

The Original Placement of the Hereford Mappa Mundi

Dan Terkla

Abstract: Although antiquarians, historians of cartography, palaeographers and art historians have written about the Hereford *mappa mundi* for more than three hundred years, we know little about its original placement or use. This paper relies on new masonry and dendrochronological evidence and the system of medieval ecclesiastical preferments to argue that this monumental world map was originally exhibited in 1287 next to the first shrine of St Thomas Cantilupe in Hereford Cathedral's north transept it did not function as an altarpiece, therefore, but as part of what I, call the Cantilupe pilgrimage complex, a conglomeration of items and images which was for a time one of England's most popular pilgrimage destinations. In this location, the map would have added to the complex's attractive power and served as a multi-media pedagogical tool.

Key words: England, Hereford Cathedral, Lincoln Cathedral, Bishop Richard Swinfield, Richard de Bello, Richard of Haldingham and Lafford, St. Thomas Cantilupe, altarpiece, Cantilupe pilgrimage complex, mappamundi (*mappa mundi*), pedagogy, pilgrimage, shrine, tomb, triptych.

Thanks to antiquarians, historians of cartography and, more recently, scholars working in what the late J. Brian Harley might have called the inter-arts disciplines, we know an enormous amount about the Hereford *mappa mundi*, which has been displayed in Hereford Cathedral since its creation in the late thirteenth century (Plate 1).¹ However, in part because of the dearth of archaeological, dendrochronological and documentary evidence, we have had no firmly grounded theories about the map's original placement or its function as the centrepiece of an elaborate triptych. The assessment of new as well as old evidence offered here is intended as a contribution toward a solution to this problem.

Four different types of evidence allow me to contend that the map was originally displayed in the Cathedral's north transept next to the shrine of Thomas Cantilupe, Bishop of Hereford (1275-1282), and that there it was part of what I call the Cantilupe pilgrimage complex: (1) dendrochronological. dating of the map's original oak backboard by Dr Ian Tyers of the University of Sheffield in January 2004; (2) the records of ecclesiastical preferments that benefited Hereford churchmen Richard Swinfield and Richard de Bello; (3) palaeographical work done on the map by Malcolm Parkes and Nigel Morgan; and, no less

important, (4) masonry evidence that I noted in Hereford Cathedral's north transept during the 'Hereford and Other *Mappamundi*' conference, held at Hereford Cathedral in 1999.² Taken together, these different categories of evidence support parallel if inchoate placement theories advanced by Marcia Kupfer, Valerie I. J. Flint and Naomi Reed Kline and incorporate work done by Martin Bailey and Scott Westrem.³ I hope my theory will also generate a fresh discussion about the map's use in *situ*, lead to a reconsideration of the power of the places in which it has been displayed and put an end to the long-standing argument that the map, as the central element of a triptych, functioned as an altarpiece in Hereford Cathedral.

This essay has six sections, with the first four providing the contextual foundation for the fifth and sixth. Section one, The Triptych, primarily presents empirical data about the Hereford *mappa mundi* and its wooden casing, although documentary evidence and informed speculation play their parts.⁴ Section two, The Cantilupe Pilgrimage Complex, outlines my theoretical reconstruction of the Cathedral's north transept and relies in almost equal parts on empirical data, documentary evidence and informed speculation. Section three, Convergent Chronologies, presents biographical information about the four men likely to have been involved in the map's creation and traces lines of patronage to support my contentions about the map's placement and sets my argument's temporal parameters. Section four, Triptych Support, introduces masonry evidence to situate the triptych case in its original location and thus leads into section five, Placement and Purpose, which argues against the myth of the map in its triptych as an altarpiece. Section six, A Likely Story, pulls together the various threads of evidence to offer an alternative to that myth.

The Triptych

The Hereford *mappa mundi*, now on permanent display in the Cathedral's New Library Building, 'is a sophisticated textual and pictorial representation of the world, combining nearly 1,100 inscriptions, most of them in Latin, taken from various Classical and medieval texts with nearly as many painted scenes and symbolic decorations' (Plate 1).⁵ The map, which 'was drawn on the carefully prepared hide of a hefty calf', measures roughly 163 cm by 137 cm.⁶ It presents the viewer with a wealth of 'cosmographical, ethnographical, geographical, historical, theological, and zoological information about the inhabited parts of the earth as it was conceived in Europe during the Middle Ages'.⁷ This, the largest extant thirteenth-century *mappa mundi*, was originally fixed with a copper strip and nails to the central panel of an oak triptych case, of which only the central panel survives (Plate 2). The dimensions of this panel

allow us to determine the size of the triptych's missing wings, or doors, and Ian Tyers's dendrochronological study allows accurate dating of the central panel's component parts: the six oak planks, the timber framing pieces and the oak-leaf mouldings currently attached to the panel's apex.⁸

As is well known, the earliest recorded sighting of the map in its triptych dates from c.1682, when Thomas Dingley reported seeing it in the Cathedral Library.⁹ During its first major restoration at the British Museum in 1855, crucial elements of the panel's decoration were removed, as the diary of Sir Frederic Madden, Keeper of the Manuscripts at the Museum, reveals. There was

a scroll ornament or border . . . introduced on each side the dragon-shaped animal that so often appears in MSS executed about 1300. This ornament at once fixed the date of the frame itself, and it was therefore not without extreme surprise and regret that I found the whole of the whitewash had been removed (and with it the ornamental border), so as to show the wood beneath.¹⁰

We also know from Richard Gough's eighteenth-century report that the triptych's original doors had the Annunciation painted on their inside surfaces.¹¹ The doors were removed, in all likelihood, 'between 1780 and 1800.'¹² There are no accounts, to my knowledge, of what might have been painted on the outside of each door.

In 1948, the central panel was done away with, perhaps on the advice of the president of the Royal Geographical Society, and the map was mounted on wood from London churches bombed during the Second World War.¹³ In a letter dated 10 October 1947, regarding 'worm activity in the form of new fresh worm holes through the surface of the skin', the president recommended to the Very Reverend Dean of Hereford, Dr. Burrows, that 'the whole frame should be dealt with at once, preferably destroyed; it has no artistic merit whatsoever: moreover the finials, crochets and Victorian gothic embellishments are broken and shabby'.¹⁴ Although, thankfully, the president's advice was ignored, the central panel was relegated to the Cathedral's former stable, where Martin Bailey and Raymond Kingsley-Taylor, chapter clerk, found it in 1989. Until December 2003, the panel was on display in the Cathedral's former cloister.

The panel was taken off display in December 2003, in preparation for Ian Tyers's dendrochronological dating. Tyers's work confirms that the six planks of unequal width which form the central panel were taken from straight-growing oaks 'in or near Herefordshire', felled as early as 1265 or as late as 1311.¹⁵ In addition, '[I]f we assume the panel is constructed from fresh or relatively unseasoned material (the clean and long toolmarks and the extent of the

thinning carried out on the outer two boards [of the central panel I suggest that this is a reasonable conjecture) then the usage-date probably lies within the same period'.¹⁶ Tyers also confirms that the plain moulding that frames the ancient oak planks is from the nineteenth century. In order to accommodate the map's pentagonal shape—the result of its being painted on a single hide, with the neck portion forming its rounded apex—the panel rises to a point, a gable, in true Gothic style and is currently surmounted by two large oak-leaf mouldings. These mouldings lacked sufficient rings for Tyers to date them, although they have been carbon-dated to between 1040 and 1280.¹⁷ Tyers's examination found them to be 'contemporaneous, or broadly so, with the six dendrochronologically dated boards'.¹⁸ With the exception, then, of the Victorian framing pieces, we can confidently state that the triptych's wood dates from the same time as the creation of the map itself, which, as I argue below, occurred around 1283.¹⁹

The centre of the panel measures 175 cm from base to apex and is roughly 147 cm wide, although 'the bottom edge of the vertical boards is probably not the original extent of the panel since this edge is neither well finished nor is it square to the panel, to the extent that the right hand side of the panel is c. 25 mm shorter than the left edge (viewed from the front)'.²⁰ Extrapolating from the width of the central panel, we get a rough size for each of the triptych's wings, or doors, of 73.5 cms. Therefore, with the doors open the triptych would have been about 294 cms wide, not including the room taken up by the hinges. The heavy oak-leaf moulding pieces surmounting the panel's gable were incorrectly remounted in the nineteenth century. This mistake left the gap that we now see between these pieces at the peak of the gable, a gap that we know was filled by a Victorian finial, missing since the 1940s (see Plate 2).²¹ If the Victorian framing pieces were removed and the oak-leaf mouldings were refitted to the central panel in what seem to be their original places, we would see that they fit nicely together atop the central panel and that the gap between them disappears.

A hole near the centre of the panel has been left by the foot of the compass used to draw the circles that constitute the 'O' of this modified T-O map and that form Jerusalem's walls (Fig. 1).²² The two rows of holes that rim the panel show us where the metal strips were nailed to fix the map to its backing (Fig. 2). There are 'at least eight holes' on the map left by these nails, four of which have been patched, perhaps during its 1855 restoration.²³ At some point in its history the map was trimmed, as the 16-cm height differential between its height (163 cms) and that of the central panel (175 cms) indicates.²⁴ The compass-foot hole in the panel implies that the hide was attached to the panel before being drawn, and the nail holes suggest that this fixing occurred with the panel in a vertical position, as Scott Westrem and

Ian Tyers have put forward.²⁵ There are also two large holes in the panel, near its apex, which look as if they were made to accommodate hardware used to attach the triptych to a wall. In sum, then, the markings on the central Hereford oak panel, along with carbon and dendrochronological dating, suggest that the Hereford *mappa mundi* was drawn in Hereford, not in Lincoln, as many have argued, and that its triptych case was also made in Hereford.²⁶ As Tyers notes, '[t]his is an unexpected outcome, since the *Hereford Mappa Mundi* has hitherto been thought on documentary and pictorial evidence to have been made in Lincoln and subsequently moved to Hereford'.²⁷

The Cantilupe Pilgrimage Complex

Both the original location of the map in its triptych case and its purpose have been debated for many years. I contend that the map was a central element of the pilgrimage complex devoted to St Thomas Cantilupe, when it was located in the Cathedral's north transept. Thomas Cantilupe, Bishop of Hereford, died in 1282 while returning from a papal audience in Italy. His bones were brought back to Hereford, where they were initially interred in the Cathedral's Lady Chapel (east of the main altar) in 1282. His successor, Bishop Richard Swinfield, then had a grand shrine built in the Cathedral's north transept to which Cantilupe's remains were translated in 1287. Owing largely to Swinfield's efforts, Cantilupe was canonized in 1320, three years after Swinfield died.

