SUMMARY An exhibition at the British Museum in 2012, which focused on one of the three models of the Church of the Holy Sepulchre in the collection, provided an opportunity for the reinvestigation of their materials and of the craft tradition from which they arose. Made in Bethlehem by Arab Christians in the seventeenth and eighteenth centuries, these models were sold to pilgrims and exported throughout western Europe. They were acquired by the faithful as aids for devotion and by collectors such as Sir Hans Sloane, who had a model of the Holy Sepulchre in his collection as well as a much rarer model of the Church of the Nativity in Bethlehem. Previously thought to have been made solely of olive wood, with mother-of-pearl and ivory used for the decorative and structural details, closer scientific examination has revealed the use of pistachio wood in addition to olive, and bone – probably camel bone – rather than ivory for architectural features. Examination has also revealed detailed information about the methods and techniques involved in the production of these models. Extensive research on the history of the Bethlehemite Christian community has enabled these new findings to be placed within their cultural context.

Introduction
In January 2012, as an accompaniment to its major exhibition Hajj: Journey to the Heart of Islam, the British Museum opened a small display entitled Sacred Souvenir, which was dedicated to one of the three models of the Church of the Holy Sepulchre in its collection. The objectives of the Holy Sepulchre display were to focus on a single object, to look at its tradition and methods of manufacture, to discuss the complex and fascinating history of the Church of the Holy Sepulchre itself and to provide some comparative historical and religious context for the exhibition on the Hajj.

The Church of the Holy Sepulchre
Known as the Church of the Resurrection to eastern Orthodox Christians, the Church of the Holy Sepulchre was originally built by the Roman emperor Constantine the Great in AD 326 to mark the sites in Jerusalem where the crucifixion, burial and resurrection of Jesus were believed to have taken place. For centuries the church was the focal point of Christian pilgrimage from Europe and the Middle East, and is still visited by large numbers of pilgrims and tourists from across the world [1, 2]. In the period when Jerusalem was under Ottoman rule, the pilgrimage to the Holy Places in Jerusalem seems to have been understood by many eastern Christians as in some sense their equivalent of the great Islamic pilgrimage to Mecca. Christians who undertook the pilgrimage to Jerusalem took the title hajji in emulation of Muslim custom. This is the origin of certain Greek surnames, including Hatzis and Haji-Ioannou, while the Serbian word for Christian pilgrimage, borrowed from Turkish, is hadziluk. Devotion to the Holy Sepulchre is still particularly strong among Orthodox Christians from eastern Europe and the Middle East, whereas its profile has declined among Roman Catholics and Protestants.

The building itself has a complex and fragmentary story that mirrors those of both the Church and Jerusalem. Over the centuries, the fissiparous and often acrimonious nature of ecclesiastical history, coupled with several instances of serious physical damage to the structure, have transformed what was once a coherent late Roman basilica church into the current confusing warren of shrines and chapels occupied...
by, and strictly divided between, six denominations whose relations with one another are not always cordial: Greek Orthodox, Roman Catholics, Armenians, Ethiopians, Copts and Syriac Orthodox. The focal point of the church is the Aedicule, a structure within the building that marks the site of the Holy Sepulchre, the tomb of Christ and, therefore, of the Resurrection. It is located within the Rotunda, a round structure whose columns are the sole surviving elements from the original Constantinian church. The other main feature of the early church was the rock of Calvary surmounted by the True Cross on which Jesus was supposed to have been crucified, and whose location was miraculously revealed to Helena, Constantine’s mother. The cross itself is long gone – divided, captured, ransomed and eventually lost during the crusades – but the rock of Calvary survives, now marked by two adjacent chapels, one Greek Orthodox, the other Roman Catholic, a situation that exemplifies the divided state of both Christendom and the church building.

The invasion and domination of the Holy Land by crusaders in the late eleventh century led to the substantial remodelling of the church, which then took the substantially Romanesque form that it still shows. The Roman Catholic Church continued to play a role in the history of the church even after the final expulsion of the crusaders from Jerusalem in the thirteenth century. It is still represented in the Holy Sepulchre, indeed throughout the Holy Land, by the Franciscan Order, which has enjoyed the status of Custodian of the Holy Land since the 1340s. The Franciscans have played an important role in the history of the church and at various times managed to persuade the Ottoman authorities, when they ruled Jerusalem, to
give them control of the Aedicule itself, which they renovated in 1555. The Franciscans also played an important role in the manufacture and Europe-wide circulation of the models of the church discussed here.

