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The Development of the Church of St Mary at Ephesos from Late Antiquity to the Dark Ages

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Abstract

The church of St. Mary is one of the most significant monuments of Ephesos but also one of the most enigmatic. Its repeated modifications prior to its destruction created an amalgam of different phases that have proven to be difficult to decipher within the present remains. Written records and inscriptions suggest that this church was the venue of the riotous Ecumenical Council of 431AD, but the identification of the phase of the building that corresponds to this event is controversial. And, if the remains make it clear that at some point the church was transformed into a domed basilica, the latter's form and date have not been established with certainty. The present article tries to fill these lacunae through a new survey of the remains of the church and a re-examination of the evidence from the archaeological excavations during the 20th century. The author's new investigation of wall structures and design patterns within the remains leads to new interpretations of this evidence. This study sheds new light on the history of the church of St. Mary from its Late Antique origins to the Dark Ages.

Introduction

The few visitors of Ephesos who leave the main tourist path to visit the remains of the church of St. Mary are confronted with overlapping structures that fail to form a coherent picture (Fig. 1). This architectural 'palimpsest' resulted from the repeated modifications of the church from Late Antiquity to the Middle Byzantine period. This article focuses on the early construction phases of this building. These involved the transformation of what was a major Roman building into an Early Christian basilica and the subsequent reconstruction of part of this basilica as a domed church (Fig. 2). The excavations of the monument during the twentieth century have revealed remains of all the above buildings (Knoll and Keil, 1932). However, as Hans Buchwald (1984: 221) and Richard Krautheimer (1986:

471) have observed, the architectural forms and dates of these developments remain problematic. This article seeks to fill this lacuna by retracing the early phases of the church of St. Mary from the 4th Century AD to the so-called ‘Dark Ages’. Our point of departure is not the discovery of new archaeological evidence. The present work is rather based on the realisation that some of the evidence that has already been published has either been misinterpreted or overlooked. The aim of this article is, therefore, to review, synthesize, and reinterpret all the evidence published since the 1930s. Grouped together and interpreted from an architectural standpoint, these clues provide new insights into the origins of the monument and its development through time.

Historical Overview

The church of St. Mary was situated near the Roman harbour at one of the most prominent sites of Late Antique Ephesos (Fig. 3). The history of its site seems to start in the second century, with the construction of a long basilical stoa flanked by apsed halls. Knoll and Keil (1932: 16–18), the first excavators of this early structure, interpreted it as a ‘Temple of the Muses’ or ‘*Mousseion*’. But, its function remains uncertain. It may have been used as a market, stock exchange, lecture hall, or exhibition space. According to Stefan Karwiese (1989: 17), this stoa formed the southern boundary of a massive Hadrianic temenos, which has been identified as the Olympieion. This site fronted a busy public square, on the other side of which stood the grandiose Harbour Baths (Yegül 2010: 161). Forming one of the ‘gateways’ to the city from the sea, and dominated by key public buildings this was one of the city’s most important areas. This may be one of the reasons why this site became the focus of so many building initiatives in late Antiquity.

The Roman stoa was to be replaced by one of the most imposing building complexes of early Christian Ephesos. This included an atrium, a baptistery, a church, and a large residence (Knoll and Keil 1932: 1–9, 27–50). The present article focuses on the church building, which presents the most complex overlap of phases in the entire site. This church has been interpreted as the Early Christian Cathedral of Ephesos (Restle 1968: 170, cf. Foss 1979: 52). The residence next to it is believed to have been the episcopal palace (Knoll and Keil 1932: 77, cf. Fasolo 1956: 27; Foss 1979: 52; Sodini 1986: 421). Based on a sixth-century inscription associating the church with the cult of Virgin Mary, scholars have identified our church as the venue of the Ecumenical Council that took place in

Ephesos in 431 (Knoll and Keil 1932: 101; Parvis 1945: 72). As Limberis (1995: 321–340) has shown, this Council was not only concerned with the incarnation of Virgin Mary but also with the establishment of a new episcopal hierarchy. The riotous conflicts that this Council generated shook the Empire to the core. For several decades after its early twentieth-century discovery, the church of St. Mary was understood as the architectural backdrop of these events, but, recently, this view was challenged (Karwiese 1989: 40–46). Still, the present paper shows that the evidence at our disposal justifies the identification of the Church of St. Mary as the venue of the Council.

The complex of St. Mary seems to have marked the transformation of Ephesos into a Christian metropolis. The same complex survived the decline of the harbour during the seventh and the early eighth centuries, a period marked by the Persian and Arab invasions in the region and the development of a new civic centre on the hill of Ayasoluk (see Foss 1979: 103 and Mango 1980: 71). Scholars including Marcell Restle (1968:174–177), Paolo Verzone (1965: 610–611) and Clive Foss (1979: 112) believe that it was this troubled period that produced the magnificent domed church whose massive remains dominate the site today (Fig. 4). However, this attribution is based on scanty evidence and this important phase of our church is no less enigmatic than the previous ones.

Literature Review and Methodology

The vagueness of the above historical overview reflects the difficulties in dating and reconstructing the stages of the modification of the Roman stoa into a church. The identification of the episodes in the life of the building has been subject to debate and controversy. A variety of theories have been published so far. For a long time, our understanding of the history of the building relied on the excavation report published by Josef Keil and Fritz Knoll in 1932. The two authors distinguished five building phases. Of these, the first three are particularly relevant to our discussion (Fig. 5). The first corresponds to the second-century Roman stoa. According to the excavators, in the fourth century, the western half of the Roman building was transformed into a church complex including a baptistery, an atrium, and a basilica with three aisles. Knoll and Keil (1932: 101) believed that this basilica was the venue of the Ecumenical Council of 431. Their

narrative continues with an undated third phase, marked by the insertion of a major cross-domed church into the west part of the Early Christian basilica (1932: 51).

Knoll and Keil's reconstructions of these phases have certain idiomatic aspects. Although the excavators found no less than three staircases in the site (two near the sanctuary and one north of the atrium), they reconstructed the basilica without galleries (Knoll and Keil 1932: 5, 19, 37, 39). This questionable aspect of their reconstruction was recently criticised by Russo, 2010: 90). Moreover, as we will see, Knoll and Keil's reconstruction of the domed church is too squat compared with other Byzantine churches with a similar plan (Knoll and Keil 1932: 62, fig. 73). Finally, the two scholars believe that the domed church stood isolated from the presbytery of the original basilica which was maintained in a dilapidated state east of the new apse, waiting for its rehabilitation several centuries later.

The first scholar to challenge these interpretations was Furio Fasolo (1956: 1-22). His article surveyed construction details that his predecessors had overlooked. Fasolo spotted differences between structures that had been previously considered homogeneous and coeval. Take the apse and the longitudinal walls of the church, for instance (Figs. 6 and 7). Both elements are still often considered as surviving parts of the same Early Christian basilica. Yet, Fasolo observed that apse and walls are, in fact, built in a different way. Continuing his survey, he detected no less than seven different wall structures and attributed these irregularities to a slow, constantly changing building programme (Fasolo 1956: 3-9). He raised the possibility that the apse belonged to a fourth-century basilica that was never completed, whereas the north and south walls belong to a later phase, an early sixth-century timber-roof basilica with piers (Fasolo 1956: 9-13). According to the Italian author, this second basilica was modified 'after the times of Justinian' with the construction of a domed church inside its west part. For the first time, the domed church was reconstructed with galleries and more 'Byzantine' proportions (Fasolo 1956: fig. 15). More importantly, Fasolo raised the possibility that this new church did not stand isolated as previously suggested, but was connected with the remaining part of the earlier basilica, forming a 'double church'. Alas, lacking evidence from excavation and stratigraphic analysis, Fasolo could not provide adequate substantiation for these hypotheses, and his analysis leaves many questions regarding the phases of the church open.

These lacunae were partly filled thanks to the recent excavations of the Austrian Archaeological Institute under Karwiese (1989; 1994; 1999). These produced invaluable evidence, the result of a meticulous stratigraphic analysis, the first to be carried out in St Mary's. In assessing this work, it is necessary to make a distinction between Karwiese's evidence and interpretations. His excavation methodology is immaculate and his evidence unequivocal. Still, his interpretations may be challenged, specifically with regard to the reconstruction of architectural forms and the relationship between St Mary's and the Ecumenical Council. Let us concentrate on the new evidence first. One of the most important finds is the date of the north longitudinal wall. Ceramic shards and coins from the foundations showed that the terminus post quem for this wall is 491 (Karwiese 1989: 18). Now let us return to the problem of interpretation. Based on this local find, Karwiese went on to attribute the entire first phase of the church to this date: at least 60 years after the Ecumenical Council of 431. For Karwiese, the council did not convene in the early Christian basilica, but in what preceded it, the second-century Roman stoa, which was allegedly still standing at the time and lightly remodelled for the occasion (Karwiese 1999: 82-83). Now, this theory is based on the assumption that the longitudinal walls and the apse are coeval. However, this overlooks Fasolo's observation of the constructional difference between apse and longitudinal walls. This shows that what applies to these walls does not necessarily apply to the apse and the entire building. Although Karwiese seems to have overlooked this observation, his publication remains useful for its rich documentation and new excavation finds.

None of the previous attempts to establish the building history of St Mary can really be considered conclusive. Despite the recent, thorough re-examination of the remains of the building by Eugenio Russo, there are still lacunae concerning the attribution of the existing remains to different phases, and the dating and reconstruction of these phases.¹ One of the problems that scholars have failed to address convincingly is the exact way in which the Roman stoa was retrofitted into a church. How smooth was the transition and to what extent were previous structures maintained? Another problem concerns the association between our church and the Ecumenical Council. As we saw, Karwiese

¹ Russo (2010, pp. 57-98) has recently provided a thorough description of the remains of the church of St. Mary, including a minute examination of its sculptural elements. This analysis shed light on certain aspects of the original form of the church, such as the galleries and the internal colonnades. However, the author's interpretation of different wall structures as the work of different teams of builders is not entirely substantiated, and certain questions, such as the dates and forms of the different phases remain open.

showed that a major part of what was interpreted as the Council's basilica belongs, in fact, to a later building. This raises questions concerning the form and date of the church in which the council convened. The chronology and reconstruction of the domed church are also problematic. The reconstructions proposed by Knoll and Keil seem to overlook evidence for galleries and display highly idiomatic forms that can claim only a vague kinship to Byzantine ecclesiastical architecture. Take the reconstructed section of the domed church, for instance. Karydis (2011: 150) recently questioned this reconstruction due to its peculiar squat proportions, so atypical of early Byzantine ecclesiastical architecture (see fig. 5). The reconstructed section published by Fasolo (1956: fig. 15) seems more convincing, but it is too diagrammatic and poorly substantiated. In most cases, the cause of these shortcomings is not the lack of evidence but the fact that we have not yet evaluated the full potential of evidence published already. Re-examining this material leads to new insights in the transformations of the church of St. Mary.

Our new approach to this evidence combines the archaeological standpoint with the ones of the architect and the builder. We will look at excavation finds and examine the degree to which constructional differences indicate different phases. We will also investigate the structure from the architectural viewpoint, distinguishing the traces of different design ideas within the remains. Literary sources and inscriptions will help to understand the implications of architectural and archaeological observations that have not been evaluated sufficiently so far. Synthesising these methods, the following paragraphs provide a new interpretation regarding the design of the church of St. Mary and its development through time.