Although we have a good deal of information about the lives of the primary participants in the initial period in the map's history, the paucity of thirteenth-century Cathedral records leaves us with virtually no knowledge of what pilgrims to Cantilupe's shrine would have seen in the north transept or what constituted the collection of items in the Cantilupe pilgrimage complex. The renovations overseen by the nineteenth-century architects Lewis Nockalls Cottingham, whose 'sensitivity to the ancient fabric left something to be desired', and Sir George Gilbert Scott, who favoured interior walls free of clutter, have exacerbated the problem.²⁸ As Julia Barrow wrote, 'Surviving sources for Hereford are few at the outset of the period [1056-1268] but plentiful by the end'. However, for the years of interest here (roughly 1270 to 1320), Robert Swanson and David Lepine inform us that the 'seeming wealth of evidence is deceptive: while plentiful, the records are often frustrating. The accounts are particularly problematic. Their number, the infuriating gaps, and the sheer complexity of the Hereford accounting system, often combine to defy analysis'.²⁹

A paucity of information does not mean a total lack of information, though, and we do

know that Cantilupe's relics made Hereford Cathedral an immensely popular destination for thirteenth- and fourteenth-century pilgrims. The *Acta Sanctorum*, a multi-volume compendium of primary documents and commentaries related to the lives of saints, provides us with accounts of the miracles worked by the Cantilupe shrine and so gives us an idea of its popularity.³⁰ R. C. Finucane's work bears this out: 'Although nearly 500 miracles were recorded by the tomb-custodians between 1287 and 1312, the peak occurred when enthusiasm was at its height at the start of the cult during April 1287, when some seventy-one miracles were listed'.³¹ *The Register of Thomas de Cantilupe* provides more evidence of his shrine's attractive power. As the Reverend W. W. Capes wrote in his introduction: '[T]he royal family and great nobles visited the [1287] tomb, and the excitement spread for eighteen years with unabated force'. He also tells us that '[p]ilgrims with their offerings were then thronging around the tomb, making it impossible for building operations to be carried on'.³² That is, the shrine's popularity seems to have interfered with the enlargement of the north nave aisle, which Bishop Swinfield commenced during his episcopacy (1282-1317), to allow pilgrims easy access to the north transept and the Cantilupe complex.³³ In addition to 'producing a modern setting for the pilgrim route', the renovations were undertaken 'with the aims of ... promoting the status of the bishopric, and creating an eye-catching skyline of towers to help proclaim these functions' to visitors approaching the building.³⁴

Pilgrims arrived at the shrine by passing through the cemetery on the Cathedral's north side—a fitting reminder of their mortality—before entering the building via the north door (Fig. 3), which was dedicated to their use. They then moved eastward along the north side of the nave (Fig. 4). As they approached the north transept, which Bishop Peter Aigueblanche had rebuilt in the 1250s in the French style, the pilgrims would have experienced what R. K. Morris calls the 'finest set-piece in the cathedral', and George Gilbert Scott proclaimed 'the Magna Carta of Gothic architecture' (Fig. 5).³⁵ This 'set-piece' comprised the whole of the north transept, including along its eastern wall the Cantilupe pilgrimage complex. The first of the elements that pilgrims would have seen in the transept, I suggest, would have been the *mappa mundi* in its triptych on the east wall between Cantilupe's shrine and the partition separating the north transept from the choir aisle. This placement would have centred the map in its triptych under Aigueblanche's immense tripartite stained-glass windows in the upper half of that wall (Plate 3). The moment the pilgrims sighted the left door/wing, on which was painted the angel Gabriel, they also would have seen the corner of the saint's shrine.

Moving on into the transept, the pilgrims would have approached the canopied shrine

which had a full-body mural of Cantilupe on the wall above and to the left of his shrine.³⁶ Offerings to and mementoes of the saint we can assume to have been placed in the vicinity. Once the pilgrims had reached the shrine itself, they would have knelt in prayer and deposited their gifts as near as possible to the saint's remains, perhaps placing them on the lid of the tomb after slipping them through the arches of the canopy.³⁷ infirm pilgrims would have thrust their diseased and damaged limbs through these arches to touch the shrine itself, hoping that the emanations from Thomas's divine bones would relieve their suffering.³⁸

Although this image of the complex depends mainly on informed speculation, it is based on antiquarian accounts of the shrine, on the evidence of the masonry close by, and on sight lines from the north nave aisle into the north transept—that is, on what a thirteenth-century viewer would have seen when approaching the complex from the north nave aisle. William Stukeley's mid-eighteenth century account provides us with a tantalizing description of the transept's clutter, the east wall and Cantilupe's shrine:

[H]is picture is painted on the wall. [A]ll around are the marks of hooks where the banners, lamps, reliques, and the like presents were hung up in his honor, and no doubt vast were the riches and splendor which fill'd this place, and 'tis well guarded and barricado'd to prevent thieves from making free with his superfluity's. [T]he shrine is of stone, carv'd round with knights in armor, for what reason I know not, unless they were his life-guard. I saw a book printed at St. Omars, of no little bulk, which contain'd an account of his miracles.³⁹

Since in the nineteenth century the east wall was cleared of articles that would have provided us with vital clues as to the original appearance of the Cantilupe complex, it bears no marks that we can match to those left by the 'hooks' Stukeley saw. Similarly (and sadly), we do not know what the 'banners' and 'like presents' were, nor can we say where the 'book printed at St Omars' was positioned.

The tomb Stukeley saw was all that remained of the shrine that Swinfield had constructed for Cantilupe's translation to the north transept from the Lady Chapel in 1287.⁴⁰ This tomb, the same structure that today's visitors to Hereford cathedral see, is comprised of just the base and canopy of the original shrine. As Penelope Morgan suggests, Cantilupe's shrine would have been more elaborate:

Originally intended as an altar tomb it was converted within a few years, as stories of Cantilupe's sanctity spread, into a shrine with a super-structure to hold a feretrum [a metal reliquary]. The beautiful base, carved with knights and naturalistic foliage, and one small brass representing St Ethelbert, once part of a large brass memorial on the tomb, remain.⁴¹

Currently, this 'beautiful base' and the attached 'super-structure' that Stukeley saw, stand away from the east wall (Fig. 6).⁴² An examination of the stonework, however, indicates that the

original 1287 shrine had been set against the wall, just below the capital of the central engaged column—the half-round pillar from which the rib vaulting springs. This conclusion is further supported by the unfinished state of the tomb's eastern end and the fact that the capital seems to have been either chiselled or broken off from the engaged column. Were the tomb pushed back against the east wall, into what was clearly its original position, the top of its superstructure would fit just under the engaged column's capital, as a drawing from 1831 shows (Fig. 7).

As we know, the *mappa mundi* in its triptych was flanked by scenes of the Annunciation: on its left door/wing was the angel Gabriel and on the right the Virgin, 'both dressed in red and blue undertunics'.⁴³ The map's designer also awarded the Virgin pride of place by crowning, as it were, the map with an image of her in her role as the *Maria Lactam*, At the map's eastern extremity (its apex) the Virgin bares her breasts before her son, in recognition of their biological affiliation, and pleads, in her other role as *mater mediatrix* or advocate for the faithful, with her Son and Judge for the souls of humanity.⁴⁴ We may speculate that having the Annunciation depicted on the inner doors of the triptych—and having the triptych near the tomb in the pilgrimage complex— would have been immensely pleasing to Cantilupe. As *Butler's Lives of the Saints* reminds us, Thomas had taken to 'fasting on the vigils of [the Virgin's] feast-days and [chose] . . . the feast of her Nativity as his consecration day'.⁴⁵ It also seems that Cantilupe would have appreciated the orientation of his mortal remains in the north transept. When pilgrims stood next to the saint's shrine and gazed eastward with him, as it were, they would have found themselves facing the image of the Crucifixion at the centre of the *mappa mundi* and might have recognized the imperative '*Ecce Testimonium [meJum]*' (Behold my witness) that scrolls across the map's eastern edge.⁴⁶ Displayed in the north transept next to Cantilupe's shrine, the Hereford *mappa mundi* would have appeared literally monumental and so would have been monumentally impressive. The triptych, with this encyclopedic *mappa mundi* in its centre panel, would have commanded respect and admiration for Cantilupe and awe of both the church that housed it and the Church whose theology and world view informed its design.

Convergent Chronologies

Any theory about the placement of the Hereford map depends on the dates of the central panel and the map itself, of course, but such a theory must also examine the interwoven chronologies of four men likely to have been involved in the map's creation and original

placement: Richard of Haldingham and Lafford, Richard de Bello, Richard Swinfield and Thomas Cantilupe. Although the full and complex histories that tie these men together fall beyond the scope of this study, central details in their lives establish a chain of patronage and indebtedness that can explain, first, how a *mappa mundi* ended up in Hereford; second, why that *mappa mundi* has to be associated with Thomas Cantilupe; and, third, where the map would have been situated within the Cathedral.⁴⁷

Before examining the biographies and chronologies of the four men, we must first have in hand the basics of the map's chronology. The map itself gives us a reasonably solid *terminus a quo* of late 1283 for its production, since it shows Edward I's castles at Conwy and Caernarfon, where construction began in 1277 and 1283, respectively.⁴⁸ The castle pictographs therefore suggest that the map was in production during or after the summer of 1283. Palaeographical studies conducted by Malcolm B. Parkes and Nigel Morgan, and summarized by Westrem, support this conclusion, in so far as they suggest that the map was produced between c.1285 and c. 1300.⁴⁹ Moreover, as noted above, the oak planks of the central panel have been dendrochronologically dated to c.1265 and its gable mouldings carbon-dated to between 1040 and 1280. Thus the map and its oak triptych date from the period during which the men whom I contend were involved in the production, placement and display of the Hereford map were active, we might even say interactive. The relationships between and among them form a chain of patronage, in which the map becomes a means of courting preferment and a token of gratitude for benefits conferred.