A major fire caused serious damage to the structure of the building in 1808, causing the Rotunda and the dome above to collapse and damaging the exterior of the Aedicule, which was then rebuilt in its current, Ottoman Baroque form, by a Greek architect named Nikolaos Komninos.

Disputes between the different denominations with a stake in the church were fierce and persistent during this period. An Ottoman imperial decree settled matters in 1852 through an agreement commonly known as the Status Quo. Since then, the church building has been divided among three major denominations that act as its principal guardians: the Greek Orthodox Patriarchate of Jerusalem, the Roman Catholic Church and the Armenian Church [3]. As a legacy of the Ottoman period, the legal framework that governs the church is, somewhat paradoxically, the Islamic law relating to donations, or waqf, which is often used within the Islamic world as a form of governance for religious or charitable institutions. The three churches are, therefore, quasi-trustees of the church on behalf of God. Since the retreat of the Ottoman Empire from the Holy Land, subsequent governing powers – Britain, Jordan and now Israel – have generally refrained from getting involved in the often fraught relations between the three co-habiting traditions within the church and have left the Ottoman Status Quo intact, thus preserving unchanged the state of affairs that prevailed in 1852. This means that it is extremely difficult to arrange repairs to the fabric of the building, as the right to repair implies ownership of the structure as a whole, which none of the three churches is willing to concede [4]. The Egyptian Copts, the Syriac Orthodox and the Ethiopian Orthodox have lesser footholds within the building, making it a complex, fragmented ecclesiastical mosaic. No other church in the world is occupied by so many different Christian traditions, and relations between the occupants are not always cordial, and are periodically violent.

**Holy Sepulchre models**

Models of the Holy Sepulchre made largely from olive wood and decorated with mother-of-pearl were produced in and around Bethlehem in the seventeenth and eighteenth centuries. They were made for sale to pilgrims to the Holy Land and for export, the trade being facilitated by the Franciscans, whose role as Custodians of the Holy Land and their pan-European network made them the ideal intermediaries [5]. Intricately made in such a way that the roof and constituent parts can be removed to reveal the floor plan and interior details of the church and the complex arrangement of its various shrines, the models were widely collected, both as devotional aids and as curiosities, Figures 1 and 2. They represent the structure of the church as it appeared in the eighteenth century before the fire of 1808, with both the distinctive Romanesque tower and the open pepper-pot dome over the Aedicule still intact.

The various holy places contained and commemorated within the church building are often numbered on the models, which were sold together with a printed key that allowed identification of the different features and chapels within the church, and enabled the pious owner to undertake a virtual
pilgrimage to the sites of the central events of the Christian religion: the crucifixion, burial and resurrection of Jesus Christ. Prominently marked within the models, and still at the heart of the church to this day, is a spot called the ‘Navel of the World’, the *Umbrilicus Mundi* in Latin. Medieval Christian cartography documents the assumption that Jerusalem, the Holy City; was at the centre of the world and that the Church of the Holy Sepulchre marked its epicentre; Islamic sacred geography made the same assertion about Mecca and the Ka'ba [6].

Several examples of these models are preserved in museum collections, and the dates at which they are recorded in the various collections provide the basis for the chronology of the otherwise undated models. Models of the Church of the Holy Sepulchre and the Church of the Nativity in Bethlehem were in the collection of Sir Hans Sloane, which after his death in 1752 formed the basis of the earliest collection of the British Museum; both are still in the British Museum. As an Ulster Protestant with pronounced Deist tendencies, it is unlikely that Sloane acquired them primarily for religious purposes. Maria Anna (‘Nannerl’) Mozart, elder sister of the young prodigy Wolfgang Amadeus, mentions in her journal that she saw such a model at the British Museum on a visit to London in 1765 [7].

Currently, there are three models of the Holy Sepulchre in the British Museum collection, all of which are held in the Department of Britain, Europe and Prehistory. Although all three models are remarkably accurate and, as discussed below, demonstrate almost identical methods of construction, each has a slightly different scale:

- **OA10338**: 42 (length) × 36 (width) × 23 cm (height), Figure 3;
- **OA10339**: 45 (length) × 38.5 (width) × 26.5 cm (height), Figure 4;
- **1983,0107.1**: 47 (length) × 41 (width) × 26.5 cm (height), Figure 5.

