

***Spitting on an Angel, Trampling a Saint: Reading the
English Monastic Tile Pavement c. 1220-1325***

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Abstract

The study of medieval pavements has traditionally focused upon the individual tile as an object of archaeological interest. Topics such as decorative techniques, methods of production and regional workshops have been closely examined in the past. However, because of this approach medieval tiles have become removed from their original setting as whole pavements within a building. This thesis, therefore, considers the medieval pavement within its wider architectural, liturgical and iconographical contexts. In so doing it brings medieval pavements into broader art-historical discussions. The most well-known and best-preserved English monastic pavements, such as those in Westminster Abbey's chapter house and Prior Crauden's Chapel, are used as illustrative case studies. Not only do they provide the most substantial evidence, but have also been the subject of scholarly research for over two hundred years. There is, therefore, an opportunity to offer new interpretations of these highly familiar pavements. The thesis begins by challenging the influence of nineteenth-century antiquarian publications on modern tile scholarship. The language that has previously been used to describe the layout of medieval pavements, for example, is especially problematic and requires re-evaluation. The thesis then moves on to consider how audience and function shaped the design of medieval pavements. Whilst the hierarchical positioning of heraldry within a church pavement indicates the importance of secular patronage, it can equally be shown that a church pavement served a liturgical function for its monastic community. Finally, the thesis demonstrates that pavements were just one part of a whole decorative and iconographic scheme. It is ultimately concluded that medieval monastic pavements were never intended only to be 'read' in one particular way. Tiles were a hard-wearing floor surface that would last for several generations. The meaning of that floor could adapt as its audience and the rituals performed on it changed.

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Author's Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, university. All sources are acknowledged as references.

Introduction

Why is it that we do not at least show respect for the images of the saints, which the very pavement which one tramples underfoot gushes forth? Frequently people spit on the countenance of an angel. Often the face of one of the saints is pounded by the heels of those passing by. And if one does not spare the sacred images, why does one not at any rate spare the beautiful colours? Why do you decorate what is soon to be disfigured? Why do you depict what is inevitably to be trod upon? What good are these graceful forms there, where they are constantly marred by dirt? Finally, what are these things to poor men, to monks, to spiritual men?¹

Bernard of Clairvaux's *Apologia* is perhaps the best known and most frequently quoted medieval text on the subject of art. It was written in the early twelfth century at the time when Bernard was abbot at the Cistercian abbey of Clairvaux. Traditionally it is thought to have been created as a defence of Cistercian ideals and an attack on the excesses of the Cluniac order.² Chapters 28 and 29 in the *Apologia* are especially concerned with art that Bernard deemed as inappropriate for a monastic audience due to its immoderation. He believed that the art and architecture of a monastery should reflect its voluntary withdrawal from the world. Excesses in material, size and quantity could threaten this foundation of the monastic life. Bernard also condemned art that distracted monks from their daily work.³ The *Apologia* has often been used by scholars as the basis for defining the characteristics of Cistercian art and architecture.⁴ It has also

¹ "Ut quid saltem Sanctorum imagines non reveremur, quibus utique ipsum, quod pedibus conculcatur, scatet pavimentum? Saepe spuitur in ore Angeli, saepe alicuius Sanctorum facies calcibus tunditur transeuntium. Et si non sacris imaginibus, cur vel non parcitur pulchris coloribus? Cur decoras quod mox foedandum est? Cur depingis quod necesse est conculcari? Quid ibi valent venustae formae, ubi pulvere maculantur assiduo? Denique quid haec ad pauperes, ad monachos, ad spirituales viros?" Conrad Rudolph, *The "Things of Greater Importance": Bernard of Clairvaux's Apologia and the Medieval Attitude Toward Art* (Philadelphia: University of Pennsylvania Press, 1990), 282-283.

² For a reassessment of traditional literature on the *Apologia* see: Rudolph, *The "Things of Greater Importance"*, 13-16; Conrad Rudolph, "Bernard of Clairvaux's Apologia as a Description of Cluny, and the Controversy over Monastic Art," *Gesta* 27 (1988): 125-132.

³ For a more detailed explanation of chapters 28 and 29 in the *Apologia* see: Rudolph, *The "Things of Greater Importance"*, 17-124.

⁴ For a general overview of Cistercian architecture and the debates concerning its characteristics see: Thomas Coomans, "Cistercian Architecture or Architecture of the Cistercians?," in *The Cambridge Companion to the Cistercian Order*, ed. Mette Birkedal Brunn (Cambridge: Cambridge University Press, 2012), 151-172; Glyn Coppack, *The White Monks: The Cistercians in Britain 1128-1540* (Stroud: Tempus, 1998); Peter Fergusson, *Architecture of Solitude: Cistercian Abbeys in Twelfth-Century England* (Princeton: Princeton University Press, 1984); Peter Fergusson, "Cistercian Architecture" in *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*, ed. Conrad Rudolph (Oxford: Wiley-Blackwell, 2010), 577-598; Christopher Norton and David Park, ed., *Cistercian Art and Architecture in the British Isles* (Cambridge: Cambridge University Press, 1986);

been used more generally to discuss how art, predominantly in a monastic context, was used and thought about during the medieval period. Images can be interpreted or 'read' in a number of different ways.⁵ Art, for example, could be considered a useful tool for moral instruction.⁶ Alternatively, it could be criticised for creating distraction with mischievous humour or inappropriate imagery.⁷ Many of these various interpretations, which have been pursued in the past by scholars interested in painting, sculpture and stained glass, assume that art has meaning. Rarely, however, is this approach taken with medieval ceramic tile pavements. It is, therefore, time that serious consideration is given to the decorative tile pavement and the various ways in which it might be read. For as Bernard queried: why do you depict what is inevitably to be trod upon?

In Bernard's *Apologia* pavements in churches are considered to be primarily a practical surface intended for walking on. Decoration was superfluous to this basic function. A pavement would also naturally be damaged and dirtied from its intended use. This made decoration not only unnecessary, but also in certain cases, like images of holy figures, quite inappropriate. A decorative pavement was considered by Bernard, therefore, to be excessive for a church and its monastic audience. Yet there were of course practical reasons for laying a pavement. They could, for example, be a cleaner, warmer and harder-wearing surface than rushes strewn over earth. There were also reasons why a pavement might intentionally be decorated. They were an additional surface adding colour and texture into a fully decorated space. Even Bernard allowed that decoration could be properly employed in a church to glorify God.⁸ A pavement was perhaps also easier to see and study than other surfaces, such as ceilings. If messages were intended to be conveyed about how to move

David Robinson, ed., *The Cistercian Abbeys of Britain: Far From the Concourse of Men* (London: B.T. Batsford, 1998).

⁵ For a general discussion of 'reading' medieval art see: Elizabeth Sears, "'Reading' Images," in *Reading Medieval Images: The Art Historian and the Object*, ed. Elizabeth Sears, Thelma K. Thomas and Ilene H. Forsyth (Ann Arbor: University of Michigan Press, 2002), 1-6.

⁶ In the sixth century St Gregory the Great believed that, when properly used, images in the church were a useful means of instructing the illiterate. Celia M. Chazelle, "Pictures, Books and the Illiterate: Pope Gregory I's Letters to Serenus of Marseilles," *Word and Image* 6 (1990): 138-153; Caecilia Davis-Weyer, ed., *Early Medieval Art 300-1150: Sources and Documents* (Toronto: University of Toronto Press, 1986), 47-49.

⁷ For a general introduction to marginal imagery in medieval art see: Paul Binski, *Gothic Wonder: Art, Artifice and the Decorated Style 1290-1350* (New Haven: Yale University Press, 2014), 283-306; Michael Camille, *Image on the Edge: The Margins of Medieval Art* (London: Reaktion Books, 1992). For specific examples of marginal imagery in monastic buildings see: Thomas E. A. Dale, "Monsters, Corporeal Deformities, and Phantasms in the Cloister of St-Michel-de-Cuxa," *The Art Bulletin* 83 (2001): 402-436; T. A. Heslop, "Contemplating Chimera in Medieval Imagination: St Anselm's Crypt at Canterbury," in *Raising the Eyebrow: John Onians and the World Art Studies: An Album Amicorum in his Honour*, BAR International Series 996, ed. Lauren Golden (Oxford: Archaeopress, 2001), 153-168.

⁸ "Nisi forte et hic adversus memoratum iam Poetae versiculum propheticus ille respondeatur: Domine, dilexi decorem domus tuae et locum habitationis gloriae tuae. Assentio: patiamur et haec fieri in ecclesia, quia etsi noxia sunt vanis et avaris, non tamen simplicibus et devotis." Rudolph, *The "Things of Greater Importance"*, 282-283.

around a space, then it would be logical to place these signposts on the pavement over which people walked. A pavement could also invite a deliberate treading on of certain images, either to re-enact or symbolise a particular event or story. Ultimately there was something about the nature of a church pavement that lent itself to decoration.

The Scope of the Thesis

Bernard condemned in his *Apologia* pavements that were both coloured and decorated with figural imagery. It is possible that he was referring to tessellated mosaic pavements like that in the Saint Firmin chapel at Saint-Denis (*France*) with its twelfth-century mosaic figures depicting the Labours of the Month.⁹ Cistercian statutes from the thirteenth century also condemned the use of elaborate pavements. It is unclear exactly what type of pavements had met with disapproval, but there is no surviving evidence of tessellated mosaic pavements from any French Cistercian abbey.¹⁰ Of all medieval pavements, tessellated mosaic pavements with figural scenes would be perhaps the most straightforward for the art historian to 'read' iconographically. It is perhaps for this reason that many of them, and particularly the continental examples, have already been studied extensively.¹¹ However, they account for only a small proportion of medieval pavements.¹² The earliest church floors would have been made of whatever materials were available locally, but have been given the generic name of earth floors by scholars. From the twelfth century stone pavements began to be laid in the most important spaces of a church. By the middle of the thirteenth century decorative ceramic tile pavements became ever more popular in all types of ecclesiastical buildings.

⁹ Xavier Barral i Altet, "The Mosaic Pavement of the Saint Firmin Chapel at Saint-Denis: Alberic and Suger," in *Abbot Suger and Saint-Denis: A Symposium*, ed. Paula Lieber Gerson (New York: Metropolitan Museum of Art, 1986), 245-256.

¹⁰ Christopher Norton, "Early Cistercian Tile Pavements," in *Cistercian Art and Architecture in the British Isles*, ed. Norton and Park, 229-231; Christopher Norton, "Table of Cistercian Legislation on Art and Architecture," in *Cistercian Art and Architecture in the British Isles*, ed. Norton and Park, 352-388.

¹¹ For the study of medieval tessellated pavements on the Continent see: Xavier Barral i Altet, *Le décor du pavement au Moyen Âge: les mosaïques de France et d'Italie* (Rome: École française de Rome, 2010); Xavier Barral i Altet, "Les débuts de la mosaïque de pavement romane dans le sud de la France et en Catalogne," *Cahiers de Saint-Michel de Cuxa* 3 (1972): 117-131; Madeline Harrison Caviness, *Sumptuous Arts at the Royal Abbeys in Reims and Braine: Ornatus Elegantiae, Varietate Stupendes* (Princeton: Princeton University Press, 1990); Ernst Kitzinger, "World Map and Fortune's Wheel: A Medieval Mosaic Floor in Turin," *Proceedings of the American Philosophical Society* 117 (1973): 344-373; E. C. Norton, "Varietates pavimentorum: contribution à l'étude de l'art cistercien en France," *Cahiers Archéologiques* 31 (1983): 69-113; Henri Stern, "Mosaïques de pavement préromanes et romanes en France," *Cahiers de Civilisation Médiévale* 5 (1962): 13-33.

¹² Jane Fawcett, "Cathedral, Churches and Chapels: Tile, Mosaic, Cosmati Marble and Stone Pavements, Ledger Stones and Monumental Brasses," in *Historic Floors: Their History and Conservation*, ed. Jane Fawcett (Oxford: Butterworth-Heinemann, 1998), 1-40; Warwick Rodwell, "The Archaeology of Church and Cathedral Floors," in *Historic Floors*, ed. Fawcett, 41-52.

In addressing Bernard's questions, the focus of this thesis will be upon English ceramic tile pavements within monastic spaces. There were a number of different types of decorative ceramic tile pavement. One of the most common was the two-colour tile pavement, which became prevalent a century after Bernard's *Apologia*.¹³ These are perhaps the most easily recognisable type of medieval floor tile for the non-specialist. Two-colour tiles, sometimes referred to as inlaid or encaustic tiles, are so-called because of their distinctive yellow decorative design set against a red-brown background. The tiles themselves vary greatly in a number of respects, including size, design and quality. Their method of production, however, is very similar. The clay was pressed into a mould and the surface levelled. Wooden stamps with carved relief designs were pressed onto the surface of the clay to leave an impression. This impression, whose depth once again changed according to practice and workshop, was then filled with a white clay. The consistency of the white clay or 'slip' varied. It could be a thick but malleable product that was pushed into the impression. It could also be a liquid that was poured over the tile and the excess brushed off. With the slip in place a glaze could then be spread over the whole tile. There were different glazes that could be used to create different colour tiles, but two-colour tiles used a transparent lead glaze that created the distinctive brown and yellow combination. The tiles were then ready to be fired.¹⁴ Due to their widespread production in England examples of two-colour tiles can be found across the country and at a varied range of sites. Many of these tiles can be seen today either *in situ* or displayed in museums. The great quantity of surviving material is one of the reasons why this thesis has chosen to primarily examine two-colour tile pavements. There is ample evidence to be drawn from England and the surviving pavements exemplify many of the issues to be taken up within the thesis. Comparative examples from outside of England will be drawn only when considered necessary or when the English evidence is deemed inconclusive. The thesis, however, does not intend to be an all-encompassing survey of medieval tile pavements in England, nor will it present a deliberately chronological or geographical approach. The choice of pavements used as case studies throughout this thesis is in fact partly the accidental result of what has most completely survived.

Nevertheless, there are limits to what is included in and excluded from the thesis. The primary case studies are all pavements from religious establishments and the majority of them were laid in the most important monastic buildings such as the church, chapter house and refectory. The preservation of many of these pavements was an inadvertent consequence of the dissolution of the

¹³ E. C. Norton, "The Origins of Two-Colour Tiles in France and in England," *Terres Cuites Architecturales Au Moyen Age* (1986): 256-293.

¹⁴ For a general overview of the manufacture of two-colour and other medieval tiles see: Elizabeth Eames, *English Medieval Tiles* (London: British Museum Publications, 1985), 40-42; Elizabeth Eames, *Medieval Craftsmen: English Tilers* (London: British Museum Press, 1992), 11-17.

monasteries in the sixteenth century. Due to the great expense involved, the earliest commissions for tile pavements tended to be either ecclesiastical buildings or royal palaces. This is reflected in the chronological range of the case studies, with the pavements all dating from between the early thirteenth and early fourteenth centuries. These pavements, therefore, come at the beginning of the production of two-colour tiles in England. This thesis examines a number of different types of ceramic tile pavement, from various regional workshops and exemplifying a range of different decorative techniques. However, all of the primary case studies utilise two-colour tiles to a greater or lesser extent. The decision to focus on earlier examples of medieval tile pavements is deliberate. This is firstly because pavements from the thirteenth century are likely to be located in ecclesiastical buildings. The thesis is particularly interested in examining the liturgical function or religious iconography of medieval tile pavements. The second reason for this decision is the increasing use of plain-glazed tiles from the fourteenth century onwards. This thesis is chiefly concerned with decorative tile pavements, such as those formed by mosaic or two-colour tiles. The development of the tile industry in the fourteenth and fifteenth centuries is the third reason for choosing earlier examples of medieval pavements as case studies. It might be possible to argue that tile designs and pavement layouts became increasingly standardised as the result of the establishment of commercial tileries. The pavements used in this thesis as case studies are all, therefore, to be considered not only exceptional survivals, but also exceptional examples.

The inspiration for this thesis came from the personal experience of being a non-specialist and visiting historic sites with medieval tile pavements. There was rarely much information about these pavements provided either on-site or in the relevant guidebooks. Upon further investigation scholarly texts still did not answer the questions that arose from seeing the tiles in their original context. How were these pavements related to their surrounding architecture? Was there a connection between a pavement and the function of the space in which it was laid? Did the designs and patterns within a pavement hold some kind of iconographical significance? Essentially it seemed that Bernard's question of why pavements should be decorated had remained unanswered. This thesis, therefore, has two main research objectives. The first of these is to establish the ways in which nineteenth-century antiquarian interest has influenced subsequent tile scholarship. This interest includes both antiquarian publications and drawings of medieval pavements, along with the creation of new Gothic Revival pavements. The second research objective is to reintegrate medieval tiles with their original contexts. This reintegration will take many forms, but first and foremost the thesis will reintegrate tiles back into their pavements. The difference between a pavement and a tile is perhaps obvious, but it is worth emphasising here. A tile is an individual unit, a single shape cut from clay and fired in a kiln. A pavement, though discussed in the singular, is made up of many

components. It contained within it a large amount of tiles. These tiles could be grouped together in a number of ways, but the primary means was in panels. Panels are groups of individual tiles, but they are also sections of pavement. These sections are usually made visually obvious by the use of borders, which are typically made up of a smaller size of tile. The overall layout of a pavement refers to the arrangement of panels within the whole space. Two-colour tiles have been extensively studied by scholars in the past and have been typically treated individually as archaeological specimens that require categorisation. Due to the nature of their design and manufacture, two-colour tile pavements can be easily broken down into individual components. This stands in contrast, for example, to the art-historical study of tessellated mosaic pavements, which would not typically examine each tessera separately. Two-colour tiles, therefore, have rarely been examined as part of a pavement and even less often 'read' as an artwork that might express meaning. Tiles were laid together to form a pavement, that pavement covered the floor of a building, and that building had its own particular audience and function. It is essential, therefore, that medieval tiles are considered within their original context.

The Study of Medieval Floor Tiles

The study of medieval tiles in England began in earnest at the end of the eighteenth century. This was a time when many medieval tiles were first uncovered, and their existence and appearance subsequently noted down. For example, John Carter, the draughtsman and antiquary, was among the first to publish illustrations of English medieval tiles.¹⁵ It was during the nineteenth century, however, that medieval tiles began to be studied in greater detail.¹⁶ This was partly a natural consequence of tiles, and on occasion whole sections of paving, being uncovered during larger and more comprehensive excavations. Once tiles had been found their designs were then categorised. There was a tendency towards taxonomy in all branches of nineteenth-century scholarship, but the categorisation of medieval tile designs was also motivated by the need to collect exemplars for contemporary artists. Whilst the old and worn medieval tiles were admired and recorded by antiquaries, they were not deemed suitable for the interiors of newly restored Victorian churches. As such medieval tile designs were copied to create Gothic Revival pavements that suited the particulars of Victorian taste. The emphasis of nineteenth-century publications, therefore, remained

¹⁵ Carter published several plans of medieval pavements including those at Gloucester Cathedral and Salisbury Cathedral. John Carter, *Specimens of the Ancient Sculpture and Painting Now Remaining in this Kingdom*, Vol. 2 (London: John Carter, 1787).

¹⁶ For a more detailed account and critique of the eighteenth- and nineteenth-century study of medieval tiles see: Chapter One, 41.

upon the individual tile and its decoration. There were a few notable exceptions where pavements, rather than tiles, were the subject of interest. Alwyne Compton, for example, drew plans of pavements from various English cathedrals and attempted to classify their arrangements.¹⁷ The study of medieval pavements in the nineteenth century, however, never moved beyond this classification of arrangement or the identification of decoration method.

By the beginning of the twentieth century clearance work undertaken by the Office of Works at sites across the country vastly expanded the national collection of medieval tiles. Many loose tiles were placed in museum storage, but those that were found *in situ* were usually lifted and then re-set in concrete for public display.¹⁸ Scholarship at this time was focused around identifying the stories or legends illustrated on medieval tiles. Those depicting the romance of Tristan and Isolde from Chertsey Abbey (*Surrey*), for example, were of special interest.¹⁹ There were also attempts to understand the regional differences between the designs of tiles and their method of decoration.²⁰ By the second half of the twentieth century a number of medieval tile kilns had been excavated and interest in the manufacture of floor tiles developed.²¹ Alongside these excavations there were experiments in recreating medieval tile kilns in order to better understand the manufacturing process.²² These helped to answer questions about the time it would have taken to make the tiles, how many tiles could be fired at one time and how these might have been stacked efficiently in the

¹⁷ The drawings made by Compton include, for example, the pavement in front of the high altar at Gloucester Cathedral, the octagonal pavements in the chapter house and muniment room at Salisbury Cathedral, and the retro-choir pavement from Winchester Cathedral. For his classification of pavement layouts see: Chapter Two, 62-63; Alwyne Compton, "On Tile Pavements, Especially that of Higham Ferrers Church," *Associated Architectural Societies' Reports and Papers* 1 (1849): 6-12.

¹⁸ This was certainly the case at sites such as Byland Abbey and Rievaulx Abbey. Jennie Stopford, *Medieval Floor Tiles of Northern England: Pattern and Purpose: Production Between the 13th and 16th Centuries* (Oxford: Oxbow Books, 2005), 1, 283, 321.

¹⁹ Roger Sherman Loomis, *Illustrations of Medieval Romance on Tiles from Chertsey Abbey* (Urbana: University of Illinois, 1916); Manwaring Shurlock, *Tiles from Chertsey Abbey, Surrey, Representing Early Romance Subjects* (London: William Griggs, 1885).

²⁰ J. B. Ward-Perkins, "Late Medieval Inlaid Tiles in England," *Antiquarian Journal* 17 (1937): 442-444; J. B. Ward-Perkins, "English Medieval Embossed Tiles," *Archaeological Journal* 94 (1938): 128-153.

²¹ Elizabeth Eames, "A Thirteenth-Century Tile Kiln Site at North Grange, Meaux, Beverley, Yorkshire," *Medieval Archaeology* 5 (1961): 137-168; Elizabeth Eames, "The Products of a Medieval Tile-Kiln at Bawsey, King's Lynn," *The Antiquaries Journal* 5 (1955): 162-181; J. S. Gardner and Elizabeth Eames, "A Tile Kiln at Chertsey Abbey," *Journal of the British Archaeological Association* 17 (1954): 24-42; P. Mayes, "A Medieval Tile Kiln at Boston, Lincolnshire," *Journal of the British Archaeological Association* 28 (1965): 860-106; D. C. Mynard, "The Little Brickhill Tile Kilns and their Products," *Journal of the British Archaeological Association* 38 (1975): 55-80.

²² This type of scholarship is part of a wider trend in art history concentrating on making and industries as opposed to broad chronological and stylistic accounts. Philip Lindley, "Introduction," in *Making Medieval Art*, ed. Philip Lindley (Donington: Shaun Tyas, 2003), 1-3; John Cherry, "Pottery and Tile," in *English Medieval Industries: Craftsmen, Techniques, Products*, ed. John Blair and Nigel Ramsay (London: Hambledon Press, 1991).

kiln.²³ At Winchester Cathedral (*Hampshire*) the medieval pavement in the north-presbytery aisle was removed in 1969 and replaced with tiles that had been handmade by Robert Baker after extensive research into medieval techniques.²⁴ Alongside the study of kilns there was an interest in more fully understanding how medieval tiles were decorated. It was shown, for example, that it was possible to identify specific design stamps through a comparison of the impressions left on tiles by the stamp. This identification made it possible to ascertain the area in which a particular tiler was operating. Cracks in the stamps, which developed over time and use, could also be used to indicate the order in which various sites may have been worked.²⁵ The organisation of the medieval tile industry also became of interest to scholars and it was concluded that there were at least three different ways that medieval tilers could have worked.²⁶ It was thought that there were itinerant tilers who would have moved from site to site, as well as kilns that were specifically associated with an ecclesiastical or secular site, like the thirteenth-century kiln at Glastonbury Abbey (*Somerset*).²⁷ Another method was the establishment of commercial tileries, such as that at Penn in Buckinghamshire during the fourteenth century.²⁸

Towards the end of the twentieth century the Census of Medieval Tiles in Britain was formed after a series of seminars were held at Cambridge. The Census was set up with the aim of

²³ John Patrick Greene and B. Johnson, "An Experimental Tile Kiln at Norton Priory, Cheshire," *Medieval Ceramics* 2 (1978): 30-42; Oliver Kent and David Dawson, "The Packing of Medieval Floor-Tile Kilns," *Medieval Archaeology* 42 (1998): 45-53.

²⁴ Elizabeth Eames, *Catalogue of Medieval Lead-Glazed Earthenware Tiles in the Department of Medieval and Later Antiquities*, Vol. 1 (London: British Museum Publications, 1980), 46; E. C. Norton, "The Medieval Tile Pavements of Winchester Cathedral," in *Medieval Art and Architecture at Winchester Cathedral*, British Archaeological Association Conference Transactions VI, ed. T. A. Heslop and Veronika Sekules (Leeds: W. S. Maney, 1983), 82; Christopher Norton, "The Medieval Tile Pavements of Winchester Cathedral," in *Winchester Cathedral: Nine Hundred Years 1093-1993*, ed. John Crook (Winchester: Dean and Chapter, Winchester Cathedral, 1993), 170. For both the history and current condition of the Winchester Cathedral retrochoir pavement, along with a selected list of relevant publications, see: Site Gazetteer, 304-305.

²⁵ Several stamps, for example, were used at both Gloucester Cathedral and Great Malvern Priory in the fifteenth century. This shows that the tiles for both sites were manufactured at the same time. One of the stamps cracked during the manufacturing process as the Gloucester tiles of this design are perfect, whilst the same design at Malvern is cracked. This suggests that for this particular design, the tiles were made for Gloucester first. Eames, *Catalogue*, Vol. 1, 238; Jennie Stopford, *Recording Medieval Floor Tiles* (London: Council for British Archaeology, 1990), Plate 9.

²⁶ Paul Drury, "The Production of Brick and Tile in Medieval England," in *Medieval Industry*, Council for British Archaeology Research Report No. 40, ed. D. W. Crossley (London: Council for British Archaeology, 1981), 126-142; Jennie Stopford, "Modes of Production Among Medieval Tilers," *Medieval Archaeology* 37 (1994): 93-108.

²⁷ Jane Harcourt, "The Medieval Tiles," in *Glastonbury Abbey: Archaeological Investigations 1904-79*, eds. Roberta Gilchrist and Cheryl Green (London: Society of Antiquaries, 2015), 278-293. For both the history and current condition of the tiles from Glastonbury Abbey, along with a selected list of relevant publications, see: Site Gazetteer, 287-288.

²⁸ Eames, *Catalogue*, Vol. 1, 221-226; Miles Green, *Medieval Penn Floor Tiles* (Penn: Miles Green, 2003); Miles Green, "Medieval Tile Industry at Penn," *Records of Buckinghamshire* 45 (2005): 146-159; Christopher Hohler, "Medieval Paving Tiles in Buckinghamshire Part 1," *Records of Buckinghamshire* 14 (1940/1): 1-49; Christopher Hohler, "Medieval Paving Tiles in Buckinghamshire Part 2," *Records of Buckinghamshire* 14 (1942): 99-132.

cataloguing and illustrating all the surviving floor tiles from the country in the form of regional studies.²⁹ Shortly afterwards Elizabeth Eames published her *Catalogue of Medieval Lead-Glazed Earthenware Tiles in the Department of Medieval and Later Antiquities*.³⁰ These two volumes, which included all the tile designs and mosaic shapes from the British Museum's vast collection, remain the principal reference book on the subject of medieval tiles. In accounts like the *Catalogue*, where tiles are treated archaeologically, regional or workshop groups are typically created. These groupings are determined either by date, clay type or production method. These groups are usually numbered (group number) and the individual tiles within each group also given a number (tile number). Occasionally further sub-groups are created by placing tiles within design groups, each again with its own number (design number).³¹ By placing tiles within these separate groups, each with its own number, they become further removed from their original context. Since the publication of the *Catalogue*, and the formation of the Census, several regional surveys have been published or are currently underway.³² These regional surveys have successfully created a public record of material that may be lost in the future as a result of destruction or deterioration. They are typically intended as a reference work for archaeologists or museum staff who may be required to identify tile fragments; as such their methodology is principally archaeological. As a result, these regional surveys do not attempt to interpret the tiles in any particular way. A notable exception is Jennie Stopford's *Medieval Floor Tiles of Northern England*.³³ Stopford's aim was not only to publish medieval tiles, but also to demonstrate the ways in which they could be of general interest to those studying medieval art history. She intended to establish the significance of northern medieval floor tiles in order that their future preservation and presentation to the public could be ensured. Through her research she established the range of tile groups active in northern England, plotted their distribution and

²⁹ Stopford, *Medieval Floor Tiles of Northern England*, 2.

³⁰ Eames, *Catalogue*, Vol. 1; Elizabeth Eames, *Catalogue of Medieval Lead-Glazed Earthenware Tiles in the Department of Medieval and Later Antiquities*, Vol. 2 (London: British Museum Publications, 1980).

³¹ For example see: Eames, *Catalogue*, Vol. 1; Eames, *Catalogue*, Vol. 2. For a critique of the *Catalogue* see: E. C. Norton, "The British Museum Collection of Medieval Tiles," *Journal of the British Archaeological Association* 134 (1981): 107-119; Stopford, *Medieval Floor Tiles of Northern England*, 2-3.

³² For medieval tiles from Ireland see: Elizabeth Eames and Thomas Fanning, *Irish Medieval Tiles: Decorated Medieval Paving Tiles in Ireland with an Inventory of Sites and Designs and a Visual Index* (Dublin: Royal Irish Academy, 1988). For medieval tiles from Scotland see: Christopher Norton, "Medieval Floor Tiles in Scotland," in *Medieval Art and Architecture in the Diocese of St Andrews*, British Archaeological Association Conference Transactions XIV, ed. John Higgitt (Leeds: W. S. Maney, 1994), 137-173. For medieval tiles from Wales see: John Lewis, *The Medieval Tiles of Wales* (Cardiff: National Museum and Galleries of Wales, 1999). For regional studies of medieval tiles on the Continent see also: Christopher Norton, *Carreaux de pavement du Moyen Age et de la Renaissance: collections du Musée Carnavalet* (Paris: Paris-Musées, 1992); Eleonore Landgraf, *Ornamentierte Bodenfliesen des Mittelalters in Sud- und Westdeutschland 1150-1550* (Stuttgart: K. Theiss, 1993).

³³ Stopford, *Medieval Floor Tiles of Northern England*.

assigned them dates. Stopford, however, did not just study surviving medieval tiles, but also the historical records of them. Her approach, therefore, was both archaeological and art-historical.

By the beginning of the twenty-first century there was an increasing use of scientific analysis to study medieval floor tiles. A petrological analysis, for example, involved studying the clay fabric of tiles through a breakdown of their chemical components.³⁴ This type of analysis made it possible to identify where the clay used to make tiles came from, which was particularly useful as only a small proportion of kiln sites had been accurately identified. Once quantified, clusters of results were presumed to come from the same source of clay. A comparison of the clay fabric from tiles at a number of sites could, therefore, be used to show the distribution of particular tile groups across a region. When first introduced this process took the form of a neutron activation analysis, but a comparatively cheaper and easier test is now more commonly used – Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES). At Glastonbury Abbey, for example, ICP-AES analysis revealed that many of the tiles were made at a kiln local to the abbey. Samples were taken from tiles at a number of other sites in Somerset including Cleeve Abbey (*Somerset*), Muchelney Abbey (*Somerset*) and Wells Cathedral (*Somerset*).³⁵ The cluster of results suggested that the kiln at Glastonbury supplied the same tiles to a number of these other sites in Somerset.³⁶ Advances in technology have also led in recent years to the creation of more accurate and up-to-date records of medieval tiles, prompted by concerns about preservation. At Westminster Abbey (*London*), for example, Laurence Keen published more accurate measurements and illustrations of the chapter house tiles than had previously been possible.³⁷ Alongside this, with the aid of English Heritage, a photo-mosaic of the entire pavement was also made available.³⁸ Technology has also made it possible to create detailed reconstructions of medieval buildings and their interiors. In the recently

³⁴ For examples of the scientific testing of medieval tiles see: A. Aspinall, "Neutron Activation Analysis of Medieval Ceramics," *Medieval Ceramics* 1 (1977): 5-16; Jennie Stopford, Michael J. Hughes and M. N. Leese, "A Scientific Study of Medieval Tiles from Bordesley Abbey, Redditch (Hereford and Worcester)," *Oxford Journal of Archaeology* 10 (1991): 349-360; M. N. Leese, Michael J. Hughes and John Cherry, "A Scientific Study of N. Midlands Medieval Tile Production," *Oxford Journal of Archaeology* 5 (1986): 355-370.

³⁵ For both the history and current condition of the Cleeve Abbey refectory pavement, along with a selected list of relevant publications, see: *Site Gazetteer*, 282-284. For the tiles from Muchelney Abbey, along with a selected list of relevant publications, see *Site Gazetteer*, 294-295. For the tiles from Wells Cathedral, along with a selected list of relevant publications, see: *Site Gazetteer*, 302.

³⁶ Harcourt, "The Medieval Tiles," 278-293.

³⁷ For both the history and current condition of the Westminster Abbey chapter house pavement, along with a selected list of relevant publications, see: *Site Gazetteer*, 303-304.

³⁸ Laurence Keen, "The Chapter House Decorated Tile Pavement," in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Warwick Rodwell and Richard Mortimer (London: Society of Antiquaries, 2010), 209-236.

reopened museum at Norton Priory (*Cheshire*), for example, a digital reconstruction of the fourteenth-century church, including its mosaic pavement, is now on public display.³⁹

From early interest by nineteenth-century antiquaries to the scientific analysis of the twenty-first century, medieval tiles have been consistently studied as individual, and often archaeological, artefacts. Yet a few scholars have pursued alternative ways of thinking about them. The study of the tile pavements at Clarendon Palace (*Wiltshire*), for example, highlighted that tiles could make a wider contribution to the study of medieval art history.⁴⁰ The kiln which manufactured the tiles was excavated on-site and the pavements in the royal apartments at Clarendon were able to be dated by surviving documentary evidence. It was subsequently demonstrated that the Clarendon tiles were part of a scheme created specifically for Henry III and Eleanor of Provence.⁴¹ The pavements at Clarendon can, therefore, be viewed as part of an integrated interior and in the wider context of royal patronage. At Winchester College (*Hampshire*) Christopher Norton was also able to study medieval tiles using historical documents. In the account rolls for the college, for example, there were four references made to payments for tiles between 1394 and 1412.⁴³ This meant that the surviving tiles could be more closely dated than would have been possible through an archaeological examination. It also enabled a better understanding of the sequence in which various pavements at the college were laid. More generally, art historians interested in medieval tiles typically created design typologies from which dates for each group of tiles could be suggested.⁴⁴ The study of heraldic tiles, and the attribution of designs to particular families, was also

³⁹ Tom Hughes, *Norton Priory Museum & Gardens* (Norwich: Swallowtail Print, 2016), 9. For both the history and current condition of the tiles from Norton Priory, along with a selected list of relevant publications, see: *Site Gazetteer*, 295-296.

⁴⁰ For both the history and current condition of the pavements from Clarendon Palace, along with a selected list of relevant publications, see: *Site Gazetteer*, 281-282.

⁴¹ Elizabeth Eames, "A Tile Pavement from the Queen's Chamber, Clarendon Palace, Dated 1250-2," *Journal of the British Archaeological Association* 20 (1957): 95-106; Elizabeth Eames, "A Decorated Tile Pavement from the Queen's Chamber, Clarendon Palace, Wiltshire, Dated 1250-1252," *The British Museum Quarterly* 22 (1960): 34-37; Elizabeth Eames, "A Thirteenth-Century Tiled Pavement from the King's Chapel, Clarendon Palace," *Journal of the British Archaeological Association* 26 (1963): 40-50; Elizabeth Eames, "The Royal Apartments at Clarendon Palace in the Reign of Henry III," *Journal of the British Archaeological Association* 28 (1965): 57-85; Elizabeth Eames, "Further Notes on a Thirteenth-Century Tiled Pavement from the King's Chapel, Clarendon Palace," *Journal of the British Archaeological Association* 35 (1972): 71-76; Elizabeth Eames, "The Tile Kiln and Floor Tiles" in *Clarendon Palace: the History and Archaeology of a Medieval Palace and Hunting Lodge near Salisbury, Wiltshire*, ed. Thomas James and A. Robinson (London: Society of Antiquaries of London, 1988), 127-168.

⁴³ E. C. Norton, "The Medieval Pavingtiles of Winchester College," *Proceedings of the Hampshire Field Club and Archaeological Society* 31 (1974): 23-42. A few years later Norton also discovered a historical record for tiles laid at Ely Cathedral during the fourteenth century. Eames, *Catalogue*, Vol. 1, 91; Laurence Keen, "The Medieval Tiles," in *Norton Priory: Monastery to Museum: Excavation 1970-87*, ed. Fraser Brown and Christine Howard-Davis (Lancaster: Oxford Archaeology North, 2008), 248.

⁴⁴ For the usefulness of design typologies for the dating of medieval tiles see: Sue. M Hirst, D. A. Walsh and Susan M. Wright, *Bordesley Abbey II: Second report on excavations at Bordesley Abbey, Redditch, Hereford-Worcestershire*, BAR British Series 111 (Oxford: British Archaeological Reports, 1983), 157-167.

pursued by art historians.⁴⁵ Whilst this type of study had a different purpose than regional surveys, nevertheless tiles continued to be treated individually and then categorised into groups.

There have, however, been occasions when medieval pavements, rather than tiles, have been the subject of scholarly interest. Many continental pavements, and in particular tessellated pavements, have received attention by scholars. Lucy Donkin, for example, has completed several studies of medieval pavements in Italy, particularly with a focus on their iconography and liturgical function.⁴⁶ The layout of the chapter house tile pavement at the abbey of Saint-Jean-les-Vignes in Soissons (*France*) has also been explored in relation to the rituals that occurred within the space.⁴⁷ Rarely, however, have English pavements been studied in a similar manner. In the nineteenth century interest in medieval English pavements did not move beyond ascertaining the layout of the pavement and the decoration of its tiles.⁴⁸ Art historians from the twentieth century onwards have typically been concerned with the iconography of individual tile designs and not the significance of the placement of these designs within a pavement layout.⁴⁹ Pavements have also been briefly described in regional surveys, but usually with little attempt to investigate their significance, beyond the tile groups or designs that they comprise.⁵⁰ Even in more recent years the study of these pavements has been devoted primarily to the accurate recording of their history, appearance and

⁴⁵ For example see: John Cherry, "Heraldry as Decoration in the Thirteenth Century," in *England in the Thirteenth Century: Proceedings of the 1989 Harlaxton Symposium*, ed. W. M. Ormrod (Stamford: Watkins, 1991), 123-134; John Goodall, "English Medieval Armorial Tiles: An Ordinary," *Journal of the British Archaeological Association* 153 (2000): 102-126.

⁴⁶ Lucy Donkin, "*Ornata Decenter*: Perceptions of 'Fitting Decoration' Amongst Augustinian Canons of Sant'Orso in Aosta in the Mid-Twelfth Century," *Journal of the Warburg and Courtauld Institutes* 71 (2008): 75-93; Lucy Donkin, "Pavimenti decorati come luoghi di memoria," in *Medioevo: Immagine e Memoria*, ed. Arturo Carlo Quintavalle (Milan: Electa, 2009), 408-414; Lucy Donkin, "*Suo loco*: The *Traditio evangeliorum* and the Four Evangelist Symbols in the Presbytery Pavement of Novara Cathedral," *Speculum* 88 (2013): 92-143. See also Chapter Four, 108.

⁴⁷ Sheila Bonde, Edward Boyden and Clark Maines, "Centrality and Community: Liturgy and Gothic Chapter Room Design at the Augustinian Abbey of Saint-Jean-des-Vignes, Soissons," *Gesta* 29 (1990): 189-213; Sheila Bonde and Clark Maines, ed., *Saint-Jean-des-Vignes in Soissons: Approaches to its Architecture, Archaeology and History* (Turnhout: Brepols, 2003). See also Chapter Four, 111.

⁴⁸ For example see: Compton, "On Tile Pavements, Especially that of Higham Ferrers Church," 6-12; Edward Cutts, *An Essay on Church Furniture and Decoration* (London: John Crockford, 1854), 90-95.

⁴⁹ The picture tiles from the chapter house pavement at Westminster Abbey, for example, have attracted much interest. The identity of the king, queen and abbot who are depicted on the tiles has frequently been discussed by scholars. Philip Clayton, "The Inlaid Tiles of Westminster Abbey," *Archaeological Journal* 69 (1912): 66-69; William Lethaby, *Westminster Abbey and The King's Craftsmen: A Study of Mediaeval Building* (London: Duckworth, 1906), 48; William Lethaby, *Westminster Abbey Re-examined* (London: Duckworth, 1925), 113-114.

⁵⁰ For example see the entry for Cleeve Abbey, and its refectory pavement, in: Barbara Lowe, *Decorated Medieval Floor Tiles of Somerset* (Somerset: Somerset Archaeological and Natural History Society, 2004), 138-139. An exception to this would be Stopford who stated clearly in her introduction that she intended to also consider the design and symbolism of whole pavements. Stopford, *Medieval Floor Tiles of Northern England*, 7.

decoration.⁵¹ Without all of these various works, however, this thesis would not be possible. The plans, drawings and descriptions published from the nineteenth century onwards have made any study of medieval tile pavements considerably easier. The relevant information has already been recorded and is readily accessible. This thesis, therefore, can build upon this information and devote the time and space to interpretation which has not been undertaken before.

The Structure of the Thesis

The thesis is divided into five chapters, each taking up a key idea and examining it through an in-depth analysis of one or more pavements. Case studies provide a tangible illustration of an idea or argument in operation, yet equally they have the potential to limit the broader applicability of those arguments. Many of the pavements discussed in this thesis are exceptional examples, and as such some of the conclusions may be specific to them, but the questions explored within each of the chapters can be directed more broadly at a larger range of pavements than covered here. Each of the case studies within the five chapters is accompanied by relevant plans and photographs. All of the plans have been hand-drawn and as such are intended for illustrative purposes only. They are typically based upon information collated from previously published plans. The tables are also populated by photographs or drawings created by the author, but based upon material published elsewhere. The precise details of these are referenced where appropriate. A Site Gazetteer is also included at the end of the thesis. This is an alphabetically organised catalogue of the key sites mentioned in each chapter. The individual entries comprise of a brief history of the site along with a description of the current condition of the pavement. A short list of publications for each site is also included along with the pertinent figure numbers. The Site Gazetteer, therefore, acts as an index for the whole thesis.

The first chapter of the thesis concentrates on the nineteenth-century history of medieval tile pavements. The publications of antiquaries at that time have been hugely influential for all subsequent scholars. This influence has previously been questioned by Jane Wight who criticised the actions of Victorian antiquaries and the “hard exactness” of their replica tiles.⁵² More specifically, those scholars interested in a particular pavement have sometimes mistrusted, and amended, the antiquarian record for their site. One example of this would be Stopford’s recent review of the

⁵¹ For an example of a recent study of medieval pavements see: Keen, “The Chapter House Decorated Tile Pavement,” 209-236.

⁵² Jane A. Wight, *Mediaeval Floor Tiles: Their Design and Distribution in Britain* (London: John Baker, 1975), 11.

nineteenth-century plans of Jervaulx Abbey (*Yorkshire*).⁵³ A more general reassessment, however, is now required. The approach of modern scholars to the study of medieval tiles, as described above, owes much to the legacy of nineteenth-century antiquaries. This legacy, however, must be recognised and queried if research on medieval pavements is to advance. The chapter will seek to address two main issues. Firstly, it will examine the ways in which antiquarian publications about medieval pavements have influenced the form of modern tile scholarship. Secondly, it will examine the influence of Gothic Revival pavements on how medieval pavements are perceived in modern tile scholarship. The first half of the chapter will consider the publication of plans and descriptions of medieval pavements as they were originally discovered. It will highlight some of the ways that they have perhaps unknowingly influenced scholars from the twentieth century onwards. The second half of the chapter will reflect on the relationship between the antiquarian record of medieval pavements and new encaustic tile pavements that were laid in the nineteenth century. Examples will be taken from Temple Church (*London*) and Westminster Abbey to indicate how early Gothic Revival pavements were influenced by antiquarian study and the restoration movement.⁵⁴ Finally, using the chapter house at York Minster (*Yorkshire*), it will be questioned how far nineteenth-century pavements have influenced the way that the modern tourist and art historian evaluate medieval pavements.⁵⁵ The Gothic Revival chapter house pavement at York has never previously been studied, yet has several interesting links to medieval precedents, which make it a valuable case study. Whilst its octagonal shape could be considered distinctive, the design process of the York pavement, and in particular the selection of its individual tile designs, appears to have been exemplary of wider practices. This first chapter will challenge how medieval pavements have been discussed for the past two hundred years, whilst the remainder of the thesis will provide alternative methodologies for the future.

The second chapter of the thesis will focus particularly upon the issue of the language and methods used to describe a medieval pavement layout. The accuracy of nineteenth-century pavement plans has been reassessed by some scholars, who have subsequently corrected these plans with recent archaeological drawings. At Westminster Abbey, for example, Warwick Rodwell helped to complete a tile-by-tile accurate drawing of the thirteenth-century chapter house

⁵³ Stopford, *Medieval Floor Tiles of Northern England*, 149-178, 303-305. For both the history and current condition of the Jervaulx Abbey church pavement, along with a selected list of relevant publications, see: *Site Gazetteer*, 290-291.

⁵⁴ For both the history and current condition of the Gothic Revival pavement at Temple Church, along with a selected list of relevant publications, see: *Site Gazetteer*, 299.

⁵⁵ For both the history and current condition of the York Minster chapter house pavement, along with a selected list of relevant publications, see: *Site Gazetteer*, 305-306.

pavement.⁵⁶ The same reassessment, however, cannot be said for the way in which pavements have been, and continue to be, written about. Their layout has been systematically undermined by the language used to describe them in both nineteenth-century and modern accounts. The antiquary Henry Shaw, for example, described a ‘blunder’ made in the chapter house pavement at Salisbury Cathedral (*Wiltshire*).⁵⁷ More recently, Keen noted several ‘mistakes’ in the layout of the Westminster Abbey chapter house pavement.⁵⁸ By questioning this language it will be shown that there are alternative ways to describe such layouts. These alternatives create opportunities to ask new questions, which in turn will allow for a better understanding of how and why particular pavement layouts may have been chosen. The layout of medieval pavements should not be dismissed using language such as ‘mistakes’, but rather understood as the product of a series of decisions made in response to practical and functional considerations. The chapter will approach pavement layouts from two different perspectives. The first will ask, what were the practical limitations and problems faced by the medieval tiler? The second will ask, were there other contextual factors influencing the decisions behind a pavement’s layout? These questions will be addressed through an in-depth analysis of the Westminster Abbey chapter house pavement. This has been chosen as a case study firstly because it is an example of a complete and *in situ* medieval pavement that has generally maintained its original arrangement. Secondly, it has been chosen because it has received a great deal of attention over the centuries by scholars. This attention, however, has typically been confined to the individual tiles with little attempt made to understand their position in the overall layout. The first half of the chapter, therefore, will describe in detail the layout of the Westminster pavement and give suggestions for why certain decisions were made during the laying process. The second half of the chapter will consider how contextual factors may have impacted that layout. These contextual factors, such as a decorative scheme, liturgy or patron, are ideas that will be returned to and expanded upon in the chapters that follow.

The third chapter of the thesis will move on to show how a pavement could be used to construct the identity of a patron. The focus will be upon the placement of heraldry within the overall layout and representations of secular individuals in sacred spaces. This chapter, therefore, will bring the study of medieval tile pavements into relation with other recent scholarship on the use of heraldry in medieval art.⁵⁹ Whilst heraldic tile designs are themselves well-known, their

⁵⁶ Warwick Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of ‘a Chapter House Beyond Compare’*, ed. Rodwell and Mortimer, Plan 2.

⁵⁷ Henry Shaw, *Specimens of Tile Pavements Drawn from Existing Authorities* (London: Basil M. Pickering, 1858), 17, note 2

⁵⁸ Keen, “The Chapter House Decorated Tile Pavement,” 226.

⁵⁹ Cherry, “Heraldry as Decoration in the Thirteenth Century,” 123-134; Andrew Martindale, “Patrons and Minds: The Intrusion of the Secular into Sacred Spaces in the Late Middle Ages,” *Studies in Church History*:

significance within a pavement has never previously been fully explored. Since the nineteenth century scholars have mostly been concerned with identifying the heraldic arms depicted on floor tiles. This can, for example, be clearly seen in John Goodall's article published as recently as 2000.⁶⁰ If heraldic tiles are not considered to be specific indicators of patronage, the alternative approach has been to consider them as merely ornamental. Yet both approaches are in danger of treating heraldry as separate from the pavement in which it was found. This chapter will not focus simply on the question of who was represented by heraldic tiles, but rather examine a further two points. The first of these will ask, where are heraldic tiles found in a pavement? Here the arrangement of heraldic tiles within the overall layout, and their location in relation to the surrounding architecture, will be dealt with. The second point addresses the question, what do heraldic tiles in these locations signify? Here the position of heraldic tiles within the sacred topography of a church, its liturgical fittings and hierarchies of space, will be considered. The chapter will take the church pavement at Hailes Abbey (*Gloucestershire*) as its primary case study, with the refectory pavement at Cleeve Abbey introduced as a comparative example.⁶¹ The heraldic tiles at Hailes are well-known and can be attributed to specific individuals or families connected to the abbey. This makes the pavement both a valuable and exceptional case study. In contrast the refectory floor at Cleeve uses many of the same designs, but is perhaps more representative of the conventional employment of heraldry within a pavement. The first part of the chapter deals with the identity of individuals and families as represented by the heraldry. It will then move on to consider the location of these heraldic arms within specific spaces. The analysis will continue by evaluating what this type of heraldic display meant, particularly for its dual audience of secular patron and monastic community. The chapter will conclude by exploring the idea of how far the monks themselves were patrons of their church pavement.

The role of a monastic community as the decision-making force behind the layout of a pavement is explored further within the fourth chapter of the thesis. It will focus particularly upon the liturgical significance of medieval pavements in monastic churches. This chapter, therefore, will place medieval tile pavements within a broader literature on the relationship between art and liturgy.⁶² The connection between tile pavements and liturgy is one that has been acknowledged by

The Church and the Arts 28 (1992): 143-178; Michael Michael, "The Privilege of 'Proximity': Towards a Re-Definition of the Function of Armorial," *Journal of Medieval History* 23 (1997): 55-74; Ann Payne, "Medieval Heraldry," in *Age of Chivalry: Art in Plantagenet England 1200-1400*, ed. Jonathan Alexander and Paul Binski (London: Royal Academy of Arts, 1987), 55-59.

⁶⁰ Goodall, "English Medieval Armorial Tiles: An Ordinary," 102-126.

⁶¹ For both the history and current condition of the church pavement at Hailes Abbey, along with a selected list of relevant publications, see: Site Gazetteer, 289-290.

⁶² Allan Doig, *Liturgy and Architecture: From the Early Church to the Middle Ages* (Aldershot: Ashgate, 2008); Peter Draper, "Architecture and Liturgy," in *Age of Chivalry: Art in Plantagenet England 1200-1400*, ed.

scholars, but never thoroughly examined. Terms such as ‘processional path’ are frequently used, and archaeological reports, like those from Bordesley Abbey (*Worcestershire*), have highlighted the routes around a church which received the most traffic.⁶³ The significance of how the pavement was decorated along these routes, however, has not been fully explained. The analysis of those art historians interested in liturgical pavements has also often been confined to one area of a pavement or a single aspect of the liturgy. Donkin has completed some of the best and most recent studies on this topic, but her case studies are typically continental.⁶⁴ Equally pavements are not usually the primary focus of liturgical studies, with more space devoted to discussions of altars, costume and processional stations.⁶⁵ A comprehensive analysis of the relationship between liturgy and English monastic church pavements has, therefore, not been attempted. One reason for this is perhaps simply due to the incompleteness of the available evidence. However, whilst few pavements survive in their original medieval arrangement, it is nevertheless possible to collate the evidence from a variety of sites and evaluate their similar, or dissimilar, arrangements. The chapter will address two interrelated questions. The first of these will ask, to what extent was a pavement a practical navigational tool? Here the ways in which a pavement could indicate a direction of travel, or a place to stand and wait, will be examined. The second question will ask, can pavements be read as a series of liturgical markers? Here the ways in which different pavement arrangements could be used to highlight the importance of one space over another will be examined. The chapter will take as its primary case study Jervaulx Abbey. Jervaulx’s complicated history, and its ownership in private hands, mean that it has not been subject to such intense historical or archaeological examination as other sites. There is much, therefore, that can still be usefully explored. Although a range of other sites could easily have worked as case studies, the evidence from Jervaulx provides an additional opportunity of formulating a more comprehensive analysis. Whilst many monastic churches retain fragmented evidence of partial pavements, the antiquarian plans of Jervaulx Abbey offer a rare

Alexander and Binski, 83-91; Colum Hourihane, ed., *Objects, Images and the Word: Art in the Service of the Liturgy* (Princeton: Princeton University Press, 2003); Justin Kroesen and Victor Schmidt, ed., *The Altar and its Environment 1150-1400* (Turnhout: Brepols, 2009); Matthew Reeve, *Thirteenth-Century Wall Painting of Salisbury Cathedral: Art, Liturgy and Reform* (Woodbridge: Boydell Press, 2008).

⁶³ These can be deduced by, not only examining the distribution of surviving floor tiles, but also assessing the impressions left in the mortar by floor tiles which no longer exist. Grenville Astill, Sue Hirst and Susan M. Wright, “The Bordesley Abbey Project Reviewed,” *Archaeological Journal* 161 (2004): 106-158; Hirst, Walsh and Wright, *Bordesley Abbey II*, 28, 139-169. For both the history and current condition of the church pavement at Bordesley Abbey, along with a selected list of relevant publications, see: *Site Gazetteer*, 280.

⁶⁴ Donkin, “*Ornata Decenter*: Perceptions of ‘Fitting Decoration’ Amongst Augustinian Canons of Sant’Orso in Aosta in the Mid-Twelfth Century,” 75-93; Donkin, “Pavimenti decorati come luoghi di memoria,” 408-414; Donkin, “*Suo loco*: The *Traditio evangeliorum* and the Four Evangelist Symbols in the Presbytery Pavement of Novara Cathedral,” 92-143.

⁶⁵ For the study of medieval liturgy see: Nicholas Bell, “Liturgy,” in *The Cambridge Companion to the Cistercian Order*, ed. Birkendal Brunn, 258-267; Helen Gittos and Sarah Hamilton, ed., *Understanding Medieval Liturgy: Essays in Interpretation* (Farnham: Ashgate, 2016).

representation of an almost complete pavement that once covered the whole church. The chapter will first evaluate these antiquarian plans, before moving on to consider the importance of roundels in pavements. It will then conclude with a full analysis of the church pavement, supported by comparative evidence from other sites.

The fifth and final chapter of the thesis seeks to bring together the various approaches offered in the three previous chapters. It will, therefore, not only explore layout, patronage and liturgy, but also the relationship between a pavement and its wider artistic context. This is vastly different to both the traditional study of medieval tiles and their display in museums. Scholarly publications usually depict individual tile designs as neat monochrome squares and museum exhibitions typically display single tiles that exemplify the best designs or techniques. However, these not only disregard how tiles interacted together within a whole pavement, but also overlook the ways in which tile pavements were related to their decorative environment. This chapter, therefore, will bring the study of tile pavements into relation with a wider scholarship on the medieval integrated interior.⁶⁶ That pavements did not exist in isolation has been acknowledged by some scholars, yet there has been little attempt to elaborate on how pavements might have fitted within their architectural, decorative and liturgical setting.⁶⁷ As such this chapter aims to create the most complete impression possible of the medieval pavement within its original context. In addition to the ideas raised earlier in the thesis, this chapter will focus on two particular questions. The first of these will ask, how far were pavements part of a wider decorative scheme that encompassed a whole space? The second question will ask, in what ways might the iconography of certain tile designs be significant for a pavement, its patron and its function? Prior Crauden's Chapel at Ely Cathedral (*Cambridgeshire*) provides a special opportunity to examine a complete medieval pavement in not only its original architectural context, but also its original decorative context, and as such is used as the primary case study of the chapter.⁶⁸ The overall layout of the pavement and its patron will be considered first, before moving on to consider the relationship between the iconography of the pavement, the liturgical rituals that occurred within the chapel, and its overall artistic environment. Whilst the case study itself is unique, the methodology employed in this

⁶⁶ Willibald Sauerländer, "Integration: A Closed or Open Proposal?," in *Artistic Integration in Gothic Buildings*, ed. Virginia Chieffo Raguin, Kathryn Brush and Peter Draper (Toronto: University of Toronto, 1995), 3-18; Willibald Sauerländer, "Integrated Fragments and the Unintegrated Whole: Scattered Examples from Reims, Strasbourg, Chartres and Naumburg," in *Artistic Integration in Gothic Buildings*, ed. Raguin, Brush and Draper, 153-166.

⁶⁷ The digital reconstruction of the fourteenth-century church at Norton Priory shows that every surface was decorated, from wall paintings, to gilded sculptures, and a mosaic pavement. Hughes, *Norton Priory Museum & Gardens*, 9; Keen, "The Medieval Tiles," 282.

⁶⁸ For both the history and current condition of the pavement in Prior Crauden's Chapel at Ely Cathedral, along with a selected list of relevant publications, see: *Site Gazetteer*, 284-285.

chapter could potentially be utilised for other pavements even if in a more limited capacity. In the past, tile pavements, like that in Prior Crauden's Chapel, have been considered the purview of archaeologists or a select group of experts who are interested in tile designs and workshops within a specific geographic region. This chapter, along with those that precede it, will attempt to link these specialist endeavours with wider art-historical issues and questions. These are questions that could not only be easily applied to pavements, but the answering of them may also provide useful observations or provoke further discussion in the art-historical community.

Chapter One

'Unconscious of the mischief of which they are guilty':

A Re-Examination of the Antiquarian Study of Medieval Pavements

'Do you hear nothing? This castle is certainly haunted!'⁶⁹

Haunted castles and ruined abbeys were the conventional backdrop and defining feature of the popular Gothic novel. Horace Walpole, widely credited for writing the first Gothic novel, also commissioned an elaborate Gothic villa in Twickenham. Strawberry Hill, begun in 1749, was the precursor to an architectural style that would gain increasing prominence in subsequent decades. What started in the eighteenth century as essentially a literary movement inspired by a romantic vision of the medieval past developed into something more during the nineteenth century.⁷⁰ The earliest phase of the Gothic Revival could be described as essentially archaeological, but by the 1840s ecclesiology emerged as a major influence. Ecclesiology combined archaeological interest in medieval architecture with a desire to return to the values of the medieval church. Groups such as the Cambridge Camden Society encouraged the restoration of medieval churches, and the building of new churches in the Gothic style, in order to provide an appropriate location for a renewed liturgy.⁷¹ Through the writings of A. W. N. Pugin, Gothic came to be imbued with new moral authority as the architectural style which best expressed the values and ideals of a Christian society.⁷² Gothic also came to be seen by many as a national architectural style reaffirming certain

⁶⁹ The Castle of Otranto, first published in 1764, is considered to be the first novel of the 'Gothic literature' genre. Books within this genre are characterised by the use of Gothic buildings, or more simply monumental architecture of the past. Morris R. Brownwell, *The Prime Minister of Taste: A Portrait of Horace Walpole* (New Haven: Yale University Press, 2001); Horace Walpole, *The Castle of Otranto* (Richmond: Alma Press, 2018), 38.

⁷⁰ Silvia Davoli, *Lost Treasures of Strawberry Hill: Masterpieces from Horace Walpole's Collection* (London: Scala Arts & Heritage, 2018). For an introduction to the Gothic Revival movement see: Chris Brooks, *The Gothic Revival* (London: Phaidon Press, 1999); Kenneth Clark, *The Gothic Revival: An Essay in the History of Taste* (London: Constable & Co., 1962); Michael Lewis, *The Gothic Revival* (London: Thames & Hudson, 2002).

⁷¹ Chris Miele, "Re-Presenting the Church Militant: the Camden Society, Church Restoration and the Gothic Sign," in *A Church as it Should Be: The Cambridge Camden Society and Its Influence*, ed. Christopher Webster and John Elliot (London: Shaun Tyas, 2001), 257-294; Michael Hall, "What do Victorian Churches Mean? Symbolism and Sacramentalism in Anglican Church Architecture 1850-1870," *Journal of the Society of Architectural Historians* 59 (2000): 78-95.

⁷² A. W. N. Pugin, *The True Principles of Pointed or Christian Architecture* (London: Weale, 1841). For an account of Pugin's life see: Alexandra Wedgwood, "Pugin, Augustus Welby Northmore (1812-1852)," *Oxford*

cultural traditions.⁷³ The Gothic Revival looked back to the medieval past, seeking inspiration not only for the construction of new buildings, but also for their decoration. As such, for the first time since the sixteenth century, decorative tile pavements returned to fashion. Whilst Gothic novels became the bestsellers of their time, so too decorative tiles became one of the biggest industries of the nineteenth century.⁷⁴ Tiles manufactured by the likes of Minton & Co., Godwin & Sons and Maw & Co. were produced to create pavements that adorned parish churches, civic buildings and domestic dwellings.⁷⁵ By the beginning of the twentieth century, everywhere from hospitals to the common doorstep used decorative tiles. This was so much the case that the popular magazine *The Builder* remarked wryly that “the difficulty is, often, to find anything that does not have a tile in it.”⁷⁶

What follows is by no means intended as a complete survey of the Gothic Revival, nor indeed a complete survey of Gothic Revival pavements. These are topics which are beyond the scope of this thesis. Yet the vital importance of the eighteenth and nineteenth centuries for the history of medieval tile pavements cannot be overlooked. Many of the pavements that were uncovered and discussed for the first time in this period are today still considered to be amongst the finest and best-preserved examples of medieval tile pavements in England. In fact, it is these very same pavements that will be studied in greater detail during the course of this thesis. The late eighteenth and early nineteenth centuries were a time in which antiquaries began to take a serious scholarly interest in tile pavements and to publish their drawings and descriptions. These publications have had, and continue to have, a deep and lasting influence. Today antiquarian drawings and texts often remain the foundation for the study of certain pavements and also stand as a testament to those pavements which no longer survive *in situ*. It is an influence, however, that requires careful reconsideration.

This chapter will explore how medieval tile pavements have been recorded and studied by antiquaries since the eighteenth century. It will highlight some of the ways in which these publications have perhaps unknowingly influenced modern scholars. Antiquaries did not necessarily

Dictionary of National Biography, 2004, accessed 22nd January 2019, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/22869>.

⁷³ This was particularly case following the rebuilding of the Houses of Parliament. Stephen Calloway, “Antiquaries and the Arts,” in *Making History: Antiquaries in Britain 1707-2007*, ed. David Starkey and David Gaimster (London: Royal Academy of Arts, 2007), 167.

⁷⁴ For an introduction to Victorian tiles and their manufacture see: Kenneth Beulah and Hans van Lemmen, *Church Tiles of the Nineteenth Century* (Oxford: Shire, 2012); Hans Van Lemmen, *Victorian Tiles* (Princes Risborough: Shire, 1981); Hans van Lemmen, *5000 Years of Tiles* (London: British Museum Press, 2013).

⁷⁵ Tiles produced during the Gothic Revival are often referred to as ‘encaustic’, a term derived from Greek and meaning ‘burnt in’. Their appearance, however, is the same as medieval tiles that are usually described as ‘two-colour’.

⁷⁶ George Godwin, “The Use of Ornamental Tiles,” *The Builder* 31 (1873): 837.

depict in their published drawings exactly what they could see. Scholars from the late twentieth century onwards have continued to improve the accuracy of such plans and observations. Nevertheless, these new plans often retain a gloss of perfection inherited from their nineteenth-century predecessors. This ideal of perfection or completeness is undoubtedly reinforced by the presence of Gothic Revival pavements. These complete nineteenth-century pavements can create both expectations of, and judgements upon, worn and incomplete medieval pavements. Many early Gothic Revival pavements were heavily indebted to the medieval past. New tile designs were, for example, carefully copied from the drawings published by antiquaries. The chapter house pavement at York Minster provides a clear example of the deliberate relationship between a Gothic Revival pavement and its medieval counterparts. This relationship, however, has also influenced the ways in which medieval pavements have been thought about. The nineteenth century, therefore, continues to be an important prism through which the medieval tile pavement is examined by both the art historian and modern tourist.

Antiquarian Study from the Eighteenth Century

The earliest antiquarian records for medieval floor tiles usually take the form of a short reference to their discovery. In 1725, for example, Ralph Thoresby remarked on his earlier accidental find in 1713 of a tiled tomb in the church of Kirkstall Abbey (*Yorkshire*).⁷⁷ Many of these early records were actually concerned with the subsequent re-use of medieval tiles, rather than the discovery itself. The removal and possible rearrangement of medieval tiles by antiquaries has sometimes caused significant confusion and led to their misinterpretation. The first record of tiles at Fountains Abbey (*Yorkshire*), for example, comes in the form of a comment made by a visitor to the site in 1772.⁷⁸ “In the central part of the abbey, a circular pedestal is raised out of the fragments of the old pavement, on which is erected a mutilated heathen statue!”⁷⁹ This may be one of the earliest references to a structure like the high altar platform that can be seen at the site today (Fig. 1.1). The platform has been the subject of considerable debate, particularly in regard to the authenticity of its arrangement. The first drawing of the altar platform at Fountains came in 1782 and the first definite

⁷⁷ Stopford, *Medieval Floor Tiles of Northern England*, 265. For both the history and current condition of the tiles from Kirkstall Abbey, along with a selected list of relevant publications, see: *Site Gazetteer*, 292-293.

⁷⁸ For both the history and current condition of the tiles from Fountains Abbey, along with a selected list of relevant publications, see: *Site Gazetteer*, 285-287.

⁷⁹ William Gilpin ‘Observations Relative Chiefly to Picturesque Beauty made in the year 1772’ as quoted in: John Richard Walbran, *Memorials of the Abbey of St Mary of Fountains*, Vol. 2 Part 1 (Durham: Andrews & Co., 1878), 109.

reference to it came slightly later in 1791.⁸⁰ The drawing made in 1800 by the artist and antiquary William Fowler comprised several different mosaic patterns, and put together they form a substantial part of the high altar platform, though not in the order seen today.⁸¹ Whilst this platform does consist of medieval tiles, its arrangement is almost certainly post-medieval. John Richard Walbran, responsible for excavations at the site between 1845 and 1856, believed that whilst the tiles had been relaid at some point, it had been done in such a way that “the integrity of the design and old arrangement were strictly preserved.”⁸² In 1875 one writer describing the platform remarked that: “the whole was relaid in what is supposed to be its original position on the floor of the chancel about six years ago by a local mason.”⁸³ By the twentieth century, however, it was often repeated that the platform was an invention by John Aislabie, the owner of the site at the beginning of the eighteenth century.⁸⁴ Given that there is little evidence for similar arrangements in other locations it seems most likely that the altar platform at Fountains was the consequence of antiquarian rearrangement.⁸⁵ The platform can, therefore, be best understood as a sampler piece, collecting together the various mosaic designs that were found around the abbey in the eighteenth and nineteenth centuries.

The high altar platform at Fountains certainly fits within the pattern of antiquarian interest at other sites. At this time it was quite common for recently discovered tiles to be removed and then reused decoratively elsewhere. Tiles from the church pavement at Rievaulx Abbey (*Yorkshire*), for example, were reused around 1819 in one of the classical temples at nearby Duncombe Park (Fig. 1.2).⁸⁶ At Byland Abbey (*Yorkshire*) tiles were also removed and then relaid in 1843 in the

⁸⁰ “The fine tessellated pavement at the high altar is much loosed since I was last there: it might easily be repaired; and is the only thing not properly attended to in the whole park.” As quoted in Verax, “State of Fountains Abbey,” *The Gentleman’s Magazine* 61 (1791): 134.

⁸¹ Many of Fowler’s prints were originally printed separately, but were published together in 1804, with a first appendix added in 1809 and a second appendix added in 1824. William Fowler, “Principal Patterns of the Roman Floors at Fountains Abbey near Ripon, Yorkshire,” (hand-coloured engraving, Winterton, 1st February 1800).

⁸² Walbran, *Memorials of the Abbey of St Mary of Fountains*, Vol. 2 Part 1, 148; John Richard Walbran, *A Guide to Ripon, Harrogate, Fountains Abbey, Bolton Priory and Several Places of Interest in their Vicinity* (Ripon: W. Harrison, 1851), 76.

⁸³ J. B. Gass, “Tile pavement, high altar, Fountain’s Abbey,” *The Building News* 29 (1875): 586.

⁸⁴ William St John Hope, “Fountains Abbey,” *Yorkshire Archaeological Journal* 15 (1900): 300; A. W. Oxford, *The Ruins of Fountains Abbey* (Oxford: Oxford University Press, 1910), 38; Eames, *Catalogue*, Vol. 1, 73; Stopford, *Medieval Floor Tiles of Northern England*, 293-294.

⁸⁵ It is interesting to note that tiles from the high altar at Fountains were sold by Mr Stubbs of Ripon to the Yorkshire Philosophical Society in 1877. If the platform was merely reset in its original form, where would these extra tiles have come from? C. Wellbeloved, *A Handbook to the Antiquities in the Grounds and Museum of the Yorkshire Philosophical Society* (York: John Sampson, 1881), 131.

⁸⁶ For both the history and current condition of the tiles from Rievaulx Abbey, along with a selected list of relevant publications, see: Site Gazetteer, 296-297.

summerhouse of a neighbouring property.⁸⁷ Interestingly, by creating these new and complete pavements from excavated medieval tiles, early antiquarian interest anticipates the ideals of perfection and completeness that become evident later in the published drawings of medieval pavements and the laying of Gothic Revival pavements. The removal and rearrangement of medieval tiles was also part of an early antiquarian desire to collect specimens. The Society of Antiquaries, for example, possessed one of the earliest collections of medieval tiles. These consisted of a selection of so-called Norman tiles donated by John Henniker and first published in the late eighteenth century.⁸⁸ The holdings of museums today are often centred around these earlier antiquarian collections.⁸⁹ Such was the popularity of collecting tiles, however, that many nineteenth-century excavations were blighted by theft. At Fountains, for example, Walbran lamented that one of the better tiles had been “stolen, soon after its discovery, by some prowling ‘collector’”.⁹⁰

Another phase of antiquarian interest took the form of detailed recordings of excavations, with lengthier descriptions accompanied by plans and drawings. This type of recording was supported by the growing circulation of scholarly journals at this time.⁹¹ Interest surrounded the most exceptional pavements, along with heraldic tiles and complex figural designs with literary references.⁹² The mosaic pavement in Prior Crauden’s Chapel at Ely Cathedral was the focus of some of the earliest scholarship on the subject of medieval tile pavements.⁹³ Richard Gough, president of

⁸⁷ Stopford, *Medieval Floor Tiles of Northern England*, 265. For both the history and current condition of the church pavement at Byland Abbey, along with a selected list of relevant publications, see: *Site Gazetteer*, 280-281.

⁸⁸ John Henniker-Major, *Two Letters on the Origin, Antiquity & History of Norman Tiles Stained with Armorial* (London: John Bell, 1794); A. Barrett, “Fine Old Painted Tiles,” *Gentleman’s Magazine* 66 (1789): 211-212; A. Barrett, “Remarks on Tiles from Caen,” *Gentleman’s Magazine* 60 (1790): 710-711.

⁸⁹ The collection made in the twentieth century by the Duke of Rutland, for example, is now a major part of the British Museum’s collection of medieval floor tiles.

⁹⁰ Walbran, *Memorials of the Abbey of St Mary of Fountains*, Vol. 2 Part 1, 89.

⁹¹ Philippa Levine, *The Amateur and the Professional: Antiquarians, Historians, and Archaeologists in Victorian England 1838-1886* (Cambridge: Cambridge University Press, 1986); Stopford, *Medieval Floor Tiles of Northern England*, 266.

⁹² The thirteenth-century chapter house pavement at Westminster Abbey has always drawn interest due to its complete state and remarkable designs. The complex figural tiles from Chertsey Abbey, also dating to the mid-thirteenth century, were equally much studied by antiquaries. Wight, *Mediaeval Floor Tiles*, 2; Stopford, *Medieval Floor Tiles of Northern England*, 1.

⁹³ The fourteenth-century pavement in Prior Crauden’s Chapel is discussed in greater detail in Chapter Five, 132. One of the reasons why Prior Crauden’s pavement may have been closely studied at such an early date is because of contemporary interest in Roman mosaic pavements. From the early eighteenth century onwards, Roman mosaic pavements were being illustrated and published by the likes of Samuel Lysons and William Fowler. This overlap between interest in Roman mosaic pavements and the mosaic pavement in Prior Crauden’s Chapel is evident in Fowler’s drawing of Crauden’s pavement, which is labelled a ‘Roman floor’. David Neal and Stephen Cosh, *Roman Mosaics of Britain*, Vol. 1 (London: The Society of Antiquaries of London, 2002); Sarah Ann Scott, “Samuel Lysons and His Circle: Art, Science and the Remains of Roman Britain,” *Bulletin of the History of Archaeology* 23 (2013): paras. 1-84, accessed 20th October 2019, <https://www.archaeologybulletin.org/articles/10.5334/bha.2323/>.

the Society of Antiquaries, published an account of the pavement in the Society's journal *Archaeologia* in 1792.⁹⁴ This was followed in 1801 with a plan drawn by Fowler (Fig. 1.3) and then in 1803 by another account in *Archaeologia*, this time by the architect William Wilkins, which also included a plan of the pavement (Fig. 1.4).⁹⁵ At the time of their writing the chapel functioned as a two-room dwelling and was not restored to its original form as a chapel until later that century.⁹⁶ In his account Gough described only the altar platform, which may well indicate that the entire pavement had not been uncovered for his inspection. However, both the plans drawn by Fowler and Wilkins depicted the whole pavement, which suggests that the rest of the pavement had by that point either been totally revealed or at least further sections uncovered. There was growing attention at this time to the importance of accurate drawings for research purposes. Carter, for example, was a notable proponent for accuracy and a draughtsman for the Society of Antiquaries.⁹⁷ However, a close examination of the plans by Fowler and Wilkins reveals that, whilst they might strive for accuracy, antiquarian publications can be misleading, particularly in their attempt to find order and pattern.

A comparison of the two plans reveals a number of differences. Wilkins, for example, showed diamond shaped tiles being used along the north wall, whereas Fowler depicted square tiles in this position. This disparity may be explained by the disruption caused by the insertion of a fireplace along the north wall when the chapel was used for domestic purposes after the seventeenth century (Fig. 1.5). When creating their plans Fowler and Wilkins made different decisions about what design may have been there originally. For Wilkins this was an arrangement of square and then diamond shaped tiles that could also be found *in situ* along the south wall (Fig. 1.6). Fowler, however, decided to continue the square tiles from the western end of the north wall all the

⁹⁴ Richard Gough, "A Mosaic Pavement in the Prior's Chapel at Ely," *Archaeologia* 10 (1792): 151-5 and Plate XVI. For an account of Gough's life see: R.H. Sweet, "Gough, Richard (1735-1809)," *Oxford Dictionary of National Biography*, 2004, accessed 15th July 2015, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/11141>.

⁹⁵ William Fowler, "Principal Patterns of the Roman Floor in Prior Crawden's Beautiful Chapel at Ely," (hand-coloured engraving, Winterton, 20th May 1801). For an account of Fowler's life see: Anita, McConnell, "Fowler, William (1761-1832)," *Oxford Dictionary of National Biography*, 2004, accessed 21st December 2015, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/10016>. William Wilkins, "An Account of the Prior's Chapel at Ely," *Archaeologia* 14 (1803): 105-112 and Plate XXVIII. For an account of Wilkins' life see: R. Windsor Liscombe, "Wilkins, William (1778-1839)," *Oxford Dictionary of National Biography*, 2004, accessed 15th July 2015, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/29422>.

⁹⁶ Peter Meadows, "Cathedral Restoration: Fabric and Furnishings 1836-1980," in *A History of Ely Cathedral*, ed. Peter Meadows and Nigel Ramsey (Woodbridge: Boydell Press, 2003), 310.

⁹⁷ Carter believed that good antiquarian drawings were for information and instruction purposes and disapproved of 'picturesque appearances' made by artists. Sam Smiles, "The Art of Recording," in *Making History: Antiquaries in Britain 1707-2007*, ed. Starkey and Gaimster, 124. For details on the life and work of John Carter see: J. Mordaunt Crook, *John Carter and the Mind of the Gothic Revival* (Leeds: W. S. Maney & Son, 1995); J. Mordaunt Crook, "Carter, John (1748-1817)," *Oxford Dictionary of National Biography*, 2004, accessed 17th January 2016, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/4791>.

way to the altar step at the east. Whilst a modern plan would depict Prior Crauden's pavement exactly as it is, it is typical of antiquarian records to show how the pavement might once have been. As a result, if there was not enough evidence, as in the case of Prior Crauden's pavement, it was sometimes necessary to make something up rather than leave it blank.⁹⁸ The overall neatness of the plans made by Fowler and Wilkins also needs to be questioned. The division between the various designs on the altar platform and along the edges of the central pavement lack today the coherence shown in both nineteenth-century plans. It is possible that some damage dates to later that same century when the building was restored to a chapel. Yet it is equally possible to suggest that Fowler and Wilkins filled in gaps or areas of disarrangement to create an image of how they thought the pavement was originally intended to look.

Antiquarian records, therefore, are a product of their time. Nineteenth-century fashion and aesthetics can be seen in the plans and drawings of medieval pavements and tiles. Pavements are shown perfected rather than disorganised, and tiles are shown as complete rather than broken. These records do not always depict reality, but rather an 'improvement'. They show what medieval tile pavements could have looked like if nineteenth-century technology had been available to the original craftsmen. These plans created by antiquaries also give a bird's-eye-view of medieval pavements. Whilst this remains the standard method of depicting pavement plans, nevertheless it is a vantage point that few, if any, medieval viewers would have been able to enjoy. Nowhere is the 'improvement' of medieval pavements more evident than in Shaw's 1858 publication *Specimens of Tile Pavements Drawn from Existing Authorities*.⁹⁹ In *Specimens* Shaw published, for example, a coloured engraving of the eastern half of the chapter house pavement at Westminster Abbey.¹⁰⁰ Careful study of this plan, however, reveals several anomalies (Fig. 1.7). Along the eastern wall a set of heraldic tiles are omitted and instead replaced with a set of rose window tiles. Also excluded in Shaw's engraving are five of the six inscriptions and one set of picture tiles. These omissions are perhaps unsurprising considering that the wooden boarding which covered the pavement had not been entirely removed during the 1841 inspection from which all antiquarian drawings were based. It is also worth noting that the arrangement of tiles around the central column and along the south-eastern wall were regularised by Shaw into neat divisions of matching tiles. Yet again the

⁹⁸ This way it was then possible to create as complete a record of the pavement as possible. A similar approach can be identified in other drawings made by Fowler of Roman mosaic pavements. In a number of these there are elements that are coloured, which indicate surviving portions of pavement, and elements that are left uncoloured. The uncoloured areas show how incomplete areas of mosaic might have continued or been connected together.