The first link in that chain is the relationship between Richard of Haldingham (d. 1278) and Richard de Bello (d. 1326). Richard of Haldingham and Lafford's name appears on the map as the one who 'made and laid it out' (*Ki lat fet e compasse*). Haldingham held a prebend at Lafford by 12 January 1265 and was treasurer of Lincoln Cathedral by 22 October 1270. He is thought to have died on 4 November 1278, well before the map was completed. Richard de Bello seems to have been a younger relation of the Lincoln treasurer, who took holy orders at Lincoln in 1294. These dates and family ties, along with the map's inscription calling for prayers for Richard of Haldingham and Lafford, allow me to postulate that the younger Richard took the idea of a *mappamundi* with him from Lincoln to Hereford, where what we now see in the Cathedral—the Hereford *mappa mundi*—was outlined on calf skin affixed to the central panel of the triptych, completed and displayed.⁵⁰

Swinfield's administrative career buttressed the connection between Hereford and Lincoln. As Flint informs us,

There was certainly an upheaval in the chancery of Lincoln in the year 1278. The chancellor, John le Romeyn, moved from the chancellorship to the precentorship in September of that year, and he was not replaced formally until Bishop Oliver Sutton . . . appointed Simon de Baumberg to the position in 1281. In the meantime, from at least June 1278 ... until the summer of 1280, Richard Swinfield, . . . friend of Richard de Bello by 1289 at the latest, administered the Lincoln cathedral chancery.⁵¹

While at Lincoln, Swinfield began to forge the second link in the chain of patronage by taking de Bello under his wing. After sorting out Lincoln's financial problems, Swinfield 'may have brought the surviving Richard [de Bello] . . . back to Hereford'.⁵² Certainly de Bello was benefiting from the generosity of Bishop Richard Swinfield by 1289—in that year he received 'a gift of meat from Bishop Swinfield's Bosbury estate'—and in 1305 he received the prebendary of Norton from Swinfield.⁵³ By 12 May 1313, de Bello was close enough to Swinfield to represent the bishop as a proctor at a synod held at St Paul's, London.⁵⁴

The third link in our chain is the relationship between Swinfield and his mentor, Thomas Cantilupe, who was Bishop of Hereford from 1275 until his death in 1282. During this period, Swinfield, held the chancellorship of Lincoln Cathedral, prebends at Hereford Cathedral (1277 and 1279), 'together with a fistful of other benefices there and in other dioceses'.⁵⁵ Valerie Flint writes that 'Swinfield had been Thomas Cantilupe's chaplain at Oxford, became Cantilupe's secretary when the latter was elected bishop of Hereford in 1275, and remained Cantilupe's devoted friend for the rest of his life'.⁵⁶ indeed, Swinfield was close enough to Cantilupe so that when John Pecham, Archbishop of Canterbury, excommunicated the bishop (along with 'disturbers of the rights and privileges of his church of Canterbury'), on 26 January 1282, he travelled with his mentor/patron to Rome to plead Cantilupe's case before Pope Martin IV. While returning from Rome, Cantilupe died at Ferento, just north of Montefiascone on 25 August 1282.⁵⁷ in that same year Cantilupe's bones were interred in Hereford's Lady Chapel, while his heart went to the monastery of the Order of the Bonhommes in Ashridge, close by Berkhamstead. On 1 December 1282, Swinfield succeeded Cantilupe as Bishop of Hereford.⁵⁸

And so it seems that the man whom the Hereford map records as its maker, Richard of Haldingham, moved in the same ecclesiastical circles as Richard de Bello and Richard Swinfield. Swinfield was indebted to Cantilupe, and de Bello was indebted to Swinfield, Cantilupe's secretary and later the driving force behind his canonization. The pulling together of the map's history and the biographies of these men reveals that the map was in production during or after 1283 and could have been completed before Swinfield translated Cantilupe's

remains to the north transept in 1287. The dates of the map's production—from design through execution—overlap the dates of these men. The close relationships and the system of preferences from which de Bello and Swinfield benefited set the stage for the map to become a vital part of the Cantilupe pilgrimage complex, a fitting tribute from de Bello to Swinfield and from Swinfield to his mentor Thomas.

Triptych Support

At this point we have a scientifically dated backing panel and reliable dimensions for the triptych— that is, for the extant central panel and its two missing wings—along with a reconstruction of the pilgrimage complex that included the map in its triptych case and the interwoven personal histories of the men who might have been involved in placing the map in the north transept. In this section I pull together two forms of empirical data to situate the map in its triptych next to Cantilupe's 1287 shrine.

This physical evidence came to my notice in the course of a visit to Hereford Cathedral during the *Mappa Mundi* conference in 1999. While examining Cantilupe's tomb, I saw anomalies in the fabric of the north transept's east wall. Just to the right of the tomb and set into the east wall runs a row of eight roughly uniform square stone inserts (Fig. 8). Measuring the east wall from the side of Cantilupe's tomb nearest the first insert to the end of that wall gives a width of 508 cm. The row of inserts is nearly centred on this space. These measurements revealed that the common central axis of the map and triptych would have lined up with the central axis of Bishop Aigueblanche's great window' above, that is, with the central axis of a tripartite arrangement of stained glass windows (see Fig. 5).

Here I must pause to acknowledge the unsatisfactory nature of the term 'inserts'; it is difficult to tell whether these stones were shaped and then inserted to fill holes left by wooden supports that had been removed or whether what we see are just the ends of stone supports that had been fitted into the holes and were later dressed off flush with the wall.⁵⁹ Neither the stones nor their mortar have been dated as yet, and until we have this dating information, we cannot pronounce definitively on this matter. In some ways, 'corbel' seems a more appropriate label, since I argue below that the stones—or the wood they replaced—supported the triptych case. 'Corbel' is the name conventionally given to wood or stone projections from which rib vaults spring or to projections that support the bases of wall-mounted items, such as the myriad memorial plaques that cover the walls of Hereford Cathedral's former cloister. However, the fact that the Hereford anomalies are flush with the wall makes calling

them corbels problematic. Therefore, since it seems clear that the holes for either wooden or stone supports were cut after the wall was built, 'insert' seems the more accurate term and is the one I shall use in what follows. Regardless of label, the anomalous appearance of the stones is striking; after a first sighting, they stand out quite dramatically and, figuratively speaking, call out for an explanation of their purpose.

Each stone insert measures 9 cm in height by 8 cm in width, and the spacing between them is about 24 cm (Fig. 9).⁶⁰ The upper edge of each insert is 63 cm above the floor and 177 cm below the lip of the cornice that runs around the transept and divides the lower section of the wall from the stained glass windows above.⁶¹ Since the triptych is 175 cm tall at its gable point, it would have just fitted under the cornice that runs below the stained glass windows (Plate 3). The full row of eight inserts is 240 cm in length.

As noted above, the triptych's central panel is 147 cm wide. Thus each of the missing doors/ wings would have been 73.5 cm, and the complete triptych would have measured 175 cm by 294 cm, not counting the room taken up by its door hinges. This means that the triptych was a little more than 54 cm wider than the row of inserts, which would not have been a problem, particularly since it seems that the two large holes near the top of the central panel were made to accommodate hardware used to secure it in place (see Fig. 2). The central panel of the triptych would have rested on the middle four inserts, and the doors/wings on the outer two on each side, which they would have overhung by a little more than 27 cm (see Plate 3). Such an overhang would not have been a problem, as the wall-mounted triptych of the Adoration (Swabian School, c.1530), now on display in the Cathedral's south transept illustrates (Fig. 10). Further analogical evidence comes from the myriad stone memorials mounted in the Cathedral's former cloister, which currently houses the tea shop and the *mappa mundi* exhibition. The majority of these memorials rest on projecting stone supports—closer to corbels than to the north transept's inserts—and their tops are fixed to the stone walls, often by what appears to be horizontal L-shaped metal nails.

Placement and Purpose

Where the Hereford *mappa mundi* was originally positioned in the cathedral and the manner in which it was originally used are matters 'of crucial importance to art historians', as Westrem asserts and as historians of cartography surely agree.⁶² Knowing where the map was originally displayed would allow us to speculate more confidently on how it was used and would get us closer to dispensing with the theory that the map in its triptych functioned as an

altarpiece. As this section demonstrates, purpose helps determine placement, and placement enables purpose.

