II, p. 256: 'Item that the jeistis [= joists] be all weill paintit the feild thairof blew with flouris [flowers] going all along thame and antikis [= antiques; all'antica ornament].' It is probable that the joists' ornamental scheme was, like the other elements of the chapel, a repainting of the pre-existing scheme. See also Michael Bath, *Renaissance Decorative Painting in Scotland* (Edinburgh 2003), pp. 270–71.

42 Fowler, *Works*, II, p. 180.

43 *Ibid.*, p. 178.

44 *Calendar of State Papers Relating to Scotland and Mary, Queen of Scots, 1547–1603*, ed. Joseph Bain et al., 13 vols (Edinburgh, 1898–1969) (henceforth CSP Scot.), XI, p. 411.

45 Fawcett, *Stirling Castle*, p. 73.

46 Personal communication with Maureen Meikle. On Anna of Denmark, see Maureen M. Meikle and Helen Payne, 'Anne (1574–1619)', *ODNB* (Oxford University Press, September 2004; online edn, January 2008) at <http://www.oxforddnb.com/view/article/559> (accessed on 7 July 2010).

47 Fowler, *Works*, II, p. 180; Fawcett, *Stirling Castle*, p. 74; Gifford and Walker, *Stirling and Central Scotland*, p. 684.

48 Fowler, *Works*, II, pp. 178, 180 and 182.

49 Howard, *Scottish Architecture*, pp. 31–32.

50 *Ibid.*, p. 32; see Sebastiano Serlio, *Il terzo libro* (Venice, 1540), p. cxxvii, and Jacques Androuet du Cerceau, *Quinque et viginti exempla arcuum* (Orléans, 1549), pl. 4. The 1548 entry of Henri II to Lyons already has some arches with paired columns, but none like the Pula arch: see Maurice Scève, *La Magnificence de la superbe et triomphante entrée* (Lyons, 1549); *The Entry of Henri II into Lyon, September 1548*, ed. Richard Cooper (Tempe, 1997).

51 Cornelis de Schrijvers, *Le triumphe d'Anuers fait en la susception du Prince Philips Prince d'Espaign* (Antwerp 1550), p. [86].

52 Howard, *Scottish Architecture*, p. 32.

53 Francesco Colonna, *Hypnerotomachia Poliphili*, in *Scritti rinascimentali di architettura*, ed. Arnaldo Bruschi et al. (Milan, 1978), pp. 145–276 (p. 221; see also the notes at p. 229); and Francesco Colonna, *The Strife of love in a dreame*, trans. Robert Dallington (London, 1592), f. 24r.