⁹⁹ Shaw, *Specimens*.

¹⁰⁰ The thirteenth-century Westminster Abbey chapter house pavement is discussed in greater detail in Chapter Two, 62.

nineteenth-century antiquary chose to present medieval pavements as whole, tidy and correct. It does not take a specialist to realise that this view paints a rather inaccurate picture of the medieval tile pavement.

Shaw's approach was in accordance with the tenor of other antiquarian publications from the eighteenth and nineteenth centuries. Tile designs, for example, were almost always shown as complete. The collation onto a single page of the best or most interesting tile designs, regardless of chronology or geography, was also generally a feature of antiquarian publications.¹⁰¹ Furthermore, Shaw was not the first antiquary to illustrate both medieval pavements and individual tile designs.¹⁰² Antiquarian plans of medieval pavements, however, were typically concerned with recording the past in the interest of scholarly research. In contrast, Shaw's *Specimens* presents medieval pavements as beautiful and colourful objects that were pleasing to the eye. Shaw had been elected as a fellow of the Society of Antiquaries as early as 1833 and his reproductions of medieval ornament and artefacts certainly appear to have been much prized, with John Ruskin counted amongst his customers. His published volumes were often large in size, with whole page plates printed in vivid colour, very similar in effect to the coffee-table art books of the present day. *Specimens*, for example, depicted fifty pages of one-hundred-and-twenty tile designs and fourteen partial pavement plans from thirty-one different locations. His work set a standard of finish and form that satisfied not only antiquaries, but also a wider Victorian audience.¹⁰³ This, however, leads to the crux of the problem with *Specimens*. Shaw's prints were not simply a matter of antiquarian interest to record and preserve the past. Instead they were also designed to appeal visually to his contemporary audience. *Specimens* is not necessarily concerned with depicting the medieval past as it actually was, or indeed, exactly how it was found at the time of discovery. As well as visual appeal, Shaw also hoped that his contemporaries would gain practical educational benefits from his drawings. He anticipated that they "would not only be acceptable to the antiquary, but might prove available for practical purposes as suggestive of improvements in the actual use of such pavements."¹⁰⁴ Antiquarian records of medieval pavements were, therefore, in keeping with other

¹⁰¹ For example see: John Gough Nichols, *Examples of Decorative Tiles, Sometimes Termed Encaustic* (London: J. B. Nichols and Son, 1845); John Henry Parker, *A Glossary of Terms used in Grecian, Roman, Italian and Gothic Architecture* (Oxford: John Henry Parker, 1840), Plates 86 and 87.

¹⁰² In the late eighteenth century, for example, John Carter had published several plans of medieval pavements. In the decade before the publication of Shaw's *Specimens*, Alwyne Compton had also made several drawings of medieval pavements. Carter, *Specimens of the Ancient Sculpture and Painting*, Vol. 2.

¹⁰³ For an account of Shaw's life see: Rowan Watson, "Shaw, Henry (1800-1873)," *Oxford Dictionary of National Biography*, 2004, accessed 7th December 2016, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/25251>.

¹⁰⁴ Henry Shaw, "Specimens of Tile Pavements Drawn from Existing Authorities," *Archaeological Journal* 9 (1852): 210-211.

nineteenth-century scholarship on architecture, ornament and stained glass. It was a time when art and architecture, both medieval and otherwise, were being classified into sets and typologies.¹⁰⁵ There was also a strong desire to provide principles and offer models to guide the architect and artist working in the Gothic Revival style. *Specimens*, and similar publications, could then be understood as design books providing models during a period in which tile pavements were once again at the height of fashionable popularity.

Antiquaries and the Gothic Revival Movement

In the middle of the nineteenth century antiquarian records of medieval pavements received a boost from the production of new Gothic Revival pavements. Existing records of medieval tiles strongly influenced the designs being produced by Victorian tile-makers, whilst new records were made for the specific purpose of being replicated in Gothic Revival pavements.¹⁰⁶ In the 1840s and 1850s the enthusiasm behind the tile market was primarily from antiquaries and architects involved in restoration projects. The Cambridge Camden Society, founded in 1839, and their journal *The Ecclesiologist*, first published in 1841, were enormously influential on church restorations undertaken during this period. They not only supported the use of encaustic tiles, but also laid a pavement 'based on ancient example' in Cambridge's Round Church (*Cambridgeshire*), where they were closely involved in the restoration.¹⁰⁷ As a consequence of this restoration work, new tile designs were typically copies of existing medieval specimens or at least closely inspired by them.

¹⁰⁵ Thomas Rickman's 1817 publication *An Attempt to Discriminate the Styles of English Architecture* is one well-known example of this type of scholarship. The terms he used to categorise and differentiate between architectural styles – such as Early English, Decorated and Perpendicular – are still in use today. Alexandrina Buchanan, *Robert Willis (1800-1875) and the Foundation of Architectural History* (Woodbridge: The Boydell Press, 2013); Calloway, "Antiquaries and the Arts," 165. Other examples of this type of scholarship include: Owen Jones, *The Grammar of Ornament: Illustrated by Examples from Various Styles of Ornament* (London: Day and Son, 1856); Pugin, *The True Principles of Pointed or Christian Architecture*; Nathaniel Westlake, *A History of Design in Painted Glass* (London: James Parker & Co., 1879); Charles Winston, *An Inquiry into the Difference of Style Observable in Ancient Glass Paintings: especially in England with Hints on Glass Painting* (Oxford: John Henry Parker, 1847).

¹⁰⁶ George Maw, of the Maw & Co. tile company, travelled to north-east England in 1863 and made records of several pavements. Stopford, *Medieval Floor Tiles of Northern England*, 267; Jennie Stopford, "Nineteenth Century Antiquarians and Medieval Tiles," (conference paper, TACS 25th anniversary conference Church Ceramics: Decorative tiles, mosaic and terracotta during and after the Gothic Revival, Ironbridge Gorge Museum Trust, Shropshire, 6th-7th October 2006).

¹⁰⁷ They believed that 'restoration' could be achieved in a number of ways including uncovering original features, repairing damaged features or reconstructing lost features based on evidence. Miele, "Re-Presenting the Church Militant: the Camden Society, Church Restoration and the Gothic Sign," 257-294. For more on the Round Church see: Nikolaus Pevsner, *The Buildings of England: Cambridgeshire* (Harmondsworth: Penguin, 1970).

Herbert Minton monopolised commissions during this period.¹⁰⁸ Minton began to develop an interest in the production of tiles during the 1830s and bought a share in Samuel Wright's patent for the manufacture of inlaid tiles. By 1840 Minton had also bought a share in Richard Prosser's patent for dust-pressing, which allowed tiles to be produced much more quickly. Minton was among the first to produce tiles both in quantity and quality; this success and his flair for promotion ensured him commissions.¹⁰⁹

The restoration of the pavement at Temple Church was the first time that antiquarian interest in medieval tiles crossed with the practical developments occurring within the tile industry as a result of the popularity of the Gothic Revival. In 1840 the Societies of the Inner and Middle Temple decided that their church ought to be fully restored after several earlier inadequate restorations.¹¹⁰ The architect L. N. Cottingham, along with several of his contemporaries, were requested by the Societies to examine the fabric of the whole church and make a report on its condition. The choice of Cottingham is itself indicative of the almost scholarly approach of the restoration process, for he was at this time a known and respected architect, antiquary and preservationist. Cottingham had worked in the 1820s on the restoration of Rochester Cathedral (*Kent*) and a decade later on St Albans Cathedral (*Hertfordshire*).¹¹¹ He believed in preserving as

¹⁰⁸ For an account of Minton's life see: Joan Jones, "Minton, Herbert (1793-1858)," *Oxford Dictionary of National Biography*, 2004, accessed 17th January 2016, <http://www.oxforddnb.com.ezproxyyork.ac.uk/view/article/18816>. For details on Minton's company see: Paul Atterbury, *The Story of Minton from 1793 to the Present Day* (Stoke-on-Trent: Royal Doulton Tableware, 1978); Joan Jones, *Minton: The First Two Hundred Years of Design and Production* (Shrewsbury: Swan Hill, 1993).

¹⁰⁹ During the height of their popularity the front page of Minton catalogues listed some of the prestigious commissions they had undertaken. The 1881 catalogue, for example, included "the Cathedrals of Ely, Lincoln, Lichfield, Gloucester, Westminster, Wells, Glasgow, Armagh, St Giles' Edinburgh, Dunblane..." During Herbert Minton's time (tile production began in earnest during the 1840s and Minton died in 1858) some one-hundred-and-fifty churches were paved with his encaustic tiles.

¹¹⁰ For a history of Temple Church and its restoration see: Sydney Smirke, *An Account of the Temple Church* (London: John Weale, 1844); David Lewer, *The Temple Church* (London: Pitkin Pictorials, 1971); Lindy Grant, ed., *Medieval Art, Architecture and Archaeology in London*, British Archaeological Association Conference Transactions X (Leeds: W.S. Maney, 1990); Robin Griffith-Jones, *The Temple Church: A History in Pictures* (London: Robin Griffith-Jones, 2008); Robin Griffith-Jones and David Park, *The Temple Church in London: History, Architecture, Art* (Woodbridge: Boydell, 2010); J. Mordaunt Crook, "The Restoration of the Temple Church: Ecclesiology and Recrimination," *Architectural History* 8 (1965): 39-51.

¹¹¹ For an account of Cottingham's work and life see: L. H. Cust and Janet Myles, "Cottingham, Lewis Nockalls (1787-1847)," *Oxford Dictionary of National Biography*, 2004, accessed 18th January 2016, <http://www.oxforddnb.com.ezproxyyork.ac.uk/view/article/6402>; Janet Myles, *L. N. Cottingham 1787-1847: Architect of the Gothic Revival* (London: Lund Humphries, 1996), 65-156. For more on Rochester Cathedral see: Tim Ayers and Tim Tatton-Brown, ed., *Medieval Art, Architecture and Archaeology at Rochester*, British Archaeological Association Conference Transactions XXVIII (Leeds: Maney Publishing, 2006); John Philip McAleer, *Rochester Cathedral 604-1540: An Architectural History* (London: University of Toronto Press, 1999). For more on St Albans Cathedral see: Martin Biddle and Birthe Kjølbye-Biddle, "England's Premier Abbey: The Medieval Chapter House of St Albans Abbey, and its Excavation in 1978," *Expedition* 22 (1980): 17-32; Martin Henig and Phillip Lindley, ed., *Alban and St Albans: Roman and Medieval Architecture, Art and Archaeology*, British Archaeological Association Conference Transactions XXIV (Leeds: British Archaeological Association, 2001).

much of an original building as possible and this was certainly the tenor of the works that took place at Temple Church. The Societies were, for example, “exceedingly anxious that every part of their Church should be restored and adorned in the most correct manner”, whilst *The Gentleman’s Magazine* described the restoration as being “carried out with true antiquarian feeling.”¹¹²

During the restoration of 1840 the black and white marble floor was removed and traces of the original medieval tile pavement were discovered. The tiles were recorded and a selection of the designs were published by the sculptor and amateur archaeologist Edward Richardson in 1845.¹¹³ It was decided that the tiles would be replaced with new versions and the new pavement would be laid at the original lower level of the medieval floor.¹¹⁴ It was, however, thought necessary that the tiles should be not only sympathetic in stylistic character to the church, but also that their arrangement within the pavement ought to follow a precedent set by pavements of a similar date to the building. To that end Cottingham, and the architect overseeing the restoration of Temple Church, James Savage, examined the chapter house pavement at Westminster Abbey.¹¹⁵ The Westminster chapter house had been for much of its life since the late sixteenth century a record office and its floor had been covered with wooden boarding. When this boarding was removed for Cottingham and Savage’s inspection the pavement beneath was found to be well preserved.¹¹⁶ In 1841 Minton was employed to create tiles for a pavement that would be based on these findings from Westminster (Fig. 1.8).¹¹⁷

In his 1843 account of the restoration William Burge, an antiquary and member of the Temple, confirmed that “the encaustic tiles which have been laid down have not disappointed the expectation which was formed of their general effect, and of their keeping with the style and character of the Church.”¹¹⁸ The restoration of the pavement at Temple Church and the investigation

¹¹² Sylvanus Urban, “Repairs of the Temple Church, London,” *The Gentleman’s Magazine* 15 (1841): 18.

¹¹³ Edward Richardson, *The Ancient Stone & Leaden Coffins, Encaustic Tiles, etc. Recently Discovered in the Temple Church* (London: Longman, Brown, Green and Longmans, 1845), Plate VIII.

¹¹⁴ Concrete was also placed beneath the new pavement to prevent dampness. William Burge, *The Temple Church: An Account of its Restoration and Repairs* (London: William Pickering, 1843), 29; Sydney Smirke, *Illustrations of the Architectural Embellishments and Painted Glass of the Temple Church, London* (London: John Weale, 1845), 6.

¹¹⁵ The pavement at Westminster Abbey dates somewhere between 1253 and 1259 (see Chapter Two, note 170), whilst at Temple Church the enlarged choir was consecrated in 1240. Burge, *The Temple Church*, 45-6; Griffith-Jones and Park, *The Temple Church in London*, 201, 205, 209.

¹¹⁶ Cottingham described in a letter dated January 1841 and published in *Archaeologia* that: “to our great delight, we found the original pavement in a very perfect state, with scarcely a tile broken, and the colours, in many parts, as brilliant as when it was first laid.” Lewis Cottingham, “Tile Pavement of the Chapter House at Westminster,” *Archaeologia* 29 (1842): 390-391.

¹¹⁷ After the bombing that damaged Temple Church in 1941 the surviving tiles were removed and relaid in the triforium of the rotunda by Walter Godfrey, who had been appointed architect of the restoration in 1947. The floor was then replaced with plain stone.

¹¹⁸ Burge, *The Temple Church*, 45-46.

of the Westminster chapter house pavement had far-reaching consequences. Contained within his report of the visit to Westminster in 1841 Cottingham included drawings of the tile designs he had seen. In 1842 John Gough Nichols used these drawings as templates for his own, publishing twenty-four of the designs in his *Examples of Decorative Tiles*.¹¹⁹ Nichols intended his book not only as a work of scholarship but also as practical instruction “to furnish patterns or models to those who might undertake the manufacture of ornamental pavements.”¹²⁰ Minton’s first printed catalogue in 1842 included illustrations of the designs that his company had made for Temple Church, but most of the other designs were also based upon medieval tiles copied from antiquarian publications such as Nichols’ *Examples*.¹²¹ What is particularly interesting about these drawings and Minton’s pavement at Temple Church is that whilst they do indeed reproduce medieval designs, they are not actually identical. In fact, they are markedly different, with more elaborate and delicate features rather than the bold and plain original designs (Fig. 1.9). The visit to Westminster was part of an effort to select designs of the highest calibre. The original designs from Temple Church may have been perceived as clumsier than those found at Westminster and so perhaps could be ‘improved’ to raise them to a similar level. Temple Church is an example of antiquarian concern meeting new artistic ability and production techniques, and the outcome is very typical of the Gothic Revival. The medieval past was a source of inspiration, but the Victorians could do things better.

As a result, it is important to remember that Gothic Revival pavements were not, and could not be, the same as their medieval counterparts. Some writers, such as the Reverend Edward Cutts, attempted to establish the principles of medieval pavements in order to act as a guide for architects and designers working in the Gothic Revival style. In his 1854 *Essay on Church Furniture and Decoration*, Cutts stated that:

Some of the modern tiles which were made at the commencement of the revival of the art were highly glazed and in the pavement composed of them the pattern was lost in the reflected light, and the whole floor had moreover a look of uncomfortable lubricity which was particularly offensive...a much more frequent fault is that of injuring the effect of the old designs, by copying them with a certain

¹¹⁹ Nichols’ book *Examples of Decorative Tiles* was originally printed in four successive parts from 1842, before being finally published together in 1845. For an account of Nichols’ life and works see: Julian Pooley and Robin Myers, “Nichols family (per. c.1760-1939),” *Oxford Dictionary of National Biography*, 2004, accessed 18th January 2016, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/63494>.

¹²⁰ Nichols, *Examples of Decorative Tiles*.

¹²¹ Minton & Co., *Examples of old English Tiles Manufactured by Minton and Co Stoke upon Trent and Sold by Wyatt Parker and Co. Holland Street London* (London: Wyatt, Parker & Co., 1842).

over-neatness and prettiness, which may look more satisfactory perhaps in the single tile, but is not so effective in the pavement.¹²²

The designs selected from pattern books, manufacturer catalogues or archaeological investigations may have been authentic, but their effect as part of a whole floor was substantially different. This must always be taken into consideration, as medieval pavements can be subject to unfair visual comparison with nineteenth-century examples. Gothic Revival pavements may have been inspired by the medieval past, but they were always a product of the nineteenth century and its attitudes and taste.

A Gothic Revival Pavement in York Minster

The Gothic Revival was of course more than just the sympathetic restoration and decoration of medieval buildings. Whilst it was a style that gained significant support from antiquaries and cathedral architects, its roots were firmly embedded within the romanticism of the eighteenth century. Entirely new buildings were commissioned in the Gothic style and the decorative arts became more ambitious and less dependent upon the accurate representation of the medieval past.¹²³ Likewise, tiles found applications beyond restoration. The chapter house pavement at York Minster is an example of an ecclesiastical Gothic Revival pavement which, whilst taking inspiration from the design and layout of medieval pavements, had no historical precedent. Despite its size and quality the York chapter house pavement has not previously received any serious study, nor has its importance in the early history of Gothic Revival pavements been appropriately highlighted. This is, therefore, the first attempt at a full description of the pavement and a discussion of its tile designs.

The centrally-planned chapter house was built in the late thirteenth century on the north side of the Minster and connected to the eastern aisle of the north transept via an L-shaped vestibule (Fig. 1.10).¹²⁴ The chapter house provided a dedicated space for the daily meetings of the Chapter and the weekly meetings which would have included matters of discipline for the lower members of clergy. However, the chapter house had more space and more seats than would have been required for these routine matters.¹²⁵ The chapter house was, therefore, not simply a

¹²² Cutts, *An Essay on Church Furniture and Decoration*, 90-95.

¹²³ Hall, "What do Victorian Churches Mean? Symbolism and Sacramentalism in Anglican Church Architecture 1850-1870," 80.

¹²⁴ For a full description of the chapter house at York Minster see: Sarah Brown, *'Our Magnificent Fabrick' York Minster: An Architectural History, c. 1220-1500* (Swindon: English Heritage, 2003), 46-85.

¹²⁵ There are forty-four seats in the chapter house, but York only had a full complement of forty clerics and far fewer resident canons than other secular cathedrals. Brown, *'Our Magnificent Fabrick'*, 56-57.

functional building. It was also a piece of architecture designed to impress outsiders and advertise the status of York and its Chapter. The chapter house was one of the most elaborately decorated parts of York Minster with every surface colourful with decoration (Fig. 1.11). There were seven stained glass windows, the wooden vault was painted, the canopies of the canons' stalls were adorned with sculpture, the Purbeck marble shafts were decorative and even the fictive lights of blind tracery of the eighth 'window' were painted onto the stone. Within this context of rich adornment on every surface it would be expected that the floor was also decorative, but no trace of the original medieval floor of the chapter house remains.¹²⁶ In several eighteenth-century engravings the chapter house was depicted with plain rectangular slabs.¹²⁷ By the nineteenth century John Browne, in his account of the Minster, described how the chapter house vestibule pavement consisted of monumental slabs, whilst the pavement of the chapter house itself was "recommended neither by its beauty nor antiquity."¹²⁸

The chapter house underwent repairs and change throughout its history, but the biggest restoration occurred between 1844 and 1845 under the direction of Sydney Smirke.¹²⁹ In a will dating to December 1843 a bequest of £3,000 was provided for the restoration of the chapter house "to its ancient good condition and grandeur".¹³⁰ During the restoration the sculptures were renewed, some of the Purbeck marble shafts replaced and the vault re-painted. The stone floor was lifted so that underfloor heating could be installed. This involved the laying of hot water pipes which were covered with cast iron grilles around the perimeter of the floor. A decorative tile pavement was then laid.¹³¹ Earlier in 1841 Smirke had been involved in the restoration of Temple Church, where he described Minton's tiles as a "new manufacture of great beauty."¹³² It is, therefore, unsurprising to find that less than five years later Smirke commissioned Minton to create a Gothic

¹²⁶ It is not impossible that the York chapter house had a medieval pavement, but there are no extant tiles in the Minster collection claiming to be from this location.

¹²⁷ Francis Drake, *Eboracum: The History and Antiquities of the City of York, from its Origin to the Present Time; together with the History of the Cathedral Church and the Lives of the Archbishops* (London: William Bowyer, 1736), 476; Joseph Halfpenny, *Gothic Ornaments in the Cathedral Church of York* (York: J. Todd & Sons, 1795), Plate 102.

¹²⁸ John Browne, *The History of the Metropolitan Church of St Peter, York* (London: Longman, 1847), 329.

¹²⁹ Brown, 'Our Magnificent Fabrick', 46-85, 300.

¹³⁰ Browne, *The History of the Metropolitan Church of St Peter, York*, 327; Brown, 'Our Magnificent Fabrick', 300; York Minster Library and Archives, H11/1.

¹³¹ At the start of the restoration project it appears as if the plan had been to pave the chapter house with Huddlestone stone. (York Minster Library and Archives, H11/1, 73). In 1845 work on the encaustic tile pavement was undertaken between 22nd June – 26th August and 27th October – 3rd November. A specialist team of three men and one boy were brought specifically to York in order to lay the pavement. (York Minster Library and Archives, B/3/6/1).

¹³² Smirke, *Illustrations*, 6

Revival pavement at York.¹³³ Whilst it is commonly repeated that the tile pavement was manufactured by Minton, it was actually Wyatt, Parker & Co. who were paid by the Minster Restoration Committee for the encaustic tiles.¹³⁴ They were a cement manufacturing company, who may have been Minton's representatives in London, but who certainly had a number of other connections to Minton. The company, for example, are named on Minton's 1842 catalogue as the agent selling his tiles.¹³⁵ By 1848 a London property formerly owned by Wyatt, Parker & Co. was occupied by Minton. John Blashfield, a partner in Wyatt, Parker & Co., had also previously worked closely with Minton in 1843 to create tessellated pavements.¹³⁶

The layout of the York pavement appears at first glance extremely complex, but the repeated use of a limited number of panel designs prevents the pavement from becoming too overwhelming (Figs. 1.12 and 1.13). The pavement uses the octagonal shape of the room by dividing the pavement into concentric octagons separated by borders. The first and innermost octagon marks the centre of the pavement with a cross that is made up of five sets of large squares and surrounded by rectangular border tiles (Fig. 1.14). The second octagon is laid entirely with the same single tile design. It is separated from the third octagon by a border the combined width of two square tiles and two rectangular tiles (Fig. 1.15). The third octagon consists of eight panels divided by eight borders radiating from the centre. This is by far the largest octagon. The eight panels can be divided into Panel Design A and Panel Design B. Panel Design A is repeated four times on the four square sides of the central cross, whilst Panel Design B is repeated four times on the diagonal edges of the central cross. Panel Design A consists of sets of sixteen (4x4) and nine (3x3) tiles arranged in a square and laid diagonally (Fig. 1.16). Panel Design B consists of sets of sixteen (4x4) tiles arranged in squares and laid diagonally. The 4x4 sets are made more complex by the inner four tiles being of one design and the surrounding twelve tiles being of another design (Fig. 1.17). Both panel designs make effective use of plain tiles. The pavement is completed by another border the combined width of two square tiles and two rectangular tiles (Fig. 1.15).

¹³³ With personal thanks to Jillian Echlin for sharing her thoughts about the pavement during her research into the restoration of the York Minster chapter house. Jillian Echlin, "Richly Coloured and Gilt: Redefining the Role of Polychrome Decoration in the Chapter House at York Minster," (masters dissertation, University of York, 2016).

¹³⁴ The minute books of the Minster Restoration Committee record that £150 was paid in September 1845 to Wyatt, Parker & Co. for encaustic tiles. (York Minster Library and Archives, B/3/4/3). The remainder of the balance, £215 4s 9d, was subsequently paid in 1846. (York Minster Library and Archives, B/3/6/1).

¹³⁵ Minton & Co., *Examples of old English Tiles Manufactured by Minton and Co Stoke upon Trent and Sold by Wyatt Parker and Co. Holland Street London.*

¹³⁶ For a full account of Blashfield's life and work see: John F. H. Smith, "Blashfield, John Marriott (1811-1882)," *Oxford Dictionary of National Biography*, 2004, accessed 16th May 2019, <https://doi-org.libproxy.york.ac.uk/10.1093/ref:odnb/49435>.

There are forty-six tile designs used in the York pavement (Fig. 1.18).¹³⁷ These vary from simple geometric patterns to more complex floriated patterns. Forty-two of these can be found in Minton's catalogue published in 1842. From these forty-two designs, seven were originally taken from the 1840 edition of Henry Parker's *Glossary of Terms used in Grecian, Roman, Italian and Gothic Architecture* and an additional seven taken from Nichols' *Examples*.¹³⁸ As has been shown, it was common practice for nineteenth-century tile makers to copy from original medieval designs published by antiquaries. That five of the designs in the York pavement are originally from the Westminster chapter house is also not unexpected.¹³⁹ The Westminster designs, as previously discussed, had been reproduced in 1841 by Cottingham for the purpose of providing Minton with models for the new pavement at Temple Church. The designs Minton created for that project were then integrated into his catalogue. What is surprising, however, is that the York pavement does not utilise any of the more complex and noteworthy animal or figural designs from Westminster. Four tile designs were created specifically for York and are given special prominence within the chapter house pavement.¹⁴⁰ Three of the designs are found only within the central cross of the pavement (Fig. 1.19). They are of a larger size than other tiles in the pavement and produced on more unusually coloured blue and green tiles.¹⁴¹ As a consequence they stand out from the rest of the pavement.

Two of the special York designs include the cross-keys which are one of the attributes of St Peter, the saint to whom the Minster is dedicated. These designs are then an entirely appropriate commission for the chapter house pavement. The cross-key design, however, was perhaps chosen for the York Minster chapter house for another, and equally appropriate, reason. The design found

¹³⁷ Figs. 1.12-1.18 are all the author's own drawings and are based upon photographs taken on site.

¹³⁸ The designs copied from these publications are marked in the table in Fig. 1.18. Parker, *A Glossary of Terms*, Plates 86 and 87; Nichols, *Examples of Decorative Tiles*, Numbers 32-52.

¹³⁹ The five designs are marked in the table in Fig. 1.18. They are identical to the Westminster chapter house examples except from the size of the tile.

¹⁴⁰ The final bill for the chapter house pavement records that £8 8s 0d was charged for the creation of "four moulds for new tiles made especially for this floor as per order." (York Minster Library and Archives, B/3/6/1). Whilst it was common practice to take commissions for original tile designs, moulds were usually only charged when they were unsuitable for reuse elsewhere. Jones, *Minton: The First Two Hundred Years of Design and Production*, 160.

¹⁴¹ The final bill for the pavement records that £3 8s 6d was charged for the blue and green tiles. (York Minster Library and Archives B/3/6/1). These tiles measure approximately 180mmx180mm. The majority of the other square tiles measure approximately 150mmx150mm and the rectangular border tiles measure 150mmx105mm. The border of the fifth octagon uses a smaller size of rectangular border tile measuring 150mmx75mm. The chapter house pavement at York represents one of the earliest uses of Minton's polychrome tiles. Another early example of these tiles can be seen in the Lady Chapel pavement at Wells Cathedral, which was laid in 1847. The colour of medieval tiles was dependent on the natural colour of the clay and its combination with certain glazes. Nineteenth-century encaustic tiles, however, could be made from clays coloured with metallic oxides. Noel Riley, *Tile Art: A History of Decorative Ceramic Tiles* (London: Magna Books, 1987), 98.

in the central octagon consists of a set of cross-keys within a diagonally-laid square, and around the four sides of this square are semi-circles (Fig. 1.20).¹⁴² If the semi-circles are removed the central part of this nineteenth-century design is in fact an exact copy of a fourteenth-century tile from the Minster. The circular handles are the same, so too is the shape of the keys themselves and the fleur-de-lis in each of the four corners. The cross-key design, along with nine other tile designs reportedly from a pavement before the altar in St Nicholas' Chapel in York Minster, was published by Fowler in 1801 (Fig. 1.21).¹⁴³ It was important to Minton, and to architects like Smirke, to reproduce tiles that could be connected to the site they were restoring. This was evident at Temple Church in 1841 and it was quite common for architects to send specimens of original medieval tiles with their order for new tiles.¹⁴⁴ At York there was no evidence for a decorated medieval tile pavement in the chapter house, but the tiles from St Nicholas' Chapel may have provided suitable inspiration. The arrangement of the cross-key designs within the pavement layout was also carefully chosen to once again visually highlight the importance of these special designs. The cross-key design copied from St Nicholas' Chapel can be found in the central octagon, set between the arms of the pavement's cross. A central location usually implies significance or importance. More interesting, however, is the arrangement of the second cross-key design.¹⁴⁵ This design can be found in both Panel Design A and Panel Design B. The position of the tiles in both panels is approximately the same distance from the central octagon. When viewed from above the cross-key design creates a separate octagon of its own within the pavement (Fig. 1.22).¹⁴⁶ It is clear, therefore, that the tile designs commissioned for the York chapter house pavement were laid in a specific and meaningful way.

¹⁴² This design is labelled YD44 in the Table of Tile Designs from York Minster Chapter House pavement (see Fig. 1.18).

¹⁴³ William Fowler, "Principal Patterns of the Norman Tiles from the Floor of St. Nicholes Chapel York Minster," (hand-coloured engraving, Winterton, 13th July 1801). Most of the designs illustrated by Fowler belong to the Northamptonshire group which was active in the midlands during the middle of the fourteenth century. The presence of designs from outside of this group, geographically and chronologically, suggests that the St Nicholas' Chapel pavement was relaid before 1801. By the end of the nineteenth century the tiles were moved to the vestry. It was presumably at this time that some of the tiles were set into a wooden frame, which today is the only surviving evidence of this pavement. These tiles, however, could not be located by the author, Professor Christopher Norton or Jane McComish (York Archaeological Trust) in 2012. Stopford, *Medieval Floor Tiles of Northern England*, 193-208, 338-341; Nora Whitcomb, *The Medieval Floor-Tiles of Leicestershire* (Leicester: Leicestershire Archaeological & Historical Society, 1956), 10-11.

¹⁴⁴ At Lichfield Cathedral (*Staffordshire*), for example, medieval tiles were discovered during its restoration between 1857 and 1861. From these fragments new tiles were commissioned using their original designs. John Hewitt, *Handbook for Lichfield Cathedral* (Lichfield: A. C. Lomax, 1875), 54. For more on Lichfield Cathedral see: A. B. Clifton, *The Cathedral Church of Lichfield: A Description of its Fabric and a Brief History of the Episcopal See* (London: Bell, 1908); John Maddison, ed., *Medieval Archaeology and Architecture at Lichfield*, British Archaeological Association Conference Transactions XII (Leeds: W. S. Maney, 1993); Warwick Rodwell, "Archaeology and the Standing Fabric: Recent Studies at Lichfield Cathedral," *Antiquity* 63 (1989): 281-294.

¹⁴⁵ This design is labelled YD4 in the Table of Tile Designs from York Minster Chapter House pavement (see Fig. 1.18).

¹⁴⁶ Author's own drawings based upon photographs taken on site.

The octagonal chapter house at York Minster invites comparison to the chapter houses at Westminster Abbey and Salisbury Cathedral.¹⁴⁷ Of the same shape, York is also of a similar size and date to the other two chapter houses. It has often been noted that the inscription found in the pavement at Westminster – *ut rosa flos florum sic est domus ista domorum* – can also be read on the wall on the north side of the entrance at York. The Gothic Revival pavement, however, also makes clear reference to the medieval pavements at Westminster and Salisbury. It makes use of tile designs found at Westminster, whilst the overall layout shares many similarities with Salisbury’s chapter house pavement (Fig. 1.23).¹⁴⁸ Both pavements at Salisbury and York are laid around a central point from which other panels radiate. At Salisbury this choice was presumably dictated by the presence of a structural column at the centre of the chapter house building. At York there was no such column necessitating this arrangement, nevertheless a cross shape was laid at the centre of the pavement determining the direction in which the other panels were laid. Both pavements at Salisbury and York make full use of the octagonal shape of the room and as such can both be divided into eight large segments or panels separated from one another by borders. In contrast to York the segments at Salisbury are further subdivided into smaller panels. Both pavements at Salisbury and York do also make effective use of plain tiles to create patterns within these panels (Fig. 1.24). It is worth noting that the pavement which today can be seen *in situ* at Salisbury was actually laid during the restoration of the chapter house in the 1850s.¹⁴⁹ It was, however, carefully copied from plans made of the medieval pavement by Carter and Compton. Salisbury, similarly to Temple Church, is another example where medieval tiles were ‘improved’ and replaced by nineteenth-century replicas.

The York chapter house pavement makes use of several medieval tile designs, including those from Westminster Abbey and from York Minster itself. It also shares many similarities in its layout with Salisbury Cathedral. Yet there are of course also numerous differences. Blue and green coloured tiles are, for example, used in the centre of the pavement. The York pavement also exhibits a high degree of accuracy, the precision of the concentric octagons and radiating panels was really only achievable with nineteenth-century methods of manufacture. The pavement at York was certainly inspired by the medieval past, but it does not try to be a medieval pavement. It is instead a unique piece of nineteenth-century art. It is a product of its time, conceived as an original Gothic

¹⁴⁷ For both the history and current condition of the chapter house and muniment room pavements at Salisbury Cathedral, along with a selected list of relevant publications, see: Site Gazetteer, 297-298.

¹⁴⁸ Author’s drawings based upon own photographs, in addition to a plan published in: John Britton, *The History and Antiquities of the Cathedral Church of Salisbury* (London: Longman & Co., 1814), Pl. 1.

¹⁴⁹ The original medieval chapter house pavement survives as a selection of much worn tiles, some of which have been relaid by the entrance to the Lady Chapel at the east end of the cathedral. Christopher Norton, “The Decorative Pavements of Salisbury Cathedral and Old Sarum,” in *Medieval Art and Architecture at Salisbury Cathedral*, British Archaeological Conference Transactions XVII, ed. Laurence Keen and Thomas Cocke (Leeds: W. S. Maney, 1996), 90-105.

Revival pavement, yet inherently influenced by the antiquarian publications and cathedral restorations that typified the period.

The Antiquarian Legacy

The chapter house pavement at York Minster comes at the very beginning of the history of Gothic Revival tiles. The nineteenth-century church-building boom provided plentiful opportunities for the developing tile industry. In 1846 there were around four-hundred new churches under construction in Britain, any one of them a candidate for a tiled floor.¹⁵⁰ It is unsurprising within this context that multiple new tile manufacturing companies began to appear in industrial towns. At the height of its popularity Maw & Co. was producing over twenty million tiles a year, their printed catalogues displaying their nine-thousand different products to potential buyers.¹⁵¹ Due to the quantity of tiles manufactured the product became cheaper and thus more affordable. Tiles were durable, easy to clean, weather resistant, hygienic and above all decorative. It was not long before tiles were introduced to public buildings, residential dwellings and retail premises.

Publications such as Shaw's *Specimens* were intended to provide the best examples of decorative medieval tiles for the attention of the antiquary and contemporary designer. It could be argued that *Specimens* is entirely successful in this pursuit. Its fifty pages are filled with over a hundred different tile designs each neatly contained within its own square space. Yet by its very nature this method of display has limited the ways in which medieval tiles have been subsequently viewed. *Specimens* is a book specifically about tiles and it displays those tiles individually, or just occasionally, as more extensive groupings of panels or pavements.¹⁵² This remains the predominant way in which tiles have continued to be treated by scholars. It is traditional for an account of a pavement to include illustrations which depict each individual tile design as a neat monochrome square. It is not only in scholarly publications that this method is found. Museum exhibitions also display tiles individually, with the best tile chosen to exemplify a single design. They are also often displayed in such a way that their size or depth becomes visibly obvious. This approach, however, has the potential to overlook the ways in which the various tiles interacted together within a whole pavement. It also ignores the ways in which the tiles were related to a wider architectural or

¹⁵⁰ Tony Herbert and Kathryn Huggins, *The Decorative Tile in Architecture and Interiors* (London: Phaidon Press, 1995), 46.

¹⁵¹ Jill Austwick and Brian Austwick, *The Decorated Tile: An Illustrated History of English Tile-Making and Design* (London: Pitman House, 1980), 61.

¹⁵² It illustrates just fourteen partial pavement plans in comparison to the one-hundred-and-twenty individual designs depicted.

decorative context. Nowhere in Shaw's *Specimens* are floors and walls united together, and even in accounts written by nineteenth-century architects, tiles remain curiously detached from their surrounding structures.¹⁵³

Eighteenth and nineteenth-century antiquarian sources form the foundation for the study of all the pavements that will be discussed within this thesis. These are sources that will need to be handled with care. They are undoubtedly vital records, yet they reveal a tendency towards generalisation and a desire for order. Antiquarian publications continue to influence how medieval pavements are written about. This is almost certainly reinforced by the presence of surviving *in situ* Gothic Revival pavements, such as that in the chapter house at York Minster. Here the pavement remains, at the time of writing, uncovered and complete. In contrast medieval pavements are often fragmented, relaid or covered for the sake of conservation. To the twenty-first-century tourist the order and accuracy of a Gothic Revival pavement is perhaps much closer to their own aesthetic ideal. There is now a standard practice for how to tile a surface and tiny plastic spacers ensure that each tile is placed exactly the same distance apart. It is, therefore, not surprising that the modern eye may judge the medieval pavement as lacking. One only needs to consider a comparison between the chapter house pavements of Salisbury and Westminster to conclude the 'improvement' of one design over the 'untidy arrangement' of the other.¹⁵⁴ How much of Salisbury's apparent improvement, however, can be attributed to the Victorian replica pavement that the modern viewer is now presented with? Remarks about 'improvement', for example, show the continuing influence on modern scholars by nineteenth-century antiquaries. In his examination of individual tile designs and their 'irregularities' the Reverend G. Rowe ultimately concluded that medieval tilers could "have done all this quite correctly, it they had cared to do so."¹⁵⁵

The medieval tile pavement ought instead to be viewed within its own context. What would the thirteenth-century observer have made of the 'untidy arrangement' of Westminster's chapter house pavement? Would the issues arising from irregular spacing have been considered a problem? Would they even have been in a position to notice when the desired intention did not become a reality? Modern scholars after all have the benefit of plans, giving them a bird's-eye-view that would have been unobtainable for almost everyone else. An open mind is therefore required. Gothic

¹⁵³ The account of Prior Crauden's Chapel pavement written by William Wilkins is just one example of this. Wilkins, "An Account of the Prior's Chapel at Ely," 105-112.

¹⁵⁴ These words, taken out of their original context, are nevertheless used by Christopher Norton and Laurence Keen during their discussions of the chapter house pavements at Salisbury and Westminster. Norton, "The Decorative Pavements of Salisbury Cathedral and Old Sarum," 95; Keen, "The Chapter House Decorated Tile Pavement," 226-227.

¹⁵⁵ G. Rowe, "On Encaustic Tiles," *Associated Architectural Societies' Reports and Papers* 15 (1879): 26.

Revival pavements are not an improvement, but rather a new interpretation of a medieval form. Nineteenth-century antiquaries provided the framework for the study of medieval pavements, and the twenty-first-century scholar must build from this.

Chapter Two

‘Without reference to equidistance or principle’: Rethinking Attitudes Towards Medieval Pavement Layouts

‘This blunder may have occurred...’

For Shaw, and other nineteenth-century antiquaries, the layout of medieval pavements was of secondary interest to the tiles themselves. As mentioned previously, many of the publications from this period were aimed at illustrating individual tile designs in order to provide examples for architects and artists working in the Gothic Revival style. There are, however, a few examples of antiquaries examining the layout of medieval pavements. In 1849 Compton wrote an account describing the various types of tiles produced during the medieval period.¹⁵⁶ From this starting point he then attempted to assign each of these types with a specific pavement layout. Two-colour tiles were laid, according to Compton, in one of two ways. The first type of pavement layout he called ‘trellised’ and dated to the Decorated period in the thirteenth and fourteenth centuries. A trellised layout was comprised of panels divided by narrow borders typically running east to west, but occasionally with panels running north to south when the space was particularly long. An example of this type of layout would be the thirteenth-century retrochoir pavement at Winchester Cathedral (Fig. 2.1).¹⁵⁷ The second type of pavement layout he called ‘grounded’ and dated to the Perpendicular period in the fifteenth century. A grounded layout consisted of large areas, rather than panels, which were divided into sets of sixteen tiles usually laid diagonally. An example of this type of layout would be the pavement laid before the high altar at Gloucester Cathedral (*Gloucestershire*) (Fig. 2.2).¹⁵⁸

¹⁵⁶ Compton, “On Tile Pavements, Especially that of Higham Ferrers Church,” 6-12.

¹⁵⁷ For the retrochoir pavement at Winchester see: Norton, “The Medieval Tile Pavements of Winchester Cathedral,” 78-93; Norton, “The Medieval Tile Pavements of Winchester Cathedral,” 167-176.

¹⁵⁸ For the sanctuary pavement at Gloucester see: Anne Kellock, “Medieval Floor Tiles in Gloucestershire,” *Glevensis* 21 (1987): 25-28; Anne Kellock, “Abbot Sebrok’s Pavement: A Medieval Tile Floor in Gloucester Cathedral,” *Transactions of the Bristol and Gloucestershire Archaeological Society* 107 (1989): 171-188. For both the history and current condition of the pavement at Gloucester Cathedral, along with a selected list of relevant publications, see: Site Gazetteer, 288-289.

These same two pavement layouts were described and illustrated five years later by Cutts, but he referred to them instead as 'panelled' and 'diapered'.¹⁵⁹

Both Compton and Cutts were categorising pavement layouts in the same way that architecture and stained glass were being classified at the time.¹⁶⁰ Their intention was to establish models and principles available for imitation. As such, as well as describing each layout, Compton and Cutts made clear the type of spaces for which they were appropriate. The trellised or panelled layout was suitable for areas occupied by seats or other objects as "any small portion of that will always look handsome".¹⁶¹ In contrast the grounded or diapered layout was more suitable for clear expanses in a church or cathedral in order for the pattern to be effective and "appear to the best advantage".¹⁶² Cutts warned his readers that improper use of pavement layouts would "turn out to be unpleasing, or at least confused and ineffective."¹⁶³ The language used here is particularly interesting. A pavement layout could be handsome or unpleasing, and it was up to the Gothic Revival architect to heed expert advice and design a fitting pavement. There is perhaps too an implicit judgement being made about the original medieval pavements on which their advice was based. The nineteenth-century antiquary was in a position to assess which layouts were more 'successful' or effective and thus make their recommendations accordingly. In Shaw's *Specimens*, this judgement is made abundantly clear, not only in his perfected illustrations of medieval tiles and pavements, but also in his description of them. At Salisbury, Shaw stated:

Though much worn, and in many places disarranged, enough then remained to show clearly the original arrangement of every panel...one panel had the tiles set diagonally to all the rest of the pavement. This blunder may perhaps have occurred at the first laying down of the tiles.¹⁶⁴

The use of the word 'blunder' is indicative of nineteenth-century attitudes. It was considered that blunders could have been, and perhaps should have been, corrected. Perfected illustrations and words like blunder, however, show only how the nineteenth century thought a medieval pavement should look. It does not represent the medieval pavement layout as it was, nor indeed how it was perceived in its own time. What is particularly troubling is that this attitude still appears today in descriptions of medieval pavements. The use of the word 'mistake', for example, is not far removed

¹⁵⁹ Cutts, *An Essay on Church Furniture and Decoration*, 96-99.

¹⁶⁰ See Chapter One, note 105.

¹⁶¹ Compton, "On Tile Pavements, Especially that of Higham Ferrers Church," 9.

¹⁶² Compton, "On Tile Pavements, Especially that of Higham Ferrers Church," 9.

¹⁶³ Cutts, *An Essay on Church Furniture and Decoration*, 99.

¹⁶⁴ Shaw, *Specimens*, 17, note 2.

from Shaw's 'blunder'.¹⁶⁵ The medieval pavement seems to compare unfavourably not only with nineteenth-century pavements, but also with modern aesthetics. Over recent years, with the development of new technologies, it has become possible to create extremely accurate plans which show the reality of medieval pavements. More, however, needs to be done to understand and describe medieval pavement layouts. Drawing attention to anomalies, inaccuracies or miscalculations can be a necessary task during this process. Yet by merely highlighting mistakes or blunders all that is expressed is a visual judgement of the pavement layout. It is essential, therefore, that from these observations an attempt is then made to explain or understand the process by which they have occurred. Pavements may have been laid 'without reference to equidistance or principle' as understood by a nineteenth-century antiquary, but that does not mean they were laid without reference to principles understood by the medieval tiler.¹⁶⁶

The desire of scholars to find order and logic can lead to the use of words such as blunder and mistake, without taking into consideration the different factors that may have shaped both the design and laying of a pavement. There is, for example, an important difference between intention and reality.¹⁶⁷ The aim of this chapter is, therefore, to re-evaluate the way in which the layout of a medieval pavement should be understood and described. At its core it will present an analysis of Westminster Abbey's chapter house pavement. From Shaw's nineteenth-century engraving (Fig. 1.7) to Keen's description of the pavement as 'untidy' in 2010, the way in which the pavement was laid has been frequently discussed but never resolved. Here it will be argued that its overall design is far from haphazard and was in fact laid out in a logical manner. The focus will primarily be on the practicalities of laying a pavement and the potential compromises or difficulties that were overcome during the process. Yet it will also become clear that there were both functional and aesthetic motivations behind certain choices. Ultimately though, the beautiful engraving produced by Shaw, and even the coloured plans drawn out to illustrate this chapter, illustrate a privileged view of the pavement layout which few would have seen. It is entirely possible, therefore, that the thirteenth-century observer would never even have noticed the 'untidy arrangement' of Westminster's chapter house pavement.

The 'Incomparable Chapter House' at Westminster Abbey

¹⁶⁵ Keen, "The Chapter House Decorated Tile Pavement," 226-227.

¹⁶⁶ Walbran, *A Guide to Ripon, Harrogate, Fountains Abbey, Bolton Priory and Several Places of Interest in their Vicinity*, 90.

¹⁶⁷ For a critical examination of how to interpret intention in art history see: Michael Baxandall, *Patterns of Intention: On the Historical Explanation of Pictures* (New Haven: Yale University Press, 1985).

“The lord king built in that place an incomparable chapter house.”¹⁶⁹ With these words the thirteenth-century St Albans monk Matthew Paris described the newly rebuilt chapter house at Westminster Abbey (Fig. 2.3). From this first mention by Matthew in his *Abbreviatio Chronicorum* to the research symposium held in 2008 by the Society of Antiquaries, much has been written and said about the Westminster chapter house to support its reputation as incomparable. The chapter house, structurally sound by 1253, was paved by 1259 at the latest.¹⁷⁰ This tile pavement remains *in situ* today and has its own claim to incomparability. Its remarkable survival owes much to the continued importance of Westminster through the centuries. After the Dissolution the chapter house became a record store, particularly for the exchequer.¹⁷¹ For much of its life as a record office the chapter house floor was covered with wooden boarding. As a consequence, when the boarding was removed in 1841 and the pavement studied by antiquaries, the tiles were found to be well preserved.¹⁷² The chapter house was restored under the supervision of George Gilbert Scott between 1867 and 1872, with a provisional sum given of £400 for the repair of the pavement.¹⁷³ Eames believed that Scott relaid the pavement as part of his restoration work.¹⁷⁴ Keen, however, has more recently demonstrated that only the most heavily worn tiles were replaced by replica tiles, presumably manufactured by Minton (Fig. 2.4).¹⁷⁵ Today the pavement is once again protected by a covering, but a photogrammetric survey was published in 2008 alongside an archaeologically accurate plan. In this

¹⁶⁹“Reaedificatur ecclesia Westmonasterialis sumptibus...Edwardi, de ejuadem regis thesauro fabricatur. Vass insuper carrissima impretiabilis et admiratione digna, cum gemmis olosericis, campanis praelectis, et novis libertatibus eidem domui a rege conferuntur; aedificavitque ibidem dominus rex capitulum incomparabile.” Frederic Madden, ed., *Matthaei Parisiensis, Monachi Sancti Albani, Historia Anglorum, sive, ut vulgo dicitur, Historia Minor. Item, ejusdem Abbreviatio Chronicorum Angliae*, Vol. 3 (London: Longmans, Green, Reader and Dyer, 1869), 318.

¹⁷⁰ In 1253 canvas was purchased for the temporary covering of windows. Howard Colvin, *The History of the King's Works: The Middle Ages*, Vol. 1 (London: Her Majesty's Stationery Office, 1963), 141-143. The popular *terminus ante quem* for the chapter house pavement is 1259, as an entry in the Close Rolls instructed that the leftover tiles from the chapter house were to be laid in St Dunstan's Chapel. A. E. Stamp, ed., *Close Rolls of the Reign of Henry III Ad 1256-1259*, Vol. 10 (London: His Majesty's Stationery Office, 1932), 377.

¹⁷¹ Elizabeth Hallam Smith, “The Chapter House as a Record Office,” in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, 124-138.

¹⁷² For further information about the antiquarian investigations at Westminster see: Chapter One, 51-52.

¹⁷³ George Gilbert Scott, *Gleanings from Westminster Abbey* (Oxford: J.H. & Jas. Parker, 1863), 45-46; Stephen Brindle, “Sir George Gilbert Scott and the Restoration of the Chapter House, 1849-72,” in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, 139-157.

¹⁷⁴ Eames, *Catalogue*, Vol. 1, 172.

¹⁷⁵ Whilst there is no evidence to show that it was Minton who supplied the replica tiles, Minton's 1881 catalogue does include Westminster in its list of prestigious commissions, though it is not clear to which pavement this refers. Brindle, “Sir George Gilbert Scott and the Restoration of the Chapter House, 1849-72,” 156; Keen, “The Chapter House Decorated Tile Pavement,” 212.

way the pavement remains available for study, even whilst the physical pavement is kept hidden from view.¹⁷⁶

The chapter house pavement has been much remarked upon since Cottingham's report in 1841. Most publications on the subject mention, and often illustrate, the 'finest' or most interesting tile designs. The picture tiles and inscriptions found in the southern part of the pavement have particularly fascinated scholars (Fig. 2.5). William Lethaby, for example, illustrated the picture tiles and made stylistic connections between them and the similarly dated *ex situ* tiles found at Chertsey Abbey.¹⁷⁷ Nearly a century later Norton studied the inscriptions and their link to other royal works of the same period, including the Cosmati sanctuary pavement at Westminster.¹⁷⁸ The rose-window design has also been frequently reproduced by art historians interested in both Westminster and more generally thirteenth-century art and architecture (Fig. 2.6).¹⁷⁹ There is undoubtedly still more to say about the chapter house tile designs, their iconography and stylistic qualities. However, the overall layout of the pavement has often been overlooked or side-lined. Almost all descriptions of the pavement have followed in a similar vein to that published by Cottingham after his inspection in 1841.¹⁸⁰ These descriptions lack detail and also fail to take into account that a great deal might be learnt from studying the layout of the pavement more closely. The Westminster chapter house pavement after all does provide a rare opportunity to study a medieval pavement in its entirety.

Shaw published his beautiful, but inaccurate, engraving of the eastern half of the pavement in 1858 and it was not until 1912 that a plan of the whole pavement was made available.¹⁸¹ Whereas many had considered the picture tiles to be the finest examples, meriting illustration and discussion, by the end of the twentieth century their incongruity within the overall layout of the pavement was highlighted.¹⁸² Most recently Keen has declared that the Westminster chapter house pavement had an 'untidy arrangement'. He listed the 'mistakes' in each of the panels and stated that the layout had 'no uniformity'. Keen concluded from these observations that the pavement must have been made up of leftovers from royal pavements commissioned for Westminster Palace. He also believed that

¹⁷⁶ Due to the inaccessibility of the pavement it is from these published photographs, drawings and plans that the questions and arguments raised in this chapter have been drawn.

¹⁷⁷ Lethaby, *Westminster Abbey and The King's Craftsmen: A Study of Mediaeval Building*, 46-53; Lethaby, *Westminster Abbey Re-examined*, 105-114; William Lethaby, "English Primitives-IV: The Westminster and Chertsey Tiles and Romance Paintings," *The Burlington Magazine for Connoisseurs* 30 (1917): 133-140.

¹⁷⁸ Christopher Norton, "The Luxury Pavement in England before Westminster," in *Westminster Abbey: The Cosmati Pavements*, ed. Lindy Grant and Richard Mortimer (Aldershot: Ashgate, 2002), 21-23.

¹⁷⁹ For example see: Paul Binski, *Westminster Abbey and the Plantagenets: Kingship and the Representation of Power 1200-1400* (New Haven: Yale University Press, 1995), 29.

¹⁸⁰ Cottingham, "Tile Pavement of the Chapter House, at Westminster," 390-391.

¹⁸¹ For more on the inaccuracies of Shaw's plan of Westminster see: Chapter One, 47-48. Clayton, "The Inlaid Tiles of Westminster Abbey," Figure 1.

¹⁸² Eames, *Catalogue*, Vol. 1, 163-164.

the tilers themselves were unused to working with octagonal spaces. In Keen's eyes, therefore, the pavement layout was 'not at all satisfactory'.¹⁸³ This assessment appears to have been made primarily on a visual examination of the pavement, and as a result it is not hard to understand why Keen reached these conclusions. The pavement is made almost entirely of decorated tiles, creating a startling and definitely overwhelming first impression. In contemporary pavements, such as those at Salisbury (Fig. 1.24) and Winchester (Fig. 2.1), plain tiles are used to great effect, particularly as borders between panels. At Westminster, however, even the borders are decorated. The variation in size – twelve different sizes out of thirty-six designs – undoubtedly adds to this visual complexity, and in itself is particularly unusual. Yet it is the purpose of this chapter to argue that the layout of the chapter house pavement was far from untidy. Through close examination and analysis it will be shown how the pavement design was not only carefully thought out, but also how the pavement was actually laid with a consideration for uniformity. The mistakes, as pointed out by Keen and others, could actually be more effectively used to show the difficulties that faced the tilers and their responses to them. The layout of the Westminster chapter house pavement does not conform to the expectations or standards of nineteenth-century antiquaries and modern scholars. However, rather than evaluating the pavement against these external values it is instead necessary to examine it within its own context. There are explanations, patterns and consistency to be found amongst the supposed untidiness.

An 'Untidy Arrangement' at Westminster?

The octagonal chapter house pavement at Westminster is laid out in fifteen long rectangular panels running from east to west (Fig. 2.7).¹⁸⁴ All but one of these panels are divided by border tiles. At the east end a sixteenth panel runs from north to south, laid directly against the eastern wall and with a border along its western edge. A seventeenth 'panel' can be found in the south-west of the pavement, where a peculiar triangular area of tiles cuts off the western end of panels WP12 and WP13. This triangular panel has four rows of border tiles running north to south through the middle of it. The southern half of the pavement features six inscriptions, made up of individual letter tiles and surrounded by rectangular border tiles. The southern section also contains two well-known areas of picture tiles, which are both arranged in parallel pairs of six and surrounded by more border

¹⁸³ Keen, "The Chapter House Decorated Tile Pavement," 209-236.

¹⁸⁴ The panels will be numbered from north to south and for ease of reference will from here on be shortened to WP1, WP2 and so on. Author's drawings based upon own photographs, in addition to a plan published by: Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, Plan 2.

tiles. There are thirty-six different tile designs used within the pavement, including eight picture tile designs and seven rectangular border tile designs (Fig. 2.8).¹⁸⁵ The layout of the pavement can be visually broken down into three sections: northern, central and southern. The northern section spans from the northern border of WP1 to WP4. The central section spans from the northern border of WP5 to the southern border of WP11. The southern section spans from WP12 to the southern border of WP15. These sections are not of equal size, but they take into account what appear to be the two most important panels within the pavement – WP5 and WP11. This division into sections is reflected in the structure of this chapter. It will be shown how one possible way of understanding the chapter house pavement is through the sequential laying of these three pavement sections. By starting with the central section, moving on to the northern section and finishing with the southern section this chapter will clearly show the logical method employed by the tilers in laying out the pavement.

*The Central Section*¹⁸⁶

The central section most convincingly demonstrates that careful thought was put, not only into designing the pavement, but also into laying it. Scholars have previously proposed that the pavement was laid from the north, giving the lack of a northern border on WP11 as evidence to support this.¹⁸⁷ It is, however, more likely that the central section was laid first. Starting from the north-east corner and working west the central section would have utilised the natural line provided by the eastern wall. The northern border of WP5 also appears to act as a base-line for the pavement (Fig. 2.9).¹⁸⁸ The northern border edge starts at the angle of the steps on the east wall. At the west end the northern border edge is on a line between the triple shafts of the wall and the central column. Whilst the north side of the pavement fits with relative neatness to the shape of the room, the south side is off line. The southern border of WP11 is out of alignment with the angle of the steps on the south-west wall. At the east end the pavement measures 6.6m from the northern border of WP5 to the southern border of WP11.¹⁸⁹ At the west end the pavement measures 6.7m

¹⁸⁵ For ease of reference from this point on the tile designs will be shortened to WD1, WD2 and so on. Author's drawings based upon own photographs, in addition to images published in: Keen, "The Chapter House Decorated Tile Pavement," 220-225.

¹⁸⁶ The central section consists of seven panels (WP5, WP6, WP7, WP8, WP9, WP10 and WP11) running from east to west, seven borders running from east to west and a single panel (WP16) and its border running from north to south.

¹⁸⁷ Clayton, "The Inlaid Tiles of Westminster Abbey," 52; Keen, "The Chapter House Decorated Tile Pavement," 227.

¹⁸⁸ Author's drawings based upon own photographs, in addition to a plan published by: Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, Plan 2.

¹⁸⁹ These measurements were taken from a scale diagram by Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, Plan 2.

across the same section of pavement. This is a difference of 0.1m which is the equivalent of the width of a border tile of WD20, WD24 or WD25. The difference between the east and west ends of the pavement could have been caused simply by variation in mortar joint size or discrepancy in tile size during the production process.

The central column, in contrast, does not appear to have been used to determine the pavement layout. Most obviously the column is not within the centre of WP8, nor is the central column of the entrance portal aligned to the centre of the pavement. Further evidence for this conclusion comes from the six examples of WD9 at the eastern edge of the central column (Fig. 2.10). WD9 is one of the smallest tiles in the pavement measuring at an average width of 141mm. It is probably for this reason that it was laid within WP8. The gap between the column and the forty-third row of WP8 was too small for another row of WD16 (measuring 153mm) and so WD9 may have been the only tile that would fit. WP8 must have been laid from east to west for there to be a small gap on the eastern side of the central column. It is also interesting to note that WP16 does not align with the central column either. The central section contains the only panel in the pavement that runs from north to south. WP16 extends across the eastern wall between WP5 and WP11. The panel is laid with WD3, a four-tile design, with two rows of fourteen-and-a-half sets of four tiles. These sets were clearly laid from north to south, as the half set of WD3 occurs on the southern side of the panel. This indicates that the panel was laid from the north-east corner and supports the argument that the northern border of WP5 and the eastern wall were the important axes for the entire pavement.

As well as demonstrating how the pavement was laid out WP5, and its twin WP11, dominate visually the central section and indeed the entire pavement. These two panels were laid with the Arms of England tiles (WD10-13) which are unusually striking due to their large size and complex design (Fig. 2.11). If the octagonal room had been regular in shape WP5 and WP11 would have run right up to the edge of the western wall. The western part of the octagon was slightly elongated, however, due to the entrance from the inner vestibule, so there is a gap between the panels and the wall that has been filled with other designs. It is interesting to note that apart from these additional rows of smaller fractional tiles at the western end there are exactly enough whole sets of WD10-13 to fill the two panels. Due to the prominence of the Arms of England tiles within the pavement, scholars have found it necessary to seek explanation for their presence. David Carpenter and Rodwell, for example, have suggested that the thirty-one sets of tiles in each panel allude to the

start of building work on the chapter house in Henry III's thirty-first regnal year (1246/7).¹⁹⁰ Yet in seeking a specific explanation for these tiles other wider issues may be overlooked. The fact that there were enough sets of tiles to fill two panels in a regularly shaped octagon, for example, could be used as evidence to argue that the tiles were not merely leftovers as Keen believed.

The panels within the central section were laid with a careful eye for consistency and symmetry. WP5 and WP11, as previously mentioned, are identical in design and width as they consist of equal sets of WD10-13. Both WP6 and WP10 are laid with tiles of an average width of 160mm. These two panels are also six tiles wide, creating three sets of four-tile designs. The designs of these panels are also somewhat similar. WP6 consists of the cock-and-fox motif (WD6) surrounded by a foliate design. WP10 consists of a foliage spray (WD5) with a similar type of double lined border. The complementing similarities between these two designs are perhaps reinforced by the use of WD6 at the western end of WP10, where WD5 must have run out. WP7 and WP9 are also symmetrical in size, with both panels consisting of tiles of 145mm average width and six tiles wide with three sets of four-tile designs. The designs used in both of these panels are also quite similar. WP7 consists of a pair of addorsed griffins with a border (WD7) and WP9 comprises a pair of addorsed lions with a double line border (WD8). The central panel (WP8) is in total contrast to its adjacent panels. It consists of a single tile design (WD16) of 153mm average width and spans seven tiles in width. The borders within the central section also follow a regular pattern. Within this central section there are seven borders that run east to west between the north of WP5 to the south of WP11. These borders all follow an alternate scheme of fish (WD24 and WD25) and floral scroll (WD20). There is no border between WP10 and WP11; it is possible that this border was intended to be WD24 and WD25, as the borders to the north and south of this are both WD20.¹⁹¹ The pairing of these two designs may have been due to their widths, as both designs measure approximately 100mm. They are, however, quite different lengths at 210mm and 175mm respectively. It is possible to suggest that another reason for their pairing may have been because of the intricacy of their design.

¹⁹⁰ David Carpenter, "King Henry III and the Chapter House of Westminster Abbey," in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, 37, note 71.

¹⁹¹ The lack of a northern border to WP11 was used by Keen to argue that the pavement was laid from the north. It might also suggest that the central section was laid first. The northern border of WP5 and the southern border of WP11 marked out the size of the central section as dictated by the length of the east wall. If the panels in this section were then laid from north to south there would have been no room left to fit a border between WP10 and WP11. If the pavement was laid from the north wall, or if the tilers were less concerned about the finished pavement, they could have put a border between WP10 and WP11 and simply shifted WP11, WP12 and the border between them further southwards.

This pairing of panels in the central section presents a clear idea of how this part of the pavement, at least, was intended to look. The tilers, however, did face problems perhaps as a result of miscalculation or a poor firing. As such there are two panels in this section where the tile design changes towards the western end of the pavement (Fig. 2.12).¹⁹² The final ten rows of WP10, for example, change from WD5 to WD6. As has already been suggested these two designs were paired together in panels to create a symmetrical design within the central section, WD6 was therefore the logical choice to complete this panel. The second case of design change is more problematic. In WP7 the design changes from WD7 to WD14 for the last twenty-two rows at the western end of the panel. As a direct consequence, perhaps, there were no longer enough WD14 tiles to complete WP3 in the northern section. Here the panel changes from WD14 to WD8 for the last seventeen rows. It might be suggested that, as in the case of WP10, the tilers ought to have laid WD8 for the remaining rows of WP7. This would have fitted better with the pairing of panels and designs throughout the central section, and also left enough of WD14 to complete the entirety of WP3. However, there simply might not have been enough tiles to do so. One-hundred-and-thirty-two tiles were required to complete WP7 in the central section. In WP3 there are only eighty-six tiles of WD8. The tilers may have been forced to choose the next best option. All three of the designs used in WP3 and WP7 are quite similar. WD14 and WD8 both depict addorsed lions, whilst WD7 and WD8 are both four tile designs depicting addorsed animals. In these cases where the tilers were faced with difficulties and the panel changes design at the western end, there appears to have been conscious reasoning behind the choice to pick complementing designs that would be the least disruptive to the overall pavement layout.

*The Northern Section*¹⁹³

In contrast to the central section at first glance there is little about the northern section that follows a regular pattern. The panels are completely different widths to one another and the borders do not alternate. Yet when the northern section is viewed as one part of the whole pavement a few interesting patterns begin to emerge. For example, the designs in the panels of the northern section and those in the panels of the southern section appear to be the reverse of one another. In the northern section WP2, WP3 and WP4 consist (apart from a few exceptions) of single tile designs,

¹⁹² Author's drawings based upon own photographs, in addition to a plan published by: Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, Plan 2.

¹⁹³ The northern section consists of four panels (WP1, WP2, WP3 and WP4) and four borders, running from east to west.

whilst WP1 is a four-tile design (Fig. 2.13).¹⁹⁴ The opposite is true of the southern section where WP12, WP13 and WP14 are four-tile designs and WP15 a single tile design. The width of WP3 also ties the northern section more closely to the rest of the pavement. WP3 consists of a single tile design representing a pair of addorsed lions (WD14) and measuring an average of 144mm. The panel is six tiles wide, which is perhaps an unusual choice. It matches the majority of the other panels in the central and southern sections (WP6, WP7, WP9, WP10, WP12, WP13 and WP14). Whereas for these other panels it was a clear choice to have three sets of four-tile designs within each panel, it was not necessary within WP3 because a single tile design could be repeated as many, or as few, times as was required.

It is possible that WP2 and WP4 were originally intended to create the symmetrical effect found also in the central section. Both WP2 and WP4 consist of tiles of similar width at 153mm and 154mm respectively, and their designs (WD16 and WD15) could also be seen as a visual pair. Both WD15 and WD16 are geometrical with a double lined circle surrounding either four squares or four circles. The last ten complete rows of WP2 change design from WD16 to WD15. There are a few other examples of WD15 scattered elsewhere in WP2 and examples of WD16 can be found within WP4 as well. The tiles are very similar and, of all the designs featured in the pavement, could be most easily used interchangeably. It may also be the case that WP2 and WP4 were intended to be the same width. WP2 is eight tiles wide and WP4 is ten tiles wide, however it might be argued that WP2 was also originally supposed to be ten tiles wide. At the eastern end of WP2 the tenth row is ten tiles wide, whereas from the eleventh row onward the panel is only eight tiles wide. It may be that the original plan was to have three panels in the northern section of the pavement, with the outer two panels complementing one another in size and design. However, it appears that the tilers changed their mind and added a fourth panel (WP1) along the north wall, with the border for this panel beginning after the tenth row of WP2. The reason for this change in layout may simply have been a shortage of WD16. This might have been the case if WP8 in the central section had been laid first and would also explain why WD15 was laid for the final ten rows at the west end of WP2. If they could not increase the width of WP2 with WD16, then the alternative was to add a different design of tile as a single row between the north wall border and WP2. Instead the tilers opted to create a new panel of larger tiles and another border. It may have been decided that it was preferable to have an entirely new panel, divided by a border, than simply a single line of tiles. The choice of the

¹⁹⁴ Author's drawings based upon own photographs, in addition to a plan published by: Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, Plan 2.

four-tile design depicting a rose window (WD3) was perhaps simply a result of having more tiles leftover from WP16 than from any of the other panels in the pavement.

If the northern section was intended to be made up of three panels of ten tiles, six tiles and ten tiles again, this would have been a clear and uniform layout (Fig. 2.14).¹⁹⁵ It would have reinforced the symmetry already found in the central section. The three panels in the northern section would also all have been laid with single tile designs. It would seem that the tilers were forced to adapt their layout when the tiles did not fit the space as they expected.

*The Southern Section*¹⁹⁶

It has been argued so far that the central section of the pavement was laid first, starting from the north-east corner of WP5 and its border. The northern section was the next to be laid, starting from the northern border edge of WP5. After the addition of WP1 in the northern section, complementing designs were then chosen to be laid in the final part of the pavement, the southern section. Like the northern and central sections, the choice of design within each of the panels in the southern section appears to have been given careful thought. WP12, WP13 and WP14 are all six tiles wide and consist of four-tile designs approximately 180mm in width. WP12 and WP14 have similar types of designs with foliage sprays; in contrast WP13 has a pair of addorsed leopards within a circular border. There is only one instance in the southern section where a panel is laid with two different tile designs. The majority of WP14 is laid with WD2, but the final five rows are partly laid with WD1. Whilst these two designs are not especially similar, the adjacent panel to the north (WP13) is laid with WD1. Adding a handful of these tiles was, therefore, not a completely inappropriate choice for WP14.¹⁹⁷ Just as in the other sections of the pavement it is clear that the tilers made a deliberate attempt at pairing or grouping similar designs.

If the southern section of the pavement was the last to be laid, this might explain the sole presence in the pavement of the picture tiles. Much interested discussion has taken place about the picture tiles and their inclusion within the pavement. For some they were representations of key individuals at Westminster at the time of the chapter house rebuilding: Abbot Crokesley, King Henry III and Queen Eleanor of Provence.¹⁹⁸ As such they were concluded to be an appropriate inclusion

¹⁹⁵ Author's drawings based upon own photographs, in addition to a plan published by: Rodwell in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, Plan 2.

¹⁹⁶ The southern section consists of four panels (WP12, WP13, WP14 and WP15) and four borders running from east to west. To the west there is a triangular area of much faded and damaged tiles (WP17).

¹⁹⁷ There are fifteen examples of WD1 if the Victorian replicas are believed to be incorrect in this panel.

¹⁹⁸ Clayton, "The Inlaid Tiles of Westminster Abbey," 66-69; Lethaby, *Westminster Abbey and The King's Craftsmen*, 48.

into the chapter house pavement. However, their position within the overall layout of the pavement has defied obvious explanation. Eames was the first to consider the picture tiles as leftovers from other pavements at Westminster. There are after all only twenty-three picture tiles in a pavement that contains nearly eight thousand tiles. Four of the picture tile designs are only found twice within the pavement, and the other four designs are found less than five times each. Yet the word 'leftover' perhaps conveys the wrong impression of how these tiles may have been viewed by a medieval audience. The word 'leftovers' suggests that the picture tiles were surplus tiles that ended up in the chapter house simply due to its proximity to the Palace of Westminster. These picture tiles, however, were among the best two-colour tiles available, not only at the time when the chapter house was paved, but also during the whole medieval period. Both the Westminster picture tiles and the figurative tiles from Chertsey Abbey, for example, are still considered to be some of the finest medieval floor tiles in England (Fig. 2.15).¹⁹⁹ Scholars have often considered the picture tiles as the most important or interesting tiles in the chapter house, and especially the worthiest of illustration. Perhaps this was how they were also perceived by the medieval viewer. Rather than leftovers the picture tiles may instead have been regarded as the most prestigious tiles in the chapter house.

The location of the picture tiles may have a simple explanation. It is possible that they mark the point the tilers had reached at the time when the picture tiles became available. It is also worth noting, however, that the tiles within WP12 and WP14, where the picture tiles are located, are 180mm in average width, the same width as five of the eight picture tiles. The only other tile design used within the pavement which shares this width is WD3, located in WP1 and WP16. If WP1 was, as suggested, a late addition to the layout then it would not have been an ideal choice of location for the picture tiles. WP16 was the only panel to run on a north-south axis and as such may have had special significance making it an unlikely place to interrupt the layout of the pavement with the picture tiles. Instead the options were limited to WP12, WP13 and WP14. Perhaps as a result of the pairing and mirroring that appears to have been made throughout the pavement, the picture tiles were laid in WP12 and WP14. Even if the picture tiles were a last-minute addition to the pavement, leftover from another pavement at Westminster or not, they were still placed within the overall layout of the chapter house with a certain amount of thought. They are both paired and relatively central within their respective panels.

¹⁹⁹ For the Chertsey tiles see: Eames, *Catalogue*, Vol. 1, 141-171; Gardener and Eames, "A Tile Kiln at Chertsey Abbey," 24-42; Loomis, *Illustrations of Medieval Romance on Tiles from Chertsey Abbey*; Shurlock, *Tiles from Chertsey Abbey*. Amanda Luyster is currently researching the Chertsey tiles, with a particular focus on the combat figures. She is attempting to reconstruct the sequence of the figures and their accompanying inscriptions. She is interested specifically in how the Chertsey tiles constructed the identity of English kingship and how they indicate a dialogue with the east Mediterranean.

The inscriptions, similarly to the picture tiles, have presented problems for scholars, who have attempted to explain their sole presence within the southern section of the pavement. There are six inscriptions, each made up of individual letter tiles. These tiles are consistent in height, but their widths vary according to the letter depicted. A letter 'i', for example, would be of much narrower width in comparison to a letter 'm'.²⁰⁰ The inscriptions are unlikely to have been leftovers from another pavement, as it would be improbable for there to have been exactly enough of each letter to create six full inscriptions. It could be, if the southern section was the final part of the pavement to be laid, that the inscriptions were a last minute or sudden addition to the layout. The first inscription is at the east end of WP12 and measures 827mm. The second is found at the east end of WP13 and measures approximately 700mm. The third inscription is at the east end of WP14 and measures approximately 750mm. The fourth is found at the east end of WP15 and measures 770mm. The fifth inscription is between the two rows of picture tiles in WP14 and measures 1153mm. The sixth is adjacent to the fifth, about halfway through WP15, and measures 770mm. The fifth inscription fits within WP14 only because the northern border of that panel is not included in that particular area. The inscription, its two borders, the row of picture tiles below and its western border all meet the edge of WP13 directly. The fact that the inscription runs into the border also allows for two complete sets of the hunting picture tiles (WD29, WD30 and WD31), below the inscription, to fit within WP14. It is perhaps for this reason that the fifth inscription was placed within WP14 in order for the usual arrangement of borders found elsewhere in the pavement to be uninterrupted. The only other two panels where the fifth inscription could otherwise have fitted are WP2 and WP4. The two inscriptions in WP15 (the fourth and sixth inscriptions) fit neatly into the width of the whole panel, requiring no removal or addition of border tiles. Whilst the width of these two inscriptions could have fitted into twelve of the seventeen panels within the pavement, their comfortable fit within WP15 is especially interesting in light of this panel being the only one in the pavement of that size. The first, second and third inscriptions found at the eastern ends of WP12, WP13 and WP14 could have occupied similar positions within the northern section in WP2, WP3 and WP4. Indeed, the widths of these inscriptions are such that there were a great number of places where they could have fitted.

²⁰⁰ The first inscription is generally considered by scholars to read: "Ut rosa flos florum sic est domus ista domorum." The beginning of the second inscription is illegible, but the remainder is thought to read: "Rex henricus sancti trinitatis amicus." The third inscription includes words identified as "Christo", "Laboravit" and "Amavit". Only a few individual letter tiles are legible from the fourth inscription. The second line of the fifth inscription is unintelligible, but the first line is thought to read: "Hi resonant cantus isti cervis." Only a few individual letter tiles are legible from the sixth inscription. The widths of the inscriptions given here are approximate where the photographs and plans are too unclear to take accurate measurements. Keen, "The Chapter House Decorated Tile Pavement," 229-232.

A few other suggestions could be made as to why the inscriptions are located in the southern section as opposed to elsewhere in the pavement. The southern section possesses the most consistency in both tile size and panel width; this may have helped to simplify any calculations that needed to be made. Another possibility for their positioning within the pavement may be the picture tiles, which are also confined solely to the southern section. The fifth inscription does certainly appear closely linked to the layout of the picture tiles. The sixth inscription is also connected to the picture tiles in terms of location. Both sets of picture tiles and the fifth and sixth inscriptions are almost in line with the eastern edge of the central column. They form a neat grouping across the panels in the southern section. Another possible explanation for the placement of the inscriptions is the design of tile within each panel. For example, the first inscription is the much quoted *'ut rosa florum sic est domus ista domorum'* and is in WP12 which is laid with WD4 and depicts a foliage spray. The second inscription names King Henry and is located in WP13 which is laid with WD1 and depicts leopards. It is also thought that the fifth inscription refers to the hunting scene that is depicted by the picture tiles beneath it.²⁰² It is also possible that the reasoning behind the position of the inscriptions lies outside of the pavement layout itself. An examination, for example, of how the chapter house was used, the rituals that were performed within it, and the individuals who would have used it, might perhaps provide more fruitful or definitive answers.

A 'Considerable Improvement' at Salisbury?

The Salisbury Cathedral chapter house pavement has been considered by some as a 'considerable improvement' on the chapter house pavement at Westminster (Fig. 1.23).²⁰³ One explanation for this 'improvement' is perhaps simply chronology. The pavement at Salisbury has been dated to a decade after that at Westminster, plenty of time to accrue the knowledge and experience required to take on an ambitious layout.²⁰⁴ It is certainly true that the layout at Salisbury is more ambitious than that at Westminster. Both pavements are laid using a combination of rectangular panels. At Westminster these panels are predominately laid east to west. At Salisbury the panels radiate from the central column making full use of the unusual octagonal shape of the room. In contrast it appears that at Westminster the pavement was laid as if the chapter house was a standard rectangular shape. It is the supposed untidiness of the pavement layout at Westminster, however, that in fact provokes the most interesting questions. The reality of the pavement layout

²⁰² Keen, "The Chapter House Decorated Tile Pavement," 231.

²⁰³ Norton, "The Decorative Pavements of Salisbury Cathedral and Old Sarum," 95.

²⁰⁴ Norton, "The Decorative Pavements of Salisbury Cathedral and Old Sarum," 95.

may have its limitations, as has been seen, but it does not exclude the possibility that at the beginning of project there was a clear intention. The presence of the picture tiles and inscriptions in the southern section of the pavement, for example, defies a single obvious explanation. Yet they are nevertheless united with the rest of the pavement in a clear aim. The inscriptions, alike to the picture tiles and the Arms of England tiles, are laid to be read when standing in the west and facing east. The overall layout of the pavement, in fact, directs the viewer towards the east end of the chapter house.