**Materials and construction**

Preparations for the display of model OA10339 in 2012 provided an opportunity to examine the construction of all the models and to undertake some new scientific work on the materials from which the models were made.

**Wood**

A particular focus of the assessment of the materials was the re-examination of the wood, which had previously been identified simply as olive, and a detailed study of the architectural decorative elements that had hitherto been assumed to be made of ivory.

For the wooden components, the standard techniques of identification and terminology prescribed by the International Association of Wood Anatomists (IAWA) for the identification of modern wood were adopted [8, 9]. For each sample, the key features were compared with reference collection specimens, wood databases and textual descriptions. This IAWA protocol may be applied to archaeological or historical wood, providing it is modified to accommodate the effects of the conditions of preservation [10]. Each sample was prepared to expose transverse, radial longitudinal and tangential longitudinal sections or surfaces for identification. For modern and some types of archaeological wood, thin-sections with an approximate thickness of 12–14 μm are cut on a base-sledge (or rotary) microtome and mounted on glass microscope slides to be examined by transmitted light microscopy.

A variation on these standard techniques was applied to two of the Holy Sepulchre models (OA10338 and OA10339) on account of the extremely small sample sizes permitted. In order for wood identification to be carried out successfully, sampling had to take place in unobtrusive, undecorated areas of wood that were free from pigments, binding media or any conservation consolidant, so that the fine details of the cellular structure were not obscured. It was not possible to remove the standard samples, measuring 25 × 25 × 50 mm, which are necessary for modern wood thin-sectioning. The tiny samples that could be taken were each mounted on a scanning electron microscope (SEM) stub using Leit-C Plast carbon cement, a proprietary brand of conductive material with low outgassing properties suitable for SEM use. Some samples were examined, uncoated, using a Hitachi S-3700N variable pressure scanning electron microscope (VP-SEM) to observe the fine detail of the crucial diagnostic anatomical features. An accelerating voltage of 15 kV was used on most occasions, but sometimes this was raised to 20 kV or lowered to 12 kV, depending on the condition of the sample. For optimal visualization of diagnostic cellular detail, the working distance varied from 23.5 to 11.3 mm, as dictated by the individual sample being examined. To eliminate surface charging on non-conducting samples, the chamber pressure was adjusted according to the state of preservation of each sample. Other mounted samples were sputter-coated with gold to make them conductive in the high vacuum conditions of a Hitachi S4800 field emission (FE) SEM using the secondary electron (SE) detector. The FE-SEM has the flexibility to achieve high resolution imaging with good contrast definition of surface information.

Although not all the wooden elements could be sampled for identification, it is clear that most of the wood used in the construction of the models is olive (*Olea europaea*) (Figure 6), with just some of the small connecting pieces (often not visible on the exterior) made from mastic tree/pistachio wood of the species *Pistacia lentiscus*, Figure 7. For each type of wood, comparisons with reference collection specimens and publications revealed the diagnostic features of *Olea europaea* wood [11] or *Pistacia lentiscus* wood [12] listed in the appendix.

Although olive wood has been identified as the principal wood employed to construct the models, one model base is of pistachio wood. Olive wood has a long tradition of use for furniture in the region [10]. It continues to be utilized by wood carvers in Bethlehem, which is not surprising as olive wood meets the five criteria that are considered by many to influence the choice of wood: availability, appearance, ritual/spiritual significance (the olive tree being a symbol of peace, beauty and longevity [13]), physical properties and appropriate size. Both olive and pistachio woods are slow-growing and, as can be seen from the features described in the anatomical summaries in the appendix, are hard, dense woods. Olive wood displays a contrasting undulating pattern with greenish/brown and yellow streaks that is highly prized by woodworkers.
The wood from the olive tree is quite oily, which allows the woodworker to achieve a highly polished surface. Furniture makers frequently choose olive wood for its durability, attractive decorative patterning and pleasant, sweet, long-lasting odour. In addition, it is naturally moderately resistant to insect attack. Olive wood is usually available in short lengths or small pieces, since it is common practice to employ pruned branches in order not to sacrifice the tree – and hence the olive crop – for the sake of its timber alone. Consequently, olive wood is not usually commercially available as lumber. Furthermore, it is not easily converted into small boards of the type used in the models, as it is difficult to season without distortion through shrinkage (typically 7.0% radially and 11.4% tangentially [14]) and frequently suffers movement in use.