Not surprisingly, we have no recorded medieval sightings of the map or accounts of its use. The earliest recorded sighting of the map dates from *c.*1682, "when Thomas Dingley saw a 'curiosity in [the Cathedral's Chained] Library, [a] Map of y^e World drawn on Vellum by a monk kept in a frame wth two doors—wth gilded and painted Letters and figures', but this does not help us to determine how the map was used.⁶³ Nearly a hundred years later such information began to appear during that period in English history when 'educated opinion . . . was becoming increasingly self-conscious about the nation's "ancient edifices"', and when antiquarians were crisscrossing England, capturing its built heritage on paper.⁶⁴ The tradition—or perhaps myth is a better word—that the Hereford *mappa mundi* was used as an altarpiece can be traced back to Richard Gough's first visit to Hereford Cathedral in 1770. In his notebook, he wrote that he had seen the map 'fastened on [a] board . . . enclosed by wooden doors on which are painted the V. M. and Angel', and, confusingly, he adds that it 'served as *an* altarpiece to *the* high altar'. Bailey cites pencil annotations from Gough's notebook, in which the antiquary dropped the indefinite article (*an*) and so seems less equivocal: 'This was *the* altarpiece till 1686 when the new altar and organ were put up'.⁶⁵ In his often cited *British Topography* (1780), Gough again equivocated. There he recorded seeing the map 'inclosed in a case with folding doors, on which are painted the Virgin and the Angel', and declared that 'it served antiently for *an* altarpiece in this church'.⁶⁶ And so Gough informs us that the map-in-triptych functioned as *an* altarpiece and as *the* altarpiece. Although he probably was referring to the main altar in each case, his use of both indefinite and definite articles means that we cannot place the map on that—or any other—altar during his time with any certainty.

A sketch by Gough's contemporary, the architect John Carter, shows the outline of what looks like the Hereford map in its triptych case.⁶⁷ This image from about 1770 includes the map's dimensions and records it as being 'enclos'd in a frame with folding doors to cover it on which a[re] painted two figures'—presumably the angel Gabriel and the Virgin.⁶⁸ In 1780, Carter published his *Specimens of the Ancient Sculpture and Painting*. There he describes the composite image he drew for his title page,

[which] is comprised of various subjects descriptive of this work from different cathedrals, The design at one view, is an ancient altar-piece the architecture of which is from Bishop Audley's Chapel, in Salisbury Cathedral. On the space where the title is wrote [sic] is to be perceived a defaced crucifix. The part below the title where the altar-table was originally placed, and the

holy water stoup is part of the altar of St. Cuthbert: the large pedestal and canopy part of the high altar, Both these altars from the Abbey Church of St. Albans. The statues on each side [of the supposed crucifix are painted on an oak case, containing a large ancient map of the world . . . ⁶⁹

Carter gives us the source of the final sentence's images: 'All these from Hereford Cathedral'.⁷⁰ Sadly, he superimposed part of his title on his drawing of the triptych's central panel and did not reproduce the 'defaced crucifix'.⁷¹ This superimposition means that we do not have Carter's drawing of the map's interior, only its circular outline. We are left to perceive, to imagine, the crucifix and the map in its triptych as an altarpiece. Even though Carter's image is a composite, Paul Harvey is surely right in stating that Carter's drawing 'is our best evidence for the original appearance of the triptych that then contained the map'.⁷² Still, this is not proof that the triptych was an altarpiece in Hereford Cathedral, only that Carter envisioned it functioning as such in *an* imaginary cathedral.

Such antiquarian accounts misled the Victorian churchmen Francis Havergal and William Bevan to acknowledge sceptically that the map adorned an altar. Their 'Subscription Pamphlet,' advertising the sale of copies of the map in the 1870s, explained that it was intended for an altarpiece and meant for one of the Cathedral's chapels. Havergal and Bevan seem to have been influenced by Gough's inconsistent use of articles to imagine the map in 'one of the chapels', none of which either was or is large enough to accommodate the triptych.⁷³ Their suggestion that the map in its triptych was originally in a side chapel rather than positioned prominently on the high altar also implies that they found such a placement inappropriate.

Modern scholarly opinion has wavered on this issue. For example, Norman Throver perpetuated the altarpiece argument and implied that using monumental *mappa mundi* as altarpieces was customary, although like Gough he equivocated.⁷⁴ Martin Bailey has taken up the map-as-altarpiece torch, although he himself finds such a function 'surprising' and so falls victim to the same imprecise use of the indefinite article, arguing that 'the map . . . once served as *an* altarpiece'.⁷⁵ In 1989 Peter Barber wrote that if the central panel were 'contemporary' with the map, then 'within a few years of its creation, the map was being used as an altar piece'.⁷⁶ Barber, however, now believes that the map was not used as an altarpiece but was intended as an impressive display piece, as a backdrop, much like the *mappa mundi* that travelled with Henry VIII.⁷⁷ This display theory makes good sense and ties in with the work of Marcia Kupfer, who asserted in 1994 that the map was 'certainly not on any altar'.⁷⁸ Indeed, Bailey now tends toward this opinion: 'If the Hereford triptych was not an altarpiece then it still must have been an object of religious instruction and edification'.⁷⁹

From measurements taken at all recorded (and accessible) exhibition locations in the Cathedral, we know that the map has always been positioned between 54 cms and 74 cms above the ground, an ideal height for 'instruction and edification', to reiterate Bailey's terms. At 63 cm, the map's original position atop its stone supports in the north transept would have fallen nearly equidistant between these two bracketing numbers. All of these positions are too close to the ground for an altarpiece but are ideal for a close inspection of the map's images, especially its central image of Jerusalem and over-arching Last Judgement (129 and 215 cms above ground level, respectively). Medieval pilgrims would have found the latter image encouraging, since it shows the Virgin pleading for the souls of humanity on Judgement Day and her son inviting the souls of the elect into heaven. They would also have found instructive, and deeply worrying, the souls of the damned being led hellward by a winged demon.

Not surprisingly, arguments for the triptych and the Hereford *mappa mundi* having been displayed on any altar, let alone Hereford's high altar, have failed to gain universal acceptance. In the first place, the triptych's size militates against its having been used as an altarpiece in the Cathedral's side chapels, all of which are too small. In the second place, the high altar is unlikely to have been a viable location. How would visitors to the Cathedral have studied it—and its word-and-image world does beg to be studied closely—if it were on the main altar? In the third place, measurements made at known exhibition locations suggest that the map is best viewed when positioned at roughly 63 cms up from ground level. We know that *mappaemundi* were used in other venues as visual aids to teaching, perhaps even to preaching, as Patrick Gautier Dalche, Marcia Kupfer and others have written.⁸⁰ Neither of these activities would have occurred in Hereford's choir.

At Dominic Harbour's invitation, I visited the cathedral in December 2003, when he had taken the triptych's central panel out of the *Mappa Mundi* exhibition in preparation for Ian Tyers's dendrochronological dating. We wanted to produce a mock-up of the map which could be temporarily fixed to the north transept's east wall, atop the eight inserts, so that we could check sight lines to that location from the north nave aisle, the spot from which medieval pilgrims would have first seen the map in its triptych and Cantilupe's shrine. We also wanted to see if rubbing the paper with heavy black crayons—used for brass rubbing in the cathedral—would reveal anything about the wooden panel that was not immediately apparent to the eye. We were especially anxious to check the placement of the two large holes near the top of the panel that seem to have accommodated the hardware used to fix the

trioptych to the north transept's east wall (see Fig. 2). Although we were unable to match these large holes with marks on the transept's east wall—that wall having been tidied up in the nineteenth century, as I have indicated—seeing the mock map *in situ* provided dramatic confirmation of two vital components of my theory. First, the map's trioptych case seems to have been tailor-made for this spot next to Cantilupe's shrine, since it fits nicely between the inserts and the cornice running below the windows in the upper section of the east wall. In this position, the map's Jerusalem axis lines up with the axis of the central window above it. Second, in this location medieval pilgrims would have viewed the map's primary salvific images at optimal heights: the City of God on earth, Jerusalem, would have been 129 cm above the floor and the Last Judgement scene at an ideal—and suitably anagogical—elevation of 215 cm.⁸¹

When we moved back to the spot on the west side of the transept (the Cathedral's crossing) from which pilgrims would have approached the Cantilupe complex, we saw that the apex of the trioptych—and thus of the map's Last Judgement image—aligns wonderfully well with the central light of Aigueblanche's tripartite window in the upper half of the transept's east wall. We also saw, as I had anticipated earlier, that in this location the map in its trioptych would have been the first element of the complex that pilgrims would have seen as they moved eastward along the north aisle of the nave (see Fig. 4). More precisely, they would have seen the entire map in its case, the lower parts of the stained glass windows and the corner of Cantilupe's shrine. These sitings and sightings led to the theoretical reconstitution of the map-in-trioptych, which has appeared throughout as Plate 3. This situated reconstitution shows that, with the oak-leaf mouldings lowered to their original places, the entire structure would have fit under the lip of the window cornice and forcefully demonstrates the power of the object in this sacred place.

It seems clear that the Hereford *mappa mundi* was designed to be visible from a distance. Indeed, some of the map's inscriptions seem to have been inked with long-distance viewing in mind. Following the work of Parkes and Morgan, Westrem differentiates the 'display script', which 'a professional limner' used for 'the illuminated upper-case letters . . . found along the Map's edge and in identifications of the four cardinal directions and the earth's principal land areas', from the hand used for the map's legends. Westrem and Barber have independently surmised that the Lombardic hand and the ink used for these larger inscriptions on the map were specially chosen for their visibility, since the key inscriptions on the map were intended to be seen from afar.⁸² In this way, the lettering on the map could have acted as a kind of

medieval neon, drawing the attention of visitors toward the Cantilupe complex from the north aisle.

A Likely Story

To conclude, I offer the following scenario, in which the masonry and dendrochronological evidence shed new light on the original setting of the Hereford *mappa mundi* and make clear that theories of the map's function should be sought in the context of medieval pilgrimage.

I suggest the following narrative. Richard of Haldingham, the man to whom its dedicatory inscription refers, began laying out the map before 1278, when he was Lincoln Cathedral's treasurer. Upon his death in 1278, the draft map passed to his younger relative, Richard de Bello, who had benefited greatly from his relationship with Richard Swinfield and who might even have been brought to Hereford from Lincoln by Swinfield. De Bello saw Swinfield's imminent translation of Cantilupe's remains to the north transept in 1287 as an opportunity to accomplish two things: first, to memorialize his relative via the map's inscription, and, second, to repay Swinfield for his generosity.⁸³ This gesture of *quid pro quo*, then, provided Swinfield with the opportunity to install the map in its triptych next to the shrine he had built as a memorial to *his* patron, Cantilupe, and no doubt helped further de Bello's career.