Though primarily designed for the use of the abbots and monks of Westminster, as set out in the Rule of St Benedict, the chapter house was also created, to an extent, for the king. The chapter house, for example, served on occasion as the meeting place for the Commons.²⁰⁵ The Close Rolls for 1249 record that the king ordered Master John of St Omer to construct a lectern for the Westminster chapter house that was alike to the one found at St Albans.²⁰⁶ A second lectern was commissioned and described in the Close Rolls for 1259 as “the lectern of the king.”²⁰⁷ Carpenter speculated that this second lectern was installed in front of the abbot’s seat, whereas the first was more likely to have been placed in the centre of the chapter house.²⁰⁸ If it can be imagined that the king may have used his *lectrinium regis* standing before the abbot’s chair, then much about the pavement layout can be explained. In this context what could have been more appropriate than the panels flanking the eastern wall with the bold and eye-catching design of the Arms of England? The panels running from east to west naturally lead the eye toward the east end and those who were standing or sitting there. WP16 marks a boundary between the east end and the rest of the pavement, and indeed the rest of the audience. The orientation of WP16 and its border, running from north to south, in direct contrast to the remainder of the pavement is also suggestive of its role in how the hierarchy of the room should be read. The importance of the east end of the chapter house was emphasised architecturally by the inclusion of a fourth tier, whereas the other sides had only three tiers of seating (Fig. 2.16). Not only would this have been the king’s position, but also more frequently the seat of the abbot, flanked by other senior monks. The penitential step was in

²⁰⁵ The earliest reference to the chapter house being used for this purpose is in 1352, and there is evidence for at least three further meetings through the 1370s and 1380s. The last known meeting was in 1395. Colvin, *The History of the King’s Works: The Middle Ages*, Vol. 1, 141-143; Barbara Harvey, “The Monks of Westminster and their Chapter House,” in *Westminster Abbey Chapter House: The History, Art and Architecture of ‘a Chapter House Beyond Compare’*, ed. Rodwell and Mortimer, 110.

²⁰⁶ A. E. Stamp, ed., *Close Rolls of the Reign of Henry III Ad 1247-1251*, Vol. 6 (London: His Majesty’s Stationery Office, 1922), 203.

²⁰⁷ “Mandatum est magistro Johanni, cementario regis, quod sine dilacione fieri faciat ferruram lectrinii regis apud Westmonasterium juxta ordinacionem magistri Willelmi, pictoris regis, et deferri faciat patibulum quod est in capella infirmatorii Westmonasterii ad domum ubi predictus magister Willelmus operatur: et hoc facere nullatenus omittat.” Stamp, *Close Rolls of the Reign of Henry III Ad 1256-1259*, Vol. 10, 366.

²⁰⁸ Carpenter, “King Henry III and the Chapter House of Westminster Abbey,” 36.

front of the abbot's seat and this was where a monk accused of an offence awaited his penance. A monk may also have prostrated himself on the pavement before this step.²⁰⁹ This practice was a key element of the daily chapter meetings, alongside readings from the Rule of St Benedict. It could be argued, therefore, that the layout of the pavement was influenced by the liturgical practices undertaken within the chapter house.

Audience and function may also help to explain some of the differences between the chapter house pavements at Salisbury and Westminster. Rather than the success of one design over the inexperience of the other, perhaps the pavements should be understood as intentionally creating a different effect on their respective audiences. At Salisbury the similarities in layout design between chapter house and muniment room raise interesting and important questions about who was meant to see these pavements (Figs. 2.17 and 2.18).²¹⁰ A muniment room by its very nature would have been seen by very few and even then would have been covered by large pieces of furniture. It would also be difficult to read either pavement at Salisbury as a series of signposts to navigate the room, especially when the muniment room had no obvious ceremonial function. In fact, the radiating panels around the central column would not lead the eye or feet to the east end, but instead would serve to send them into a labyrinth of confusion. The Salisbury chapter house pavement, therefore, performs a decorative purpose and cleverly uses the shape of the room to its advantage. Salisbury was served by a community of secular clergy in the thirteenth century and so perhaps would not have used its chapter house in the same way that a monastic community would have done. In contrast, the Westminster chapter house pavement appears to have been laid with a great deal of thought as to how the room was used.

The Medieval Pavement in Context

The Westminster Abbey chapter house pavement may not have been laid with leftover tiles, but there certainly must have been some kind of miscalculation. The tilers appear to have had too many of some designs and too few of others. It is possible that part of the difficulty came from the octagonal shape of the room. WP5 and WP11 were certainly designed for an octagon with sides of equal length. This might also explain some of the problems encountered when the tilers reached the western end of the panels. It should also not be forgotten that the Westminster chapter house was of an early date for English two-colour tile pavements. In the Close Rolls for 1258-1259 an entry

²⁰⁹ Harvey, "The Monks of Westminster and their Chapter House," 102-105.

²¹⁰ Author's drawings based upon own photographs, in addition to a plan published in: Britton, *The History and Antiquities of the Cathedral Church of Salisbury*, Pl. 1.

records the instruction for the remaining tiles left over from the chapter house to be used to lay a pavement in St Dunstan's Chapel.²¹¹ St Dunstan's Chapel was located on the east side of the cloister and roughly half the size of the Pyx Chamber.²¹² How many tiles would have been required to create a pavement in this building? The number would have been substantially less than the nearly eight-thousand tiles that comprise the chapter house pavement. Yet if Keen's argument is to be believed then there may have been as many as nine-thousand tiles left over from works in the Palace of Westminster during the mid-thirteenth century that were used to lay both the pavements in the chapter house and St Dunstan's Chapel. This would have been a rather large miscalculation in the first instance. It seems, instead, more reasonable to suggest that it was the picture tiles alone that were 'leftovers' from a pavement in the Palace of Westminster. The number of these tiles which were laid within the chapter house appears consistent with this kind of conclusion.

The perception of the Westminster pavement as made up of leftovers in an untidy arrangement must be challenged. This chapter has set out a possible interpretation of the evidence for how the pavement was laid and how its panels may have been thought about and designed. A close analysis of the layout reveals that it was laid with careful attention to detail and designed with a similar degree of consideration. Deviations from an intended pattern were part of the practical difficulties that arose from laying a pavement in a large and unusually shaped room. It may well be that this conclusion presents its own set of problems. Yet ultimately, regardless of whether the tiles were leftovers or specially commissioned for the chapter house, the pavement has its own distinct patterns, symmetry and uniformity. As such it is important to be aware in future of the language and methods used to describe medieval pavement layouts. They may not conform to modern standards of accuracy or beauty, nor compare favourably with *in situ* Gothic Revival pavements, but that does not make them unsatisfactory. The pavement plans produced by Shaw and others are beautiful, but they do not depict what a medieval viewer could see. When viewed from the entrance of the chapter house the impression given by the Westminster pavement is not of untidiness. Rather, once the first overwhelming impact subsides, the eye is drawn to the east end of the room and where matters of importance would have been transacted. The layout could as such be described as entirely successful. Medieval pavements need, therefore, to be analysed within their own context and not subjected to a visual assessment based on non-medieval perceptions.

²¹¹ Stamp, *Close Rolls of the Reign of Henry III Ad 1256-1259*, Vol. 10, 377.

²¹² St Dunstan's Chapel is no longer extant, but the estimated size is based on a plan of the Abbey drawn in the early 1920s for the Royal Commission on the Historical Monuments of England. Warwick Rodwell, "The Chapter House Complex: Morphology and Construction," in *Westminster Abbey Chapter House: The History, Art and Architecture of 'a Chapter House Beyond Compare'*, ed. Rodwell and Mortimer, 2.

There were undoubtedly other factors, aside from practical limitations and compromises, that influenced how a medieval pavement was intended to look. At Westminster, for example, the chapter house pavement suggests three further elements that are worth exploring. These include the liturgical use of a space, the pavement as part of a wider decorative scheme and the use of heraldic tiles. Each of these ideas will be explored in greater detail through the course of the ensuing chapters. In Chapter Four the relationship between liturgy and a medieval pavement will be examined. At Westminster, the arrangement of the panels reveals how the chapter house functioned liturgically. The monks would have processed eastwards into the chapter house, a route mimicked by the east-west orientated panels. The demarcation of the east end from the rest of the pavement by a north-south orientated panel highlighted its importance as the abbot's place. In Chapter Five the medieval pavement will be considered as just one part of a wider decorative scheme. At Westminster, seven of the tile designs include depictions of lions or leopards, animals that can be found repeated in the sculptural decoration of the chapter house (Fig. 2.19). The repetition of lions across the floor and walls is surely no coincidence. Lions represented royalty, in particular English kings, and the chapter house was after all built under the patronage of Henry III.²¹³ His involvement is made clear not only in the pavement inscriptions, but also through the choice of tile design. WD33, for example, depicts the story in which Edward the Confessor gave his ring to a beggar who is later revealed to be John the Evangelist (Fig. 2.20). The ring from this story became the identifying emblem of Edward the Confessor. The placement of this tile design in the Westminster chapter house pavement must have been deliberate. It was Edward the Confessor who first built Westminster Abbey and it was where he chose to be buried in 1066. It was also Henry III's personal veneration of the Confessor that led the abbey, and its chapter house, to be rebuilt in the thirteenth century. The pavement, therefore, referred to the history of the abbey and both its past and present patronage. Royal patronage is also made clear through the use of heraldic tiles. The next chapter will explore the function of heraldry in medieval pavements. At Westminster, The Arms of England design is far larger than the other tile designs and as such is instantly visible in the pavement. These tiles were a central axis for the pavement, pointing the viewer towards important events happening at the east end of the chapter house. The choice of this tile design, and its placement within the pavement layout, was not an accident. It was a deliberate statement of power and authority, which could be appropriately and succinctly declared by using heraldic arms.

²¹³ David Badke, "Lion," *The Medieval Bestiary: Animals in the Middle Ages*, 2011, accessed 10th December 2015, <http://bestiary.ca/>; Margaret Haist, "The Lion, Bloodline and Kingship," in *The Mark of the Beast: The Medieval Bestiary in Art, Life and Literature*, ed. Debra Hassig (London: Routledge, 1999), 3-16.

The example of Westminster shows, therefore, that there is much still to explore about medieval pavements beyond their initial visual appearance. Medieval pavements need to be considered within their own architectural, decorative and liturgical contexts. In this way a better understanding will be gained about the intentions and reality behind 'untidy' and 'unsatisfactory' medieval pavement layouts.

Chapter Three

'Some attempt to appropriate them is now made': A New Approach to Heraldry in Medieval Pavements

'The four shields above noticed bear the following coats...'

By the thirteenth century heraldry had become more than a system of signs identifying individuals on the tournament or battlefield. What had begun as a necessity to overcome the increasing anonymity of personal armour became a sophisticated language employed to indicate authority, lineage and prestige.²¹⁴ Heraldry was able to simultaneously represent the current possessor of a title, the previous incumbent and the succeeding generations. It was this ability which led to heraldry moving beyond the individual surcoat of an armoured knight and onto a variety of other objects. The types of items varied hugely, as did the specific function of the heraldry with which they were adorned. Heraldry on funerary monuments, for example, might be considered commemorative. In contrast other objects embellished with heraldry may have been intended to advertise patronage. From here it was a short step for heraldry to become incorporated into the decorative arts.²¹⁵ Heraldic shields, by the thirteenth century, could be found carved into stone, painted onto stained glass and stamped into floor tiles. With the possibility for every surface to be covered with heraldic designs, it is unsurprising that heraldry began to lose the impact of its original meaning and often became merely ornamental.

Heraldic symbols, alongside naturalistic foliage, geometric shapes and animal motifs, made up a significant proportion of medieval tile designs. In the past, scholars interested in these heraldic tile designs have been primarily concerned with identifying the heraldry that was depicted upon

²¹⁴ For the origin of heraldry and a discussion of its earlier history see: A. Ailes, "Heraldry in Twelfth-Century England: The Evidence," in *England in the Twelfth Century: Proceedings of the 1988 Harlaxton Symposium*, ed. D. Williams (Woodbridge: Boydell Press, 1990), 1-16; Peter Coss and Maurice Keen, *Heraldry, Pageantry and Social Display in Medieval England* (Woodbridge: Boydell Press, 2008); Richard Marks and Ann Payne, ed., *British Heraldry and its Origins to c.1800* (London: British Museum Publications, 1978); Michel Pastoureau, *Heraldry: Its Origins and Meaning* (London: Thames and Hudson, 2010); Anthony Wagner, *Heralds and Heraldry in the Middle Ages: An Inquiry into the Growth of Armorial Function of Heraldry* (London: Oxford University Press, 1956). A more recent discussion about heraldry and art history can be found in: Hans Belting and Thomas Dunlap, *An Anthropology of Images: Picture, Medium, Body* (Princeton: Princeton University Press, 2011), Chapter 3.

²¹⁵ For a general introduction to heraldry in the decorative arts see: Cherry, "Heraldry as Decoration in the Thirteenth Century," 123-134; Payne, "Medieval Heraldry," 55-59.

them. As a consequence of this identification an argument of patronage could be made in cases where heraldic tiles were attributed to families or individuals connected to a building or pavement. Shaw, for example, in his 1858 description of the church pavement at Jervaulx Abbey observed:

The four shields above noticed bear the following coats, and some attempt to appropriate them is now made. First a Lion, passant, not on a shield; this might have been the badge of John de Kingston, first Abbat of Jorevalle, who founded the church.²¹⁶

This approach is just as apparent in the works of modern historians. As recently as 2000, for example, Goodall collated a list of heraldry found on medieval tiles and proceeded to identify them.²¹⁷ One motivation for this type of study is the fact that heraldry on floor tiles is not straightforward to identify. The designs are often simplified into more basic geometric shapes, and two-colour tiles by their nature contain none of the colours that are so important to the language of heraldry. Further confusion can also be caused by the accidental reversal of arms. This was a consequence of the design being carved correctly onto the wooden stamp, but the resulting impression in the clay tile being a mirror image of it.

Alternatively, heraldic tiles have been considered by some scholars as just one type of design in a tiler's repertoire.²¹⁸ Due to the number of heraldic tiles which were produced and distributed by any particular workshop, any suggestion of patronal or commemorative meaning becomes problematic. If a tile workshop repeatedly employed heraldic designs at several sites, then the specificity of their meaning must be questioned. Yet it is possible to consider the significance of choice. The choice of heraldic designs over other types of design, or the choice of one particular set of heraldic arms over another, could offer potential alternative avenues of enquiry. It is also worthwhile observing how heraldic tiles were utilised and whether this suggests that the heraldry retained some kind of significance, even if diluted from its original purpose. Decorative heraldry, therefore, poses its own interesting set of questions and should not be dismissed as only ornamental. Both traditional approaches to heraldic tiles, whether viewed as an indication of specific patronage or appreciating their general decorative qualities, are in danger of treating the heraldry as

²¹⁶ Shaw, *Specimens*, 10.

²¹⁷ "If the place of origin is known then the number of possibilities can be narrowed down providing there is sufficient evidence for the families connected with the place where they were found." Quoted from Goodall, "English Armorial Tiles: An Ordinary," 103.

²¹⁸ Even in the nineteenth century some antiquaries were beginning to question the idea of heraldic tiles indicating specific patronage. In fact, the arms of the King of the Romans were cited as designs that continued to be used for several generations. Anonymous, "Heraldic Tiles," *Somersetshire Archaeological and Natural History Society's Proceedings* 35 (1889): 35-37.

separate from the pavement in which it was found. The detailed work of identifying heraldic tiles has already been completed for many sites and is an invaluable resource, making it now possible to step back and examine the pavements in which they were found. As such this chapter will move beyond the usual question of 'what is the heraldry' and will instead seek to engage with the questions of 'where is the heraldry' and 'why is the heraldry there'. By addressing these issues, the chapter will move the study of heraldic tiles closer to those studies that have already been completed in regard to heraldry in other art forms.

The location of heraldry was key to Michael Michael's discussion of proximity, exploring the position of heraldry in relation to other parts of any given site or context.²¹⁹ Using examples found in stained glass, stonework and manuscripts, Michael argued that heraldry was deliberately located in particular spaces in order to make a statement about the represented individual. By displaying heraldry in a sacred space, for example, an assertion may be made about the authority of a person, not only in life, but also in death. An amount of wealth and social position would have been required to gain access to these spaces. At the same time the closeness of secular heraldry to holy objects, like shrines or relics, may have announced to a viewer that the represented individual had a special relationship with a particular saint. Heraldry did not, however, denote just an individual. It also embodied whole families, spanning generations. The employment of heraldry within a space, therefore, was linked to notions of commemoration and memory. Heraldry within spaces also raises an important question about the various means by which heraldry could be organised. The decision of which arms to represent, and how they should be displayed, was clearly not haphazard. It has been suggested that the organisation of heraldry in stained glass, for example, was sometimes the work of a specialist and not the patron.²²⁰ Many heraldic displays do correspond with the typical organisation of rolls of arms. There were several different types of heraldic rolls. Occasional Rolls recorded the arms of the individuals present at a particular event, whilst General Rolls compiled heraldry from a number of sources. Institutional or Regional Rolls illustrated those associated with a particular group.²²¹ Rolls were often organised hierarchically, with royal arms arranged at the beginning. After this came the lesser nobility, whose arms do not always appear to have been arranged in any particular order. This type of hierarchical organisation is evident, for example, on the carved stone shields that adorn the early fourteenth-century gatehouse at Kirkham Priory (*Yorkshire*)

²¹⁹ Michael, "The Privilege of 'Proximity'," 55-74.

²²⁰ Richard Marks, *Stained Glass in England During the Middle Ages* (London: Routledge, 1993), 85-90.

²²¹ Noel Denholm-Young, *History and Heraldry 1254 to 1310: A Study of the Historical Value of the Rolls of Arms* (Oxford: Clarendon Press, 1965), 2; Stephen Friar, *Heraldry for the Local Historian and Genealogist* (Stroud: Sutton Publications, 1997), 53; Wagner, *Heralds and Heraldry in the Middle Ages*, 49; Thomas Woodcock and James Martin Robinson, *The Oxford Guide to Heraldry* (Oxford: Oxford University Press, 1988), 172-173.

(Fig. 3.1).²²² The royal arms are positioned at the top, with the arms of local nobles below.²²³ These local families were the founders and patrons of the priory. Yet alongside the acknowledgement of patronage and secular authority, there was also a desire within this display for commemoration. For heraldry at the priory was not confined to the gatehouse exterior alone, but could also be found on the funerary effigies of the de Roos family, who were buried at the east end of the church.²²⁴

Once the question of where has been raised, the related question of why that heraldry is there arises. The idea of proximity for the use of heraldry in sacred spaces is clearly a useful one, but it introduces the wider issue of the use of secular signs and images within sacred spaces.²²⁵ The secular, of course, need not refer to heraldry alone, but also includes the marginal or profane imagery that continues to bemuse and amuse the art historian.²²⁶ Yet heraldry, a widely-understood and much-utilised symbol of secular power and authority, could appear contradictory to the sacred spaces in which it was placed. If a church was meant to be a bridge between the world of men and the heavenly paradise, heraldry was, more than almost anything else, a reminder of the temporal world. It is possible, however, that the advantages of a heraldic display within a church were felt by both parties involved. Heraldry was key to identifying secular lords, and their families, who wished to be remembered in the prayers of priests and monks. At the same time, heraldry would have benefited a religious community by being a visual statement of the power – political and martial – that stood behind and supported their church. Equally a community could be proud of its founders and patrons and want to celebrate them in some way.²²⁷ This is one explanation that has been given for the carved heraldic shields that line the nave of York Minster (Fig. 3.2). The heraldry depicts a variety of noble families, many of whom were recorded patrons. The nave was reconstructed in the latter part of the thirteenth century and the shields may have commemorated those who

²²² Glyn Coppack, Stuart Harrison and Colin Hayfield, "Kirkham Priory: The Architecture and Archaeology of an Augustinian House," *Journal of the British Archaeological Association* 148 (1995): 55-136. For more on Kirkham Priory see: Stuart Harrison, *Kirkham Priory, North Yorkshire* (London: English Heritage, 2003); Charles Reed Peers, *Kirkham Priory, Yorkshire* (London: His Majesty's Stationery Office, 1946); Nikolaus Pevsner, *The Buildings of England: Yorkshire The North Riding* (Harmondsworth: Penguin, 1981).

²²³ The heraldry on the Kirkham gatehouse includes: de Clare, England, de Roos, de Vaux, Espec, FitzRalph, Scrope and de Fortibus. Coppack, Harrison and Hayfield, "Kirkham Priory: The Architecture and Archaeology of an Augustinian House," 107-108.

²²⁴ Three members of the de Ros family, including the original founder, were buried before the high altar during the thirteenth and fourteenth centuries. Coppack, Harrison and Hayfield, "Kirkham Priory: The Architecture and Archaeology of an Augustinian House," 73.

²²⁵ For a general overview of this topic see: Martindale, "Patrons and Minders: The Intrusion of the Secular into Sacred Spaces in the Late Middle Ages," 143-178.

²²⁶ Some of the key literature on medieval marginalia includes: Binski, *Gothic Wonder*, 283-306; Camille, *Image on the Edge*; Lillian Randall, *Images in the Margins of Gothic Manuscripts* (Berkeley: University of California Press, 1966).

²²⁷ Martindale, "Patrons and Minders: The Intrusion of the Secular into Sacred Spaces in the Late Middle Ages," 154-155.

contributed towards the rebuilding work.²²⁸ The question of the secular within the sacred, and the idea of proximity, have both been usefully applied to the heraldry found in stained glass, manuscripts and stonework. Yet they can be just as successfully applied to the heraldic tiles found in medieval pavements. The inclusion and placement of the Arms of England tiles in the Westminster Abbey chapter house pavement, for example, has been argued in the previous chapter to have been of particular importance. These tiles were not only central in the decision of how to lay the chapter house pavement, but were also part of a wider scheme in which the pavement was designed and laid to enhance the royal authority of Henry III.

Hailes Abbey, the thirteenth-century Cistercian abbey and pilgrimage destination, had a heraldic pavement of particular interest. The heraldic tiles from Hailes are well-known and frequently referenced by scholars.²²⁹ The pavement they came from, however, has been less well discussed. It was laid in the late thirteenth century in the new, elaborately rebuilt east end of the church. Most of the heraldic tiles have been attributed to particular individuals, but their placement within the overall layout of the pavement has not before been considered in detail. The following discussion will situate the thirteenth-century pavement within its historical and architectural context. A close analysis of the layout and distribution of tile designs will be used to explore the idea that the pavement was a visual reminder of the abbey's founder, Richard of Cornwall, and his extended family. The refectory pavement at Cleeve Abbey will be taken as a comparative case study. Both pavements employed the same group of heraldic arms, but give very different answers to the question of why that heraldry was there. According to the traditional explanations of heraldic tiles set out above, the designs at Cleeve could be considered decorative, whilst those at Hailes could be used to argue patronage. It is not, however, that straightforward. Both pavements used heraldry in ways that were meaningful and particular to the audience and function of the space in which they were laid.

Hailes Abbey and its Founder

²²⁸ An alternative explanation for the nave shields at York returns to the idea of decoration imitating rolls of arms. It has been suggested that the individuals represented may have been connected through a shared event, such as the wars with Scotland, and recorded, for example, in the Falkirk Roll of 1298. Brown, *'Our Magnificent Fabrick'*, 89-92.

²²⁹ The Hailes tiles find themselves noted not only in the literature on tiles, but also in publications about medieval heraldry. John Cherry, "Tiles," in *Age of Chivalry: Art in Plantagenet England 1200-1400*, ed. Alexander and Binski, 181-2; Cherry, "Heraldry as Decoration in the Thirteenth Century," 131; Eames, *Catalogue*, Vol. 1, 202-203; Nicholas Vincent, *The Holy Blood: King Henry III and the Westminster Blood Relic* (Cambridge: Cambridge University Press, 2001), 150.

Richard, Earl of Cornwall was born in 1209, the second son of King John of England.²³⁰ By the late 1220s he had assumed the titles of Count of Poitou and Earl of Cornwall. Less than a decade later he had accumulated enough land and wealth to become the richest earl in England. During the latter part of his career he was principally occupied with his concerns in Germany. He was crowned King of the Romans at Aachen in 1257.²³¹ Richard was married three times. His first wife was Isabel Marshal, the widow of the Earl of Gloucester, whom he had married in 1231. In 1243, three years after Isabel's death, he married Sanchia of Provence. Sanchia was the younger sister of Eleanor of Provence, who had married Richard's brother Henry III in 1236. After Sanchia's death in 1262, Richard married for a third time, taking Beatrix von Falkenburg as his wife in 1269. Richard had a number of children, but few lived into adulthood. Henry of Almain was Richard's eldest son by his first wife Isabel. Henry was murdered in 1271 and it was Richard's second son, Edmund, who inherited Richard's titles and estates on his death in 1272. Edmund was born in 1249, the only surviving child of Richard and his second wife Sanchia.²³² Following his assumption of the earldom in 1272, Edmund was knighted and married to Margaret Clare, sister to the Earl of Gloucester. Edmund continued to be, like his father, the richest baron in England. A great deal of that wealth went into the patronage of religious houses. Edmund died in 1300 without issue. His title and estates reverted to the crown, including the manor at Hailes.

Hailes Abbey, located some twenty miles north-east of Gloucester, was one of the last Cistercian foundations in England (Fig. 3.3).²³³ In 1245 Richard's brother, King Henry III, gave him the manor of Hailes on which to found a religious community.²³⁴ By 1246 a group of monks had arrived.²³⁵ Building work at Hailes commenced shortly after and by 1251 enough had been

²³⁰ For a full account of Richard's life see: Welbore St Clair Baddeley, "Richard, Earl of Cornwall and Henry of Almaine," *Transactions of the Bristol and Gloucestershire Archaeological Society* 22 (1899): 86-114; Noël Denholm-Young, *Richard of Cornwall* (Oxford: Blackwell, 1947); T. W. E. Roche, *The King of Almayne: A Thirteenth-Century Englishman in Europe* (London: Murray, 1966); Nicholas Vincent, "Richard, first earl of Cornwall and king of Germany (1209-1272)," *Oxford Dictionary of National Biography*, 2004, accessed 6th February 2016, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/23501>.

²³¹ For further details of English interests in Germany during this period see: Björn Weiler, *Henry III of England and the Staufan Empire 1216-1272* (Woodbridge: Boydell Press, 2006).

²³² For a full account of Edmund's life see: Nicholas Vincent, "Edmund of Almain, second earl of Cornwall (1249-1300)," *Oxford Dictionary of National Biography*, 2004, accessed 6th February 2016, <http://oxforddnb.com.ezproxy.york.ac.uk/view/article/8505>.

²³³ For a full account of the buildings of Hailes Abbey see: Michael Carter, *Hailes Abbey* (London: English Heritage, 2017), 3-27; J. G. Coad, *Hailes Abbey, Gloucestershire* (London: Her Majesty's Stationery Office, 1969), 11-23.

²³⁴ Carter, *Hailes Abbey*, 29; Coad, *Hailes Abbey*, 3.

²³⁵ The monks came from Beaulieu Abbey, a Cistercian house in Hampshire founded by Richard and Henry's father, King John. Henry Richards Luard, ed., *Matthæi Parisiensis, Monachi Sancti Albani, Chronica Majora*, Vol. 4 (London: Longman & Co., 1877), 562-563.

completed to hold a well-attended dedication ceremony, which Matthew Paris described in his *Chronica Majora*:

The king and queen were present at the said dedication, and almost all the nobles and prelates of England: there were thirteen bishops, who all celebrated mass on the day of the dedication each at his own altar.²³⁶

Along with the land and pre-existing church at Hailes, Richard granted the monastery one thousand marks.²³⁷ In the years preceding his death, it was his son and heir, Edmund, who took over the patronage of Hailes Abbey. Edmund acquired a relic of the Holy Blood in the late 1260s and donated part of it to Hailes in 1270.²³⁸ The donation of the Holy Blood relic caused a reversal in the abbey's dwindling fortunes, as it became one of the most popular pilgrimage destinations in England.²³⁹ A year after the donation a fire at the abbey meant rebuilding work was required. The church dedicated in 1251 had consisted of an eight-bay nave and a four-bay rectangular aisled presbytery. The rebuilding work provided the opportunity to expand the east end of the church. Practically speaking it needed to adapt to the increasing number of pilgrims visiting the church. Aesthetically it also needed to capture the magnificence and prestige of the relic. The east end was transformed into a polygonal apse with five radiating semi-circular chapels, and the shrine for the relic of the Holy Blood was located at the centre of this chevet arrangement (Fig. 3.4).²⁴⁰

The inspiration behind this type of apsidal plan, which was much more elaborate than a rectangular east end, has been considered French in origin by architectural historians.²⁴¹ In England the apsidal plan appears to have been particularly associated with elite founders. Beaulieu Abbey (*Hampshire*), Hailes, Vale Royal Abbey (*Cheshire*) and Westminster were all, for example, royal

²³⁶ "Erant autem in memorata dedicatione praesentes dominus rex et regina, et fere omnes Angliæ magnates et praelati, episcopi vero tredecim, qui omnes Missam die dedicationis celebrarunt, quilibet vero ad suum altare, Lincolniensisque ad majus altare Missam sollempniter valde decantavit." Henry Richards Luard, ed., *Matthæi Parisiensis, Monachi Sancti Albani, Chronica Majora*, Vol. 5 (London: Longman & Co., 1880), 262.

²³⁷ Carter, *Hailes Abbey*, 29; Coad, *Hailes Abbey*, 3; William Dugdale, *Monasticon Anglicanum A History of the Abbies and other Monasteries, Hospitals, Frieries, and Cathedral and Collegiate Churches, with their Dependencies, in England and Wales: also of all such Scotch, Irish and French Monasteries, as Were in any Manner Connected with Religious Houses in England*, Vol. 5 (London: Bohn, 1846): 686.

²³⁸ Welbore St Clair Baddeley, "The Holy Blood of Hayles," *Transactions of the Bristol and Gloucestershire Archaeological Society* 23 (1900): 277-278; Vincent, *The Holy Blood*, 137-153.

²³⁹ Its fame was such that it found itself immortalised in Geoffrey Chaucer's fourteenth-century *Canterbury Tales*: "By the blode of Crist that is in Hayles." Quoted from the 'The Pardoner's Tale': Walter Skeat, ed., *The Complete Works of Geoffrey Chaucer* (Oxford: Clarendon Press, 1903), 560.

²⁴⁰ In 1900 Bazeley described the discovery of the quadrangular shrine base, which he believed was the point from which all the chapels radiated outwards. William Bazeley, "The Abbey of St Mary, Hayles: Brief sketch of its History and Report of the Excavations in 1889 and 1900," *Transactions of the Bristol and Gloucestershire Archaeological Society* 22 (1899): 265.

²⁴¹ Nicola Coldstream, "Cistercian Architecture from Beaulieu to the Dissolution," in *Cistercian Art and Architecture in the British Isles*, ed. Norton and Park, 143.

foundations.²⁴² One of the objectives of this type of plan was to provide more space for altars. By the thirteenth century there was increasing demand for intercessory masses to be said for the dead, correlating with the development of the doctrine of purgatory. The arrangement at Beaulieu created ten additional chapels, whilst the fourteenth-century plan at Vale Royal created as many as thirteen.²⁴³ Five new apsidal chapels, with altars, were provided by the late thirteenth-century east end extension at Hailes Abbey. The elaborate plan also created the space required for the liturgy associated with the Holy Blood relic. The newly reconstructed east end at Hailes was also the location of what could be considered the Cornwall family mausoleum. By its dedication in 1277, Sanchia, Henry of Almain and Richard had all been buried in the presbytery, and Edmund was also laid to rest there during a ceremony attended by Edward I in 1301.²⁴⁴

Both the rectangular presbytery and polygonal apse were laid in this period with a heraldic pavement (Fig. 3.5).²⁴⁵ The pavement was first recorded during the excavation of the monastic church in 1899.²⁴⁶ At this time four of the apse chapels were described as paved with thirteenth-century heraldic tiles, along with the north presbytery aisle and the central area of the presbytery. Further details were documented during the mid-twentieth century when the church was once again excavated.²⁴⁷ The areas of excavated paving were described as being divided into irregular sized panels by the use of smaller rectangular tiles acting as borders. Each panel was typically laid with the same tile design. Variety was created within these panels by the alternation of reduced and oxidised tiles.²⁴⁸ Reduced tiles had a grey or black coloured appearance, whilst oxidised tiles were a red or

²⁴² Even Croxden, the Cistercian abbey that was seemingly an exception to this, has been argued to have had connections to the royal court. Coldstream, "Cistercian architecture from Beaulieu to the Dissolution," 145. For more on the history of Beaulieu Abbey see: Stanley Frederick Hockey, *Beaulieu King John's Abbey: A History of Beaulieu Abbey Hampshire 1204-1538* (Surrey: Pioneer Publications, 1976). For more on Vale Royal Abbey see: Nikolaus Pevsner, *The Buildings of England: Cheshire* (Harmondsworth: Penguin, 1971); F. H. Thompson, "Excavations at the Cistercian Abbey of Vale Royal, Cheshire, 1958," *The Antiquaries Journal* 42 (1962): 183-207.

²⁴³ Coldstream, "Cistercian Architecture from Beaulieu to the Dissolution," 143-147.

²⁴⁴ Bazeley also mentions at least one other family member who was thought to have been buried at Hailes, this was an infant child named Richard. Bazeley, "The Abbey of St Mary, Hayles," 257-258.

²⁴⁵ The tiles have been dated to the latter half of the thirteenth century and are thus usually associated with the reconstruction of the east end. There were several phases of paving within the church. *Ex situ* evidence of Chertsey type tiles, for example, suggest the presence of a thirteenth-century pavement in the north transept and choir. There was also evidence a fourteenth century heraldic pavement, which included the arms of Castile and Despenser. Bazeley, "The Abbey of St Mary, Hayles," 269; Eames, *Catalogue*, Vol. 1, 156, 202-203. Author's drawings based upon own photographs, in addition to plans published in: Carter, *Hailes Abbey*; Coad, *Hailes Abbey*.

²⁴⁶ Bazeley, "The Abbey of St Mary, Hayles," 257-267.

²⁴⁷ Excavations were carried out between 1970 and 1977 for the Department of the Environment. B. Rawes, "Archaeology in Gloucestershire 1976-77," *Transactions of the Bristol and Gloucestershire Archaeological Society* 96 (1978): 88-89; Leslie Webster and John Cherry, "Medieval Britain in 1977," *Medieval Archaeology* 22 (1978): 150-188.

²⁴⁸ Reduced tiles were fired in an environment where oxygen was excluded or through overfiring. In contrast oxidised tiles were fired in an environment where there was oxygen. Tiles can also be partly reduced and

pink colour. The alternation of oxidised and reduced tiles would, therefore, have created a repeating chequered effect throughout the pavement.²⁴⁹ In particular, two *in situ* areas of paving were recorded during the excavations of the mid-twentieth century. The first section was in the north presbytery aisle between the second and third bays (Fig. 3.6).²⁵⁰ The second section was between the fourth bay of the north presbytery aisle and the first bay of the chevet (Fig. 3.7).²⁵¹

The Heraldic Tile Designs

The tile designs from this thirteenth-century pavement were bold and depicted simplified versions of heraldic arms (Fig. 3.8).²⁵² Heraldic tiles usually contained the design within a shield, lozenge, square or circle shape. These could then be placed square or at an angle, depending on whether it was intended to lay the tile square or diagonally. At Hailes the heraldic arms are placed within a variety of geometric shapes, but all the designs appear to be orientated so as to be used as square tiles. Heraldic tiles were, of course, not uncommon in medieval pavements. As discussed previously, some of these designs were employed as decorative motifs, whilst others may not have been intended as heraldic at all.²⁵³ Yet at Hailes it can be argued that the choice of heraldic designs was both deliberate and meaningful. The sheer number of heraldic designs included within the pavement, and their selection, were significant. Another factor which highlights their importance is that the majority of the designs were not used elsewhere. Eames was confident that the workshop that produced the tiles at Hailes went on to produce a further series of tiles referred to as the 'stabbed Wessex' series.²⁵⁴ Yet most of the heraldic designs have not been found outside of Hailes Abbey. There are a handful of exceptions, but these sites were not necessarily random. At least one

partly oxidised. For example, the surface or outer edges may be a red oxidised colour, but the central core of the tile may be a grey reduced colour.

²⁴⁹ It was recorded that the alternation was not consistent throughout the panels but occurred often enough to create a distinct visual pattern. Eames, *Catalogue*, Vol. 1, 202-203.

²⁵⁰ Author's own drawings based upon photographs taken on site.

²⁵¹ Author's own drawings based upon photographs taken on site.

²⁵² Author's drawings based upon own photographs, in addition to images published in: Eames, *Catalogue*, Vol. 2.

²⁵³ Lions within circles, for example, should not be assumed to have heraldic meaning. In fact, a case has been made that animals within circles have more similarities with contemporary textile designs. Goodall, "English Medieval Armorial Tiles: An Ordinary," 103-104. See also: Agnes Geijer, *A History of Textile Art* (Leeds: W. S. Maney, 1979).

²⁵⁴ They have been named as such due to the characteristic small holes stabbed into the back of the tiles. Evidence from this workshop has been found in Bedfordshire, Buckinghamshire, Leicestershire, Northamptonshire, Oxfordshire and Warwickshire. Eames, *Catalogue*, Vol. 1, 202-203.

of the heraldic designs, for example, was discovered at Rewley Abbey (*Oxfordshire*).²⁵⁵ The potential connection between Hailes and Rewley is quite straightforward, as the abbey was founded by Edmund of Cornwall in 1281. It is surprising, however, that the stabbed Wessex workshop did not more widely reuse all the designs which had been created for the Hailes pavement. It appears otherwise to have been common practice for a workshop to employ the same design stamp at a number of sites.²⁵⁶ As such, it is possible to argue that the tiles were specially commissioned for the pavement at Hailes, the heraldic designs being of personal significance to Richard of Cornwall and his family. This interpretation is supported by the striking and substantial connections between the families represented by the tile designs.

Seven of the heraldic tile designs can be simply explained through direct reference to Richard, Edmund and their immediate family (Fig. 3.9). Three are directly related to Richard himself. Two (HD1 and HD13) reference the heraldic arms of the King of the Romans. Both of these designs depict the characteristic imperial eagle, with the first placing it within a shield. The eagle was traditionally the insignia for the Holy Roman Emperor, a title which Richard never actually gained, though he had been crowned King of the Romans in 1257.²⁵⁷ The third design (HD2) is a reference to Richard as Earl of Cornwall and Count of Poitou. The lion rampant was Richard's device from 1225, when he was knighted. As these were titles inherited by his son Edmund, the designs could also be considered an acknowledgement of Edmund's key role in the 1270s rebuilding of the monastic church where, and when, these tiles were laid. The Arms of England (HD3) are also present in the pavement. The three passant guardant lions could be a reference to either Richard as son of King John, or more likely, to his elder brother Henry III. Henry had been present at the dedication of the abbey in 1251 and had himself granted a yearly rental of 20 marks.²⁵⁸ The design could then have acted two-fold as an acknowledgement of the royal lineage of the abbey's founder, but also a reminder of another patron. Richard married three times and the heraldic devices for each of his wives are included within the designs (HD4, HD5 and HD6). His first wife was Isabel Marshal, the widow of Gilbert de Clare, Earl of Gloucester. The Arms of Clare (HD4), depicted by three chevrons,

²⁵⁵ Eames, *Catalogue*, Vol. 1, 202-203. For the history of Rewley Abbey see: Julian Munby and Lance Adlam, *From Studium to Station: Rewley Abbey and Rewley Road Station, Oxford* (Oxford: Oxford Archaeological Unit, 2007).

²⁵⁶ Publications such as Stopford's *Medieval Floor Tiles of Northern England* look for workshops that use common practices or designs at a number of geographically diverse sites.

²⁵⁷ Lacking papal support, Richard was never officially recognised as Holy Roman Emperor. Vincent, "Richard, first earl of Cornwall and king of Germany (1209-1272)," *Oxford Dictionary of National Biography*, 2004, accessed 6th February 2016, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/23501>.

²⁵⁸ Henry Richards Luard, ed., *Annales Monastici*, Vol. 2 (London: Longman, 1865), 343-344.

have generally been considered to represent Isabel.²⁵⁹ Richard's second wife was Sanchia of Provence, who was represented in the pavement by a design based on the Arms of Provence (HD5). Beatrix von Falkenburg was Richard's third wife and was represented in the pavement by a shield bearing a lion rampant (HD6).

The remaining six designs can be explained through a combination of marriage and family connections. The presence of the chequered Arms of Warenne, the Earls of Surrey, can be explained through the fifth earl's marriage (HD7). William de Warenne married Maud Marshal in 1225. Maud was the elder sister of Isabel, Richard of Cornwall's first wife (Fig. 3.11). The presence of the Arms of Ferrers, the Earls of Derby, can be explained similarly (HD8). William de Ferrers married Sybil Marshal, the younger sister of Isabel, before 1219. (Fig. 3.11). The Peveril (HD9) and Stafford (HD10) families were linked to the Ferrers, who it has already been seen were connected to the Cornwall line through the marriage of the Marshal sisters. William de Ferrers, husband to Sybil Marshal, had an aunt who married into the Stafford family. His great-grandmother was also a Peveril by birth (Fig. 3.12). The Maudit (HD11) and Beauchamp (HD12) families intermarried, with Isabel de Maudit marrying William de Beauchamp in the mid-thirteenth century. Their son, also William de Beauchamp, married Maud FitzJohn, the granddaughter of Maud Marshal, in the early 1260s (Fig. 3.13). Alternative explanations for the inclusion of some of the heraldic designs have previously been given by scholars. Some of the heraldic designs, for example, have been associated with the inheritance of particular lands by Edmund of Cornwall.²⁶⁰ The forfeited estates of the Ferrers family (HD8) were acquired by Edmund in 1269. The Peveril (HD9) estate had been passed to the Ferrers through marriage and subsequently after 1269 to Edmund. Geographical proximity has also been used to find connections between the heraldry and Hailes Abbey.²⁶¹ William de Beauchamp, for example, lived at Elmley Castle only ten miles from Hailes and was married to Isabella Maudit. It is also worth recalling Matthew Paris' description of the dedication of the church in 1251 at which "almost all the nobles...of England" attended.²⁶² The families represented by the heraldry may have been present at a significant event in the abbey's history. On this interpretation the pavement becomes a type of occasional roll, recording in clay what would typically be committed to parchment.

²⁵⁹ As the pavement includes designs for both Richard's other wives this is a probable conclusion. It is worth noting, however, that Edmund married the granddaughter of Isabel and Gilbert de Clare (Fig. 3.10). The Arms of Clare could, therefore act two-fold as acknowledgement to both the wives of Richard and his son Edmund.

²⁶⁰ Eames, *Catalogue*, Vol. 1, 203.

²⁶¹ Eames, *Catalogue*, Vol. 1, 203.

²⁶² Luard, ed., *Matthæi Parisiensis*, Vol. 5, 262.

The presence of the heraldic designs in the Hailes pavement can, therefore, be explained in a number of ways. Ultimately, however, it has to be recognised as one of the most intentionally personal pavements in medieval England.²⁶³ It was a visual representation of the powerful aristocratic network to which the Cornwall family was connected. These networks were created through a complex association of marriage alliances and extended families. The importance of these connections should not be underestimated. Marriage could be used to create opportunities for advancement or make new powerful alliances. The result was often the formation of a large familial group, where those connected were encouraged to consider one another as family and to provide support or favour.²⁶⁴ Heraldry presented one way of displaying visually these alliances. The decision to juxtapose the family arms with those of another made a declaration of association and perhaps also support or loyalty to a particular cause.²⁶⁵ As such the choice of which heraldic designs were depicted on the Hailes tiles was clearly of great significance. The choice of where that heraldry was displayed in the pavement, however, was of equal importance.

The Layout of the Heraldic Pavement

It can almost be forgotten, when considering the aristocratic networks of the Cornwall family, where the thirteenth-century pavement was laid. The pavement was located in an abbey, and more significantly at the east end of the church in an ambulatory around the shrine and relic of the Holy Blood. Since the excavation of the church in 1899, two areas of *in situ* tiles have provided the chief evidence for the thirteenth-century heraldic pavement. The first section was recorded in the north presbytery aisle and the second in the polygonal apse.²⁶⁶ Due to the fragmentary nature of the evidence the conclusions drawn from an analysis of these sections will be limited. Yet enough survives to explore how far the layout of the pavement, like the individual tile designs, can also be associated with Richard and his family. The relationship between a pavement and its surrounding architecture will also be examined. How architectural features were used to aid the laying out of a pavement is an interesting issue. A pavement, after all, had to fit within the framework of its

²⁶³ Eames, *Catalogue*, Vol. 1, 202-203.

²⁶⁴ Gerd Althoff, *Family, Friends and Followers: Political and Social Bonds in Early Medieval Europe* (Cambridge: Cambridge University Press, 2004), 160; David Crouch, *The Image of Aristocracy in Britain: 1000-1300* (London: Routledge, 1992), 345-346.

²⁶⁵ Political alliances or friendships were, for example, at work on the thirteenth-century seal of Robert Fitzwalter, which depicted the arms of Fitzwalter alongside that of de Quincy. The seal is in the British Museum collections: Museum Number 1841,0624.1. Adrian Ailes, "Heraldry in Medieval England: Symbols of Politics and Propaganda," in *Heraldry, Pageantry and Display in Medieval England*, ed. Coss and Keen, 83-104; Cherry, "Heraldry as Decoration in the Thirteenth Century," 124-125; Crouch, *The Image of Aristocracy in Britain*, 238; Maurice Keen, "Introduction," in *Heraldry, Pageantry and Display in Medieval England*, ed. Coss and Keen, 9.

²⁶⁶ Bazeley, 'The Abbey of St Mary, Hayles,' 265-267.

surrounding building. Practically speaking using piers, columns or other markers to lay out a line of tiles made the work of the tiler more straightforward. Architectural features could create a primary axis or line around which the rest of the pavement could be laid. Utilising a column or pier, for example, would be easier than creating a line manually with string or simply judging by eye. However, aesthetically, by using the architectural features to divide up the pavement the tiles become part of a wider artistic context.

The first section of pavement, in the north presbytery aisle, has a large central dividing line consisting of two parallel sets of rectangular border tiles and a series of diagonally laid plain tiles (Fig. 3.6). The plain colour of the rectangular and square tiles creates a contrast with the surrounding heraldic panels, as does the diagonal orientation of the square tiles, as the remainder of that section is laid square. The wide triple border divides the north presbytery aisle in two (Fig. 3.14).²⁶⁷ This may have been a practical solution, in order to prevent the north-south running panels from inclining too far east or west. By creating an additional central axis, the tiles have a third point of reference to retain a straight path. Visually the thick dividing border also leads the eye directly up the aisle towards the chevet at the east end. The north presbytery aisle may have been the space in which pilgrims waited or processed to reach the Holy Blood relic at the centre of the chevet. The south aisle was traditionally used by monks to access the church from the cloister on that side. As well as the central east-west running border there are several north-south borders consisting of diagonally laid square tiles within the first section of pavement. Similarly, these borders have an interesting relationship with the surrounding architectural features. The borders appear to mark the separation between the bays of the presbytery. At Hailes the division of the bays is obvious architecturally from the bases of the piers. The pavement emphasised these divisions further by using borders to break up the panels and laying different designs on either side of the border. A panel of border tiles marks the beginning of the second bay running from the north wall to the second pier (Fig. 3.14). Another panel of border tiles marks the end of the bay running again from the north wall to the centre of the third pier. A third panel consisting of plain coloured rectangular border tiles does not correspond to a particular bay or pier. It is interesting that this border panel is formed of rectangular border tiles rather than the diagonally laid square tiles. Perhaps here it would be possible to read a hierarchy in the use of the tiles and the division of the panels. The border panels which are made up of square tiles or multiple lengths of tiles are visually more striking and perhaps more successful in dividing up the large areas of the aisle.

²⁶⁷ Author's drawings based upon own photographs, in addition to plans published in: Carter, *Hailes Abbey*; Coad, *Hailes Abbey*.

The second section of pavement, which was uncovered in the chevet, also has a particularly involved relationship with its surrounding architecture (Fig. 3.7). It can be seen that the decisions made in laying this section of pavement were unlikely to have been practically motivated. In fact, practicality or simplicity appear to have been the last things considered. The three panels to the west of the chevet continue a similar arrangement to those panels seen in the north presbytery aisle. They are laid square and different designs are separated by four north-south running border panels. The third border panel, consisting of diagonally laid plain tiles, is clearly related to its surrounding architecture. The border starts at the first pier of the chevet and runs to the north wall where the columns indicate the turn of the wall to encompass the first semi-circular chapel (Fig. 3.14). Not only does the border panel once again respond to the architectural division of space, creating a unifying visual effect, but the adjacent panels change as well. The tiles in the panel to the east of this border are laid at an angle. They are not laid at a 45° angle as a diagonal tile, but rather at a larger angle that responds to the move in direction around the chevet. This would not have been the simplest or quickest way to lay the pavement. The potential for problems would be increased as would the requirement for fractional tiles. It is possible to imagine that panels and borders further around the chevet would have been required to increase the angle in which they were laid so that the design was always facing in the correct direction as the space was navigated. The fourth border panel, made up of smaller square tiles, could also have had a potential relationship with the surrounding architecture of the chevet. The border panel appears to be on a line between the eastern edge of the first chevet pier and the second shaft cluster in the first chapel space. If these points were used as markers the intention was presumably a practical one. Here a string could be placed between the two points that would show the tilers where to turn as they laid the next panel. The chapels would have been useful points of orientation for when the tiles needed to change angle and turn through the curve.

Not only is the way in which the tiles were laid in the chevet interesting, but so too is the choice of tile design used in this space. Of the five partial panels uncovered during the excavations all five are laid with tile designs connected to the immediate Cornwall family. From west to east these can be read as: the Arms of England tiles (HD3); the Arms of the King of the Romans (HD1); the Arms of Provence (HD5); the Arms of Clare (HD4); and the Arms of Cornwall (HD2). In contrast, the tiles laid in the north presbytery aisle have no immediate obvious significance in their arrangement. Yet it is worth highlighting a hierarchical reading of the deployment of heraldic designs in the Hailes pavement. Whilst the chevet contains the heraldic designs of the Cornwalls themselves, the north presbytery aisle designs are primarily those of baronial families connected more loosely to the family. The arms depicted in the north presbytery aisle also do not appear to be in any particular

order. The thirteenth-century pavement at Hailes could, therefore, be likened to a roll of arms.²⁶⁸ As has previously been shown, this method for organising heraldry can be seen in contemporary decorative displays in both stained glass and stonework. At Westminster Abbey, for example, the spandrels of the nave aisles were adorned with carved and painted shields in the thirteenth century. These depicted the heraldry of members of the European monarchy and a number of prominent English barons.²⁶⁹ The shields were organised by rank, so that the royal arms were at the easternmost end of the aisles and the barons towards the western end. Whilst this kind of arrangement can be likened to rolls of arms, the hierarchical positioning of heraldic shields may also have been a consequence of the importance placed upon the proximity to altars and shrines. This proximity could have suggested to an onlooker the close relationship between the individual represented by the heraldry and Christ.²⁷⁰

At Hailes Abbey the chevet was one of the most important spaces in the church. At the easternmost end, it stood behind the high altar, it contained the shrine for the Holy Blood relic and it had five small chapels each with its own altar.²⁷¹ The decision to place the heraldry of the Cornwall family within this sacred space was a calculated one. The physical closeness of the Arms of Cornwall to the shrine and altars of the abbey could have equally been interpreted as a moral or spiritual closeness between the family and Christ. This closeness would have provided them with a certain status and authority. The greater the proximity, the greater the intercessory benefits for both the family and those praying on their behalf.²⁷² It was also a status that would have served the family in both life and death. The display of heraldry within a sacred space was not simply about being seen to occupy a particular place in the social hierarchy, but also about securing a similar place in heaven.²⁷³ As well as being hierarchically an important space, the chevet would also have been one of the busiest spaces in the church. This was the place within the church that the laity were able to access in order to venerate the shrine. It would also have featured during monastic processions, which

²⁶⁸ The fourteenth-century heraldic wall-paintings, in what is now the parish church at Hailes, have themselves previously been described in this way (Fig. 3.15). Goodall, "English Medieval Armorial Tiles: An Ordinary," 102-106.

²⁶⁹ The heraldry depicted on the Westminster shields include: the Arms of England, Arms of the Empire, Arms of France, Arms of Provence, Arms of Scotland, Arms of Bigod, Arms of Montfort, Arms of Clare, Arms of Warenne, Arms of Bohun, Arms of Arundel, Arms of de Quinci, Arms of de Lacy and Arms of Cornwall. Binski, *Westminster Abbey and the Plantagenets*, 76-80; Cherry, "Heraldry as Decoration in the Thirteenth Century," 129; Payne, "Medieval Heraldry," 56.

²⁷⁰ Michael, "The Privilege of 'Proximity'," 55-74.

²⁷¹ Eric Palazzo, "Relics, Liturgical Space and the Theology of the Church," in *Treasures of Heaven: Saints, Relics and Devotion in Medieval Europe*, ed. Martina Bagnoli, Holger Klein, C. Griffith Mann and James Robinson (London: British Museum Press, 2011), 99-109.

²⁷² Michael, "The Privilege of 'Proximity'," 69-70.

²⁷³ Michael, "The Privilege of 'Proximity'," 73.

could also have involved high-ranking members of the nobility on particular holy days.²⁷⁴ Five years after the donation of the Holy Blood, the monks obtained a licence to hold an annual ceremony for the relic. This would have included all the pomp and honour of other important liturgical ceremonies. Soon after this the abbey were also licenced to employ two priests to serve the shrine and offer confession to pilgrims.²⁷⁵ Thus, not only does the placement of the heraldic tiles within the space make a powerful statement about the Cornwall family, the tiles were also in a position where they could be seen by many. With this potential audience in mind, the question of why the heraldic tiles were located in this space becomes of greater significance.

Heraldry and Commemoration

The intrusion of the secular into sacred spaces was of particular difficulty for the Cistercian order whose statutes of the twelfth century, for example, did not allow for the burial of lay founders in the church.²⁷⁶ Whilst the statutes never changed, attitudes towards lay burials responded to the times. By the beginning of the thirteenth century the burial of founders in the church ceased to be condemned.²⁷⁷ In fact, Cistercian churches became the favoured sites for interment by high-status founders in England and on the Continent.²⁷⁸ The burial of founders and patrons, therefore, might not have ultimately been such an issue for the Cistercians. It would have been a far greater problem if a founder chose not to be buried there at all. For Hailes, Richard of Cornwall was an ideal founder, wealthy and well-connected. His son Edmund was also the means by which the abbey gained the Holy Blood relic which fostered their fame. The heraldry contained in the thirteenth-century pavement could, therefore, be understood as a type of promotion. The heraldic tiles reminded the viewer not only of the authority of the Cornwall family, but also of the power of the abbey. This was a power gained through the connections of their founder to royalty and to some of the most

²⁷⁴ For more details on how pilgrims would have accessed shrine spaces see: Ben Nilson, *Cathedral Shrines of Medieval England* (Woodbridge: Boydell Press, 1998), 93-97.

²⁷⁵ Baddeley, "The Holy Blood of Hayles," 276-284; Vincent, *The Holy Blood: King Henry III and the Westminster Blood Relic*, 137-138.

²⁷⁶ Mette Birkedal Brunn, ed., *The Cambridge Companion to the Cistercian Order* (Cambridge: Cambridge University Press, 2002), 25-37, 87-99; Norton and Park, ed., *Cistercian Art and Architecture in the British Isles*, 315-393.

²⁷⁷ Jackie Hall, "Croxden Abbey Church: Architecture, Burial and Patronage," *Journal of the British Archaeological Association* 160 (2007): 83-84.

²⁷⁸ Alongside Hailes Abbey in England, Beaulieu and Vale Royal may also have been intended as mausoleums for royal family members. In France, Royaumont Abbey was the location for several Capetian royal burials. In Spain, the Abbey of Santa Maria la Real de Las Huelgas was the location of the burial of several Castilian monarchs. Alexandra Gajewski, "The Patronage Question under Review: Queen Blanche of Castile (1188-1252) and the Architecture of the Cistercian Abbeys of Royaumont, Maubisson, and Le Lys," in *Reassessing the Roles of Women as 'Makers' of Medieval Art and Architecture I*, ed. Therese Martin (Leiden: Brill, 2012), 245-274.

influential noble families in the country. The placement of heraldry in sacred spaces was not, however, just about communicating the authority of a living person. This type of display was also concerned with the commemoration of the dead and the endurance of a family name in the memory of the living.²⁷⁹

The inheritance of heraldry became increasingly common through the thirteenth century. This was fundamentally linked to developments within society, particularly the noble class, where primogeniture became the principal means of inheritance.²⁸⁰ Over time, heraldry became an identifying feature of the noble class, and a method by which they were able to express their identity.²⁸¹ Personal seals from this period onwards, for example, often displayed their owner's heraldry. Richard of Cornwall's seal is no exception to this. The recto side depicted Richard on horseback bearing a shield emblazoned with the Arms of England. The verso side depicts a shield with a lion rampant, Richard's own arms, identifying him as Earl of Cornwall and Count of Poitou.²⁸² On Richard's death in 1272 Edmund inherited both his father's titles and coat of arms. The heraldic tiles at Hailes could, therefore, be understood as a reference to either Richard or Edmund (Fig. 3.16). The Arms of England could suggest either Henry III as uncle to Edmund or King John as grandfather (Fig. 3.17). Edmund did not inherit the crown of the King of the Romans, but he did continue to style himself as 'Edmund Almain' in his charters, a reference to the German crown (Fig. 3.18). Sanchia of Provence was not only Richard's second wife but also Edmund's mother. The Arms of Clare could also have been a reference to Edmund's wife Margaret, whom he married in 1272 (Fig. 3.19). At the time of construction, the same probable date for the laying of the pavement, the tiles could easily have been intended as a reference to Edmund or Richard. Richard was the founder of the abbey, but Edmund had donated the Holy Blood relic which was a causal factor in the rebuilding of the east end of the church. Heraldry, however, could represent several generations of a family simultaneously. Rather than interpreting the pavement as a specific reference to either Richard or Edmund, it should be understood as a statement about the Cornwall name. The Cornwall family ended with Edmund in

²⁷⁹ Michael, "The Privilege of 'Proximity'," 58. For a general discussion of the issue of memory in medieval culture see: Caroline Barron and Clive Burgess, ed., *Memory and Commemoration in Medieval England: Proceedings of the 2008 Harlaxton Symposium* (Donington: Shaun Tyas, 2010); Mary Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: Cambridge University Press, 2011); Elma Brenner, Meredith Cohen and Mary Franklin-Brown, ed., *Memory and Commemoration in Medieval Culture* (Farnham: Ashgate, 2013).

²⁸⁰ Crouch, *The Image of Aristocracy in Britain*, 188.

²⁸¹ Chris Given-Wilson, *The English Nobility in the Late Middle Ages* (London: Routledge, 1996), 29; Maurice Keen, *Origins of the English Gentleman: Heraldry, Chivalry and Gentility in Medieval England c.1300-1500* (Stroud: Tempus, 2002), 16.

²⁸² Marks and Payne, *British Heraldry from its Origins to c.1800*, 11-12.

1300 – as he died without issue.²⁸³ It is worth considering, however, whether Richard had originally intended to found Hailes as a family mausoleum.²⁸⁴

It is possible that the placement of the heraldic tiles may be related to these family burials. Within the first section of pavement in the north presbytery aisle there was one border which did not correspond to an architectural division (Fig. 3.14). The other borders in this section of pavement appear to relate to the piers which divided the presbytery. The third border, however, divided the panels to the east of the third pier. The border, unlike the others in this section, consisted only of plain tiles. It is worth considering for a moment the placement of this border within the plan of the presbytery. The panels to the west of this third border are smaller than the other panels in this section of pavement. There is of course not enough of the pavement recorded to know how far this was unusual or typical in the overall pavement layout. Yet it is interesting to note that the smaller panels were laid with the Arms of the King of the Romans and the Arms of Provence. The other designs used in this section of pavement were not from the immediate Cornwall family. The differences between these two smaller panels and the other panels in this section of pavement could be significant.

The Arms of Provence are representative of Sanchia, and of the two coats of arms used by Richard, the Arms of the King of the Romans was the grandest. Richard would presumably have wanted to be remembered as a king first, and an earl second. The position of these two panels in the north presbytery aisle is almost parallel to the possible location of the tombs of Richard and Sanchia within the presbytery (Fig. 3.21).²⁸⁵ William Bazeley in his account of the 1899 excavation of the church stated that either directly in front of the high altar, or to the north of it, were the tombs of Richard of Cornwall and his second wife Sanchia of Provence. He described the arrangement of

²⁸³ Edmund's marriage to Margaret deteriorated after the death of their child in 1285 and they were officially separated in 1294.

²⁸⁴ Westminster Abbey offers a contemporary parallel with Hailes for the development of a family mausoleum. Another interesting comparison can be made with the burial of the Verdun family at Croxden Abbey (*Staffordshire*). Croxden was Cistercian and its church had a chevet arrangement (Fig. 3.20). John de Verdun was buried before the high altar in 1274, his choice perhaps influenced by the burial two years earlier at Hailes of Richard of Cornwall, with whom he was politically associated. Hall, "Croxden Abbey: Architecture, Burial and Patronage," 85-89. For more on Croxden Abbey see: Jackie Hall, "Croxden Abbey: Buildings and Community," (PhD thesis, University of York, 2003); Paul Kenneth Baillie Reynolds, *Croxden Abbey, Staffordshire* (London: His Majesty's Stationery Office, 1946).

²⁸⁵ Richard's first wife Isabel died prior to the foundation of Hailes Abbey. She was buried before the high altar at Beaulieu Abbey, a Cistercian house, and directly against her own desire to be buried at Tewkesbury. Baddeley, "Richard, Earl of Cornwall and Henry of Almaine," 94-95; Dom Frederick Hockey, *Beaulieu King John's Abbey: A History of Beaulieu Abbey Hampshire 1204-1538* (Surrey: Pioneer Publications, 1976), 95. Author's drawings based upon own photographs, in addition to plans published in: Carter, *Hailes Abbey*; Coad, *Hailes Abbey*.

tombs at Hailes as a “noble pyramis or raised tomb”.²⁸⁶ Fragments of tomb effigies depicting a knight and a lady were discovered during the excavation, as were the heads of the lions which had presumably lain at their feet (Fig. 3.22). A fragment of a shield decorated with the Cornwall arms was also discovered which led Bazeley to his conclusion.²⁸⁷ The burial of founders or noble patrons within the presbytery and close to the high altar was not unusual in this period. At nearby Tewkesbury Abbey (*Gloucestershire*), for example, five members of the Clare family were buried before the high altar in the period between 1230 and 1320.²⁸⁸ Like heraldry, the proximity of a tomb to altars or shrines could construct a special relationship between an individual and a saint or the sacred. This was of particular interest for the laity as, in this period, the relationship between the living and dead was a reciprocal one.²⁸⁹

The tombs in the presbytery at Hailes would have primarily been accessible to the monks, who were undoubtedly tasked with saying masses for their dead founder. The tiles, however, may have had a potentially wider audience. Whilst both aisles would have been utilised by the community during its processions, as argued previously, pilgrims may also have accessed the Holy Blood relic from the north presbytery aisle. Upon encountering these tiles, they were perhaps meant to pray for, or reflect on, the souls of Richard and Sanchia, dead and buried a few feet away. Places of burial often became the focus for places of commemoration and memory.²⁹⁰ During the thirteenth century it became ever more important to consider how the dead could be remembered and helped by the living. The concept of purgatory allowed for a system where penance in the afterlife could be remitted by deeds of the living, becoming part of Christian doctrine after the

²⁸⁶ Bazeley, “The Abbey of St Mary, Hayles,” 258.

²⁸⁷ Bazeley, “The Abbey of St Mary, Hayles,” 265-266.

²⁸⁸ Whilst the benefits of this location are perhaps most obvious for lay patrons, it has been argued that their burial and commemoration was also a coup for the monastery. Phillip Lindley, “The Later Medieval Monuments and Chantry Chapels,” in *Tewkesbury Abbey: History, Art & Architecture*, ed. Richard Morris and Ron Shoesmith (Almeley: Logaston Press, 2003), 161-163, Fig. 13.1; Richard Morris, “Tewkesbury Abbey: the Despenser Mausoleum,” *Transactions of the Bristol and Gloucestershire Archaeological Society* 93 (1974): 150; Richard Morris and Malcom Thurlby, “The Gothic Church: Architectural History,” *Tewkesbury Abbey: History, Art & Architecture*, ed. Morris and Shoesmith, 115-116. For more on Tewkesbury Abbey see: T. A. Heslop, ed., *Medieval Art and Architecture at Gloucester and Tewkesbury*, British Archaeological Association Conference Transactions VII (London: British Archaeological Association, 1985); Alan G. Vince and Tony Wilmott, “A Lost Tile Pavement at Tewkesbury Abbey and an Early Fourteenth-Century Tile Factory,” *Antiquaries Journal* 71 (1991): 138-173.

²⁸⁹ For a discussion of the various elements involved in the relationship between the living and the dead during the medieval period see: Paul Binski, *Medieval Death: Ritual and Representation* (London: British Museum Press, 1996); T. S. R. Boase, *Death in the Middle Ages: Mortality, Judgement and Remembrance* (London: Thames and Hudson, 1972); D. M. Hadley, *Death in Medieval England: An Archaeology* (Stroud: Tempus, 2001).

²⁹⁰ Megan Cassidy-Welch, *Monastic Spaces and their Meanings: Thirteenth Century English Monasteries* (Turnhout: Brepols, 2001), 240-241.

Second Council of Lyon in 1274.²⁹¹ It became increasingly common to believe that prayers for specific souls were more effective than general masses for the dead.²⁹² As a result of this trend, by the fourteenth century the foundation of a chantry was becoming progressively more customary, as they were primarily charged with saying masses for the patron's soul.²⁹³ The remembrance and commemoration of the dead were an integral feature of the medieval church. Prayers for lay patrons and for the holy dead such as the saints became part of the repeated pattern of the liturgical calendar.²⁹⁴ Within this context it is perhaps less surprising to consider decorative elements, such as floor tiles, communicating ideas of remembrance.

The commemorative function of the Hailes pavement could be compared to the role fulfilled by other types of floor monuments. Incised slabs and brasses, for example, stood in place of the dead in the memory of the living. They stimulated prayer and remembrance, and often used epitaphs to directly ask for such treatment.²⁹⁵ Funerary monuments could also be a means of social display, utilising heraldry and dress to emphasise status and authority.²⁹⁶ Choosing a funerary monument that covered the floor, however, could be seen as particularly pious in an age of ever more elaborate tomb structures. They were in some respects a practical solution at a time when churches were becoming cluttered with large memorials which could potentially interfere with liturgical practices.²⁹⁷ At the same time, the desire to be commemorated with a monument that was 'level with the pavement' implied a sense of pious humility.²⁹⁸ By bringing the individual 'down to earth', they could avoid any criticism of pride and vanity.²⁹⁹ A floor monument, and indeed a pavement, as Bernard duly noted, were designed to be trodden on.³⁰⁰ The individual thus became part of the ground in which they were physically buried and symbolically commemorated. The tile

²⁹¹ Boase, *Death in the Middle Ages*, 59; Christopher Daniell, *Death and Burial in Medieval England* (London: Routledge, 1997), 202; Jacques Le Goff, *The Birth of Purgatory* (London: Scolar Press, 1984).

²⁹² Crouch, *The Image of Aristocracy in Britain*, 316-317; Daniell, *Death and Burial in Medieval England*, 13-16.

²⁹³ Mailan S. Doquang, "Status and the Soul: Commemoration and Intercession in the Rayonnant Chapels of Northern France in the Thirteenth and Fourteenth Centuries," in *Memory and Commemoration in Medieval Culture*, ed. Brenner, Cohen and Franklin-Brown, 93-118; Brian Gittos and Moira Gittos, "Motivation and Choice: The Selection of Medieval Secular Effigies," in *Heraldry, Patronage and Social Display in Medieval England*, ed. Coss and Keen, 144.

²⁹⁴ Gittos and Gittos, "Motivation and Choice: The Selection of Medieval Secular Effigies," 167.

²⁹⁵ Nigel Saul, "Bold as Brass: Secular Display in English Medieval Brasses," in *The Earliest English Brasses: Patronage, Style and Workshops 1270-1350*, ed. John Coales (London: Monumental Brass Society, 1987), 170-171.

²⁹⁶ Nigel Saul, *Death, Art and Memory in Medieval England: The Cobham Family and their Monuments 1300-1500* (Oxford: Oxford University Press, 2001).

²⁹⁷ Binski, *Medieval Death*, 92; Hadley, *Death in Medieval England*, 175; Saul, *Death, Art and Memory in Medieval England*, 76.

²⁹⁸ Binski, *Medieval Death*, 89; N. J. Rogers, "English Episcopal Monuments 1270-1350: The Episcopal Monument," in *The Earliest English Brasses: Patronage, Style and Workshops 1270-1350*, ed. Coales, 20.

²⁹⁹ Binski, *Medieval Death*, 38.

³⁰⁰ See Introduction, 22-24.

pavement at Hailes was a conspicuous symbol of secular patronage and authority, constantly under the gaze of the monk and pilgrim. One of the ways in which the insertion of such a symbol into a sacred space could have been made acceptable was through a show of pious humility. Yet whilst placing heraldic symbols on the floor could be interpreted as humble, it is also possible to suggest that more people were likely to see something under foot than they were above their heads. There are, after all, plenty of stories of pilgrims crawling on their knees towards a shrine. Irrespective of these motivations, it is quite probable that the heraldic tiles and their arrangement within the presbytery pavement would have resulted in the Cornwall name being kept alive in the community's memory.

Decorative Heraldry at Cleeve Abbey

Heraldry was clearly not employed in the same way in every medieval pavement. Hailes may have been an unusual example, and in many cases the correlation between pavement and individual is less obvious. Yet the decorative use of heraldry within a pavement is also worthy of study. Whilst being divorced from its primary meaning, heraldry nevertheless still retained a recognised value even when used decoratively in a pavement. The refectory pavement at Cleeve Abbey, for example, shares many similarities with the Hailes church pavement, but ultimately should be understood rather differently. Cleeve was also a Cistercian foundation which attracted a number of high-status patrons including amongst them Henry III and Richard of Cornwall.³⁰¹ The refectory pavement was laid in the thirteenth century when work on the abbey church and claustral buildings had been completed. Though damaged in the fifteenth century with the construction of a new refectory hall, the pavement remains to this day one of the most extensive and well-preserved medieval pavements in England (Fig. 3.23).³⁰² It includes seven different tile designs, five of which can be

³⁰¹ For further details of the history and buildings at Cleeve Abbey see: Roy Gilyard-Beer, *Cleeve Abbey, Somerset* (London: Her Majesty's Stationery Office, 1959); Stuart Harrison, *Cleeve Abbey, Somerset* (London: English Heritage, 2015); Thomas Hugo, "On the Charters and Other Archives of Cleeve Abbey," *Somersetshire Archaeological and Natural History Society* 6 (1855): 25-29.

³⁰² J. R. Bramble, "Notes on a Recently Discovered Pavement at the Abbey of Old Cleeve, Somerset," *Journal of the British Archaeological Association* 33 (1877): 456-464; E. Buckle, "The Buildings of Cleeve Abbey," *Somersetshire Archaeological and Natural History Society's Proceedings* 35 (1889): 83-120; John Reynolds, "On the Recent Discovery of the Refectory and Tiled Floor at Cleeve Abbey," *Journal of the British Archaeological Association* 33 (1877): 465-467.

considered heraldic (Fig 3.24).³⁰³ These designs were not specific to Cleeve.³⁰⁴ The tiles were not made on-site but were bought from a kiln close to Glastonbury.³⁰⁵ In contrast to Hailes, therefore, the heraldic designs can be found at a number of diverse sites. Evidence from these other sites shows that the heraldic designs, including the Arms of England, Arms of Cornwall and Arms of Clare were always produced together.³⁰⁶ *Ex situ* and relaid evidence also suggests that the heraldic tiles were incorporated into pavements alongside other tile designs such as animals and floriated motifs. This indicates that the heraldic tiles were considered chiefly for their ornamental value, rather than their ability to identify specific patrons. The pavements at Cleeve and Hailes may have been contemporary in date and displayed the same selection of heraldic arms, but, as will be demonstrated, their audience, function and patron were ultimately quite dissimilar.

The Cleeve pavement consists of three primary panels with two smaller panels acting as borders (Fig. 3.25).³⁰⁷ The first, most northerly, panel of the pavement consists of groups of sixteen tiles surrounded by rectangular border tiles (Fig.3.26). Only two tile designs are used within the majority of this panel (CD4 and CD6). The sets of sixteen tiles create a generally alternating pattern across the pavement along the east-west axis. The central panel consists of groups of four tiles surrounded by rectangular border tiles (Fig. 3.27). As in the northern panel, only two tile designs are used (CD5 and CD7). Unlike the rest of the pavement the tiles are not laid pointing towards the south. Instead the tiles within each group of four are laid successively at a 90° angle to create a radiating effect (Fig. 3.28). The central panel is generally laid so that the groups alternate across a north-south axis. The southern panel consists of groups of sixteen tiles surrounded by rectangular border tiles (Fig. 3.29). These groups appear to have been laid so that the same tile designs are used

³⁰³ All five of these heraldic arms can also be identified in the Hailes pavement: Arms of England, Arms of Cornwall, Arms of Clare, Arms of Warenne and Arms of the King of the Romans. Author's drawings based upon own photographs, in addition to images published in: Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 35; Lowe, *Decorated Medieval Floor Tiles of Somerset*.

³⁰⁴ The large heraldic tiles from Cleeve were also recorded at Bridgwater Friary, Glastonbury Abbey and Wells Cathedral in Somerset, as well as at Gloucester Cathedral. The smaller heraldic tiles from Cleeve were also found at sites in Somerset such as Glastonbury and Wells, but tiles of the same design were found at Raglan Castle and Tintern Abbey in Wales. The kiln at Nash Hill in Wiltshire appears to have produced heraldic tiles of the same design and size as those found at Cleeve, but of poorer quality. Eames, *Catalogue*, Vol. 1, 195-198; Jane Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," *Journal of the British Archaeological Association* 153 (2000): 49-51; Lowe, *Decorated Medieval Floor Tiles of Somerset*, 133-155; J. B. Ward Perkins, "A Late Thirteenth Century Tile Pavement at Cleeve Abbey," *Proceedings of the Somersetshire Archaeological and Natural History Society* 87 (1941): 39-55.

³⁰⁵ It was originally thought that the tiles came from a kiln in Gloucestershire. However, recent scientific examination of tiles from Glastonbury have suggested that the tiles were in fact made locally to the abbey. The tiles from the Glastonbury kiln were then transported to sites such as Cleeve Abbey, Gloucester Cathedral and Wells Cathedral. Harcourt, "The Medieval Tiles," 278-293.

³⁰⁶ Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 49-50.

³⁰⁷ Author's drawings based upon own photographs, in addition to plans published in: Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 34; Harrison, *Cleeve Abbey*; Lowe, *Decorated Medieval Floor Tiles of Somerset*, 5.

along a north-south axis. The designs of the southern panel consist of the Arms of England (CD1), the Arms of Cornwall (CD2) and the Arms of Clare (CD3). From the antiquarian publications of the late nineteenth century to the display boards placed on-site in 2016, the pavement has consistently been dated by its use of heraldry.³⁰⁸ It is traditionally stated that the pavement was laid sometime between 1272 and 1300 to commemorate the marriage of Edmund of Cornwall and Margaret Clare.³⁰⁹ The marriage would certainly combine the individuals and families represented in the heraldic tiles. There is, however, no known direct connection between the marriage of Edmund and Margaret, and Cleeve Abbey. An alternative interpretation has suggested that the pavement was a recognition of Richard of Cornwall's position as patron of the abbey.³¹⁰ Both the Arms of Cornwall (CD2) and Arms of the King of the Romans (CD7) could be representative of the patronage of Richard. There are also records of gifts made to the abbey by Henry III, which perhaps are referenced by the Arms of England design (CD1). There is not, however, a recorded gift by the Clare family. In fact, if this pavement was about the patronage of the abbey by notable persons it is interesting which designs are not included, such as any reference to the abbey's founder.³¹¹

Neither of these interpretations of the Cleeve pavement heraldry, therefore, is entirely convincing. Yet even if the heraldry in the Cleeve pavement cannot be associated with a particular patron or event, that does not imply that it lacked meaning. In fact, the way in which the heraldic tiles were positioned in the pavement suggests that the heraldry retained some of its original value. All the tiles in the pavement, for example, are laid diagonally. A diagonal orientation was necessary for all the designs to be viewed the right way around (Fig. 3.25). The majority of the tiles are also laid so as to point towards the south wall and are therefore viewed from the correct angle when entering through the north door. This suggests that the pavement was deliberately laid in a way that meant all the coats of arms depicted on the tiles were facing the right way up. The order in which the tiles were laid within the refectory pavement also seems to indicate that the heraldry retained

³⁰⁸ Due to the destruction of the first refectory during rebuilding work in the fifteenth century there is no architectural detail to help with dating the pavement. Buckle, "The Buildings of Cleeve Abbey," 87-88; Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 42.

³⁰⁹ This appears in fact to have been a misinterpretation of the parameters for dating the pavement. In dating the heraldry to the period between Edmund and Margaret's marriage in 1272 to their divorce in 1294, or his death in 1300, an assumption could be made that the pavement commemorates the marriage itself. J.B. Ward-Perkins, "A Late Thirteenth Century Tile Pavement at Cleeve Abbey," *Proceedings of the Somersetshire Archaeological and Natural History Society* 87 (1941): 39-55. A similar argument has been made for the date of the Clare Chasuble. The ecclesiastical vestment has been dated to 1272-1294 and was once adorned with the Arms of Clare (for Margaret), the Arms of Cornwall (for Edmund), the Arms of Lacy (for Margaret's mother) and the Arms of England (for Edmund's uncle). Victoria and Albert Museum, London: Museum Number 673-1864.

³¹⁰ Eames, *Catalogue*, Vol. 1, 195-198; Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 42, 63.

³¹¹ The founder of Cleeve Abbey was William de Roumare, Earl of Lincoln. Hubert de Burgh, the Earl of Kent and Justiciar of England from 1215, for example, was also a notable patron.

its connotations of authority and power. The southernmost panel of the pavement, for example, employs not only the largest tiles, but also the Arms of England (Fig. 3.30). The fact that most of the tiles in the pavement are orientated towards the south, also leads the eye towards the southern end of the refectory. This is where the raised dais would have been located and where the abbot and highest-ranking officials would have sat in the refectory. It is striking, when considering the location of this dais, that the tiles depicting the royal arms are all used to create a U shape at the southern edge of the panel. Very few fragments of these large heraldic tiles have been found *ex situ*, which suggests that only a limited quantity were provided.³¹² If so, it may have been a deliberate choice to concentrate these designs at the southern end of the refectory pavement. The heraldry at Cleeve can be shown, therefore, to retain a layer of its original significance, even when separated from a particular patron or event.