- 54 1 Kings, 6 v. 3; 2 Chron. 3 v. 3. These are accepted to be internal measurements; see Roland de Vaux, *Ancient Israel: Its Life and Institutions* (London, 1961), p. 313.
- 55 1 Kings, 6, 3; 2 Chron. 3, 4.
- 56 On the cubit, see De Vaux, *Ancient Israel*, pp. 196–97. Vitruvius, *De architectura*, III.1.7 discusses the foot and the cubit together; see Vitruvius, *Ten Books on Architecture*, ed. and trans. Ingrid D. Rowland and Thomas Noble Howe (Cambridge, 1999), p. 48. On Renaissance knowledge of the relationship of Roman, Greek and Hebrew cubits and feet, see Jerónimo de Prado and Juan Bautista Villalpando, *In Ezechielem explanationes et apparatus urbis, ac temple hierosolymitani*, 3 vols (Rome, 1595–1605), III, p. 471, in the section ‘De Romanis Graecis Hebraicisque mensuris’, which begins on p. 433. On the *Explanaciones*, see Juan Antonio Ramirez et al., *Dios arquitecto: J.B. Villalpando y el Templo de Salomó*, 2nd edn (Madrid, 1994).
- 57 Nicholas of Lyra, *Postilla super totam Bibliam* (Venice, 1488), sig. d. v. p. 50, ‘cubitus usualis tenet pedem & dimidium’, commenting on the dimensions of Noah’s Ark in Genesis 6. On the dissemination of the *Postilla*, see Edward A. Gosselin, ‘A Listing of the Printed Editions of Nicolaus de Lyra’, *Traditio*, 26 (1970), pp. 399–426. See also Felipe Pereda, ‘Le origini dell’architettura cubica: Alfonso de Madrigal, Nicola di Lira e la “querelle salomonista” nella Spagna del Quattrocento’, *Annali di architettura*, 17 (2005), pp. 21–51.
- 58 On the use of the foot in Scotland, see Robin D. Connor and Allen D. C. Simpson, *Weights and Measures in Scotland: A European Perspective* (Edinburgh, 2004), pp. 42–44. Samuel Lee, in *Orbis miraculum, or, The temple of Solomon, Pourtrayed by Scripture-Light* (London, 1659), pp. 16–17, used the Roman foot (29.6 cm) for his calculations. Using that, the dimensions of the Stirling Chapel would work out at 45.7 × 30.5 × 107 ft.
- 59 Given the state of the wall, it is difficult to be absolutely precise in measuring it.
- 60 *New English Translation of the Septuagint* (Oxford, 2009), 3 Reigns 6, 4, p. 302.
- 61 *The Geneva Bible: a Facsimile of the 1560 Edition, With an Introduction by Lloyd E. Berry* (Madison, Milwaukee and London, 1969), p. 151.
- 62 The first edition to combine the two was Anton Koberger’s in Nuremberg in 1481, which was reprinted and imitated many times (Gosselin, ‘Listing’, p. 408, no. 25). The early versions follow the manuscript drawings from of the *Postilla* in showing the Temple windows as mainly pointed. Later ones, influenced by Renaissance architecture, make the windows rounded. The woodcut illustrated here is from Gaspard Trechsel’s *Biblia sacra*, 7 vols (Lyons, 1545), which circulated in Scotland in the sixteenth century. The bindings of the Glasgow University copy we illustrate (Sp Coll Bh6-a.3-8) bear the stamp of James Beaton, Archbishop of Glasgow (on whom, see Mark Dilworth, ‘Beaton, James (1524–1603)’, *ODNB*, at <http://www.oxforddnb.com/view/article/1825> (accessed on 9 July 2010)). The NLS copy (Gray.711-715) belonged to the burgh of Haddington.
- 63 Mark Girouard, ‘Solomon’s Temple in Nottinghamshire’, in his *Town and Country* (New Haven and London, 1994), pp. 187–96; summarized in Mark Girouard, *Elizabethan Architecture* (New Haven and London, 2009), pp. 243–45.
- 64 *New English Translation of the Septuagint*, 3 Reigns 7, 39, p. 304. The *Geneva Bible*, p. 153, renders 1 Kings 7, 4 as ‘And the windowes were in three rowes, & windowe was over against windowe in three rankes.’
- 65 The Koberger woodcuts are illustrated in Girouard, ‘Solomon’s Temple’, figs 173 and 175. In them the windows are still pointed in the Gothic style, but later editions make them round-arched. It is striking that such biforate windows within a containing arch are found on earlier medieval buildings such as the Palazzo Vecchio in Florence. It is also noteworthy that it is divided into three storeys, suggesting that it might have been emulating Solomon’s Palace, as well as the ‘Palace of Nerva’, as the rear wall of the Forum of Augustus was known (see Andreas Tönnemann, ‘“Palatium Nervae”. Ein antikes Vorbild für Florentiner Rustika Fassaden’, *Römisches Jahrbuch für Kunstgeschichte*, 21 (1984), pp. 61–70.
- 66 1 Kings, 6, 8. The English version cited is the Douai-Rheims translation. The *Geneva Bible* (p. 151) has ‘the dore for the middle chamber was in the right side of the house.’
- 67 Bede, *De Templo Salamonis*, 8, in *Patrologia latina*, ed. Jacques Paul Migne, 221 vols (Paris, 1844–55; henceforth *PL*), XCI, col. 753; cf. also Bede, *In libro regum I*, c. XII: *PL*, XCI, col. 722, and Bede, *Hom. I*, 22 (in *Fer. II Quadr.*): *PL*, XCIV, col. 119, cited in Peter Milward S.J., ‘Devotion to the Sacred Heart II’, at <http://www.catholicculture.org/culture/library/view.cfm?recnum=3139> (accessed on 9 July 2010).
- 68 Nicholas of Lyra, *Postilla*, p. 528. See Josephus, *Jewish Antiquities*, VIII, p. 70, and *Josephus With an English Translation*, ed. Joseph Bain et al., 8 vols (London and Cambridge, 1926–81), V, p. 609.
- 69 However, the title page of the first volume of the *Explanaciones* does show a pedimented frontispiece with paired columns on shared pedestals.
- 70 Leo Mildenberg, *The Coinage of the Bar Kokhba War*, *Typos*, vol. 6 (Aarau, 1984), pp. 31–45.
- 71 John Cunnally, *Images of the Illustrious: The Numismatic Presence in the Renaissance* (Princeton, 1999),