Because we know that the shrine was finished by 1287, that palaeographical evidence suggests an early limit of 1285 for the map's production, and that dendrochronology dates the triptych's oak to this time and locates Hereford as the wood's source, I am confident in arguing that the map was completed in Hereford between Caernarfon's inception in 1283 and Thomas's transferral in 1287.⁸⁴ Upon the map's completion—and certainly by the time of the dedication of the shrine—it became part of a Cantilupe pilgrimage complex, which would have comprised Swinfield's rebuilt north nave aisle leading to Bishop Aigueblanche's 'stunningly modern and French' north transept, finished by 1268; Bishop Swinfield's new Cantilupe shrine; the mural portrait of the saint which Thomas Dingley and William Stukeley reported seeing; and the *mappa mundi* in its triptych, with its doors painted to show the Annunciation.

Swinfield probably regarded the 1287 tomb we see today as a temporary resting place for his mentor's remains. We know that he left 100 marks in his will toward the completion of the grander shrine in the Lady Chapel.⁸⁵ His desires seem to have been carried out, for, as

John Leland reported between 1536 and 1539, 'S. Thomas de Cantolupo Episcopus Herefor. lieth at this tyme in the chyrch rychely shrined'.⁸⁶ It seems logical that the map and Cantilupe's remains, having existed in close proximity to one another for sixty-two years in Aigueblanche's north transept, were both returned to the Lady Chapel by Bishop John Trillek in 1349.⁸⁷ There, map and tomb with its 'new reliquary'—which together comprised the Cantilupe shrine—would have been near what is now the oldest window in the Cathedral. Appropriately enough, this thirteenth-century window shows Christ in majesty holding a T-O orb.⁸⁸

There in the Lady Chapel (the Cathedral Library from 1590 onwards), the map and shrine continued to serve as a monument to St Thomas, and to a lesser extent to Richard of Haldingham, until the Dissolution, when Cantilupe's 1349 shrine was destroyed. We know from Dingley's report that the map was still in the library in 1682, and that some hundred years later Gough and Carter reported seeing it there. The map remained in the Chapel until the nineteenth century, since 'in 1813 a visitor calling himself Camden' saw it there, but it was removed to the vestry in 1820, where it became part of a cabinet of curiosities. Since then it has been in myriad locations in the Cathedral.⁹⁰ In 1996 the map was installed in its purpose-built case in the New Library Building, close to the reassembled Chained Library.

Since the Cathedral literally contains the map, which pictorially represents the Cathedral, the Cantilupe complex would not have been the final destination for visitors. Pilgrims to the shrine could have extended their literal journeys to the building by experiencing the *mappa mundi* as a portal to myriad figurative journeys through pagan, mythological, legendary, political and biblical history. Just as the pilgrims would have benefited from being directed through the building's various layers of decorative and liturgical figuration, they would have profited from having the devotion and curiosity that brought them to the Cathedral channelled in useful ways by an attendant churchman, a *custos*. With the map displayed near the tomb, such an attendant—possibly a Dominican or Franciscan—could get his constellation of visitors to locate the Biblical landmarks that the map represents as pictographs and verbal legends.⁹⁰ From these signs the Cathedral *custos* could easily have drawn parallels between the pilgrims' life journeys and the exemplary ones of Christ and St Thomas, as well as between their travels *to* Hereford and *through* its Cathedral, all the while guiding their ocular journeys over the map.

Looking at the map would have given the pilgrim visitors a new sense of their place in the world. They could have found—or more likely would have been shown—England on the

map, even Hereford. At the same time, on a more profound level they would have been orientated metaphysically; for the role of this and all Christian *mappaemundi* was to point the way from the terrestrial City of God to the celestial City of God, which the map's Last Judgement shows its viewers.

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NOTES AND REFERENCES

1. On *mappaemundi* in general, see David Woodward, 'Medieval *mappaemundi*', in *The History of Cartography: Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean*, vol. 1, ed. J. Brian Harley and David Woodward (Chicago, University of Chicago Press, 1987), 286-370; P. D. A. Harvey, *Medieval Maps* (London, The British Library, 1991); and Evelyn Edson, *Mapping Time and Space: How Medieval Mapmakers Viewed Their World* (London, The British Library, 1997). On the Hereford map in particular, see W. L. Bevan and H. W. Phillott, *Medieval Geography: An Essay in Illustration of the Hereford Mappa Mundi* (London, E. Stanford, and Hereford, E. K. Jakeman, 1873); Gerald R. Crone: *The Hereford World Map* (London, Royal Geographical Society, 1948); *The World Map by Richard of Haldingham in Hereford Cathedral, circa A.D. 1285*, Reproductions of Early Manuscript Maps 3 (London, Royal Geographical Society, 1954); *idem*, 'New light on the Hereford map', *Geographical Journal* 131 (1965): 447-62; A. L. Moir, *The World Map in Hereford Cathedral*, 1955, 8th rev. ed. (Hereford, Friends of Hereford Cathedral, 1977); and Scott Westrem, *The Hereford Map: A Transcription and Translation of the Legends with Commentary* (Turnhout, Brepols, 2001). Westrem provides full-colour reproductions of the map *in toto* and in

sections.

2. Hereford Cathedral's basic floor plan is cruciform and conventionally' orientated eastward. It thus has a crossing (a transept) that separates the main body of the building (the nave) from the *sancta sanctorum*, which contains the choir and main altar. The two 'arms' of the transept project northward and southward. Thomas's 1287 shrine was situated in the north transept.
3. See Marcia Kupfer, 'Medieval world maps: Embedded images, interpretive frames', *Word & Image* 10:3 (199): 262-88; Valerie I. J. Flint, 'The Hereford map: Its author(s), two scenes and a border', *Transactions of the Royal Society*, Sixth Series 8 (Cambridge, Cambridge University' Press, 1998), 19-44; Naomi Reed Kline, *Maps of Medieval Thought: The Hereford Paradigm* (Woodbridge, Suffolk, The Boydell Press, 2001); Martin Bailey', 'The *Mappa mundi* triptych: The full story of the Hereford Cathedral panels', *Apollo* 137 (1993): 374-78; and Westrem, *The Hereford Map* (see note 1).
4. Unless otherwise stated, all descriptions of the triptych panel and *mappa mundi* assume that the viewer is facing them. I use 'triptych' to refer to the tripartite structure that included the extant central panel and its two missing doors. I use 'central panel' and, less frequently, 'panel' to refer only to that extant central section. I follow the convention of referring to Hereford's map as the '*mappa mundi*' and use '*mappamundi*' (and its plural, '*mappaemundi*') as the generic term for a medieval world map. Although perhaps inelegant, I use 'map-in-triptych' to refer to the triptych with the Hereford map mounted on its central panel.
5. Westrem, *The Hereford Map* (see note 1). xv.
6. The map's dimensions and all those of its central triptych panel—both as discrete elements and as a complete unit—are from the January 2004 dendrochronological dating work undertaken by Ian Tyers. See his 'Project report 782a: Tree-ring analysis of the Hereford *mappa mundi* panel', unpublished description commissioned by the Dean and Chapter of Hereford. I am most grateful to Dominic Harbour for sending me a copy of Tyers's report via e-mail on 18 February 2004.
7. See Westrem, *The Hereford Map* (see note 1), xv.
8. I am not the first to offer a reconstruction of the map's triptych. There are antiquarian drawings of it as we shall see, and Hargrave Hands has recently offered an elaborate re-imagining of the map in its triptych. My description owes something to Bailc'y's important synthesis of antiquarian sightings of the triptych but little to Hands, whose

work is more Neo-Gothic than Gothic. Bailey' reproduces Hands's image as a kind of pictorial epigraph for his study. For a reproduction of Hands's image and the reference to 'copper strip', see Bailey, 'The *Mappa mundi* triptych' (note 3), 374-78. For Hands's original, see *The Observer*, 20 May 1990. P. D. A. Harvey writes that the map was fixed to its central panel with 'brass strips and nails' and suggests that the 'strips and nails', now missing, disappeared in 1948, when the map was restored (*Mappa Mundi: The Hereford World Map* (London: Hereford Cathedral and The British Library, 1996) 14).

9. Thomas Dingley, *History from Marble Compiled in the Reign of Charles II by Thomas Dingley, Gent...* introduction and descriptive table of contents by John Gough Nichols, 2 vols. (Westminster, The Camden Society, 1867-1868), 1: 12. The Chained Library' was moved to the Lady Chapel in 1590; hence Dingley and other antiquarians refer to the extreme east end of the Cathedral as the Library. Hereford Cathedral has always been a secular house and so never had resident 'monks'; therefore, 'cleric' would have been a more accurate term for Dingley to have used, particularly if the map was drawn and painted in Hereford, as the dendrochronological evidence suggests.
10. Bailey, 'The *Mappa mundi* triptych' (see note 3), 375.
11. Richard Gough, *British Topography, or, An Historical Account of What Has Been Done for Illustrating the Topographical Antiquities of Great Britain and Ireland*, 2 vols. (London, T. Payne and Son, and J. Nichols, 1780), 1:71.
12. Harvey, *Mappa Mundi* (see note 8), 12. Harvey (ibid., 12-14) also provides a lucid account of the disappearance of the rest of the triptych's accoutrements.
13. See Harvey, *Mappa Mundi* (note 8), 11-18.
14. Bailey, 'The *Mappa mundi* triptych' (see note 3), 377. For the president of the Royal Geographical Society's comments, see his letter inserted into the Hereford Cathedral copy of Francis Tebbs Havergal, *Fasti Herefordenses and other Antiquarian Memorials of Hereford*, illustrated by G. C. Haddon (Edinburgh, R. Clark, 1869), n.p.
15. Tyers, 'Project report' (see note 6), 7.
16. Ibid., 6.
17. Ibid., 4. The carbon dating was undertaken by Oxford's Research Laboratory for Archaeology and the History of Art 'at the expense of *The Observer* newspaper' (Harvey, *Mappa Mundi* (see note 8), 14). See also Bailey, 'The *Mappa mundi* triptych' (note 3), 374-76. For more on the carbon dating of the central panel, see Westrem, *The*

Hereford Map (note 1), xix.