The choice and positioning of the heraldic tiles in the refectory at Cleeve were clearly not random. The tiles were bought, at presumable expense, from Glastonbury. Other thirteenth-century tiles from Cleeve, such as those in the church and sacristy, came from more local kilns.³¹³ The refectory pavement must, therefore, have been considered a commission of great significance. The tile designs may not have been unique to Cleeve, but their high-quality production indicates that a deliberate choice was made by the community at Cleeve. This was not only a decision to purchase the best quality tiles they could afford, but also a choice of heraldic designs as opposed to animal or floriated tile designs. The heraldry may have simply represented the most famous and powerful individuals of the time, but it would not have been out of place at Cleeve, where Richard of Cornwall and Henry III were patrons. The different ways in which the Hailes and Cleeve pavements employed the same heraldry can potentially be explained by the disparity of their audiences. At Hailes the pavement was literally under the feet of hundreds of pilgrims a year. The pavement at Cleeve, in contrast, would hardly have had such an audience. The tiles were laid in the monastic refectory of a relatively minor institution. The monks themselves, therefore, were almost certainly the patrons and primary audience of the Cleeve pavement.

'Byld a chapel ther fayre with five auters aboute, Upon them he spare no spense'³¹⁴

³¹² Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 63.

³¹³ Harcourt, "The Medieval Floor-Tiles of Cleeve Abbey," 42-44.

³¹⁴ Quoted from a fifteenth-century Middle English poem, describing Edmund's gift of the Holy Blood relic and the consequent building of the chevet, possibly composed by a monk at Hailes. British Library, Royal MS 17 C xvii, fol. 152r.

Throughout this chapter the heraldic designs and pavement layout at Hailes Abbey have been discussed in such a way as to suggest that the Cornwall family was behind its commission. The heraldry was closely and carefully associated with them and their extended baronial family. The designs were perhaps intended to highlight the power and authority of the earldom. The placement of the heraldic designs within the pavement could have implied a special relationship between the Cornwall family and Christ. The proximity of their heraldic arms to the shrine of the Holy Blood relic might have suggested their particular devotion and the possibility of intercessory benefits. The position of the panels in the north presbytery aisle also potentially sought remembrance for deceased family members in the prayers of the living. The heraldry on the pavement represented several generations of the Cornwall family simultaneously. Yet, out of father and son, Edmund appears the most likely candidate as patron of the pavement. From the early 1270s the patronage of the abbey was almost certainly in his hands. By that date he had donated the relic which made the abbey's fortune. He was also younger and perhaps more freely available to invest time and money into the project than his father.³¹⁵ The stabbed Wessex workshop could have been commissioned by Edmund to create limited edition designs, which might have been beyond the resources of a monastic community.³¹⁶ If Edmund was involved with the commission of the pavement it would perhaps reinforce the idea that the heraldry in the north presbytery aisle was intended to act as a prompt for prayers for his parents. He would surely have been involved in the funerary ceremony of his father and presumably also an executor of his will. It is also possible to consider whether Edmund might have intended the pavement, and more generally the abbey, to have a longer enduring tradition as a place of family commemoration and patronage. He had patronised the abbey his father had founded, and in the early 1270s, soon after his own marriage, perhaps his mind had turned towards the future of his own children. Ultimately, however, the family line ended with Edmund in 1300. With the Cornwall family dead, and pilgrim numbers dwindling by the mid-fourteenth century, it was the monks who were left to see the pavement on a daily basis.

The role of the Hailes monks, therefore, should not be overlooked.³¹⁷ The pavement may have been commissioned by the Cornwall family, but it brought its own prestige to the abbey. The

³¹⁵ It has also been suggested that Edmund's 'disproportionate' patronage of religious institutions was his response to the end of his marriage. He may also have deliberately given away lands that would otherwise have returned to the crown at his death. Vincent, "Edmund of Almain, second earl of Cornwall (1249-1300)," *Oxford Dictionary of National Biography*, 2004, accessed 6th February 2016, <http://oxforddnb.com.ezproxy.york.ac.uk/view/article/8505>.

³¹⁶ Eames was certainly of the opinion that the pavement was commissioned by Edmund in the 1270s and only after this was completed did the tilers become a commercial industry which produced the stabbed Wessex series. Eames, *Catalogue*, Vol. 1, 280.

³¹⁷ For a general introduction to monastic patronage see: Emma Cownie, *Religious Patronage in Anglo-Norman England 1066-1135* (Woodbridge: Boydell Press, 1998); Julian Luxford, "The Construction of English Monastic

heraldic display made an impressive statement about the power of Hailes. This was a power they inherited through their connection to the Cornwalls and, by association, to the royal family of England and numerous other noble families. The Hailes pavement acted in a similar way to the display of heraldry on the gatehouse at Kirkham Priory. Both announced to visitors in a very public way the influential connections which the institution possessed and provided a show of secular support in times of trouble.³¹⁸ A royal, rich and renowned founder was something that would have boosted the reputation of an abbey. Architectural and decorative elaboration would have been signs of prosperity and success, which could be used to emphasise their position over other local monastic institutions. At the same time a religious house was a guardian to the memory and history of its founders and patrons.³¹⁹ It was the monks at Hailes, for example, who would presumably have been able to most easily identify the heraldry depicted on the tiles.³²⁰ The Cornwall family would also have been remembered in the obit rolls of the abbey. Obits, the prayers for the dead, gave structure to the liturgical year and kept the memory of those long dead ever present in the minds of the living. The burial of a patron would have been of great importance to a religious institution. A single individual after all could have established a number of religious foundations. The recipient of a founder's burial would have felt fortunate, particularly if they were favoured over several generations.³²¹ These burials highlighted an institution's ability to help people through the afterlife and also gave them a certain status when interacting with other religious houses or secular authorities.³²²

The religious community at Hailes was not necessarily a passive recipient of secular patronage either. They would have had significant control over how a patron was commemorated.³²³ It was, for example, perhaps a fifteenth-century Hailes monk who wrote a poem honouring the memory of Edmund, his gift of the Holy Blood relic and the rebuilding of the church.³²⁴ The monks appear to have also preserved the story of Edmund's gift by means of an inscribed tablet kept close

Patronage," in *Patronage, Power & Agency in Medieval Art*, ed. Colum Hourihane (Princeton: Princeton University Press, 2013), 31-53.

³¹⁸ Coppack, Harrison and Hayfield, "Kirkham Priory: The Architecture and Archaeology of an Augustinian House," 134.

³¹⁹ Binski, *Medieval Death*, 105.

³²⁰ In the thirteenth century, for example, nearly a quarter of all heraldry contained a lion. That, along with the lack of colour, would have made the identification of the tile designs problematic to those less familiar with the families involved. Woodcock and Robinson, *The Oxford Guide to Heraldry*, 3.

³²¹ Hall, "Croxden Abbey: Architecture, Burial and Patronage," 89; Lindley, "The Later Medieval Monuments and Chantry Chapels," 161-163; Morris and Thurlby, "The Gothic Church: Architectural History," 115-116.

³²² Hall, "Croxden Abbey: Architecture, Burial and Patronage," 91.

³²³ Luxford, "The Construction of English Monastic Patronage," 46.

³²⁴ See Chapter Three, note 314.

to the shrine.³²⁵ As such they could have played a role in accepting, and perhaps also shaping, the heraldic pavement that was laid in their church at the end of the thirteenth century. This role becomes evident when examining the pavements that were laid at Hailes Abbey during the sixteenth century. These pavements, laid in the church and chapter house, were part of a programme of works undertaken by the abbots of Hailes.³²⁶ This is visibly indicated by the tile designs which incorporated the initials of Thomas Stafford, abbot between 1483 and 1509, and Anthony Melton, abbot between 1509 and 1527 (Fig. 3.31). The tile designs also included the double-headed eagle of the King of the Romans, as well as the Arms of the Earl of Cornwall (Fig. 3.32). These designs referenced not only the abbey's history and founder, but also the thirteenth-century heraldic pavement laid in the abbey church.³²⁷ These historical designs were found alongside the Tudor rose and the pomegranate of Katherine of Aragon. This combination makes a clear statement about the abbey's importance and its royal connections, beginning in the thirteenth century and continuing into the sixteenth century.

The thirteenth-century pavement at Hailes with its display of secular heraldry benefited, therefore, both the Cornwall family and the monks of the abbey. Trod under foot by passing pilgrims, it promoted the prestige of the family and the influence of the abbey at the same time. It may also have served to keep the Cornwall name alive in the memory of the living. Ultimately, however, it cannot be forgotten that it was located in the abbey church and thus would have become part of the daily activities of the monks. What might have been intended by the Cornwall family at the time of commission, may have been quite different to how the pavement was used over the subsequent centuries by the monastic community. The pavement may have found itself an additional purpose as a practical marker for the liturgy and processions that took place there.

³²⁵ Michael Carter, "Abbots and Aristocrats: Patronage, Art and Architecture at Hailes Abbey in the Late Middle Ages," *Journal of the British Archaeological Association* 171 (2018): 163; Doreen Winkless, *Hailes Abbey, Gloucestershire: The Story of a Medieval Abbey* (Stocksfield: Spredden Press, 1990), 57.

³²⁶ Carter, "Abbots and Aristocrats: Patronage, Art and Architecture at Hailes Abbey in the Late Middle Ages," 154-175. For more on abbatial patronage see: Michael Carter, "Cistercian Abbots as Patrons of Art and Architecture: Northern England in the Late Middle Ages," in *The Prelate in Late Medieval England and Europe*, ed. Martin Heale (Woodbridge: Boydell & Brewer, 2014), 217-241.

³²⁷ Michael Carter, "So it was abowte iiiic yeres agoo: Retrospection in the Art and Architecture of the Cistercians in Northern England in the Late Middle Ages," *Journal of Medieval Monastic Studies* 4 (2015): 107-132.

Chapter Four

'The interior of the church was laid with encaustic tiles': Revisiting Medieval Liturgical Pavements

Medieval Art and Liturgy

The relationship between medieval art and liturgy has been investigated by a number of scholars, including those interested in architecture and painting.³²⁸ Architectural historians have been concerned with understanding how medieval churches responded to the rituals that occurred within them. The addition of a Lady Chapel to an existing church, for example, was a response to changes in the liturgy that were driven by the increasing popularity of the Virgin.³²⁹ The embellishment of architectural features could also emphasise areas that were of particular liturgical significance. Raising the floor level was a simple but effective way of achieving this. Change or elaboration in pier design was another possible method. The piers in the area around a shrine, for example, might have a more elaborate design or be made from finer materials than the piers in a nave.³³⁰ The decoration of these spaces has also been of interest to scholars pursuing the

³²⁸ For the relationship between liturgy and medieval art and architecture see: Doig, *Liturgy and Architecture*; Nicola Coldstream, "The Kingdom of Heaven: The Architectural Setting," in *Age of Chivalry: Art in Plantagenet England 1200-1400*, ed. Alexander and Binski, 92-97; Draper, "Architecture and Liturgy," 83-91; Hourihane, ed., *Objects, Images and the Word*; Carolyn Marino Malone, "Architecture as Evidence for Liturgical Performance," in *Understanding Medieval Liturgy: Essays in Interpretation*, ed. Gittos and Hamilton, 207-237.

³²⁹ Work on the Lady Chapel at Ely Cathedral, for example, was begun in 1321. Its construction was supposedly in response to the increase in lay and female visitors to the monastic church, making it desirable to have separate places for the monks and laity to worship in. Nicola Coldstream, "Ely Cathedral: the Fourteenth-Century Work," in *Medieval Art and Architecture at Ely Cathedral, Medieval Art and Architecture at Ely Cathedral*, British Archaeological Association Conference Transactions II, ed. Nicola Coldstream and Peter Draper (Leeds: W. S. Maney, 1979), 28-46; John Maddison, "The Gothic Cathedral: New Building in a Historic Context," in *A History of Ely Cathedral*, ed. Meadows and Ramsey, 124-127.

³³⁰ At Canterbury Cathedral (*Kent*), for example, the floor level of the Trinity Chapel was raised above the height of the nave and choir. Coloured marble shafts were also placed around the Trinity Chapel, which housed the shrine of Thomas Becket from the thirteenth century. Peter Draper, "Canterbury Cathedral: Classical Columns in the Trinity Chapel?," *Architectural History* 44 (2001): 172-178; Peter Draper, "Interpretations of the Rebuilding of Canterbury Cathedral 1174-86: Archaeological and Historical Evidence," *Journal of the Society of Architectural Historians* 56 (1997): 184-203, 249; M. F. Hearn, "Canterbury Cathedral and the Cult of Becket," *Art Bulletin* 76 (1994): 19-54. For more on Canterbury Cathedral see: Nicola Coldstream and Peter Draper, ed., *Medieval Art and Architecture at Canterbury Before 1220*, British Archaeological Association Conference Transactions V (Leeds: W. S. Maney, 1982); Michael Michael, *Stained Glass of Canterbury Cathedral* (London: Scala, 2004); E. C. Norton and M. C. Horton, "A Parisian Workshop at Canterbury. A Late Thirteenth-Century Tile Pavement in the Corona Chapel, and the Origins of Tyler Hill," *Journal of the British Archaeological Association* 134 (1981): 58-77.

relationship between art and liturgy. At Salisbury Cathedral, for example, Matthew Reeve interpreted the thirteenth-century cycle of wall paintings at the east end of the church as indicators of the liturgical rituals that were practised beneath them.³³¹ The divisions in the painted cycle also corresponded with the architectural divisions of the church, with different iconography depicted in the choir, crossing, eastern transepts and ambulatory. In the crossing, for example, New Testament imagery of Christ and the Apostles was related to the high altar and the re-enactment of Christ's sacrifice during the Mass.³³² Endeavouring to understand the relationship between medieval art and liturgy is part of recent attempts by scholars to reintegrate medieval art into its original setting. By so doing further insights could be made regarding its function and reception. This is an approach that works equally well for medieval pavements. Medieval tile pavements were laid in architectural spaces which had ritual and liturgical uses and as such must be examined within this context.

The idea that medieval pavements may have been endowed with liturgical significance is not new. Stones or markers positioned in the naves of cathedrals and monastic churches have long been thought to have been used during medieval processions (Fig. 4.1).³³³ At Fountains Abbey, for example, two rows of stones were excavated in the nave during the nineteenth century. The square slabs were made from limestone and had circles incised upon them. There were more than twenty evenly spaced stones in each row, with further stones set apart to the east and west. These stones, thought to date from the early sixteenth century, perhaps indicate where the monks would have stood during the Sunday procession after entering through the west door of the church.³³⁴ One of the stones, sometimes referred to as the abbot's stone, was placed opposite the central opening of the rood screen. Since their discovery by nineteenth-century antiquaries the stones at Fountains have been associated with the liturgy performed in the monastic church. Similar processional stones also once existed in the nave of cathedral churches. However, many of these have been lost and their existence is now only preserved in antiquarian plans and drawings. At Wells (*Somerset*) there were perhaps two equal rows of eleven circular-shaped stones and at Lincoln (*Lincolnshire*) an

³³¹ Reeve, *Thirteenth-Century Wall Painting of Salisbury Cathedral*.

³³² Reeve, *Thirteenth-Century Wall Painting of Salisbury Cathedral*, 102-103.

³³³ Author's own drawing based upon plans published in: Drake, *Eboracum*, 493, 519; Oxford, *The Ruins of Fountains Abbey*, 8; Aymer Vallance, *Greater English Church Screens: Being Great Roods, Screenwork & Rood-Lofts in Cathedral, Monastic & Collegiate Churches in England & Wales* (London: Batsford, 1947), 13-21.

³³⁴ The actual number of stones differs in the various accounts of the abbey and the stones are today covered over by grass. Glyn Coppack, *Abbeys & Priors* (Stroud: Amberley, 2009), 79; Peter Fergusson and Stuart Harrison, *Rievaulx Abbey: Community, Architecture, Memory* (New Haven: Yale University Press, 1999), 224; G. M. Hills, "Fountains Abbey, Yorkshire," *Collectanea Archaeologica: Communications Made to the British Archaeological Association* 2 (1871): 292-293; Hope, "Fountains Abbey," 307; Vallance, *Greater English Church Screens*, 18-19; Walbran, *Memorials of the Abbey of St Mary of Fountains*, Vol. 2 Part 1, 156.

arrangement of thirty-seven stones per side was described.³³⁵ At York there were perhaps as many as forty stones on each side extending the length of the nave.³³⁶ The idea of stones or roundels marking a place to stand comes from an older tradition with imperial connections. Porphyry roundels were used as markers during ceremonial rituals in the Byzantine court at Constantinople (*Turkey*), whilst Henry V stood on a roundel at Old St Peter's (*Italy*) when crowned by the Pope as Holy Roman Emperor in the early twelfth century.³³⁷

Whilst these stones are usually thought to mark a place to stand, there is some difficulty with interpreting decorative pavements in a similar fashion. Bernard of Clairvaux, for example, had condemned figural decoration on floors in his twelfth-century *Apologia*.³³⁸ Yet there are examples to be found where figural imagery was clearly intended to be stood upon as part of a liturgical ceremony.³³⁹ At Novara Cathedral (*Italy*) Donkin has argued that the twelfth-century mosaic pavement in the presbytery was used to mark the positions of participants during a pre-baptismal ceremony. The pavement included roundels on either side of the altar depicting the symbols of the four Evangelists and these were used as markers for where the priests had to stand and read passages from the Gospels.³⁴⁰ Inscriptions can also provide evidence that decorative pavements were related to the liturgical use of a space. The twelfth-century mosaic pavement in the choir of Santi Pietro ed Orso in Aosta (*Italy*) refers to the singing of psalms, whilst the contemporary choir pavement at Saint-Martin-d'Ainay in Lyon (*France*) alludes to the power of the Eucharist. Both of the inscriptions in these pavements make reference to the liturgical rituals that would have occurred upon them.³⁴¹ At Titchfield Abbey (*Hampshire*) there is evidence that there were multiple inscriptions in the early fourteenth-century cloister pavement (Fig. 4.2).³⁴² The first of these was

³³⁵ For more on Lincoln Cathedral, see: T. A. Heslop, ed., *Medieval Art and Architecture at Lincoln Cathedral*, British Archaeological Association Conference Transactions VIII (Leeds: W. S. Maney, 1986).

³³⁶ Drake, *Eboracum*, 493, 519; Hope, "Fountains Abbey," 308; Vallance, *Greater English Church Screens*, 16-19.

³³⁷ Richard Foster, *Patterns of Thought: The Hidden Meaning of the Great Pavement of Westminster Abbey* (London: Jonathan Cape, 1991), 162-164; Dorothy Glass, "Papal Patronage in the Early Twelfth Century: Notes on the Iconography of Cosmatesque Pavements," *Journal of the Warburg and Courtauld Institutes* 32 (1969): 386-390.

³³⁸ For more on Bernard's *Apologia* and the types of pavement he may have responding to see: Introduction, 22-24.

³³⁹ Donkin, "Pavimenti decorati come luoghi di memoria," 408-414; Kitzinger, "World Map and Fortune's Wheel: A Medieval Mosaic Floor in Turin," 344-373.

³⁴⁰ Donkin, "*Suo loco*: The *Traditio evangeliorum* and the Four Evangelist Symbols in the Presbytery Pavement of Novara Cathedral," 92-143.

³⁴¹ Donkin, "*Ornata decenter*: Perceptions of 'Fitting Decoration' Amongst Augustinian Canons of Sant'Orso in Aosta in the Mid-Twelfth Century," 75-93.

³⁴² P. M. Green and A. R. Green, "Mediaeval Tiles at Titchfield Abbey, Hants., Afterwards Place or Palace House," *Papers and Proceedings of the Hampshire Field Club & Archaeological Society* 17 (1949): 6-29. For both the history and current condition of the cloister pavement at Titchfield Abbey, along with a selected list of relevant publications, see: Site Gazetteer, 300-301. Author's drawings based upon own photographs, in

orientated to be read by members of the community as they entered the refectory (Fig. 4.3). It reminded the viewer to think of the poor before eating their own meal. There are the remains of a second inscription in the cloister, close to the north transept of the church, and orientated to be read when facing east (Fig. 4.4). The inscriptions at Titchfield show, therefore, that the pavement was an integrated part of the cloister and intended to be read and interpreted according to the rituals that occurred in and around that space. The fourteenth-century pavement at Titchfield employed two-colour tiles, but it is clear that the relationship between pavements and liturgy was a more general phenomenon and not confined to a single material or workshop. Two-colour tile pavements, therefore, were clearly in dialogue with an older tradition.

Inscriptions and figural decoration can be easily associated with the liturgical use of a space, yet it is still possible to argue that a similar relationship existed between liturgy and two-colour tile pavements which did not contain those elements. Rather than relying upon word and image, two-colour tiles were also able to use pattern to express meaning. The design of the thirteenth-century pavement in the chapter house at Saint-Jean-des-Vignes in Soissons, for example, has been shown to correspond with the rituals that took place there.³⁴³ The centre of the chapter house was a space for special burials, for the administration of monastic discipline and also the location of certain prayers and readings. The seating of the chapter house would have consisted of benches along each wall, the viewer would thus always be facing towards the centre of the pavement. The layout of the pavement further emphasised visually the centre of the room. It was laid, for example, to create an X-shape at the centre of the room. The tiles in the central cross were laid square, whilst the rest of the pavement was laid diagonally. The Saint-Jean pavement, therefore, not only responded to the way in which the space was used, but also enhanced it. This example shows that it is not only possible to find relationships between two-colour tile pavements and the ritual use of a space, but also that this relationship can further current understanding of medieval pavements. The aim of this chapter, therefore, is to use these ideas to examine the English monastic church pavement within its liturgical context. In the previous chapter it was shown how a church pavement might respond to its surrounding architecture and to objects like shrines and tombs. In this chapter it will become clear that church pavements were also responding to the rituals that were being performed upon them.

The thirteenth-century church pavement from Jervaulx Abbey will be taken as the primary case study for this chapter. Only a few *ex situ* tiles survive of this pavement which once covered

addition to plans published in: Rose Graham and Stuart Rigold, *Titchfield Abbey, Hampshire* (London: Her Majesty's Stationery Office, 1969).

³⁴³ Bonde, Boyden and Maines, "Centrality and Community: Liturgy and Gothic Chapter Room Design at the Augustinian Abbey of Saint-Jean-des-Vignes, Soissons," 189-213; Bonde and Maines, *Saint-Jean-des-Vignes in Soissons*, 262-302.

“almost all the interior of the church.”³⁴⁴ Instead the nineteenth-century antiquarian record stands as a testament to its existence and provides the only evidence of its arrangement. Such is the problematic evidence surrounding Jervaulx’s pavement that few in depth studies have been written on the subject. This chapter will reassess the evidence at Jervaulx and suggest how the lost pavement can still provide valuable information. The plan of the church pavement will be analysed in detail, with particular reference to the liturgical arrangement of the church and its daily use by the monastic community. To support the argument made at Jervaulx, comparative evidence will be drawn from church pavements at sites such as Byland Abbey, Rievaulx Abbey and Warden Abbey (*Bedfordshire*).³⁴⁵ All of these pavements used tiles to create arrangements of panels and roundels. Similarities between these pavements will be examined to see whether certain types of arrangement were considered suitable for specific areas within the church. It will also be considered whether these pavements responded to the hierarchy of spaces within a church and how they may have highlighted those of greatest importance. There may have been no inscriptions to follow or figural decoration to re-enact, but these pavements could still indicate where to stand and which way to walk.

The Problem of Jervaulx Abbey and its Pavement

A Cistercian community moved to the site at Jervaulx in 1156, having started out a decade earlier as a troubled Savigniac community sixteen miles away at Fors.³⁴⁶ A temporary church was first built in the 1150s, which was then later incorporated into a larger building. The nave was rebuilt first and shares similarities to contemporary work undertaken at Byland Abbey.³⁴⁷ The east end of the church was subsequently completed by the beginning of the thirteenth century. The church consisted of an aisled ten-bay nave and rectangular four-bay presbytery (Fig. 4.5). The east-end included a raised level with five altars and there were two chapels in both the north and south transepts. By the late thirteenth century, sometime after the church was completed, it was laid with a decorative pavement. The pavement consisted of square tiles laid diagonally in panels and large elaborate mosaic roundels created using specially shaped two-colour tiles (Fig. 4.6). As a result, the

³⁴⁴ Shaw, *Specimens*, 9.

³⁴⁵ For both the history and current condition of the Warden Abbey church pavements, along with a selected list of relevant publications, see: Site Gazetteer, 301-302.

³⁴⁶ For a full account of the foundation of Jervaulx Abbey see: Janet Burton, *The Foundation History of the Abbeys of Byland and Jervaulx* (York: Borthwick Institute for Archives, 2006); Janet Burton, *The Monastic Order in Yorkshire 1069-1215* (Cambridge: Cambridge University Press, 1999), 98-124.

³⁴⁷ For a description of the buildings at Jervaulx see: W.H. St John Hope and Harold Brakspear, “Jervaulx Abbey,” *Yorkshire Archaeological Journal* 21 (1911): 303-344.

tiles from Jervaulx Abbey are called 'Decorated Mosaic'. It has been suggested that the Decorated Mosaic pavement at Jervaulx could have been designed and laid in the decades after production ceased by a workshop called Plain Mosaic, which had itself been active in the north of England from the end of the twelfth century.³⁴⁸ It has been argued by Stopford that the pavement at Jervaulx was laid at the end of the thirteenth century. This would have been one of the first pavements laid by the itinerant Decorated Mosaic workshop, with other pavements dating to the beginning of the fourteenth century.³⁴⁹ These pavements have been found at a number of other sites in northern England, the majority of which were monastic, such as Kirkstall Abbey.

The church at Jervaulx, along with the rest of the abbey, was first excavated at the beginning of the nineteenth century. These excavations revealed that several feet of the church walls were still standing, but they, along with the floor, had been covered over with ruined fragments. This had resulted in the preservation of gravestones, an altar and also large areas of pavement. In 1807, after the excavation, drawings of the pavement were made by the London artist P. A. Reinagle.³⁵⁰ These drawings have been lost, but copies of the plans and drawings were subsequently made by Reverend John Ward, who lived locally to the abbey. Ward supposedly made tracings from the original drawings and converted them into full-scale reconstructions.³⁵¹ Ward's drawings included a plan of the church pavement, illustrations of four roundel designs and a large number of square tile designs.³⁵² Ward's drawings were displayed at Winchester in 1845 during the annual meeting of the Archaeological Institute. They were afterwards lent to Shaw for publication in *Specimens*. Shaw's illustrations included a plan of the church pavement, three large and one small roundel designs and a diagonally laid square-tile panel.³⁵³

Alongside his illustrations of the Jervaulx tiles, Shaw described the pavement which covered almost the entire interior of the church. He claimed that the nave aisles had been laid with plain tiles. Roundels were laid in the nave, choir, transepts and east end. No paving, however, survived in the presbytery. The pavement, he continued, was generally laid with panels of diagonally orientated

³⁴⁸ Stopford, *Medieval Floor Tiles of Northern England*, 31-32.

³⁴⁹ For details regarding the Decorated Mosaic Group see: Stopford, *Medieval Floor Tiles of Northern England*, 149-178.

³⁵⁰ The drawings were made in 1807, but the exact date of the excavations at Jervaulx prior to this is unclear. Stopford, *Medieval Floor Tiles of Northern England*, 303-304.

³⁵¹ This is how Shaw describes Ward's method and it is considered by Stopford a reasonably accurate explanation of his process. Shaw, *Specimens*, 9; Stopford, *Medieval Floor Tiles of Northern England*, 303-304.

³⁵² The drawings made by Ward are now within the Yorkshire Museum's collections and are kept at their Birch Park store. The drawings are stored in their original wooden box and, whilst covered in centuries of dust and dirt, are generally in good condition. The scale drawings of the square tile designs and roundel designs retain their vivid colour and give a clear idea of how impressive the pavement must have looked when originally laid.

³⁵³ Shaw, *Specimens*, Plates VII-XII.

tiles. A combination of square tiles and plain half tiles were used to create a variety of panel designs (Fig. 4.7).³⁵⁴ This description of the pavement has long been considered accurate and reiterated in various accounts of the abbey.³⁵⁵ Yet Shaw had concluded his own description of the pavement by admitting that little of what he had described and illustrated survived:

It is much to be regretted that nearly the whole of this magnificent pavement has now disappeared. Hardly fifty figured tiles can be found about the building; the rest have been purloined by travelling antiquaries, or those who imagine themselves to be such, and who seem unconscious of the mischief of which they are guilty while indulging these pilfering propensities.³⁵⁶

Specimens was published in 1858, yet more than thirty years earlier an anonymous report in *The Gentleman's Magazine* had devoted only one sentence to the pavement in a general description of the abbey. The "materials of a tessellated pavement, consisting of pieces of three inches square or under" does not seem to correspond with the extensive pavement described by Shaw.³⁵⁷ Here then is the problem of Jervaulx Abbey. From the mid-nineteenth century onwards the Jervaulx pavement has been systematically depleted, until today only a handful of *ex situ* tiles in storage and a few relaid tiles on-site remain (Fig. 4.8).³⁵⁸ The loss of a pavement that once covered nearly a whole church has been explained in a variety of ways. Whilst Shaw blamed individuals with 'pilfering propensities', other antiquaries believed the destruction to be the result of frost.³⁵⁹ The plans drawn by Ward and Shaw are, therefore, the primary evidence for how the pavement once looked before its loss. *Ex situ* tiles from Jervaulx may provide evidence of individual designs, but they cannot show where they were originally laid. Surviving tiles from Kirkstall Abbey demonstrate the arrangement of Decorated Mosaic roundels. Whilst these roundels are believed to have once been part of a church pavement, they are no longer in their original locations. In the fifteenth century a roundel was

³⁵⁴ Shaw, *Specimens*, 9-10.

³⁵⁵ William Lorenzo Christie, *Jervaulx Abbey* (Harrogate: R. Ackrill, 1924), 6; Hope and Brakspear, "Jervaulx Abbey," 315.

³⁵⁶ Shaw, *Specimens*, 10.

³⁵⁷ Anonymous, "The Present State of Jervaulx Abbey," *The Gentleman's Magazine* 91 (1821): 605-606.

³⁵⁸ In 2017 a number of relaid tiles could still be seen in a small summerhouse at the site, as depicted in Figure 4.8, but by 2019 these tiles had disappeared. Almost all that now remains of these relaid tiles are their impressions in the mortar and a few broken fragments.

³⁵⁹ Stopford's examination of the surviving *ex situ* tiles from Jervaulx, however, has shown that there is little or no evidence of frost damage. Stopford, *Medieval Floor Tiles of Northern England*, 169.

incorporated into the refectory pavement (Fig. 4.9), whilst several partial roundels were relaid in the south transept during the nineteenth century (Fig. 4.10).³⁶⁰

It is clear, therefore, that any study of the Jervaulx pavement must make use of the antiquarian plans. It is first necessary, however, to question their veracity and how far they can be relied upon. The plans made by Ward and Shaw are not identical. In Ward's plan two of the roundels, one at the east end of the church and the other in the nave, are shown interrupted by pier bases. In Shaw's plan, however, the roundels have been moved to avoid the overlap. This is perhaps once again indicative of nineteenth-century attitudes towards medieval pavement layouts. By 'correcting' the position of the roundels, Shaw shows how the medieval pavement could have looked rather than how it actually looked. This would certainly be in keeping with the style of other pavement illustrations published in *Specimens*.³⁶¹ This alteration does call into question the reliability of the antiquarian plans. It is possible, however, that they can still be useful if they are viewed as products of the nineteenth century, and not as archaeological records. The drawings of the roundels, for example, are idealised illustrations. All the tiles are shown complete, as they might have looked originally, rather than as partial or broken as they were found at the time of excavation. The plans made by Ward and Shaw should then be understood and interpreted in a similar fashion. The pavement may have been illustrated as more complete than it really was. The large areas of seemingly intact paving could actually have been areas of incomplete paving. Rather than depicting large whole panels of tiles, the plans may show where scattered tiles were found. These scattered tiles were then pieced together to illustrate how they would have been originally arranged in large panels or groupings. This interpretation would also explain why antiquaries struggled to explain the 'loss' of such large areas of pavement.³⁶² The gathering together of evidence from across a site was also the approach taken during the nineteenth-century excavations at Muchelney Abbey. Here too evidence of decorated mosaic roundels was discovered in the church (Fig. 4.11). In 1878 a report on the excavation stated that these roundels were "not found entire; the pieces were put together when found, till at last they formed the centre."³⁶³ A similar methodology was also executed at

³⁶⁰ For further details on Kirkstall Abbey see: Stephen Moorhouse and Stuart Wrathmell, *Kirkstall Abbey: The 1950-64 Excavations: A Reassessment*, Vol. 1 (Wakefield: West Yorkshire Archaeology Service, 1987); Stopford, *Medieval Floor Tiles of Northern England*, 306-308.

³⁶¹ For other examples of Shaw's changes to pavement layouts in *Specimens* see: Chapter One, 47-49.

³⁶² This would seem logical and certainly helps to explain some of the conflicting accounts of the site. The possibility of theft, however, should not be ruled out entirely. Jervaulx has appeared to suffer more than most at the hands of thieves. On a visit to the site made by the author in Spring 2017 it was reported that some tiles had very recently been stolen. On a subsequent visit to the site in Summer 2019 it appeared that tiles from the summerhouse had also been the victim of theft in the last two years. Stopford, *Medieval Floor Tiles of Northern England*, 167-169.

³⁶³ T. Shelmerdine, "Notes on the Excavation at Muchelney," *Proceedings of the Somersetshire Archaeological and Natural History Society* 24 (1878): 67.

Meaux Abbey (*Yorkshire*) during the twentieth century.³⁶⁴ No complete mosaic roundels were discovered during the excavations, but rather they were assembled from scattered pieces across the site. In some places several pieces were found close together and could indicate the original medieval placement.³⁶⁵ Ward and Shaw's plans of Jervaulx, therefore, are best understood as illustrative of where tiles were discovered and their possible arrangement within a pavement, as assumed and extrapolated from the excavated remains.

The Significance of Roundels

The Decorated Mosaic roundels, which would each have measured nearly two metres in diameter, are one of the most striking features of the church pavement at Jervaulx (Fig. 4.12). These roundels were composed of a series of concentric bands around a central piece. They were made from specially shaped two-colour tiles and each of the bands was laid with a different tile design. The Decorated Mosaic roundels are derivative of earlier Plain Mosaic work. Several roundels survive at Byland Abbey, which was perhaps the first site to receive a Plain Mosaic pavement (Fig. 4.13).³⁶⁶ These were also formed of concentric bands. However, rather than bands of different tile designs, the roundels at Byland contain bands of different geometric patterns. These geometric designs were all created using plain glazed tiles. These tiles could be produced in two colours and the reversal of these colours created variation between the roundels, which were otherwise identical. The roundels from Jervaulx can also be compared to a series of decorated roundels in the south of England. These have been found at sites including Clarendon Palace, Cleeve Abbey and Muchelney Abbey.³⁶⁷ Though all formed primarily of two-colour tiles, there are a number of variations between them. At Clarendon, for example, bands of two-colour tiles are alternated with bands of plain glazed tiles. In contrast at Muchelney there are no plain tiles, instead each band has a separate tile design (Fig. 4.11). The roundels at Jervaulx employ both decorated and plain tiles, but the designs of the two-

³⁶⁴ For the tiles from Meaux Abbey, along with a selected list of relevant publications, see: Site Gazetteer, 293-294.

³⁶⁵ G. K. Beulah's notes on the excavations at Meaux were summarised in: Stopford, *Medieval Floor Tiles of Northern England*, 309-316.

³⁶⁶ The pavement at Byland has been given various dates by scholars. It is possible that the pavement dates to c. 1170-90 when building work on the church was completed as some of the stonework shows evidence of being cut to allow tiles to be laid. Alternatively, it has most recently been argued that the pavement was a second separate phase of work dating sometime after c. 1190. A later date would account for the use of inlaid decoration on some of the tiles, which was not common in northern Europe until after 1200. Stopford, *Medieval Floor Tiles of Northern England*, 124-125, 280-284.

³⁶⁷ Elizabeth Eames imagined a scenario in which the decorative roundels came from France to England, with one series active in the north of England and another entering into the south of the country. Eames, *Catalogue*, Vol. 1, 138-139. For the roundels at Cleeve and Muchelney see: Lowe, *Decorated Medieval Floor Tiles of Somerset*, 9, 138-139, 147-148.

colour tiles connect the bands together (Fig. 4.14). During modern excavations of monastic sites small quantities of shaped tiles have begun to be found, continually expanding the range of places thought to have had pavements with roundels.³⁶⁸ It appears, therefore, that the use of roundels was more widespread than originally thought and that they were produced by a number of different workshops.

In pavements primarily composed of square and rectangular units, the appearance of a roundel is particularly noticeable. They are, due to their shape, visually distinct from the rest of a pavement. It is that distinctiveness that has led to the commonly held belief that roundels indicated something important – something that square or rectangular tiles were not special enough to do.³⁶⁹ Roundels would have created an additional expense for a pavement. The specially shaped tiles would have caused problems during their manufacture and created a greater probability for breakages during the firing process. The cost and effort taken to produce these roundels would suggest that it was logical to place them in hierarchically important or well-used spaces, where they would have had visual impact. Roundels may also have held further significance. As previously discussed, stone roundels, or stones incised with circles, were used during the medieval period as processional markers (Fig. 4.1). It is possible that tile roundels, such as those at Jervaulx, were also used to mark a place to stand. At Byland, for example, it has been noted that the mosaic roundels showed more signs of wear than other tile arrangements.³⁷⁰ There were no differences in the material or manufacture of the roundels to the rest of the pavement, so it was concluded that the roundels were the most trodden upon parts of the pavement.

Roundels could also possess a significance beyond that of a physical marker. The roundels that formed part of the thirteenth-century Cosmati sanctuary pavement at Westminster Abbey, for example, have been argued to possess cosmological symbolism (Fig. 4.15).³⁷¹ Through a detailed deconstruction of the inscription, geometry and materials of the pavement, Richard Foster has claimed that the pavement was intended to be read as a simplified diagram of medieval knowledge

³⁶⁸ At Glastonbury Abbey, for example, half of a tile belonging to the centre of a roundel is displayed in the site museum.

³⁶⁹ It is possible that a similar argument could be made for circular designs on square tiles. At Westminster Abbey chapter house, for example, the circular rose-window design was used to demarcate the important area in front of the abbot along the east wall. For a full discussion of this panel see: Chapter Two, 77-78.

³⁷⁰ Stopford, *Medieval Floor Tiles of Northern England*, 18.

³⁷¹ Foster, *Patterns of Thought*, 148-166; Richard Foster, "Feet on the Ground, Eyes on the Heavens: Some Aspects of Porphyry Opus Sectile Pavements in England," in *The Medieval English Cathedral: Papers in Honour of Pamela Tudor-Craig, Proceedings of the 1998 Harlaxton Symposium*, ed. Janet Backhouse (Donington: Shaun Tyas, 2003), 63-75; Warwick Rodwell and David Neal, ed., *The Cosmatesque Mosaics of Westminster Abbey: The Pavements and Royal Tombs: History, Archaeology, Architecture and Conservation*, Vol. 1 (Oxford: Oxbow, 2019).

of time, space and the world. Actual diagrams of the cosmos in medieval literature, for instance, could be depicted as roundels. Whilst many of the conclusions reached by Foster are specific to the Westminster pavement, his ideas could potentially be applied to other pavements which feature roundels. There are, for instance, similarities in style between Plain Mosaic pavements and the Cosmati pavements at Westminster. At Byland it has been suggested that the roundels could have represented the continuity and eternity of the universe, whilst some of the other geometrical patterns may have represented the order of the universe.³⁷² Other types of roundel designs in medieval art have also been interpreted cosmologically. Rose windows, for example, are made up of numerous geometric shapes. A different design could be placed within each of these separate spaces, but would ultimately be read and understood together as a unified message or symbol.³⁷³ The church itself was also often interpreted in the medieval period as a representation of the universe. The various spaces within a church belonged to different parts of the cosmos. The nave, for example, was associated with the world, whilst the presbytery was associated with heaven.³⁷⁴ By placing a pavement roundel in one of these spaces in the church it could have acquired by association greater cosmological significance. This interpretation of roundels in tiled pavements, however, remains speculative and further research would be required to properly test the hypothesis. It would be interesting, for example, to ascertain whether there is any significance or symbolism to the various numerical values connected with the roundels.

A cosmological interpretation is just one way that roundels may have served as a contemplative tool for the monastic viewer. William of Malmesbury, for example, described how the twelfth-century church pavement at Glastonbury Abbey consisted of: “interlacing stones purposefully laid out in triangles or squares and sealed with lead; I do no wrong to religion if I believe a certain sacred mystery is preserved beneath them.”³⁷⁵ Using simple geometric shapes and manipulating them into complex patterns could also promote meditation by providing a basis for both visual and mental focus. In this way roundels would have possessed a similar function to the medieval labyrinth.³⁷⁶ During the twelfth and thirteenth centuries labyrinths were being laid in the

³⁷² Stopford, *Medieval Floor Tiles of Northern England*, 15-18, 80-81.

³⁷³ Painton Cowen, *Rose Windows* (London: Thames and Hudson, 1979).

³⁷⁴ Daniel K. Connolly, “At the Center of the World: The Labyrinth Pavement of Chartres Cathedral” in *Art and Architecture of Late Medieval Pilgrimage in Northern Europe and the British Isles: Texts*, Vol. 1, ed. Sarah Blick and Rita Tekippe (Leiden: Brill, 2005), 305; Foster, *Patterns of Thought*, 148-166.

³⁷⁵ “Ubi autem notare licet in pauimento, uel per triangulum, uel per quadratum, lapides altrinsecus ex industria positos, ex plumbo sigillatos, sub quibus quiddam archani sacri contineri si credo, iniuriam religioni non facio.” John Scott, ed., *The Early History of Glastonbury: An Edition, Translation and Study of William of Malmesbury’s De antiquitate Glastonie ecclesie* (Woodbridge: Boydell Press, 1981), 66-67.

³⁷⁶ For the medieval labyrinth see: Daniel K. Connolly, *Imagined Pilgrimage in Gothic Art: Maps, Manuscripts and Labyrinths* (Ann Arbor: UMI, 1998); Connolly, “At the Center of the World: The Labyrinth Pavement of Chartres Cathedral,” 285-314; Hermann Kern, *Through the Labyrinth: Designs and Meanings over 5,000 Years*

western nave bays of European cathedrals and churches. They typically formed a pattern of seven or more circuits which were intended to be walked around. These were pavements with a deliberate performative function dictated by their layout. The labyrinth created an area for personal reflection or penitence and have been interpreted by some scholars as symbolising the complex path to salvation. Whilst the labyrinth invited physical movement around a circular space, the pavement roundel perhaps invited an internal movement. This would be in line with Mary Carruthers' concept of *ductus*, where the medieval viewer could move around an image in their minds.³⁷⁷ A roundel in a pavement could, therefore, offer an opportunity for quiet contemplation. This particular reading of roundels in tile pavements also remains provisional and open to further investigation. One feature possibly worthy of additional study is the importance and meaning of inscriptions as aids to contemplation. Evidence from both the antiquarian drawings and surviving collections of Decorated Mosaic tiles, for example, indicate that the centre of the Jervaulx roundels included inscriptions of some kind.

Cistercian legislation on art was primarily focused on creating an appropriate setting for prayer and contemplation.³⁷⁸ At the beginning of the thirteenth century the General Chapter issued a number of statutes against the inappropriate decoration of pavements, though it is unclear exactly what types of pavement were condemned.³⁷⁹ It is clear, however, that there was a desire for simplicity and the avoidance of distraction. Plain Mosaic roundels, like those at Byland, were made in only two colours – yellow and dark green (Fig. 4.16). Rather than specific colours, however, it has been suggested that they should be interpreted as dark tiles and light tiles.³⁸⁰ This use of light and dark, as opposed to colour, would perhaps have been consistent with the simplicity of Cistercian taste. The restrained palette at Byland, for example, stands in contrast to the myriad of blues, greens and purples used in the Cosmati pavement at Westminster. The use of light and dark tiles could also have been open to symbolic interpretation, which may have enhanced their contemplative function. A similar argument could be made for the roundels at Jervaulx. Whilst Shaw illustrated three different large roundel designs from Jervaulx, an examination of the surviving *ex situ* tiles has led

(London: Prestel, 2000); Penelope Reed Doob, *The Idea of the Labyrinth from Classical Antiquity through the Middle Ages* (Ithaca: Cornell University Press, 1990).

³⁷⁷ Mary Carruthers, "The Concept of *Ductus*, or Journeying Through a Work of Art," in *Rhetoric Beyond Words: Delight and Persuasion in the Arts of the Middle Ages*, ed. Mary Carruthers (Cambridge: Cambridge University Press, 2010), 190-213.

³⁷⁸ Christopher Holdsworth, "The Chronology and Character of Early Cistercian Legislation on Art and Architecture," in *Cistercian Art and Architecture in the British Isles*, ed. Norton and Park, 40-55.

³⁷⁹ There are five references to decorative pavements in the statutes of the General Chapter between 1205 and 1235. Pavements are then mentioned by rote until 1316. Norton, "Early Cistercian Tile Pavements," 228-255; Norton, "Table of Cistercian Legislation on Art and Architecture," 352, 354, 358, 366, 368, 378.

³⁸⁰ Stopford, *Medieval Floor Tiles of Northern England*, 21-23.

Stopford to argue that there were in fact only two large roundel designs. There was evidence to support the existence of Roundel B with light-on-dark tiles (Fig. 4.12) and Roundel C with dark-on-light tiles (Fig. 4.14). This would be consistent with the evidence of square tiles from Jervaulx. Two different stamps were used to create light-on-dark and dark-on-light versions of the same square tile design.³⁸¹ The existence of only two Decorated Mosaic roundels of alternate light and dark designs would also be in accordance with the earlier Plain Mosaic roundels from Byland. It could be suggested, therefore, that the Decorated Mosaic workshop were referencing back to the earlier design tradition of the Plain Mosaic workshop. If the roundels at Byland, and their alternate use of light and dark tiles, can be considered to have had a meditative or iconographical function, then it is hypothetically possible that a similar interpretation could be made at Jervaulx.

It is evident that the roundels in the pavement at Jervaulx might not just have been a striking decorative feature, but could also have been intended to perform a number of other functions. They may have indicated a processional route, or marked a place to stand, or created a focal point for monastic meditation. Their significance, however, lies not only in their shape but also in their location. The presumed rarity of pavement roundels has been used in the past to suggest their significance. However, it is now clear that roundels were employed more regularly. They can, therefore, be used to explore whether there may have been specific places to lay them. The similarities between the location of the roundels at different sites might suggest that they were considered to have meaning and purpose. This knowledge appears to have spanned several generations and workshops. Roundels were clearly a feature offered by a number of different tile workshops in England. Yet there were pavements laid by these same workshops that did not employ roundels. Instead there seems to have been a conscious association between ecclesiastical spaces and pavements known to have contained roundels. For example, both Plain Mosaic and Decorative Mosaic roundels appear to have been a feature of monastic, and in particular Cistercian, pavements. All of the sites where Plain Mosaic roundels are known to have been laid are Cistercian, whilst over half of the Decorated Mosaic roundels were laid under Cistercian patronage.³⁸² As such, through an analysis of the pavement layout at Jervaulx, it will be questioned whether the distribution of the roundels was related to the liturgical rituals that were performed in the monastic church.

³⁸¹ Roundel A (Fig. 4.6) as depicted by Ward and Shaw was almost identical to Roundel B, but in reversed colours. The band of lions are also the same as in Roundel C. For a full evaluation and list of the differences between the nineteenth-century evidence and the extant tiles from Jervaulx see: Stopford, *Medieval Floor Tiles of Northern England*, 149-178, 303-305.

³⁸² Stopford, *Medieval Floor Tiles of Northern England*, 127, 149.

Navigating the Church

For modern scholars one of the most problematic aspects of the nineteenth-century plans of Jervaulx is the location of the roundels. There are eight roundels depicted on the plans drawn by Ward and Shaw, with only two of them centrally positioned. There are three roundels in the nave, one in the crossing, two in the south transept and two at the east end (Fig. 4.17).³⁸³ To Stopford these roundels appeared “haphazardly placed” which ultimately led her to conclude that Ward and Shaw’s plans were not reliable. The adjustment made by Shaw to the position of two of the roundels only adds to this impression of unreliability.³⁸⁴ If the antiquarian plans are interpreted as illustrating only where disturbed areas of tiling were found, however, this might help to explain some of the haphazardness of the roundel placement. Rather than assuming that the nineteenth-century plans are inaccurate, it is worth pursuing alternative explanations for the arrangement of roundels and square-tile panels in the Jervaulx pavement. As has already been demonstrated, medieval pavements do not conform to the criteria of Gothic Revival or modern pavements, but instead possess their own patterns and logic. In order to better understand the layout of the pavement at Jervaulx it is necessary to examine it in relation to its surrounding architecture and the rituals that occurred there. The pavement, as illustrated by the nineteenth-century plans, will therefore be examined in detail with a particular focus on the liturgical context of the Cistercian church.

The abbey church, and the daily offices observed within it, formed a core part of the monastic day.³⁸⁵ In eleventh-century Benedictine foundations the psalms and prayers had become the dominant part of the liturgy, with other additions and amendments such as the Office for the Dead, prayers for the Virgin Mary and other local saints. The mass had also been expanded with long processions and litanies. The Cistercians notably sought in the twelfth century to decrease the amount of time spent within the church and created a simplified and austere liturgy to complement their beliefs. The underlying principle of Cistercian liturgy, as with most of their way of life, was to return to a stricter following of the Rule of St Benedict. St Benedict did not, however, give clear instructions for how the mass should be celebrated and the practice varied amongst Benedictine foundations. The Cistercians, therefore, desired the mass to be celebrated in the same way in all their foundations and there were also changes to make the liturgy more concise. By focusing on the relationship between pavement and liturgy some of the problems surrounding the antiquarian plans

³⁸³ Author’s drawings based upon own photographs, in addition to plans published in: Hope and Brakspear, “Jervaulx Abbey,” 308-309; Shaw, *Specimens*, 9; John Ward, “Plan of Jervaulx Abbey Co. York copied from an original made in the year 1807 by direction of the late Earl of Ailesbury. JW. 1845,” (pen and ink drawing, Yorkshire Museum, 1845).

³⁸⁴ Stopford, *Medieval Floor Tiles of Northern England*, 167-169.

³⁸⁵ Bell, “Liturgy,” 258-267; Coomans, “Cistercian Architecture or Architecture of the Cistercians?,” 151-170.

of Jervaulx may be resolved. Each part of the church at Jervaulx will be examined sequentially in order to assess the relationship between its liturgical arrangement and the layout of its pavement.

The Nave

According to the antiquarian plans, the centre of the nave at Jervaulx was principally laid with diagonally orientated panels of tiles, whilst the aisles were laid with square tiles. This change in tile orientation is a simple but effective way to differentiate clearly between two spaces. What are here described as square tiles were referred to by Shaw as 'plain red tiles'. It is likely that these tiles were originally decorated, either with a plain glaze or two-colour design, but that their surface had worn away by the nineteenth century. The red colour of the tiles was presumably the colour of the clay body showing through.³⁸⁶ It is possible that these tiles originally came from elsewhere in the abbey and were only laid in the nave at the end of the medieval period. The nave was often one of the last areas within a church to receive a tile pavement. At Rievaulx Abbey, for example, the east end of the church was paved with Plain Mosaic tiles in the early thirteenth century. Tiles dating to the early fourteenth century were laid to the west of the choir, whilst in the fifteenth century tiles were laid at the east end of the nave (Fig. 4.18).³⁸⁷ The western part of the nave, however, was only paved with large plain-glazed tiles at the beginning of the sixteenth century (Fig. 4.19).³⁸⁸ If pavements were being replaced or repaired at Jervaulx, old tiles may have been reused in the nave. This reuse of material is likely, as the areas where the plain red tiles are shown on Shaw's plan were not areas that typically received a lot of wear. Before the fourteenth century the nave would have been occupied by the lay brother's choir. After their disbandment, however, the nave became a space that could be utilised for processions or divided up into chapels. At Rievaulx eight chapels were created in the eastern bays of the nave and paved at the beginning of the fourteenth century with tiles of various styles and ages (Fig. 4.20).³⁸⁹ These tiles were presumably either unlaidd leftovers from earlier pavements or removed from their original positions. It is possible, therefore, that the nave aisles at Jervaulx were paved with reused tiles at a later date when the number of altars within the church became increasingly important.

Ward and Shaw's plans depict three roundels in the nave at Jervaulx (Fig. 4.21). Two of these are located in the centre of the nave, and the third is adjacent to them in the north nave aisle. Whilst

³⁸⁶ Shaw, *Specimens*, 9; Stopford, *Medieval Floor Tiles of Northern England*, 173.

³⁸⁷ Author's drawings based upon own photographs, in addition to plans published in: Peter Fergusson, Glyn Coppack and Stuart Harrison, *Rievaulx Abbey* (London: English Heritage, 2008); Stopford, *Medieval Floor Tiles of Northern England*, 323.

³⁸⁸ Jennie Stopford, "Tiled Pavements and Phases of Floor Decoration," in *Rievaulx Abbey: Community, Architecture, Memory*, ed. Fergusson and Harrison, 221-224.

³⁸⁹ Stopford, *Medieval Floor Tiles of Northern England*, 324-325.

at first their position defies immediate explanation, a closer examination shows that their location is entirely plausible. The lay brother's choir was divided from the rest of the church by a screen that ran across the sixth bay, directly to the east of the roundels. A similar division existed in the sixth bay of the nave at Rievaulx. This screen would have contained doors to allow access between the two sides. There would also have been at least one altar associated with this screen.³⁹⁰ The placement of a roundel, or multiple roundels, in this location is consistent with the possible significance of pavement roundels as outlined above. Roundels could indicate a place to stand or move toward and could also indicate areas of special importance. In the nave at Jervaulx the roundels would have fulfilled both functions. It has been suggested above that the nave aisles were paved sometime later, using worn tiles from elsewhere at Jervaulx. An alternative explanation for the nave roundels, therefore, would be that they too were laid at a later date than the rest of the pavement. It is possible that the nave was given roundels only after the departure of the lay brothers and the increasing use of the nave for monastic processions. In this context it is interesting to note the location of the nave roundels at Jervaulx in comparison to the limestone slabs in the nave at Fountains Abbey (Fig. 4.1). The series of three stones laid separately at the eastern end of the nave has an interesting correlation with the position of the two central roundels in the nave at Jervaulx. The stones at Fountains are considered to be processional markers indicating where the monks were to wait before continuing into the choir. The stones to the east have been thought to be the position of the abbot and his senior monks. If the nave roundels at Jervaulx can be interpreted in a similar manner, this might suggest the continued liturgical use of the pavement throughout the abbey's history.

The Choir and Crossing

In the eastern part of the architectural nave, beyond the lay brother's choir, was the monks' choir. At the western end of the monks' choir at Jervaulx were two chapels (Fig. 4.22). The L-shaped arrangement of the choir stalls is evident in the areas where no paving is marked on the antiquarian plans. The choir screen would have acted as the decorative western end of the choir stalls. It usually contained a central door by which access was provided to the choir stalls from the west. The position of this door is perhaps indicated on the plans by a line of square-laid tiles that runs east-west through the centre of the first two bays of the choir. The choir aisles at Jervaulx are shown laid with panels of diagonally orientated tiles, with square tiles acting as borders. These panels indicate a clear eastward movement through the aisles. A similar arrangement is also evident at Byland Abbey, where panels of diagonally laid plain tiles are divided by east-west orientated borders (Fig. 4.23).

³⁹⁰ Fergusson, Coppack and Harrison, *Rievaulx Abbey*, 6-9.

This can be seen most clearly in both the south choir aisle and the central crossing area before the presbytery (Fig. 4.24).³⁹¹ In the crossing at Bordesley Abbey panels of diagonal tiles framed by borders of square tiles were also used. This early fourteenth-century pavement consisted of three main panels divided by borders all leading from the choir stalls at the west to the presbytery in the east. Panels of square tiles were also used to create a distinction between the crossing aisles and the transepts (Fig. 4.25). These long panels running from west to east would lead the eye visually, and the monk physically, in a particular direction. Wear patterns at Bordesley suggest that the same route was used for processions throughout the thirteenth and fourteenth centuries.³⁹² Whilst the arrangement of square and diagonal tiles in the aisles at Jervaulx cannot necessarily be called a processional path, nevertheless it would have directed the monks visually towards the east end of the church.

A single roundel is depicted in the centre of the crossing at Jervaulx. At Meaux Abbey a similar arrangement was discovered at the centre of the crossing, directly between the monks' choir and the presbytery steps (Fig. 4.26).³⁹³ A roundel in this location at Jervaulx could have served several purposes. It may have been related to the processional routes taken by the monks as they moved between the south transept, the south choir aisle, the choir and the presbytery. One route to or from the choir stalls would have taken the monks from the south transept into the crossing before entering the choir stalls from the east. This would have led the community directly over the roundel at the centre of the crossing. It is also possible to suggest that a roundel in this position would have created a striking visual centrepiece, working alongside its surrounding architecture and the crossing tower that rose above it. From the choir the monks would have been able to see the roundel and it could have drawn their gaze to the high altar at the east end of the presbytery. If pavement roundels were intended to serve a contemplative function a central position in the crossing would have been a suitable location. It marked, in one sense, the centre of the church and the cross it symbolised. The roundel would also have been easily visible to the community at Jervaulx and could have served as a point of visual and mental focus during the recitation of the daily offices.

The Transepts

³⁹¹ Author's drawings based upon own photographs, in addition to plans published in: Stuart Harrison, *Byland Abbey, North Yorkshire* (London: English Heritage, 2009); Stopford, *Medieval Floor Tiles of Northern England*, 281.

³⁹² Astill, Hirst and Wright, "The Bordesley Abbey Project Reviewed," 106-158; Hirst, Walsh and Wright, *Bordesley Abbey II*, 28, 139-169.

³⁹³ Author's own drawing based upon a plan published in: Stopford, *Medieval Floor Tiles of Northern England*, 312.

The antiquarian plans of Jervaulx show that the pavement in both transepts consisted primarily of diagonally-laid panels of tiles. In the north transept small panels of square-laid tiles are depicted around the walls. In the south transept there is another panel of square-laid tiles which appears to correspond with the location of the night stair (Fig. 4.17). The night stair would have provided the monks with access from the dormitory to the church for the night offices. In the choir aisles it has been suggested that the alternating panels of square and diagonally laid tiles indicated the direction of travel. It is possible that a similar arrangement of panels in the south transept could have marked the route the monks would have taken from the south transept to the liturgical choir. Panels and borders have also been used to divide one space from another. These may have corresponded with architectural divisions like columns, or removable fixtures like screens. At Jervaulx there appear to have been divisions in the pavement between the transepts and the crossing, and between the crossing aisles and the nave aisles. At the western edge of the north transept, for example, a small border separates the transept from the eastern nave aisle. This division of space using changes in pavement layout was also observed at Bordesley Abbey. Here a panel of square tiles, along with a screen or rail, created a division between the crossing and south transept (Fig. 4.25). These pavements also differed in height and style.³⁹⁴ At Byland panels of different designs were also used to define the boundaries between the crossing and north transept (Fig. 4.27). The creation of divisions between spaces at Jervaulx suggests that the pavement could be read hierarchically. The change in pavement layout was perhaps an indication of moving from one space into another space of greater or lesser importance.

There is no indication on the plans of the type of pavement that was laid in the transept chapels. A report on excavations at Jervaulx at the beginning of the twentieth century described the altar steps and platforms in these chapels as paved with stone.³⁹⁵ There is still evidence of stone paving in the transept chapels at the site today (Fig. 4.28). It is possible that a stone pavement could have been laid prior to the late thirteenth-century Decorated Mosaic pavement. Important spaces in the church, like altars and the presbytery, were usually among the first to receive a pavement. At Bordesley Abbey, for example, a stone floor was laid in the presbytery during the twelfth century whilst other areas in the church at this date had unpaved dirt floors.³⁹⁶ Even at sites where the transept chapels did receive a tile pavement, distinction could be made between both the transept and the chapel, and between the body of the chapel and the altar platform. At Byland, for example, panels of square tiles with borders were used in the transept, whilst shaped mosaic tiles were used

³⁹⁴ Philip A. Rahtz and Sue M. Hirst, *Bordesley Abbey, Redditch, Hereford-Worcestershire: First Report on Excavations 1969-1973*, BAR British Series 23 (Oxford: British Archaeological Reports, 1976), 69.

³⁹⁵ Hope and Brakspear, "Jervaulx Abbey," 312

³⁹⁶ Hirst, Walsh and Wright, *Bordesley Abbey II*, 28.

in the chapels themselves. Within the chapels themselves different mosaic patterns were also selected for the body of the chapel and the altar platform (Fig. 4.29). Similarly, at Bordesley the transept chapel pavements were laid with a series of panels with borders, a different arrangement of panels on the altar step and a single tile design for the altar platform (Fig. 4.25).³⁹⁷ Regardless of the style of pavement there appears to have been a deliberate choice to emphasise the hierarchy of spaces within the transept chapels by either using a different layout, a different design, or perhaps as at Jervaulx, a different material.

The nineteenth-century plans indicate that there were two roundels in the south transept at Jervaulx. The first was placed before the northernmost chapel and the second adjacent to it, north of the crossing (Fig. 4.30). The location of these roundels is of particular interest as there are several parallels for them at other sites. There appear to have been Plain Mosaic roundels in the south transepts at both Byland and Rievaulx in the early thirteenth century. At Rievaulx a partial roundel was found in the south transept aligned to the altar in the southern chapel (Fig. 4.31).³⁹⁸ This is a similar position to the roundel depicted at Jervaulx, except that here it is shown on the plans as aligned to the altar in the northern chapel. At Byland the roundel is also aligned to the altar in the northern chapel, but positioned slightly further east than the roundel depicted at Jervaulx (Fig. 4.24). This association between roundels and the south transept appears to have continued into the fourteenth century. At Warden Abbey a mosaic pavement was laid which was clearly influenced by the earlier Plain Mosaic workshop. There were similarities in technique as well as style, with many of its designs being copies of those produced a hundred years earlier. It appears as if the arrangement of the pavement may also have been inspired by this earlier tradition. During excavations at Warden in the mid-twentieth century two roundels were discovered in the south transept close to the night stair (Fig. 4.32).³⁹⁹ It is possible that north transepts also once possessed roundels that have now been lost. Yet it is difficult to explain why north transept roundels would have disappeared without trace, whilst there survives considerable evidence for south transept roundels. There are a number of reasons why roundels may have been deemed a more suitable arrangement for the south

³⁹⁷ Author's own drawing based upon plans published in: Hirst, Walsh and Wright, *Bordesley Abbey II*, Fig. 1, Fig. 63; Rahtz and Hirst, *Bordesley Abbey*, Fig. 1.

³⁹⁸ Stopford, "Tiled Pavements and Phases of Floor Decoration," 223.

³⁹⁹ The exact location of the mosaic pavement and roundels at Warden is unclear in the literature. The roundels are described as close to the night stair and were either in south aisle of the church or possibly the south transept. Either way this still roughly corresponds with the location of both roundels depicted at Jervaulx Abbey. Evelyn Baker, "Images, Ceramic Floors and Warden Abbey," *World Archaeology* 18 (1987): 364-365. Author's own drawing based upon plans published in: Evelyn Baker, "The Warden Abbey Pavements: Fine Art on a Floor," in *Studies in Cistercian Art and Architecture*, Vol. 4, ed. Meredith Parsons Lillich (Kalamazoo: Cistercian Publications, 1993), Fig. 9; Granville T. Rudd and Bernard B. West, "Excavations at Warden Abbey in 1960 and 1961," *Bedfordshire Archaeological Journal* 2 (1964): 58-69.

transept than the north transept. The south transept was in regular processional use by the monks who entered from the dormitory via the night stairs. In this context roundels may have signified a place to move towards or pause at. The importance and daily use of the south transept would have been highlighted by the presence of an elaborate roundel, the pavement once again marking out the spaces of greatest importance. It is also possible that these roundels could have marked where to stand in relation to a chapel or altar. The transept chapels were used by monks to say private masses and prayers for the dead and were also a place to stop during processions. At Byland there is certainly evidence to suggest that the roundel in front of the altar in the south transept was frequently trodden upon (Fig. 4.13).⁴⁰⁰ Roundels nearby to altars could also have been used as a contemplative tool for focusing the mind during these prayers. The positions of the two roundels depicted on the plans of Jervaulx are, therefore, entirely plausible.

The East End

There is no record of a presbytery pavement at Jervaulx and the antiquarian plans show merely a blank space where it would have been (Fig. 4.33). The absence of any paving in this area has generated speculation by scholars as to what might have been there. Shaw suggested that the presbytery pavement was mosaic marble which was then sold off at the time of the Dissolution due to its high value. This idea has been repeated in various guises.⁴⁰¹ However, this seems somewhat unlikely, principally because there is no evidence of marble in the excavated remains of the church or amongst the surviving *ex situ* tiles. It is also worth noting that the presbytery is not the only area left blank on the antiquarian plans. No pavements are shown for the chapels to the west of the choir stalls, the transept chapels or the chapels that extended the length of the east wall. These chapels along with the presbytery would have been the most hierarchically important spaces in the church. Typically it was these most important spaces that were paved first. Until the thirteenth century at Bordesley Abbey, for example, the presbytery was the only area in the church to have a pavement.⁴⁰² It is possible, therefore, that at Jervaulx important areas of the church, like the presbytery and chapels, had received a stone floor first, before further areas were then tiled. If the presbytery was laid with a stone floor it is conceivable that the remains of the paving were confused with other stone rubble and debris during the excavations of the church at the beginning of the nineteenth century. The presbytery may have retained its stone pavement for a significant length of time and never have been laid with Decorated Mosaic tiles. At Bordesley, for example, the stone pavement probably remained in the presbytery until the early fourteenth century even though tile

⁴⁰⁰ See Chapter Four, 118.

⁴⁰¹ Christie, *Jervaulx Abbey*, 6; Shaw, *Specimens*, 9.

⁴⁰² Hirst, Walsh and Wright, *Bordesley Abbey II*, 28.

pavements had been laid in the crossing and south transept during this time.⁴⁰³ A stone pavement could have continued to mark out an important space even if tile pavements were laid elsewhere. At Jervaulx there may have been no lost tile or marble pavement that requires explanation as it is possible that the presbytery never required elaborate decoration. At Byland, for example, the presbytery is laid only with a series of plain square tiles arranged to create a chevron pattern (Fig. 4.34). This simple arrangement stands in contrast to the elaborate roundel and shaped mosaic patterns in the south transept chapels. Like a stone pavement at Jervaulx, this may have been a deliberate choice. The simplicity of the pavement may have been a way to avoid distraction from the important liturgical rites that occurred in the presbytery.⁴⁰⁴

The presbytery aisles at Jervaulx appear to have been laid with the same alternating panels of square and diagonally-laid tiles as seen in the aisles flanking the liturgical choir. At Byland there is a similar continuation of long east-west running panels divided by borders through the choir and presbytery aisles (Fig. 4.24). This continuation would certainly be convenient for the processional use of the aisles by the monks. Two roundels are also depicted at the east end of the church at Jervaulx. The first of these is in a central position between the presbytery and east wall.⁴⁰⁵ This roundel appears to be aligned between two altars – the high altar in the presbytery and an altar in a chapel on the east wall. This would suggest a location perhaps related to the use of these altars. As has already been discussed a roundel may have been used as a place to stand or meditate before the altar in the south transept chapel. A similar function could be suggested here. The second of the two roundels is shown in front of the northernmost chapel along the east wall. The position of this roundel on the plan has been considered particularly problematic, as it does not fit within the space and was actually shown overlapped by a pier base in Ward's plan (Fig. 4.35).⁴⁰⁶ Yet it is possible to argue that its position is still credible. Several of the roundels at Jervaulx, including this one, are depicted aligned to altars. This is similarly the case for roundels at other sites such as those at Byland and Rievaulx. It is also interesting to note the general similarities between the plans of Jervaulx and Byland (Figs. 4.17 and 4.24). The roundels at Byland occupy almost identical positions to those at Jervaulx. This includes a roundel in the north-east corner of the church (Fig. 4.36). The locations of the roundels at Jervaulx as depicted by Ward and Shaw are not, therefore, necessarily haphazard or

⁴⁰³ Hirst, Walsh and Wright, *Bordesley Abbey II*, 36-52.

⁴⁰⁴ Stopford, *Medieval Floor Tiles of Northern England*, 15-18, 80-81.

⁴⁰⁵ The depiction of this roundel on the antiquarian plans is reminiscent of the high altar platform at Fountains Abbey (Fig. 1.1). The roundel is shown surrounded by borders of square tiles and flanked by panels of diagonally-laid tiles. The altar platform at Fountains is almost certainly the work of antiquaries piecing together evidence from around the site. This is a similar approach to that argued for the plans of Jervaulx. For a discussion of the altar platform at Fountains Abbey see: Chapter One, 44-45.

⁴⁰⁶ Stopford, *Medieval Floor Tiles of Northern England*, 167.

inaccurate. There is a varying degree of correlation between roundels and altars throughout the church at Jervaulx, but their general positioning is supported by the evidence from Byland.

'Interlacing Stones Purposefully Laid Out'

It is clear, therefore, that there is an interesting and significant relationship between the pavement at Jervaulx and the liturgical use of the church by the monks. Caution is ultimately required when handling the evidence provided by the antiquarian record of the pavement. There are several inconsistencies which make firm conclusions problematic. Nevertheless, comparative evidence drawn from a range of other sites supports in general the conclusions reached at Jervaulx. Through these comparisons it has been shown that particular arrangements of tiles were suited to certain areas in the church. These arrangements were not confined to the practice of a singular workshop. Instead it appears as if pavement layouts were shared in the same way as techniques or designs. The use of long panels divided by borders running from west to east, for example, appears to have been frequently used for aisles. This is perhaps a simple layout that might have been chosen because it was the easiest or most convenient to lay. These panels, however, do succeed in drawing focus in a particular direction. In the case of aisles, they could mark a processional route, leading the monk towards the east or west ends. Roundels appear to have been for the most part associated with altars. They were not used to mark the site of an altar, and were not even always placed directly before them, but were usually aligned to them. The meditative function of roundels is also suggested by their position close to altars and in spaces that were most frequently used by the monastic community. It also appears that the most special places in the church did not necessarily require the most elaborate pavements. A stone paved presbytery could last for several generations without being replaced. Pavements were, therefore, perhaps intended to complement the liturgy and not distract from it. Within the Cistercian context being considered here, the simplicity of a pavement could actually serve to highlight the importance of the rituals that occurred upon it.

Whilst the previous chapter examined the secular patronage of a pavement, here the focus has been upon the monks themselves as patrons. Jervaulx, and all of the comparative examples given above, were Cistercian abbeys. Due to Cistercian attitudes towards art and architecture, as codified in their statutes, there was a desire to create pavements that were not overly elaborate. One way to avoid accusations of overindulgence may have been to endow a decorative pavement with practical use. These pavements were perhaps, therefore, intended to navigate the monks around the church. The pavement at Jervaulx, for example, has an interesting relationship with the various entrances into and out of the church. The door in the south choir aisle provided access

between the cloister and the church. The use of long panels divided by borders running the length of the aisle provided a directional emphasis towards the east or west ends. At Byland there is evidence to suggest that these panels continued into the presbytery aisles. The other entrance used regularly by the monks at Jervaulx was the night stairs in the south transept. Here, along with the presence of roundels, there is also an indication that panels and borders in the pavement could have directed the monks towards the crossing. A pavement could, therefore, act as a map of the church, marking out important spaces with roundels or other elaborate arrangements. It was a constant visual reminder to the monk of what to do and where to do it.

The pavements that have been examined here mark out simple spaces for prayers and processions. As such they could have worked in the churches of other monastic orders, like the Benedictines. The choir occupied a similar position, the night stair was used for access and altars were worshipped at. They may also have functioned over a long period of time. Yet the relationship between pavements and liturgy could have changed, for liturgical practices continued to develop throughout the medieval period. Abbey churches were often laid with several different pavements during the course of their history. At both Bordesley Abbey and Norton Priory, for example, the tile pavements at the east end of the church were replaced in the fifteenth century.⁴⁰⁷ The understanding and use of these pavements may, therefore, have changed over time too. Decoration acquired meaning from the rituals that took place around it. If the rituals changed or were no longer enacted, it stands to reason that the meaning too would change. It is unlikely, therefore, that there was ever one single intended meaning or interpretation attached to a pavement. It is also possible that pavements possessed layers of meaning, beyond their usefulness as a navigational tool. Movement did not necessarily need to be physical; it could also be in the mind. One only needs to consider how the interlaced stones at Glastonbury led William of Malmesbury to believe that their geometrical arrangement must have meant something important.⁴⁰⁸ If arrangements like roundels were intended to have cosmological symbolism or to be used as a meditation aid, then the experience of the pavement could have been a deeply personal one. Pavements were part of a decorative scheme that encompassed an architectural space and worked in partnership with the rituals that were enacted within it. The experience of this decorated space would have been different for every individual.

⁴⁰⁷ Hirst, Walsh and Wright, *Bordesley Abbey II*, 157-167; Keen, "The Medieval Tiles," 108, 267-271.

⁴⁰⁸ Scott, ed., *The Early History of Glastonbury*, 66-67.

Chapter Five

***‘Among the scattered single tiles’*: Reintegrating Tile Pavements into the Medieval Interior**

‘Three specimens of square tiles...’⁴⁰⁹

Integration in its basic form means combining several elements together and bringing them into equal participation. For the medieval ecclesiastical interior this means examining art, architecture, audience and performance at the same time. Willibald Sauerländer has asserted that art historians should consider three different kinds of integration. The integration of time highlights, for example, the difference between intention and result. The integration of performance considers not only liturgical practices, but also the audience of these practices and their movement around a church. The integration of context places the church within its historical context, whether that be economic, social or political.⁴¹⁰ Other scholars such as Nicola Coldstream have considered the crossover of media as another type of integration. Wood, for example, could be painted to mimic stonework. Decorative motifs found on walls and piers could be repeated in metalwork, embroidery and stained glass.⁴¹¹ For Paul Binski integration came from the careful planning of a learned patron to create a cohesive scheme that began with the ground plan of a building and finished with its decoration.⁴¹² What integration means for medieval tiles is, first and foremost, being viewed collectively as a pavement rather than individual specimens.

Shaw’s *Specimens* was filled with medieval tiles designs arranged in neat coloured squares and surrounded by the white margins of the paper.⁴¹³ Whilst these designs illustrated many of the ‘scattered single tiles’ found during excavation works, nevertheless their presentation could not be any further removed from their original context within the medieval interior.⁴¹⁴ Whilst the

⁴⁰⁹ Shaw, *Specimens*, 15.

⁴¹⁰ Sauerländer, “Integration: A Closed or Open Proposal?,” 3-18; Sauerländer, “Integrated Fragments and the Unintegrated Whole: Scattered Examples from Reims, Strasbourg, Chartres and Naumburg,” 153-166.

⁴¹¹ Nicola Coldstream, *The Decorated Style: Architecture and Ornament 1240-1360* (London: British Museum Press, 1994), 10, 37.

⁴¹² Binski uses the example of Alan of Walsingham and the Lady Chapel at Ely Cathedral: Binski, *Gothic Wonder*, 193-202.

⁴¹³ For a more detailed discussion of *Specimens* and the motivations behind its publication see: Chapter One, 47-49.

⁴¹⁴ Shaw, *Specimens*, 10.

motivation for publishing medieval tile designs may have changed since the nineteenth century, the format has not.⁴¹⁵ The creation of regional catalogues in the twentieth century, for example, has resulted in the continued separation of tiles from, not only other decorative arts, but also the buildings in which they were located. This thesis has, therefore, aimed to reconnect and reintegrate medieval tiles in a variety of ways. In Chapter Two it was shown how tiles should be integrated and understood as part of a whole pavement. The detailed analysis of the compromises that were made to the layout of the Westminster chapter house pavement also fits within Sauerländer's parameters of the integration of time. Through its anomalies the pavement layout reveals the difference between planned intention and practical reality. In Chapter Three it was demonstrated how pavements can be integrated with the architecture of their surrounding buildings. The discussion of the role of commemoration in the church pavement at Hailes Abbey can also be linked to Sauerländer's ideas surrounding the integration of context. The significance of the pavement was clearly highlighted when placed within a social and historical context, centred around heraldry and the construction of memory. In Chapter Four it was made evident that pavements can be integrated with the liturgical rituals that occurred in an ecclesiastical space. The evaluation of the relationship between liturgy and the church pavement at Jervaulx Abbey can be associated with Sauerländer's integration of performance. The pavement was intended not only to be read as a set of signposts directing movement around the church, but also as a series of liturgical symbols, drawing attention to spaces of greater importance. This fifth and final chapter will integrate together all of these elements and reveal how a pavement was just one part of a decorative scheme that could cover the floor, walls and windows of a church. By working together these elements created a stage on which liturgical rituals could be enacted.

The best case study for reintegrating tile pavements into the medieval interior is Prior Crauden's Chapel at Ely Cathedral. Not only is the fourteenth-century mosaic pavement one of the most well-preserved and celebrated of English pavements, it also remains *in situ* within a building whose architecture and decoration date to the same period. The chapel is, therefore, one of the few examples where real connections can be made between the pavement and the rest of an interior. Prior Crauden's pavement was one of the first to be studied and published by antiquarians in their pursuit of the medieval past.⁴¹⁶ Even today most publications about the cathedral mention the

⁴¹⁵ Tile designs continue to be presented as individual squares in recent accounts. The tiles are typically arranged into groups, with each group of tiles given its own page and each tile assigned a design number on that page. For an example see: Harcourt, "The Medieval Tiles," 278-293.

⁴¹⁶ For a detailed discussion on early antiquary interest in Prior Crauden's pavement see: Chapter One, 45-47. For the nineteenth-century plans of Prior Crauden's pavement drawn by Fowler and Wilkins see: Figures 1.3 and 1.4.

pavement or include a photograph of its striking Adam and Eve panel. Yet there has been surprisingly little said about how to interpret the pavement, its imagery and wider artistic context. Since the late 1970s the suggestion that the pavement was originally intended to be laid in the Lady Chapel at Ely Cathedral has been much repeated.⁴¹⁷ The aim of this chapter, however, is to demonstrate that the pavement was actually more appropriate for the interior of Prior Crauden's Chapel. It will start by placing the chapel and its pavement within the wider architectural and chronological context of Ely Cathedral in the fourteenth century. It will move on to consider Prior Crauden's pavement within the wider context of other, geographically diverse, line-impressed pavements. The pavement will then be studied within the artistic context of the chapel, including both painted and sculptural decoration. Finally, the pavement and its imagery will be connected to ideas of performance by examining the audience and function of Prior Crauden's Chapel. Thus, not only will the chapter move the understanding of the Ely pavement in new directions, but also explore ways in which medieval tiles can be studied in the future by scholars.