The Roman Stoa

The building history of our church starts with the remodelling of the second-century basilical stoa. To measure the full extent of this transformation, it is necessary to visualise this early building. Even though the latter's remaining traces are sparse, excavations have managed to establish some aspects of the stoa's plan, such as the two longitudinal stylobates running in an east-west direction. Lying on a stratum that dates back to the second century, their concrete foundations are typical of the Imperial period. Dowel holes indicate that these stylobates were surmounted by colonnades. According to the excavators, these colonnades stopped before reaching the east and west extremities of the

building. They terminated in marble corinthian pilasters, two of which were later embedded in the apse of the early Christian church, where they were found by Knoll and Keil (1932: 20-21, 39 fig. 11, 12). Beautifully decorated with panels in their shafts, these pilasters serve as an excellent indication for the height of the columns of this Roman building: at 6.5 m, they must have formed part of a towering space, typical of public buildings constructed in Ephesos during the Roman Imperial period.

If these colonnades have disappeared, other elements of the Roman stoa survive. Take the apses in the two extremities of the site, for instance (Fig. 8). Their off-axis position distinguishes them as parts of the site's earliest phase. Their structure is also distinctive: it consists of a base made of small ashlar blocks forming thin, continuous joints and an upper part made of brick. The same structure occurs in other elements as well: parts of the atrium walls and a series of massive piers incorporated in the northern longitudinal wall are built in this way. In the northern boundary of the building, these piers seem to have been connected with walls. The south boundary was more permeable. Its foundations are indicative of isolated piers projecting southwards from the trace of the present south wall.

All these traces delineate a long, three-aisled basilical stoa, terminated at its east and west ends by rectangular halls with broad apses. It is not certain whether the entire building was covered or if the central part of it was exposed. In any case, it seems that this building was problematic from a structural point of view. Its elongated form must have made it vulnerable to earthquakes, especially if the seismic waves were perpendicular to the stoa (Dowrick 2003: 277). Its weak alluvial subsoil (described in Karwiese 1989: 41) must have also compromised seismic behaviour. It is, therefore, likely that our building was affected by two major earthquakes that caused widespread damage in the area: the first in 270/80 and the second one in 365 (Foss 1979: 188–191; Altunel 2000: 299–301). Earthquake damage together with a possible demolition of the Olympieion, an institution that was out of date in an early Christian metropolis, could have made the Roman stoa redundant. Such a prominent site could not have remained redundant for a long time. Indeed, very soon, a new development would infuse new life into it.

The Church of the Third Ecumenical Council

Karwiese (1989: 17, 40–46) has made the plausible hypothesis that the Olympieion was destroyed sometime around 400, under the influence of the anti-pagan legislation of the late fourth century (Fowden 1978: 53). One of the most decisive steps in the modification of the Roman stoa seems to have been the demolition of the northern colonnade in its interior, and the construction of a new colonnade 3m north of the old one. Excavation revealed the foundation of the new colonnade, some fragments of its stylobate, and column bases (Knoll and Keil 1932: 31–33; Karwiese and Danica Beyll 1994: 14 fig. 6). The replacement of the northern colonnade created a wider nave. This space corresponds in width to the aperture of the great apse that dominates the site today.

It was the construction of this apse that brought the most radical transformation to the Roman structure. Flanked by two side chapels, the apse was inserted in the exact middle of the old stoa marking the east boundary of the new church. Karwiese (1999: 81) believed that this apse was coeval to the longitudinal walls whose remains can be seen today. This needs to be revised because of the constructional differences between these elements. The apse is made of concrete faced with small ashlar masonry blocks, and employs grey pozzolanic mortar. On the other hand, the longitudinal walls are made of much bigger blocks connected with a pinkish mortar. But it is mainly the design of the apse and its side-chambers that disproves Karwiese's theory and suggests that these elements are older than the longitudinal walls. The side-chambers flanking the apse were clearly designed to incorporate parts of the Roman building. Indeed, the north side-chamber sacrifices space to include one of the piers of the Roman north wall (Fig. 9). On the other hand, the construction of the longitudinal walls reflects the opposite tendency: it necessitated the complete destruction of the rest of the piers. If walls and apse were parts of the same phase, then one may ask why their builders demolished such a great part of the Roman stoa but spared the cumbersome pier north of the apse. This radical change of attitude can only be attributed to builders and architects of different periods.

Another indication of an early insertion of the apse into the Roman stoa is found at the back of the apse, i.e. in its east elevation (Fig. 10). There lies a detail that has eluded the attention of scholars so far: the pilasters of this elevation correspond to the tracing of the two old colonnades of the Roman stoa. This detail shows that when the apse was built, the

east part of the old colonnades was maintained and taken into account. The apse was one of the first elements inserted in the Roman stoa, and for this reason, its design should ensure a transition from the eastern remaining part of the stoa to the new church structures.

Apart from the apse and the new colonnades, this phase includes the east and west walls of the narthex, a major part of the atrium as well as the baptistery. Indeed, like the apse, all these elements contain the same grey mortar and tend to integrate parts of the earlier building (Fasolo 1956: 3-5). They all form an entity that does not seem to include the longitudinal walls. All seem to adapt their design to incorporate elements of the older building, such as its northern piers, or its colonnades. These clues seem to suggest that apse, side-chambers, new colonnades, narthex walls, atrium and baptistery were not parts of an entirely new building but constituted interventions within the Roman stoa, which was partly maintained. The north and south walls and piers of this stoa must have been preserved as the boundaries of the new church. Within these boundaries, new colonnades (built, as we will see with reused material), narthex walls, and apse, must have made the building recognizable as an Early Christian basilica (Fig. 11).

This was far from being a common basilical church. One of its traits was asymmetry: the northern aisle must have been narrower than the south one. Another particularity was that some of its spaces were covered by vaults, whereas other spaces were timber-roofed. In a previous publication, the present author reconstructed the vaults of this phase on the basis of surviving fragments. This revealed the use of peculiar vaulting patterns. The dome of the baptistery was made of interlocking ribbons of arched brick courses (Fig. 12). The sail vault covering the north side chapel was made of brick courses laid on radiating arched beds (Fig. 13). The small barrel vaults over the two staircases flanking the apse were made of arched brick courses forming a herring-bone pattern (Fig. 14). But, strange vaults like these were not the only particularity of the new church. Unlike other Early Christian basilicas in the region, St. Mary's must have had galleries. Indeed, the staircases are too numerous and too dispersed to have only provided access to the roofs or two towers, as previous scholars have suggested (Knoll and Keil 1932: 5, 19).

Following this brief description of the first church of St Mary, we should now examine the evidence for its date. Some of the most important archaeological clues for dating were

found in the excavations that revealed the paving of the first church. Coins found by Karwiese (1999: 81) near the apse suggest that this was constructed after 426. Written records also provide information about the first phase of the church of St Mary. Potential clues may be drawn from the dialogue of Palladios concerning the life of St John Chrysostom, and the acts of the two major Councils that took place in Ephesos in the first half of the fifth century. Palladios' account suggests that at the end of the fourth century, a cathedral with a baptistery was being built, and simultaneously 'pillaged' by Antonios, Bishop of Ephesos during that time (Malingrey and Leclercq (Palladios XIII) 1988: 148–168, 275). The acts of the Ecumenical Council of 431, and specifically a letter by Cyril of Alexandria, suggest that the Council took place in 'the Great Church' which was called 'church of Mary Theotokos' (*Acta Conciliorum Oecumenicorum* (Schwartz 1914): I.i.v.14). The same record refers to an Episcopal palace nearby. This description seems to match with our complex. The fact that a sixth-century inscription found in the narthex identifies the church as the church of Virgin Mary makes it very likely that this is the same church as the one of the Council (Knoll and Keil 1932: 101–102). Its prominent location and easy access would have made this an ideal venue for such an event. This indicates that the first church on the site must have been largely completed before the Third Ecumenical Council was convened in 431, and constituted the venue of this event. The above clues suggest a completion date between 426 and 431. This does not exclude that the preliminary steps towards the transformation of the Roman stoa into a church had begun decades ago or that smaller modifications occurred slightly after this date.

According to the above hypothesis, the first church of St. Mary was completed at a time when the devotion to Virgin Mary was becoming an essential element of Early Christian liturgy (Atanassova 2010: 453). Ephesos was one of the most important centres of Marian veneration in the Byzantine Empire (Limberis 1995: 321-340). A church dedicated to St. Mary in this city must have had a special significance as the heart of one of the empire's major cults. The influence of this cult in the top circles of political power is reflected in the activities of Pulcheria, Augusta and sister of Emperor Theodosius II. A fervent promoter of Mary, she sponsored the building of three major churches dedicated to Mary in Constantinople (Hollum 1982: 142). There is no evidence for Pulcheria's involvement in the construction of the church of St. Mary at Ephesos, but we know that she engaged with the Ecumenical Council that took place there (Limberis 1994: 55; Atanassova 2010: 451). During the council, our church became the site of the riotous dispute over the

attribution to Mary of the title 'Theotokos' (i.e. God-bearer) (Limberis 1995: 321-340). The enormous liturgical and theological significance that this major event gave to the church of St. Mary must have seemed at odds with the fragmentary architectural character of a church which still included large parts of a Roman stoa. However, as we will see in the following paragraphs, the church was soon to be redeveloped into a far more cohesive structure, without losing entirely the traces of its Roman origins.

The Second Basilica

Even though the construction of the Council Basilica was a major undertaking, requiring considerable resources, the tendency to integrate parts of the previous Roman stoa must have resulted into the creation of a peculiar, asymmetrical building. This first church must have been seen simultaneously as a 'Great Church' and as a building site in progress. And indeed, progress came in two stages later in the fifth century. The first stage involved the creation of a new entrance doorway, near the centre of the west wall of the narthex. The architrave of this doorway has been reconstructed and now constitutes one of the most impressive aspects of the church. Made of Proconnesian marble blocks, the architrave features bead-and-reel astragals, runs of egg-and-dart and lesbian leaf bands, and is crowned with an anthemion frieze and denticulated Ionic cornice (Fig. 15). These elements are typical of Roman architecture in Ephesos. Indeed, similar sculptural enrichments occur in second-century monuments of Ephesos such as the Temple of Hadrian and the Library of Celsus. This seems to suggest that the doorway was built entirely with carved blocks taken from an earlier building, and carefully reworked to fit the church.

The added door was slightly off-axis with both the atrium and the apse at the other end. The strange position of this portal has been attributed to the need to avoid interference with a tomb or monument that stood close to the center of the narthex (Fasolo 1956: 9). Indeed, the burial tradition inside the church is attested by the sixth-century inscription in the narthex that we mentioned previously (Knoll and Keil 1932: 101). But, the existence of a central tomb is not the only explanation for the position of this doorway. The latter's off-center, asymmetrical positioning is only surprising when one examines it in the context of the present, symmetrical remains. Viewed in the context of the largely asymmetrical design we just described, this misalignment would hardly be noticeable.

Crucial evidence for the date of this doorway comes from the inscription on its architrave. This attributes the gate to a certain ‘Archbishop John’, who has been identified as the Bishop of Ephesos installed by the Council of Chalcedon in 451 (Knoll and Keil 1932: 98; cf. Vettters 1966: 275–280; Foss 1979: 54; Russo 2010: 86). This indicates that this portal dates back to the mid-fifth century.