18. Tyers, 'Project report' (see note 6), 7.
19. Westrem states that '[e]verything about the physical object of the Map itself bespeaks its exacting, expensive production, a process that may well have taken over a year' (*The Hereford Map* (see note 1), xix).
20. Tyers, 'Project report' (see note 6), 3.
21. Westrem, *The Hereford Map* (see note 1), xix.
22. For more on the use of the compass, see Harvey, *Mappa Mundi* (note 8), 10.
23. Westrem, *The Hereford Map* (see note 1), xx and xxvi.
24. Westrem (*ibid.*, xv) notes that the map's width varies: 'it is at the base of the triangular head . . . 1,292 millimeters, across the middle 1,325 millimeters (as a result of some trimming on the sides, this is in effect the depicted earth's diameter), and across the bottom 1,335 millimeters. . . . The actual skin size was probably some 50 millimeters . . . wider before it was reduced to [what conservator Christopher Clarkson has called] "a continuous edge"'.
25. Westrem, *The Hereford Map* (see note 1), xx; and Tyers, 'Project report' (see note 6), 4.
26. Westrem (*The Hereford Map*, xxiii-xxiv) provides a careful, succinct summary of this tradition and notes that '[t]he Map's manufacture is not, in fact, known with certainty to have taken place in Lincoln'.
27. Tyers, 'Project report' (see note 6), 6.
28. David Whitehead informs us that Cottingham, whose contract began in 1843, and John Merewether, Dean of the Cathedral (1832-1850), found much of the existing stone detail work 'too imperfect', and so had it removed. They were after 'a grand and beautiful design' that was compromised by what they saw as medieval 'deformities' ('The architectural history of the Cathedral since the Reformation', in *Hereford Cathedral: A History*. ed. Gerald Aylmer and John Tiller (London and Rio Grande, Ohio, Hambledon Press, 2000), 271 and 276). Cottingham also had the fourteenth-century pulpitum—the stone divider between transept and choir—removed, thereby making reconstructions of medieval pilgrims' patterns of ingress and egress difficult. Scott was more sensitive to the original Cathedral fabric than his predecessor Cottingham. Arthur T. Bannister, Canon Residentiary (1909-1916), felt that 'what was done under Scott was for the most part done well and carefully, in the spirit not of innovation but of conservative restoration' (*ibid.*, 280).

29. Julia Barrow, 'Athelstan to Aigueblanche, 1056- 1268', 21, and Robert Swanson and David Lepine, 'The later middle ages, 1268-1535', 50, both in Aylmer and Tiller, *Hereford Cathedral* (see note 28).
30. See the entry 'De S. Thoma de Cantilupe episcopo here for diensi in Anglia. Apud montem flasconis in hertruria pontifica', in *Acta Sanctorum: toto orbe coluntur. . .*, ed. Joanne Camandet; 67 vols. (Paris, V. Palme, 1863-1919), 1 3: 539-704.
31. R. C. Finucane, ' Cantilupe as thaumaturge: Pilgrims and their miracles', in *St. Thomas Cantilupe, Bishop of Hereford: Essays in His Honour*, ed. Meryl Jancey (Hereford, The Friends of Hereford Cathedral, 1982), 138.
32. *The Register of Thomas de Cantilupe, Bishop of Hereford (A.D. 1275-1282)*, transcribed by the Rev. R. G. Griffiths, introduction by the Rev. W. W. Capes (Hereford, The Cantilupe Society, 1906), liii and lvi.
33. Swinfield enlarged both north and south nave aisles. Perhaps the southern enlargement was undertaken to allow pilgrims easy egress.
34. R. K. Morris, 'The Architectural history of the medieval cathedral church', in Aylmer and Tiller, *Hereford Cathedral* (see note 28), 218.
35. *Ibid.*, 214. For Scott, see Whitehead, 'The architectural history of the Cathedral' (note 28), 277.
36. Thomas Dingley reported having seen 'the remains of his Image painted in fresquo with another Image on y^e other side [of] the window, after the same manner— supposed to be designed for Bishop Ethelreda . . .' (*from Marble* (see note 9), clxxix).
37. Morris, 'The Architectural history of the medieval cathedral church' (see note 34), 214. Morris has corrected some of George Marshall's misapprehensions and provides a current account of Bishop) Aigueblanche's building campaign. See George Marshall, 'The shrine of St. Thomas de Cantilupe in Hereford Cathedral', *The Transactions of the Woolhope Naturalists' Field Club* 34 (1930): 34-50.
38. The imaginative reconstruction of Thomas's first shrine by the illustrator Brian Byron, made in 1998, comes quite close to my conception of the Cantilupe complex. For Byron's image, which does not include the map-in-triptych, see the Reverend Canon James Butterworth, *Hereford Cathedral: The Church, Mappa Mundi, Chained Library* (Norwich, Hereford Cathedral and Jarrold Publishing, 1998), 19. I am grateful to Dominic Harbour for showing me this guidebook, which, of course, is in the Cathedral shop).

39. William Stukeley, *Itinerarium Curiosum, Or, an Account of the Antiquities and remarkable Curiosities in Nature or Art, observ'd in Travels thro' Great Britain*, 2 vols., illustrated with copperplate prints (London, Printed for the Author, 1724), 67. Except for the tomb itself, none of the items Stukeley mentions is in place today.
40. Medieval shrines were not the same as tombs: 'Shrines differed from tombs primarily in the elevation of the coffin, and indeed translations could be described as movement to "higher" positions. . . . The bulk of a tomb monument was therefore a superstructure, while a shrine monument was the base for a reliquary chest' (Ben Nilson, *Cathedral Shrines of Medieval England* (Woodbridge, England, The Boydell Press, 1998, reprinted 2001), 18).
41. Penelope E. Morgan, 'The Pilgrim cult and Hereford Cathedral', in Jancey, *St. Thomas Cantilupe* (see note 31), 146.
42. Havergal in 1869 thought that this placement was original and thus correct: 'During the former part of this century it was placed against the eastern wall of this aisle. In 1859 it was taken down with great care, and reconstructed in the centre, which is admitted by all authorities to be its original position' (Havergal, *Fasti Herefordenses* (see note 14), 175).
43. Harvey, *Mappa mundi* (see note 8), 12.
44. Flint ('The Hereford map' (see note 3), 42, n. 93), characterizes this standard depiction as 'the curious image . . . of the bare-breasted Virgin'. In fact, it was quite common. For more on this popular trope and image as well as those of the related *Mater Dolorosa* and *Planctus Mariae*, see Dan Terkla, 'A Basochien proto-drama and its mariological context: *L'Advocacie Nostre-Dame*', *Medieval Perspectives* 6 (1991): 87-100. For an architectural analogy, see Ellen M. Ross, *The Grief of God: Images of the Suffering Jesus in Late Medieval England* (New York, Oxford University Press, 1997), 55.
45. See *Butler's Lives of the Saints*, New Full Edition, 12 vols., ed. Rev. Peter Doyle (Collegeville, Minnesota, The Liturgical Press, 1996), vol. 10, October, 13-14. While suggesting that the map 'was perhaps in the Lady Chapel' in 1283, Flint points out that the Chapel was where 'newly delivered mothers were accustomed to be "churched"' ('The Hereford map' (note 3), 42, n. 93).
46. This inscription is not visible in the current exhibition case. See Westrem, *The Hereford Map* (see note 1), 4 and 5.
47. For more on the life of Thomas, see Richard Strange, comp., *The Life and Gestes of S.*

THOMA CANTILVPE, Bishop of Hereford, and some time before L. Chancellor of England, collected by R.S.S.I. at Gant [Ghent] (printed by Robert Walker, at the signe of the Annunciation of our B. Lady[,]1674), 192-227 *et passim*; *The Hereford Breviary*, ed. Walter Howard Frere and Langton E. G. Brown, from the Rouen Edition of 1505 with Collation of the Manuscripts, vol. 3 (London, Henry Bradshaw Society, 1904), 252 and 260; Rev. W. W. Capes, Introduction, in *The Register of Thomas de Cantilupe* (note 32), i-lxviii; Jancey, *St Thomas Cantilupe* (note 31). For a full account of Cantilupe's canonization, based in part upon the unedited MS. Vatican Cod. Lat. 015, see R. C. Finucane, 'The Cantilupe-Pecham controversy', in Jancey, *St. Thomas Cantilupe* (note 31), 103-23. See also *John le Neve Fasti Ecclesiae Anglicanae 1066-1300, Lincoln*, vol. 3, compiled by Diana Eleanor Greenway (London, University of London, 1977), 20, 73; *John le Neve Fasti Ecclesiae Anglicanae 1066-1300, Salisbury*, vol. 4, compiled by Diana Eleanor Greenway (London, University of London, 1991), 49, 64, 70; *John le Neve Fasti Ecclesiae Anglicanae 1066-1300, Salisbury Diocese*, vol. 3, compiled by Joyce M. Horn (London, University of London, 1962), 9, 45, 58.