Prior Crauden and his Chapel

John Crauden was elected prior in 1321, though it is not known how long he had resided at Ely before this date.⁴¹⁸ Crauden was active in his role as prior, establishing a house for monks at Cambridge University and undertaking a role in the bishop's consistory court. He was also present at the royal court, forming a friendship with Queen Philippa which resulted in her gifting him a set of state robes.⁴¹⁹ At Ely, Crauden extended the personal authority of the prior by remodelling and building an extension to the original prior's house, along with a prior's kitchen and a private chapel. Prior Crauden's Chapel was built in the first quarter of the fourteenth century to the south of the cathedral (Fig. 5.1). The Queen's Hall, which provided accommodation for important visitors, along with the prior's hall and private study were all connected to the chapel by first-floor walkways (Fig.

⁴¹⁷ Laurence Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," in *Medieval Art and Architecture at Ely Cathedral*, ed. Coldstream and Draper, 47-57.

⁴¹⁸ For a full account of Crauden's life and personality see: Nicola Coldstream, "Crauden, John (d.1341)," *Oxford Dictionary of National Biography*, 2004, accessed 27th November 2015, <http://www.oxforddnb.com/ezproxy.york.ac.uk/view/article/107245>.

⁴¹⁹ These were the robes of state she had worn for her churching in 1330, which Crauden is said to have made into vestments. Coldstream, "Crauden, John (d. 1341)," *Oxford Dictionary of National Biography*, 2004, accessed 27th November 2015, <http://www.oxforddnb.com/ezproxy.york.ac.uk/view/article/107245>; Stella Mary Newton, "Queen Philippa's Squirrel Suit," in *Documenta Textilia*, ed. Mechthild Flury-Lemberg and Karen Stolleis (Munich: Deutscher Kunstverlag, 1981), 342-348; W. Stevenson, *A Supplement to...Mr Benthams History and Antiquities of the Cathedral and Conventual Church of Ely* (Norwich: Stevenson, Matchett and Stevenson, 1817), 117.

5.2).⁴²⁰ A record in the treasurer's accounts for the year 1324-1325 records a sum of £138 8s 5d as payment for "in nova constructione capelle et camera Domini Prioris."⁴²¹ This has generally been considered a final payment marking the conclusion of work on the prior's chapel and study. The latest possible date that has been proposed for the chapel is c. 1330, a conclusion based stylistically on both its sculptural decoration and mosaic pavement.⁴²² The chapel is of two storeys consisting of a stone vaulted undercroft and an upper wooden vaulted chapel. The rectangular chapel consists of four bays, a wider bay to the west and three narrower bays of similar size to the east. The westernmost bay, though the largest, is also the plainest with little sculptural ornamentation. In contrast the easternmost bay containing the altar is highly ornate in its decoration and raised two steps above the rest of the chapel (Fig. 5.3). The vault is supported by clusters of shafts that stand proud from the wall surface. At the east end of the chapel there is a five-light window and to the west there is a four-light window. In the two easternmost bays the north and south walls each contain large two-light windows. In the third bay from the east on both the north and south walls there are small single-light windows framed by nodding ogees. There are two additional nodding ogees situated diagonally across the corners of the east end, housing a piscina and an aumbry.

Along with Crauden, the period in question is characterised by the personalities of the sacrist Alan of Walsingham and Bishop John Hotham.⁴²³ Together the three men are credited with the successful building programme at Ely in the first half of the fourteenth century as evidenced by the surviving sacrist accounts of Walsingham. The fourteenth-century additions to the church included the Lady Chapel (1321-1349), the Octagon (1322-1328) and the first three bays of the choir (1322-1337).⁴²⁴ The foundation stone of the Lady Chapel was laid in 1321, but building work was disrupted by the collapse of the Norman central tower in 1322. The result of this destruction was the

⁴²⁰ The exact relationship of these buildings to one another is unclear. Many of these buildings were altered during the centuries and some were removed at the time of the Dissolution. Author's own drawing based upon plans and descriptions published in: Philip Dixon, "The Monastic Buildings at Ely," in *A History of Ely Cathedral*, ed. Meadows and Ramsay, 151-153; John Maddison, *Ely Cathedral: Design and Meaning* (Ely: Ely Cathedral Publications, 2000), 85.

⁴²¹ F. R. Chapman, *Sacrist Rolls of Ely*, Vol. 2 (Cambridge: Cambridge University Press, 1907), 126.

⁴²² Paul Binski and David Park, "A Ducciesque Episode at Ely: The Mural Decorations of Prior Crauden's Chapel," in *England in the Fourteenth Century: Proceedings of the 1985 Harlaxton Symposium*, ed. W. M. Ormrod (Woodbridge: Boydell Press, 1986), 29-30; Coldstream, "Ely Cathedral: the Fourteenth-Century Work," 29; Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," 52.

⁴²³ For a full account of Walsingham's life see: Nicola Coldstream, "Walsingham, Alan (d.1363)," *Oxford Dictionary of National Biography*, 2004, accessed 20th December 2015, <http://www.oxforddnb.com/ezproxy.york.ac.uk/view/article/270>. For a full account of Hotham's life see: M. C. Buck, "Hotham, John (d.1337)," *Oxford Dictionary of National Biography*, 2004, accessed 20th December 2015, <http://www.oxforddnb.com/ezproxy.york.ac.uk/view/article/13851>.

⁴²⁴ For an account of the fourteenth-century work at Ely see: Coldstream, "Ely Cathedral: the Fourteenth-Century Work," 28-46; Phillip Lindley, "The Fourteenth-Century Architectural Programme at Ely Cathedral," in *England in the Fourteenth Century: Proceedings of the 1985 Harlaxton Symposium*, ed. Ormrod, 119-129; Maddison, "The Gothic Cathedral: New Building in a Historic Context," 113-141.

Octagon Tower, which was given a wooden vault as the space was considered too large for a stone vault (Fig. 5.4). The collapse of the Norman tower also damaged parts of the choir and the first three bays were subsequently rebuilt and refitted. It is agreed by scholars that work on the choir, Octagon and Lady Chapel, alongside Prior's Crauden's Chapel, was undertaken in the short space of a few decades. As such, similarities that could connect these overlapping projects have been sought. For example, some scholars have argued that Prior Crauden's Chapel, along with the Octagon, Lady Chapel and choir were all the work of one master mason, with one of the Ramsey family identified as a likely candidate.⁴²⁵ Other scholars have discerned regional nuances between the various buildings. Norwich and Lincoln, for example, are often quoted as the sources of inspiration for the Decorated style at Ely. The Lady Chapel has been described as the work of Lincolnshire men, while the slightly less ornate style of the Octagon, Choir and Prior Crauden's Chapel have been attributed to the work of Norwich men.⁴²⁶ Any overlap and shared motifs between the buildings can perhaps be explained by the different groups of masons working in close proximity to one another.

The similarities and differences between these buildings must, however, be considered in relation to their different functions, iconography and patrons.⁴²⁷ The foliate designs, window tracery and bundled shafts in Prior Crauden's Chapel have, for example, been compared with similar work in the Lady Chapel and the Octagon.⁴²⁸ Yet a private chapel would have had a very different audience and function than a monastic choir under a crossing tower. Whilst both the Lady Chapel and Octagon would have had a wide audience, Prior Crauden's Chapel would have had a much smaller audience, perhaps sometimes even an audience of one. It is worth considering, therefore, how much input Crauden himself may have made into the chapel's form and decoration. Crauden has typically been viewed as the patron of the chapel, its interior marking him out as a man of private luxury with lavish and cosmopolitan taste.⁴²⁹ Alternatively a few scholars have proposed that Walsingham may have been the main influence behind the construction and decoration of the chapel.⁴³⁰ This suggestion appears to be based primarily on the short amount of time that Crauden would have used the chapel after its completion and before his death. However, through a detailed examination of the pavement

⁴²⁵ Names connected with the fourteenth-century building work at Ely include John and William Ramsey, John Attegrene and the court carpenter William Hurley. Binski, *Gothic Wonder*, 192; Maddison, "The Gothic Cathedral: New Building in a Historic Context," 127.

⁴²⁶ Coldstream, "Ely Cathedral: the Fourteenth-Century Work," 29, 40.

⁴²⁷ Lindley, "The Fourteenth-Century Architectural Programme at Ely Cathedral," 128.

⁴²⁸ Coldstream, "Ely Cathedral: the Fourteenth-Century Work," 30-32.

⁴²⁹ This assessment of Crauden as a patron was based primarily on the chapel, but also on his other possessions which have survived. These include books, embroideries and silverware. Binski, *Gothic Wonder*, 192; Binski and Park, "A Ducciesque Episode at Ely," 37.

⁴³⁰ Binski, *Gothic Wonder*, 225; Charles William Stubbs, *Ely Cathedral Handbook* (Ely: G. H. Tyndall, 1904), 230.

and the artistic scheme of the chapel it will here be argued that the chapel can be connected to Crauden in a deeply personal way.

Prior Crauden and his Pavement

One of the most remarkable features of Prior Crauden's Chapel is its mosaic pavement. It covers the entirety of the chapel and can be divided into two sections (Fig. 5.5).⁴³¹ The first section covers the main floor area and contains nine panels. Seven of these panels run from east to west and are made up of geometric designs (Fig. 5.6).⁴³² Two panels run from north to south and consist of large mosaic animals framed by rectangular border tiles (Fig. 5.7). The second section of pavement covers the altar step and platform and contains the well-known panel depicting Adam and Eve tasting the fruit of knowledge (Fig. 5.8). Most of the pavement is laid with mosaic tiles, glazed in contrasting light and dark colours (Fig. 5.9). Some of the tiles were further decorated with line-impressed stamps, which has led this group to be called 'line-impressed mosaic'.⁴³³ This technique created a single-line design on a plain tile that was a different colour to the rest of the glaze (Fig. 5.10). The small number of two-colour tiles included in the pavement have additional hand-incised decoration (Fig. 5.11).⁴³⁴ Details were added, for example, to make the animals look like they were made up of several pieces. It is possible that the tilers were trying to create the same impression given by the large mosaic animals, thus creating continuity through the pavement. It would not have been possible to create mosaic animals on such a small scale as the tiny pieces would almost certainly have broken or been damaged during their manufacture.⁴³⁵ Hand-incised decoration has also been used on the teeth, ears and fur of the large mosaic animals themselves. The pupils of their eyes were created with an inlay of darker clay (Fig. 5.12). The animals would have been covered in a white slip to create a yellow colour once fired and the animals were surrounded by dark glazed tiles so that they would appear more visually striking. These shaped tiles were presumably made using a wooden template that could be cut around. They may have been fixed to the clay with spikes or nails

⁴³¹ Author's drawings based upon own photographs, in addition to plans published in: Dixon, "The Monastic Buildings at Ely," 151; Maddison, *Ely Cathedral*, 85.

⁴³² Author's drawings based upon own photographs taken on site.

⁴³³ Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," 47.

⁴³⁴ Interestingly the majority of these hand-incised two-colour tiles are concentrated at the east end of the chapel. Elizabeth Eames, "Medieval Pseudo-Mosaic Tiles," *Journal of the British Archaeological Association* 38 (1975): 85-87.

⁴³⁵ Eames, "Medieval Pseudo-Mosaic Tiles," 85-87.

to stop any movement that might hinder the cutting of a complex design. Turning the template over would create a second shape facing the opposite way.⁴³⁶

It becomes clear through a comparison of building works across fourteenth-century Ely that the pavement within Prior Crauden's Chapel can be considered unusual. The only other contemporary pavement which survives can be found relaid in the south transept and also consists of line-impressed mosaic tiles.⁴³⁷ There is, however, a record from later in the fourteenth century for the purchase of tiles for the 'new work' at Ely. The sacrist accounts for the year 1345-1346 records payment for ten thousand tiles costing seven shillings per thousand, and a further four thousand tiles costing six shillings per thousand. Another entry records payment for a further fifteen thousand tiles.⁴³⁸ At first this casts some doubt on the widely repeated dating of the pavement to the chapel's completion in 1324-1325. However, as Eames has pointed out, these are far more tiles than would be required for paving a small chapel. The elaborate shaped nature of the mosaic tiles and figural panels are also unlikely to have been bought in bulk by the thousand and all costing the same amount.⁴³⁹ What it does suggest is that there were other pavements being laid at Ely in the fourteenth century, probably associated with the various building works being undertaken in the church and monastic precinct. It also suggests that these were pavements made from square tiles, possibly plain or decorated with two-colour designs, as these were more likely available to be purchased in such large quantities. Prior Crauden's pavement, therefore, becomes a lot more significant when placed alongside these other contemporary Ely pavements. A very interesting choice seems to have been made regarding the type of pavement and the imagery that was placed upon it.

Since the 1960s archaeological excavations have revealed pavements at several sites in England which used the same group of tiles as Prior Crauden's Chapel. Not only do these other pavements show evidence of the same tiles, but also additional designs not found at Ely. The similarities between the tile designs suggest that many of the sites used the same templates and stamps, but it is not known whether there were one or more places of manufacture.⁴⁴⁰ Line-impressed tiles can be found quite widely and have been recorded at sites in Bedfordshire,

⁴³⁶ Patrick Greene, *Norton Priory: The Archaeology of a Medieval Religious House* (Cambridge: Cambridge University Press, 1989), 136.

⁴³⁷ It is alleged that this pavement was originally laid in the passageway between the presbytery and Lady Chapel. Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," 53.

⁴³⁸ The record of these tiles was discovered in 1976 by Christopher Norton in an eighteenth-century transcript of the sacrist accounts (Cambridge University Library, Add. MSS 2956-57). Eames, *Catalogue*, Vol. 1, 91; Keen, "The Medieval Tiles," 248.

⁴³⁹ Eames, *Catalogue*, Vol. 1, 91.

⁴⁴⁰ Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," 55.

Cambridgeshire, Essex, Hertfordshire, Norfolk, Northamptonshire, Oxfordshire, and Suffolk.⁴⁴¹ The figural mosaic panels combined with line-impressed tiles also appear at several locations, but the number of sites is significantly fewer. The most important of these are Norton Priory and Warden Abbey. It is clear then that Prior Crauden's pavement was just one example of the work produced by an early fourteenth-century tile workshop.⁴⁴² Whilst the pavement in Prior Crauden's Chapel can no longer be considered unique, the figural mosaic panels required special skill to design and manufacture so could probably never have been 'mass-produced'.⁴⁴³

Warden Abbey was a Cistercian monastery founded in 1135. Most of the monastic buildings were demolished after the Dissolution and a Tudor red-brick mansion was built on the site. What remained of this building after the eighteenth century was left derelict until the late twentieth century.⁴⁴⁴ At this time it was decided to move the two mosaic pavements which had previously been discovered during earlier excavations.⁴⁴⁵ The first pavement, as mentioned in the previous chapter, was located in the south aisle or transept of the church (Fig. 4.32). It consisted of mosaic tiles some of which were hand-incised and included complex roundels. The second pavement was in better condition, retaining much of its original glaze and hand-incised decoration. It consisted of geometric designs like those in Prior Crauden's Chapel and fragments of what is believed to be an Adam and Eve panel (Fig. 5.13). The similarities between the tiles at Ely and the fragments from Warden are so strong it is very likely that they were made using the same templates. This has also been used as evidence when dating the pavements at Warden and Ely to the same point in the fourteenth century.⁴⁴⁶ The mosaic lion from Ely is also present amongst the remains at Warden (Fig. 5.14). Furthermore, there is evidence of other figural mosaics not present at Ely, such as a mounted knight (Figs. 5.15 and 5.16), Samson and the lion, and a figure in ecclesiastical vestments. The latter

⁴⁴¹ Patricia Christie and J. G. Coad, "Excavations at Denny Abbey," *Archaeological Journal* 137 (1980): 138-279; Elizabeth Eames and Laurence Keen, "Some Line-Imprinted Tile Mosaic from Western England and Wales: an Interim Statement," *Journal of the British Archaeological Association* 35 (1972): 65-70; Laurence Keen and David Thackray, "Helpston Parish Church, Northamptonshire: the Remains of a Medieval Tile Pavement," *Journal of the British Archaeology Association* 39 (1976): 91; Laurence Keen and David Thackray, "A Fourteenth-Century Mosaic Tile Pavement with Line-Imprinted Decoration from Icklingham," *Proceedings of the Suffolk Institute of Archaeology* 33 (1974): 153-167; Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," 53.

⁴⁴² Much of what has been said about the tiles within this group has been based on stylistic similarities with the pavement in Prior Crauden's Chapel. As a result, many of the tiles have been assigned a date in the early fourteenth century, based upon the evidence from the Ely sacrist accounts given above.

⁴⁴³ Eames, *Catalogue*, Vol. 1, 39.

⁴⁴⁴ Rudd and West, "Excavations at Warden Abbey in 1960-1," 58-73.

⁴⁴⁵ The tiles were removed to the Higgins Art Gallery and Museum in Bedford for conservation and study in the 1970s. They remain in their collections on long term loan from the Whitbread family of Southill Estate.

⁴⁴⁶ Prior Crauden's pavement is usually dated 1324-1325 from the evidence of the sacrist accounts. The pavements at Warden Abbey are dated by the visit of the Bishop of Lincoln in 1323, when he granted the community an indulgence to help with rebuilding the church: Baker, "Ceramic Floors and Warden Abbey," 364.

appears to have been life-size and is thought to come from a tomb cover, similar to those from Jumièges Abbey in Normandy (*France*).⁴⁴⁷ The second pavement at Warden was laid in a building which may have formed part of the prior's lodgings. It has been suggested that the figural tiles were leftovers from a pavement that would have originally been laid at the east end of the church, near the high altar. Their haphazard arrangement in the borders of the second pavement, it has been said, could hardly have been their originally intended setting.⁴⁴⁸

Norton Priory was an Augustinian foundation, established in Cheshire in 1134. After the Dissolution the monastic buildings were incorporated into a Tudor mansion, which was itself then replaced by an eighteenth-century country house. This was partially demolished in the 1920s and the site began to be excavated in the 1970s.⁴⁴⁹ The mosaic floor at Norton covered extensive areas of the church including the choir and transepts (Fig. 5.17). Patrick Greene calculated that it spanned an area of some five hundred square-metres, the whole floor requiring some forty thousand tiles which would have taken around two years to produce.⁴⁵⁰ The Norton pavement reveals more variety than the pavement at Ely, partly due to the sheer size of the floor it covered. Eighteen different geometric designs have been identified at Norton, which were laid in panels separated by borders (Fig. 5.18). Similar designs to Ely, however, include the geometric patterns, line-impressed stamps such as the flower and leopard's face, and also fragments of a mosaic lion (Fig. 5.19).⁴⁵¹ Other designs excavated at Norton include inscription tiles, heraldry and a figure of a knight in chainmail (Fig. 5.20). Together these tiles may have formed a tomb cover. They were all found *ex situ* in a chapel on the north side of the presbytery. The heraldry has been identified as belonging to the Dutton family and the chapel contains many of their tombs (Fig. 5.21). The Dutton's were patrons of the priory and presumably paid for the pavement in their chapel.⁴⁵² The Norton tiles are usually dated slightly earlier than Prior Crauden's pavement. The 'crudeness' or lesser quality of the tiles from Norton has been seen as in accordance with a date of around c. 1312.⁴⁵³ More recently,

⁴⁴⁷ E. C. Norton, "The Thirteenth-Century Tile-Tombs of the Abbots of Jumièges," *Journal of the British Archaeological Association* 137 (1984): 145-167.

⁴⁴⁸ There is no actual evidence to support the assumption that the pavement was originally laid at the east end of the church and the presumption is based upon the arrangement of the Adam and Eve panel in Prior Crauden's pavement. Baker, "Ceramic Floors and Warden Abbey," 363-381; Evelyn Baker, "Post-excavation report on the medieval tile pavements," *Council for British Archaeology Newsletter*, Regional Group 9 (1980): 6-10; Baker, "The Warden Abbey Pavements: Fine Art on a Floor," 69.

⁴⁴⁹ Brown and Howard-Davis, ed., *Norton Priory: Monastery to Museum: Excavation 1970-87*, 11-34.

⁴⁵⁰ Greene, *Norton Priory*, 132-133.

⁴⁵¹ Elizabeth Eames commented upon inspection that this lion was not identical to the lions in Prior Crauden's pavement, but significantly larger. Eames, *Catalogue*, Vol. 1, 39.

⁴⁵² Greene, *Norton Priory*, 12-14.

⁴⁵³ The discovery in a deposit of mortar of a silver penny from the reign of Edward I was the primary, though unreliable, evidence for assigning the Norton pavement an early date. This was then supported by stylistic

however, it has been argued that the Norton tiles should be dated after those found at Ely and Warden. The greater range of designs found there suggests that the workshop had built up a larger repertoire. A date in the second quarter of the fourteenth century is, therefore, also possible.⁴⁵⁴

The similarities and differences between the pavements at Ely, Warden and Norton are important for any discussion about Prior Crauden's Chapel. The repetition in all three pavements of designs such as the lions, the geometrical patterns and even the Adam and Eve panel makes it immediately obvious that Crauden's pavement can no longer be considered unique. As such any analysis of the pavement's imagery must accept that it was not specific to Prior Crauden and Ely. However, the designs at Ely must have been selected from a larger range of options, as the remains of the pavements at Norton and Warden indicate that there were more designs than those seen at Ely. The decision to choose one design over another, for example the wyvern over another animal, or Adam and Eve over Samson and the Lion, may say interesting things about the intention behind the pavement and those who used the chapel. It is still possible, therefore, to argue that Prior Crauden's pavement was entirely suitable for the chapel, its function as a place of private prayer, and its artistic scheme.

An Integrated Artistic Scheme?

The mosaic pavement did not exist in isolation in Prior Crauden's Chapel and indeed an analysis of the pavement would not be complete without considering the artistic context of which it was a part. The pavement was just one aspect of the overall decorative and artistic scheme of the chapel. To the medieval eye the pavement would not have been seen separately or indeed as a complete entity. Plans enable the modern scholar to examine the whole pavement, but the medieval visitor would have only been able to see parts of the pavement framed within walls that were painted, stone that was decorated and coloured light filtering through the glass. Even the furnishings and the people in their vestments and robes would have added to an overall impression that cannot be truly appreciated or replicated today.

The original stained glass from the chapel does not survive, the glazing of the east window dating instead from the nineteenth-century restoration. The chapel remains, however, richly adorned with sculptural decoration. This includes the capitals which are carved with delicate clusters of foliage. The nodding ogees and the arched niches above them are also covered in tiny sculptural

comparisons to the pavements at Ely and Warden. Greene, *Norton Priory*, 137-138; Baker, "Ceramic Floors and Warden Abbey," 373; Baker, "The Warden Abbey Pavements: Fine Art on a Floor," 75.

⁴⁵⁴ Keen, "The Medieval Tiles," 250.

forms such as leaves and human heads (Fig. 5.22). The decoration also includes miniaturised architectural forms, such as crenellations (Fig. 5.23). The remaining traces of colour and gilding indicate that these sculptures would once have been painted. The paint would have added to the effect of the sculpture, for example by imitating stonework patterns. This was a similar technique to that used on the Octagon in the 1330s.⁴⁵⁵ The sculptural programme includes two small figures on either side of the east window, one is shown seated and the other praying. This kneeling figure has been identified as Prior Crauden himself, the sculpture being a type of donor portrait.⁴⁵⁶ The east end would presumably have originally contained further figural sculpture.⁴⁵⁷ The chapel walls would also once have been brightly painted. There remains, for example, a shadowy outline of a figure in the niche behind the piscina. This figure, identified by her garments as female, faced the altar and held a staff in one hand. The upper tiers above the piscina and aumbry also contain traces of painted enthroned figures. These were perhaps similar to the sculpted kings in the Lady Chapel wall niches.⁴⁵⁸ Two other wall-paintings have survived, both of which are at the west end of the chapel and remain faintly visible today.⁴⁵⁹ At the west end of the south wall there is a painting of the Crucifixion (Fig. 5.24). Christ on the cross is central in the picture, the heads of other figures surround the cross and there are scrolls on which speech would have been painted. At the bottom of the painting there is possibly another figure, perhaps representing Adam collecting the blood of Christ.⁴⁶⁰ Binski and David Park dated the painting to the late fourteenth century or fifteenth century, sometime after Prior Crauden's death. They assumed, however, that there may have been a similar crucifixion scene painted there originally.⁴⁶¹ The second wall-painting frames the west window and represents the Annunciation. The Angel is pictured to the south with an inscribed scroll, curly hair and a baggy robe (Fig 5.25). The Virgin is shown to the north and is depicted with right hand raised, a slightly bowed head with a halo and dressed originally in blue (Fig. 5.26). From its style the Annunciation painting has been dated to the fourteenth century.⁴⁶²

What is particularly interesting about Binski and Park's discussion of the wall-paintings is their conclusion that Prior Crauden's Chapel had a distinctive scheme that linked together its various decorative features. This is of particular importance in light of Keen's argument that the pavement

⁴⁵⁵ Binski and Park, "A Ducciesque Episode at Ely," 28-41.

⁴⁵⁶ Binski, *Gothic Wonder*, 190.

⁴⁵⁷ Binski and Park, "A Ducciesque Episode at Ely," 29.

⁴⁵⁸ Binski and Park, "A Ducciesque Episode at Ely," 31-32.

⁴⁵⁹ The wall paintings were captured in a series of watercolours in c. 1850 by William Burges, the architect and antiquary. Binski and Park, "A Ducciesque Episode at Ely," Fig. 6 and Fig. 7; Maddison, *Ely Cathedral*, 77.

⁴⁶⁰ The figure of Adam is not mentioned by Binski and Park in their description of the painting.

⁴⁶¹ Similar types of crucifixion scenes were not uncommon in the mid-fourteenth century. Binski and Park, "A Ducciesque Episode at Ely," 34.

⁴⁶² Binski and Park, "A Ducciesque Episode at Ely," 34-41.

was originally intended to be laid in the Lady Chapel. In his analysis of the pavement layout he believed that the figural mosaic panels were too big for Prior Crauden's Chapel. He noted, for example, that the mosaic lions had been altered to appear smaller by scraping away some of the white slip on their feet.⁴⁶³ The figural mosaic would, he concluded, have been more appropriate within the Lady Chapel. The iconography of Adam and Eve would have fitted neatly into its interior. Eve was the instigator of the original sin and the Virgin was the instigator for the means by which that original sin could be expunged, i.e. Christ was born to save mankind. At the Annunciation the angel greets Mary: "Hail, full of grace", or in Latin "*Ave gratia plena*". AVE was the reverse of EVA, or Eve, just as Mary reversed through the birth of Christ the original sin of Eve. This was a pun enjoyed and frequently employed by medieval clerics.⁴⁶⁴ Eve was, therefore, often included within the iconography of the Virgin Mary. The Lady Chapel at Ely, for example, boasts a roof boss depicting Adam and Eve. As such a pavement with a panel illustrating Adam and Eve at the moment of sin would have fitted neatly into such a scheme. The lions too would have been appropriate within the context of a Lady Chapel. Lions were often shown flanking the Throne of Solomon in depictions of the enthroned Virgin.⁴⁶⁵

From this stylistic analysis Keen argued that in 1322, when the central tower collapsed, work on the Lady Chapel was paused and the parts of the pavement that had already been made were used elsewhere. Prior Crauden's Chapel was a convenient place to lay the unused tiles as it was under construction at the time. It is a plausible explanation, but it is based entirely on supposition. The foundations of the Lady Chapel were laid at the end of March 1321 and the central tower collapsed in February 1322. Would parts of the pavement already have been completed so early on in the building's construction? It has been generally assumed elsewhere that a pavement would have been the last part of a building to be installed.⁴⁶⁶ The Adam and Eve panel would have fitted within the iconographic scheme of the Lady Chapel, but it fits equally as well within the overall theme of Prior Crauden's Chapel. Both the Annunciation and Crucifixion paintings, along with the

⁴⁶³ Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in South Transept," 52.

⁴⁶⁴ The expression has been incorporated into the 'Hail Mary' prayer that is still used today. Lynne Broughton, *Interpreting Ely Cathedral* (Ely: Ely Cathedral, 2008), 136-137.

⁴⁶⁵ The Throne of Solomon is described in the Old Testament as made of ivory and set upon six steps, with two lions on each step. "3rd Book of Kings (1 Kings) Chapter 10," *Douay-Rheims Bible + Challoner Notes*, 2019, accessed 13th May 2019, <http://drbo.org/chapter/11010.htm>. When the Throne of Solomon, or Throne of Wisdom, was occupied by the Virgin, medieval theologians interpreted the six steps as the Virtues and the twelve lions as the Apostles. Binski, *Gothic Wonder*, 198-199; Warwick Rodwell, *The Coronation Chair and Stone of Scone: History, Archaeology and Conservation* (Oxford: Oxbow Books, 2013), 35.

⁴⁶⁶ As detailed in Chapter Two, the chapter house pavement at Westminster Abbey, for example, is generally dated from 1253 to 1259. The start date of 1253 is usually given as when the structure of the chapter house was complete. See Chapter Two, note 170.

Adam and Eve pavement mosaic, fit together within a redemptive theme.⁴⁶⁷ The 'original sin' committed by Adam and Eve as they tasted the fruit of knowledge was redeemed firstly by the Virgin conceiving Christ and secondly by Christ's sacrifice on the cross. The Fall, the Annunciation and the Crucifixion are all linked by ideas of redemption. A depiction of the original sin would also have been entirely appropriate in front of an altar where the Eucharist was celebrated. That Prior Crauden's Chapel may have possessed a coherent artistic scheme is not so surprising when it is placed in comparison with other fourteenth-century buildings at Ely. The decoration of the Octagon, for example, created an interior which celebrated the history and identity of the monastic community, particularly through the representation of its important individuals.⁴⁶⁸ The shape of the Octagon was reminiscent of Early Christian mausolea and may, therefore, have been intended to represent Ely as a grand mausoleum for St Etheldreda. The Octagon did, after all, include a series of sculpted images from the Life of St Etheldreda. The Octagon also acted as a genuine mausoleum for the tombs of seven Anglo-Saxon kings. These royal patrons of the abbey were also commemorated in a series of paintings.⁴⁶⁹ The Lady Chapel was also designed and decorated with a particular focus. Binski has argued that it was intended to be associated with the House of Solomon as described in the Old Testament. The ceiling bosses, window designs, statues and even the plan of the building were orientated towards this connection.⁴⁷⁰ It is entirely plausible, therefore, that the pavement, sculpture and wall-paintings in Prior Crauden's Chapel were chosen to create a scheme that would complement each other, as well as the audience and function of the space.

Prayer and Performance in Prior Crauden's Pavement

Prior Crauden's Chapel was a small building, which could have been used by individuals or small groups for prayer and quiet contemplation. It was connected via first-floor level passageways to both the prior's house and his private study, as well as the Queen's Hall (Fig. 5.2). Crauden's own personal use of the chapel is recorded in the *Chronicon Eliensis*, which described his intense devotion and habit of saying prayers in his chapel at night:

Of the Chapel it is said that Crauden caused to be built at the hospice of the Prior a new Chapel of wondrous beauty in which out of the affection of his heart he rendered his vows of praise to God; where also he carried on frequently through

⁴⁶⁷ Binski and Park, "A Ducciesque Episode at Ely," 34; Coldstream, *The Decorated Style*, 55.

⁴⁶⁸ Binski, *Gothic Wonder*, 223; Phillip Lindley, "The Imagery of the Octagon at Ely," *Journal of the British Archaeological Association* 139 (1986): 75-99.

⁴⁶⁹ Maddison, *Ely Cathedral*, 65.

⁴⁷⁰ Binski, *Gothic Wonder*, 195-196.

days and nights his prayers and spiritual meditations. For, as those who were in his intimacy affirmed, he was accustomed to rise at night and to seek his Chapel alone, unless hindered by grievous sickness, and there began to offer to God many prayers with groanings of heart.⁴⁷¹

In this description it is claimed that Crauden made regular use of his chapel. It was not a building designed to simply be decorative and luxurious or a statement of prestige. It fulfilled those functions, but its primary and most important purpose was as a place of prayer. Devotional practices became through the Middle Ages ever more complex, but the *Rule of St Benedict* set the basic outline of the monastic day that was followed by the monks in fourteenth-century Ely. *The Rule* specified that the monks would pray seven times a day and once at night.⁴⁷² These were the monastic hours or daily offices known as Matins, Lauds, Prime, Terce, Sext, None, Vespers and Compline. Each office had a similar form, combining prayers, hymns and readings, though they differed in length and theme. The psalms were also a key part of the daily offices and were recited from memory by the monks.⁴⁷³ The cycle of psalm readings set out in the *Rule of St Benedict* varied from day to day in order for all one-hundred-and-fifty psalms to be read in the duration of a week (Fig. 5.27). Compline, however, which was the office said before retiring to bed, always included the same three psalms.⁴⁷⁴ *The Rule* also specified that there should be no talking after Compline had been said.⁴⁷⁵ If it was decided to illustrate imagery from the psalms, the office of Compline would be a strong candidate. Its psalms went unchanging throughout the week, so any imagery chosen from them would have always remained relevant to the words spoken during Compline. Also, if the monks

⁴⁷¹ "Ipse en im fabricari fecit ad hospitium Prioris novam Capellam mirandi decoris, in qua. Deo vota laudis ex affect reddit cordis; ubi etiam nocturnas excubias ac spirituals meditations per dies & noctes frequentius exercebat. Nam sicut illi, qui continue secum erant a secretis, testati sunt, quod qualiter nocte consuevit assurgere & capellam suam solus adire, nisi magna praepediretur infirmitate; ubi coepit diutius & preces Deo multiplices cum gemitu cordis efferre; ac se & Ecclesiam suam & omnia Ecclesiae negotia Deo devote recommendare." Chapman, *Sacrist Rolls of Ely*, Vol. 2, 127; Henry Wharton, *Anglia Sacra, sive, Collectio historiarum partim antiquitus, partim recenter scriptarum, de archiepiscopis & episcopis Angliae, a prima fidei Christinae susceptione ad annum MDXL*, Vol. 1 (London: Richard Chiswel, 1691), 649-650. The *Chronicon Eliensis* was a late fourteenth-century version of the *Liber Eliensis*. The original twelfth-century text was altered and updated several times by anonymous members of the monastic community. Janet Fairweather, *Liber Eliensis: A History of the Isle of Ely from the Seventh Century to the Twelfth* (Woodbridge: Boydell, 2005). Several of these versions were recorded in *Anglia Sacra*, a collection of medieval English church records made by the seventeenth-century historian and clergyman Henry Wharton. For a full account of Wharton's life see: Laird Okie, "Wharton, Henry (1664-1695)," *Oxford Dictionary of National Biography*, 2004, accessed 12th December 2015, <http://www.oxforddnb.com.ezproxy.york.ac.uk/view/article/29167>.

⁴⁷² Bruce Venarde, ed., *The Rule of St Benedict* (London: Harvard University Press, 2011), 78.

⁴⁷³ The numbering of the psalms used here is from the Latin Vulgate Bible. The Hebrew text used as the basis for modern translations has a different counting system whereby Psalms 9-147 are one ahead of the Vulgate version. I.e. Psalm 90 from the Vulgate becomes Psalm 91 in modern translations.

⁴⁷⁴ Venarde, ed., *The Rule of St Benedict*, 80-82.

⁴⁷⁵ Venarde, ed., *The Rule of St Benedict*, 144.

were intended to meditate silently after Compline it would provide the opportunity to pay close attention to the imagery surrounding them. It is for these reasons that it is worth looking in more detail at Compline and its possible significance for the imagery on Prior Crauden's pavement.

Compline is the final office of the monastic day and the English word derives from the Latin *complere*, meaning to complete or finish.⁴⁷⁶ *The Rule* specifies that three psalms should be said at Compline, along with one hymn, one reading, a verse, the Kyrie Eleison and a blessing.⁴⁷⁷ The three psalms that were said every night comprised: Psalm 4, Psalm 90 and Psalm 133. Psalm 4 and Psalm 133 are quite short; ten and three verses respectively. Psalm 4 begins with a plea to God to listen and ends with thanksgiving for hope provided. It indicates that in moments of despair the faithful should turn to prayer and to God.⁴⁷⁸ Psalm 133 is both an offering of praise and a blessing. The Psalm suggests that God should be praised not only during the day but also at night.⁴⁷⁹ This is of course particularly relevant for the office of Compline. Psalm 90 is longer than the other two psalms, being of sixteen verses. The psalm centres on the idea of men trusting in the protection of God. Even against the most deadly of attacks, such as those from arrows and poisonous animals, God protects man.⁴⁸⁰ Of particular interest to Prior Crauden's Chapel and its pavement are the final few verses of Psalm 90 which focus on the idea of feet:

In their hands they shall bear thee up: lest thou dash thy foot against a stone.

Thou shalt walk upon the asp and the basilisk: and thou shalt trample under foot
the lion and the dragon.⁴⁸¹

What else but a pavement offers up the opportunity to make a literal interpretation of this psalm? In the previous chapter it was suggested that standing on certain pavement arrangements like roundels could have had liturgical significance. A similar argument could be made here for Prior Crauden's pavement. Walking on the pavement and trampling over the images became almost a performance of the psalm itself. This idea of performance is perhaps clearest in the position in the overall pavement layout of the Adam and Eve panel.

⁴⁷⁶ Oxford English Dictionary, "Compline, complin n.," *Oxford English Dictionary*, 2015, accessed 19th December 2015, <http://www.oed.com.ezproxy.york.ac.uk/view/Entry/37729>.

⁴⁷⁷ Venarde, ed., *The Rule of St Benedict*, 80-82, 84-88.

⁴⁷⁸ John Eaton, *The Psalms: A Historical and Spiritual Commentary* (London: Continuum, 2005), 70-72.

⁴⁷⁹ Eaton, *The Psalms*, 447-448.

⁴⁸⁰ Eaton, *The Psalms*, 325-328.

⁴⁸¹ "In manibus portabunt te, ne forte offendas ad lapidem pedem tuum. Super aspidem et basiliscum ambulabis, et conculcabis leonem et draconem." Douay-Rheims Bible Online, "Psalm 90," *Douay-Rheims Bible + Challoner Notes*, 2014, accessed 12th December 2015, <http://www.drbo.org/lvb/chapter/21090.htm>.

Regardless of whether the Adam and Eve panel was originally designed for the Lady Chapel or for Prior Crauden's Chapel, its position on the altar platform cannot be considered anything but deliberate. It is in a central position, exactly where the celebrant of the Eucharist would stand, and orientated to be viewed when looking towards the altar (Fig. 5.28).⁴⁸² If the panel was stood or knelt upon then the devil's face would almost certainly have been the target. The devil is shown with a winged serpent's body wrapped sinuously around the tree and with a human face (Fig. 5.29). From the evidence found at Warden Abbey, Evelyn Baker has argued that this was the face of a woman.⁴⁸³ The hair was netted, usually the sign for a married woman. In contrast Eve is shown as a virgin with loose unbound hair (Fig. 5.30). The devil's face has also been made to look like it was covered in cosmetics. The face was coated in a white slip, with a darker clay used for the eyes. The details of the face were hand-incised and then emphasised with a black glaze, before being covered with a transparent lead glaze (Fig. 5.13).⁴⁸⁴ There are multiple apples in the panel, indicating to the viewer that this is a narrative scene that can be followed as the story unfolds. Eve is taking the apple from the Devil and giving it to Adam, whilst Adam is taking the apple from Eve and eating it. As well as an appropriate choice for a chapel decorated with a redemptive theme, the panel also allows for a deliberate rejection of temptation and the devil in the way that the supplicant would tangibly interact with the narrative scene. Psalm 90 had said "thou shalt walk upon the asp" and the Adam and Eve panel, with its serpent-like depiction of the devil, enabled exactly such a physical action.

The description from the *Historia* of Crauden praying in his chapel does not mention directly the office of Compline, but it does indicate that Crauden was praying at night, as well as by day. He also commissioned a missal and benedictional for use in his chapel, both of which were aids for the monastic services.⁴⁸⁵ Along with the chapel, a private study had been added to the prior's accommodation by Crauden. From this study he would have been able to look across to his chapel and thus it would never have been far from his mind.⁴⁸⁶ Crauden's use of the chapel and his hypothetical reflection on the office of Compline and Psalm 90 has significant implications for reading the imagery of the pavement. The mosaic animals, previously believed to be too large or incongruous for the chapel, could in fact be entirely suitable for Crauden's night-time devotions.

⁴⁸² Baker, "Ceramic Floors and Warden Abbey," 369-372.

⁴⁸³ There are examples of the Devil shown as a woman in manuscripts also dating to the fourteenth century. Evelyn Baker, "Craftsmanship and Design in Floors for the Wealthy – Some Implications of the Warden Abbey Tile Pavements," in *Rotterdam Papers IV: A Contribution to Medieval Archaeology*, ed. J. G. N. Renaud (Rotterdam: Coördinatie Commissie van Advies Inzake Archeologisch Onderzoek Binnen het Ressor Rotterdam, 1982), 10-11, Fig. 3.

⁴⁸⁴ Baker, "Ceramic Floors and Warden Abbey," 369-372.

⁴⁸⁵ Coldstream, "Crauden, John (d.1341)," *Oxford Dictionary of National Biography*, 2004, accessed 27th November 2015, <http://www.oxforddnb.com/ezproxy.york.ac.uk/view/article/107245>.

⁴⁸⁶ Chapman, *Sacrist Rolls of Ely*, Vol. 2, 128.

Animal iconography is not in itself unusual for medieval pavements, with lions and birds some of the most frequently recorded tile designs. Prior Crauden's pavement has a number of these two-colour animal tiles, which are of interest primarily because of their additional hand-incised decoration. The large mosaic animals could, however, be of potentially more importance. They may have held greater iconographic significance because of their size and the complexity of their production. There was always an audience for animal stories in the medieval period and their popularity can be seen in the success of the medieval bestiary.⁴⁸⁷ The bestiary used animals as human exemplars to provide moral instruction in a way that would be remembered. In both the bestiary and popular preaching, imaginary animals were of equal if not more importance than real animals. When used as exemplars the actual qualities and characteristics of the animal became irrelevant when compared to their symbolic meaning and interpretation.⁴⁸⁸ To the medieval eye, therefore, the animals in the Ely pavement would have been open to both Christian and moral readings.

Lions are depicted most frequently on the chapel pavement (Fig. 5.31).⁴⁸⁹ Surviving evidence from the pavements at both Norton Abbey and Warden Abbey show that the lion was a common motif to the workshop and not specific to Ely. Nevertheless, the choice of the lion instead of another animal, and the choice of so many lions instead of repeating other animals, is noteworthy. For Keen the lions belonged, along with the Adam and Eve panel, in the Lady Chapel. They would have fitted within his proposed scheme of the Virgin on the Throne of Solomon. Yet it could alternatively be argued that the lion was an appropriate choice of animal for Prior Crauden's Chapel and its function. The lion was described in the bestiary as being Christ-like. It slept with open eyes, for example, which was likened to Christ dying on the cross. A lion's cubs were born dead and had to be revived by breathing over them, which was likened to Christ's Resurrection.⁴⁹⁰ This allegory of the lion would have fitted within the painted scheme of the chapel already described. The Crucifixion, which was followed by the miracle of the Resurrection, would have been seen reflected in the character of the lion. The Christian moralisation of the lion and its associations with good kingship run counter to its character in the Old Testament. There lions posed a real and dangerous threat to men. Stories such as those about Samson or Daniel show lions as ferocious creatures and a test or obstacle that must

⁴⁸⁷ For the medieval bestiary see particularly: David Badke, "The Medieval Bestiary: Animals in the Middle Ages," *The Medieval Bestiary*, 2011, accessed 10th December 2015, <http://bestiary.ca/>; Ron Baxter, *Bestiaries and their Users in the Middle Ages* (Stroud: Sutton Publishing, 1998); Hassig, ed., *The Mark of the Beast: The Medieval Bestiary in Art, Life and Literature*; Debra Higgs Strickland, *Medieval Bestiaries: Text, Image, Ideology* (Cambridge: Cambridge University Press, 1995).

⁴⁸⁸ Joyce Salisbury, *The Beast Within: Animals in the Middle Ages* (London: Routledge, 1994), 103.

⁴⁸⁹ There are fifteen large mosaic lions and only two other mosaic animals.

⁴⁹⁰ A mid-thirteenth century English bestiary (British Library, MS Sloane 3544), for example, tells this story of the lion and depicts on f. 1r a lion breathing or roaring at its cubs to bring them to life.

be overcome against all the odds.⁴⁹¹ This interpretation of the lion is particularly interesting in the context of Compline and Psalm 90.

Two other mosaic animals are present in Crauden's pavement, which are usually identified as a griffin and a wyvern.⁴⁹² The griffin was a mythical creature with the body of a lion and the head and wings of an eagle. It is typically depicted in medieval illustrations with four legs and often shown in its traditional heraldic pose with one foot raised. This is precisely how it is presented in Crauden's pavement (Fig. 5.32). The animal described as a wyvern by Keen and subsequent scholars is of perhaps greater importance (Fig. 5.33). A wyvern is traditionally described as a dragonsque creature with a serpent-like barbed tail.⁴⁹³ From the early modern period the wyvern was identified by having two legs, whereas dragons were depicted with four legs. The medieval bestiary of the thirteenth and fourteenth centuries, however, depicted both four-footed and two-footed dragons.⁴⁹⁴ The distinction between the two-footed wyvern and the four-footed dragon must, therefore, be a later construction. The wyvern depicted in Crauden's pavement has two feet, wings and the distinguishing barbed tail. Yet to the medieval eye it could actually have been interpreted as an illustration of a dragon, or even an asp, a basilisk or a viper.⁴⁹⁵ The asp, basilisk and viper, for example, could all be depicted with two feet and a hairy body or as dragonsque winged creatures. The dragon itself was considered in the medieval period to be the greatest of all serpents. It was not characterised at this time by its ability to breathe fire. Instead becoming entangled in its tail, like most serpents, was more deadly than its teeth or venom. If the wyvern could have originally been considered as either a dragon, viper or asp, then its inclusion within the pavement becomes of increasing significance. There are four animals that are trampled in Psalm 90: the asp, the lion, the

⁴⁹¹ Haist, "The Lion, Bloodline and Kingship," 7-8.

⁴⁹² Fig. 1 and Fig. 2 are mislabelled in Laurence Keen's article. Fig. 1 should read 'small wyvern beneath sanctuary step' and Fig. 2 should read 'small gryphon at W end'. Keen, "The Fourteenth-Century Tile Pavements in Prior Crauden's Chapel and in the South Transept," 48.

⁴⁹³ The word wyvern, only used from the sixteenth century, in fact derives from wyver which was used from the late fourteenth century to denote a real or figurative viper. It was adapted from the Middle English *reven*, from the Old French *wivre*, itself from the Latin *vipera* meaning viper, adder or asp. Oxford English Dictionary, "wyvern, n.," *Oxford English Dictionary*, 2015, accessed 11th December 2015, <http://www.oed.com.ezproxy.york.ac.uk/view/Entry/230944>. In the Bestiary the viper could also be called: adder, gulvre, wivre, woutre. This makes the connection between the wyvern and the viper much clearer.

⁴⁹⁴ Out of seven depictions of dragons from medieval manuscripts in the British Library, four showed dragons with two feet, one showed a dragon with four feet and two showed dragons with no feet. Out of seventeen depictions of dragons from medieval manuscripts in the Bodleian Library, sixteen showed dragons with two feet and one showed a dragon with no feet. Badke, "Dragon," *The Medieval Bestiary*, 2011, accessed 10th December 2015, <http://bestiary.ca/beasts/beastgallery262.htm>.

⁴⁹⁵ Indeed, in her discussion of Prior Crauden's pavement Elizabeth Eames refers to the animal as a dragon, suggesting that the label of wyvern, whilst much repeated, is not necessarily accurate. Eames, *Catalogue*, Vol. 1, 37.

dragon and the basilisk. If the wyvern could instead be identified as a dragon, Crauden's pavement illustrates three of Psalm 90's dangerous animals. In the bestiary the dragon was likened to the devil:

The dragon, the greatest of all serpents, is the devil, the king of all evil. As it deals death with its poisonous breath and blow of its tail, so the devil destroys men's souls by thought, word and deed. He kills their thoughts by the breath of pride; he poisons their words with malice; he strangles them by the performance of evil deeds, as it were with his tail...The dragon is the enemy of a pure animal; likewise is the devil the enemy of the Virgin's son.⁴⁹⁶

The dragon as representative of the behaviours of the devil is perhaps one reason why it also features on ecclesiastical funerary monuments. The dragon, along with other animals from Psalm 90, was often depicted trampled under clerical feet.⁴⁹⁷ At York Minster, for example, the thirteenth-century tomb effigy of Archbishop Walter de Gray depicts his crosier in the mouth of a dragon and his foot on its body (Fig. 5.34). The dragon, along with the lion and asp, would, therefore, fit with the idea of Crauden praying at night and stamping on, quite literally, temptation and sin. The wyvern mosaic is, after all, helpfully positioned in the centre of the row of mosaic animals, directly below the Adam and Eve panel (Fig. 5.28).

Beyond the Mid-Fourteenth Century

Despite being one of the most well-known of all medieval English pavements, Prior Crauden's pavement has never been examined within its wider context as both a functioning chapel and as part of a fourteenth-century artistic programme. Both of these aspects have proved vital for the further understanding of the pavement beyond simply a visual appreciation. The imagery found on Prior Crauden's pavement is not especially unusual for a tile pavement or for the fourteenth century. Yet the imagery can be read in such a way that the pavement becomes an integral part of the overall artistic scheme of the chapel and indeed the types of prayer or devotion that were practised within its walls. Whilst the evidence of identical tiles from Norton Priory and Warden Abbey show that Prior Crauden's pavement was not unique, nevertheless an argument can be made for choice. The combination of animals and the Fall panel work cleverly together. It is possible to suggest that Crauden chose these designs from a larger selection in order that the various elements would work in partnership. Keen's argument that the pavement was originally intended for the Lady

⁴⁹⁶ Translated from British Library MS Sloane 278 in: George C. Druce, "The Elephant in Medieval Legend and Art," *Journal of the Royal Archaeological Institute* 76 (1919): 34-35.

⁴⁹⁷ Rogers, "English Episcopal Monuments 1270-1350," 18-19.

Chapel has been often repeated, but there is as much evidence to suggest a deliberate choice for Prior Crauden's Chapel as there is for suggesting the pavement was originally designed for the Lady Chapel. In fact, the whole artistic scheme of the Chapel fits well within a reading of Compline and in particular Psalm 90. The final verses of the Psalm echo the idea of a redemptive theme of salvation:

Because he hoped in me I will deliver him: I will protect him because he hath known my name. He shall cry to me, and I will hear him: I am with him in tribulation, I will deliver him, and I will glorify him. I will fill him with length of days; and I will show him my salvation.⁴⁹⁸

The popularity of line-impressed mosaic pavements, like those at Ely, Norton and Warden, declined after the mid-fourteenth century. By the fifteenth century square two-colour tiles and imported plain 'Flemish' tiles dominated the market. This decline has been attributed to the first devastating outbreaks of plague in the fourteenth century; the skills required to create such a pavement may have died with its creator.⁴⁹⁹ Cost and availability may also have been practical limitations. It was much cheaper and easier, to produce and lay, a pavement consisting of regularly sized square tiles. Even before the Black Death tilers were experimenting with ways to reduce costs and the time it took to create mosaic tiles. The so-called 'pseudo-mosaic tiles' were the result of experiments to create pavements that looked like earlier mosaic examples, but did not require the same complex manufacturing. Pseudo-mosaic tiles in their basic form were simple tile shapes scored with lines to look like multiple shaped pieces of tile that had been laid together. They would have been easier to manufacture as they did not require any special kiln furniture and were easier to lay also.⁵⁰⁰ Some scholars have also argued that, in the wake of the fourteenth-century disasters of plague and famine, there may have been a change in decorative taste.⁵⁰¹ Plain square tiles, for example, would have been more suitable for a simpler and sombre type of art. The pavements at Ely, Norton and Warden are perhaps the closest that floor tiles come to being considered 'art'.⁵⁰² They share, for example, many similarities with stained glass. The figural mosaic tiles were produced

⁴⁹⁸ "Quoniam in me speravit, liberabo eum; protegam eum, quoniam cognovit nomen meum. Clamabit ad me, et ego exaudiam eum; cum ipso sum in tribulatione; eripiam eum, et glorificabo eum. Longitudine dierum replebo eum, et ostendam illi salutare meum." Douay-Rheims Bible Online, "Psalm 90," *Douay-Rheims Bible + Challoner Notes*, 2014, accessed 12th December 2015, <http://www.drbo.org/lvb/chapter/21090.htm>.

⁴⁹⁹ Baker, "Ceramic Floors and Warden Abbey," 379.

⁵⁰⁰ Eames, "Medieval Pseudo-Mosaic Tiles," 82, 89.

⁵⁰¹ More recently, however, other scholars have questioned whether these changes were already in motion before the outbreak of the plague. Binski, *Medieval Death*, 123-163; Phillip Lindley, "The Black Death and English Art: A Debate and Some Assumptions," in *The Black Death in England*, ed. Mark Ormrod and Phillip Lindley (Stamford: Paul Watkins, 1996), 125-146.

⁵⁰² Evelyn Baker, for example, compared the Warden tiles with the stone sculpture of the Lady Chapel at Ely or the carpentry of the Octagon at Ely. The tiles are more than just 'humble' mass-produced products and have a status as an art form. Baker, "Ceramic Floors and Warden Abbey," 379.

by using templates, in a similar manner to the use of cartoons in the manufacture of stained glass. The Adam and Eve panel has also been described as a narrative scene that could be read in the same traditionally iconographical way as a window.⁵⁰³ This was a long way away from the geometric mosaic tiles of early thirteenth-century Cistercian churches or even the bold two-colour tiles of the later thirteenth century. Perhaps then the tiles at Ely and other locations were considered a little too life-like to be placed on a floor and walked upon. What was appropriate for a window or a wall might not have been deemed suitable for a floor. By the end of the fourteenth century perhaps Bernard of Clairvaux's condemnation was pertinent after all:

Why is it that we do not at least show respect for the images of the saints, which the very pavement which one tramples underfoot gushes forth? Frequently people spit on the countenance of an angel. Often the face of one of the saints is pounded by the heels of those passing by...Why do you depict what is inevitably to be trod upon?⁵⁰⁴

⁵⁰³ Baker, "Ceramic Floors and Warden Abbey," 369-72.

⁵⁰⁴ For the Latin text see: Introduction, note 1. Taken from the translation by Rudolph in: Rudolph, *The "Things of Greater Importance"*, 106.

Conclusion

In the nineteenth century an important reason for publishing medieval tile designs was to provide the necessary examples that could be copied by contemporary designers working in the Gothic Revival style. The medieval designs were not only intended to be replicated, but also to inspire the creation of entirely new designs.⁵⁰⁵ Whilst there was little desire to preserve the worn and damaged original medieval tiles, there was an enthusiasm for reproducing tile designs and their general effect when laid in a pavement.⁵⁰⁶ Yet, for some, there were concerns that Gothic Revival pavements were not as successful as their medieval counterparts. “The leading fault has been the mistaken idea...that the greater the quantity of rich work...the richer the effect would be.”⁵⁰⁷ These new pavements were criticised for overusing elaborate tile designs, selected straight from pattern books, and should instead have punctuated the arrangement with plain tiles. For as Cutts in his *Essay on Church Furniture and Decoration* remarked:

Even in a church which is very destitute of architectural ornamentation which would contrast with the floor patterns, we must remember the probability of decorative patterns being hereafter introduced in the windows and upon the walls, and must let the design of the floor be such as will harmonise with the style to be adopted.⁵⁰⁸

Nineteenth-century pavement makers, according to Cutts, had forgotten that a pavement was made up of many individual tiles and that the pavement itself was just one part of a whole decorated space. These are facts that had also been forgotten by modern scholars studying medieval floor tiles. However, through the course of this thesis it has been shown that medieval tiles can be successfully reintegrated back into pavements and their original contexts. By examining pavements in this manner it has been possible to develop a new understanding of medieval tiles and how they can be connected to wider art-historical issues.

Determining the influence of nineteenth-century antiquarian plans and publications on modern tile scholarship was one of the two research objectives set out at the beginning of the thesis. This was principally addressed in Chapter One, whilst each of the succeeding chapters picked

⁵⁰⁵ Nichols, *Examples of Decorative Tiles*.

⁵⁰⁶ At Salisbury, for example, the medieval chapter house pavement was replaced with a Victorian replica during the 1850s restoration. Norton, “The Decorative Pavements of Salisbury Cathedral and Old Sarum,” 90-105.

⁵⁰⁷ Cutts, *Essay on Church Furniture and Decoration*, 96.

⁵⁰⁸ Cutts, *Essay on Church Furniture and Decoration*, 92.

a specific aspect of the nineteenth-century legacy to reassess. It has been shown that the primary influence of antiquarian publications has been the continuing focus on tiles as individual objects of study. Interest in individual tile designs endures to this day and the neat presentation of these designs in published works also persists.⁵⁰⁹ Though the methodology and scope of modern tile studies are very different to the works of nineteenth-century antiquaries, their general appearance and subject matter remain similar.⁵¹⁰ Equally problematic for modern scholarship has been the manipulation of the evidence for medieval tiles and pavements by nineteenth-century antiquaries. This manipulation includes, for example, the rearrangement of medieval tiles upon their discovery, the 'improvement' of individual tile designs and the presentation of medieval pavements to show how they could have looked rather than how they actually looked.⁵¹¹ The evaluation of the nineteenth-century plans of Jervaulx Abbey in Chapter Four, for example, has illustrated that the antiquarian record can be misleading and must be treated with caution.⁵¹² The Gothic Revival pavements created in the nineteenth century have also influenced the ways in which medieval pavements have been viewed by both scholars and non-specialists. These pavements, along with antiquarian drawings, construct a perfected view of how the medieval pavement ought to look. Deviation from this perfected view could, as a consequence, be classified as mistakes or poor decisions on the behalf of medieval tilers. Yet this principally aesthetic judgement overlooks the choices that may have been deliberately made by those who designed or laid the pavements. The detailed analysis of the Westminster Abbey chapter house pavement in Chapter Two, for example, has illustrated that there may have been other contextual factors that influenced the final layout.⁵¹³ Undoubtedly the descriptions and drawings of medieval tiles published in the nineteenth century will continue to remain important records. They often represent the best evidence of tiles that no longer survive or whose condition has deteriorated. However, their influence must be consciously recognised if tile scholarship is to continue moving forward in the future.

From the nineteenth century onwards tiles have typically been studied in isolation. Whether that be the separation of tiles into neat squares across a page in a book, or the study of tiles by a

⁵⁰⁹ This thesis has also presented medieval tiles and pavements in a traditional way. The plans show pavements from a bird's-eye-view, whilst the tables show individual tile designs as neat squares. These methods are undeniably useful for collating and displaying information clearly. It is important, however, to recognise that this approach is influenced by nineteenth-century publications. It is also important that these methods do not become simply the final outcome of any research, but rather are used as a foundation from which to examine medieval tile pavements.

⁵¹⁰ The appearance and subject matter of regional tile studies can be most closely compared with antiquarian publications. For example see: Lewis, *The Medieval Tiles of Wales*; Lowe, *Decorated Medieval Floor Tiles of Somerset*; Whitcomb, *The Medieval Floor-Tiles of Leicestershire*.

⁵¹¹ See Chapter One, 47-49.

⁵¹² See Chapter Four, 113-117.

⁵¹³ See Chapter Two, 80-81.

distinct group of individuals from a particular academic field, this isolation is the fundamental problem with modern tile scholarship. The second research objective of the thesis was to find ways to reconnect and reintegrate medieval tiles. Throughout the thesis this has been achieved by studying pavements, as opposed to tiles. It has been shown that it is possible to obtain new information from tiles that have been extensively studied in the past simply by examining them as pavements instead. The tile designs from the chapter house at Westminster Abbey, for example, have long been admired by scholars, but the importance and relevance of their placement within the pavement has never before been satisfactorily explained.⁵¹⁴ Once tiles are considered as part of a whole pavement, it is then possible to reintegrate them with their wider context. This can be an architectural context, as demonstrated in Chapter Three. After all, by their very nature, pavements are fundamentally architectural, as they must always appear within a building. The layout of a pavement could be used to reinforce the architectural division of a space. At Hailes Abbey, for example, the borders which broke up the long panels in the north presbytery aisle corresponded to the position of the aisle piers and presumably also once to the vaults.⁵¹⁵ The second context within which medieval pavements could be considered is a liturgical one. The layout of a pavement when viewed from above on a plan can appear haphazard. In order to understand this layout, it is important to recognise the function of the space in which a pavement was laid. As demonstrated at Jervaulx Abbey, for example, certain pavement arrangements were considered appropriate for particular spaces within the monastic church.⁵¹⁶ The final context within which medieval pavements could be considered is a decorative one. Pavements did not exist alone within an architectural and liturgical framework. They were usually just one of the many surfaces that could be decorated. In some cases it is possible that these surfaces were originally decorated with a scheme that united them with a common purpose or message. At Prior Crauden's Chapel, for example, the mosaic animals possess a greater iconographical meaning when read within this decorative setting.⁵¹⁷ By reintegrating medieval tiles with their pavements and wider contexts the thesis has also succeeded in reconnecting medieval tiles to broader discussions occurring in the art-historical community. The concept of reintegration has already been examined by art historians interested in both the holistic cathedral and the relationship between architecture and performance.⁵¹⁸ It has been shown that medieval tile pavements can easily be placed within these discussions. Through examining the

⁵¹⁴ See Chapter Two, 62.

⁵¹⁵ See Chapter Three, 94-95.

⁵¹⁶ See Chapter Four, 109.

⁵¹⁷ See Chapter Five, 132.

⁵¹⁸ Raguin, Brush and Draper, ed., *Artistic Integration in Gothic Buildings*.

relationships between architecture, pavements and performance, new ideas can be generated about well-known tiles.

There is plenty of scope for developing the methodology employed during the course of this thesis for future research. There are perhaps three main opportunities that could be expanded upon. The first would be the study of other types of pavement. Extensive work has already been completed on tessellated pavements and *opus sectile* pavements formed from different coloured stones, marbles or glass. Many of these examples include both geometric and figural designs that have been closely studied by art historians.⁵¹⁹ This thesis has focused upon decorative ceramic tile pavements and in particular two-colour tile pavements. There are, however, other types of pavement that warrant investigation. Stone pavements were typically the first type of pavement to replace a beaten earth floor in the most sacred spaces within the monastic church.⁵²⁰ Pavements, such as the lias stone pavements in the churches at Bordesley Abbey and Muchelney Abbey, would provide an interesting comparison with the tile pavements laid at a later date in these spaces. Plain tile pavements lack perhaps the glamorous allure of decorated tile pavements, but nevertheless could potentially also offer opportunities for further study. A detailed analysis, for example, could shed further light on the practicalities of laying a medieval pavement. By examining other types of medieval pavement it may be revealed that certain ideas and practices remained constant even though the material changed. There may have been certain arrangements that were considered suitable for particular spaces regardless of the material from which a pavement was made. Equally there may also have been methods of working that were practised by numerous workshops producing different types of pavement.

The second opportunity for further research would be to lengthen the chronological range from which case studies are taken. An extended chronological range would also be a natural consequence of examining different types of medieval pavement. Stone pavements, for example, are frequently dated earlier than most of the case studies discussed in this thesis.⁵²² In contrast plain

⁵¹⁹ Much of this analysis has been concerned with continental examples, whilst in England Richard Foster has given a detailed analysis of the *opus sectile* pavement laid in front of the high altar at Westminster Abbey. Though the pavement includes no figural designs, his analysis included a discussion of the pavement's geometry, materials and inscription. Foster, *Patterns of Thought*; Rodwell and Neal, *The Cosmatesque Mosaics of Westminster Abbey*, Vol. 1.

⁵²⁰ At Bordesley, for example, the stone pavement was laid in the presbytery of the church in the twelfth century, at which time the remainder of the church was unpaved. Hirst, Walsh and Wright, *Bordesley Abbey II*, 28.

⁵²² At Muchelney a stone floor was laid throughout the Anglo-Saxon church and may date to the eleventh century. John Goodall and Francis Kelly, *Muchelney Abbey, Somerset* (London: English Heritage, 2004), 6.

tile pavements can often be assigned a later date than the case studies from this thesis.⁵²³ By extending the chronological range it may be revealed that certain methods or ideas spanned generations and were continued over a long period of time. Art historians have also been interested in the change of style that occurred in medieval art and architecture in the fourteenth century. This is a change that is also noticeable in medieval pavements. Whilst the usefulness of labels such as 'Decorated' and 'Perpendicular' is now being questioned by scholars, there were nevertheless stylistic changes that occurred over time.⁵²⁴ Many of the arguments made for this changing style in medieval architecture can also be applied to medieval pavements.⁵²⁵ By the late fifteenth and early sixteenth centuries there was also a revival of decorative two-colour tile pavements. New pavements were commissioned and laid in monastic buildings at this time. These pavements, like those laid at Hailes Abbey and Fountains Abbey, are of particular interest when considering issues of heraldry, patronage and identity. Many of the notable tile designs in monastic pavements which date to this period, for example, include the initials or heraldry of their abbots.⁵²⁶

The third opportunity for future research would be the examination of a wider range of locations. This thesis has focused specifically upon England, but this could easily be broadened to include Ireland, Scotland and Wales. There are also further opportunities for comparison with continental two-colour tile pavements. It would be worth seeing how far the conclusions and observations reached in this thesis could be applied to examples from other places. Scholars have already established that there were regional tile workshops operating with slightly different manufacturing and decorating techniques, but it would be interesting to know how far these differences also applied to the laying of pavements.⁵²⁷ This thesis has deliberately chosen to examine some of the most well-known English medieval tile pavements, but there are of course other less complete or less well-known examples that could be open to similar interpretations or analysis. This thesis has also chosen to concentrate upon a monastic context. Numerous tile pavements from other contexts still remain to be studied, such as those laid in royal palaces, castles, muniment rooms and secular domestic spaces.⁵²⁸ The function of these spaces would have been very different

⁵²³ At Rievaulx Abbey, for example, the plain-glazed tiles in the church have been dated to c. 1500. Stopford, *Medieval Floor Tiles of Northern England*, 46-53, 321-325.

⁵²⁴ Binski, *Gothic Wonder*, 355-364.

⁵²⁵ See Chapter Five, 151-152.

⁵²⁶ Carter, "Abbots and Aristocrats: Patronage, Art and Architecture at Hailes Abbey in the Late Middle Ages," 154-175; Carter, "Cistercian Abbots as Patrons of Art and Architecture: Northern England in the Late Middle Ages," 217-241; Stopford, *Medieval Floor Tiles of Northern England*, 54-61, 287-299.

⁵²⁷ For an overview of regional groups and methods of decoration see: Eames, *Catalogue*, Vol. 1.

⁵²⁸ Some notable examples include the thirteenth-century pavements from Clarendon Palace, the fourteenth-century pavement at Windsor Castle (*Berkshire*) and the fifteenth-century pavement from Canynge House (*Bristol*). For more on the Canynge pavement see: Eames, *Catalogue*, Vol. 1, 239-247. For more on Windsor Castle, see: Ian Betts and Thomas Cromwell, "Windsor Castle Governor's House (Norman Gate, South Tower,

to those examined within this thesis. As such a comparison between the various pavement arrangements in these spaces would be useful. They could still direct movement around a space, and there may have been rituals enacted on them, but those movements would not have been liturgical. A pavement in a monastic church would have had a different audience and function to one laid in a domestic dwelling. As such it would have been interpreted differently, for a pavement gains meaning from the people who can see it and the actions that are performed upon it.

Bernard of Clairvaux had asked in the twelfth century why it was necessary to decorate a pavement. For him a pavement was a practical surface that would naturally become worn and dirtied after daily use. Yet this thesis has shown that a pavement could actually invite certain types of decoration. In Chapter Three, for example, it was argued that representing heraldry on a floor could deliberately be used to suggest the pious humility of the represented individual. They were brought 'down to earth' by those treading upon the heraldic pavement, and yet it could also have been a very conspicuous method of commemoration. In Chapter Four it was shown that pavements could be used to signpost movement around a building and to highlight the status of certain spaces within it. On the floor and directly underfoot would, after all, be an obvious and logical location for these signposts. In Chapter Five it was also suggested that certain images on a floor could be used to invite a deliberate and performative trampling. Bernard had protested against stepping on images of angels and saints, but the treading on representations of evil could perhaps be justified. Ultimately, however, it must be concluded that there is no one single way to read the medieval tile pavement. They could be interpreted in multiple ways, for pavements, like other types of medieval art, could mean different things to different audiences. The relationship between liturgy and a pavement, for example, would have been much more obvious to a monk or a priest than it would have been to a lay person. The significance of heraldry, and the construction of an identity, would perhaps have been more universally understood by both religious and secular viewers. However, the various social groups within lay society would have had different perceptions of that heraldry. The interpretation of a monastic pavement could also differ over time. Tiles were intended to be a durable and long-lasting floor covering. As such the way in which a pavement was read when it was first laid may have been quite different to how it was viewed a century later. Not only would members of a monastic community change over time, but so too would the art and architecture surrounding it, and the liturgical practices that took place upon it. Over time pavements were also subject to repair with

First Floor) Survey Record and Interpretation of a Medieval Tiled Floor," *English Heritage Research Department Report Series 26* (2011): 1-23; Laurence Keen and Eileen Scarff, ed., *Windsor: Medieval Archaeology, Art and Architecture of the Thames Valley*, British Archaeological Association Conference Transactions XXV (Leeds: W. S. Maney, 2002).

worn tiles, for example, moved to less prominent positions.⁵²⁹ As such the reading of these floors could not remain static and was always open to changing interpretations. Equally, pavements remain receptive to an array of readings by scholars in the future. They have the potential to be interrogated with new questions and utilised in thinking about broader art-historical issues.

This thesis has offered new ways of thinking about pavements that have not only been extensively published by scholars, but which are also the most accessible to the general public. If medieval tile pavements can be shown to have had meaning and importance, beyond their practical usefulness as a floor covering, it is far more likely that they will be conserved and preserved for the next generation. The conservation of floors is particularly difficult, requiring a careful balance between conservation and accessibility. As Bernard pointed out the very nature of a pavement being located on the ground means that it will wear out more quickly than other artistic media. Whilst this thesis has not been about conservation, it is impossible to ignore the deterioration that has occurred in some medieval tiles over the last few years.⁵³⁰ This is a worrying trend that could potentially lead to the loss of many medieval tiles in the near future. In 2016 the Society for the Protection of Ancient Buildings ran a social media campaign to draw awareness to the plight of historic floors, described by them in their press release as the “down-trodden Cinderella of building conservation”.⁵³¹ They invited members of the public to take photographs of floors and post them on social media using the hashtag ‘#lookdown’. This was a simple but effective way of getting people to notice what they might otherwise have overlooked. People are frequently invited to focus their gaze upwards by the helpful positioning of mirrors to get the best view of cathedral vaults. Yet it is possible that with a similar invitation people would also remember to look down. During the research for this thesis there have been many moments when intense study, photography or sketching has drawn interest and comments from fellow visitors who in turn have taken their own photographs. It is hoped, therefore, that within this thesis there may be ideas or interpretations that could be translated in some manner to reach a wider, non-specialist audience. Medieval tiles can be perceived as a niche area of interest and their study confined to scholarly journals. Medieval pavements, however, offer the opportunity to make tiles more accessible. By engaging with ideas of how pavements were related to their surroundings, be that decorative or functional, the public would be able to experience them more completely. If they were able to walk down a ‘processional

⁵²⁹ This is speculated to have been the case at Jervaulx Abbey see: Chapter Four, 123; Stopford, *Medieval Floor Tiles of Northern England*, 173.

⁵³⁰ For the conservation of historic floors see: Fawcett, ed., *Historic Floors; Historic England, Practical Building Conservation: Earth, Brick & Terracotta* (Farnham: Ashgate, 2015).

⁵³¹ Society for the Protection of Ancient Buildings, “History at Your Feet – Everyone #lookdown,” *S.P.A.B.*, 2016, accessed 16th June 2016, <http://www.spab.org.uk/media-centre/press-releases/press-release/?ContentID=301>.

path' in the ruins of a monastic church, for example, the pavement would be animated and have a more memorable impact on them. Pavements are in fact one way to bring incomplete buildings back to life, as they create a kinetic experience of the space as it is moved through. They are a way for both scholars and the wider public to better understand medieval buildings, their functions and significance. If enough people look down, therefore, these pavements will begin to be understood and appreciated not only as works of art, but also as vital sources that tell us about the medieval past.

Figures

Figure 1.1

Fountains Abbey: Plain Mosaic tiles relaid to form the high altar platform.



Figure 1.2

Rievaulx Abbey: nineteenth-century arrangement of Plain Mosaic tiles taken from the church, Rievaulx Terrace.



Figure 1.3
Plan of Prior Crauden's Chapel pavement by William Fowler, 1801.
© British Library Board (Maps K. Top.8.69.s.1).

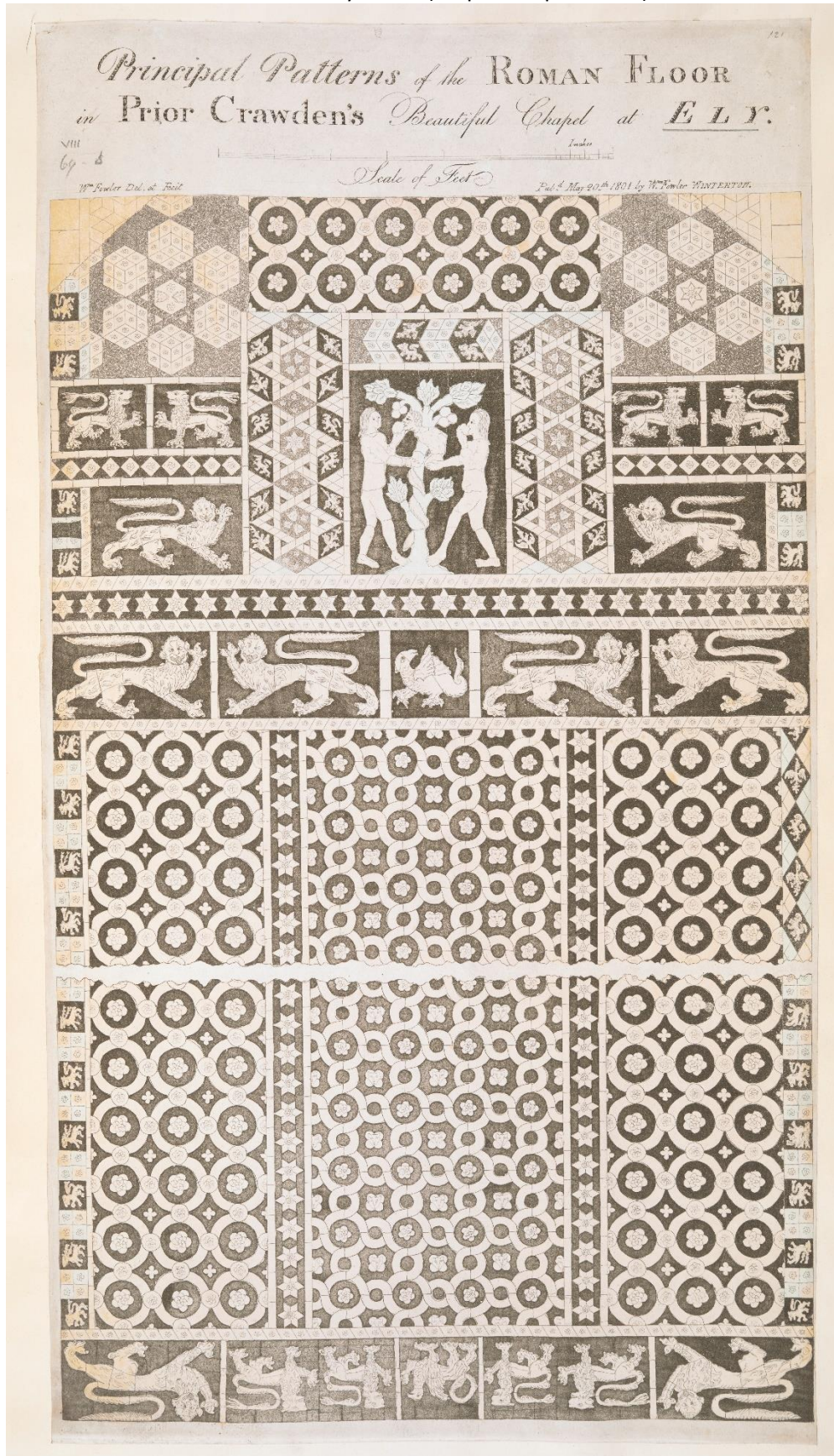


Figure 1.4

Plan of Prior Crauden's Chapel pavement by William Wilkins, 1801.
© British Library Board (General Reference Collection Ac.9233.ce).