Pistachio is also difficult to convert and often splits during seasoning. Pistachio wood is green, red, white and brown (tan to dark brown) in colour and shows striking patterns of contrasting bands, providing a highly figured wood. This mottled colouring provides an attractive, decorative wood that is used mostly for small artefacts or as an inlay.

The olive wood was likely to have been prepared to thickness well in advance of final finishing, thus preventing distortion during seasoning. The thin elements of olive wood used to construct walls, ceilings, roofs and base have remained stable and flat without cupping, warping or splitting; this can be attributed to the skill of the maker and specialist knowledge of the properties and behaviour of the wood. It is remarkable that, centuries after construction, it is still possible to slide the moveable parts in and out of position without binding.

**Mother-of-pearl and bone**

The wooden surfaces are inlaid with a number of materials that provide patterning and contrast, the most striking of which is the iridescent nacre, or mother-of-pearl, which is harvested from species of *Pinctada*.

Another result of the survey of materials was that the small elements that simulate columns, which had previously been assumed to be ivory, were identified as bone. This identification was undertaken by comparing the structure of the samples with reference specimens of bone and other materials under the optical microscope. The distinctive cross-hatching (Schreger lines) diagnostic of elephant ivory were not present, but Haversian canals (which comprise a series of tubes around narrow channels formed by lamellae) were visible, even on the smoothed, polished surfaces of certain elements of the model. These Haversian canals are typical of compact bone that, being hard and dense, makes a good substitute for ivory. There is a long tradition of bone carving in the region from which the models originate that dates back to the fourth century AD [15] and very likely earlier. It seems most probable that bone was chosen over ivory because it is readily available and, unlike ivory, would not need to be imported at considerable cost. It is not known if there was a religious or spiritual significance to selecting bone and this possibility has not been ruled out. Different types of bone that date to the seventeenth or eighteenth century have recently been excavated by the Centre for Cultural Heritage Preservation in the old town of Bethlehem; among these were found camel bone, commonly used for making souvenirs [16].

**Construction**

The models are constructed from a number of wooden elements of similar thickness joined with a proteinaceous glue and dowelled together to replicate the many spaces within the church. To allow the viewer access to the model’s interior, the domes, walls and sections of the roof and floor slide out. Their construction employs, for the most part, dovetailed and simple, square housing joints similar to those used for removable shelves in modern furniture. There are also a number of hinged elements that use small metal and wire hinges and pins. The pieces are well fitted and after centuries of use and exposure to different climatic conditions, continue to operate with ease, which demonstrates the knowledge and skill used to convert, season and assemble these thin and climatically vulnerable wooden elements.

It is almost certain that all the shell, and possibly some if not all of the bone, was inlaid and positioned before assembly, as access thereafter would be limited. The iridescent mother-of-pearl would initially be cut (as flat as possible) into workable pieces or ‘blanks’ that took best advantage of any natural pattern and lustre. Any curvature in the pieces would have been ground off on a stone or stone wheel, resulting in blanks that would typically be between 1.5 and 3 mm thick. The
mother-of-pearl would have been marked with the outline of the shape required, and then cut and pierced using a small fretsaw with a very fine blade, not dissimilar to a modern jewellers’ saw. A bow drill would also have been used to drill and shape the mother-of-pearl and to assist access for the saw blades. Craftsmen employing a bow drill, chisels and fretsaws are present in the image of a nineteenth-century Bethlehem workshop, Figure 8.

Enhancing the surface of wood with inlays of different woods or other materials is not unique to the East; in the West, materials other than wood were also employed to decorate the surfaces of wooden objects. Indeed, inlaying furniture is a very old craft and examples survive from ancient Egypt. The high-status burial tomb of the Eighteenth Dynasty (c.1575–1310 BC) pharaoh Tutankhamun contained many fine examples, including a throne elaborately lined with gold and inlaid with silver, coloured glass, precious stones and ceramics [17]. Occasionally, wood veneers and other materials were applied directly to the substrate as marquetry, but certain materials, including ivory, bone, metal and stone, have also been used as inlays. Unlike marquetry, which is an assemblage of veneers (wood or otherwise) applied over the surface of an object, inlaying involves letting in or inserting pieces into spaces that were pre-cut into the wooden substrate. The resulting inlays are then flush with the surface of the wood.