pp. 113–14. See also pp. 44–46 on the collecting of ancient Jewish coins generally during the Renaissance.

72 Prado and Villalpando, *In Ezechielem explanations*, II, part ii, p. 245:

Exstat nunc Venetijs nummus quidam argentues perantiquus apud Clarissimum virum Federicum Contarenum procuratorem Sancti Marci, sicli iusto pondere, faciem huius vestibule ex altera parte proferens Hebraicis antiquis literis inscriptus, in quo tetrastili in medio fornix apparet, eandem plane formam praese ferens, quam in Orientali facie vestibule Santuarij nos expressaeramus multis annis [p. 246] antea quàm huius nummi vel minimi incidisset suspicio, nedum eius videndi spes aliqua affalsisset. Venetijs olim aliud huic simile numisma fuit apud Patriarchum Aquiliensem, quo è medio, sublato solum superset exemplar aereum, sed satis expressum, utriusque nummi exemplari forsitan expeteret hic Lector: sed quia multa ad rem nummariam spectantia his atque adijs denuo à me inventis nummis confirmari posse arbitramur, omnia simul in proprium locum conferenda esse arbitrary sumus, in appendice capitis vigesimi septimi libri secundi secundae partis Apparatus, quam molimur.

Prado and Villalpando were probably relying on secondhand evidence here, since the Temple obverses of the Bar Kochba coinage are confined to the silver tetradrachms; see Mildenberg, *Coinage*, p. 31.

73 Guido Rebecchini, *Private Collectors in Mantua 1520–1630* (*Sussidi erudite*, 56; Rome, 2002), p. 238. On Contarini and Grimani as collectors, see Lanfranco Franzoni, 'Antiquari e collezionisti nel Cinquecento', in *Storia della cultura veneta*, 6 vols in 10 (Vicenza, 1976–86), III/3, pp. 207–66 (pp. 212–14 and 222–23); on Francesco Barbaro, see Deborah Howard, 'I Barbaro come collezionisti rinascimentali', in *Collezionismo d'arte a Venezia: dalle origini al Cinquecento*, ed. Michel Hochmann, Rosella Lauber and Stefania Mason (Venice, 2008), pp. 192–205 (p. 199).

74 Fowler, *Works*, III, p. xxvi.

75 Bernhard Degenhart and Annegrit Schmitt, *Jacopo Bellini: l'album dei disegni del Louvre* (Milan, 1984), p. 15, pl. 40. I am grateful to Jasenka Gudeli for this observation.