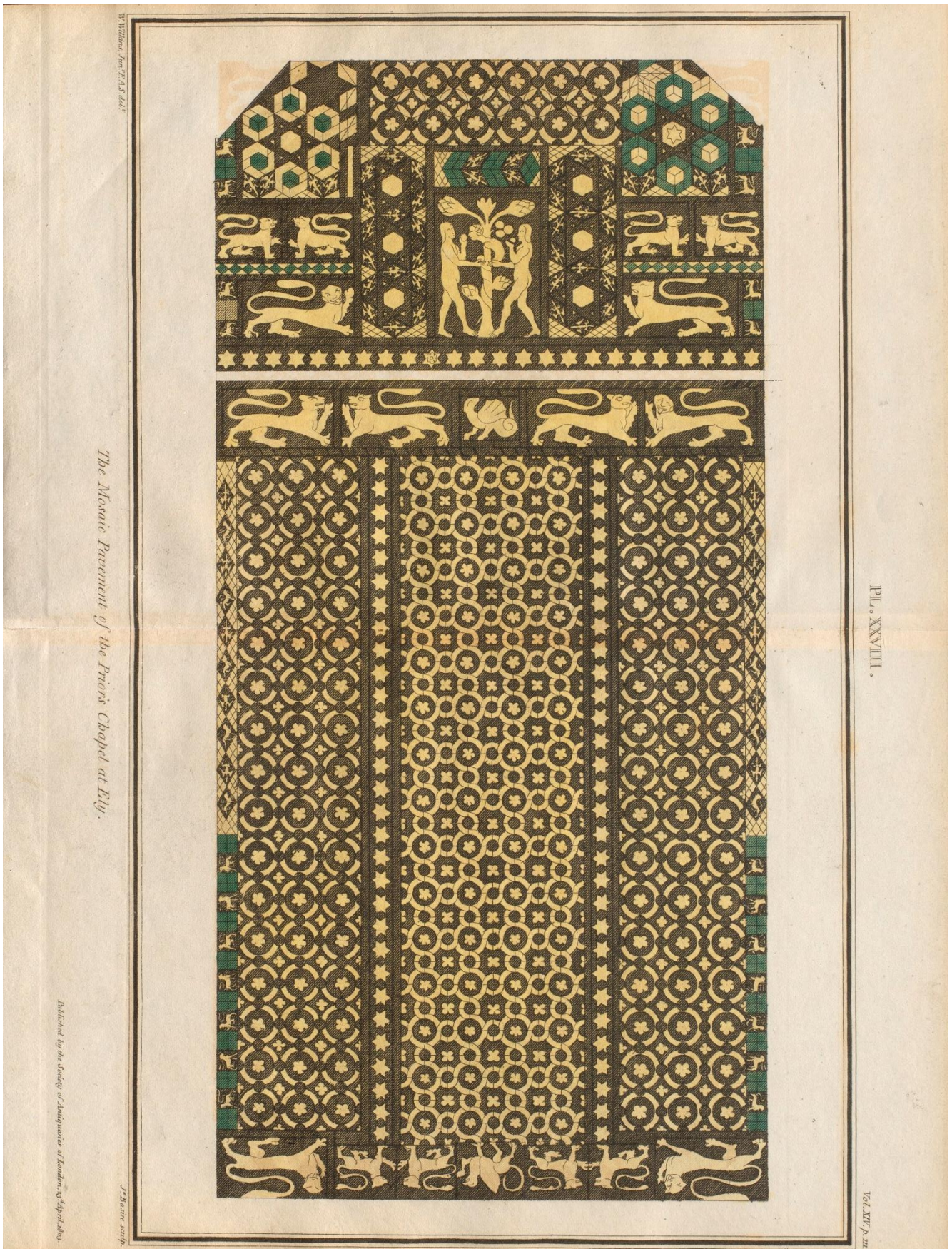


Figure 1.5

Prior Crauden's Chapel: view of north-eastern edge of chapel pavement, Ely Cathedral.



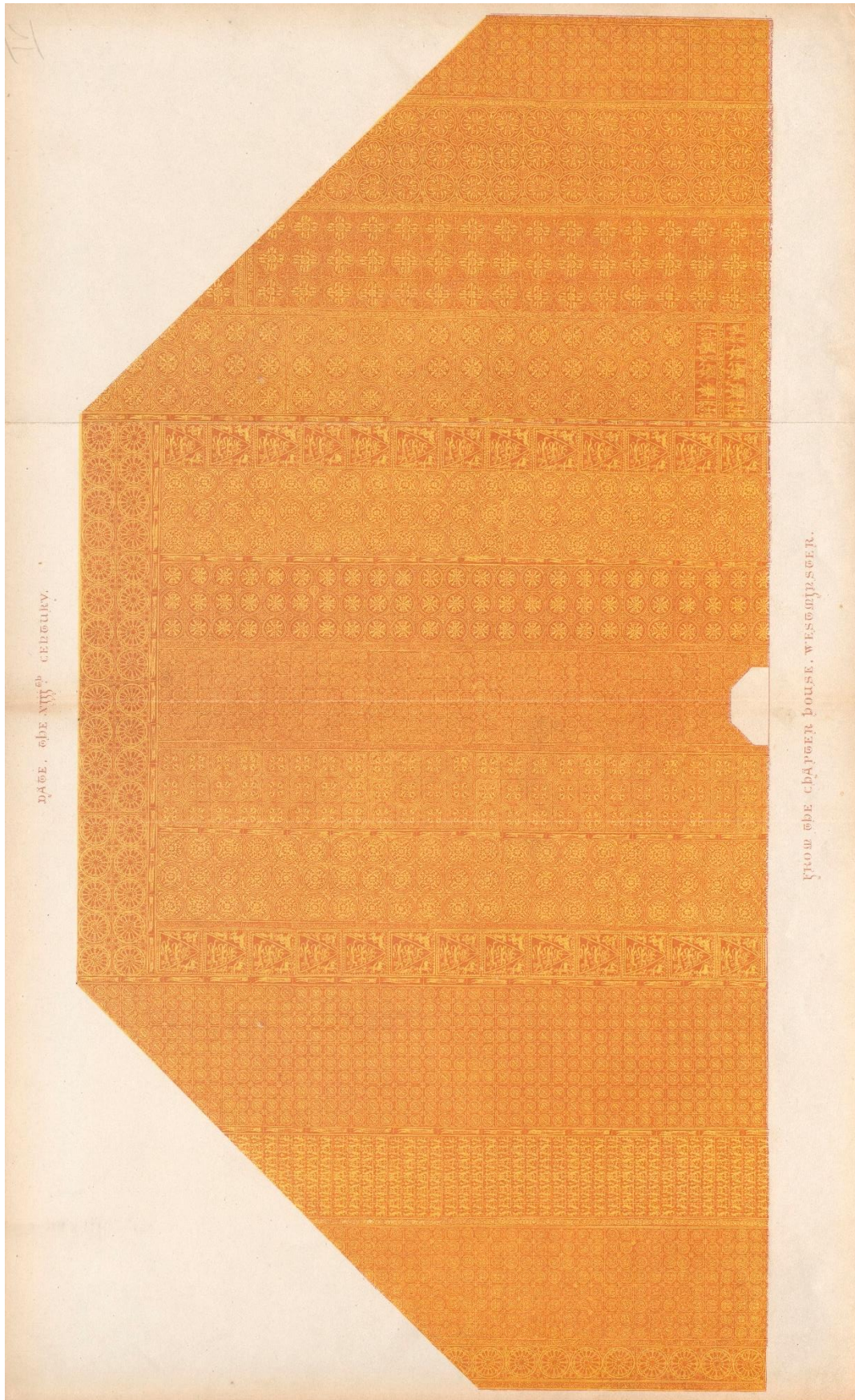
Figure 1.6

Prior Crauden's Chapel: view of south-eastern edge of chapel pavement, Ely Cathedral.



Figure 1.7

Plan showing eastern half of Westminster Abbey chapter house pavement by Henry Shaw, 1858.
© British Library Board (General Reference Collection 7709.I.14).



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Figure 1.8
Temple Church: Minton tiles relaid in the rotunda triforium.



Figure 1.9

Comparison between fourteenth-century medieval tile from Temple Church, as traced by Elizabeth Eames, and 1841 Minton tile of the same design.

© Trustees of the British Museum



Figure 1.10

York Minster: view of chapter house exterior facing west.

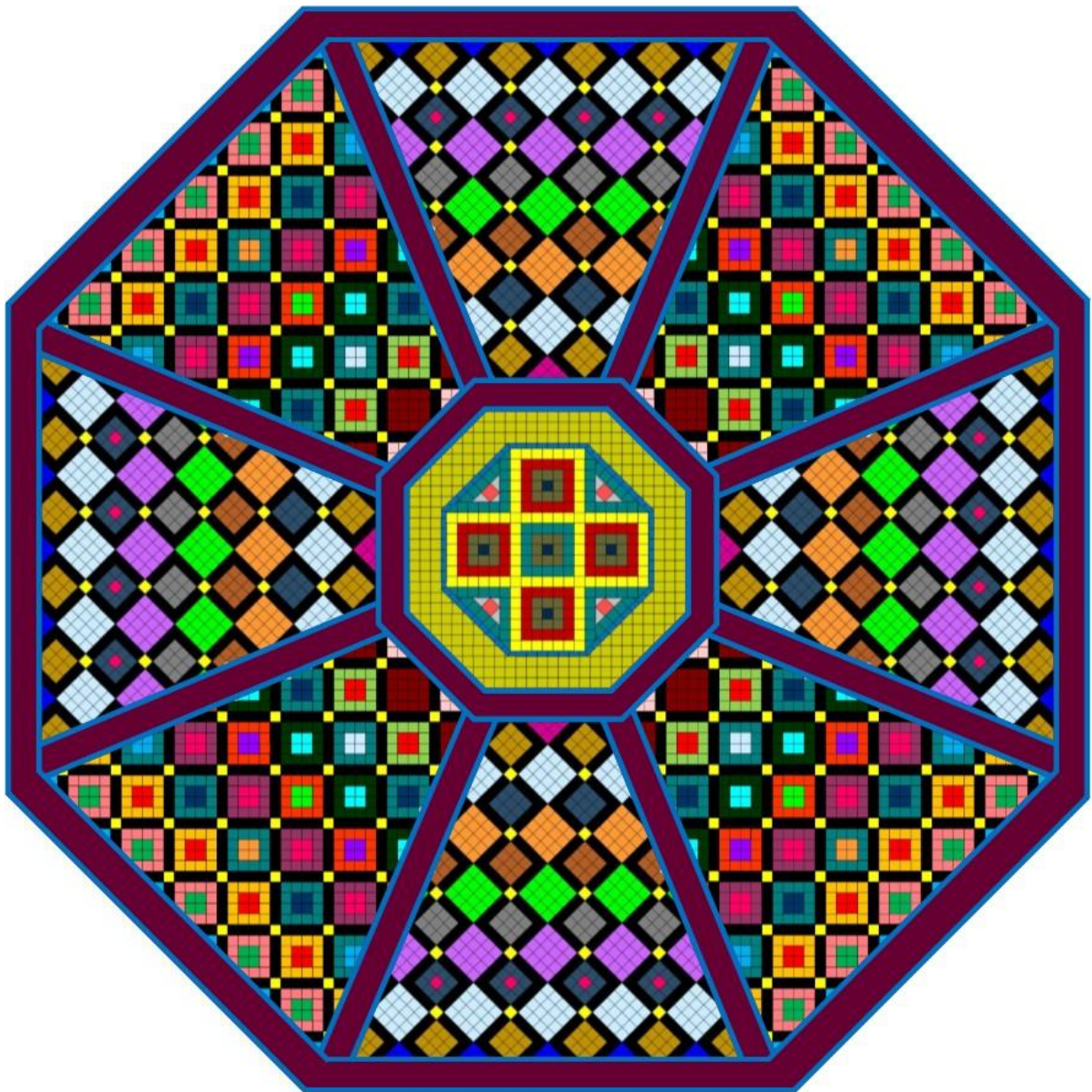


Figure 1.11

York Minster: view of chapter house interior facing south-east.



Figure 1.12
York Minster: plan of chapter house pavement.



York Minster Chapter House

Plan of Chapter House Pavement (Not to Scale)

See Table of Tile Designs for Key.

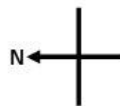
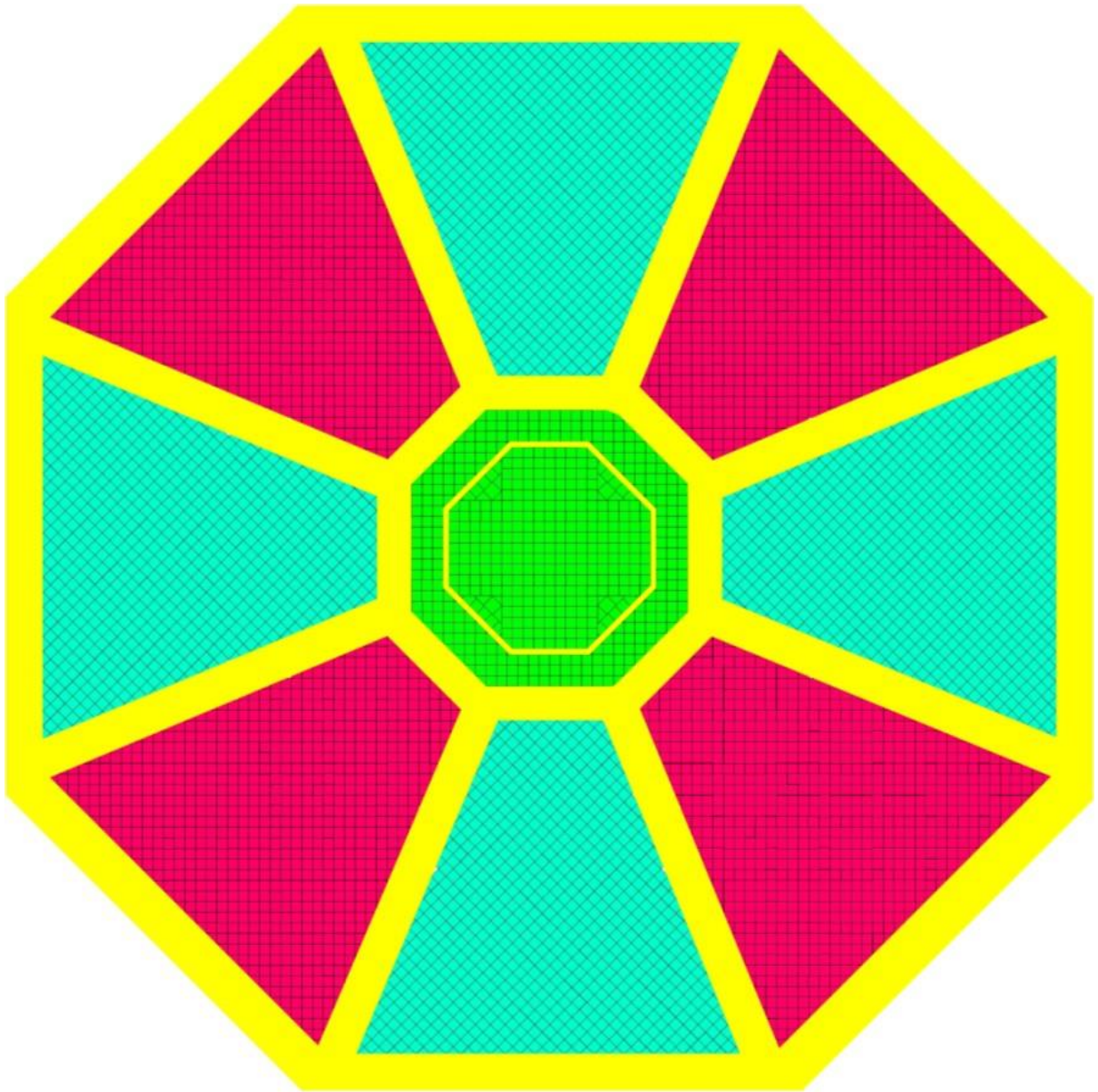


Figure 1.13

York Minster: plan showing sections of chapter house pavement.



York Minster Chapter House

Plan of Chapter House Pavement (Not to Scale)

-  Central Octagon
-  Panel Design A
-  Panel Design B
-  Borders

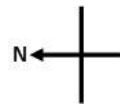
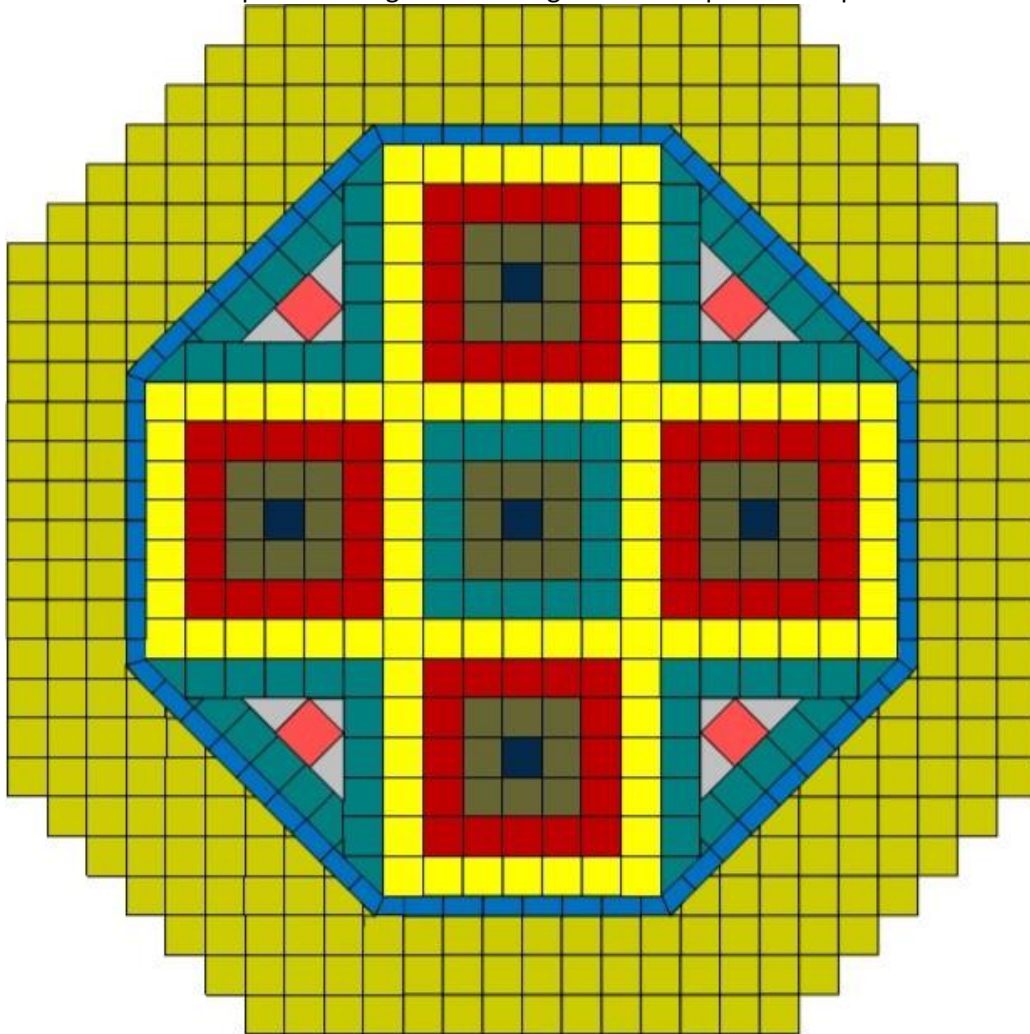


Figure 1.14

York Minster: plan showing central octagon from chapter house pavement.



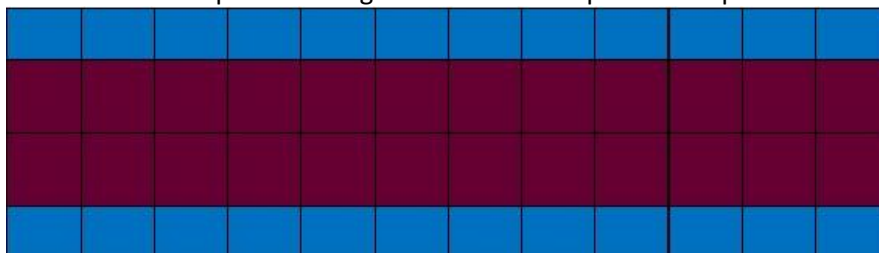
York Minster Chapter House

Central Octagon of Chapter House Pavement (Not to Scale)

See Table of Tile Designs for Key.

Figure 1.15

York Minster: plan showing borders from chapter house pavement.



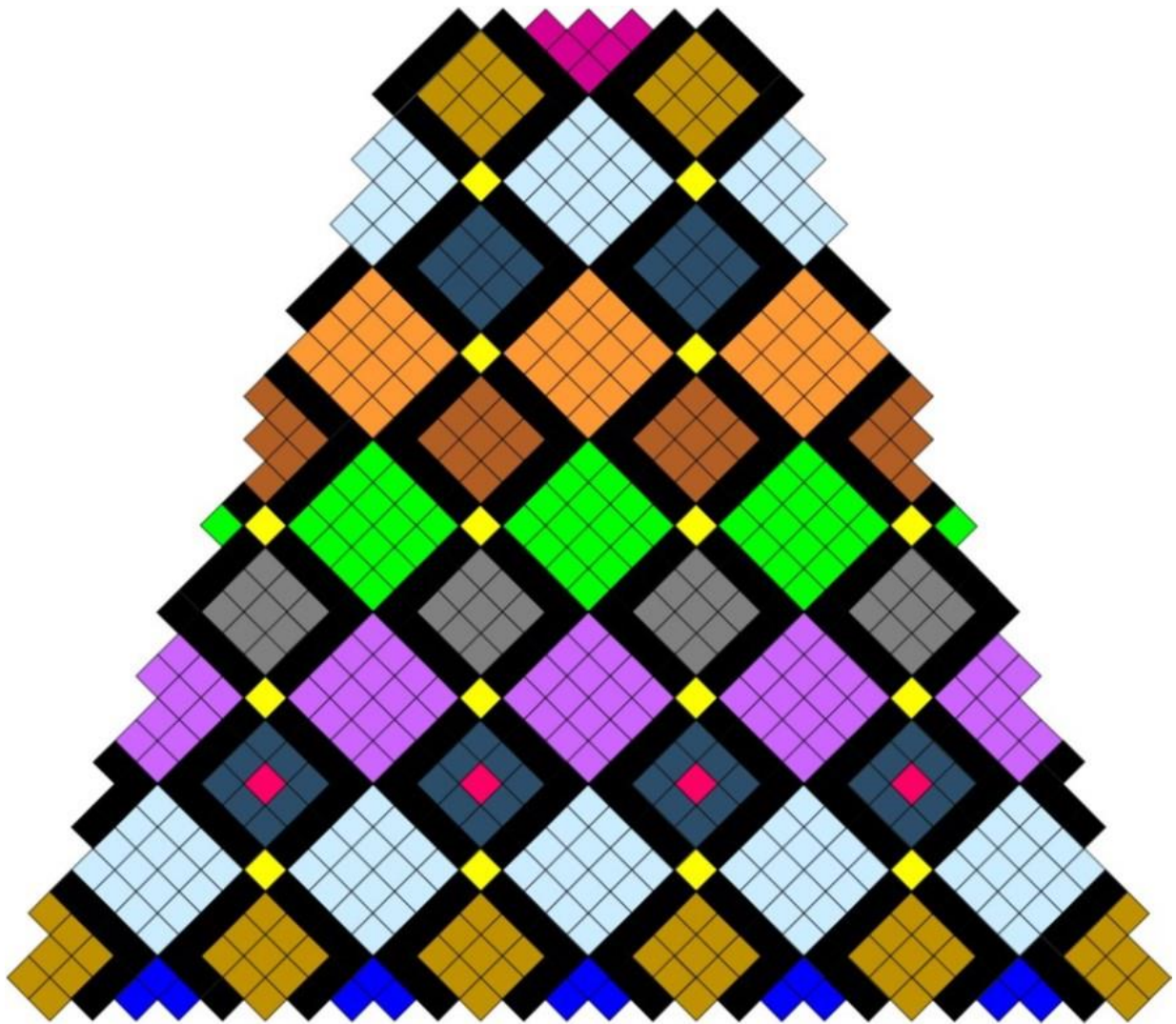
York Minster Chapter House

Borders of Chapter House Pavement (Not to Scale)

See Table of Tile Designs for Key.

Figure 1.16

York Minster: plan showing Panel Design A from chapter house pavement.



York Minster Chapter House

Panel A of Chapter House Pavement (Not to Scale)

See Table of Tile Designs for Key.

Figure 1.17

York Minster: plan showing Panel Design B from chapter house pavement.













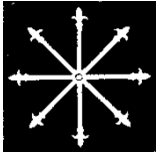



York Minster Chapter House



















Panel B of Chapter House Pavement (Not to Scale)



















See Table of Tile Designs for Key.



















Figure 1.18



















York Minster: table showing tile designs from chapter house pavement.

Design No.	1842 Minton Catalogue Design No.	1845 Nichols' <i>Examples</i> Design No.	1840 Parker's <i>Glossary</i> Design No.	Westminster Abbey Chapter House Design No.	Average Width	Type of Design		Key
YD1a	28	40		WD22	100mm x150mm	Border		
YD1b	28	40		WD22	75mm x150mm	Border		
YD2	44		18 (Plate 86)		150mm	x1		
YD3	89				150mm	x1		
YD4					150mm	x1		
YD5	37				150mm	x1		
YD6	40		16 (Plate 86)		150mm	x1		

YD7	46				150mm	x1		
YD8	31		15 (Plate 86)		150mm	x1		
YD9	27	6			150mm	x1		
YD10	53				150mm	x1		
YD11	8	32		WD16	150mm	x1		
YD12	11	51		WD15	150mm	x1		
YD13	34		23 (Plate 86)		150mm	x1		
YD14	30				150mm	x1		
YD15	1		24 (Plate 86)		150mm	x1		

YD16	4				150mm	x1		
YD17	94	3			150mm	x1		
YD18	10				150mm	x1		
YD19	81				150mm	x4		
YD20	54		11 (Plate 87)		150mm	x4		
YD21	84				150mm	x4		
YD22	20	50		WD4	150mm	x4		
YD23	83				150mm	x4		
YD24	51		6 (Plate 87)		150mm	x4		

YD25	23	37		WD5	150mm	x4		
YD26	82				150mm	x4		
YD27	9				150mm	x4		
YD28	69				150mm	x9		
YD29	66				150mm	x9		
YD30	67				150mm	x9		
YD31	65				150mm	x9		
YD32	64				150mm	x9		
YD33	63				150mm	x9		

YD34	73				150mm	x9		
YD35	72				150mm	x9		
YD36	70				150mm	x9		
YD37	74				150mm	x9		
YD38	71				150mm	x9		
YD39	78				150mm	x9		
YD40	56				150mm	x9		
YD41	55				150mm	x9		
YD42	77				150mm	x9		









YD43	76				150mm	x9		
YD44					180mm	x1		
YD45						x1		
YD46						x1		

Figure 1.19

York Minster: view of central cross from chapter house pavement facing north-west.

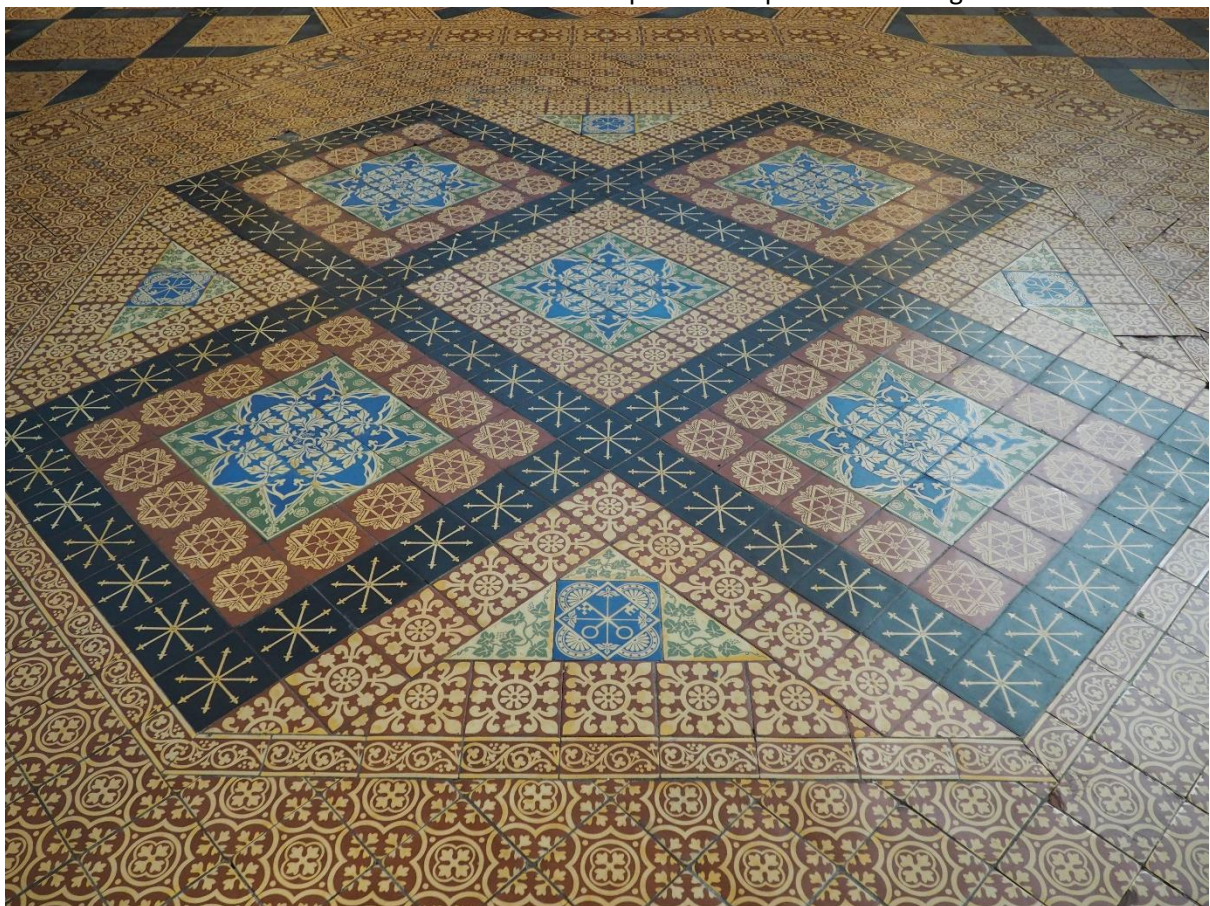


Figure 1.20
 York Minster: cross-key design, nineteenth century.



Figure 1.21
 Engraving of tiles from St Nicholas' Chapel in York Minster by William Fowler, 1801.
 © British Library Board (Maps K.Top.45.7.kk).

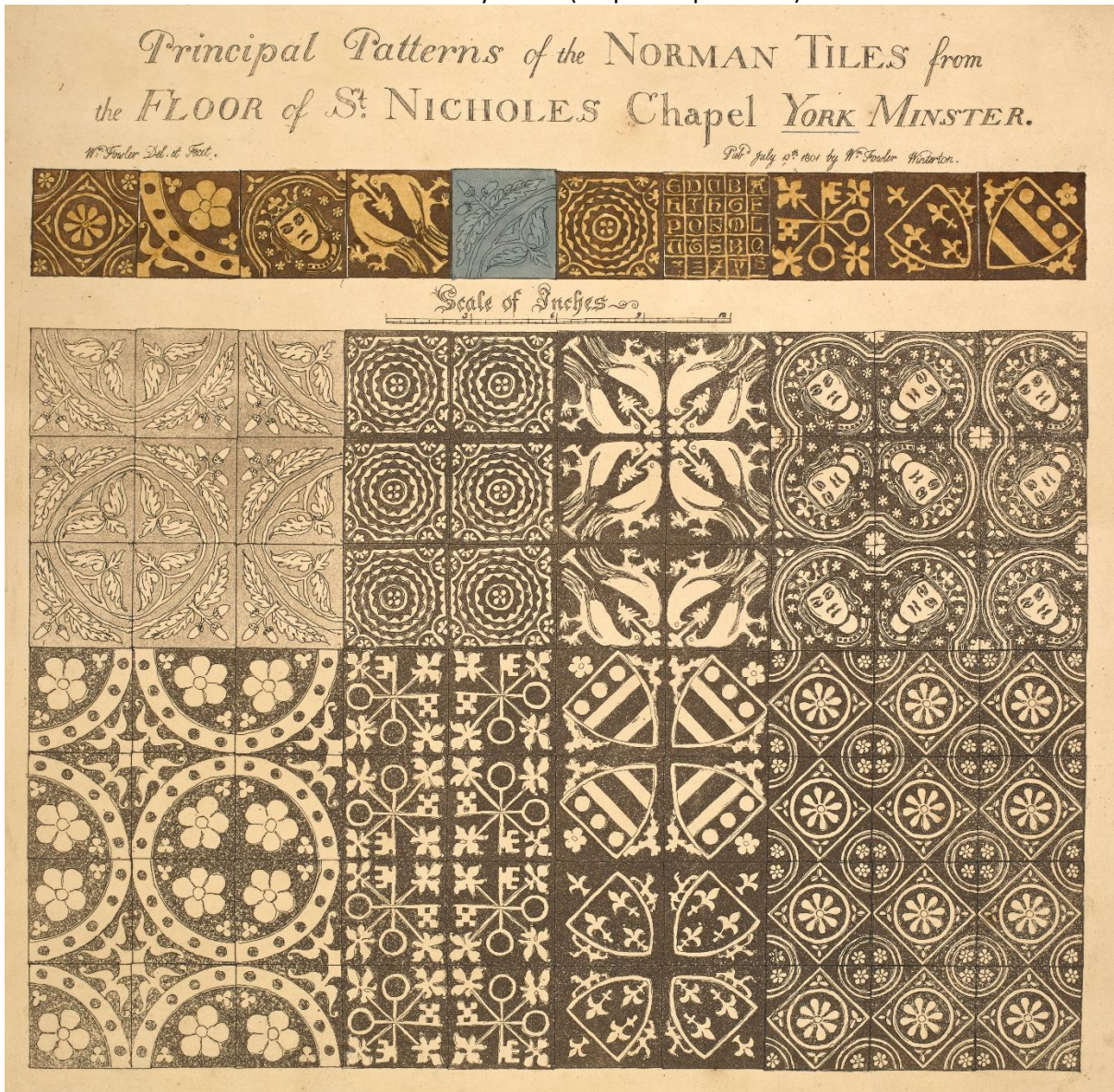
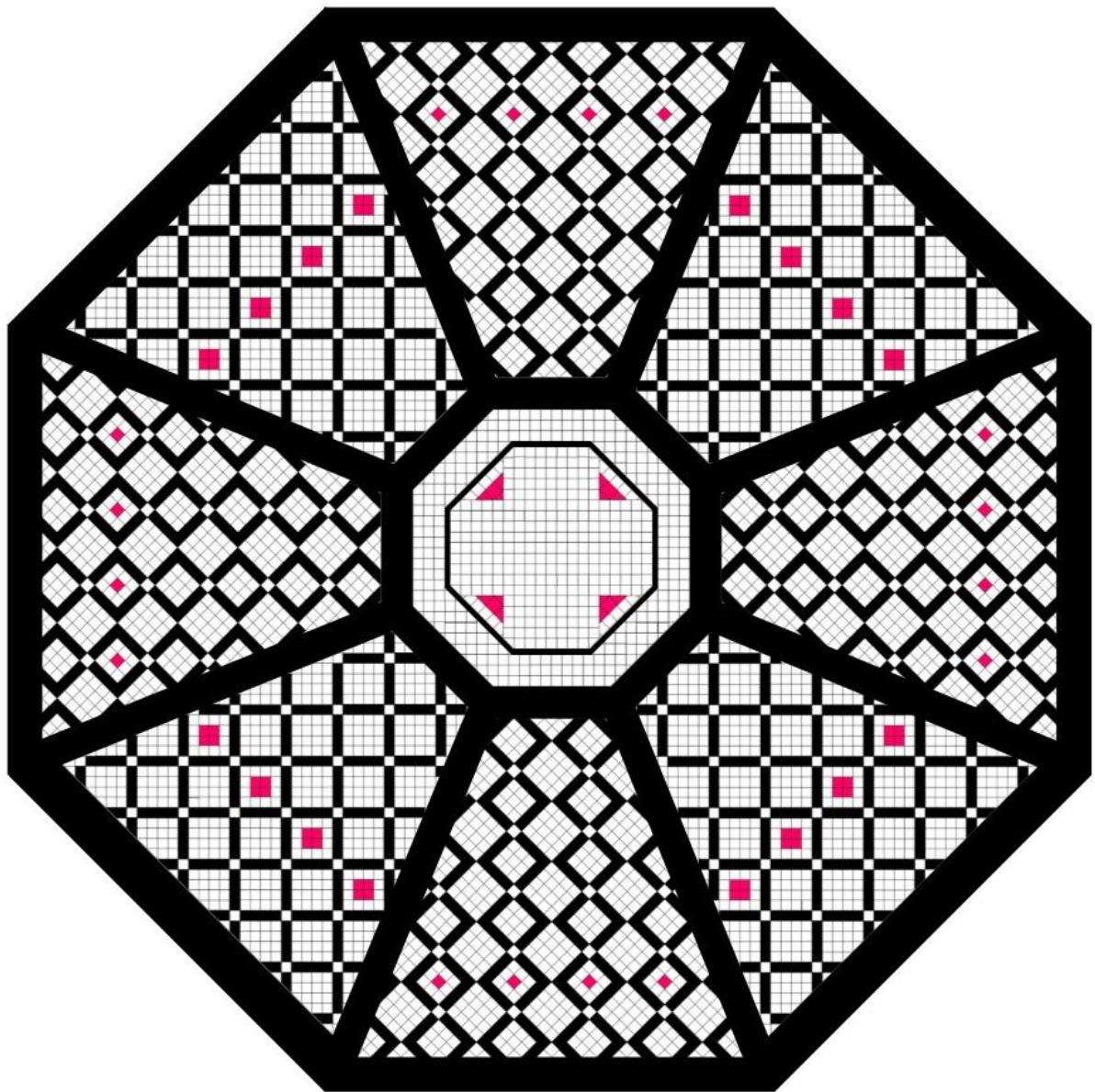


Figure 1.22

York Minster: plan showing distribution of tile designs commissioned for chapter house pavement.



York Minster Chapter House

Plan of Chapter House Pavement (Not to Scale)

- Tile designs commissioned for York Minster
- Borders and Plain Tiles

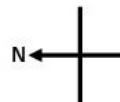


Figure 1.23

Salisbury Cathedral: plan of chapter house pavement, coloured to show distribution of panel designs.

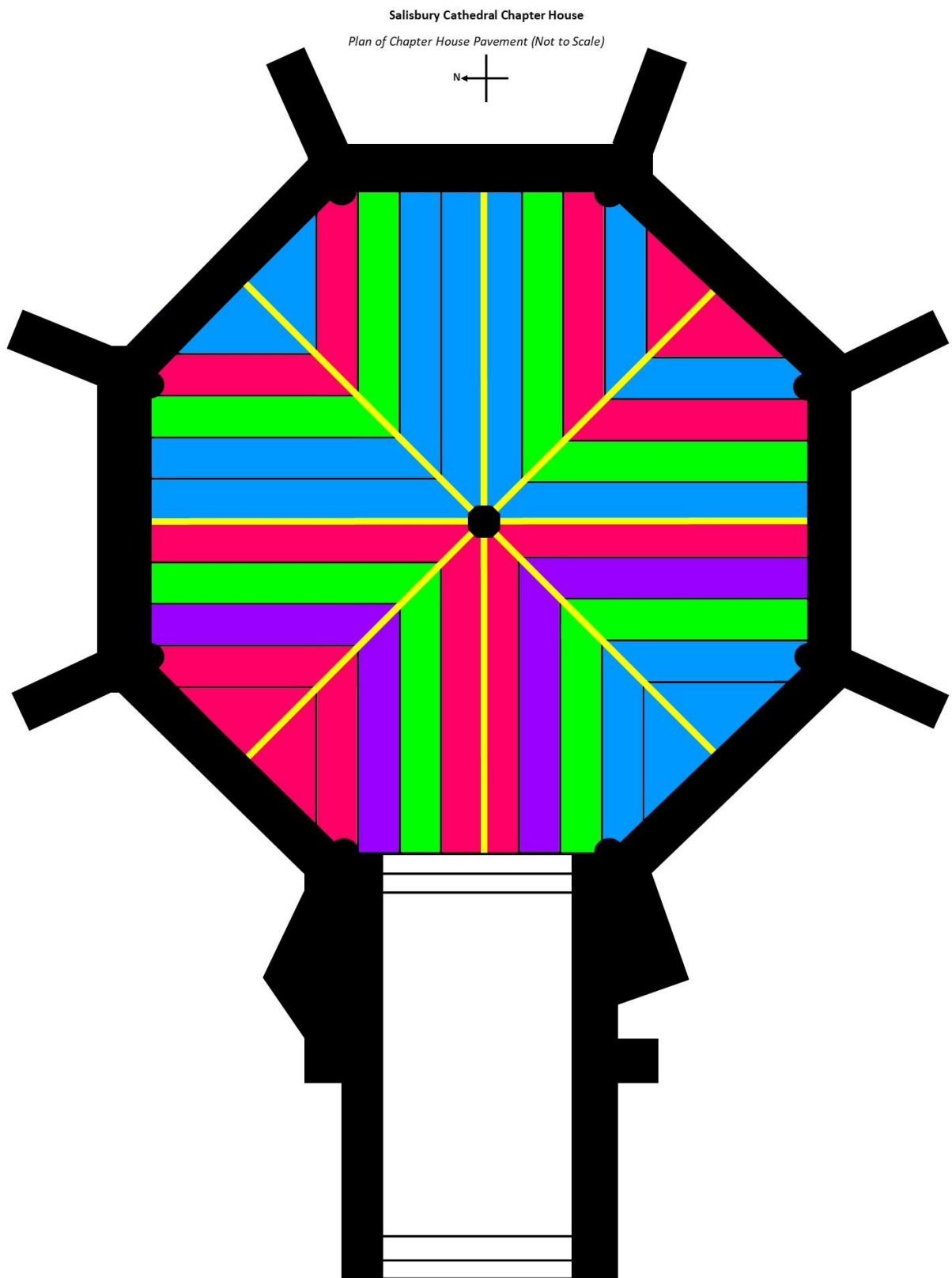


Figure 1.24

Salisbury Cathedral: view of nineteenth-century replica chapter house pavement facing south-west.



Figure 2.1

Winchester Cathedral: detail of retrochoir pavement, thirteenth century.



Figure 2.2

Gloucester Cathedral: detail of pavement in front of the high altar, fifteenth century.



Figure 2.3

Westminster Abbey: view of chapter house interior facing south-east.

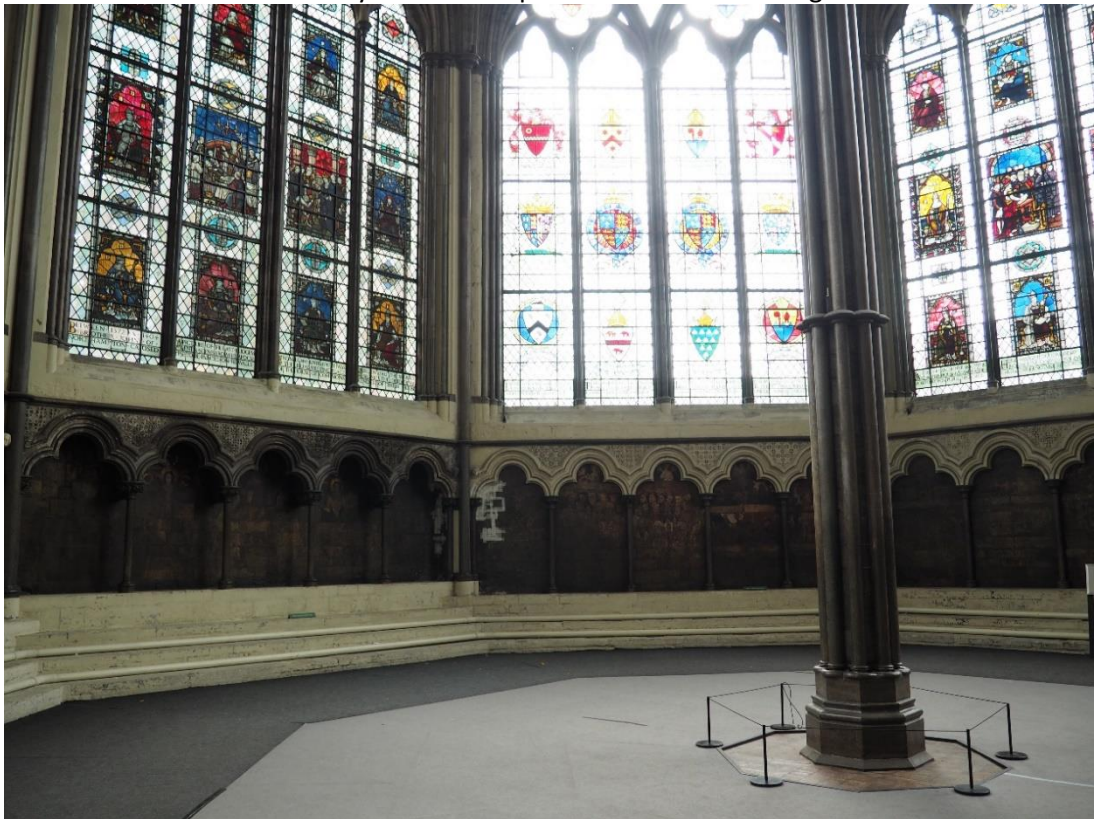


Figure 2.4

Westminster Abbey: view showing nineteenth-century repairs to chapter house pavement facing west.



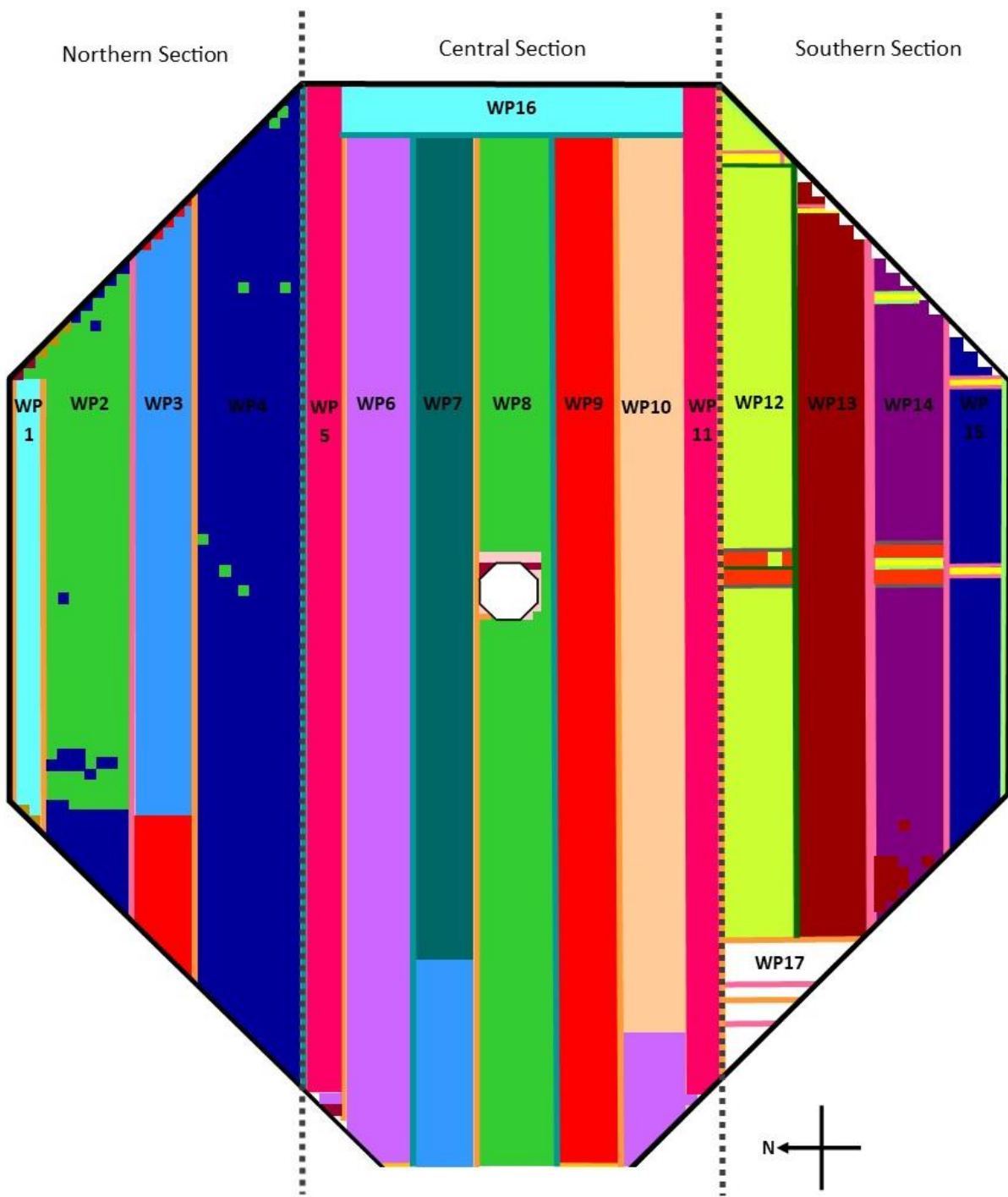
Figure 2.5
Westminster Abbey: picture tiles, thirteenth century.



Figure 2.6
Westminster Abbey: Minton copy of rose window design, nineteenth century, Temple Church.





















Figure 2.7
Westminster Abbey: plan of chapter house pavement.



































Westminster Abbey Chapter House
Plan of Chapter House Pavement (Not to Scale)
See Table of Tile Designs for Key.

Figure 2.8

Westminster Abbey: table showing tile designs from chapter house pavement.

Design No.	Panel No.	Average Width	Type of Design		No. of Tiles	Key
WD1	WP13, WP14	180mm	x4		384	
WD2	WP14	180mm	x4		265	
WD3	WP1, WP16	180mm	x4		189	
WD4	WP12	180mm	x4		382	
WD5	WP6, WP9, WP10, WP14	160mm	x4		524.5	
WD6	WP5, WP6, WP10, WP11	160mm	x4		623	
WD7	WP7, WP17	145mm	x4		522	
WD8	WP3, WP9, WP17	145mm	x4		737.5	
WD9	WP8, WP17	141mm	x4		6	

WD10- WD13	WP5, WP11	249mm	x1		48	
WD14	WP3, WP7	144mm	x1		501	
WD14(B)	WP17	136mm	X1			
WD15	WP2, WP4, WP15	154mm	x1		1138.5	
WD15(B)	WP17	136mm	x1		1	
WD16	WP2, WP4, WP8	153mm	x1		1045	
WD16(B)	WP17	136mm	x1		5	
WD17	WP17	135mm	x1			
WD18	WP17	135mm	x1			
WD19	WP17	150mm	x1			
WD20	WP1, WP2, WP4, WP6, WP8, WP10, WP12, WP17	175mm x 100mm	Border		512	
WD21	WP12, WP14	174mm x 82mm	Border		24.5	

WD22	WP12, WP13	177mm x 80mm	Border		78	
WD23	WP3, WP12, WP13, WP14, WP15, WP17	140mm x 73mm	Border		251	
WD24	WP5, WP7, WP9, WP16	210mm x 100mm	Border		123	
WD25	WP5, WP7, WP9, WP16	210mm x 100mm	Border		122	
WD26	WP12, WP13, WP14, WP15(s)	154mm x 66mm	Border		73	
WD27	WP1, WP2, WP5, WP8, WP14	180mm x 180mm	Border		10	
WD28	WP2, WP5, WP8, WP10	260mm x 150mm	Border		6	
WD29	WP14	194mm	Picture		2	
WD30	WP14	194mm	Picture		2	
WD31	WP14	194mm	Picture		2	











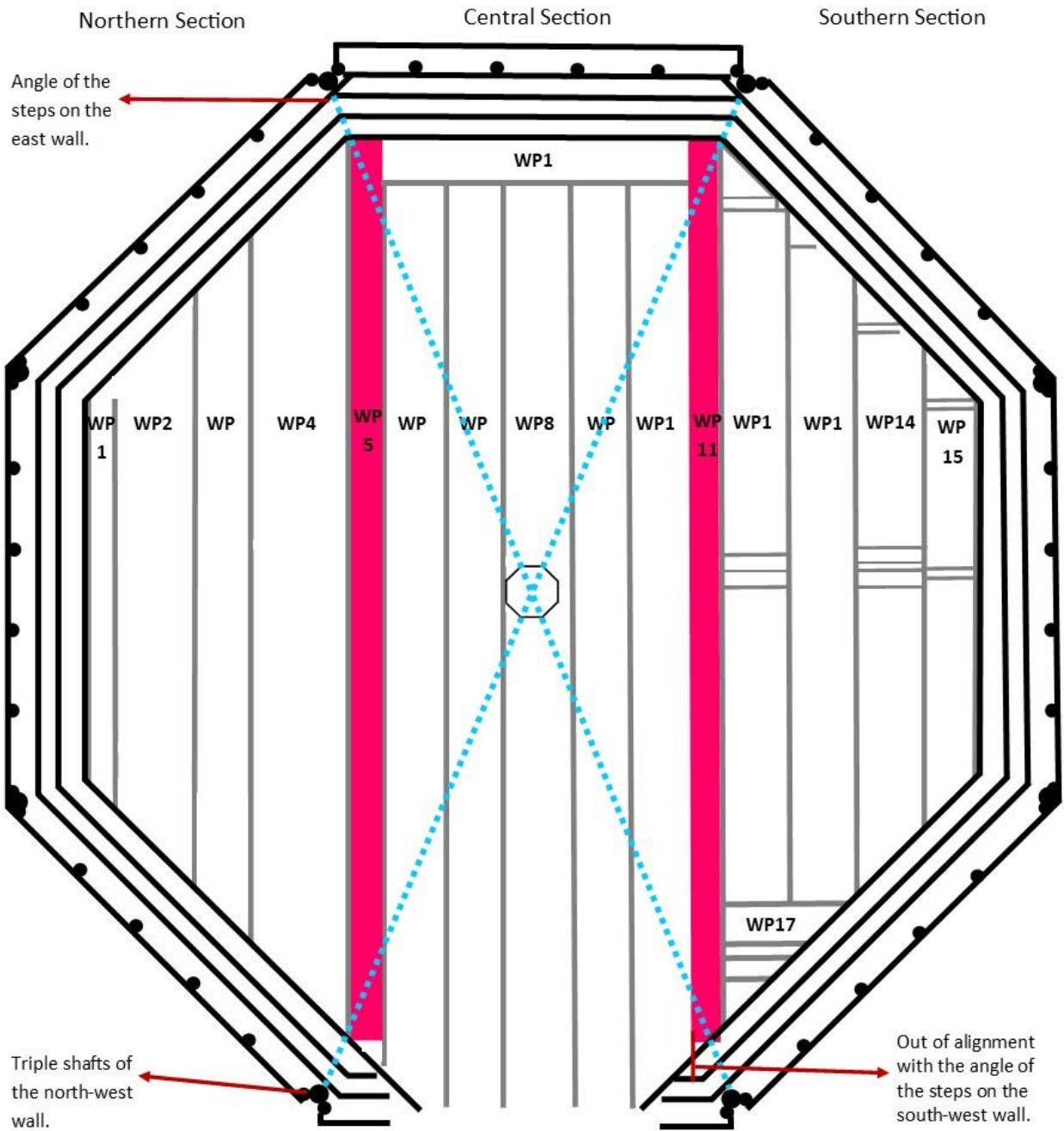
WD32	WP12	180mm	Picture		3	
WD33	WP12, WP14	180mm	Picture		4	
WD34	WP12, WP14	180mm	Picture		2	
WD35	WP12, WP14	180mm	Picture		3	
WD36	WP12, WP14	180mm	Picture		5	

Figure 2.9

Westminster Abbey: plan showing proposed laying-out lines of chapter house pavement.



Westminster Abbey Chapter House

Plan of Chapter House Pavement (Not to Scale)

- Arms of England panels
- Suggested laying out lines



Figure 2.10

Westminster Abbey: view of section of chapter house pavement on the east side of the central column.



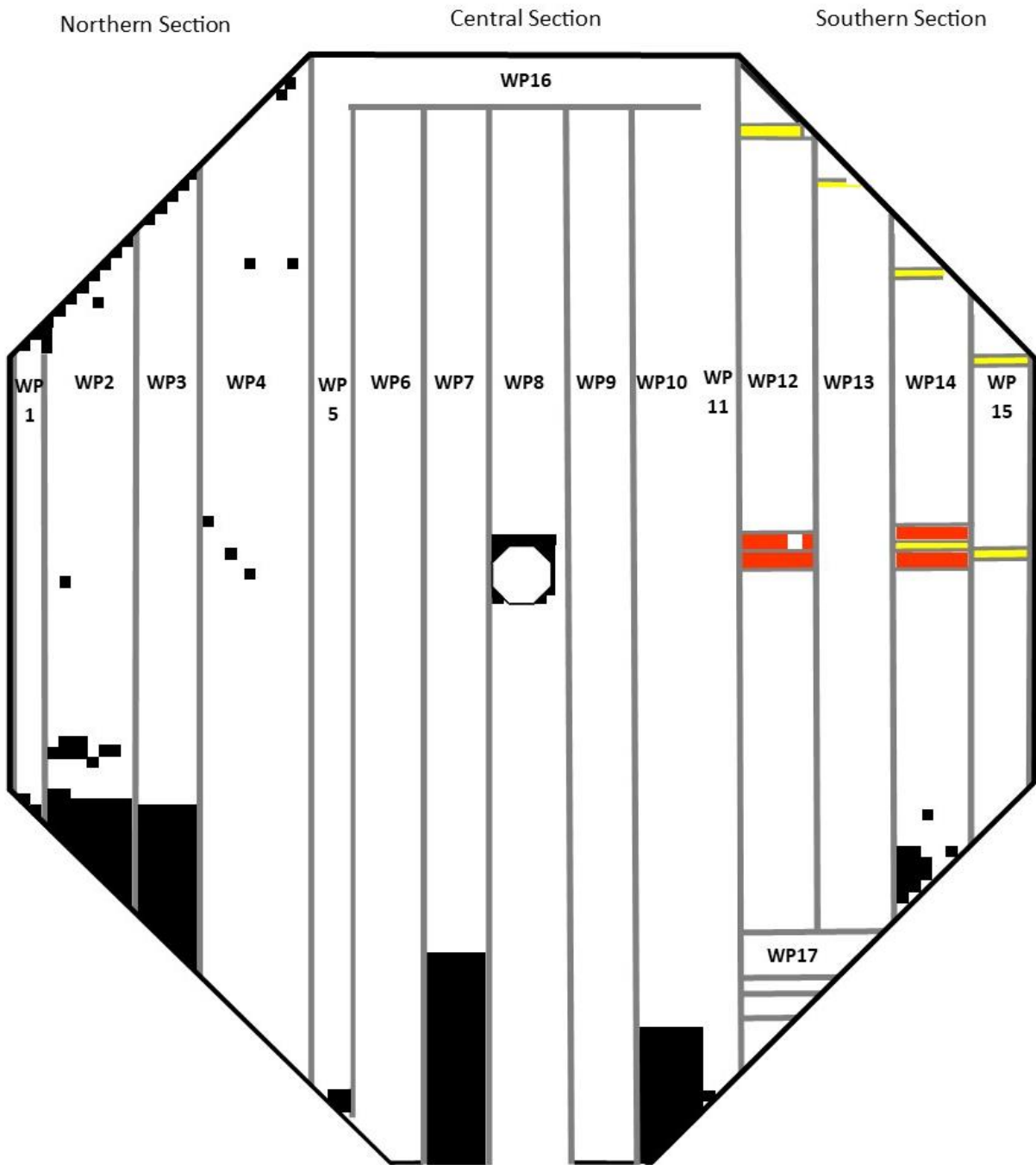
Figure 2.11

Westminster Abbey: Arms of England design, thirteenth century.



Figure 2.12

Westminster Abbey: plan showing changes in tile designs from chapter house pavement.



Westminster Abbey Chapter House

Plan of Chapter House Pavement (Not to Scale)

-  Picture Tiles
-  Inscriptions
-  Different tile designs to rest of panel

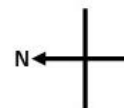
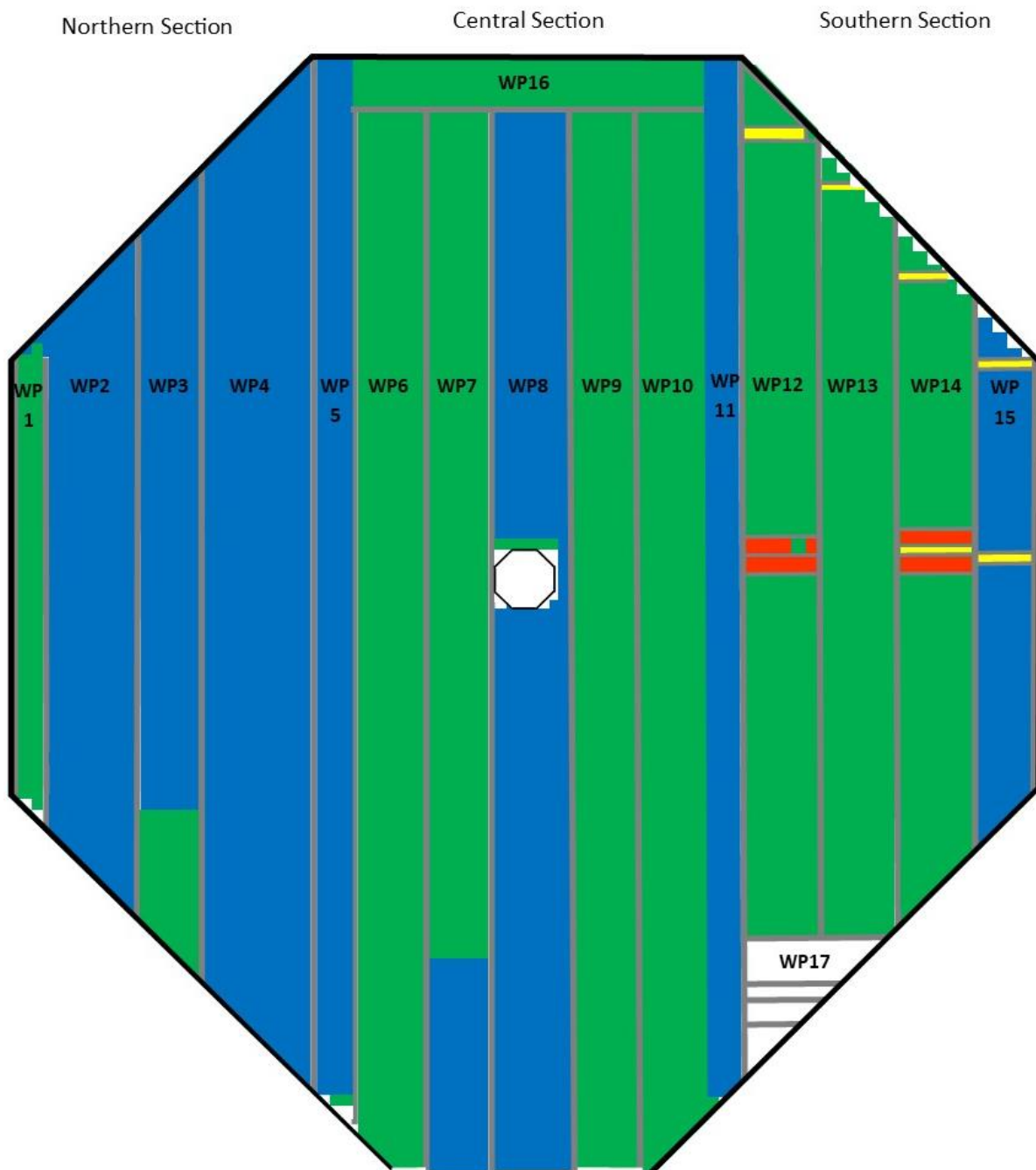


Figure 2.13

Westminster Abbey: plan showing unit of tile design from chapter house pavement.



Westminster Abbey Chapter House

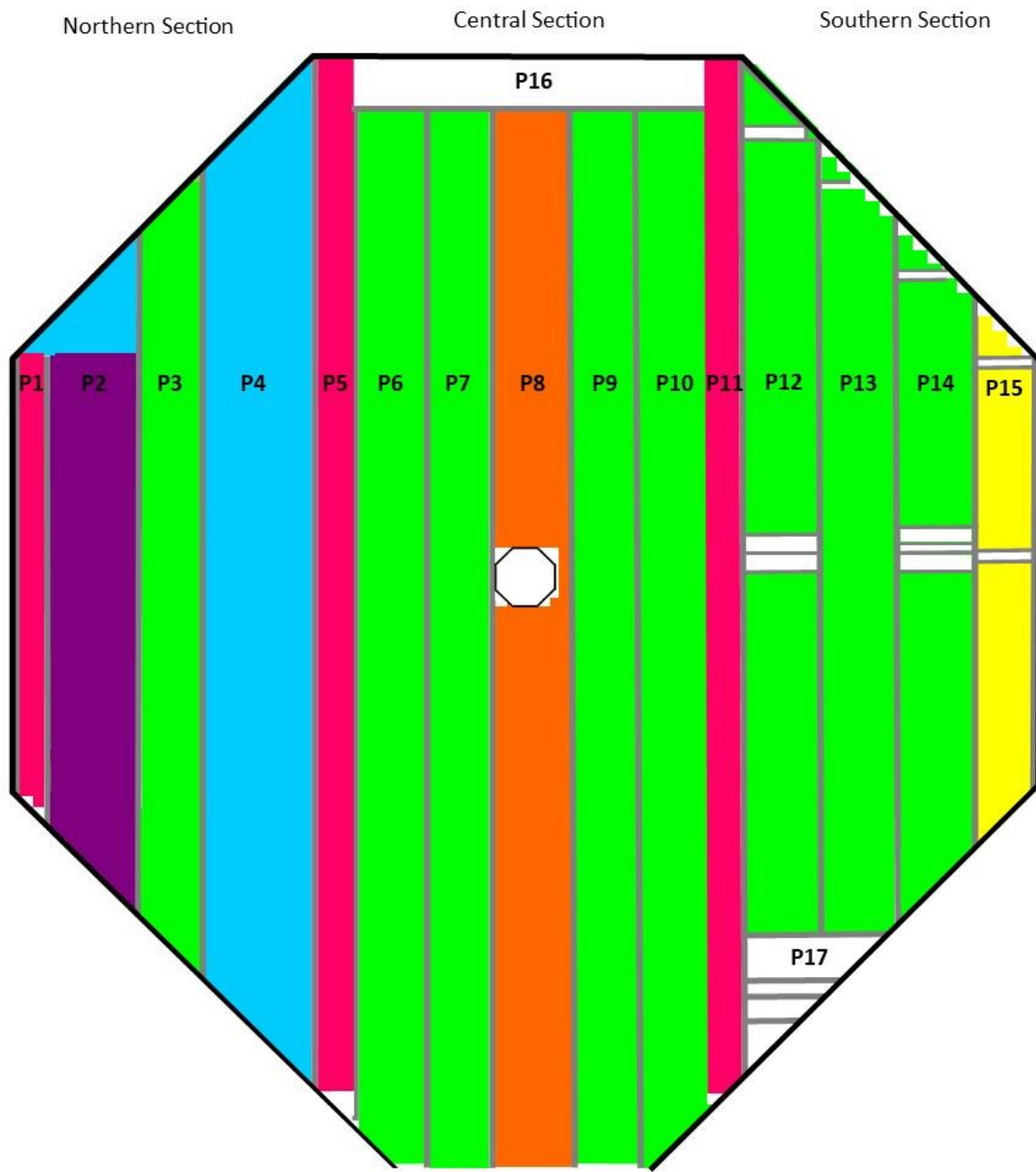
Plan of Chapter House Pavement (Not to Scale)

- Picture Tiles
- Inscriptions
- x1 Tile Design
- x4 Tile Design



Figure 2.14

Westminster Abbey: plan showing width of panels from chapter house pavement.



Westminster Abbey Chapter House

Plan of Chapter House Pavement (Not to Scale)

- 2 Tile Panel Width
- 5 Tile Panel Width
- 6 Tile Panel Width
- 7 Tile Panel Width
- 8 Tile Panel Width
- 10 Tile Panel Width



Figure 2.15
Chertsey Abbey: figural tiles, thirteenth century, British Museum.



Figure 2.16

Westminster Abbey: view of chapter house facing east.



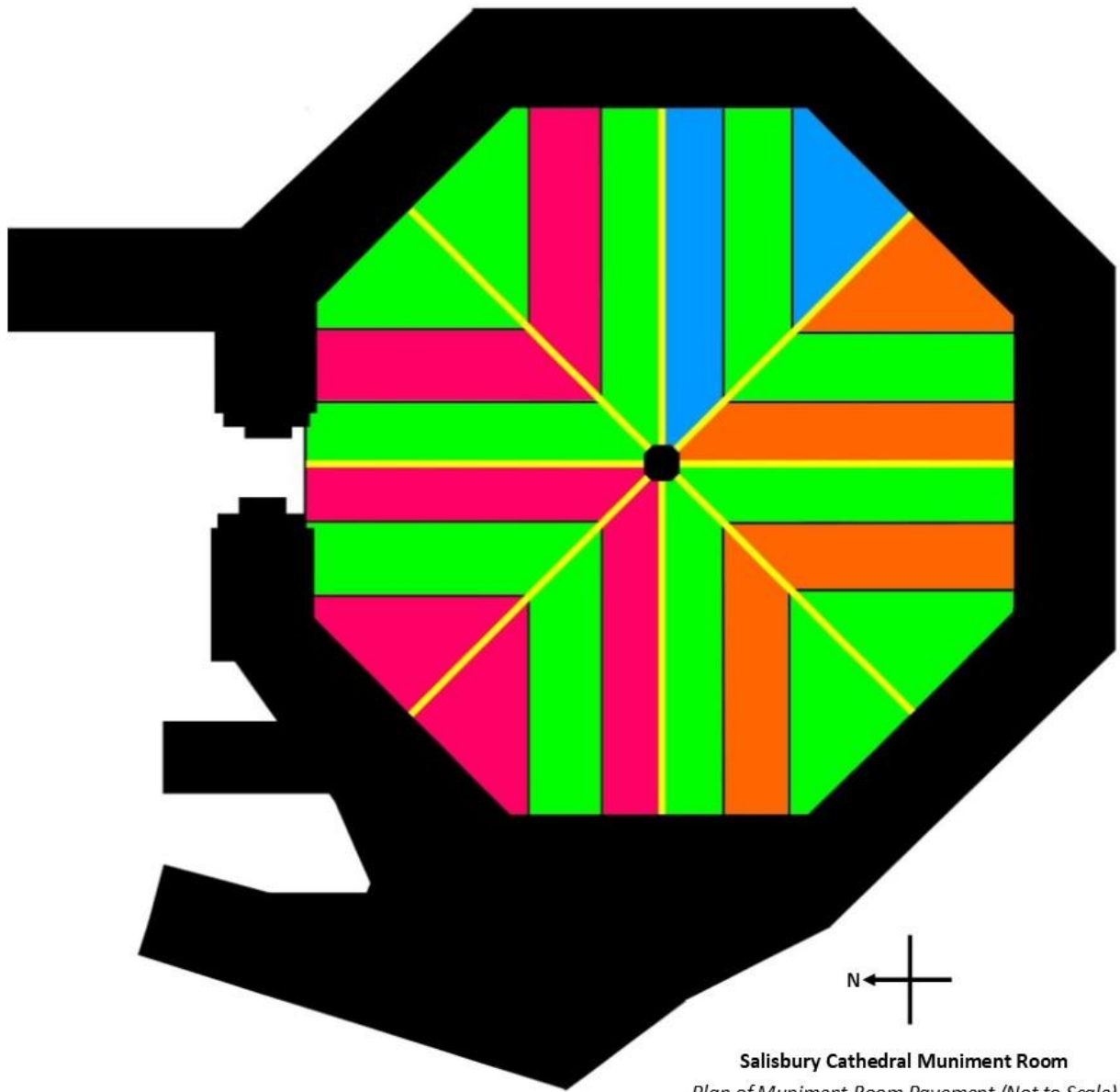
Figure 2.17

Salisbury Cathedral: detail of pavement arrangement around the central column of the muniment room, thirteenth century.



Figure 2.18

Salisbury Cathedral: plan of muniment room pavement, coloured to show distribution of panel designs.



Salisbury Cathedral Muniment Room
Plan of Muniment Room Pavement (Not to Scale)

Figure 2.19

Westminster Abbey: lion tile design, thirteenth century.



Figure 2.20

Westminster Abbey: Edward the Confessor tile design, thirteenth century.



Figure 3.1
Kirkham Priory: view of gatehouse facing south.



Figure 3.2
York Minster: view of nave facing west.

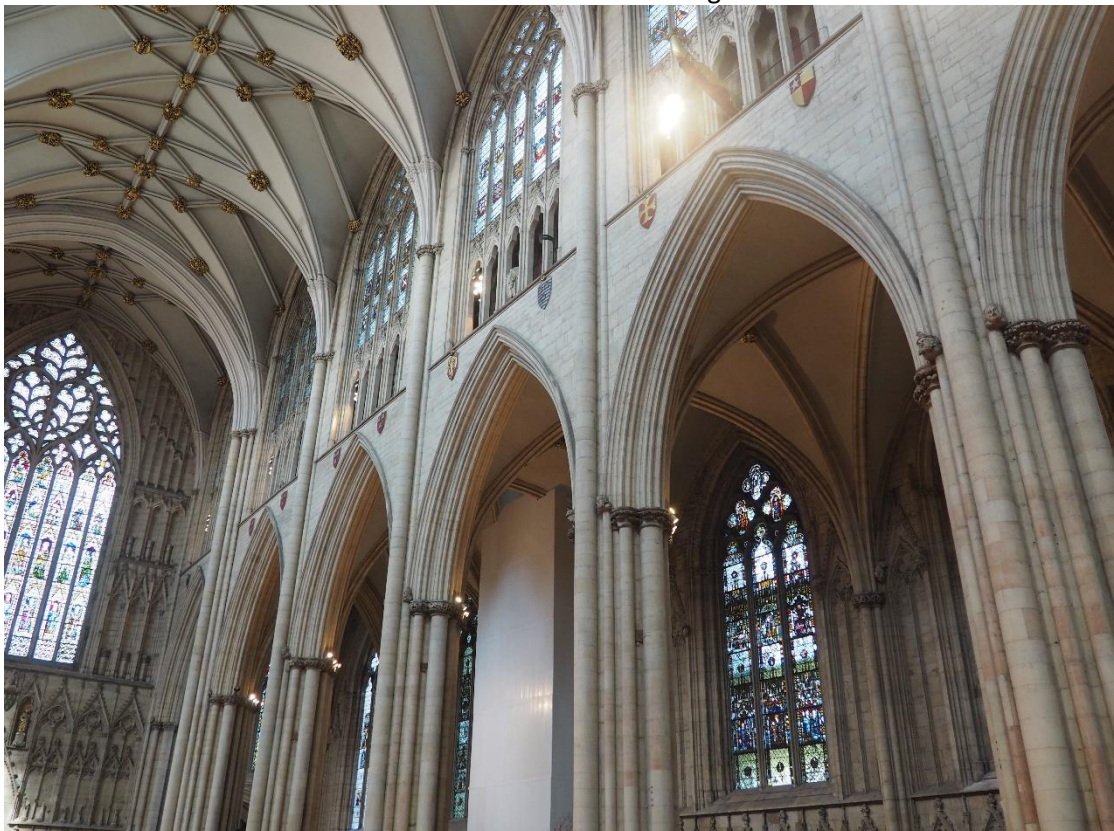


Figure 3.3
Hailes Abbey: view of church facing west.



Figure 3.4
Hailes Abbey: view of chevet at the east end of the church.



Figure 3.5
Hailes Abbey: plan of church.

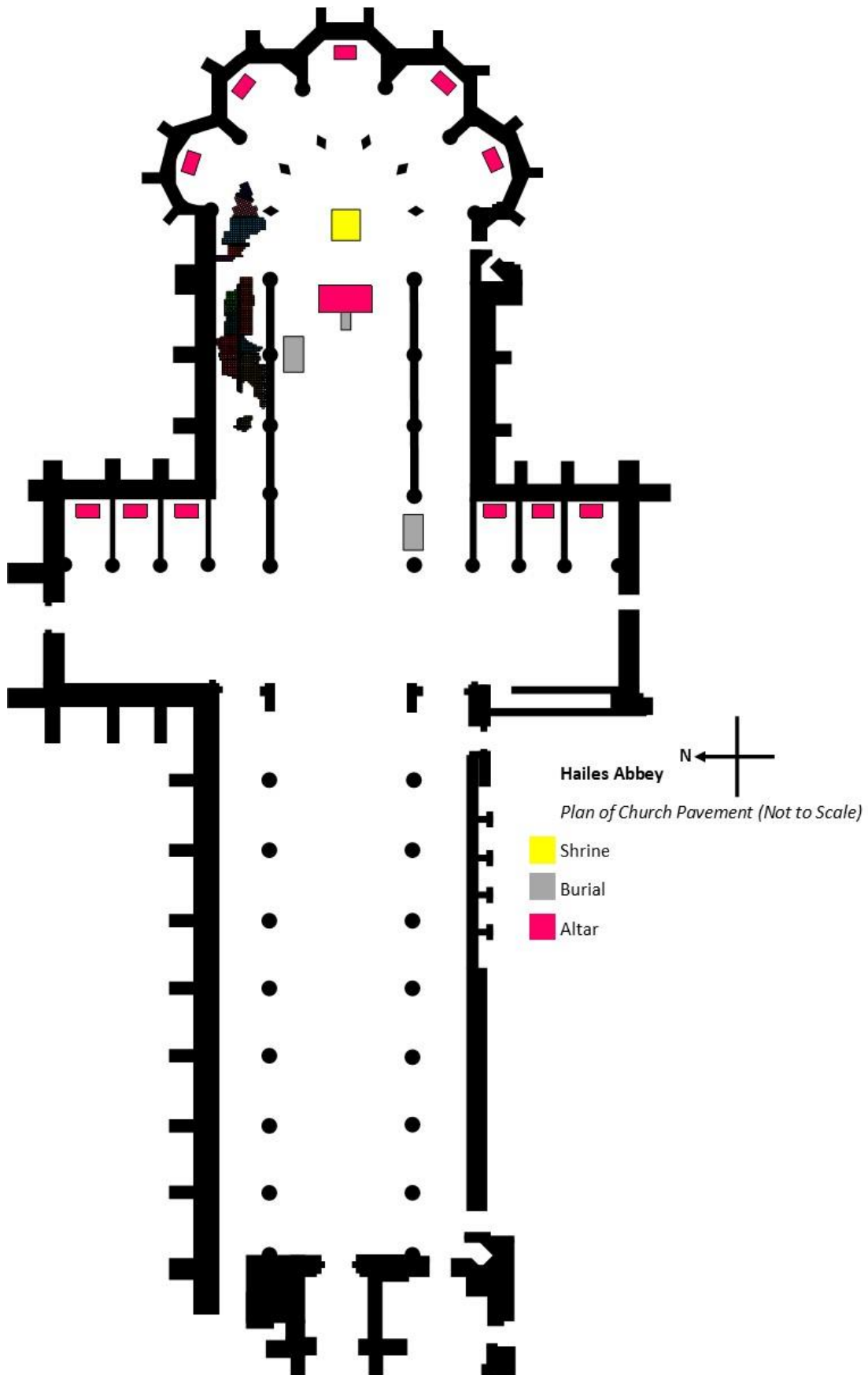
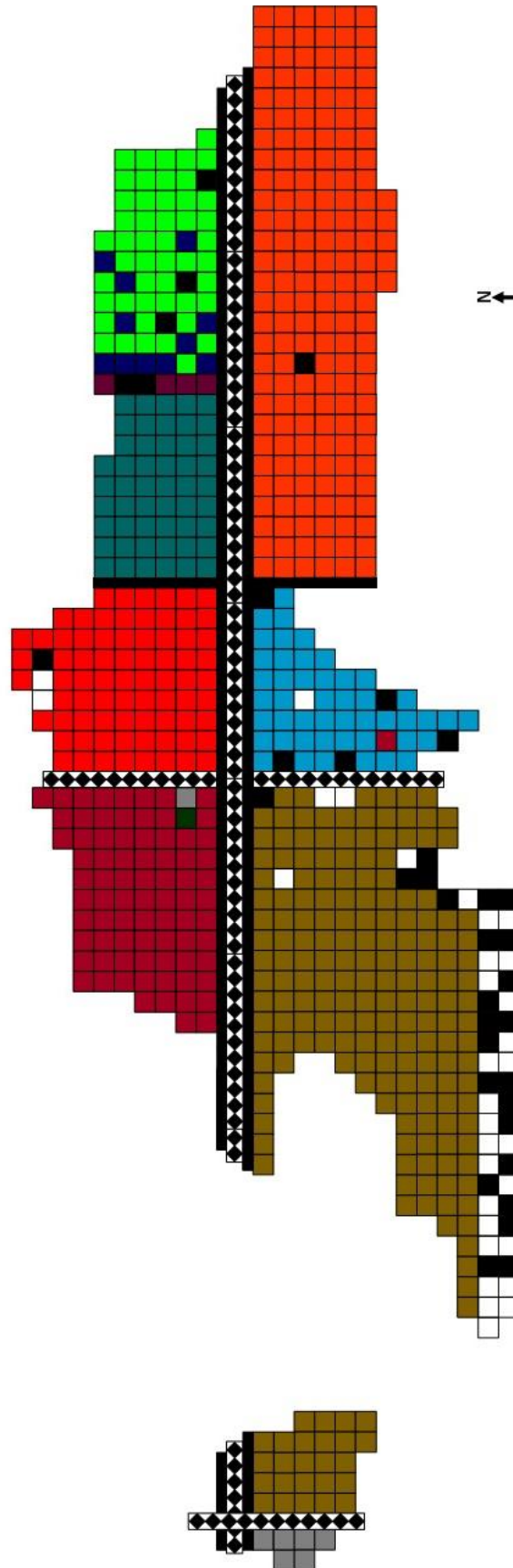


Figure 3.6

Hailes Abbey: plan of Section 1 of church pavement.