The second stage of the fifth-century modification seems to have dealt drastically with the problem of asymmetry. This involved the destruction of the north and south walls of the Roman phase. It only spared Roman parts whose removal would have damaged vital parts of the church. This explains the preservation of the massive Roman pier near the apse and the maintenance of the Roman staircase southeast of the baptistery. In spite of these precautions, the replacement of the Roman walls must have required extensive reconstruction. Roofs and galleries had to be demolished and reconstructed, and new longitudinal walls were built. Remains of these walls are currently preserved on site. They are largely made of reused ashlar blocks connected with a mortar containing crushed brick (Fasolo 1956: 7). The recent excavation of these walls revealed coin and ceramic finds that provide an approximate terminus post quem after the third quarter of the fifth century (Karwiese 1989: 18).

The design was at last complete. This time, the aisles were almost symmetrical and well-defined by the new external walls and colonnades. In the reconstructed plan shown in figure 15, the position of the columns has been established on the basis of several base traces found on the stylobates (Knoll and Keil 1932: 31-33). The new external walls must have had windows whose axes corresponded to the grid of the colonnade opposite. The correspondence between the two elements is attested by the buttresses placed against this wall at a later stage, during the construction of the ‘domed church’ (see Fig. 2). As we will see, although these small buttresses are coeval with the ‘domed church’, they do not align with its big, central piers, but with the columns of the earlier basilica. It is likely that this ‘erratic’ position resulted from the need to avoid blocking the windows along the external walls of the earlier basilica (which were retained in the design of the ‘domed church’). The position of these windows and their relationship with the colonnades can be examined in our reconstructed plan in Figure 16.

Let us now move to the reconstruction of the section. The height of the ground floor colonnades can be deduced from the height of the pilasters that are preserved in the remains of the great apse (6.5 m). The two Roman Imperial architrave blocks that were found on site during the excavations provide an important clue for the reconstruction of these colonnades. Examined in detail by Russo (2010: 235-236, figs. 319-322), these blocks suggest that the columns did not carry brick arches, as in most Early Christian basilicas in Asia Minor, but architraves. Featuring three fasciae divided by runs of bead-and-reel and crowned by a cavetto moulding enriched with a palmette-and-lotus motif, these architraves probably supported the gallery floors (Fig. 17). The existence of galleries is also attested by the remains of three staircases found on site: one staircase lay near the north-east corner of the atrium and two staircases flanked the apse (see fig. 2). Given their symmetrical disposition and strategic location, these staircases clearly play a more important role than that of a service access to the roof, as Keil and Knoll (1932: 36, 40) claimed. All three staircases should rather be interpreted as accesses to the gallery and as such, they provide a useful indication for the level of the gallery floor. The dimensions and number of the surviving steps suggest that the gallery floor stood at a level of approximately 9.35 m above the ground.²

The reconstruction drawings in Figures 16 and 17 suggest that the second basilica was a very long, modular structure. With its quasi-symmetrical plan, clear tripartite division as well as the long and narrow proportions, the church interior had a dynamic quality, which made it ideal for processions. All these characteristics are typical of the architectural development that Buchwald (1982: 35-38) broadly designated 'the First Byzantine Architectural Style'. Krautheimer (1986: 81) claimed that St. Mary's has the 'standard plan' for Asia Minor and nearby islands, drawing parallels with the basilicas of Mastichari on the island of Kos, Eresos on the island of Lesbos and Didyma. For Krautheimer, this plan type, characterised by a 'simple apse' is closer to that of the Greek mainland. However, in St. Mary, the apse is flanked by lateral rooms or chapels. These are quite rare in Greece but common in the Early Christian basilicas in Syria, Northern Africa (Orlandos 1952: 224-228). Monuments such as Ayatekla church 1 in Cilicia (Herzfeld and Guyer 1930: 4-46) reflect the adoption of this design in South Asia Minor (Krautheimer 1986:

² In the two staircases flanking the apse, traces of three flights of steps survive. The plan suggests that one had to climb eight flights of steps to reach the point directly above the entrance of the staircase. Each flight seems to have consisted of four steps, apart from the initial one that had eight. There must have been approximately 36 steps, with an average height of 26 cm.

82). Still, by the late fifth century, the influence of this design had reached west Asia Minor. Indeed, lateral rooms flanking the apse do not only occur in the church of St. Mary but also in the basilica of Aphrodisias, which also resulted from the retrofit of a previous building (Cormack 1990, 75-88).

Following our typological examination of the design of St. Mary's, a brief note is needed about the architectural sculptures and finishes of the church. These have been described in detail in previous publications, the most recent and perhaps the most detailed being that of Russo (2010: 84-89). However, it is worth looking at some of these elements again here, to understand the sophisticated and hybrid character of the church's interior. The colonnades consisted of reused composite columns carrying the highly ornate architraves mentioned above. But, this Roman Imperial design was 'updated' with some typical Early Christian architectural elements: the grooves in the attic bases of the columns suggest that nave and aisles were separated with closure screen slabs. Some of these slabs were found during the excavations (Knoll and Keil 1932: 33). Alternating with posts of the same height, most of these slabs were enriched with incised rhomboid shapes inscribed within a rectangle, the central space being filled with crosses of various designs. This elegant motif is typical of fifth-century Ephesos (Deichmann 1974: 560-564) and also occurs in the nearby Basilica of Priene, whose first phase has been tentatively attributed to the fifth or the early sixth century (Westphalen 2000: 280). A similar degree of refinement characterises the doorways created specifically for the new church. Most of these are found in the narthex. They were made of marble blocks and feature two or three fascias surrounded by two mouldings of curvilinear profiles (usually cyma recta, ovolo, or cavetto) separated by a narrow fillet. These doorways may not equal the magnificence of the narthex's central portal described above, but at least they do not disrupt the tone and quality of the overall design. The latter's opulence must have relied considerably on the floor mosaics, large fragments of which were found in the narthex and the side chapels flanking the apse (Knoll and Keil 1932: 35, 38).

The above sketchy overview shows that the second basilica of St. Mary maintained part of the hybrid character of the previous phase of the building: largely made of reused material, the church's classically-inspired colonnades and doorframes stood next to elements and symbols with a strong Early Christian character, such as the screen slabs with the crosses. These, together with liturgical furniture such as the altar and the synthronon (dated and

reconstructed in Karwiese, 1989: 12-17) constituted one further step in the gradual transformation of the Roman Stoa into the 'Great Church' of Ephesos.

The Domed Church

So far, the phases of the church seem to have conformed to a master-plan. Both of them tried to create a typical basilica within the previous Roman building. The gradual replacement of the walls and supports of this building made this design concept more and more readable. But, at a certain point, this concept was suddenly abandoned: the slender colonnades of the basilica were replaced by heavy piers, which are typical of a vaulted building (see Figs. 2 and 4). The west piers are divided in two parts interconnected with broad arches. The east piers have a composite form: they also consist of two parts, of which the eastern ones include chambers with apses, hollowed out in the mass of the piers and flanking a central semi-circular apse with a low synthronon (Knoll and Keil 1932: 54-55) (Figure 18). This new building occupied only half of the previous basilica. The old narthex, east colonnade and sanctuary were maintained with few alterations. The result was a hybrid, 'double' church with two apses, two narthexes and two naves whose main spaces must have communicated through the side aisles (Fig. 18).

The new, vaulted building belongs to a fascinating, yet relatively unexplored development in the history of Byzantine architecture. Its cross-shaped nave, with the 'atrophic' cross-arms evokes the design of the church of the Koimesis at Nicaea (Schmit 1927), St Nicholas at Myra (Rott 1908: 327-340 fig. 123), St Clement at Ankara (De Jerphanion 1928: 113-143) and St. Sophia at Thessaloniki (Theocharidou 1992: 83-99). These churches are 'cross-domed basilicas,' a type associated with the obscure architectural developments of the so-called 'Transitional Period' from the seventh to the ninth century (Krautheimer 1986: 189; Mango 1978: 90-96). The examples of this development in west Asia Minor are very limited and their chronology is often problematic. The study of the vaulted church of St. Mary provides an opportunity to shed more light on this architectural typology and the forms associated with it.

Our understanding of the form of the vaulted church is limited due to its dilapidation and the absence of remains from its upper parts. Still, the careful observation of the plan of the

church helps to construct a plausible model for its missing superstructure. The fact that the three staircases of the previous phases were maintained suggests that the building had galleries. The existence of galleries is also attested by a series of column shafts and capitals of the Ionic impost type found and surveyed by Fasolo (1956: 24-25, figs. 44-45). Given their very small height, these shafts cannot be attributed to the first two phases of the basilica. The new phase had no use for columns on the ground floor, where nave and aisles were separated by pairs of pilasters (see figure 2). Therefore, the columns identified by Fasolo were probably located in the galleries, whose plan may have been similar to that of the aisles.

Let us now move to the missing vaulted ceiling, one of the most impressive elements of the new church. Constructing vaults that spanned a distance of more than 11m must have required significant technological skills. Unfortunately, there are no traces of the nave vaults over the galleries. Only the secondary vaults of this building survive. They can still be seen inside the two small chambers flanking the apse. As for the vaults of the nave, to reconstruct them we need to observe the plan: the existence of four enormous piers at the corners of a square bay indicate the existence of a dome on pendentives over the centre of the building. Byzantine vaulting practice makes it likely that this dome had windows, and was abutted by barrel vaults: two deep ones (east and west) and two narrow ones (north and south), corresponding to the plan. The fact that the piers supported barrel vaults is attested by an interesting architectural detail that has not been noticed before. This is found in the deep arches that cover the passages through the four main piers. Comparing the two faces of these arches (north and south), we realise that they are quite different: in the face towards the nave, the arch rings are of equal depth, whereas in the face towards the aisle the outer arch ring is half the usual depth (Fig. 20). The fact that the rear portion of the arch structure is weaker than the front one indicates that the front was designed to carry a greater load, which, in this case, can plausibly be interpreted as the load of a major barrel vault.

The vaults of the church were not supported entirely on newly built walls and supports. The external walls of the previous basilica were largely maintained and integrated in the new structure. However, these walls were probably not thick enough to provide adequate abutment for the new vaults. For this reason, the longitudinal north and south walls were reinforced with internal buttresses, which probably carried arches. In the area of the

narthex, the builders chose a more imaginative solution: a series of reused ionic columns with bases of various designs were placed against the east and west wall (Knoll and Keil 1932: 58-59). The use of columns against walls must have been known from the aisles of the nearby church of St. John at the hill of Ayasoluk (Karydis 2016: 119). In St. Mary, the addition of these columns would have increased the ability of the narthex walls to support arches and, perhaps, a barrel vault.

The above observations help to visualise the interior of the 'domed church' (Fig. 21). This had a cruciform nave, whose central bay was covered by a dome. The latter rested on two deep barrel vaults and two narrow lateral arches. Piers and lateral screens separated nave and aisles. The aisles were covered by barrel vaults and surmounted by galleries. The design of these galleries differed slightly from that of the aisles. As we have seen, whereas the aisles had piers, the galleries probably had columns. As the old stairs remained in use, the galleries of the domed church must have prolonged the galleries of the second basilica, whose eastern part was also preserved. That this earlier fabric was incorporated in the new church is proven by the state of preservation of the apse of the earlier basilica. Had this been abandoned before the site was deserted, it would not have been preserved in its original form for so long.