76 Guido Beltramini (ed.), *Guida a palazzo Barbaran da Porto* (Vicenza, 2000), p. 56. One reason why the Arch of the Sergii might be connected in people's minds with Jerusalem is that Pula was usually the first stop for ships from Venice taking pilgrims to the Holy Land; see Jasenka Gudelj, 'Le antichità di Pola nel Quattro- e Cinquecento' (doctoral thesis, IUAV, Venice, 2008). There also appears to have been a broader tradition of using coupled columns to indicate associations with the Temple or with Solomon, stretching back into early medieval architecture and continuing into the eighteenth century, which space does not allow us to explore here. On it, see André Corboz, 'Il Louvre come Palazzo di Salomone', in *Gian Lorenzo Bernini architetto e l'architettura europea del Sei-Settecento*, ed. Gianfranco Spagnesi and Marcello Fagiolo, 3 vols (Rome, 1983–84), II, pp. 563–98, and Thomas W. Lyman, 'The Function of an Ancient Architectural Ornament and its Survival in Medieval Spain and France', in *Actas del XXIII. Congreso internacional de historia del arte: España entre el Mediterraneo y el Atlantico*, 3 vols (Granada, 1976–78), I, pp. 393–406. The much more common association with Solomon of the 'barley-sugar'-type columns, which formed part of the shrine at Old St Peter's, is combined with the paired columns in one of the arches of the 1548 entry to Lyons (but with no explicit reference to Solomon; see Scève, *Entry*, sig. E2; also illustrated in Stefania Tuzi, *Le colonne e il Tempio di Salomone: la storia, la leggenda, la fortuna* (Rome, 2002), p. 229, fig. 48. However, two of Du Cerceau's *Exempla arcuum* have paired Solomonic columns identified as such; see Hubertus Günther, 'Die Salomonische Säulenordnung. Eine unkonventionelle Erfindung und ihre historischen Umstände', *RIHA Journal*, 15 (12 January 2011), at <http://www.riha-journal.org/articles/2011/2011-jan-mar/guenther-salomonische-saeulenordnung> (accessed on 15 February 2011), figs 6 and 7, one of which had already been published; Tuzi, *Le colonne*, p. 229, fig. 50.

77 Turpin C. Bannister, 'The Constantinian Basilica of St Peter at Rome', *Journal of the Society of Architectural Historians*, 27 (1968) pp. 3–32. See also Helen Rosenau, *Vision of the Temple: The Image of the Temple of Jerusalem in Judaism and Christianity* (London, 1979), and John Wilkinson, *From Synagogue to Church: The Traditional Design; its Beginning, its Definition, its End* (London, 2002).

78 Eugenio Battisti, 'Il significato simbolico della Cappella Sistina', *Rivista di critica e storia dell'arte* (1957), pp. 96–104; see also John Higgitt, 'The Dedication Inscription', in *King's College Chapel, Aberdeen, 1500–2000*, ed. Jane Geddes (Leeds, 2000), pp. 66–73.

79 William Elphinstone, Bishop of Aberdeen, and the effective founder of the chapel, gave his copy of a Koberger Bible, published in 1498, to King's College in 1512: see Jane Geddes, 'Appendix: The Proportions and Solomon's Temple', *King's College Chapel*, ed. Geddes, pp. 61–63.

80 John Williams, *Great Britains Salomon* (London, 1625).

81 John Gordon, *Enotikon or a sermon of the union of Great Brittanie, in antiquitie of language, name, religion and kingdome* (London, 1604).