The process of inlaying would begin once the wooden elements had been cut to shape and the wood finished by sanding or scraping. An amount of wood slightly greater than the mother-of-pearl or other inlay would have been removed from the surface of the wood using drills and chisels. A mixture of black-pigmented natural resin and/or glue would then have been applied into these recesses, and the thin piece of mother-of-pearl pressed into position in the resin. Some mother-of-pearl pieces were further embellished by engraving or incising with decorative lines. Correct levelling of the mother-of-pearl and resin was important to give a flush finished surface that would minimize the need for any final sanding, which was particularly important where the mother-of-pearl was incised, as sanding could result in damage and loss of detail. Once positioned correctly and partially set, the excess resin mixture would have been wiped off to give a flat even surface across the wood, resin and mother-of-pearl. It is likely that in the process of removing the excess glue/resin mixture, some residues would remain in the incised lines, and these were probably left in place to enhance the decoration.

In addition to the thin mother-of-pearl inlay, larger, thicker pieces of mother-of-pearl were applied directly to the wood to simulate steps, doors and altars, while bone was carved for pillars and other architectural features. The maker inscribed lines in the various wooden sections, which aided in their accurate setting out and cutting, but also gave extra detail around openings including arches, windows and doors. These incised lines would have had more visual effect when the model had its original, natural surface finish, which although it might have been waxed would not have had a stain or varnish applied. Subsequent application of a dark shellac-type varnish has not only obscured the figure of the wood, but also these incised lines.

Despite their slight differences in scale, all three Holy Sepulchre models in the British Museum show almost identical methods of construction. Models OA10338 (Figure 3) and OA10339 (Figure 4) are remarkably similar, although there are differences in the mother-of-pearl motifs (Figure 9), the bone inlays and the removable sections. Both belong to the less heavily decorated group, which Piccirillo argues are earlier than the more ornate group to which model 1983,0107.1 belongs [5]. The small sliding window that reveals a spiral staircase in the bell tower is common to both the smaller, less ornate models; unfortunately the tower is missing from 1983,0107.1 so it is not possible to compare this feature. In comparison, very little wood is left visible on the ornately and extensively inlaid model (1983,0107.1), which possibly belongs to the later group.

While the similarities in construction could suggest that all three models were manufactured within a single workshop, such complex models would require a detailed plan or set of templates to facilitate multiple production – yet each is made to a different scale. It seems more probable, therefore, that the
three models are by different family workshops working to the same plans, which were handed down through generations, but perhaps using different templates within each workshop, leading to the production of models of a slightly different scale. The origin of these plans lies in the publication of detailed, architectural drawings of the church in the sixteenth century, as discussed further below.

There seems to be a later addition to the large dome on 1983.0107.1. On the other two models (OA10338 and OA10339), the dome above the Aedicule is pierced with an oculus, as was the case for the dome at the Church of the Holy Sepulchre in the eighteenth century. The wooden, cone-shaped spire on 1983.0107.1 is fashioned from a different wood and what appears to be ivory, which has not been used elsewhere on any of the models where the wood has been identified. In addition, the inlays of mother-of-pearl crosses on this spire appear more block-like than those used elsewhere on the model. One possibility is that a previous owner misinterpreted the original open dome as a defect and had this spire made to make the model more complete. Alternatively, there may perhaps have been a stylistic preference on the part of a patron for this different shape.

Future comparison with similar models, including those in the collections of the Ashmolean Museum and the Palestinian Exploration Fund [18, 19], may help to attribute the models to a single or to multiple workshops.

Who made the models? – Producers

The presence of these church models in museums and stately homes all over Europe is the product of a
specific socio-historical context in the town of their production – Bethlehem. Although the Holy Sepulchre in Jerusalem is the most frequently depicted shrine in this genre of model making, the models were made in the smaller, nearby town of Bethlehem. Importantly, elaborate models such as those in the British Museum represent only the pinnacle of a much wider cottage industry in Bethlehem, whose staple income was provided by the sale of more basic items such as crosses, rosaries, crowns and small boxes.