The reconstruction of the 'domed church' of St Mary with galleries is much more credible architecturally and stylistically than the reconstruction without galleries proposed by Knoll and Keil (1932: 62, fig. 73). According to their reconstruction, the proportional ratio of the height of the dome cornice to the nave width is almost 1.2:1. These proportions are atypically squat. This becomes clear if we examine other cross-domed basilicas in Greece and Asia Minor. The proportional relationship between nave width and the height of the springing of the dome at Thessaloniki, Nicaea, Myra, Ankara, ranges from 1:1.5 to 1:1.6. In new reconstruction proposed here the width to height ratio is approximately 1.6:1. These reconfigured proportions are more typical of a 'cross-domed church'.

The date of this striking development remains uncertain. Verzone (1965: 611) and Foss (1979: 112) interpreted the cross-domed church as an indication of the reconstruction of the city in the eighth century. Falla Castelfranchi (1999: 90) opposed this theory, claiming that the building of a monumental vaulted church could not have taken place during a period of unrest, a view shared by Denis Feissel in a recent conversation with the author.

In a recent article, Karwiese and Beyll (1994: 14-15) championed a late sixth-century date, based on the find of early Byzantine pottery shards in a grave next to the eastern wall of the domed building. But, the date of the grave is not necessarily that of the cross-domed church. We are clearly confronted with a dilemma. Did the construction of the cross-domed church represent an attempt by the Ephesians to harmonise themselves with the sixth-century development of vaulted architecture? Or was this an effort to resuscitate the glory of the town near the harbour after the Persian and Arab invasions of the seventh century?

The available evidence is not sufficient to resolve the above dilemma. Still, our reconstruction of the original form of the domed building provides some new material for the discussion regarding its date. As we have seen, the vaulted church of St. Mary has all the characteristics of a 'cross domed church.' There are very few surviving examples of this type and none of them seems to have been dated through documents or inscriptions. For instance, the date of the church of St. Sophia at Thessaloniki is subject to debate: Cormack (1981) has attributed the foundation of this church to the late eighth century, but Theodoridou (1988: 155) argues in favour of a date in the early seventh century. The Koimesis church at Nicaea was built no later than 726 and could even date back to the seventh century (Krautheimer 1986: 208-209). But, there is no indication that similar cross-domed churches were built before the seventh century. Indeed, as Buchwald (1984: 221) has suggested, comparison with similar churches discourages us from considering the vaulted church of St. Mary as a sixth-century building. Another reason why such an early date seems unlikely is its proximity to the presumed construction of the second basilica, which seems to have been built around 500. The great constructional difference between the walls of the 'cross-domed church' and those of the second basilica indicates that significant time must have elapsed between the two phases. The above considerations seem to suggest that the cross-domed church was built after the beginning of the seventh century.

One may ask what necessitated such an extensive modification of the building. Partial collapse or destruction of the second basilica may be an explanation. A construction detail in the southeast corner of the cross-domed church confirms this. This corner displays a reused chancel parapet slab which probably belonged to the second basilica (Fig. 22). Decorated with a relief representing a cross, this slab is badly damaged and seems to have

been incorporated in the structure only after its original surroundings collapsed. Given our previous discussion about the possible date of the church, this collapse may be associated with the undetermined events which destroyed many buildings in Ephesos between 614 and 616 (Foss 1979: 105-107; Scherrer 2001: 80; 2006: 54). An attribution of this destruction to the time of the Arab invasions in 654/5 is also likely (Schindel 2009: 197, 213). Foss (1979: 103-116) suggests that the reconstruction of the city after these events was far from being immediate. If this is correct, then the reconstruction of St Mary as a complex church including a domed element must be tentatively attributed to the eighth century.

By the time the vaulted church of St. Mary was built, Ephesos had been reduced to a much smaller city. Disruptions caused by the Arab and Persian invasions until the eighth century in combination with plague and civil war had caused parts of the city to be abandoned (Foss 1979: 103-106). Most of the inhabited city had been surrounded by a fortification wall which was probably built in the early seventh century and protected an area between the peaks of Panayirdag and the harbour (Heberdey 1907: 73; Scherrer 2006: 49-54). A section of this wall lay next to the west extremity of the church of St. Mary (see figure 3). In its new, vaulted form, the church was probably the most impressive monument of the age in the walled city. With its towering dome, the church must have dominated the urban skyline, probably dwarfing the dwellings of the scarcely-documented residential district that developed on the nearby site of the Harbour Baths (Benndorf 1898: 63). Echoing the soaring vaults in the nearby church of St. John at Ayasoluk, this ambitious structure reflects the growing importance of Ephesos as the capital of the Thracesian theme and a major religious centre.

Conclusions

Revisiting the remains of the Church of St Mary and re-examining material published already has shed new light on the form and date of the phases of this remarkable building. We have examined three major phases of construction. The first building phase modified a major Roman building into a basilica. Retaining significant parts of the Roman building, such as parts of its longitudinal walls and colonnades (one of which was moved for the occasion), this phase involved the construction of the great apse whose remains dominate

the eastern part of the site. The second episode in the life of the building was a phase of substantial re-building. It did away with irregularities that resulted from the incorporation of elements from the Roman building. This phase must have involved the recreation of the greatest part of the longitudinal walls. As we have shown, both this basilica and the previous one must have had galleries, accessed from three staircases, the remains of which can still be observed on site. The third phase we examined involved the construction of a cross-domed church. This was not meant to replace entirely the previous basilica. It occupied the western part of the nave and aisles of the basilica. The latter's eastern end was retained and kept being used as part of a hybrid building, an amalgam of different phases.

Apart from recapturing the form of the church in each of the above three phases, the present paper has attempted to elucidate the problem of dating. One of the most important aspects of this problem was the relationship between the Church of St Mary and the third Ecumenical Council of 431. As we have shown, the transformation of the Roman building into a basilica must have taken place shortly before the Council. This first phase must have involved a more substantial modification than the one described by Karwiese (1999: 83–84). Indeed, the great apse of this basilica, and part of its narthex walls seem to have been already constructed in the 420s. The 'regularisation' of the first basilica and its reconstruction with new longitudinal walls must have occurred at the end of the fifth century or the beginning of the sixth century. It is this modification of the structure that confused previous scholars leading them to attribute – erroneously – the entire basilica to a date seventy-odd years after the Council. As for the third and final phase, the reconstruction proposed in this paper confirmed that the portion it added to the building has all the characteristics of a cross-domed church. The similarity with the Church of Sophia in Thessaloniki is striking. The fact that other examples of this church type date back to the seventh and the eighth century offers a good indication for the dating of the third phase of St Mary.

Our improved understanding of the date and form of the phases of the Church of St Mary paves the way for further research that will look at these phases in the light of the urban development of Ephesos from the fifth to the eighth century. Exploring the form, site, and function of the church of St Mary holds the key for understanding several aspects of this development. The fifth-century transformation of the Roman basilica into a major church

provides indications for the Christian appropriation of Roman heritage and the emergence of new institutions in the city stage. It also sheds light into the architectural culture that reshaped the centres of public life of the city during its Christianization. Finally, the construction of a resplendent cross-domed church not only reflects the reconstruction of the city near the harbour towards the end of the so-called 'Dark Ages', but also indicates that Ephesos continued to play a major role in the development of church architecture long after the Early Byzantine period.

Bibliography

Altunel, E. 2000: 'L'Attività Sismica a Hierapolis e nelle zone limitrofe,' in F. D'Andria and F. Silvestrelli (eds), *Ricerche Archeologiche Turche nella valle del Lykos*. Lecce, Università di Lecce: 299–308

Benndorf, O. 1898: 'Vorläufige Berichte über die Ausgrabungen in Ephesus,' *Jahreshefte des Österreichischen Archäologischen Institutes in Wien* 1: 53-72

Buchwald, H. 1982: 'The First Byzantine Architectural Style: Evolution or Revolution?' *Akten, XVI Internationaler Byzantinistenkongress II/5. Jahrbuch der Österreichischen Byzantinistik* 32/5: 33-45.

Buchwald, H. 1984: 'Western Asia Minor as a Generator of Architectural Forms in the Byzantine Period: Provincial Back-Wash or Dynamic Center of Production,' *Jahrbuch der Österreichischen Byzantinistik* 34: 200-234.

Cormack, R. 'The Apse Mosaics of S. Sophia at Thessaloniki,' *Δελτίον Χριστιανικής Αρχαιολογικής Εταιρείας* 10: 111-136

Cormack, R. 1990: 'The Temple as the Cathedral,' in C. Roueché and K. T. Erim (eds.), *Aphrodisias Papers: Recent work on architecture and sculpture, Journal of Roman Archaeology Supplement* 1: 75-88.

De Jerphanion, G. 1928: 'L'Eglise de Saint-Clément à Angora,' in *Mélanges d'archéologie anatolienne* (Mélanges de l'Université St. Joseph XIII). Beyrouth, Université St. Joseph: 113-143.

Deichmann, F. W. 1974: 'Zur Spätantiken Bauplastik von Ephesus,' in A. M. Mansel (ed.) *Mélanges Mansel I*, Ankara, Türk Tarih Kurumu Basımevi: 549-570.

Dowrick, D. 2003: *Earthquake Risk Reduction*. Chichester, Wiley.

Falla Castelfranchi, M. 1999: 'Il complesso di San Giovanni ad Efeso nel quadro dell'architettura giustiniana dell'Asia Minore,' in R. Pillinger, O. Kresten, F. Krinzing and E. Russo (eds.), *Efeso Paleocristiana e Bizantina – Frühchristliches und byzantinisches Ephesos* (Österreichische Akademie der Wissenschaften, philosophisch-historische Klasse, Denkschrift 282 = Archäologische Forschungen 3). Vienna, Österreichische Akademie der Wissenschaften: 89–98.

Fasolo, F. 1956: 'La Basilica del Concilio di Efeso, Con alcune Note Sull'Architettura Romana Della Valle del Meandro,' *Palladio* 5: 1–31.

Foss, C. 1979: *Ephesus after Antiquity: A late antique, Byzantine and Turkish City*. Cambridge, Cambridge University Press.

Fowden, G. 1978: 'Bishops and Temples in the Eastern Roman Empire,' *The Journal of Theological Studies* 29/1: 53–78.

Heberdey, R. 1907: 'VIII Vorläufiger Bericht über die Grabungen in Ephesus 1905-06,' *Jahreshefte Des Osterreichischen Archaologischen Institutes in Wien* 10: 62-78.

Holum, K. 1982: *Theodosian Empresses: Women and Imperial Dominion in Late Antiquity*, Berkeley: University of California Press.

Karwiese, S. 1989: *Die Marienkirche in Ephesos: Erster vorläufiger Grabungsbericht über die Wiederaufnahme der archäologischen Untersuchung der Marienkirche in Ephesos*. Vienna, Österreichische Akademie der Wissenschaften.

Karwiese, S. 1995: 'The Church of Mary and the Temple of Hadrian Olympios,' in H. Koester (ed.) *Ephesos: Metropolis of Asia* (Harvard Theological Studies 41). Valley Forge, Trinity Press International: 311–320..