Hailes Abbey
Section 1 of Church Pavement (Not to Scale)
See Table of Tile Designs for Key.

Figure 3.7
Hailes Abbey: plan of Section 2 of church pavement.

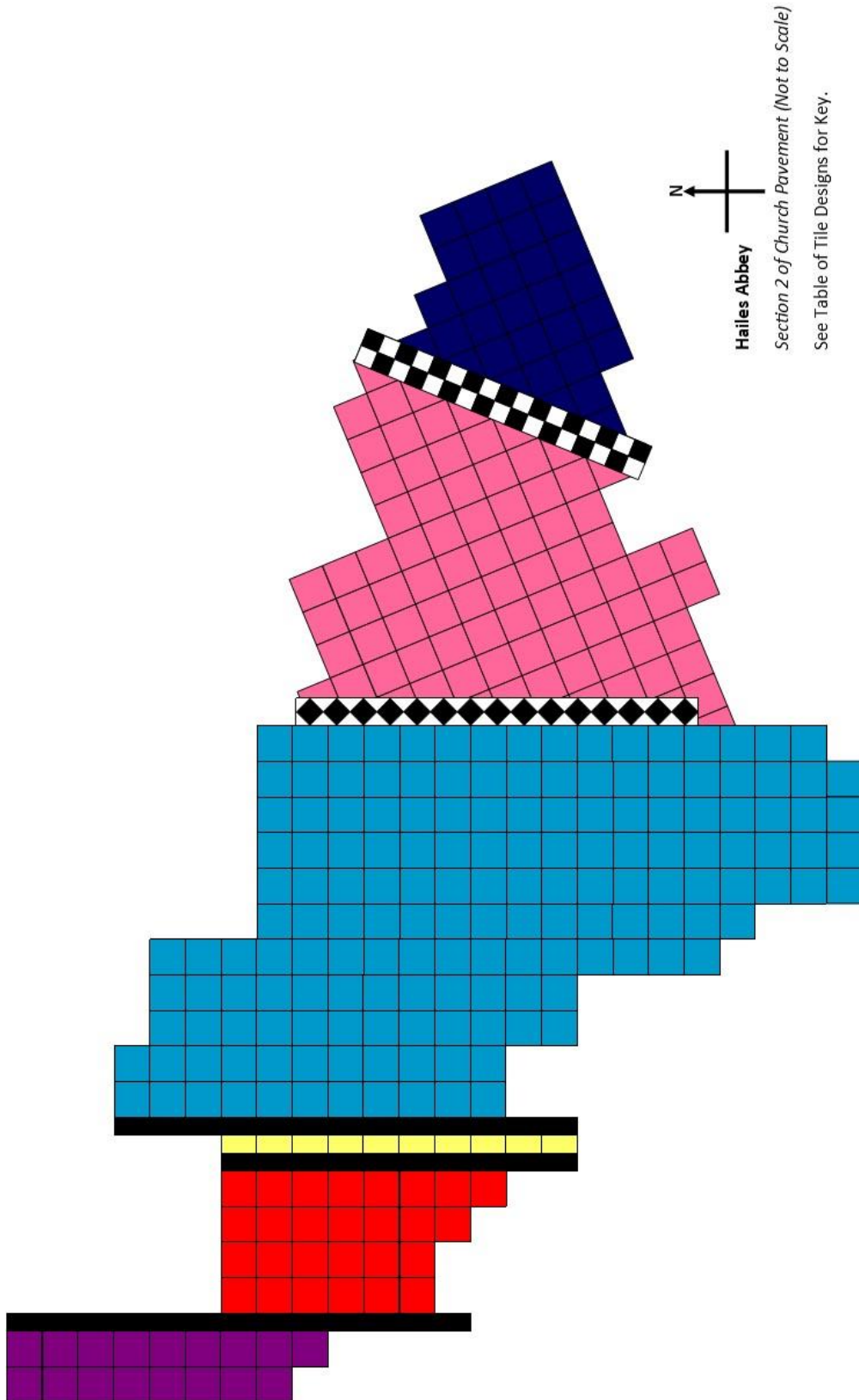


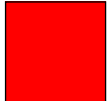














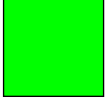











Figure 3.8

Hailes Abbey: table showing tile designs from church pavement.

Design No.	Eames Catalogue No.	Panel No.	Average Width		Description of Design	Heraldic Arms	Key Colour
HD1	1542	HS1, HS2	136mm		Arms of King of Romans x1		
HD2	1525	HS1, HS2	136mm		Arms of Earl of Cornwall and Count of Poitou x1		
HD3	1506	HS2	136mm		Arms of England x1		
HD4	1644	HS2	136mm		Arms of de Clare x1		
HD5	1622	HS1, HS2	136mm		Arms of Sanchia of Provence x1		
HD6	1533	HS1	136mm		Arms of Beatrice von Falkenburg x1		
HD7	1617	HS1	136mm		Arms of de Warenne x1		
HD8	1658	HS1	136mm		Arms of de Ferrers x1		
HD9	1668	HS1	136mm		Arms of Peveril x1		















HD10	1637		136mm		Arms of de Stafford x1		
HD11	1627	HS1	136mm		Arms of Maudit x1		
HD12	1605	HS1	136mm		Arms of Beauchamp x1		
HD13	1948	HS1	136mm		Design based on Arms of King of Romans x1		
HD14	1634	HS1	136mm		Unknown coat of arms x1		
HD15	1633		136mm		Unknown coat of arms x1		

Figure 3.9
Plan showing the Cornwall family tree.

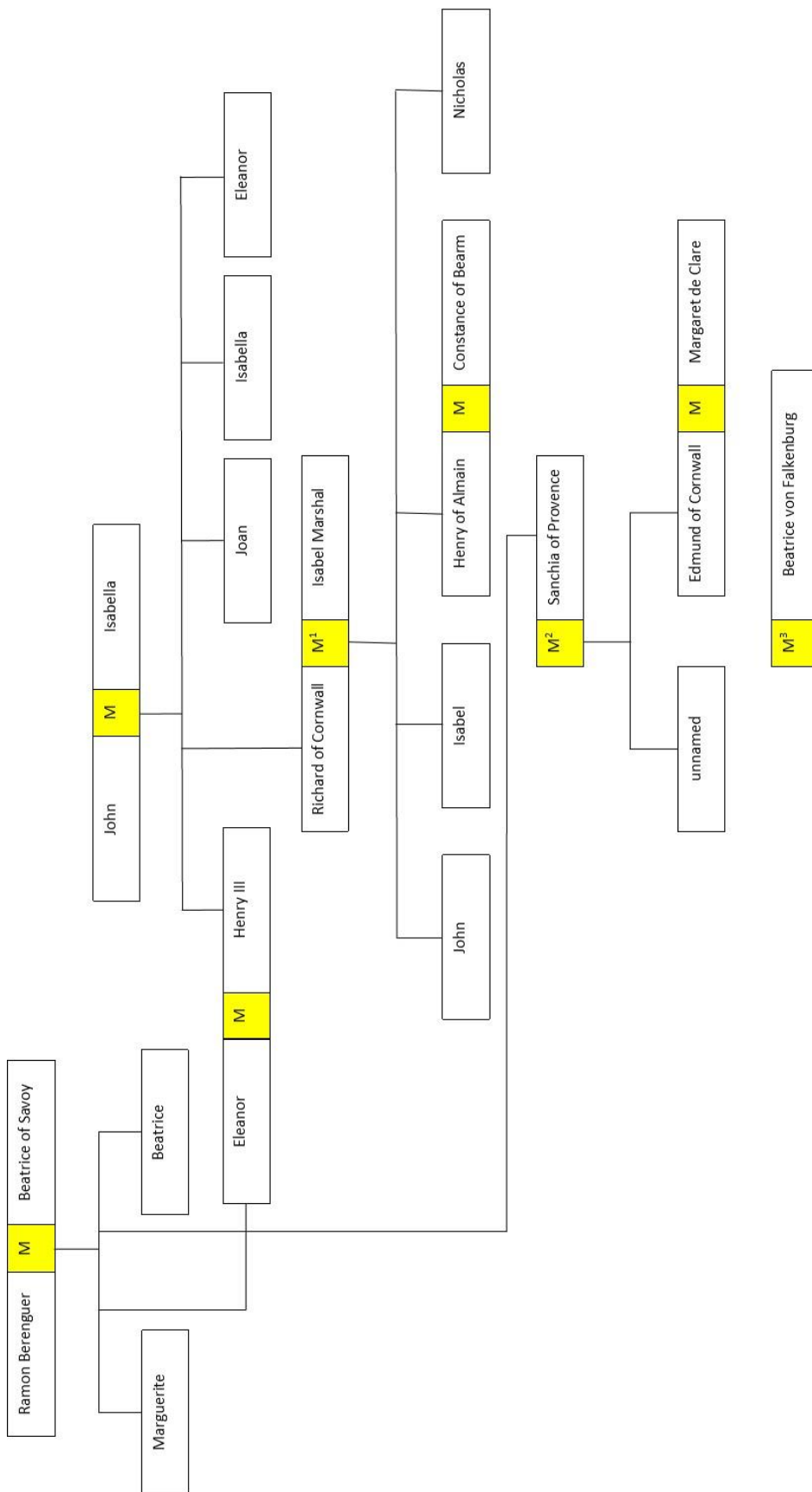


Figure 3.10
Plan showing the Clare family tree.

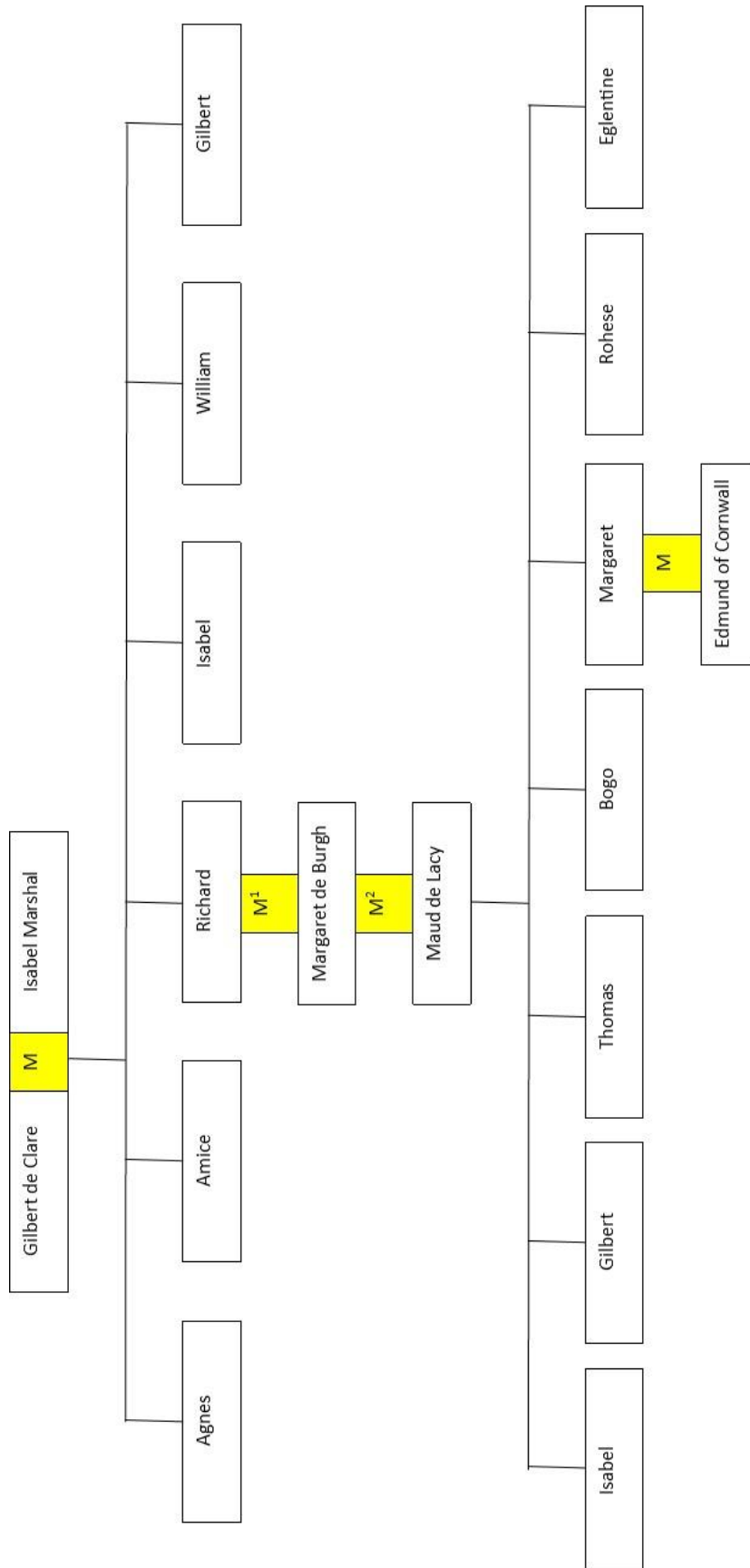


Figure 3.11
Plan showing the Marshal family tree.

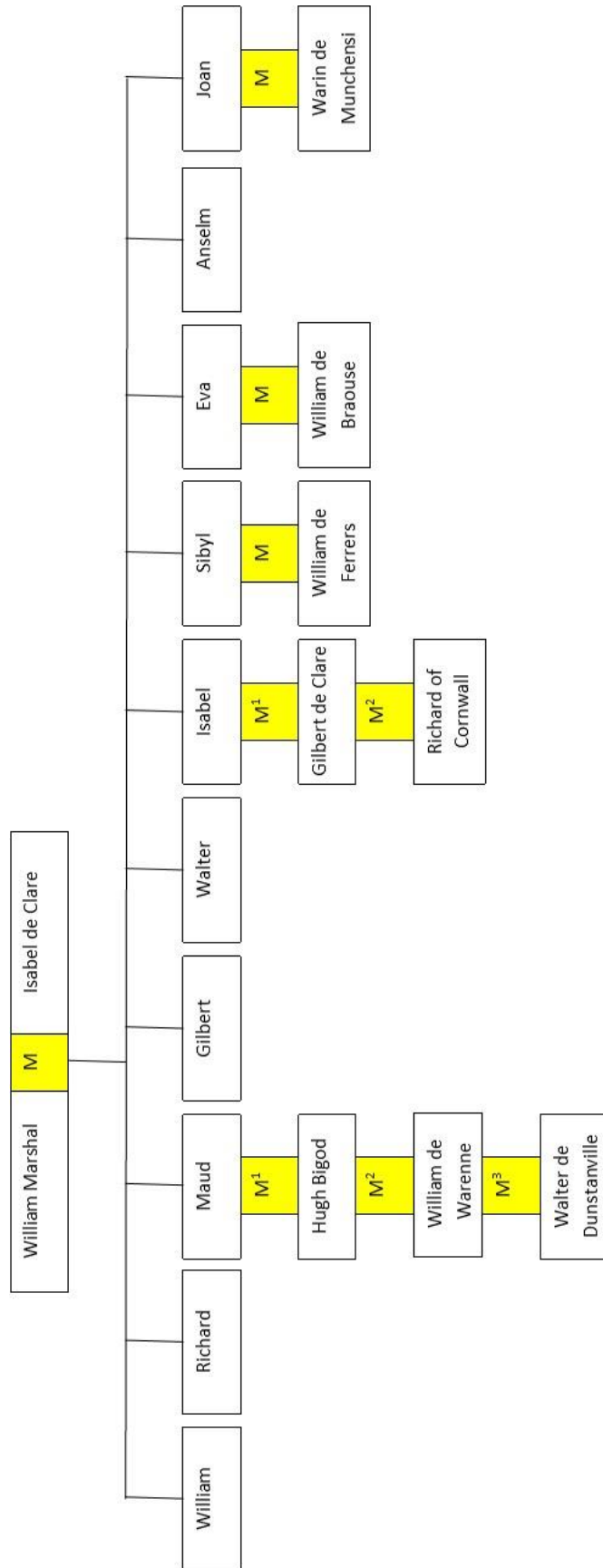


Figure 3.12

Plan showing relationship between Peveril and Stafford families.

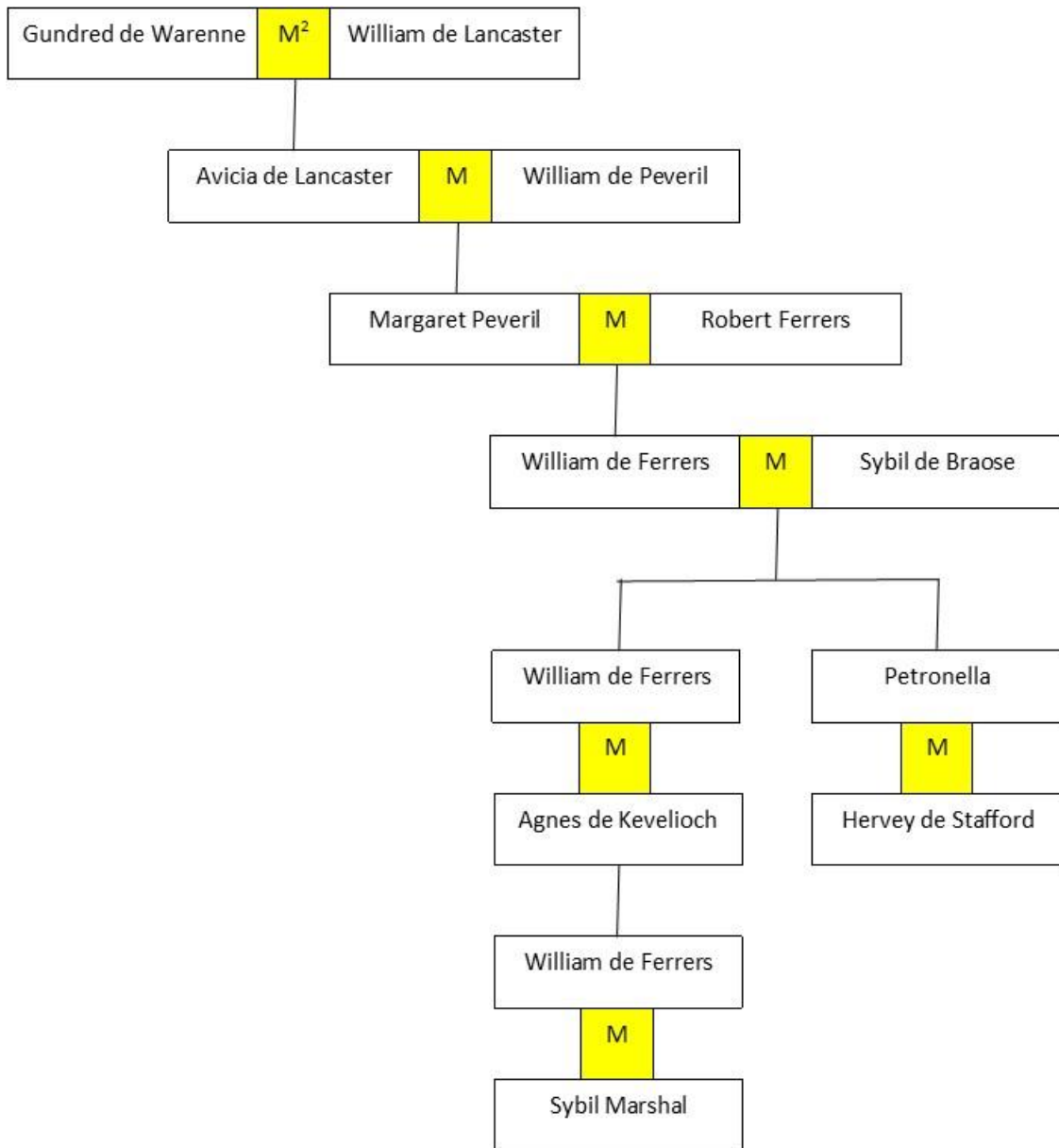


Figure 3.13

Plan showing relationship between Maudit and Beauchamp families.

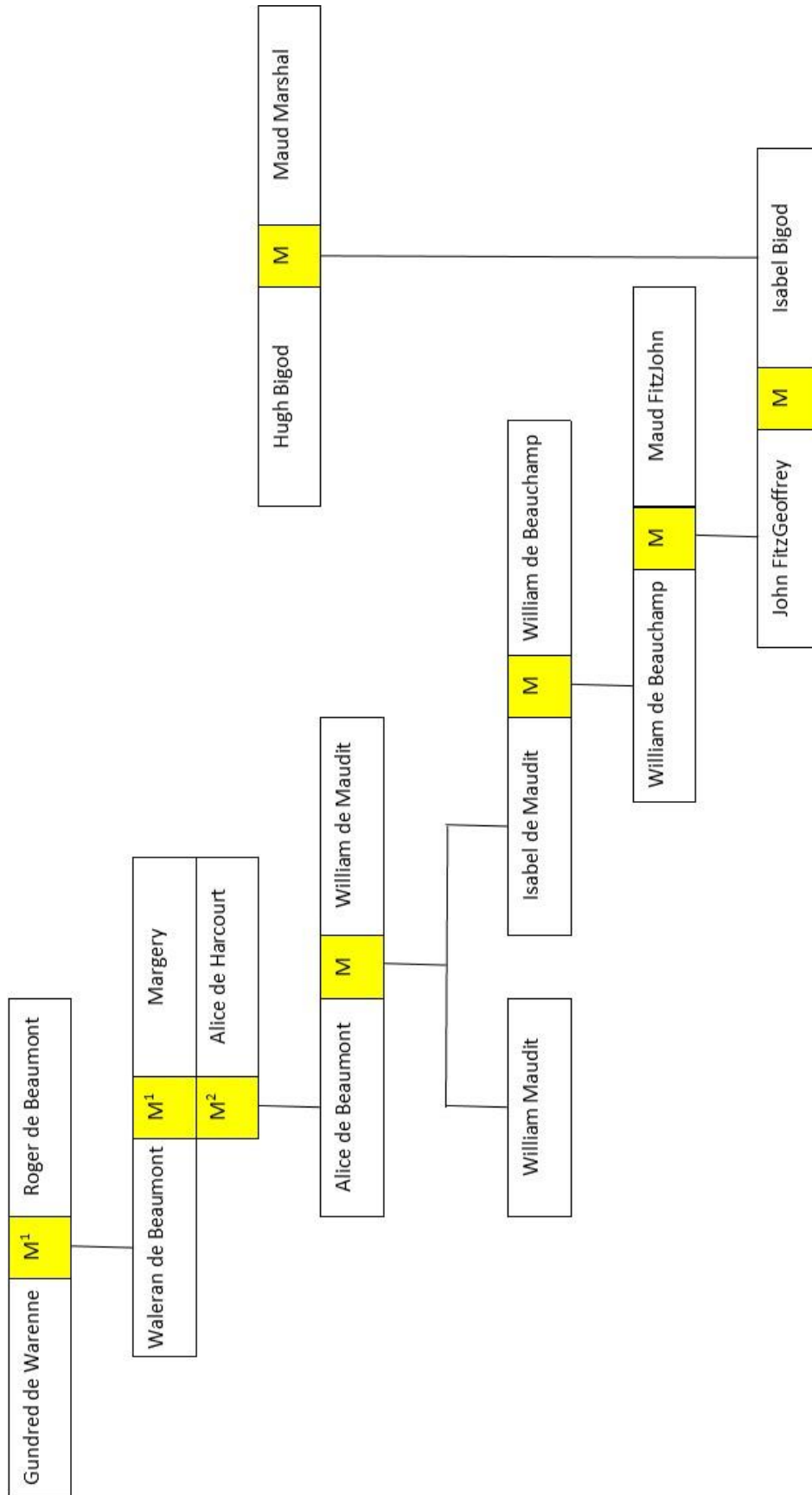


Figure 3.14

Hailes Abbey: plan of church pavement showing relationship with architectural features.

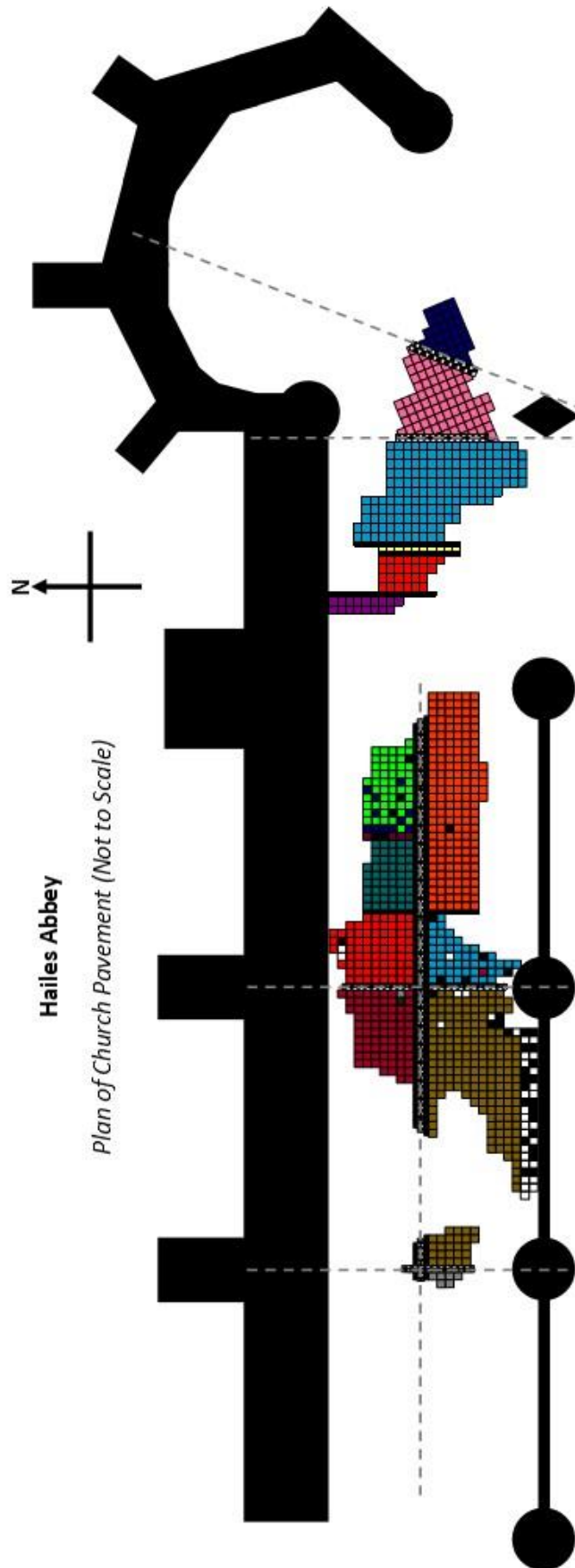


Figure 3.15
Hailes Church: heraldic wall paintings, fourteenth-century.



Figure 3.16

Hailes Abbey: heraldic tile design for the Earl of Cornwall, thirteenth century, Hailes Church.



Figure 3.17

Hailes Abbey: heraldic tile design for the King of England, thirteenth century, Hailes Church.



Figure 3.18

Hailes Abbey: heraldic tile designs for the King of the Romans and Sanchia of Provence, thirteenth century, Hailes Church.



Figure 3.19

Hailes Abbey: heraldic tile design for Isabel Marshal, thirteenth century, Hailes Church.



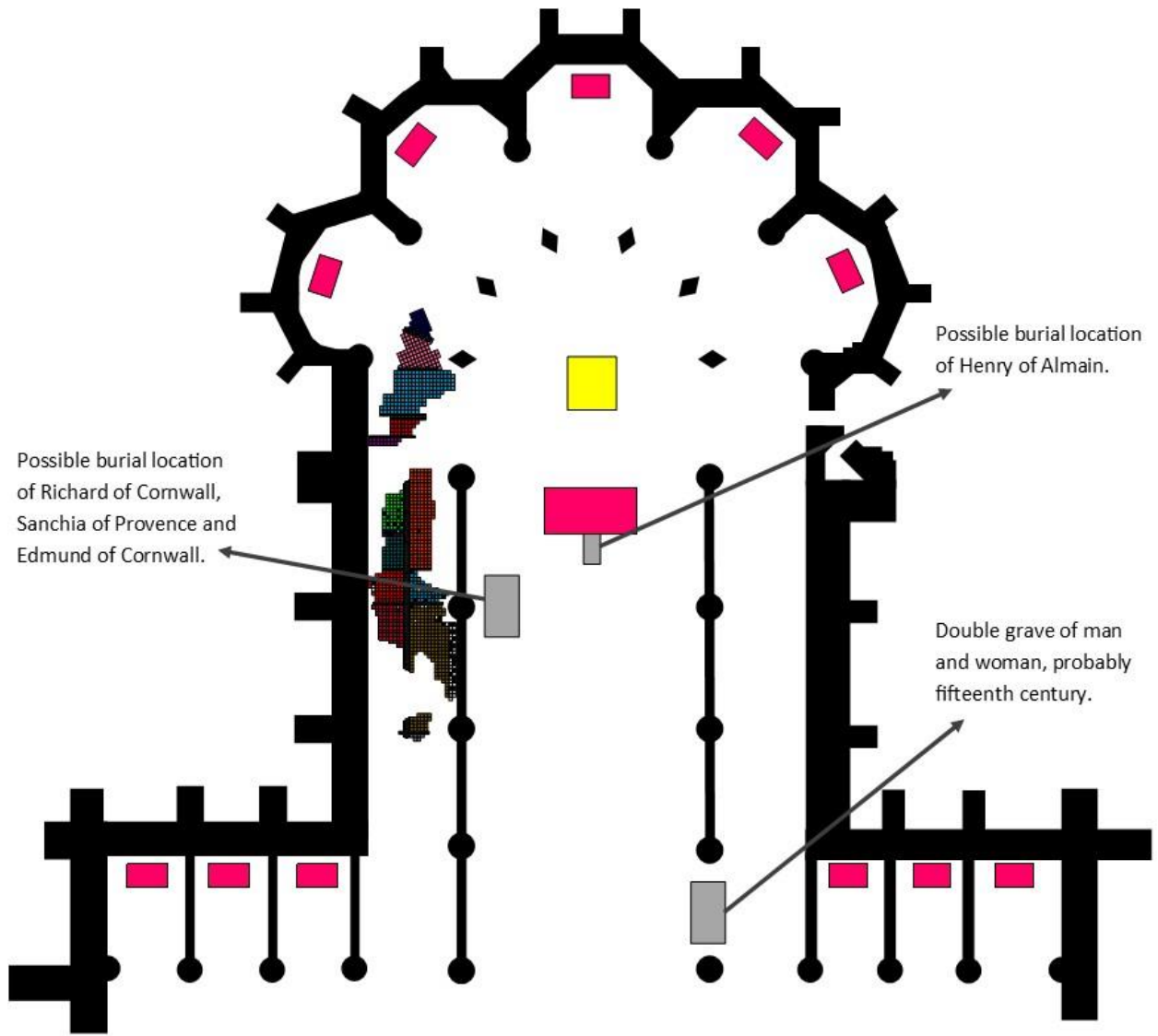
Figure 3.20

Croxden Abbey: view of chevet at the east end of the church.



Figure 3.21

Hailes Abbey: plan of east end of church, annotated to show burials.



Possible burial location of Richard of Cornwall, Sanchia of Provence and Edmund of Cornwall.

Possible burial location of Henry of Almain.

Double grave of man and woman, probably fifteenth century.

Hailes Abbey

Plan of Church Pavement (Not to Scale)

- Shrine
- Burial
- Altar

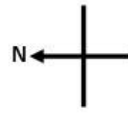


Figure 3.22

Hailes Abbey: fragments from funerary monument possibly belonging to Richard of Cornwall, thirteenth century.



Figure 3.23

Cleeve Abbey: view of refectory pavement facing north.



Figure 3.24

Cleeve Abbey: table showing tile designs from refectory pavement.




















Design No.	Panel No.	Average Width	Type of Design		Description of Design	Heraldic Arms	Key
CD1	CP1, CP4	200mm	x1		Arms of England		
CD2	CP1, CP2, CP4	200mm	x1		Arms of Earl of Cornwall and Count of Poitou		
CD3	CP1, CP2, CP4	200mm	x1		Arms of de Clare		
CD4	CP5	155mm	x1		Arms of de Warenne		
CD5	CP3	155mm	x1				
CD6	CP5	155mm	x1				
CD7	CP3	155mm	x1		Arms of King of Romans (?)		

Figure 3.25
Cleeve Abbey: plan of refectory pavement.

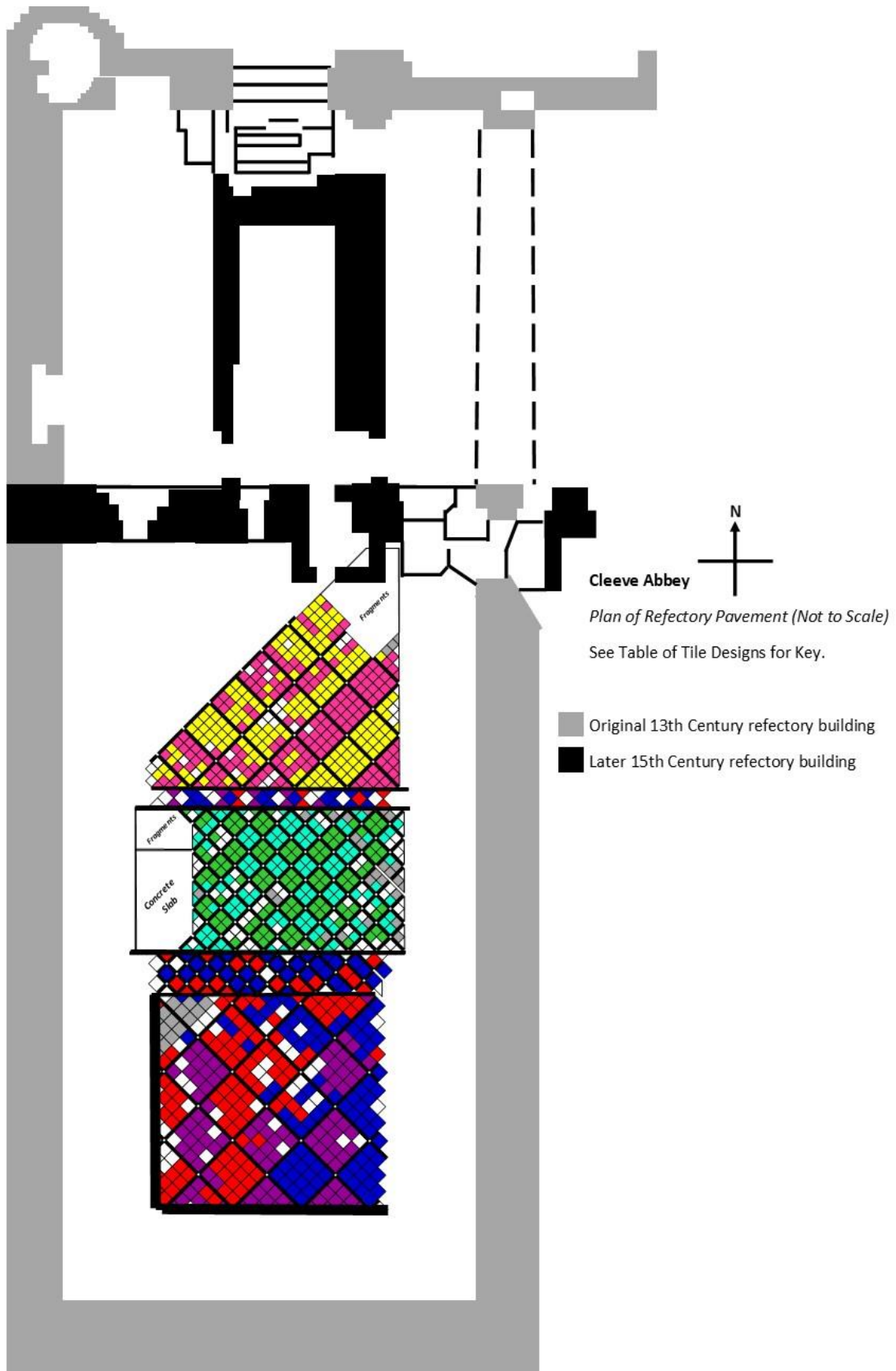


Figure 3.26

Cleeve Abbey: view of northern section of refectory pavement facing east.



Figure 3.27

Cleeve Abbey: view of central section of refectory pavement facing east.



Figure 3.28

Cleeve Abbey: tile designs CD5 and CD7, thirteenth century.



Figure 3.29

Cleeve Abbey: view of southern section of refectory pavement facing east.



Figure 3.30
Cleeve Abbey: Arms of England heraldic tiles, thirteenth century.



Figure 3.31
Hailes Abbey: detail of reassembled pavement from church and chapter house, sixteenth-century.



Figure 3.32

Hailes Abbey: heraldic tile design for the Earl of Cornwall, sixteenth century.



Figure 4.1

Plans showing processional stones at Fountains Abbey, Wells Cathedral and York Minster.

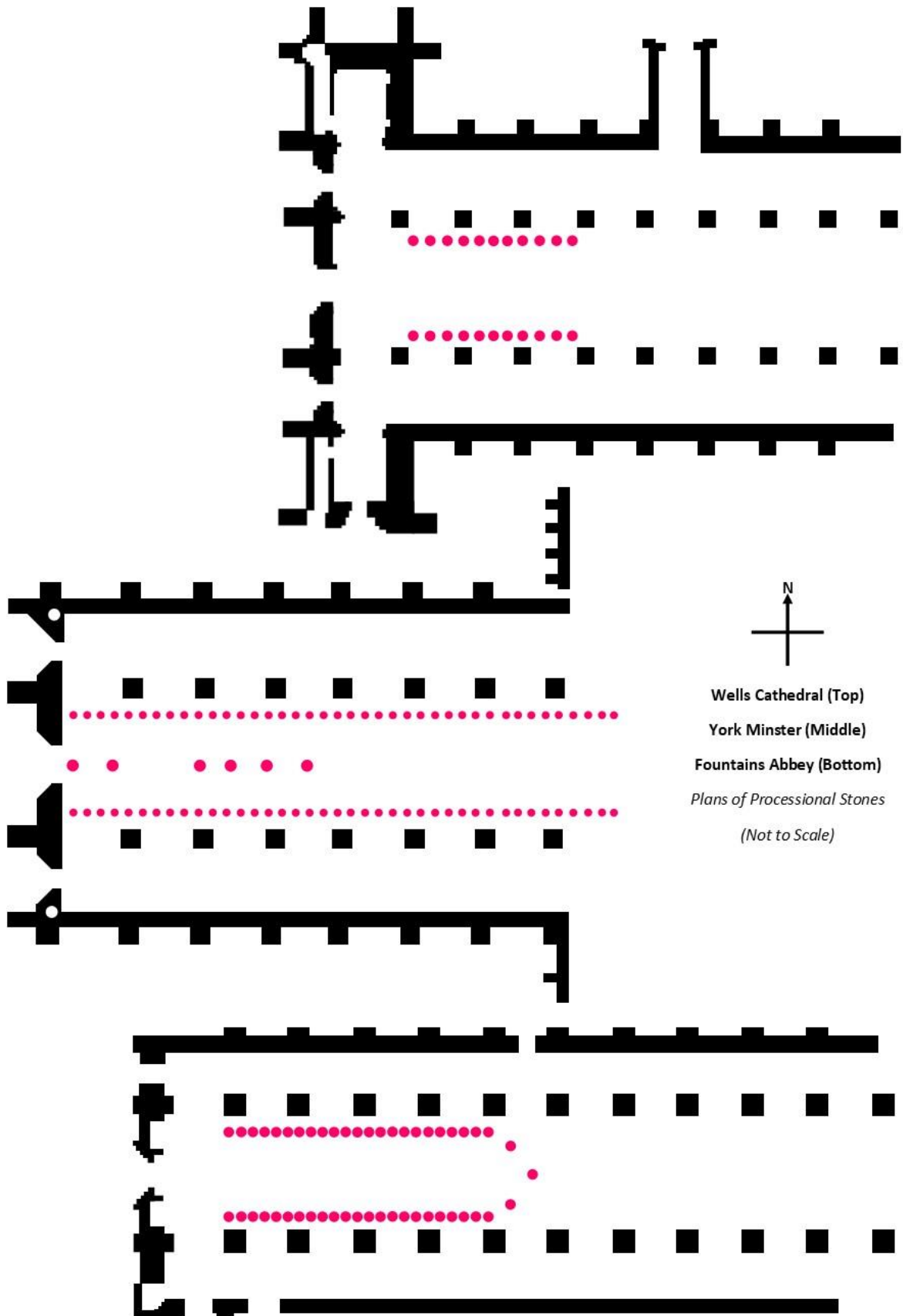


Figure 4.2

Titchfield Abbey: plan showing location of inscriptions in cloister pavement.

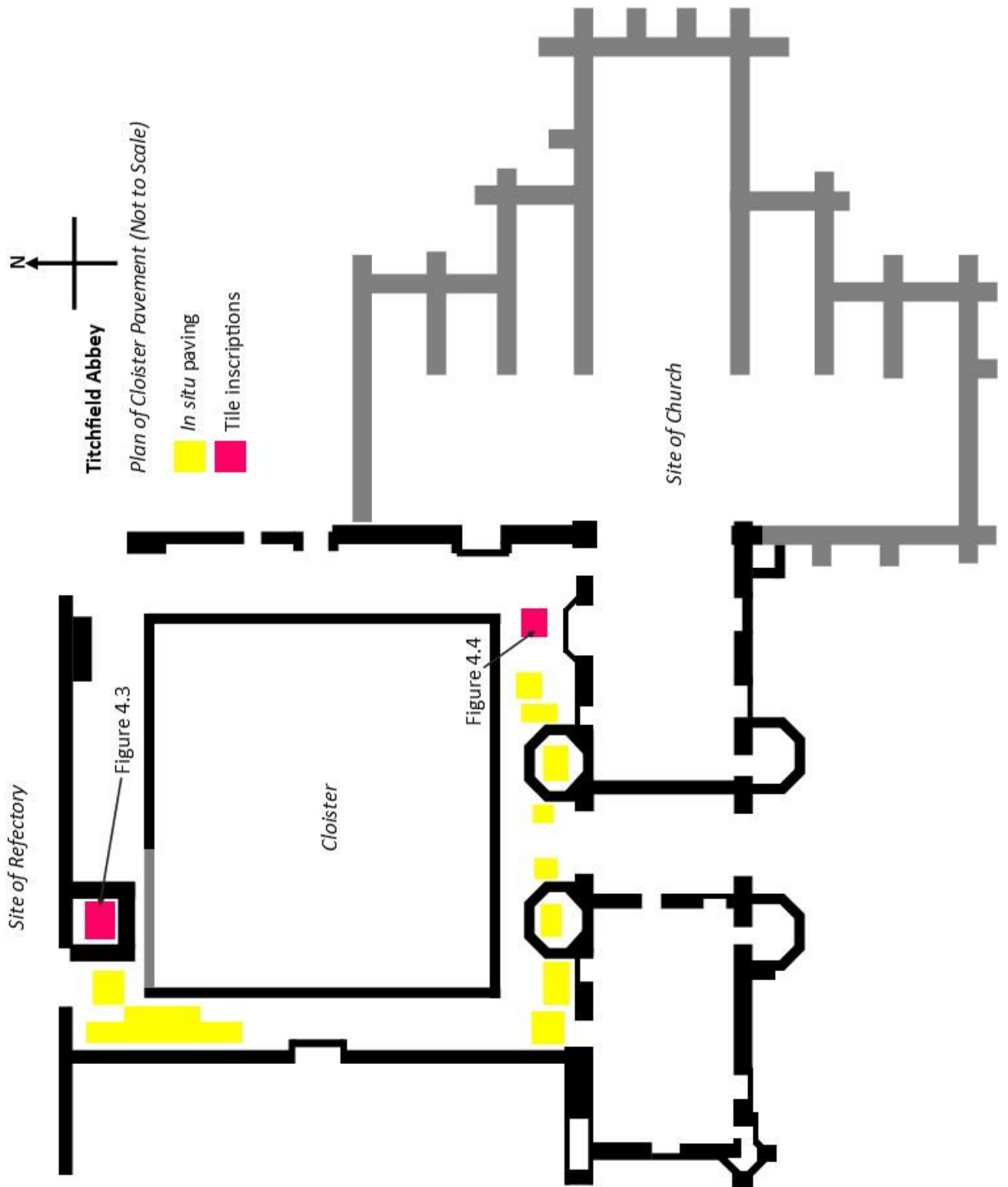


Figure 4.3

Titchfield Abbey: tile inscription outside the refectory, fourteenth century.



Figure 4.4

Titchfield Abbey: tile inscription outside the north transept, fourteenth century.



Figure 4.5
Jervaulx Abbey: view of church facing east.



Figure 4.6
Drawing of Roundel A from Jervaulx Abbey by John Ward, 1845.
© York Museums Trust (Yorkshire Museum).



Figure 4.7

Drawing of square tile panel from Jervaulx Abbey by John Ward, 1845.
© York Museums Trust (Yorkshire Museum).



Figure 4.8

Jervaulx Abbey: relaid tiles now missing from the site, thirteenth century.



Figure 4.9

Kirkstall Abbey: detail of Decorated Mosaic roundel relaid in the refectory pavement, thirteenth century.



Figure 4.10

Kirkstall Abbey: Decorated Mosaic roundels relaid in the south transept pavement, thirteenth century.



Figure 4.11

Muchelney Abbey: two-colour roundel, thirteenth century, Church of St Peter and St Paul, Muchelney.



Figure 4.12

Drawing of Roundel B from Jervaulx Abbey by John Ward, 1845.
© York Museums Trust (Yorkshire Museum).



Figure 4.13

Byland Abbey: Plain Mosaic roundel, thirteenth century.



Figure 4.14

Detail from drawing of Roundel C from Jervaulx Abbey by John Ward, 1845.

© York Museums Trust (Yorkshire Museum).



Figure 4.15

Westminster Abbey: *opus sectile* roundel from Cosmati sanctuary pavement, thirteenth century.



Figure 4.16

Byland Abbey: detail of Plain Mosaic tile riser on presbytery step, thirteenth century.



Figure 4.17
 Jervaulx Abbey: plan of church pavement.

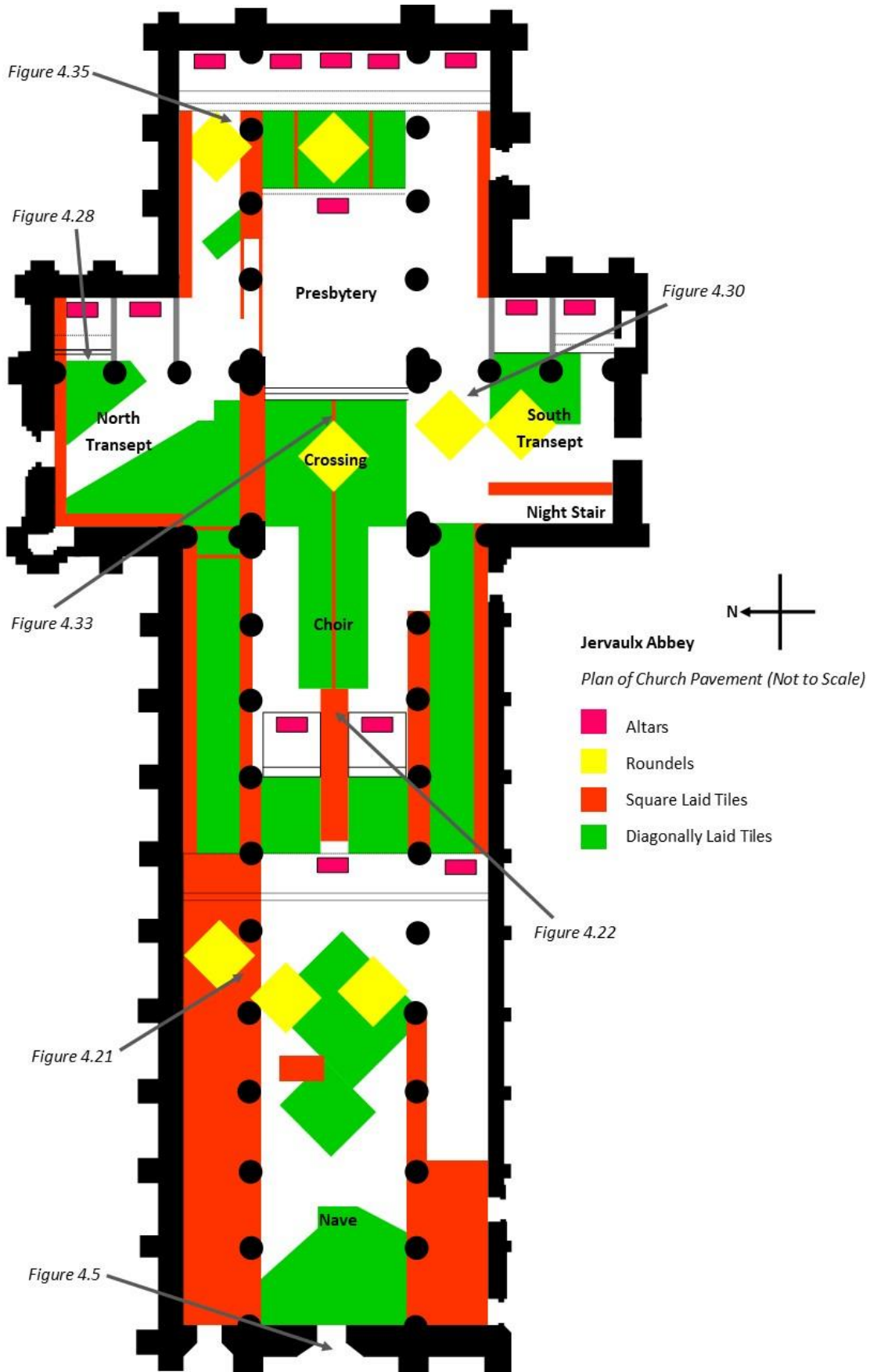


Figure 4.18
Rievaulx Abbey: plan of church pavement.

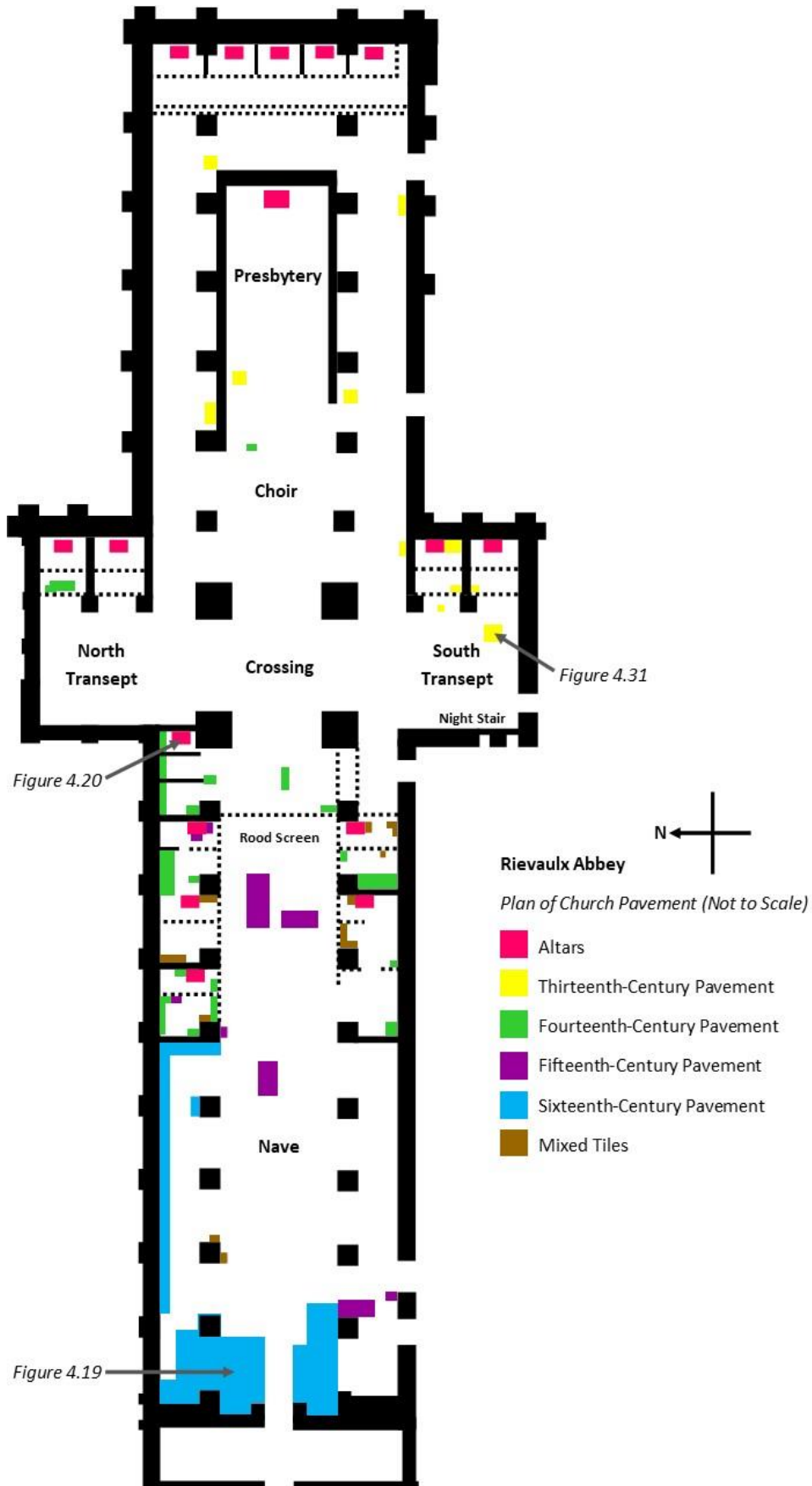


Figure 4.19

Rievaulx Abbey: plain glazed tile pavement at the west end of the nave, sixteenth century.



Figure 4.20

Rievaulx Abbey: chapel pavement in north nave aisle, fourteenth century.



Figure 4.21

Jervaulx Abbey: view of north nave aisle facing east.



Figure 4.22

Jervaulx Abbey: view of chapels adjacent to the choir facing west.



Figure 4.23
Byland Abbey: view of south choir aisle facing east.



Figure 4.24
Byland Abbey: plan of church pavement.

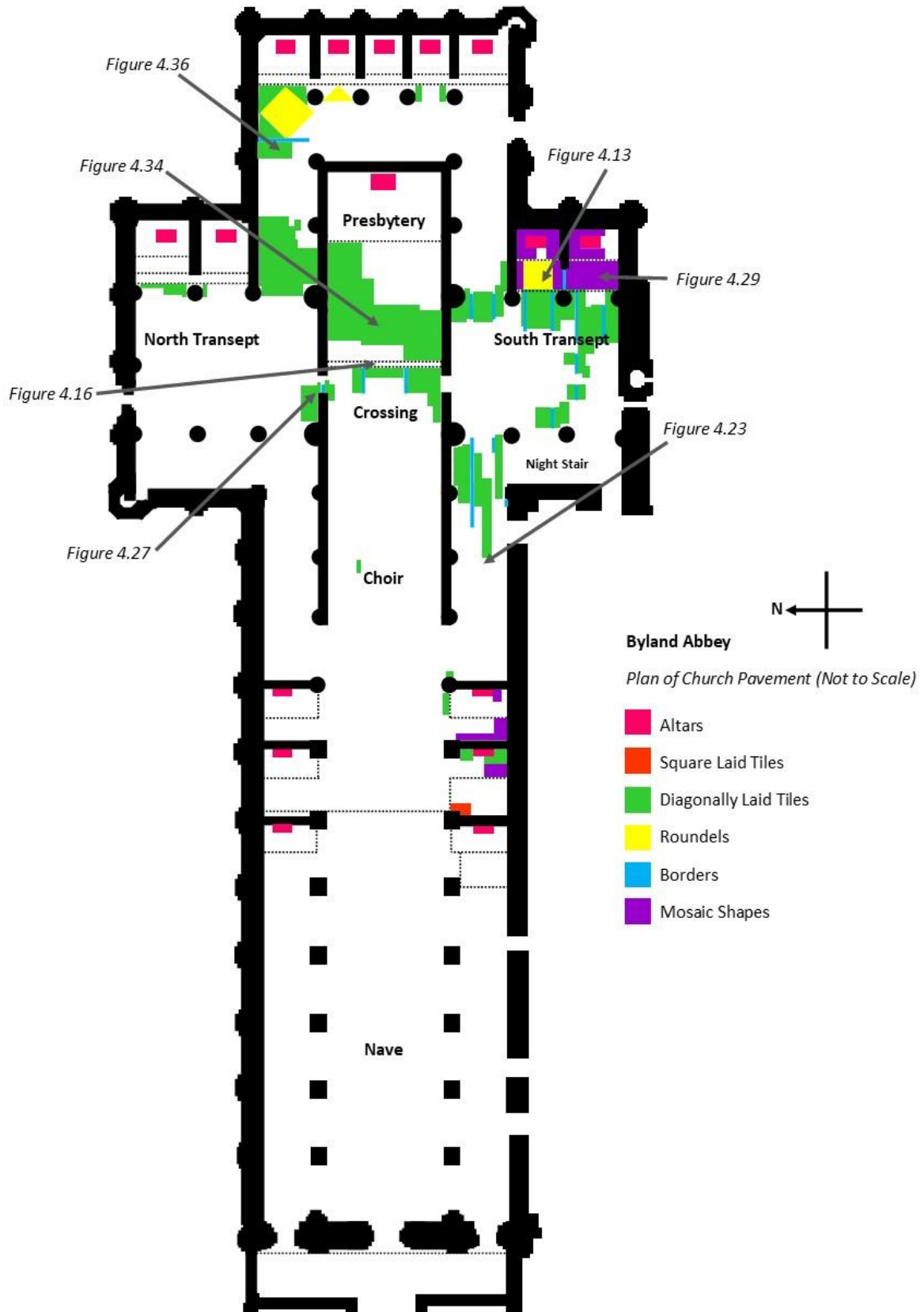


Figure 4.25
Bordesley Abbey: plan of church pavement.

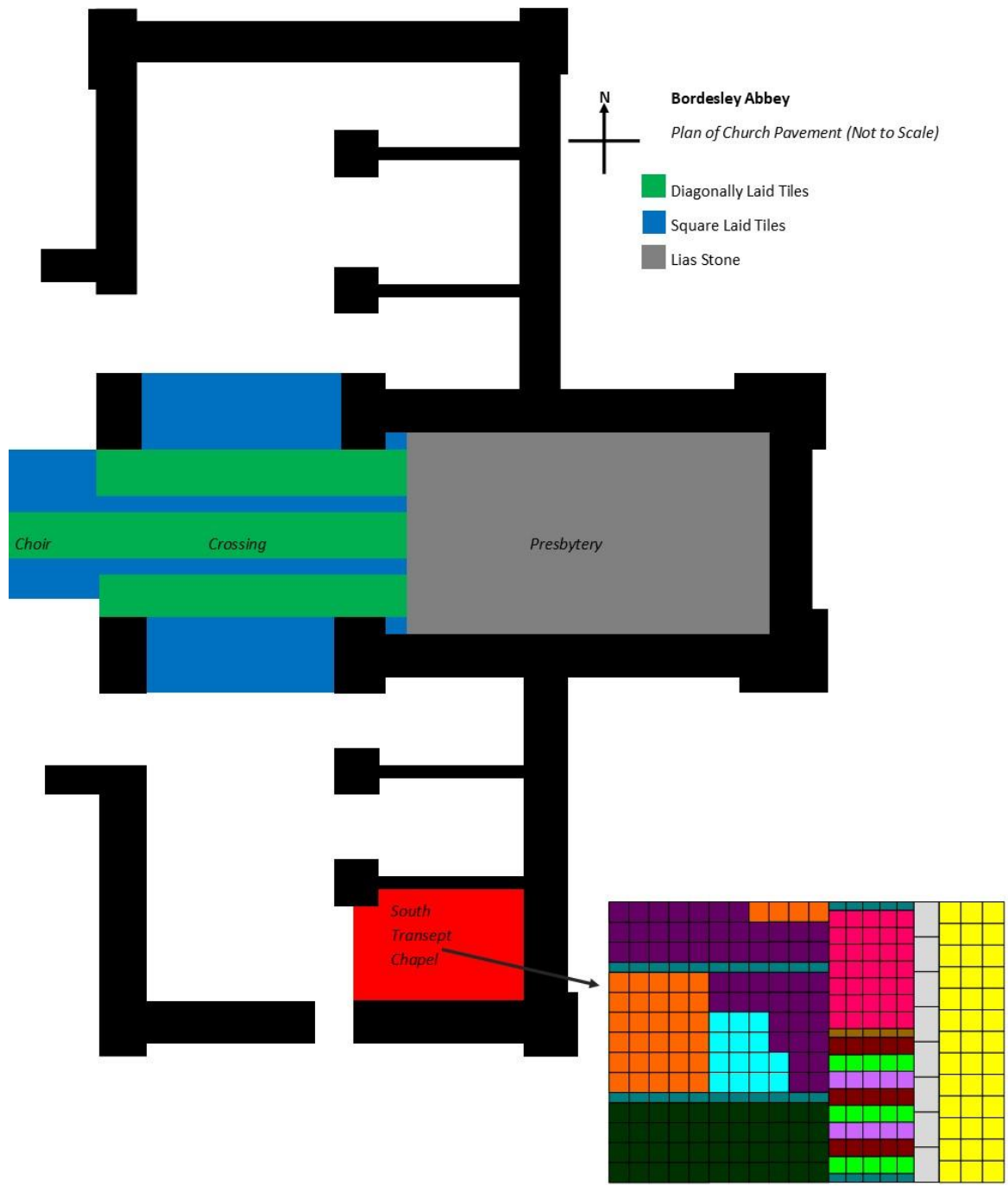


Figure 4.26
Meaux Abbey: plan of church pavement.

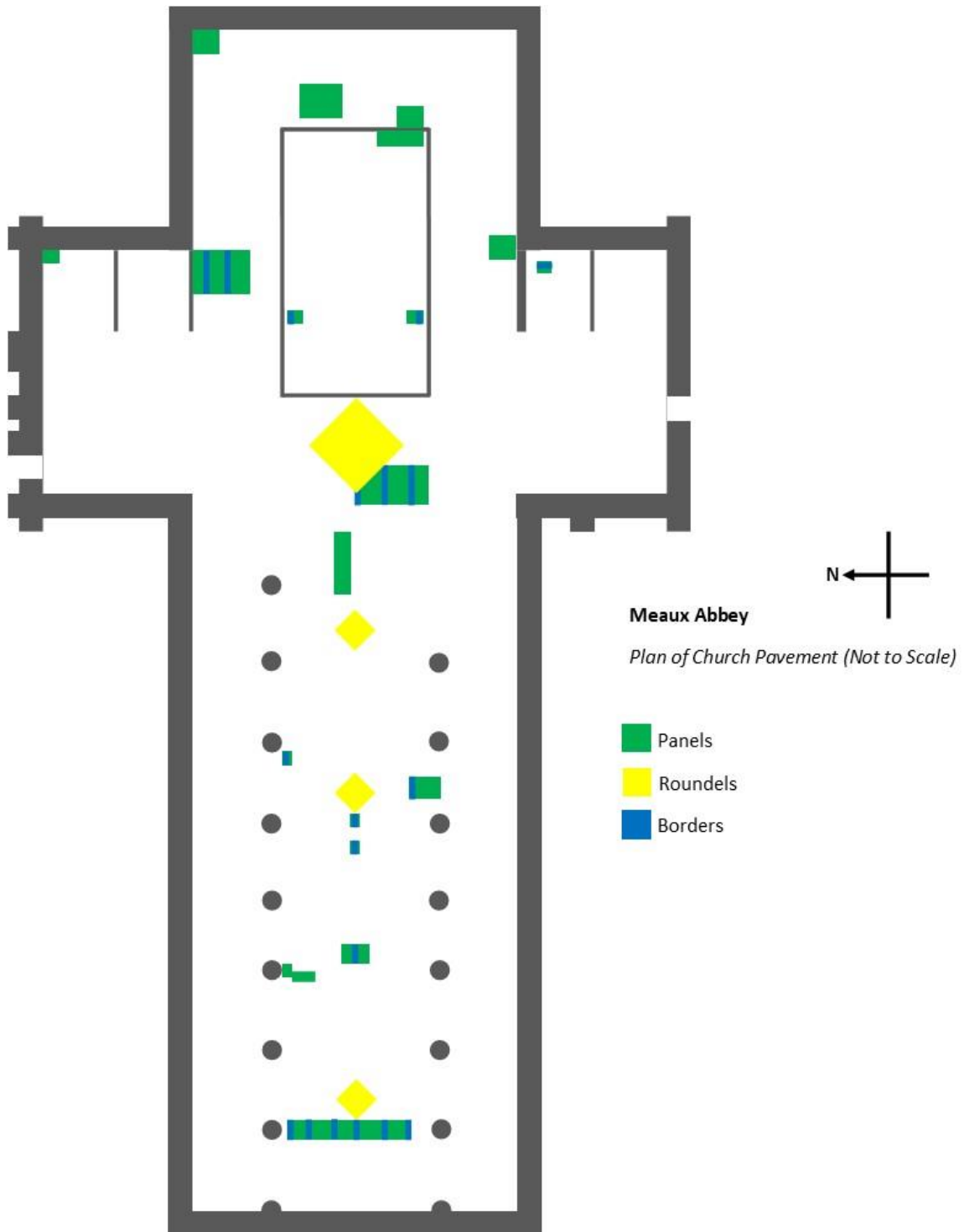


Figure 4.27
Byland Abbey: view of north-crossing aisle facing west.



Figure 4.28

Jervaulx Abbey: view of north transept chapel facing east.



Figure 4.29

Byland Abbey: view of south transept chapels facing north-east.



Figure 4.30

Jervaulx Abbey: view of south transept and crossing aisle facing south-east.



Figure 4.31

Rievaulx Abbey: detail of Plain Mosaic roundel from south transept, thirteenth century.



Figure 4.32
Warden Abbey: plan of south transept.

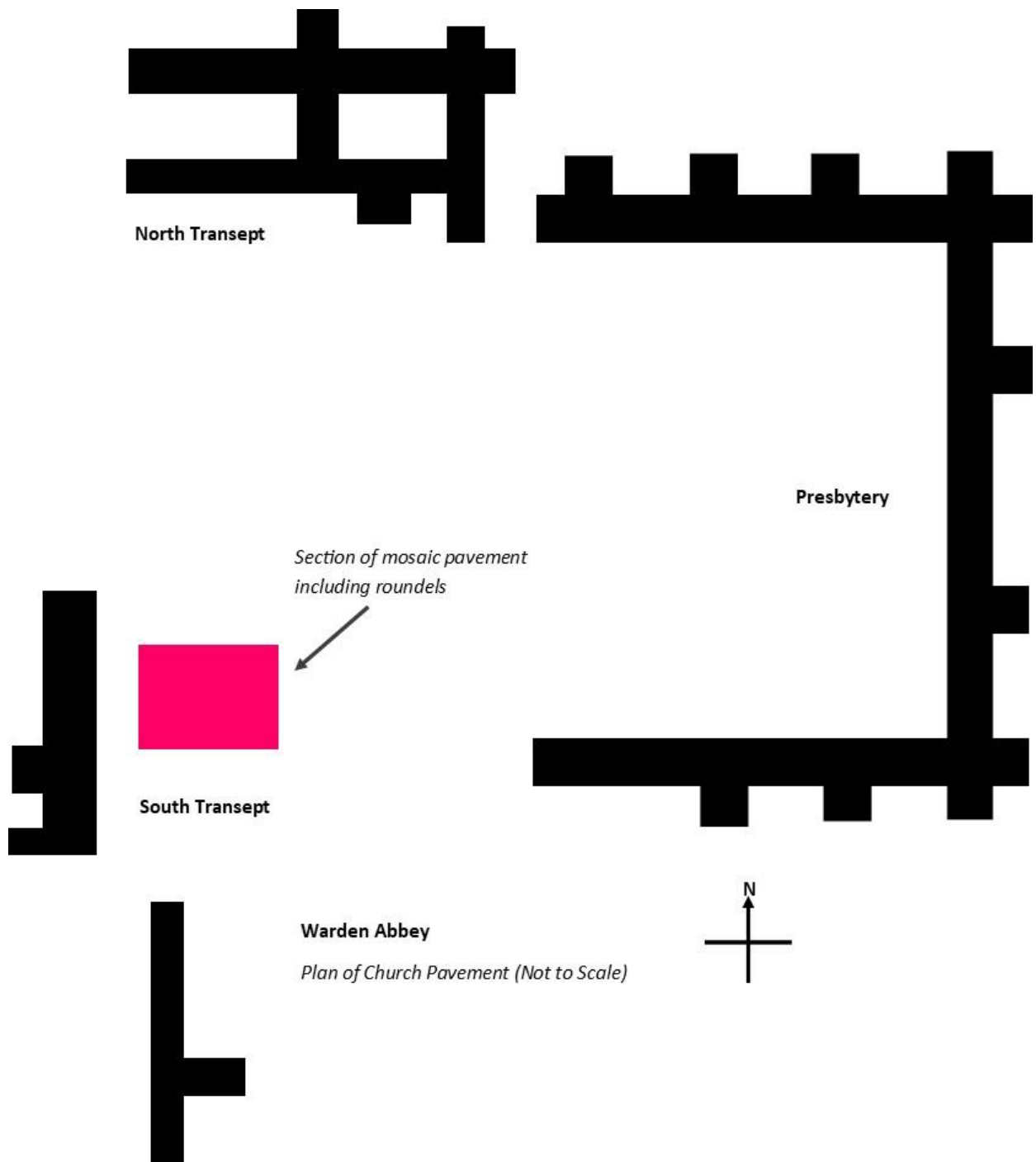


Figure 4.33

Jervaulx Abbey: view of presbytery facing east.



Figure 4.34

Byland Abbey: detail of Plain Mosaic presbytery pavement, thirteenth century.



Figure 4.35

Jervaulx Abbey: view of north-east corner of the church.



Figure 4.36

Byland Abbey: view of Plain Mosaic roundel aligned with north-east chapel.



Figure 5.1

Prior Crauden's Chapel: view of chapel exterior facing south-east, Ely Cathedral.



Figure 5.2
Ely Cathedral: plan of the prior's accommodation.

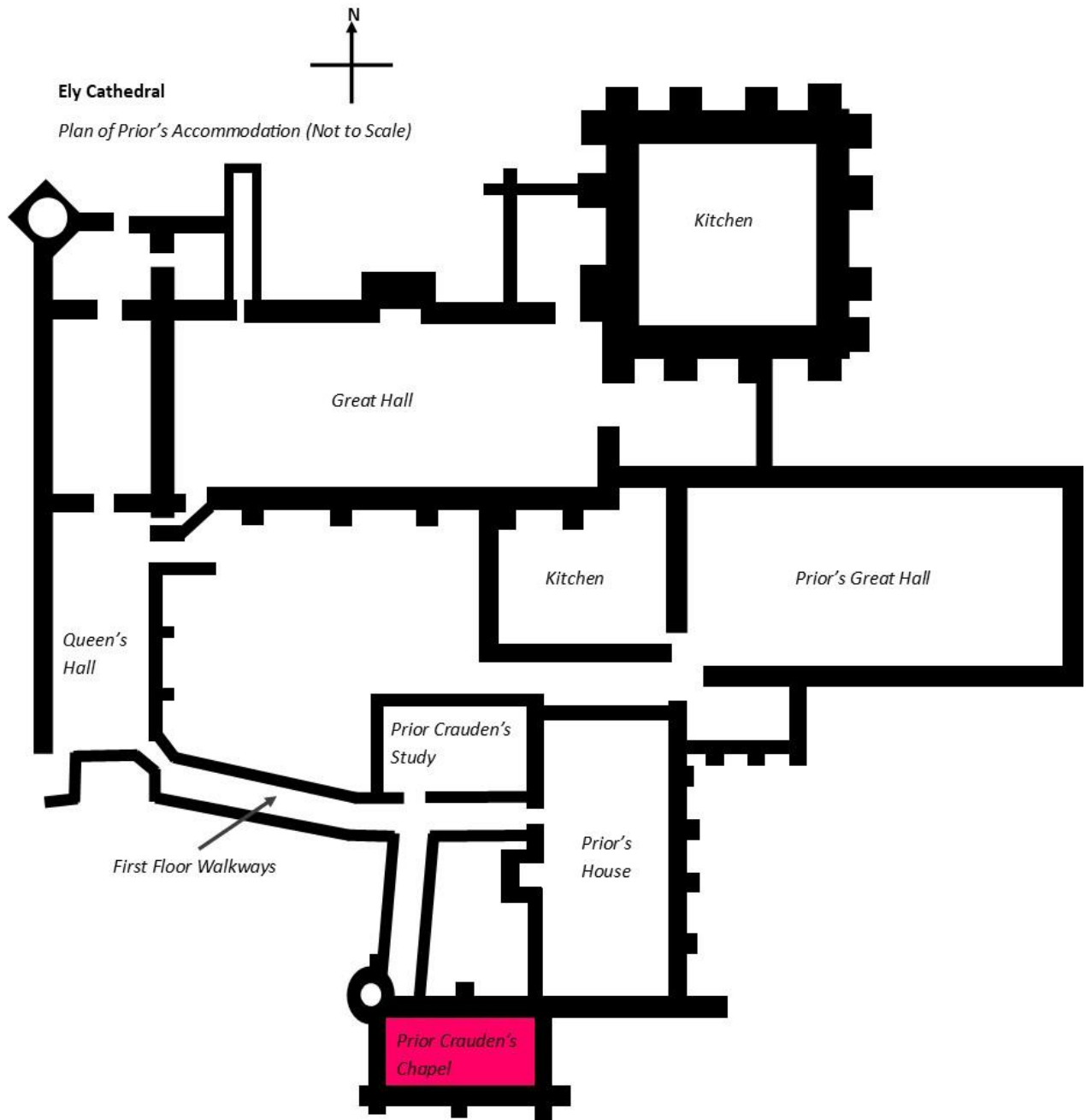


Figure 5.3

Prior Crauden's Chapel: view of chapel interior facing east, Ely Cathedral.



Figure 5.4

Ely Cathedral: view of the Octagon facing east.



Figure 5.5
Prior Crauden's Chapel: plan of chapel pavement.