These religious wares were mostly produced from the same raw materials as the church models – olive wood and mother-of-pearl – and they found increasingly lucrative markets during the seventeenth and eighteenth centuries. By the middle of the nineteenth century the industry was nearing its peak, creating considerable wealth in Bethlehem and with it a burgeoning middle class. This in turn caused merchants from the town to begin a complex series of migrations in search of new export markets, laying the foundations for broader patterns of Palestinian emigration and long-term settlement all over the world [20].

To understand how the production of these devotional objects became centred in Bethlehem, it is necessary to appreciate the town’s unique connection to the Franciscan mission in the Holy Land. Unlike any other town in the Franciscan Custodia di Terra Santa, which included Syria, Egypt and Cyprus, the majority of Bethlehem’s population had been converted to the Roman Catholic Church before the mid-eighteenth century. This meant that, although Bethlehem’s total population never exceeded 4000 before 1900, it had long contained more Roman Catholics than any other town in the eastern Mediterranean, including the great regional centres such as Jerusalem, Damascus and Aleppo [21].

The intimate relationship the Franciscans enjoyed with the population of Bethlehem meant that they were able to commission the town’s artisans to work on a new type of scale-model making that emerged in the late sixteenth century. Crucial to this process was the Franciscan friar Bernardino Amico who served the Custodia between 1593 and 1597 [5; pp. 28–29, 22]. Trained as an architect in Italy, Amico was among the first people to record the exact dimensions of the major churches and shrines in the Jerusalem area in the form of reproducible scale plans. His approach was partly the product of Renaissance Italy’s fascination with Greco-Roman architectural design, most frequently expressed in the form of scale drawings and model making. At the same time, his work was also born from the religious commitment of a senior member of the Franciscan community in the Holy Land, and in particular the debates surrounding the authenticity of the Holy Sepulchre’s claim to mark the site of Jesus’ crucifixion and resurrection. Within these intersecting contexts, Amico decided to commission a group of Bethlehem artisans to produce a series of replica models based on his drawings.

While the identities of those who worked on Amico’s models will probably never be known, it is clear they contributed towards an increase in demand for all types of Holy Land souvenirs in Europe. By the early eighteenth century the sources describe a thriving cottage industry whose exports were controlled almost exclusively by the Franciscans. The replica models would fetch high prices among a growing collectors’ market or were given as gifts to dignitaries and potential donors. But the staple sales remained the thousands of smaller items that were bought from local craftsmen, boxed in warehouses in Bethlehem and Jerusalem before being shipped to shops and churches across Catholic Europe and beyond.

Sales figures and shipping routes for these exports are now difficult to reconstruct, but historic sources provide occasional glimpses of the scale of the enterprise. For example, in 1769 Fredrik Hasselquist, a student of Linnaeus at Uppsala in Sweden, described his sojourn with the Franciscans in Bethlehem:

The procurator [the financial officer of the Franciscan convent in Bethlehem] informed me that 15000 piasters-worth [of religious souvenirs] were held in the Jerusalem convent which seemed almost unbelievable. They are sent to all the Catholic countries of Europe but above all to Spain and Portugal [23].

In a similar vein, the Italian writer Giovanni Mariti, who lived in Palestine for two years, stated in his 1776 description of Bethlehem:

No other trade is known than that of making wooden crowns and crosses, ornamented with mother of pearl … The European merchants of Acre are the ones who purchase the majority of those works, which are packed into boxes and transported to Venice from where they are sent to Germany [24].

A key shift in the marketing of these wares took place in the nineteenth century when local Bethlehem merchants began to sell the goods abroad themselves, typically starting out as small-scale pedlars before later expanding into a variety of import-export businesses. Major bases were established in France, Haiti, Honduras, Mexico and the Philippines, with the Franciscan exporters apparently side-lined by the early twentieth century. These trading bases grew over successive generations to become more established immigrant communities and today a discernible Bethlehem ‘diaspora’ exists all over the globe, most notably in Central and South America. In the latter half of the twentieth century the origins of these communities were often blurred by the newer waves of migrants fleeing the various rounds of conflict and occupation in Palestine, but the original merchant pioneers are still revered in popular memory [20].