Karwiese, S. 1999: 'Die Marienkirche und das Dritte Ökumenische Konzil,' in R. Pillinger, O. Kresten, F. Krinzinger and E. Russo (eds.), *Efeso Paleocristiana e Bizantina – Frühchristliches und byzantinisches Ephesos* (Österreichische Akademie der Wissenschaften, philosophisch-historische Klasse, Denkschrift 282 = Archäologische Forschungen 3). Vienna: Österreichische Akademie der Wissenschaften: 81–85.

Karydis, N. 2011: *Early Byzantine Vaulted Construction in Churches of the Western Coastal Plains and River Valleys of Asia Minor* (BAR International Series 2246). Oxford, Archaeopress.

Karydis, N., 2016: 'The Evolution of the Church of St. John at Ephesos during the Early Byzantine Period,' *Jahreshefte des Osterreichischen Archäologischen Institutes in Wien*, 84: 97-128.

Knoll, F. and Keil, J. 1932: *Die Marienkirche* (Forschungen in Ephesos IV/1). Vienna, Österreichisches Archäologisches Institut.

Krautheimer, R. 1986: *Early Christian and Byzantine Architecture*. Harmondsworth, Middlesex, Penguin.

Limberis, V. *Divine heiress. The Virgin Mary and the Creation of Christian Constantinople*. London, New York, Routledge, 1994.

Limberis, V. 1995: 'The Council of Ephesos: The Rise of the Cult of the Theotokos and the Demise of the See of Ephesos,' in H. Koester (ed.), *Ephesos: Metropolis of Asia* (Harvard Theological Studies 41). Valley Forge, Trinity Press International: 321–340.

Malingrey, A.–M. and Leclercq, P. 1988: *Palladios. Dialogue sur la vie de Jean Chrysostome*. Paris, Les Éditions du CERF.

Mango, C. 1980: *The Empire of New Rome*. London, Weidenfeld and Nicolson.

Miltner, F. 1958: *Ephesos, Stadt der Artemis und des Johannes*. Vienna, Franz Deuticke.

Parvis, M. M. 1945: 'Archaeology and St Paul's Journeys in Greek Lands: Ephesos,' *The Biblical Archaeologist* 8/3: 61–73.

- Restle, M. 1968: 'Ephesos,' in K. Wessel and M. Restle (eds.) *Reallexikon der Byzantinischen Kunst*, Vol. II. Stuttgart, A. Hiersemann: 164–207.
- Rott, H. 1908: *Kleinasiatische Denkmäler*. Leipzig, Theodor Weicher.
- Russo, E. 2010: *Sulla cronologia del S. Giovanni e di altri monumenti paleocristiani di Efeso* (Archäologische Forschungen, Band 19). Vienna, Österreichischen Akademie der Wissenschaften.
- Scherrer, P. 2001: 'The Historical Topography of Ephesos,' in D. Parrish (ed.) *Urbanism in Western Asia Minor: New Studies on Aphrodisias, Ephesos, Hierapolis, Pergamon, Perge and Xanthos*, (JRA Supplementary Series 45). Portsmouth RI, JRA.
- Scherrer, P. 2006: 'Die Agora: Vorläufiger Baugeschichte', in P. Scherrer and E. Trinkl (eds.) *Forschungen in Ephesos XIII.2 Die Tetragonos Agora in Ephesos*. Vienna, Verlag der Österreichischen Akademie der Wissenschaften: 49-54.
- Schmit, T. 1927: *Die Koimesis-Kirche von Nikaia*. Berlin and Leipzig, W. de Gruyter.
- Schindel, N 2009: 'Die Fundmünzen von der Kuretenstrasse 2005 und 2006 Numismatische und historische Auswertung,' in S. Ladstätter (ed.) *Neue Forschungen in der Kuretenstraße von Ephesos*, (Archäologische Forschungen, Band 15). Vienna, Österreichischen Akademie der Wissenschaften: 171-245.
- Schwartz, E. 1914-40: *Acta Conciliorum Oecumenicorum*. Berlin and Leipzig, W. de Gruyter
- Sodini, J.-P. 1989: 'Les Groupes Episcopaux de Turquie (à l'exception de la Cilicie!),' in *Actes du XIe Congrès International d'Archéologie Chrétienne 9/1986*, Vol. 1. Rome, Ecole Française de Rome: 405–426.
- Theocharidou, K. 1992: 'The Structure of Hagia Sophia in Thessaloniki from its Construction to the Present,' in R. Mark and A. Ş. Çakmak (eds.) *Hagia Sophia: From the Age of Justinian to the Present*. Cambridge, Cambridge University Press: 83–99.
- Verzone, P. 1965: 'S. Giovanni e S. Maria di Efeso e la Ricostruzione della Città nell' VIII Secolo,' *Corsi di Cultura Sull'Arte Ravennate e Bizantina* 1: 133–140.
- Vetters, H. 1966: 'Zum byzantinischen Ephesos,' *Jahrbuch der Österreichischen Byzantinistik* 15: 273–287.
- Westphalen, S. 2000: 'The Byzantine Basilica at Priene,' *Dumbarton Oaks Papers* 54: 275-280.
- Yegül, F.
2010 *Bathing in the Roman World*. Cambridge, Massachusetts: Cambridge University Press.

Figures



Figure 1. View of the remains of the Church of St Mary from the narthex looking east. The wide variety of structures that one encounters on site is the result of a slow, accretive development. The marble pilaster in the central background belongs to the Roman building that stood on the same site. The ashlar masonry apse next to it constituted the eastern termination of the early Christian basilica that replaced the Roman building. The massive brick piers in the foreground belong to the cross-domed church that replaced part of the older basilica (author's photo)

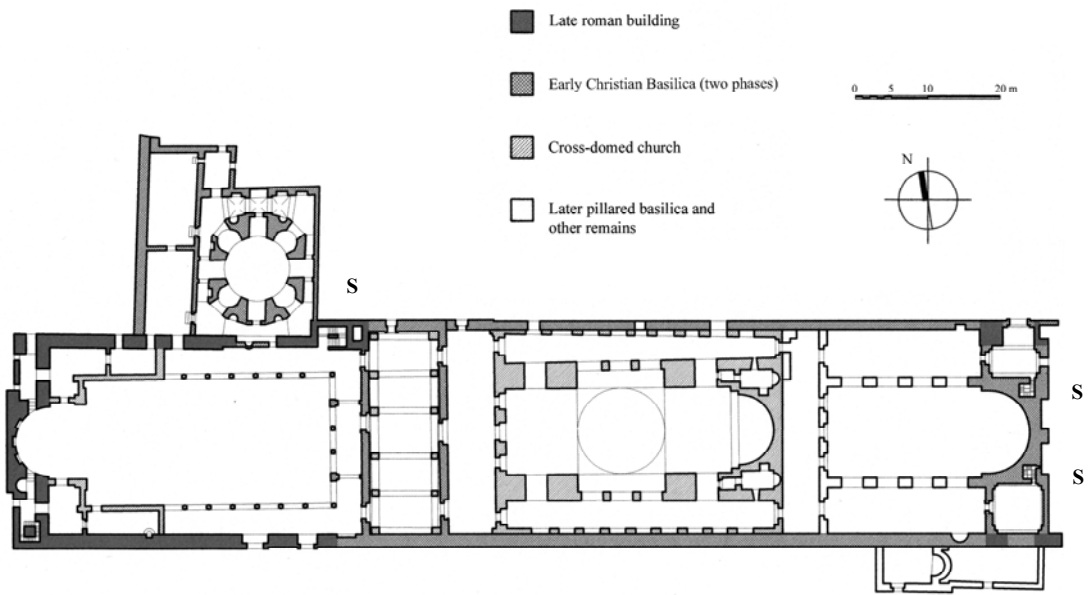


Figure 2. Ephesos: Church of St Mary: Plan showing the main phases of construction. Remains of staircases are shown with an ‘S’ (drawing by C. Vasilikou, 2009)



Figure 3. City map of Ephesos: indicating the position of the remains of the Church of St Mary (A) as well as the position of two buildings in its vicinity: the Harbor Baths (B), and the Olympieion (C). Given the presence of a Harbor (D) next to them, the urban spaces near the church must have constituted major centres of public life and hubs of cultural exchange and commercial activity (after C. Kurtze, © ÖAI)



Figure 4. View of the remains of the domed church (author's photo).

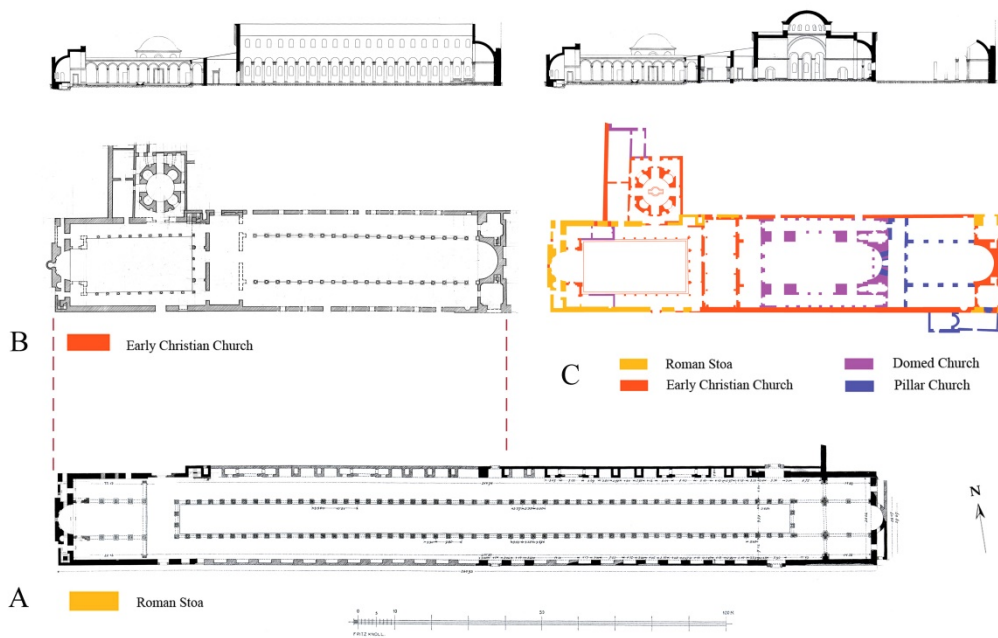


Figure 5. Ephesus: Church of St Mary: Table showing the plans of first three building phases of the church as identified in Knoll and Keil (1932, pp. 1–9, 27–40):
 A. Plan of the Roman building (Keil and Knoll, 1932);
 B. Plan of the Early Christian Basilica (Author, 2013) and corresponding section (Keil and Knoll 1932).
 C. Plan and section of the 'Domed Church', redrawn to indicate the remains of earlier and later phases (Author, 2013, after Keil and Knoll 1932).



Figure 6. View of the north longitudinal wall of the church of St. Mary (author's photo).



Figure 7. View of the apse of the 'Early Christian Basilica,' looking east (author's photo).