82 Vaughan Hart, *Art and Magic in the Court of the Stuarts* (London, 1994), pp. 105–21.

- 83 Michael Lynch, 'Court Ceremony and Ritual During the Personal Reign of James VI', in *Reign of James VI*, ed. Goodare and Lynch, pp. 70–92 (p. 75).
- 84 In Alexander Montgomerie, *Poems*, ed. David J. Parkinson, 2 vols (Edinburgh, 2000), I, no. 53; I, p. 79; and II, p. 74.
- 85 Maureen M. Meikle, 'Anna of Denmark's Coronation and Entry into Edinburgh, 1590: Cultural, Religious and Diplomatic Perspectives', in *Sixteenth-Century Scotland: Essays in Honour of Michael Lynch*, ed. Julian Goodare and Alasdair A. Macdonald (Leiden and Boston, 2008), pp. 277–94 (p. 290).
- 86 *CSP Scot.*, XI, p. 377, cited in Amy L. Juhala, 'An Advantageous Alliance: Edinburgh and the Court of James VI', in *Sixteenth-Century Scotland*, ed. Goodare and Macdonald, pp. 337–63 (p. 350).
- 87 Rob Macpherson, 'Colville, John (1542?–1605)', *ODNB* (Oxford University Press, September 2004; online edn, May 2009) at <http://www.oxforddnb.com/view/article/6011> (accessed on 30 June 2010).
- 88 Stevenson, *Origins*, pp. 34–51.
- 89 *Ibid.*, p. 49.
- 90 Frances Yates, *The Art of Memory* (London, 1966). Peter Beal, 'Dicsone, Alexander (bap. 1558, d. 1603/4)', *ODNB*, at <http://www.oxforddnb.com/view/article/73792> (accessed on 1 July 2010). See also Ingrid D. Rowland, *Giordano Bruno: Philosopher/Heretic* (Chicago and London, 2009), pp. 157–58.
- 91 Stevenson, *Origins*, p. 93; by coincidence, Dicsone is mentioned in the John Colville letter referring to Solomon's Temple: *CSP Scot.*, XI, p. 377.
- 92 Stevenson, *Origins*, p. 93; Fowler, *Works*, II, p. 3; III, p. xix, n. 4.
- 93 Stevenson, *Origins*, p. 94.
- 94 *Ibid.*, p. 95. On this, see also Marcello Fagiolo, *Architetettura e massoneria* (Florence, 1988), pp. 33–34, and Marcello Fagiolo, *Architetettura e massoneria: l'esoterismo della costruzione* (Rome, 2006), pp. 88–89.
- 95 Stevenson, *Origins*, p. 139.
- 96 *Ibid.*, pp. 139–40 and 148.
- 97 David Stevenson, *The First Freemasons: Scotland's Early Lodges and Their Members* (Aberdeen, 1988), p. 98.
- 98 Stevenson, *First Freemasons*, p. 99; for more on Anthony and Henry Alexander, see Stevenson, *Origins*, pp. 61–73.
- 99 Albert G. Mackey, *Encyclopedia of Freemasonry and Kindred Sciences, Comprising the Whole Range of the Arts, Sciences, and Literature of the Masonic Institution*, new edn, 2 vols (London, 1929), II, p. 720, s.v. 'Northeast corner'.
- 100 Bernard E. Jones, *The Freemasons' Guide and Companion*, new edn (London, 1956), pp. 323 and 328. In 1114, the foundation stone of the new church of Crowland, or Croyland, Abbey in Lincolnshire was laid at the northeast corner; see *Ingulph's Chronicle of the Abbey of Croyland*, ed. Henry T. Riley (London, 1908), p. 246.
- 101 Albert G. Mackey, *The Symbolism of Freemasonry* (New York, 1869), pp. 166–67.
- 102 See Gerhart B. Ladner, 'The Symbolism of the Biblical Corner Stone in the Mediaeval West', first published in *Mediaeval Studies*, 4 (1942), pp. 43–60; reprinted in Ladner's *Images and Ideas in the Middle Ages: Selected Studies in History and Art*, 2 vols (Rome, 1983), I, pp. 172–96.
- 103 Jones, *Freemasons' Guide*, pp. 537–38.
- 104 Stevenson, *Origins*, pp. 144–45.
- 105 James Stevens Curl, *The Art and Architecture of Freemasonry* (London, 1991), p. 332.