48. Daniel Mersey, 'Caernarvon Castle—Fit for a Prince', Castles of Wales, <<http://www.castlewales.com/caemarf/html>>, 14 June 2002.
49. See Westrem, *The Hereford Map* (see note 1), xviii-xix, and Malcolm B. Parkes and Nigel Morgan, 'The Mappa mundi at Hereford: Report on the handwriting and copying of the text', typescript of a lecture delivered at the Hereford *Mappa mundi* Conference, 27 June-1 July 1999, which will be published in *The Hereford Mappa Mundi: Proceedings of the Mappa Mundi Conference, 1999*, ed. P. D. A. Harvey (London, British Library, forthcoming).
50. Richard of Haldingham's authorship is by no means accepted by all historians of cartography. For other theories about why and for whom the Hereford map was created, see Flint, 'The Hereford map' (note 3), 19-4; Harvey, *Mappa mundi* (note 8), 7-14; P. D. A. Harvey, 'Mappa Mundi', in Aylmer and Tiller, *Hereford Cathedral* (note 28), 559-61; Kline, *Maps of Medieval Thought* (note 3); and Westrem, *The Hereford Map* (note 1), xxiii. Curiously, in volume 3 of *John le Neve Fasti* (1977; note 7), Diana Greenway records that Richard of Haldingham occurs 'as *magister* twice . . .', while in volume 4 (1991), she writes the following: 'No evidence for identification with Richard de Haldingham or Lafford [as *magister*], of Hereford "Mappa mundi", and not to be confused with man of same name (who does *not* occ. As Master), who was preb. Lafford

and treas. Lincoln, who d. perhaps 4 Nov. 1278' (my emphasis). For more on the life of Bishop Swinfield, see Flint, 'The Hereford map' (note 3), 19-44; Havergal, *Fasti Herefordenses* (note 14), 19-20 *et passim*.

51. Flint, 'The Hereford map' (note 3), 30; and Westrem, *The Hereford Map* (note 1), xxiii.
52. Westrem, *The Hereford Map* (note 1), xxiii.
53. See Flint, 'The Hereford map' (note 3), 26-29, on this 'gift of meat' and for more on the relationship) between de Bello and Swinfield.
54. On de Bello's role as proctor, see *Registrum Ricardi de Swinfield, episcopi Herefordensis, 1283-1317*, transcribed and edited by William W. Capes (London: Canterbury and York Society 6, 1909), 491. Along with Swinfield's patronage, de Bello enjoyed the favours of three other bishops: Hereford's Thomas Cantilupe, Lincoln's Oliver Sutton (1280-1299), and Salisbury's Simon of Ghent (1297-before 1315). For this and more on de Bello's preferments, see Flint, 'The Hereford map' (see note 3), 29.
55. Flint, 'The Hereford map' (see note 3), 31.
56. Ibid.
57. In e-mail communications, Patrizia Licini has told me that she has observed links between these place-names and the Hereford map which look promising in terms of pulling Thomas's shrine and the map a bit closer.
58. *The Register of Thomas de Cantilupe* (see note 32), lii.
59. On 18 July 2002, Ron Shoesmith conveyed the following to me via e-mail: 'I would favour the idea that timbers were removed and the stones inserted to tidy up the wall'.
60. I have converted the measurements in this section from inches and feet to centimetres and have rounded them off. The figures for the inserts, like those for the triptych, are therefore approximate.
61. I am unsure if this cornice is original or a nineteenth-century' restoration/re-creation of Sir George Gilbert Scott. Cathedral masons Simon Hudson and Martin Lewis told me in May 2002 that they think the cornice is not original, but they had no dating information. Even if it is a re-creation, it seems to be in the original location, although this needs confirmation.
62. Westrem, *The Hereford Map* (see note 1), xxi, n.17.
63. Dingley, *History from Marble* (see note 9), 1: 12.
64. Whitehead, 'The Architectural history of the cathedral' (see note 28), 260.
65. Richard Gough's notebook, Oxford's Bodleian Library MS Top.Gen.e.19, fol. 88r; all

- quoted in Bailey 'The *Mappa mundi* triptych' (see note 3), 376, my emphases.
66. Gough, *British Topography* (see note 11), 1: 71, my emphasis.
 67. BL Add. MS 29942, fol. 1 48; and Bailey, 'The *Mappa mundi* triptych' (see note 3), 37 5.
 68. Quoted by Bailey' in 'The *Mappa mundi* triptych' (see note 3), 376-77.
 69. John Carter, *Specimens of the Ancient Sculpture and Painting, now remaining in this Kingdom, from the earliest period to the reign of Henry ye VIII, consisting of Statues, Bassorelievos, Brasses &C. Paintings on Glass and on Walls, &C. A Description of each Subject, some of which by Gentlemen of Leterary [sic] Abilities, and well versed in the Antiquaries (London [,] Published as the act directs by John Carter[,] Wood S'. Westminster[.] November y^e 1.st 1780), iii. For more accessible reproductions of Carter's title page, see Bailey', 'The *Mappa mundi* triptych' (note 3), 375-76; and Harvey, *Mappa Mundi* (note 8), 12.*
 70. Carter, *Specimens of the Ancient. Sculpture and Painting* (see note 69), 40.
 71. The Crucifixion appears just above—that is, just east—of Jerusalem at the map's centre and has been heavily worn, it seems, by the fingers of countless viewers.
 72. See Harvey, *Mappa mundi* (note 8), 15.
 73. Havergal, *Fasti Herefordenses* (see note 1 4), 2-3. Havergal's *Fasti*, under the year 1869, refers to Dingley's *History from Marble* (see note 9), and provides the following under 'On Walls and Groining': 'The following fine examples [of "distinct traces of colour"], as described by local authors, have long since been destroyed:—1. Doors and canopy of the map. 2. Mural effigies near Cantilupe Shrine. 3. Mural decoration in the Chapter-house' (156). 4.
 74. Norman J. W. Thrower, *Maps & Man: An Examination of Cartography in Relation to Culture and Civilization* (Englewood Cliffs, New Jersey, Prentice-Hall, 1972), 42, my emphasis.
 75. Bailey, 'The *Mappa mundi* triptych' (see note 3), 374, my emphasis. Unfortunately, Gabriel Alington's guide—currently on sale in the busy Cathedral shop) and so widely dispersed among visitors—follows on from Gough and Dingley to perpetuate the altarpiece theory (*The Hereford Mappa Mundi: A Medieval View of the World*, illustrated by Dominic Harbour (Leominster, England, Gracewing, 1996), 20). Bailey uses Hargrave Hands's reconstruction of the triptych as an image-epigraph on the first page of his *Apollo* article (see note 3). Although Hands's vision is more Victorian than medieval, it does intimate the sense of majesty that the original might have inspired in its viewers (see note 8). Nicely framed versions of the Hands reconstruction are on sale in the

Cathedral shop, where they continue to blur the temporal line between medieval and Neo-Gothic art and so misinform visitors about the triptych's original appearance. I have overheard people in the shop commenting on Hands's 'original', which they see as a 'reproduction' of the medieval triptych.

76. Peter Barber, 'Visual encyclopaedias: The Hereford and other *map pae mundi*', *The Map Collector* 48 (1989): 3-7, reference on 7.
77. This is from my conversations with Barber at the British Library in the autumn of 2003.
78. Kupfer, 'Medieval world maps' (see note 3), 276.
79. Bailey, 'The *Mappa mundi* triptych' (see note 3), 376, my emphases.
80. On medieval monastic education and *mappaemundi*, see Hugh of St-Victor's dialogue with a student in *Opera Omnia* (1854), ed. J. P. Migne, *Patrologia Latina*, 176.2 C. See also Patrick Gautier Dalche, ed., *La 'Descriptio Mappa mundi' de Hugues de Saint-Victor*, texte inédit. avec introduction et commentaire (Paris, Etudes Augustiniennes, 1988); Kupfer, 'Medieval world maps' (see note 3), 276; and Dan Terkla, 'Impassioned failure: Memory, metaphor, and the drive toward intellection', in *Imagining Heaven in the Middle Ages: A Book of Essays*, ed. Hugh Feiss and Jan Emerson (New York, Garland Press, 2000), 260-62, 289.
81. This means that the current height at which the map is exhibited is much too high, as anyone who has tried to see its Last Judgement or details in its depiction of Asia knows. In May 2003, Dominic Harbour informed me that the Cathedral has undertaken fund raising to finance the redesign of the *mappa mundi*'s display. Part of that redesign will include situating the map at a height more in line with these figures.
82. Westrem, *The Hereford Map* (see note 1), xviii. Peter Barber conveyed this information to me during a conversation at the British Library in the autumn of 2003.
83. Westrem notes that, 'while the legend does not explicitly invite prayers for the soul of Richard [of Haldingham], an invocation of this kind was more commonly made for the deceased, often sponsored by family members' (*The Hereford Map* (see note 1), xxii, n.21). The fact that the legend is written in the third-person also suggests that Richard of Haldingham was not its author.
84. In this context dates will be fluid, but Nigel Morgan's earliest palaeographical date of 1285 (Parkes and Morgan 'The Mappa mundi at Hereford' (see note 49)), and Westrem's tenable assumption that the map took at least one year to complete (*The Hereford Map* (see note 1), 11), make Flint's favouring of 'a date close to the conquest of Wales, 1282-

3, for the completion of the whole and, perhaps, for its display' a problem. She argues that 'the whole was completed after Cantilupe's death, in essence *by 1283*, for the embellishment of Cantilupe's *first* resting place in Hereford Cathedral' ('The Hereford map' (see note 3), 23 and 2, my emphases). I am leery of speculating to this extent, however. No written source records of the map's location before Dingley's 1682 sighting, nor is there any architectural or decorative evidence to support a pre-1283 display date in the Lady Chapel; for the eastern end of the Cathedral has been heavily rebuilt since the thirteenth century. For solid recent accounts of this rebuilding, see the relevant chapters in Aylmer and Tiller, *Hereford Cathedral* (note 28); also the older but still helpful Marshall, 'The shrine of St. Thomas de Cantilupe' (note 37), 34-50, and Sir George Gilbert Scott, *Personal and Professional Recollections*, revised, with introduction by Gavin Stamp (Stamford, Paul Watkins, 1879, reprinted 1995).