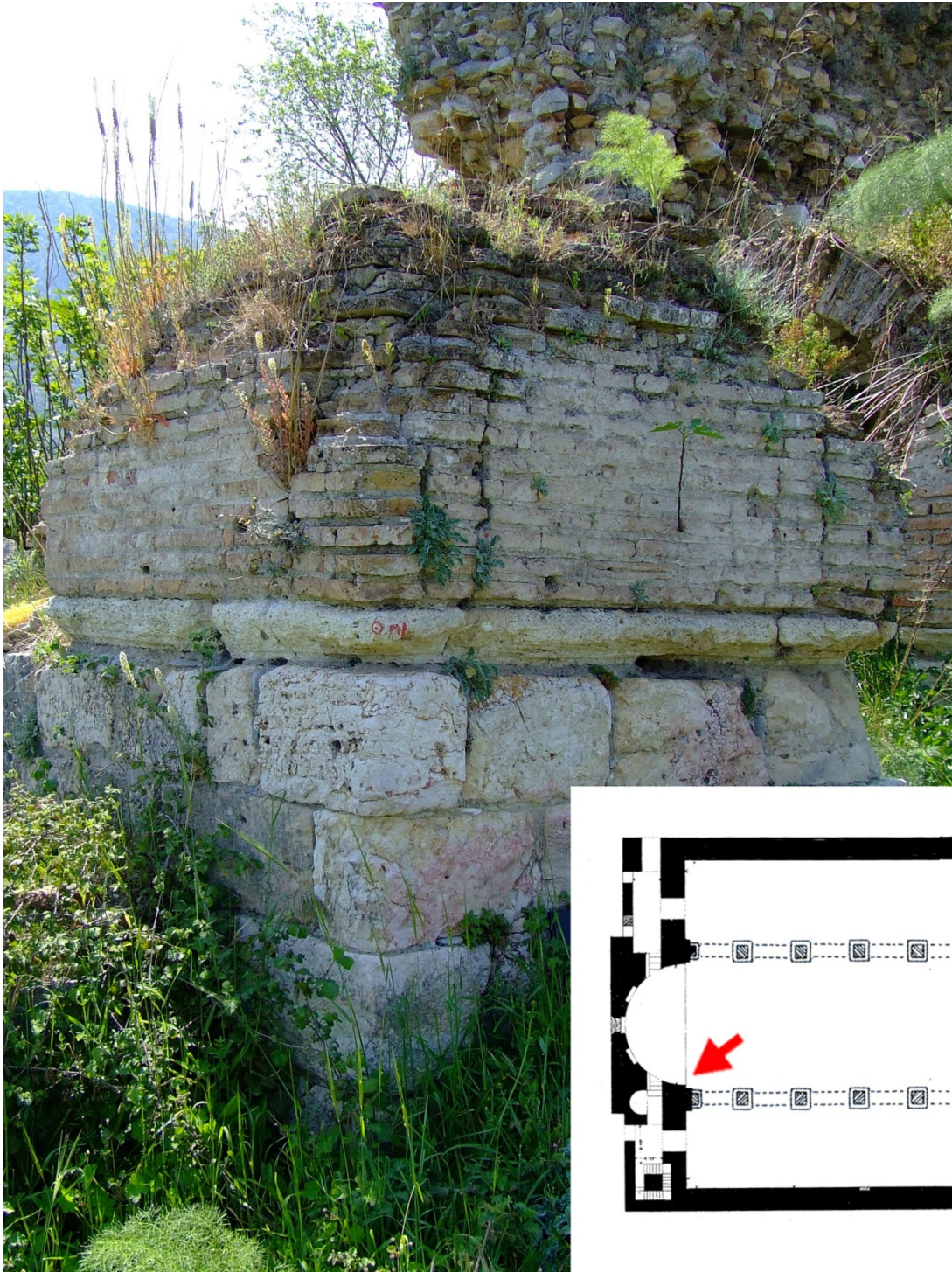


Figure 8. Detail of the apse that constituted the west termination of the Roman stoa (author's photo)

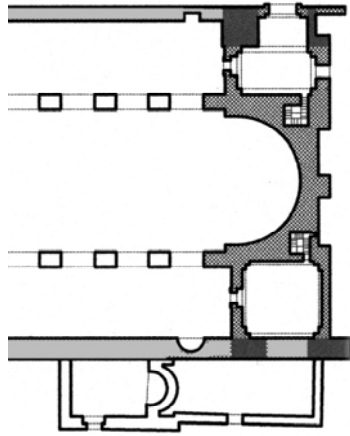


Figure 9. Plan of the remains of St Mary's showing the area of the eastern apse. Elements shown in dark grey, such as the large pier projecting inside the north side chamber, belong to the Roman building. The ones shown in grey appeared when this building was turned into a timber-roof basilica. The two walls shown in light grey were built at a later stage, in an attempt to 'regularise' the first basilica, doing away with obtrusive elements from the Roman phase (drawing by C. Vasilikou, 2009)

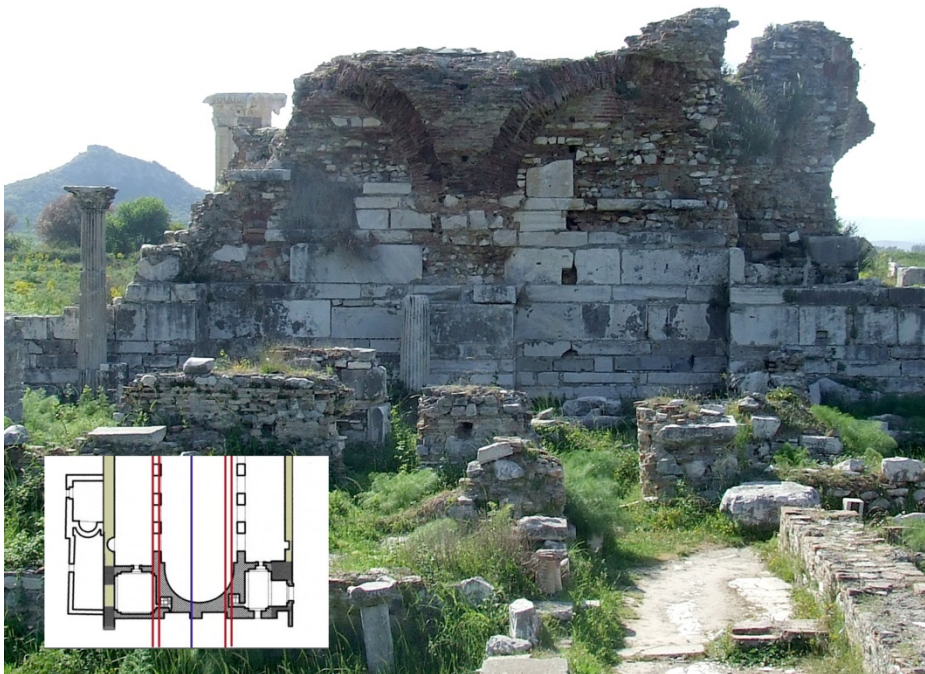


Figure 10. Apse of the first basilica: View of the east elevation, and diagrammatic plan showing the alignment of the pilasters with the colonnades of the Roman building, whose trace is shown in red (author's photo)

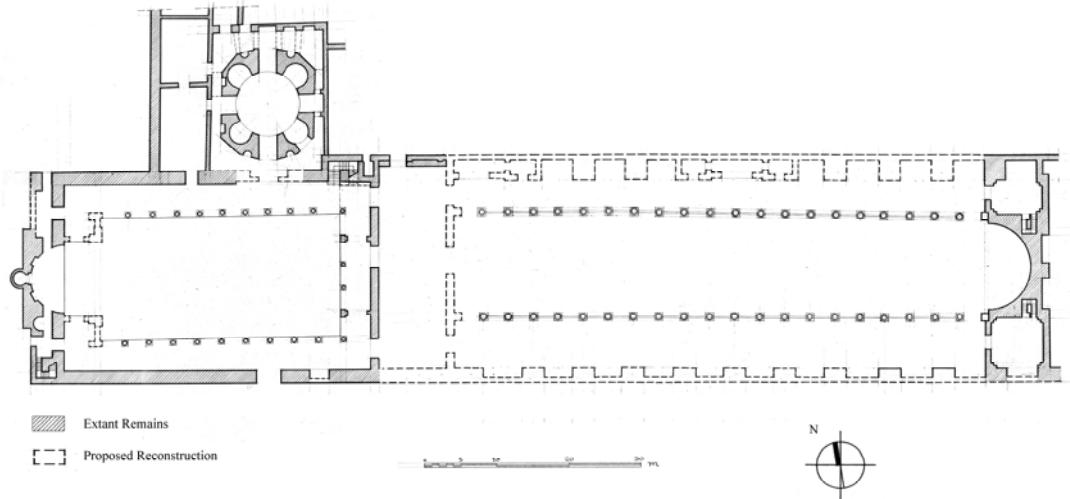


Figure 11. First basilica: Reconstructed plan (author's drawing, 2013)

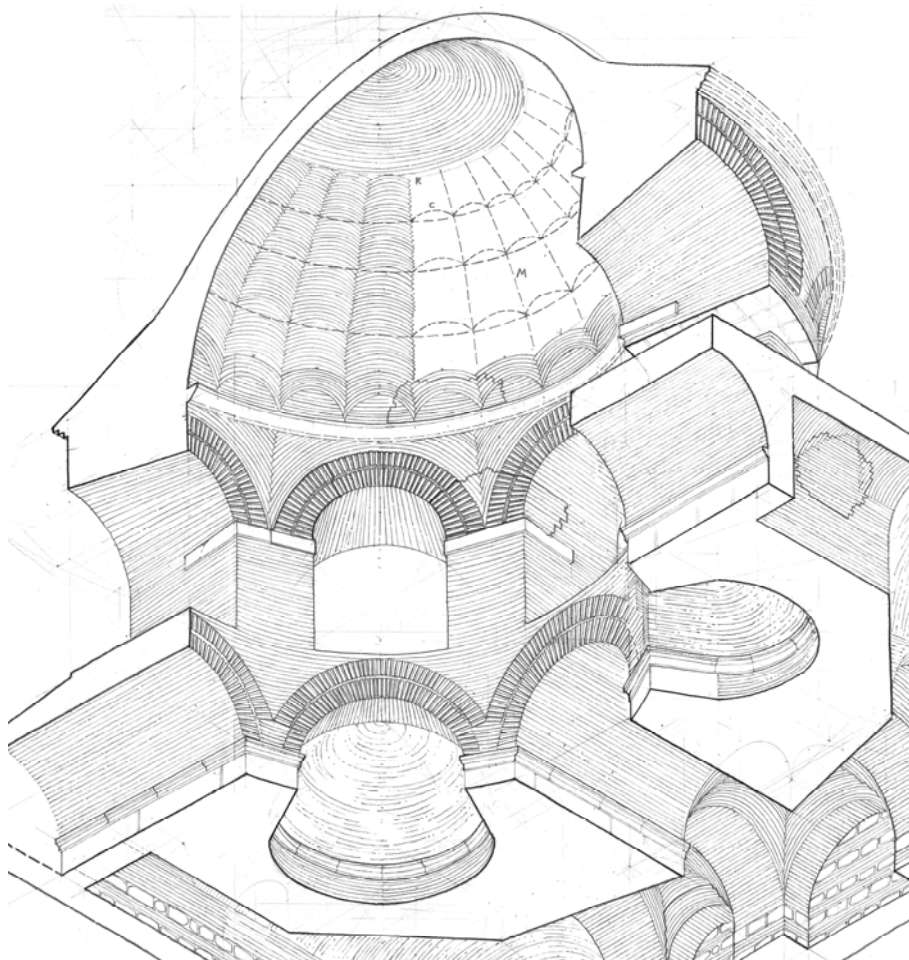


Figure 12. Baptistery of the Church of St Mary: Reconstructed Cut-Away Axonometric (author's drawing, 2009)