The souvenir industry continues to be a vital part of the local Bethlehem economy, albeit under the strained circumstances of the Israeli occupation of the West Bank. After passing through military checkpoints and an 8-m-high separation wall, visitors to Bethlehem are struck immediately by the proliferation of souvenir shops selling ‘Holy Land products’, from the smallest trinkets to enormous carvings costing as much as US$ 50000. Nowadays, not all of this material is locally produced and the old artisanal families find themselves increasingly squeezed out of the market, although traces of the town’s rich heritage in religious craftwork can still be found. Recently, initiatives such as the Salesian Technical School are seeking to revitalise the art of olive wood and mother-of-pearl carving in Bethlehem, training young apprentices and raising
awareness among the local population of the grave dangers faced by the industry [25]. It is hoped that visitors to the British Museum will continue to view the church models discussed here not as relics of an extinct tradition, but as examples of an ongoing vibrant and dynamic Palestinian material culture.

Conclusions

The history of the Church of the Holy Sepulchre is long, complicated and often unedifying. Its current state of muddle and dilapidation scarcely reflects its significance within the story of Christianity and of the Middle East. The models of the church are important documents of that history. They are testimony both to the continued devotion towards, and fascination for, the Holy Places felt by European Christians in the post-Medieval period after the decline of the crusader movement, and to the wish to capture its physical appearance before increased ease of travel in the nineteenth century improved access to the Holy Land for pilgrims and artists. They also testify to the skill of the anonymous Bethlehemite craftsmen whose work was widely exported and collected across early modern Europe, and whose successors still produce items for the local pilgrim trade and worldwide export to this day. This contribution has clarified the identity and variety of the materials that were used in the construction of the examples in the British Museum collection, and future research on other specimens may add further information. Comparison of their differing dimensions has also raised interesting questions about the organization of the workshops that produced them, which could again be further addressed by studying other surviving models. In addition, such comparisons might resolve some of the questions of internal chronology within the series, which is currently based on stylistic features alone. Most importantly perhaps, this small but significant project has demonstrated the potential for objects in museum research collections to shed new light on the human past: in this case, on the history both of a particular local tradition of manufacturing and of a building that at certain points in its history has been of worldwide significance.

Appendix

Characteristic anatomical features of Olea europaea

Diffuse-porous arrangement of vessels, radial multiples of four or more vessels, simple perforation plates, alternate intervessel pitting, vessel-ray pits with distinct borders, helical thickenings in vessels, non-septate fibres with simple to minutely bordered pits, diffuse and scanty paratracheal parenchyma as well as vasicentric, confluent and marginal parenchyma, uniseriate to triseriate rays, and procumbent body ray cells with rows of upright and/or square marginal cells.

Characteristic anatomical features of Pistacia lentiscus

Semi-ring-porous to diffuse-porous arrangement of vessels, vessels in a diagonal, dendritic or radial pattern, clusters and radial multiples of four or more vessels, vessels of two distinct diameter classes, simple perforation plates, alternate intervessel pitting, vessel-ray pits with much reduced borders/apparently simple or sometimes gash-like/scalariform in palisade arrangements, helical thickenings in vessels, vascular/vasicentric tracheids, non-septate fibres with simple to minutely bordered pits, diffuse and scanty paratracheal parenchyma, uniseriate to triseriate rays, procumbent body ray cells with rows of upright and/or square marginal cells, and prismatic calcium oxalate crystals.

Acknowledgements

The authors thank Jim Peters for facilitating access to the objects and providing useful feedback.

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References


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**Notes**

1. Similar arrangements govern other Christian shrines in the Holy Land, including the Church of the Nativity in Bethlehem.

2. Both the models with ‘OX registration numbers were in the BM collection by 1848. It is no longer possible to tell which of these was the model that belonged to Sloane. For further information on the history and provenance of the British Museum examples, see the entry on ‘Holy Sepulchre model’ on the British Museum’s Collections Database: www.britishmuseum.org/research/search_the_collection_database.aspx (accessed 28 March 2014).

3. The only indication thus far found is a note in the Franciscan chronicles to ‘Giorgio nostro turcimanno’ (‘George, our dragoman’), who was named as the chief artisan for a model of the Church of the Nativity sent to Signor Contarini Bailo of Venice [3].