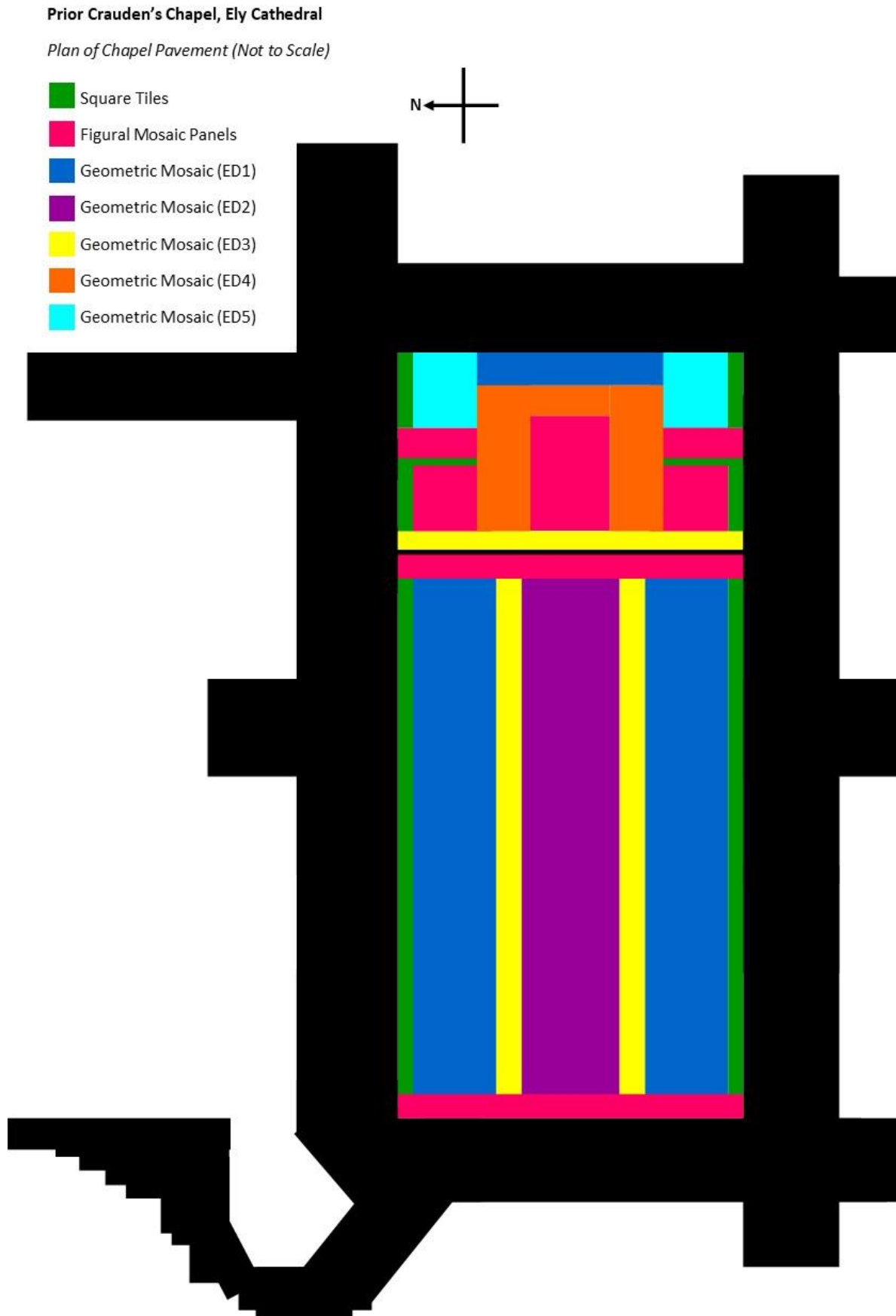
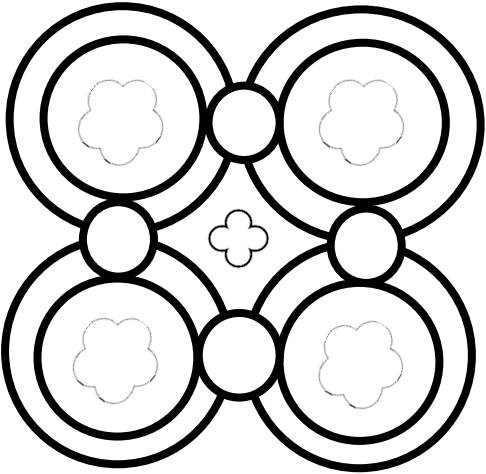

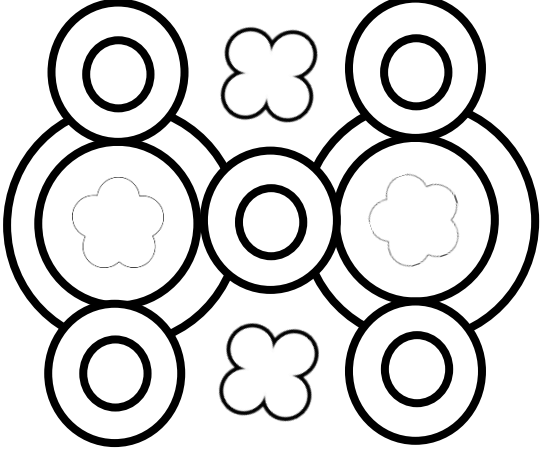

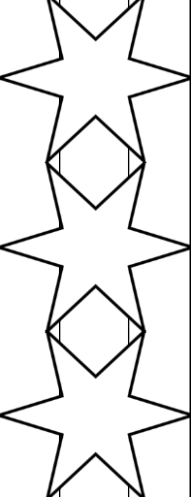



Figure 5.6

Prior Crauden's Chapel: table showing geometric mosaic designs from chapel pavement.

Design Number		Key
ED1		
ED2		
ED3		

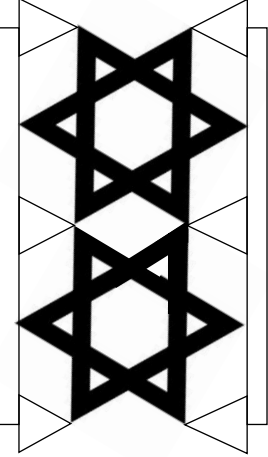

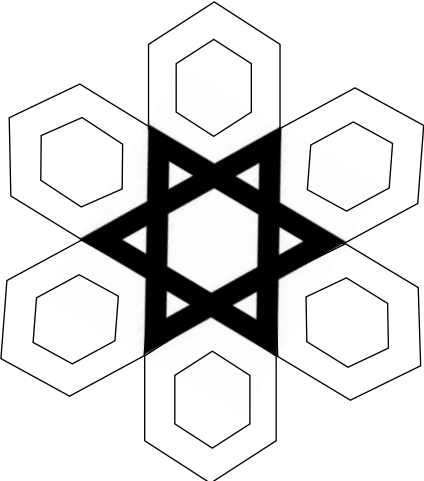

ED4		
ED5		

Figure 5.7

Prior Crauden's Chapel: hand-incised mosaic lion, fourteenth century, Ely Cathedral.



Figure 5.8

Prior Crauden's Chapel: hand-incised mosaic Adam and Eve panel, fourteenth century, Ely Cathedral.



Figure 5.9

Prior Crauden's Chapel: line-impressed mosaic tiles, fourteenth century, Ely Cathedral.



Figure 5.10

Prior Crauden's Chapel: line-impressed mosaic tiles, fourteenth century, Ely Cathedral.

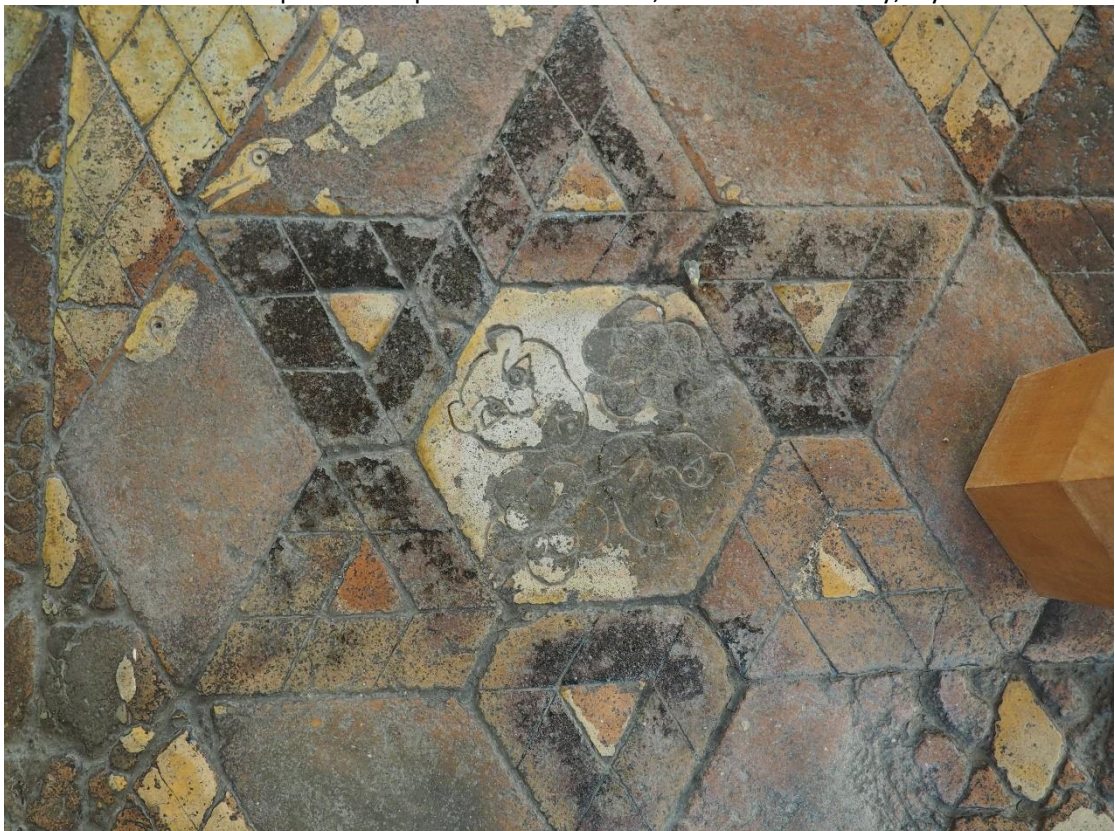


Figure 5.11

Prior Crauden's Chapel: hand-incised two-colour tile, fourteenth century, Ely Cathedral.



Figure 5.12

Prior Crauden's Chapel: detail of hand-incised mosaic lion, fourteenth century, Ely Cathedral.



Figure 5.13

Warden Abbey: hand-incised mosaic Devil, fourteenth century, Higgins Art Gallery and Museum, Bedford.



Figure 5.14

Warden Abbey: hand-incised mosaic lion, fourteenth century, Higgins Art Gallery and Museum, Bedford.



Figure 5.15

Warden Abbey: hand-incised mosaic hand and sword pommel, fourteenth century, Higgins Art Gallery and Museum, Bedford.



Figure 5.16

Warden Abbey: detail of tile fragment inscribed *sub equo*, fourteenth century, Higgins Art Gallery and Museum, Bedford.



Figure 5.17
Norton Priory: view of church facing north-east.



Figure 5.18

Norton Priory: line-impressed mosaic tile designs, fourteenth century.



Figure 5.19

Norton Priory: hand-incised mosaic lion fragments, fourteenth century.



Figure 5.20

Norton Priory: hand-incised mosaic chainmail fragments, fourteenth century.



Figure 5.21

Norton Priory: view of Dutton family chapel facing east.



Figure 5.22

Prior Crauden's Chapel: nodding ogee, fourteenth century, Ely Cathedral.



Figure 5.23

Prior Crauden's Chapel: detail of sculptural decoration including miniature crenellations, fourteenth century, Ely Cathedral.



Figure 5.24

Prior Crauden's Chapel, wall-painting of the Crucifixion, fifteenth century, Ely Cathedral.



Figure 5.25

Prior Crauden's Chapel: detail of angel from Annunciation wall-painting, fourteenth century, Ely Cathedral.



Figure 5.26

Prior Crauden's Chapel: detail of the Virgin from Annunciation wall-painting, fourteenth century, Ely Cathedral.



Figure 5.27

Table showing weekly distribution of psalm readings during the monastic offices.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Matins ⁵³²	[3, 94] 32(x2), 33, 34, 36(x2), 37, 38, 39(x2), 40, 41	[3, 94] 43(x2), 44, 45, 46, 47, 48, 49, 51, 52, 53, 54	[3, 94] 55, 57, 58, 59, 60, 61, 65, 67(x2), 68(x2), 69	[3, 94] 70, 71, 72(x2), 73(x2), 74, 76, 77(x2), 78, 79	[3, 94] 80, 81, 82, 83, 84, 85, 86, 88, 92, 93, 95, 96	[3, 94] 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108	20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31
Lauds	66, 50, 5, 35 [148, 149, 150]	66, 50, 42, 56 [148, 149, 150]	66, 50, 63, 64 [148, 149, 150]	66, 50, 87, 89 [148, 149, 150]	66, 50, 75, 91 [148, 149, 150]	66, 50, 142 [148, 149, 150]	66, 50, 117, 62 [148, 149, 150]
Prime	1, 2, 6	7, 8, 9	9, 10, 11	12, 13, 14	15, 16, 17	17, 18, 19	118(x4)
Terce	118(x3)	119, 120, 121	119, 120, 121	119, 120, 121	119, 120, 121	119, 120, 121	118(x3)
Sext	118(x3)	122, 123, 124	122, 123, 124	122, 123, 124	122, 123, 124	122, 123, 124	118(x3)
None	118(x3)	125, 126, 127	125, 126, 127	125, 126, 127	125, 126, 127	125, 126, 127	118(x3)
Vespers	109, 110, 111, 112	113, 114, 115-116, 128	129, 130, 131, 132	134, 135, 136, 137	138(x2), 139, 140	141, 143(x2), 144	144, 145, 146, 147
Compline	4, 90, 133	4, 90, 133	4, 90, 133	4, 90, 133	4, 90, 133	4, 90, 133	4, 90, 133

⁵³² The Rule does not specify exactly which psalms should be said during the night service (known as Matins or Vigils). It only specifies that there should be twelve psalms read in order each night in both summer and winter, and that the remaining unsaid psalms should be spread evenly across the nights. A hypothesis has, therefore, been made for their arrangement and the division of longer psalms.

Figure 5.28

Prior Crauden's Chapel: view of altar platform facing east, Ely Cathedral.



Figure 5.29

Prior Crauden's Chapel: detail of the Devil from hand-incised mosaic Adam and Eve panel, fourteenth century, Ely Cathedral.



Figure 5.30

Prior Crauden's Chapel: detail of Eve from hand-incised mosaic Adam and Eve panel, fourteenth century, Ely Cathedral.



Figure 5.31

Prior Crauden's Chapel: hand-incised mosaic lion, fourteenth century, Ely Cathedral.



Figure 5.32

Prior Crauden's Chapel: hand-incised mosaic griffin, fourteenth century, Ely Cathedral.



Figure 5.33

Prior Crauden's Chapel: hand-incised mosaic wyvern, fourteenth century, Ely Cathedral.



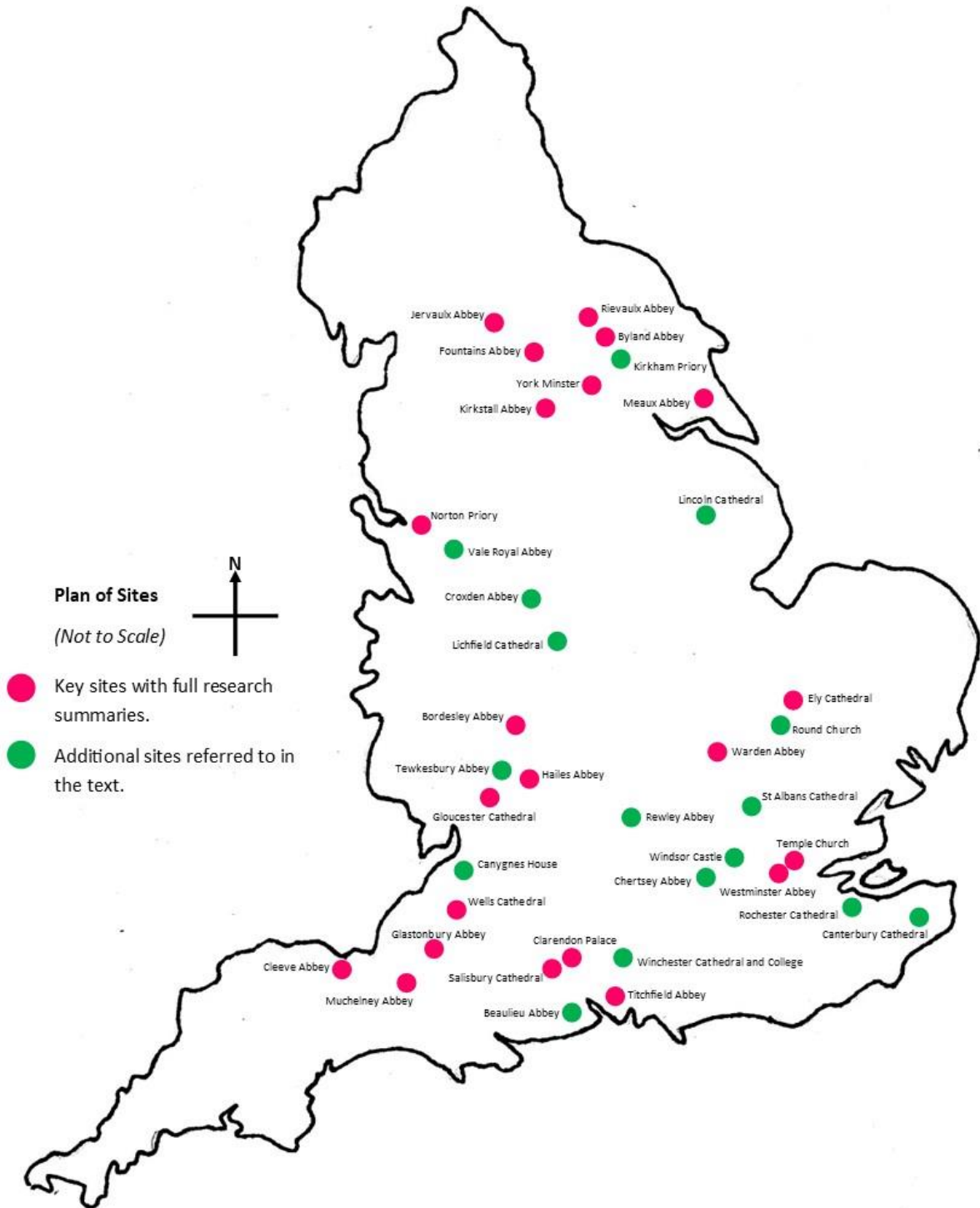
Figure 5.34

York Minster: detail of Walter de Gray's tomb effigy, thirteenth century.



Site Gazetteer

This is intended as an index to the key sites that are mentioned within the text of the thesis and not as an exhaustive list of medieval tile pavements in England. Each entry indicates the history of a pavement along with its current state of preservation. A selected list of publications and figure numbers are also included for reference purposes.



BORDESLEY ABBEY (*Worcestershire*)

Bibliography: Astill, Hirst and Wright 2004; Hirst, Walsh and Wright 1983; Rahtz and Hirst 1976; Stopford and Wright 1998.

Figures: Fig. 4.25.

The Cistercian abbey of Bordesley was founded in the twelfth century. It was considered a royal foundation and as such benefited from a number of privileges granted by the crown. The majority of the monastic buildings were first constructed in the twelfth century and then later altered or extended in the thirteenth and fourteenth centuries. The buildings suffered from structural issues, caused by their location on a hillside and proximity to water, which necessitated various rebuilding works. After the Dissolution the monastic buildings were demolished. Excavations at Bordesley were undertaken in the nineteenth century, at which time drawings were made of a tile pavement in the south transept chapel. The site was extensively excavated in the late twentieth century. Much of the work has concentrated upon the church and in particular the south-eastern section. Information about changes in the fabric of the building and its decoration have been possible through the examination of over one metre of floor levels and the church walls which have survived up to two metres high. The excavations revealed seven different floor levels in the church, including a beaten earth floor, stone paving and several tile pavements. New pavements were being laid in the church from the thirteenth century up until the end of the fifteenth century. Much of the evidence for the layout of these pavements comes from impressions left in the mortar and from stratified deposits.

BYLAND ABBEY (*Yorkshire*)

Church Pavement, Plain Mosaic Group, Early Thirteenth Century.

Bibliography: Burton 2006; Eames 1980; Gill 1852; Harrison 2009; Lillich 1993; Peers 1960; Pevsner 1981; Stopford 2005; University of Sheffield 2013; Walbran 1878.

Figures: Fig. 4.13; Fig. 4.16; Fig. 4.23; Fig. 4.24; Fig. 4.27; Fig. 4.29; Fig. 4.34; Fig. 4.36.

Byland Abbey was founded in the early twelfth century as a Savigniac community. However, it took forty-three years and six relocations before Byland became the abbey it is known as today. By 1177 when the monks arrived at Byland the claustral buildings had been completed, but the church was not completed until the 1190s. The church at Byland was one of the biggest and most elaborate Cistercian churches in England at the time of its construction. The scale of the building reflects the

size of the monastic community. These numbers dwindled over the centuries and many of the monastic buildings were altered to reflect a desire for greater privacy and comfort. In the fourteenth century the Scottish army attacked a number of religious houses in the north including Byland and Rievaulx. The abbey's income principally came from sheep farming and the sale of wool, but by the fifteenth century the community leased their land to tenants instead. After the Dissolution the abbey buildings were stripped of useable materials. By the nineteenth century some of the buildings, like the south transept, had collapsed. The land was owned by a number of families before being given to the Office of Works in the early 1920s. The site is now in the care of English Heritage and open to the public.

The earliest recorded excavations at the site were in the early nineteenth century when the discovery of a pavement was first noted. At this time various materials were removed from the site including tiles. During the clearance work at the beginning of the twentieth century the mosaic pavements were rediscovered and relaid in what is presumed to be their original layout. The tiles are from the Plain Mosaic group and were laid to create a variety of geometric patterns. The most well-known of these patterns is the large roundel. The pavement is thought to have been laid at the beginning of the thirteenth century. An earlier date of the late twelfth century has been suggested and would coincide with the end of building work on the church. However, the techniques evident in the pavement are more consistent with an early thirteenth century date. Most of the tiles have lost their original glaze, which makes some of the geometric patterns hard to distinguish. The overall impact of the pavement, however, remains remarkable. The pavement is covered over during the winter months and left exposed during the summer. Signs direct visitors to avoid walking on the tiles, though there is nothing to actually stop them doing so. A number of tiles from Byland were removed from the site in the late 1920s and are now in the collections of the British Museum, some of which are on display in their medieval gallery.

CLARENDON PALACE (*Wiltshire*)

Bibliography: Eames 1980; Eames 1972; Eames 1965; Eames 1960; Eames 1957; James and Robinson 1988.

Clarendon was a royal hunting lodge and palace that remained in use throughout the medieval period. The palace particularly developed in the thirteenth century, when new buildings were constructed and decorated for Henry III and Eleanor of Provence. A further building programme was undertaken by Edward III in the fourteenth century. By the sixteenth century,

however, Clarendon fell out of favour with English monarchs and the palace was no longer maintained. Archaeological evidence shows that some buildings, like the gatehouse, continued to be occupied until at least the seventeenth century. By the eighteenth century a neo-classical house was built elsewhere in the park, whilst the palace was abandoned and allowed to become ruinous. In the early nineteenth century excavations were undertaken at the site. It was at this time that tile pavements were first discovered. By the early twentieth century a series of excavations were carried out, with further archaeological investigation occurring later that same century. Many of the tiles first recorded in the nineteenth century had been lost by the time of the excavations in the twentieth century. However, evidence of a circular pavement from Henry III's new chapel did survive and was recorded in the twentieth century. The large roundel consisted of alternating bands of plain and decorated tiles with an inscription in the outermost band. The reconstructed section of roundel is now displayed at the British Museum. Another tile pavement was discovered during the twentieth-century excavations in the queen's apartments. The pavement consisted of rectangular panels of various designs, with some tiles laid square and others laid diagonally. Clarendon is a rare example where there is surviving documentation that records both orders for tile pavements and their cost. As a consequence, the pavement in the queen's chamber has been closely dated to c. 1250-1252. This reconstructed section of pavement is also now on display in the British Museum. In the 1930s a tile kiln was also excavated at Clarendon. This was later reconstructed and is in the collections of the British Museum.

CLEEVE ABBEY (*Somerset*)

Refectory Pavement, Glastonbury Kiln (?), Late Thirteenth Century.

Bibliography: Bramble 1877; Buckle 1889; English Heritage 2013; English Heritage 2016; Foord 1925; Gilyard-Beer 1959; Harcourt 2000; Harrison 2015; Hugo 1855; Lowe 2003; Pevsner 1976; Reynolds 1877; Walcott 1875; Ward-Perkins 1941; Warre 1855; Weaver 1906.

Figures: Fig. 3.23; Fig. 3.24; Fig. 3.25; Fig. 3.26; Fig. 3.27; Fig. 3.28; Fig. 3.29; Fig. 3.30.

Cleeve Abbey was a twelfth-century Cistercian foundation. It remained small throughout its history, the community probably never growing larger than thirty monks, and the scale of its buildings reflect this. The thirteenth-century church consisted of a six-bay aisled nave, a crossing with transept chapels and a small rectangular unaisled presbytery. The claustral buildings equally followed a traditional Cistercian format. The east range comprised the sacristy, library and rectangular chapter house with the monks' dormitory above. The west range comprised storage and

accommodation for the lay brothers. The south range included the kitchen, warming room and refectory, which was originally built at a right-angle to the cloister. After a century of decline, the fifteenth century marked an improvement in the abbey's fortunes with major building work undertaken for the first time since its foundation. The west range underwent the most significant changes and was likely used as the abbot's lodgings by the early sixteenth century. The dormitory and south range were converted into more comfortable, subdivided dwellings. At the same time the thirteenth-century refectory was demolished and a new refectory was built above the south range, which ran parallel to the cloister. The new refectory was a great hall, with a wooden vaulted ceiling with carved angels, nine windows and a large-scale wall-painting of the Crucifixion. The remodelling of the abbey continued right up until the abbey's dissolution in the sixteenth century. After 1537 the church was demolished and the claustral buildings converted to a country house. By the seventeenth century the buildings became part of a working farm. In the nineteenth century the abbey became a tourist attraction and some of the buildings were converted back into private accommodation. Due to the continuous use of the abbey the claustral buildings remained in particularly good condition and retained their roofs. Little, however, remained above ground of the church or the infirmary. The abbey church was first excavated in 1875 and the claustral buildings in 1876. Further excavations took place in 1914 and in the early 1930s. The abbey was sold in 1949 and passed to the Ministry of Works in 1951. Additional excavations were carried out between 1979 and 1982 for the Historic Buildings and Monuments Commission for England. The abbey was passed into the care of English Heritage in 1984. Today the abbey is open to the public with a small on-site museum containing some of the excavated materials.

The thirteenth-century refectory pavement was first discovered during the excavations in 1876. It covered around two-thirds of the excavated ground plan of the original refectory building. After its discovery, the refectory pavement remained uncovered. By 1906 it was reported that the tiles were becoming damaged by the weather. Sometime after this date the pavement was reburied. By 1951 the pavement was once again uncovered and exposed for public display. In the early 1960s the tiles were lifted and relaid in their original position. Small gaps within the pavement were filled with mosaic fragments. The refectory pavement was thereafter left exposed in summer and covered in winter. By the end of the twentieth century it was becoming increasingly apparent that weather and climate conditions were having an adverse effect on the tiles. Whilst the pavement was protected during the winter months from frost and cold, the exposure to fluctuating summer temperatures was causing significant problems. Monitoring by English Heritage recorded that the surface glaze of the tiles was mostly lost, causing the inlaid clay to flake. Between 2000 and 2003 canopies were erected over the pavement and it was observed that the pavement could benefit

from greater stability in climate, particularly in regards to rain and temperature fluctuations. A marquee was erected in 2005 to more permanently cover the pavement and allow continued public access to the pavement. Monitoring of the pavement consisted of recording environmental data at regular intervals in order to review any change in the condition of the pavement. By 2008 it was clear that the marquee was reducing the rate of wear of the tiles. A review subsequently took place to decide whether a more permanent covering structure was necessary or desirable. A variety of solutions were considered, including reburying the pavement. Ultimately a new wooden building was constructed over the pavement, which opened to the public in early 2016. The wooden structure was designed to slow down the damage caused by environmental factors. The wooden slats control the amount of light that reaches the pavement but allows for the circulation of air.

ELY CATHEDRAL (*Cambridgeshire*)

Chapel Pavement, Line-Imprinted Mosaic Group, c. 1324-1325.

Bibliography: Bentham 1812; Binski 2014; Broughton 2008; Chapman 1907; Coldstream and Draper 1979; Eames 1980; Gough 1792; Linley 1986; Maddison 2000; Meadows and Ramsay 2003; Ormrod 1986; Pevsner 1970; Shaw 1858; Stevenson 1817; Stewart 1868; Stubbs 1904; Wharton 1691; Wilkins 1803.

Figures: Fig. 1.3; Fig. 1.4; Fig. 1.5; Fig. 1.6; Fig. 5.1; Fig. 5.2; Fig. 5.3; Fig. 5.4; Fig. 5.5; Fig. 5.6; Fig. 5.7; Fig. 5.8; Fig. 5.9; Fig. 5.10; Fig. 5.11; Fig. 5.12; Fig. 5.22; Fig. 5.23; Fig. 5.24; Fig. 5.25; Fig. 5.26; Fig. 5.28; Fig. 5.29; Fig. 5.30; Fig. 5.31; Fig. 5.32; Fig. 5.33.

Prior Crauden's Chapel was built in the first quarter of the fourteenth century to the south of the cathedral and originally connected to the Prior's House. A record in the treasurer's accounts for the year 1324-1325 records a sum of £138 8s 5d as payment for the chapel, which has generally been considered a final payment marking the conclusion of the building work. The chapel's mosaic pavement has also been dated to this time. The building consists of two storeys with a stone vaulted undercroft and an upper wooden vaulted chapel. Access is today gained through a spiral staircase leading out onto a small balcony and through a door into the north-west corner of the chapel. Prior Crauden's Chapel was built as a place of private prayer and devotion for high status individuals such as the prior and his guests who were able to access the chapel via passageways from the Prior's House and Queen's Hall. By 1649 the Parliamentary Commissioners' Survey valued the building at £33 17s. After this date the chapel was converted into a dwelling, divided into two storeys with two rooms and a passage. A fireplace was placed in the north wall which caused it to be faced with brick

and a staircase was inserted into the south-west corner. Prior Crauden's Chapel was the focus of some of the earliest tile scholarship. Richard Gough gave a paper on the topic to the Society of Antiquaries in 1790, which was subsequently published in 1792. The chapel continued to be lived in up until the nineteenth century and was only restored and rededicated as a chapel in 1858. It is today used by the King's School, Ely and as a place of private reflection for tourists to the cathedral.

The mosaic pavement covers the entire area of the chapel and can be divided into two sections. The first section of the pavement covers the entire central part of the chapel and measures approximately 6.15m from east to west and 4.18m from north to south. The second section of the pavement covers the altar step and platform. This area measures approximately 2.35m from east to west and 4.18m from north to south. The majority of the pavement is laid with line-impressed mosaic tiles in geometric shapes. There are also figural line-impressed mosaic tiles, the most celebrated of which is the Adam and Eve panel on the altar platform. These figural mosaic tiles include hand-incised decoration, as do the small number of two-colour tiles present in the pavement. The tiles are in surprisingly good condition considering the building's use as a domestic dwelling from the seventeenth to nineteenth centuries. The most notable signs of wear are in the south-west corner where the pavement is patched with random fragments. This is where a staircase was inserted into the building when it was used as a residence. The edges of the pavement are generally the most worn and in areas have been replaced with plain square tiles. This is also most noticeable in the south-west corner and in the north-east corner before the altar step. The other most significant sign of wear is the loss of the original colours of the tiles. This is particularly true for the central part of the pavement, but some glaze does remain on a few tiles on the altar platform and those edges of the pavement that have not been replaced by new tiles. The chapel is currently accessible to members of the public by request to the Cathedral's vergers. Loose sections of carpet cover the majority of the pavement, but the step and altar platform are uncovered. A large wooden altar table rests directly on the pavement, but the benches rest on top of the carpet. Limiting the amount of people who use the chapel will help to conserve the pavement, but many of the tiles show significant wear and in places have crumbled entirely. There is also a significant amount of insect activity, both dead and alive, underneath the carpet itself.

FOUNTAINS ABBEY (*Yorkshire*)

Church Pavement, Plain Mosaic, Early Thirteenth Century.

Bibliography: Coppack 1986; Eames 1980; Gass 1875; Gilyard-Beer 1968; Gilyard-Beer and Coppack 1986; Hills 1871; Hope 1900; Mauchline and Greeves 2007; Oxford 1910; Pevsner 1981; Stopford 2005; University of Sheffield 2013; Vallance 1947; Verax 1791; Walbran 1878; Walbran 1851.

Figures: Fig. 1.1; Fig. 4.1.

Fountains Abbey was an early twelfth-century Cistercian foundation. The monastic buildings, following the traditional Cistercian arrangement, were originally constructed from wood before being replaced with stone structures. The church went through many phases of development, from following a simple rectangular Bernardine plan to the more elaborate east end extension constructed in the early thirteenth century. By the end of the century Fountains was one of the wealthiest religious houses in England, with wool the principle source of that wealth. The fortunes of the community waned by the end of the fourteenth century and the abbey's estates were leased to tenants. The late fifteenth century saw a period of revival with the community growing once again and new building work undertaken. After the Dissolution the site was sold by the Crown and by the beginning of the seventeenth century Fountains Hall was built with the stones from the abbey buildings. Early in the eighteenth century the site was owned by John Aislabie. Whilst credited with the creation of the water garden, now known as Studley Royal, he has also long been associated with the destruction of parts of the abbey. Later that same century one of Aislabie's descendants inherited the site and in around 1790 work was carried out to clear the chapter house of debris at which time a 'tessellated pavement' was discovered. Between 1808 and 1845 the tower, nave aisles and western range were repaired. Between 1845 and 1856 more extensive excavations were carried out in the abbey, starting with the infirmary, then the site of the abbot's house, before examining the east claustral range and finally moving through the church from east to west. A complete set of drawings and plans of the abbey were started in 1873 and published in 1892. Along with elevations, the floor plans showed the location of individual tiles that had been found during the excavations. Further excavation and work on the abbey site were completed by William St John Hope between 1887 and 1888.

The foundation history of Fountains describes how the church was paved under the patronage of Abbot John of Kent (1220-1247). Plain Mosaic tiles have been found in various areas of the church including the crossing, south transept, south transept chapel and north transept chapel. The Plain Mosaic tiles in the southern most chapel of the north transept were discovered during the nineteenth-century excavations by Walbran and reset there when the vault was cleared from the ground. In the south crossing aisle and south transept the Plain Mosaic tiles found there in the 1980s primarily consisted of small squares laid diagonally. The Plain Mosaic tiles in the nave appear to have

been deliberately relaid in order to correspond with the location of altars as suggested by Hope during his excavations. The tiles at the high altar have been the subject of considerable debate for over a century. The main point of contention is the authenticity of the arrangement and whether it was in fact a post-medieval creation. If it was the work of a later nineteenth-century excavator, there is no clear date for when this work may have occurred. Today the tiles are very worn and their original glaze has disappeared. The grey and pink colours evident today are the colour of the clay bodies to the tiles. The original glazes would have made the tiles black, yellow and green as can be seen at Byland Abbey. The tiles at Fountains are not protected from either the weather or from visitors and as a result their condition continues to deteriorate. This is particularly noticeable in the infirmary where designs noted a decade ago are no longer visible today. In contrast the tiles relaid in the roofed muniment room during the nineteenth century are at least protected from the weather.

GLASTONBURY ABBEY (*Somerset*)

Church Pavement, Glastonbury Kiln (?), Late Thirteenth Century.

Bibliography: Coldstream 1981; Foord 1925; Gilchrist and Green 2015; Lowe 2003; Pevsner 1976; Scott 1981.

Glastonbury Abbey was founded in the late seventh century and the abbey buildings extended in the tenth century. Further enlargement took place and by the late eleventh century Glastonbury was the wealthiest monastery in the country. Further rebuilding work took place at the beginning of the twelfth century only to be damaged by fire a few decades later. A new church was constructed in the thirteenth century. By the fourteenth century Glastonbury continued to be a powerful and wealthy abbey, second only to Westminster. After the Dissolution the site was granted to the Duke of Somerset who established a group of Dutch weavers on the site. After their removal the site was privately owned and passed through the hands of several noble families. Materials from the site continued to be removed throughout this time. At the beginning of the twentieth century the site was purchased by the Church of England and administered by the Bath and Wells Diocesan Trust. Extensive excavation of the site, in particular the church and cloister, began in 1908 and continued into the 1920s. A further series of excavations took place in the 1930s, 1950s and 1960s, with the last major excavation at the end of the 1970s. Smaller and more specific excavations have continued to be undertaken in the last few decades.

There are only a small number of tiles surviving from the abbey perhaps due to the removal of material from the site after the Dissolution or caused by the disturbance of frequent excavations.

The earliest group of tiles which survive from Glastonbury share similarities in design to tiles from Clarendon Palace and Wells Cathedral and have been dated to c. 1250. There is evidence of a pavement roundel, similar in design to that found at Muchelney Abbey, which has been dated to c. 1275. The heraldic designs found in the refectory pavement at Cleeve Abbey are also evidenced at Glastonbury and as such have been dated, like the Cleeve pavement, to c. 1272. Most of the thirteenth-century tiles from Glastonbury are thought to have been made locally and transported to other sites in the region as well as being used at the abbey itself. Tiles laid at the abbey from the fifteenth century appear to have been brought to the abbey from elsewhere. A small number of tiles, including the heraldic designs, are on display in the on-site museum. Other late thirteenth-century tiles can be found *in situ* in the north transept of the church. The tiles are slightly below the modern ground level and are covered by wooden trap doors. These doors serve to protect the tiles from the worst of the elements and from wear caused by visitors. The doors, however, are not weather-proof and the tiles were considerably wet on the day of visiting. Many of the tiles are cracked or in some way damaged. The designs of the tiles, however, are still legible and in places the original glaze remains.

GLOUCESTER CATHEDRAL (*Gloucestershire*)

Chancel Pavement, Malvern Kiln, c. 1455.

Bibliography: Heslop 1985; Kellock 1989; Kellock 1987.

Figures: Fig. 2.2.

The pavement in front of the high altar at Gloucester Cathedral was laid in 1455 under the patronage of Abbot Sebrok. These details can be found in the inscription of one of the tile designs in the pavement. The tiles were made in Malvern and some of the designs can also be found at the church there. The pavement in Gloucester Cathedral consists of tiles laid diagonally, with groups of four-tile, nine-tile and sixteen-tile designs divided by plain tiles. The pavement makes use of twenty-nine different designs, including six different heraldic shields. It is thought that the pavement once covered a larger area, perhaps reaching as far west as the choir. Plans published by John Carter in the eighteenth century and Henry Shaw in the nineteenth century show only a section of the pavement. Today the surviving area of pavement covers the width of the chancel and spans between the altar rail and the altar steps. During the Victorian restoration of the cathedral in the late nineteenth century the western portion of the pavement was removed and replaced with encaustic tiles made by Godwin & Sons. A plan made by Alwyne Compton around 1850 seems to suggest that

the west end of the pavement had been destroyed or damaged sometime before the restoration work. Some of the tiles from the pavement were relaid in a chapel in the triforium at an unknown date. The surviving pavement is behind the altar rail and as such is protected from wear caused by visitors. The tiles are rather worn and whilst many have lost their glaze, the designs remain visible.

HAILES ABBEY (*Gloucestershire*)

Church Pavement, Stabbed Wessex Group, c. 1270s.

Bibliography: Bazeley 1899; Brown 2006; Carter 2018; Carter 2017; Clifford 1963; Coad 1969; Eames 1980; Edwards 1981; St Clair Baddeley 1900; Vincent 2001; Winkless 1990.

Figures: Fig. 3.3; Fig. 3.4; Fig. 3.5; Fig. 3.6; Fig. 3.7; Fig. 3.8; Fig. 3.14; Fig. 3.15; Fig. 3.16; Fig. 3.17; Fig. 3.18; Fig. 3.19; Fig. 3.21; Fig. 3.22; Fig. 3.31; Fig. 3.32.

Hailes Abbey was one of the last Cistercian foundations in England, with building work commencing shortly after the monks arrived in 1246. The abbey buildings followed Cistercian convention. The church, until the late thirteenth century, had an eight-bay nave and a four-bay presbytery. The west range housed the lay brothers' dormitory, whilst the east range consisted of the chapter house with the monks' dormitory on the first floor. The south range consisted of the kitchen, warming room and refectory. Hailes was given new purpose from the 1270s when it became an important site of pilgrimage due to its Holy Blood relic. A fire at the abbey in 1271 meant rebuilding work was required to take place. The rectangular east end of the abbey church was replaced by a new polygonal apse with radiating chapels. By the end of the fourteenth century the abbey experienced a period of deterioration. Yet in the fifteenth century a brief resurgence of pilgrims led to a period of relative prosperity, enabling repairs and rebuilding of the abbey to take place. The cloister, for example, was rebuilt in the fifteenth century and the vaulting bosses were decorated with heraldry. The west range, previously used by the lay brothers in the preceding century, was also converted in the fifteenth century for the private use of the abbot. After the Dissolution the majority of the abbey buildings were dismantled in order to reuse the stone, but the west range and gatehouse survived. In the seventeenth century the west range became a country house and was later converted into farmhouses, but after 1729 these too were dismantled for building materials. An illustration of the abbey from 1732 showed the remaining buildings of the abbey as a ruin. The abbey was excavated between 1899 and 1908. By 1948 the site was under the care of the Ministry of Works. Further excavations took place in the late twentieth century. Today

the abbey ruins are owned by the National Trust and managed by English Heritage. The ruins are open to the public and there is an on-site museum displaying various finds from the excavations.

The thirteenth-century pavement was revealed during the twentieth-century excavations by the Inspectorate of Ancient Monuments in the eastern section of the abbey church, which were concentrated within the chevet and north presbytery aisle. The *in situ* areas of paving were believed to be contemporary with the building of the new chevet in the 1270s. The tiles were all of a similar type measuring 136mm square, between 23 and 28mm thick and made from a sandy fabric. The back of the tiles were marked with small holes, which characterises the stabbed Wessex group. The pavement consisted of panels separated by borders. Within each of the panels the same tile design was laid. Variety in these panels was not created by using multiple designs but rather by alternating reduced and oxidised tiles. The *in situ* areas of pavement were reburied after the excavations in order to preserve the tiles. A selection of loose tiles are on display at the on-site museum and nearly four thousand are within the British Museum's collection, whilst an amount are also owned by the Cheltenham Art Gallery and Museum. Many of the tiles from the abbey, including the heraldic tiles from the east-end, were at some point relaid in Hailes Church.

JERVAULX ABBEY (Yorkshire)

Church Pavement, Decorated Mosaic Group, Late Thirteenth Century.

Bibliography: Anon. 1821; Burton 2006; Christie 1924; Eames 1980; Hope and Brakspear 1911; Pevsner 1981; Shaw 1858; Stopford 2005; Worsley 1988.

Figures: Fig. 4.5; Fig. 4.6; Fig. 4.7; Fig. 4.8; Fig. 4.12; Fig. 4.14; Fig. 4.17; Fig. 4.21; Fig. 4.22; Fig. 4.28; Fig. 4.30; Fig. 4.33; Fig. 4.35.

Jervaulx Abbey started out in 1145 as a Savigniac community at Fors. By 1156 the community had moved to the more favourably situated site at Jervaulx and responsibility of the abbey had been assumed by the Cistercians. The abbey grew rapidly in the late twelfth century when many of the buildings were constructed. These buildings conform to the typical Cistercian plan. The west range was one of the first structures to be erected, dating to the 1150s, and provided accommodation and storage for the lay brothers. The east range included the chapter house and monastic dormitory and was built in the 1160s with some reconstruction in the late twelfth century. The south range, dated to the 1180s or 1190s, included the kitchen and refectory which was orientated on a north-south axis in the typical Cistercian fashion. The infirmary was situated to the east of the cloister and connected via a passage. During the thirteenth century lands and rights were

granted to the abbey by members of the nobility. As such Jervaulx grew to be a wealthy and powerful abbey with extensive land holdings in the surrounding local area. An abbot's lodging was built in the fourteenth century to the south of the infirmary which included an attached chapel. A general trend towards greater comfort and privacy in monastic houses led to the subdivision of communal dormitories. This prosperity, however, did not continue indefinitely and by the fifteenth century the abbey was impoverished. The last abbot of Jervaulx, Adam Sedbar, was executed for high treason in 1537 after his involvement in the Pilgrimage of Grace. On his death the monastic estate was forfeited to the king. The abbey was suppressed in 1537 and demolished in 1539. In the following years much of the stone and other materials were removed from the site. The ruins of the abbey became part of the gardens in the grounds of the seventeenth-century Jervaulx Hall.

In the early nineteenth century the accidental discovery of a pier in the cloister led the owner of the site, the Earl of Ailesbury, to order the area to be excavated to discover the full layout of the monastic buildings. The work was supervised by the Earl's steward John Claridge. It was revealed that several feet of the church walls were still standing, but they, along with the floor, had been covered over with ruined fragments. This had resulted in the preservation of gravestones, an altar and also large areas of paving. The pavement at Jervaulx was laid towards the end of the thirteenth century and is believed to have been one of the first sites to receive Decorated Mosaic tiles. Shortly after the excavations, drawings of the site, including the mosaic pavements, were made by P. A. Reinagle, a London artist. Copies of these drawings were made by Reverend John Ward. These drawings were in turn copied by the antiquary Henry Shaw for publication. The drawings made by Ward and Shaw are the primary surviving evidence of the Jervaulx pavement. Both Reinagle's original drawings and the majority of tiles from the site have been lost. Further excavations at Jervaulx were carried out between 1905 and 1907 by William St John Hope and Harold Brakspear, but no further areas of paving were recorded. Conservation work was carried out in the 1980s and the site, though privately owned, remains open to the public today. A number of tiles were relaid in a small summerhouse in the south-east corner of the site. These tiles were very worn, with few showing evidence of their original decoration or glaze. In places the mortar had been damaged meaning some of the tiles were loose and able to be lifted out of the pavement. It appears, however, that the majority of these relaid tiles have now been stolen. All that remains are the impressions in the mortar along with a few whole tiles in the corners of the building and numerous small broken pieces on the floor surface. Further tiles have been relaid in the porch and summerhouse of a local hotel, though some of these have reportedly also been stolen in recent years. A small number of tiles are in the collections of the British Museum, English Heritage and the Yorkshire Museum.

KIRKSTALL ABBEY (*Yorkshire*)

Refectory Pavement (relaid), Decorated Mosaic Group, Late Thirteenth Century.

Bibliography: Hoey 1995; Moorhouse and Wrathmell 1987; Pevsner 1959; Stopford 2005; University of Sheffield 2013.

Figures: Fig. 4.9; Fig. 4.10.

Kirkstall Abbey was a twelfth century Cistercian foundation. The twelfth century at Kirkstall saw the development of the abbey buildings and expansion of its landholdings. The monastic buildings conformed to the Cistercian model, with the chapter house to the east, the refectory and kitchens to the south and the lay brothers range to the west. The church too had a characteristic simple rectangular, unaisled presbytery. By the thirteenth century the abbey had serious financial problems and patronage waned from this time. After the Dissolution many of the buildings were reused for agricultural purposes, the gatehouse, for example, was converted into a farmhouse. It was only in the eighteenth century that some of the buildings collapsed due to neglect and exposure to the elements. The main route to Leeds ran directly through the nave of the church from the late eighteenth century, which required the destruction of the east window. It was not until 1827 that the road was redirected. Over the centuries the site passed through the hands of several families before being presented to the City of Leeds in the 1880s. At this time the site was re-landscaped and the infirmary buildings and guest house were discovered. The site was extensively excavated in the 1950s and 1980s. Today Kirkstall is situated in the midst of a public park, bisected by the A65, and is itself open to visitors free of charge.

In the early eighteenth century tiles were discovered in the church and a tiled tomb cover was reportedly found in the cloister. At the beginning of the nineteenth century further tiles were found and relaid close to the chapter house. Some tiles were also relaid without concern for their original arrangement in the southern most chapel in the south transept. Many of these tiles were from the Decorated Mosaic group, including three partial sections of roundels. Today these tiles are not protected in any way and as such are badly worn with few designs now visible. The principle area of paving discovered at Kirkstall during the twentieth-century excavations was in the late fifteenth-century refectory. It was laid on the ground floor level at the time when the refectory was reconstructed as a two-storey building. The pavement comprised of a central area divided into diagonally laid panels separated by border tiles. A large mosaic roundel was used as a centre piece and limestone flags flanked both sides of the tile pavement. The tiles are from the Decorated Mosaic

group and can be dated to the mid or late thirteenth century. They were moved from their original position, perhaps in the church, and relaid in the refectory in the fifteenth century. The tiles have lost most of their glaze and colour, making their designs generally hard to make out. In some areas the tiles are cracked and broken. The surviving section of the roundel has been reset in concrete to show its original size when complete.

MEAUX ABBEY (Yorkshire)

Bibliography: Butler 1984; Eames 1980; Eames 1961; Stopford 2005.

Figures: Fig. 4.26.

The Cistercian abbey of Meaux was founded in 1150 by the Count of Aumale *in lieu* of travelling to Jerusalem on pilgrimage. A community of monks came to Meaux from Fountains, but there were a number of difficulties with the site as it was prone to flooding. The construction of a moat like ditch around the monastic precinct appears to have been the solution to this problem. The buildings at Meaux conform to the typical Cistercian arrangement. The church was begun in 1207 and dedicated by 1253. It replaced two earlier churches and consisted of an aisled nave of nine bays, a central tower, transepts with eastern chapels and a short east end. After the construction of the church a Plain Mosaic pavement was laid sometime between 1249 and 1269. Throughout its history the community struggled with its finances and experienced a period of decline at the end of the fourteenth century. Shortly after the Dissolution the abbey buildings were entirely demolished. Stone and other materials were removed from the site to be reused in the fortifications being constructed at Hull. There were a number of excavations at Meaux during the eighteenth and nineteenth centuries, at which time graves were opened and mosaic tiles discovered. The earliest record of tiles from Meaux dates to 1760 when a roundel was discovered and later published in 1796. Two further roundels were subsequently published in 1840. Between the 1920s and 1930s more extensive excavations were undertaken by G. K. Beulah. These excavations established the plan of the monastic church and reconstructed sections of the mosaic pavement. Few tiles were found *in situ* and no complete roundels were discovered. Some tiles were found together, but others were pieced together from around the site. At Meaux the whole church, except the nave aisles, appear to have been paved as part of a single programme. The majority of tiles from Meaux have been removed from the site, but a section of mosaic roundel is preserved in the hall of Meaux Abbey Farm. A number of mosaic tiles were presented to the Dean and Chapter of York Minster in 1963

and were subsequently relaid in the crypt of the Minster. Many of the other tiles are held in the collections of the British Museum.

MUCHELNEY ABBEY (*Somerset*)

Church Pavement, Glastonbury Kiln (?), Late Thirteenth Century.

Bibliography: Baker 1873; Goodall and Kelly 2004; Lowe 2003; Pevsner 1976; Shelmerdine 1878.

Figures: Fig. 4.11.

Muchelney Abbey was first founded in the seventh century, however for reasons that are unclear the community struggled. In the tenth century Muchelney was refounded as a Benedictine abbey and a church was built at this time. The east end of the Anglo-Saxon church was given a lias stone pavement, which is now preserved under grass. In the twelfth century the monastic buildings were reconstructed to create a complex of buildings around a central cloister space. This reconstruction included a larger Romanesque church. By the end of the thirteenth century the chapter house had been extended and the east end of the church remodelled to include a Lady Chapel. It was at this time that a tile pavement was laid in the church. Further work on the church was undertaken in the fourteenth and fifteenth centuries. Building work at the abbey continued into the sixteenth century when a third iteration of the refectory was erected. By this time, however, the community may have only had ten members. Almost all of the monastic buildings at Muchelney were demolished after the Dissolution when the land was granted to Edward Seymour. Following his execution, however, the abbey was repossessed by the Crown. From 1614 until 1927 the site served as a farm with the sixteenth-century abbot's house functioning as a farmhouse. After this time the abbey was taken into state care, a report was compiled by the Ministry of Works and repairs were completed. Since 1984 the site has been in the care of English Heritage.

Muchelney was extensively excavated between 1873 and 1952. In the late nineteenth century part of a tile pavement, along with a coffin-lid, were discovered provoking the first series of excavations. At this time the tiles were removed from the site and relaid in the parish church, situated directly adjacent to the abbey. The majority of the tiles have been laid at the east end of the church before the high altar. These tiles include decorated square tiles, plain border tiles and part of a roundel. The arrangement of the tiles is reportedly similar to how they were found during the excavations at the abbey. They are generally in a good condition and visitors are directed to avoid walking on the pavement. A second, larger roundel can be found at the west end of the church next

to the font. It has been set in concrete and is raised above floor level. Though the tiles are worn and a few are broken, the tile designs are still clearly visible.

NORTON PRIORY (*Cheshire*)

Church Pavement, Line-Imprinted Mosaic, c. 1325.

Bibliography: Brown and Howard-Davis 2008; Greene 1989; Greene and Johnson 1978; Pearson 2016; Pevsner 1971.

Figures: Fig. 5.17; Fig. 5.18; Fig. 5.19; Fig. 5.20; Fig. 5.21.

The Augustinian priory at Norton was founded at the beginning of the twelfth century. The early Romanesque buildings were extended and developed during the thirteenth century. This coincided with the growing membership of the community, which made it one of the largest Augustinian houses in the country. The priory's affairs were strained in the first half of the fourteenth century, but in 1391 the priory was elevated to the status of a mitred abbey. By the early fifteenth century, however, the buildings were described as ruinous and membership waned. After the Dissolution building materials were removed from Norton rendering it uninhabitable. A manor house was built on the site at the end of the sixteenth century incorporating into it the abbot's lodgings and claustral west range. At the beginning of the eighteenth century the Tudor house was demolished and a new Georgian house was built in its place. The eighteenth-century house retained the medieval undercroft of the west range. The family left the house at the beginning of the twentieth century and the building was almost entirely demolished. In the 1970s extensive excavations were carried out on the site at which time the medieval tile pavements were discovered. These were later removed and placed into storage. After the excavations the Norton Priory Museum Trust was established who today continue to run the site, which is open to the public.

At the end of the thirteenth century the east end of the church, along with the transepts, were extended. It was at this time that a tile pavement was laid in the church, which had previously only been covered in earth or mortar. The tiles were made on-site in the priory's own tile kiln. The pavement is thought to have extended from the choir, into the transepts and all the way into the eastern chapel. The pavement was laid in panels extending from the west to the east and separated from one another by borders. The mosaic pavement was made up of a number of different geometric patterns. The colour of the tiles varied from black, to green and yellow. The church pavement has been dated to the early fourteenth century. Comparison with sites such as Ely and Warden have suggested a date around c. 1325, whilst a penny found in the mortar between the tiles

has been used to suggest a slightly earlier date of c. 1312. The northern chapel on the east side of the north transept was also laid with a mosaic pavement at this time. It was a burial chapel for the Dutton family. They had been patrons of the priory since its foundation and by the thirteenth century were its principle benefactors. The pavement consisted of line-impressed mosaic tiles like the rest of the church, however the designs were figural rather geometric. The tiles consisted of mosaic lions, the heraldry of the Dutton family and a tiled tomb cover depicting a knight in armour. None of these figural tiles, however, were found *in situ* during the excavations. Many of the tiles from the pavements in the church and chapel are now in the newly refurbished on-site museum. The display includes a good variety of the different types of tiles found at the site as well as reconstruction images of how the figural designs may have originally looked.

RIEVAULX ABBEY (Yorkshire)

Church Pavement, Plain Mosaic, Useflete Group, Huby-Percy Group, Plain Glazed, c. 1200-1500.

Bibliography: Eames 1980; Fergusson, Coppack and Harrison 2008; Fergusson and Harrison 1999; Hoey 1995; Peers 1967; Pevsner 1981; Stopford 2005; University of Sheffield 2013.

Figures: Fig. 1.2; Fig. 4.18; Fig. 4.19; Fig. 4.20; Fig. 4.31.

The Cistercian abbey of Rievaulx was founded at the beginning of the twelfth century. It was the first Cistercian foundation in the north of England and grew to be one of the most powerful. The community numbered as many as six-hundred-and-fifty in its heyday. The west range was built first, whilst many of the other monastic buildings were completed in the second half of the twelfth century. The church, first built in the 1140s, was given a new east end in the early thirteenth century. Many of the monastic buildings were altered after the fourteenth century to correspond with the disbandment of the lay brothers and a desire for greater privacy and comfort by the monks. Part of the infirmary complex, for example, was remodelled in the fifteenth century to create a new abbot's house. After financial problems in the fourteenth century, the abbey recovered and began to flourish once more by the beginning of the sixteenth century. After the Dissolution the new owner of the site made an inventory of the abbey before dismantling many of the abbey buildings and selling off the materials. By the end of the sixteenth century a blast furnace was operated on the site. At the beginning of the eighteenth century the abbey and its estates had a new owner. The Duncombe family built a new house and proceeded to create a terrace garden that deliberately overlooked the abbey ruins. The abbey was taken into the care of the Office of Works in 1917 and work was completed between 1918 and 1921 to save the monastic buildings from collapse. Later in the 1920s

clearance work was carried out to remove the rubble from the destruction of the abbey in the sixteenth century. Today the abbey site is cared for by English Heritage, whilst the terrace garden overlooking the abbey is cared for by the National Trust.

During the clearance work of the 1920s many tiles were discovered, the majority of which appear to have come from the church, and were subsequently reset. It is not entirely clear whether tiles were reset where they were found, but the position of the tiles seen today is generally believed to have been their approximate medieval locations. A Plain Mosaic pavement appears to have been laid soon after the completion of the new east end at the beginning of the thirteenth century. Further tile pavements appear to have subsequently been laid in other parts of the church. There are two-colour tiles dating to the middle of the thirteenth century, along with tiles from the Useflete Group which have been dated to the beginning of the fourteenth century. These appear particularly in the area around the transepts. There are tiles at the east end of the nave from the Huby/Percy Group which date to the late fifteenth or early sixteenth century. The Plain Glazed tiles at the west end of the nave appear to have been the last pavement laid in the church, dating to the beginning of the sixteenth century. A pavement was laid using Plain Mosaic tiles from the site in one of the classical temples built on the terrace overlooking the abbey. A nineteenth-century drawing of this pavement states that the tiles had been removed earlier that century from their original position in front of the high altar. Further Plain Mosaic tiles appear to have been laid at some time in a local farmhouse, but the building was demolished in the 1950s and no tiles were recovered. Some tiles were removed from the abbey in the 1920s and are today in the collections of the British Museum. The tiles that remain in the church are in mixed conditions. In recent years some tiles, particularly the Plain Mosaic tiles at the east end of the church, have been covered over with earth. The Plain Glazed tiles at the west end of the church, almost all of which are broken or cracked, are usually kept covered with tarpaulin during the worst weather conditions. A recent display in the on-site visitor centre now includes a variety of different tile groups that have been found at the site.

SALISBURY CATHEDRAL (*Wiltshire*)

Chapter House and Muniment Room Pavements, Wessex Group, c. 1260s.

Bibliography: Ayers 2000; Brimacombe 1997; Britton, 1814; Cocke and Kidson 1993; Eames 1980; Green 1968; Keen and Cocke 1996; Reeve 2008; Saunders and Saunders 1991; Shaw 1858; Whittingham 1974.

Figures: Fig. 1.23; Fig. 1.24; Fig. 2.17; Fig. 2.18.

The octagonal chapter house at Salisbury Cathedral was built at the end of the thirteenth century and a tile pavement laid shortly after its completion. This medieval pavement today exists as a selection of much worn tiles relaid by the entrance to the Lady Chapel at the east end of the cathedral. The *in situ* chapter house pavement was laid in the 1850s during the Victorian restoration of the building. The nineteenth-century pavement was based upon the plan made by Alwyne Compton of the original medieval pavement. A plan of the medieval chapter house pavement had previously been made by John Carter in the late eighteenth century. The chapter house pavement, whilst visually complex, can be broken down into eight segments. These segments are divided by border tiles that run from the central column to the centre point of the outer walls. Within each of these eight segments are five panels of varying size. These five panels are also divided by border tiles. Part of the complexity of the pavement layout arises from the repetition of panel designs across the segments. The panels in the first and second segments, for example, are a mirror image of one another. This creates a series of L-shapes, dividing the pavement into quarters, and creating a cross-shape around the central column. The complexity of the chapter house pavement does not come from its tile designs as only a limited number of designs are used in the pavement. There are six different square 130mm tiles, five different square 40mm tiles and five different rectangular border tiles. The pavement in the vestibule consists of long rectangular panels leading the viewer from the cloister into the chapter house. Despite only being laid in the mid-nineteenth century, the chapter house pavement is today in a poor condition. Display cabinets had been bolted into the floor and though now removed this has left holes through some of the tiles. Other tiles are broken or in some way damaged. The colour and effect of the pavement arrangement, however, is still strikingly visible.

The muniment room at Salisbury Cathedral retains its original medieval pavement. Neither the muniment room nor its pavement have been assigned a date. Since the beginning of the 1970s the muniment room has been used as the Song School. At that point the medieval chests were moved to the north choir aisle and the pavement covered with boarding. Now only a small area of tiles is visible around the central column. The pavement is remarkably well preserved, particularly considering that extensive restoration work was carried out in the muniment room during the 1930s. The pavement is recorded by Compton's sketch plan made c. 1850 and by a series of black and white photographs taken in 1961 by the Royal Commission for Historical Monuments England. The muniment room has a very similar layout to the chapter house at Salisbury. It consists of eight segments divided by a line of border tiles running from the central column to the middle of the outer walls, but there are only three panels within each segment. The muniment room contains more tile designs than the chapter house pavement with fifteen different designs evident.

TEMPLE CHURCH (*London*)

Church Pavement, Minton & Co., c. 1840s.

Bibliography: Burge 1843; Grant 1990; Griffith-Jones 2008; Griffith-Jones and Park 2010; Lewer 1971; Mordaunt Crook 1965; Richardson 1845; Smirke 1845; Smirke 1844; Urban 1841.

Figures: Fig. 1.8; Fig. 1.9; Fig. 2.6.

Temple Church, built by the Knights Templar, was consecrated in the late twelfth century. The church had a centralised plan intended to recall the circular church of the Holy Sepulchre in Jerusalem. An enlarged rectangular choir was added to the church in the middle of the thirteenth century. The church served as the chapel for the headquarters of the Knights Templar in London. After the fall of the Templars in the early fourteenth century, Temple Church was given to the Knights Hospitaller by the king. From this time the Temple was rented by two colleges of lawyers who used the church as their chapel. When the Hospitallers were disbanded after the Dissolution the church once again became property of the crown. At the beginning of the seventeenth century the two colleges of lawyers were granted a Royal Charter giving them use of the Temple buildings in perpetuity on the condition that they maintained the church. Later that century the church was restored by Sir Christopher Wren, and a second restoration project was completed in the mid-nineteenth century. During the Second World War the church was badly damaged during an air raid, with the organ and all the wood in the church being destroyed. The choir was rededicated in 1954 and the round church a few years later.

During the restoration of Temple Church in the 1840s the marble floor was removed and the original medieval pavement discovered. It was decided to create a new pavement based upon medieval examples in both style and arrangement. Herbert Minton was employed to create this new pavement made from encaustic tiles. The chapter house pavement at Westminster Abbey was studied in order to copy its layout. Tile designs were also copied from Westminster, alongside those that had been found at Temple Church during the restoration. Additional designs, such as the emblems of the two colleges of lawyers were also commissioned for the pavement. Minton's pavement, originally laid in the church, can now be found on the triforium level of the round church. The tiles were relaid after the bombing of the church during the Second World War. The tiles are in remarkably good condition. There is little obvious sign of damage or wear, and the colour and design of the tiles remains vividly bright. The tiles are not subject to much wear by visitors as access to the triforium is allowed only with prior permission.

TITCHFIELD ABBEY (*Hampshire*)

Cloister Pavement, Early Fourteenth Century.

Bibliography: Graham and Rigold 1969; Green and Green 1949.

Figures: Fig. 4.2; Fig. 4.3; Fig. 4.4.

The Premonstratensian abbey at Titchfield was founded in the early thirteenth century and most of the monastic buildings date to this period. There were several royal visits made to the abbey during the fourteenth and fifteenth centuries presumably in part due to the abbey's location close to ports. By the end of the fifteenth century the community numbered fifteen at most and the buildings were reportedly in good condition. After the Dissolution the abbey and its lands were given to Thomas Wriothesley, a close associate of Thomas Cromwell, who set about turning the abbey buildings into a grand residence known as Place House. It was noted during the rebuilding work that the pavement in the nave was taken up and few of the tiles were saved due to their poor condition. The refectory to the north was transformed into the hall, whilst the nave of the church was adapted to become the gatehouse range with domestic apartments. Further royal visits occurred at Place House and Shakespeare is thought to have performed some of his plays there. Much of Place House was demolished at the end of the eighteenth century. By the beginning of the twentieth century the land was owned by the Ministry of Agriculture and Fisheries before being passed into the care of the Office of Works in 1923.

The site was excavated in the late nineteenth century and again in the early 1920s at which point the medieval tiles were discovered. They were found to be well-preserved having been buried under soil and masonry since the sixteenth century. Surviving tiles are to be found scattered around the area of the medieval cloister, but the church and other monastic buildings are known to have possessed tile pavements that have not survived. The cloister tiles have been dated to the late thirteenth or early fourteenth century. The two-colour tile designs at Titchfield include birds, beasts and castles. Some of these designs have been found at other sites locally, including the Premonstratensian abbey at Durford. This has been used to suggest that the tiles were made locally. It has been noted, however, that the Titchfield pavement shares similarities with the pavement laid at Halesowen Abbey prior to 1298. Halesowen in the West Midlands was the mother house of Titchfield and the decision to copy designs from that pavement may have been a deliberate statement. The similarities between some of the designs found at Titchfield and the Chertsey tiles has also been noted. In principle the surviving tiles in the cloister at Titchfield are covered in

tarpaulin weighted down with sand during the winter months and are left exposed to the elements during the summer months. Between visits made by the author in 2013 and 2016 some of the tiles appear to have lost most of their glaze making their designs harder to distinguish. This may be due to exposure to the elements, but it could also be that the tiles require cleaning. Many of the tiles are cracked and broken in several places. The tiles are fenced off from the rest of the site so are saved from being walked on by visitors. The tiles which were preserved beneath the spiral staircases of the Tudor gatehouse are badly discoloured with mould. The most prestigious tiles, the inscription at the refectory entrance, are in the best condition of all the surviving tiles from the site.

WARDEN ABBEY (*Bedfordshire*)

Church Pavement, Line-Imprinted Mosaic Group, c. 1325.

Bibliography: Baker 1987; Baker 1980; Lillich 1993; Renaud 1982; Rudd and West 1964.

Figures: Fig. 4.32; Fig. 5.13; Fig. 5.14; Fig. 5.15; Fig. 5.16.

The Cistercian abbey of Warden was founded in the early twelfth century. Many of the monastic buildings were rebuilt at the beginning of the fourteenth century following a period of growing wealth and power. After the Dissolution the abbey buildings were demolished and the materials sold. Soon afterwards a grand house built of red brick was erected to the east of the site, incorporating some of the late medieval abbot's house. By the end of the eighteenth century the house was purchased by Samuel Whitbread of Southill Park, and his descendants remain the owners of the site today. Around 1790 much of the Tudor house was demolished. One wing of the house survived and this is all that remains of both the medieval abbey and Tudor house. At the beginning of the twentieth century the building was derelict and in the 1950s the roof was damaged by a fire. Emergency repairs were carried out in the 1960s and the site was leased to the Landmark Trust in 1974. Restoration work was completed by 1976 and the house was opened as a holiday let.

There have been excavations at the site since the early nineteenth century. More extensive excavations were carried out between 1960 and 1961 with the aim of finding the remains of the church. It was at this time that the first pavement was discovered in the area of what would have been the south transept. The pavement consisted of roundels and mosaic tiles arranged to create geometric patterns. Further excavations were carried out between 1974 and 1975 during the restoration work by Landmark Trust. A second pavement was found in a building thought to have been the abbot's house. The pavement consisted of line-imprinted mosaic tiles in both geometric and figural shapes. The figural tiles were arranged haphazardly to fill a border and are unlikely to

have been in their original positions. Both of the pavements at Warden have been dated to the early fourteenth century. This date is based upon a comparison to the mosaic pavement at Ely, along with the date of the rebuilding of the church at Warden. After 1975 both pavements were removed from the site and taken to the Higgins Art Gallery and Museum in Bedford for the purposes of conservation and study. The tiles, on loan from the Whitbread family of the Southill estate, remain today in the collections of the museum. A small number of these are on display in the museum, whilst the others are kept in boxes in their archives. The tiles are incredibly well preserved with many retaining their original glaze allowing the hand-incised details to be properly appreciated. Due to the *ex situ* nature of the Warden tiles it is also possible to study the back and sides of the tiles. Many of the tiles that comprised the figural mosaics, for example, are marked with numbers, letters or words. These indicate what the piece was and where it fitted in relation to the other tiles.

WELLS CATHEDRAL (*Somerset*)

Corpus Christi Chapel Pavement, Glastonbury Kiln (?), Late Thirteenth or Early Fourteenth Century.

Bibliography: Coldstream 1981; Foord 1925; Lowe 2003; Pevsner 1976; Rodwell, 2001; Vallance 1947.

Figures: Fig. 4.1.

The Corpus Christi Chapel is situated in the north-east transept of the cathedral and was constructed during the first quarter of the fourteenth century. An area of *in situ* pavement survives in the north-west corner of the chapel, which was revealed after the removal of a tomb-chest in the 1970s. Only a small part of this arrangement, however, is medieval. The southern part of the pavement was destroyed during the refurbishment of the chapel in the early nineteenth century. At this time some of the tiles from the destroyed section were relaid to the east of the surviving section and others were used to pave the altar step. The majority of the tiles have been dated to the late thirteenth or early fourteenth century. They were produced at a kiln close to Glastonbury, which also provided tiles for other sites in Somerset such as Cleve Abbey, Glastonbury Abbey and Muchelney Abbey. A few of the tiles have been dated to the Wessex Group active in the 1250s, whilst others are at least two centuries later. The addition of these other tile groups may have occurred in the nineteenth century. The condition of the tiles is mixed with some showing damage whilst others still retain their glaze. The chapel pavement is roped off and as such is not currently subject to wear by visitors.

WESTMINSTER ABBEY (*London*)

Chapter House Pavement, c. 1253-1259.

Bibliography: Binski 1995; Binski 1990; Bond 1909; Clayton 1912; Cocke 1995; Cottingham 1842; Eames 1980; English Heritage 2007; Foster 1991; Grant and Mortimer 2002; Lethaby 1925; Lethaby 1917; Lethaby 1906; Montagu 1988; Nichols 1845; Reynolds 2011; Rigold 1976; Rodwell and Mortimer 2010; Rodwell and Tatton-Brown 2015; Royal Commission on Historical Monuments 1924; Scott 1863; Shaw 1858; Tatton Brown 2000; Thompson 1904; Trowles 1997; Wilson 2008.

Figures: Fig. 1.7; Fig. 2.3; Fig. 2.4; Fig. 2.5; Fig. 2.7; Fig. 2.8; Fig. 2.9; Fig. 2.10; Fig. 2.11; Fig. 2.12; Fig. 2.13; Fig. 2.14; Fig. 2.16; Fig. 2.19; Fig. 2.20.

The main building work on the chapter house at Westminster Abbey was completed in 1253 and it would have been paved by 1259 at the latest. Though primarily designed for the use of the abbots and monks of Westminster, the chapter house was also used by the king and as a meeting place for the Commons. After the Dissolution, once the Commons had moved permanently to another location at Westminster, the chapter house became a record store, particularly for the exchequer. Before 1753 it was known as the 'chapter house treasury', but by 1755 it was furnished as a record office. Between 1753 and 1838 it was the exchequer record office and from 1838 to 1864 it was the Public Record Office. For much of its life as a record office the chapter house floor was covered with wooden boarding. As a consequence, when the boarding was removed in 1841 to be studied by Lewis Cottingham and James Savage, the tiles were found to be well preserved. Both Cottingham and Savage were involved with the restoration work taking place at Temple Church. The chapter house and its tiled pavement were restored under the supervision of Sir George Gilbert Scott. Scott had been appointed Surveyor of the Fabric to the Dean and Chapter of Westminster Abbey in 1849, a post he held until his death in 1878. Once the new Public Record Office at Chancery Lane was completed, responsibility for the chapter house was passed to the Office of Works in 1864. Work by Scott on the restoration of the chapter house began in 1867. In 1866 the schedule of work recorded the provisional sum of £400 for the repair of the pavement. By March 1871 a report on the restoration work stated that the inner portal and tiled floor were still to be completed. By January 1872, however, the Office of Works confirmed that the chapter house restoration was complete. The most heavily damaged and worn tiles were replaced by replica tiles manufactured by Minton. The Victorian replicas are scattered across the entirety of the pavement, with the most extensive areas of repair occurring around the entrance to the chapter house. Care seems to have been given to match the Victorian replica tiles with their medieval counterparts. Yet even today they remain visually distinctive in colour and texture from the medieval pavement.

The pavement is now under the care of English Heritage. Various initiatives have been attempted to care for the pavement whilst preserving access for visitors. In the 1980s and 1990s overshoes and a perimeter mat made of coir were used and a microcrystalline wax applied to the tiles to protect them. However, this was removed in 1997 when it was revealed to have resulted in discolouration. Currently a fitted carpet protects the pavement, with detachable sections that can be removed according to the use of the chapter house. Only 10% of abbey visitors enter the chapter house. At its peak in the summer, however, visitor numbers can reach 16,000 per month. In order to preserve the pavement for future generations English Heritage carried out in 1998 a photogrammetric survey of the pavement which was later published. In this way the pavement remains visually available in great detail even whilst the physical pavement remains partially, or if not entirely, hidden from the visitor.

WINCHESTER CATHEDRAL (*Hampshire*)

Retrochoir Pavement, Wessex Group, c. 1260-1280.

Bibliography: Carpenter Turner 1969; Crook 1993; Draper 1986; Draper 1978; Eames 1980; Emden 1948; Heslop and Sekules 1983; Knapp 1956; Woodman 1983.

Figures: Fig. 2.1.

At Winchester the Norman church was reconstructed in the early thirteenth century with the addition of the retrochoir which included at its east end a Lady Chapel and flanking this a further two chapels. The Lady Chapel was paved first, perhaps around 1250, with tiles that were also used at Clarendon Palace. The retrochoir pavement was laid at the end of the thirteenth century and originally covered the whole retrochoir along with the north presbytery aisle and possibly also the south presbytery aisle. The pavement was divided into rectangular panels divided by border tiles. These panels ran from east to west in the centre of the retrochoir and from north to south in the aisles. The layout of the pavement and its tile designs were copied from pavements that had been laid at Winchester in the 1240s and 1250s. The retrochoir pavement itself provided the inspiration for the early fourteenth century pavement in the eastern aisle of the north transept. By this time the entire east end of the church had almost certainly been paved with tiles. The pavements were laid sequentially and during a period when no other major building work was undertaken.

In the nineteenth century antiquaries like John Gough Nichols and John Henry Parker reproduced some of the tile designs from Winchester in their publications. There are also unpublished drawings of Winchester tiles made by Alwyne Compton along with a plan of the

retrochoir pavement which shows areas that have since been lost or damaged. The medieval pavement in the north presbytery aisle was removed in 1969 to allow essential repairs to be carried out on the crypt vault below. At this time it was recorded that the pavement had already been disrupted and in some areas replaced. In the sixteenth century, for example, the wall of the north presbytery aisle was rebuilt and the northernmost part of the pavement was damaged as a result. Further disruption was caused in the early twentieth century when the heating system was installed. After the repairs were completed a replica pavement was laid, which had been handmade by Professor Baker after much experimentation with medieval techniques. The south presbytery aisle is now paved with slabs of Purbeck marble, possibly laid in the early sixteenth century, but presumably the thirteenth-century retrochoir pavement originally extended there too. Today the two best preserved areas of the retrochoir are to the east of the high altar and to the west of the Lady Chapel. Much of the rest of the pavement has been disturbed by later burials and encroachments made by late medieval chantry chapels. The central area of the retrochoir pavement was restored in the 1990s. At this time the medieval tiles were conserved and Diana Hall was commissioned to create replica tiles to replace plain tiles that had been laid during nineteenth- and twentieth-century building works. Replica tiles were also laid on the north side of the retrochoir where a tomb had been removed to create easier access for visitors. These replica tiles are visually quite distinct from the areas of the original medieval pavement. The surviving areas of medieval paving are subject to considerable wear by visitors as, except for one rug, the retrochoir pavement is left uncovered.

YORK MINSTER (*Yorkshire*)

Chapter House Pavement, Minton & Co., c. 1844-1845.

Bibliography: Aberth 1989; Britton 1819; Brown 2003; Browne 1847; Coldstream 1972; Drake 1736; Echlin 2016; Halfpenny 1795; Harrison and Norton 2015; Hampson 2005; Minton & Co. 1842; Pevsner 1981; Royal Commission on Historical Monuments 1974; Stopford 2005; Vallance 1947; Wander 1978; Willey 1998.

Figures: Fig. 1.10; Fig. 1.11; Fig. 1.12; Fig. 1.13; Fig. 1.14; Fig. 1.15; Fig. 1.16; Fig. 1.17; Fig. 1.18; Fig. 1.19; Fig. 1.20; Fig. 1.21; Fig. 1.22; Fig. 3.2; Fig. 4.1; Fig. 5.34.

The centrally planned chapter house at York was built on the north side of the Minster and connected to the eastern aisle of the north transept via an L-shaped vestibule. It has no recorded date of construction, but scholars have concluded a date of 1290 to be most likely, due primarily to stylistic comparisons. The chapter house provided a dedicated space for the daily meetings of the

Chapter and the weekly meetings which would have included matters of discipline for the lower members of clergy. The room is lined with forty-four canon stalls – six seats on seven sides of the octagon and two seats flanking the entrance. The walls, windows and stones of the chapter house were richly decorated. In this context it would be expected that the floor was also decorative, however, no trace of the original medieval floor remains. By the eighteenth century the chapter house was depicted with a floor consisting of plain rectangular slabs. The chapter house was restored between 1844 and 1845 under the direction of Sydney Smirke. The restoration included renewing the stone sculptures and repainting the vault. The stone floor of the chapter house was also removed so that underfloor heating could be installed. The hot water pipes, covered by decorative cast iron grilles, span the perimeter of the room. A decorative tile pavement made by Minton was then laid. Wyatt, Parker & Co., the company representing Minton in London, were paid £150 in September 1845 and £215 4s 9d in 1846, for providing the encaustic tiles for the chapter house pavement. The design of the pavement consists of a series of concentric octagons divided by borders. The centre of the pavement is demarcated by a large cross from which eight large panels radiate around the room. The tiles have a large variety of designs, many of which were based upon medieval designs, and all but four were present in Minton's 1842 printed catalogue of designs. Considering the date when the pavement was laid it is in surprisingly poor condition. This is almost certainly a result of a lack of any obvious means of conservation. Visitors are free to walk over the entirety of the pavement and furniture is placed directly onto, and moved over, the tiles. A good many of the tiles are cracked or have corners broken off. This damage appears to be spread equally across the pavement, though the central cross has particularly suffered. The designs of the tiles and their colour are, however, clearly visible and in generally good condition.

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