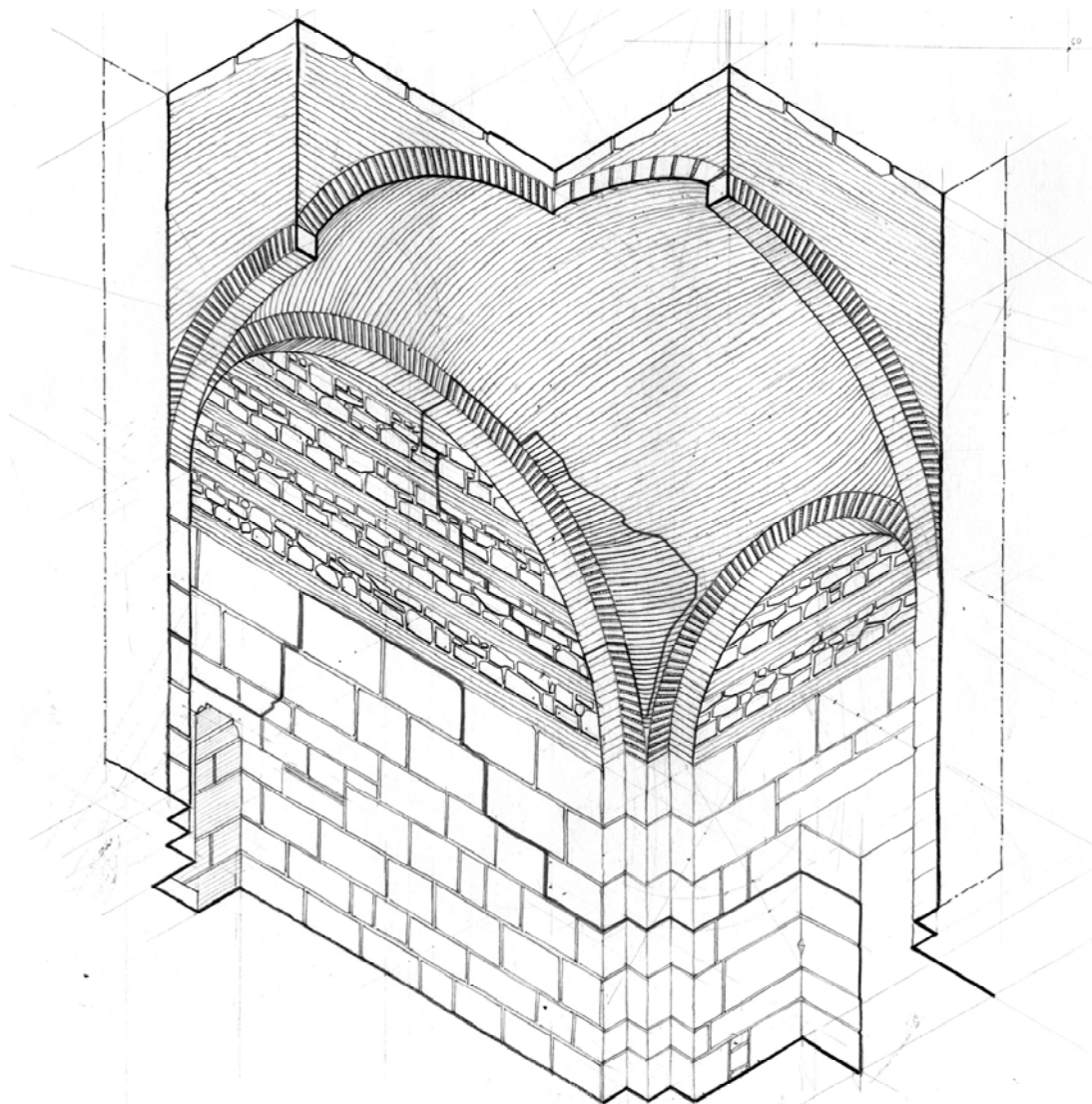


Figure 13. Side Chamber of the first basilica of St Mary: Reconstructed, cut-away axonometric (author's drawing)

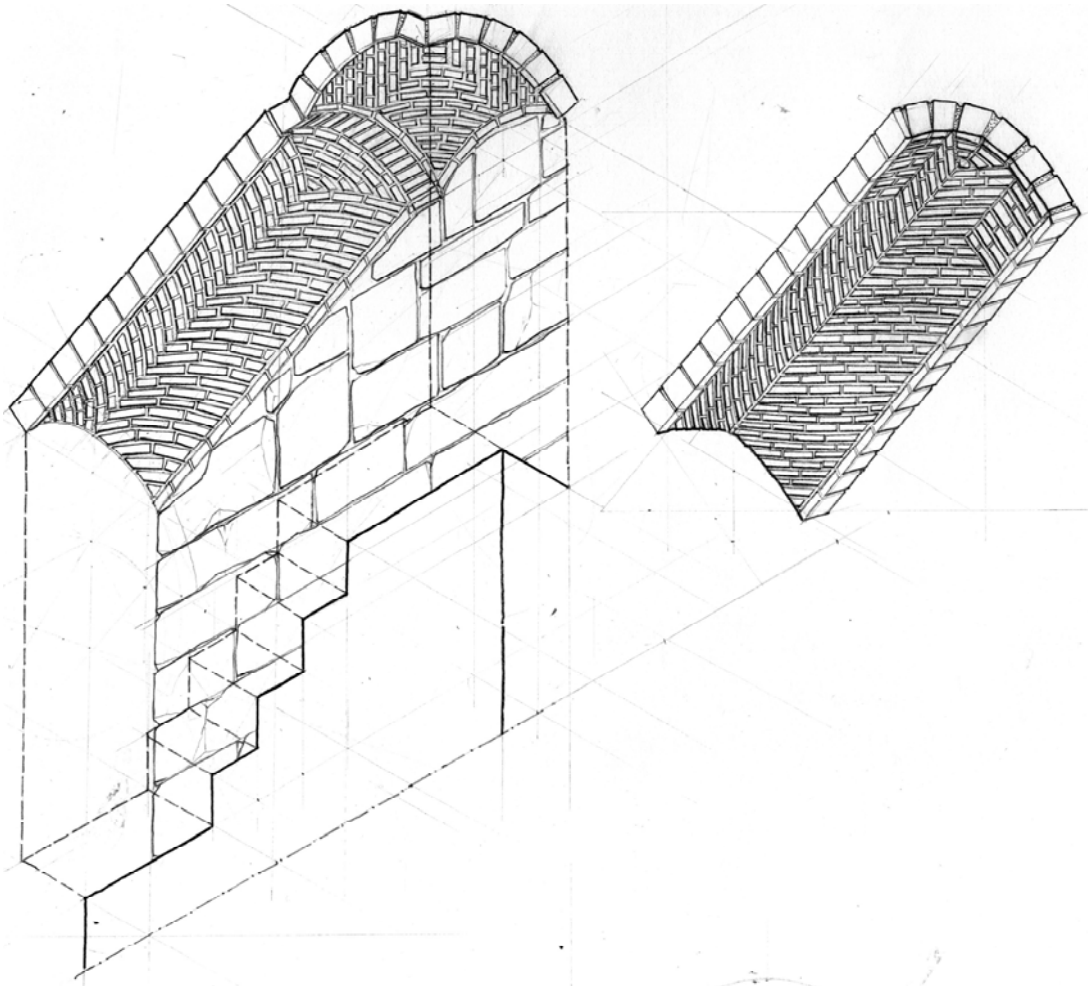


Figure 14. Vaults covering the staircases of the first basilica of St Mary: Reconstructed axonometric drawings (author's drawing)



Figure 15. Narthex portal of the first basilica: View looking north-east (author's photo)

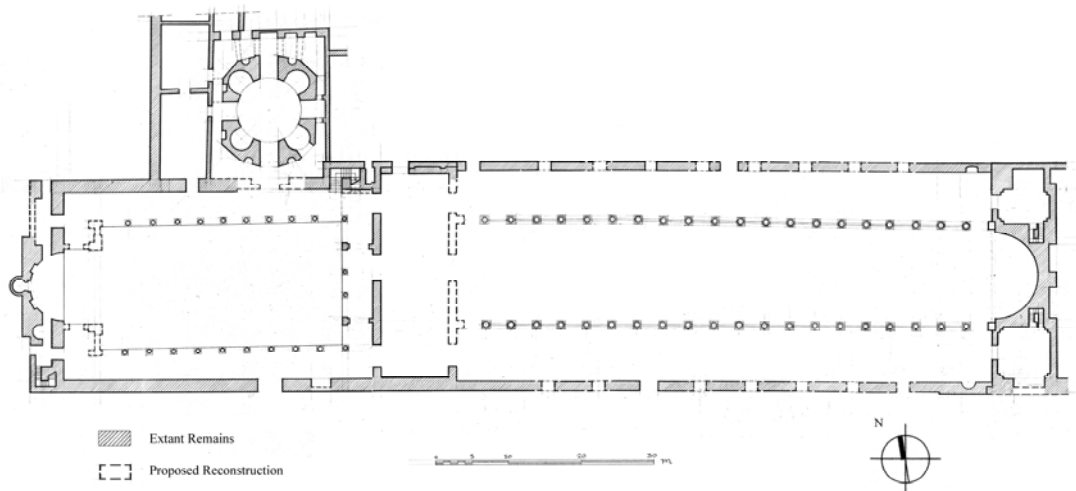


Figure 16. Second phase of the Early Christian basilica: Reconstructed plan (author's drawing)

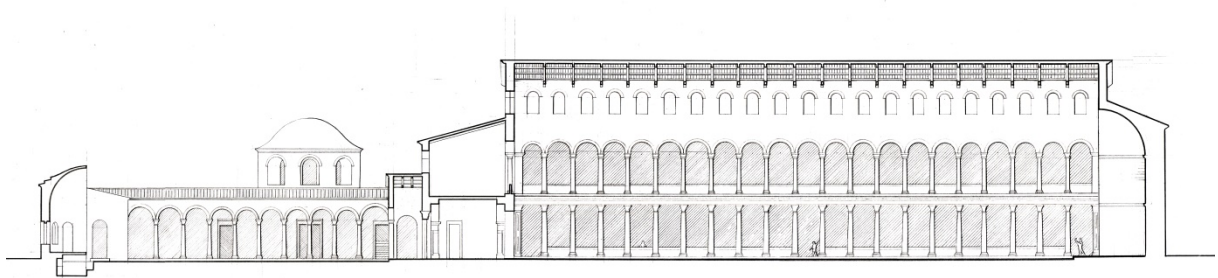


Figure 17. Second basilica: Reconstructed section (author's drawing)