85. Capes, *Registrum Ricardi de Swinfield* (see note 54), 220-21.
86. John Leland, *The Itinerary of John Leland in or about the Years 1535-1543*, ed. Lucy Toulmin Smith, 5 vols. (London, George Bell and Sons, 1907), 3: 48.
87. Ian Tyers's date of one of the central panel's battens—that is, one of the two horizontal supportive planks running across the back of the panel—might buttress this contention. The tree that produced the upper batten, according to Tyers, 'cannot have been felled before c. 1289'. The map would have had to be removed before this new batten was attached, perhaps to prevent the central panel 'twisting' any further; this would account for the second set of nail holes near the panel's apex (Fig. 2). In discussing this issue, Dominic Harbour and I wonder if this minor refurbishment occurred in preparation for the removal of the triptych from the north transept to its next location in the Lady Chapel. As Tyers writes, '[t]he implications of this are far reaching . . . and necessitate both a discussion of the feasibility of withdrawing nails from oak boards, and an appreciation of the likely damage to the Mappa in trying to get it off the board' ('Project report' (see note 6), 6-7).
88. On the 'new reliquary' and a brief history of the movements of Cantilupe's remains, see Nicola Coldstream, 'The Medieval tombs and the shrine of Saint Thomas Cantilupe', in Aylmer and Tiller, *Hereford Cathedral* (note 28), 330 *et passim*. On the translation to the Lady Chapel, see *The Register of John de Trillek Bishop of Hereford, A.D. 1344-1361*, ed. J. H. Parry (Hereford, Hereford Cathedral, 1910), 147-48.

89. On Camden, see Havergal, *Fasti Herefordenses* (note 14), 162. For the period 1855-1863 the map was on display with the Chained Library then in a room above the north transept, and in 1863 it was in the south choir aisle. The map was moved to the Audley Chapel for copying in 1869, and in 1910 or 1912 it was placed on the east wall of the south transept. From 1948 to 1988, it was in the north choir aisle in a new case designed by the Royal Geographical Society. From 1990 to 1996 it was located in the crypt, again with the Cathedral treasures and curiosities. I am indebted to Cathedral Archivist Rosalind Caird, for some of this information. For a f idler history of the map's movements (in and out of the Cathedral), and copying, see Harvey, *Mappa mundi* (note 8), 15-18.
90. Thomas Tanner, Bishop of St Asaph, wrote of these 'friers Preachers', who 'came hither first in the time of St. Thomas Cantilupe bishop of Hereford' (*Notitia Monastica; or an Account of all the Abbies, Priories, and Houses of Friers, Formerly in England and Wales and also of all the Colleges and Hospitals Founded Before A.D. MDXL*, 2nd ed. (Cambridge, Cambridge University Press, 1787), 126r). See also Leland, *The Itinerary of John Leland* (note 86), 1: 160-61, 2: 67, 3: 8; and Swanson and Lepine, 'The later middle ages' (note 29), 80.

L 'emplacement originel de la mappemonde de Hereford

Bien que les amateurs d'antiquite's, les historiens de la cartographie, les paieographes et les historiens de l'art aient ecrit depuis plus de trois cents ans sur la mappemonde de Hereford, on connait peu de choses a propos de son emplacement primitif ou de son utilisation. Cet article s'appuie sur des preuves tirees de la nouvelle maçonnerie et de la dendrochronologie pour affirmer que cette monumentale carte du monde etait presentee a l'origine pres du premier tombeau de Saint Thomas Cantilupe, dans ie transept nord de la cathedrale de Hereford. Elle n'etait donc pas utilisee comme un retable, mais comme un element de ce que j'appelle le 'systeme du pelerinage de Cantilupe', un ensemble d'objets et d'images qui constitua un temps l'une des destinations de pelerinage parmi les plus popul.ai.res d'Angleterre. A son emplacement, la carte aurait ajoute au pouvoir d'attraction du systeme et servi d'outil pedagogique multimedia.

Der ursprüngliche Aufstellungsort der Mappa Mundi von Hereford

Obwohl Historiker, Kartographen, Palaeographen und Kunsthistoriker seit über dreihundert Jahren über die *Mappa Mundi* von Hereford geschrieben haben, wissen wir wenig über ihren originalen Aufstellungsort und ihre Verwendung. Die Argumentation in diesem Beitrag basiert auf neuen Untersuchungen der Steinmetzarbeiten, der Dendrochronologie und des Systems der Beförderung in der mittelalterlichen Kirchenhierarchie, die nahelegen, dass diese monumentale Weltkarte 1287 ihren ersten Aufstellungsplatz neben dem ersten Schrein des Heiligen Thomas Cantilupe im nördlichen Querschiff der Kathedrale von Hereford erhielt. Sie diente dementsprechend nicht als Altarbild, sondern bildete einen Teil dessen, was der Autor den 'Cantilupe pilgrimage complex' nennt. Dabei handelt es sich um eine Gruppe von Bildern und Gegenständen, die für einige Zeit zum populärsten Pilgerziel Englands avancierten. An diesem Platz hatte die Karte die Attraktivität dieses Komplexes gesteigert und als ein multimediales pädagogisches Instrument gedient.

El emplazamiento original del mappa mundi de Hereford

Aunque anticuarios, historiadores de la cartografía, paleógrafos e historiadores del arte han escrito sobre el *mappa mundi* de Hereford durante más de 300 años, conocemos poco acerca de su emplazamiento original o uso. Este artículo trata de la obra de la nueva sillería de la catedral, de evidencias dendrocronológicas y del sistema de preeminencias eclesásticas medievales, para argumentar que este monumental mapa del mundo fue originalmente exhibido en 1287 cerca del primer sepulcro de Santo Thomas Cantilupe, en el crucero norte de la catedral de Hereford, y que no funcionó como retablo, sino como parte de lo que el autor denomina 'el complejo de peregrinaciones Cantilupe', un conglomerado de aditamentos e imágenes que fue en aquel tiempo uno de los más populares destinos de peregrinación en Inglaterra. En este emplazamiento, el mapa podría haber añadido atractivo al complejo y servido como un instrumento de pedagogía multimedia.

Figures

Fig. 1 Hereford Cathedral. Detail of the central panel of the Hereford *mappa mundi* triptych without the map, showing the conical hole left by the compass foot used to draw the three circles that frame the map and the walls of Jerusalem. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 2 Hereford Cathedral. Detail of the central panel of the Hereford *mappa mundi* triptych without the map, showing the rows of nail holes used to fix the map to the panel. The fact that there are two rows of holes suggests that the map was mounted once, partly removed and then remounted—that is, renailed—to the central panel. The two larger holes near the apex of the panel may have been made for hardware used to fix the panel to the wall. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 3 Hereford Cathedral. The Booth Porch, named after Bishop Charles Booth in 1518; this entrance was used by medieval pilgrims to gain access to the Cathedral, thence to the north aisle of the nave, and ultimately to the north transept and Cantilupe's tomb. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 4 Hereford Cathedral. The route followed by medieval pilgrims through the Cathedral would have led them from the north nave aisle to the Cantilupe complex. At this point, they would have seen, looking east towards the crossing and north transept, the *mappa mundi* (here represented by the paper mock-up), and Cantilupe's tomb. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 5 Hereford Cathedral. The north transept as it is today. Looking east with Cantilupe's tomb on the left. The tomb now stands away from the east wall, which it originally abutted. The row of eight stone inserts (arrowed) is discernible below the window, which now contains the Victorian glass that replaced Bishop Peter Aigueblanche's medieval glass. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 6 Hereford Cathedral. The north transept today, showing the gap between the unfinished east end of Cantilupe's tomb and the east wall. The remnant of an engaged column above the level of the tomb, marks where the shrine originally abutted the column. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 7 Hereford Cathedral. North transept. Cantilupe's tomb viewed from the east, in 1831. Note how at that time the tomb was positioned right against the Cathedral's east wall. (Reproduced with permission from Ron Shoesmith.)

Fig. 8 Hereford Cathedral. The north transept, showing the lower section of the east wall with the row of eight stone inserts that seem to have been either cut off flush with the wall or inserted to plug holes made by wooden supports. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 9 Hereford Cathedral. North transept. Detail of the east wall, showing one of the stone inserts, which is approximately 9 cm in height by 8 cm in width. Note the tool marks, suggesting that the inserts originally protruded but were subsequently cut back flush to the wall. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Fig. 10 Hereford Cathedral. South transept, west wall. Note how the doors of the triptych of the Adoration (Swabian School, c. 1530) overhang the two corbels. (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Plate 1 Hereford Cathedral. New Library Building. The Hereford *mappa mundi* (c. 1283). Drawn on calf skin, approximately 163 cm tall x 137 cm wide, shown here fixed to its current mounting made from wood taken from City of London churches bombed during the Second World War. The pentagonal map presents a later medieval encyclopedic vision of the inhabited regions of the world. (Reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Plate 2 Hereford Cathedral. The central panel of the Hereford *mappa mundi* triptych, showing planks cut from oaks grown near Hereford and felled c. 1265 according to dendrochronological testing. The

oak-leaf gable moulding is carbon-dated to c. 1040-1280. Note the gap between moulding pieces created by incorrect remounting. The framing wood is a nineteenth-century addition. 175 x 147 cm. The photograph was taken when the central panel was still in its customary location in the former cloister of the Cathedral and before its removal in December 2003 for dendrochronological dating, (Author's photograph, reproduced with permission from the Dean and Chapter, Hereford Cathedral.)

Plate 3 Montage showing the Hereford *mappa mundi* in what is suggested was its original position. The triptych containing the map would have rested on eight stones inserted into the wall, below the Bishop Aigueblanche's tripartite window and next to St Thomas Cantilupe's tomb (left). The stones, now cut back flush with the wall, are discernible immediately below the triptych. The dimensions and angles of the doors of the triptych are exactly half those of the central panel. The triptych was created in Photoshop® from scanned slides of the map and the central panel without the map to show the missing doors or wings. (Author's photograph, map and central panel slides, as in Plate 1 and 2, are reproduced with permission from the Dean and Chapter, Hereford Cathedral. Photoshop® reconstitution by SpencerSauter of spenmedia.com.)