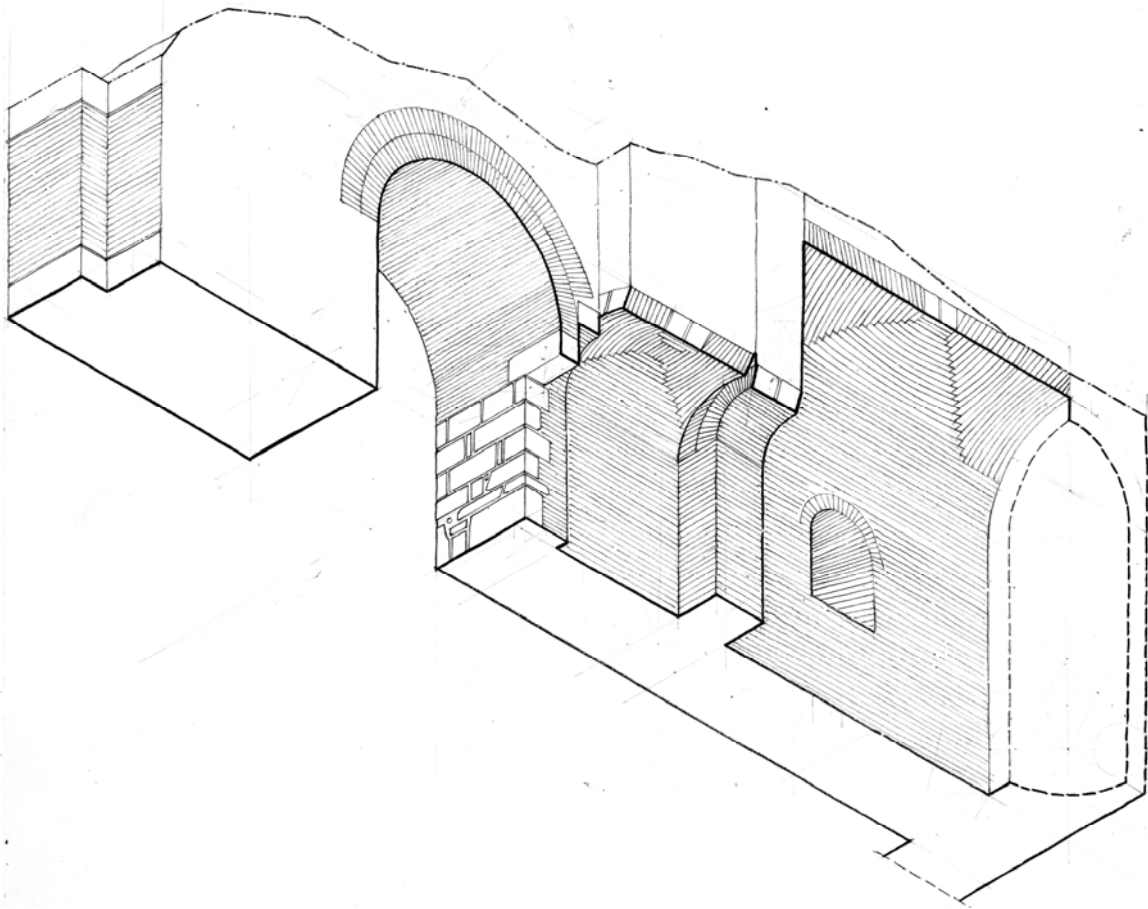


Figure 18. 'Cut-away' axonometric representation of the north side chapel of the vaulted church of St. Mary (author's drawing).

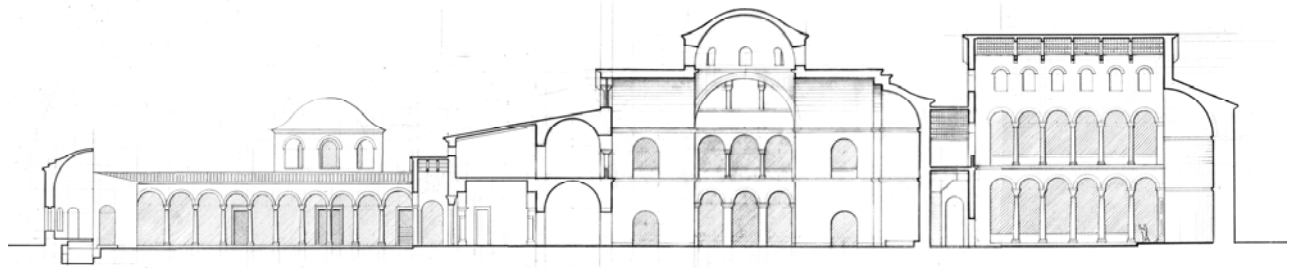


Figure 19. The Church of St Mary after the construction of the domed Church:
Reconstructed section (author's drawing)

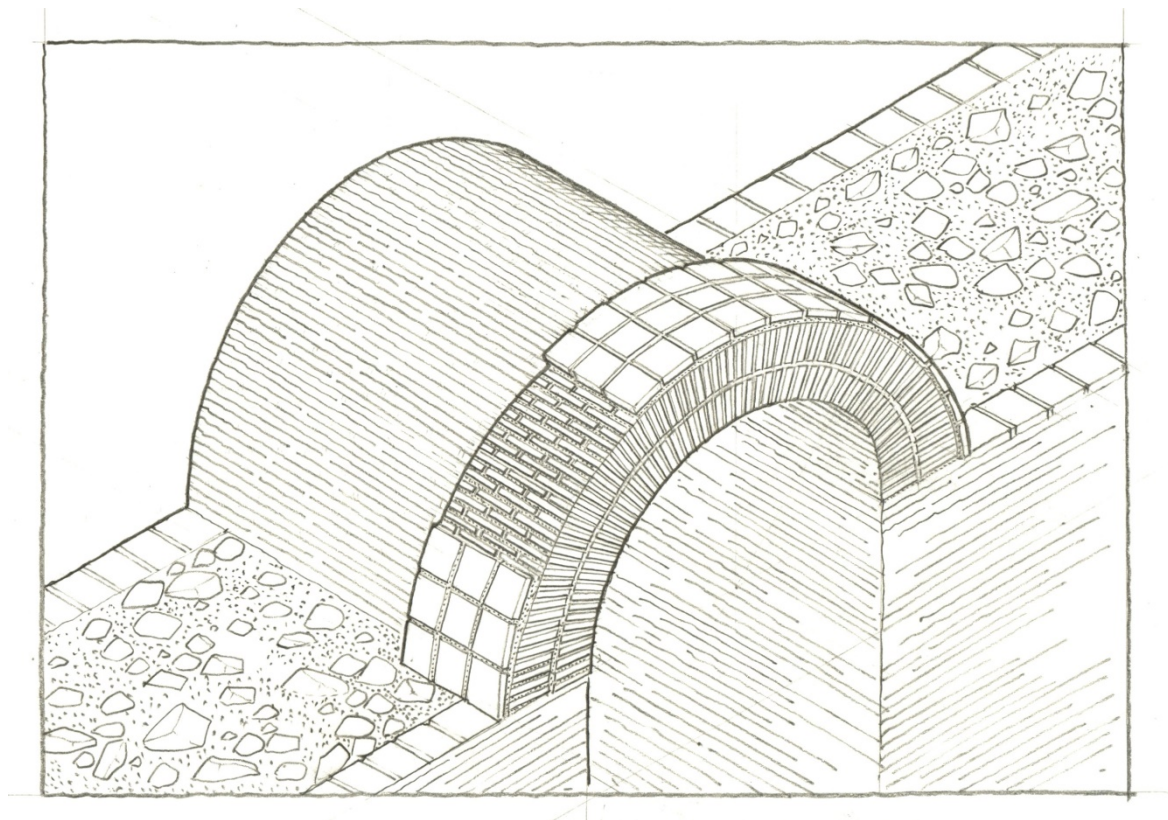


Figure 20. Interpretive axonometric of one of the arches of the piers of the vaulted church of St. Mary. The part of the arch facing the nave is thicker than the part of the arch facing the aisle.

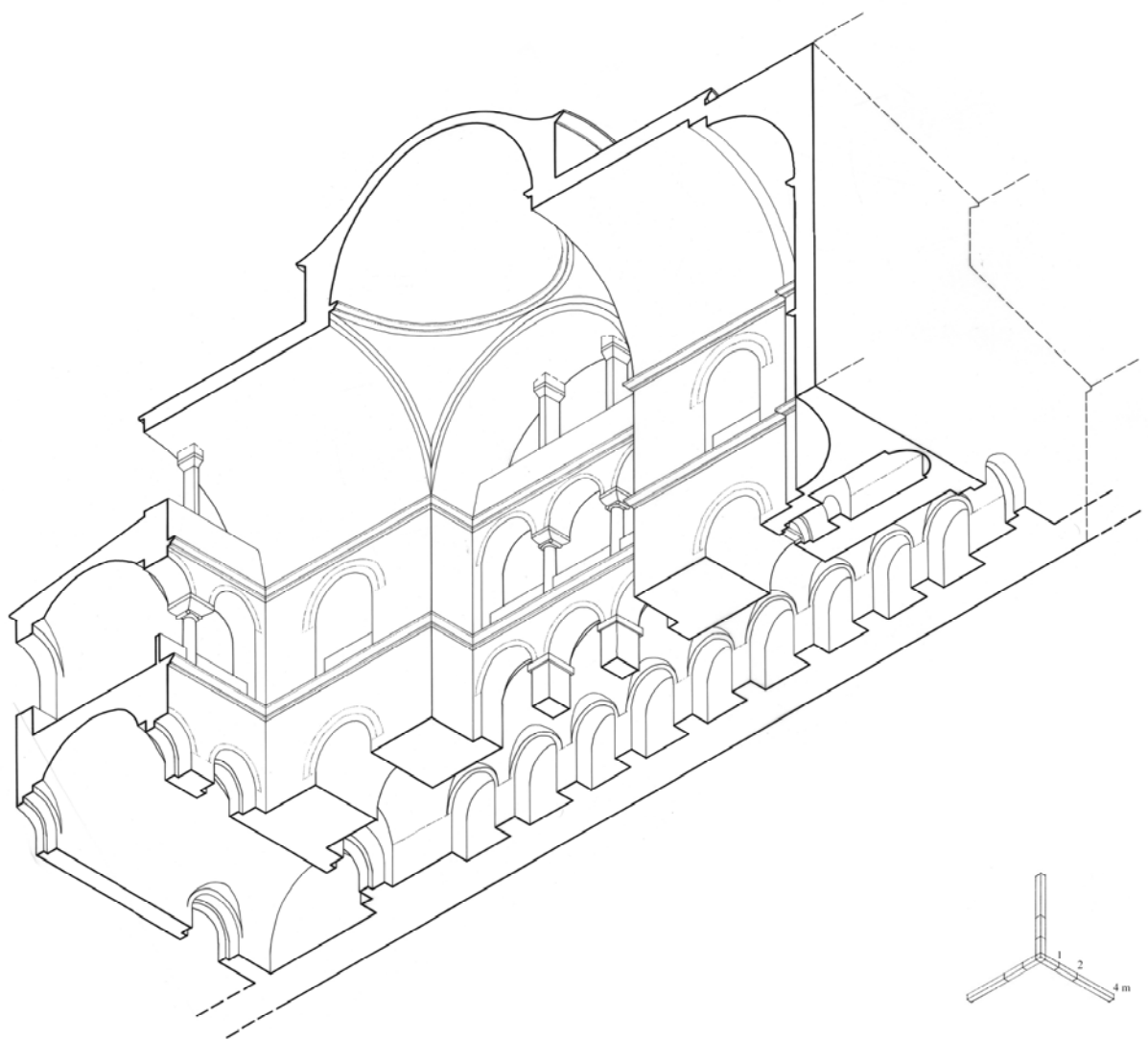


Figure 21. The cross-domed church of St. Mary: Reconstructed cut-away axonometric (author's drawing)



Figure 22. Cross-domed church of St. Mary: detail of reused chancel parapet incorporated in the southeast corner of the southeast pier (author's photo)
