The Evolution of the Church of St. John at Ephesos during the Early Byzantine Period

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Introduction

Exploring the evolution of the church of St. John at Ephesos opens a unique window into the urban and architectural development of Late Antique and Early Byzantine Ephesos. Throughout its millennial history, from its Late Antique origins to its presumed destruction in the fourteenth century, this church was associated with events that marked the history of the city. Built over the tomb of St. John the Theologian on the hill of Ayasoluk, according to Byzantine tradition, the building was later modified by Justinian, and immortalised in the writings of Procopius as the Ephesian counterpart to the church of the Holy Apostles at Constantinople. St. John's developed into a major pilgrimage site, whose fame travelled well beyond the confines of Byzantium. One cannot study the evolving architecture of such a monument without being conscious of its role as the setting of events and rituals that marked the history of Ephesos.

The study of the church of St. John also contributes to our understanding of the urban development of Late Antique Ephesos, which remained one of the wealthiest cities of the Byzantine Empire.[1] Indeed, both the complex of St. John and the one of St. Mary, the other great church of Ephesos, played an important role in the development of the city from the fourth to the seventh century. This period saw the beginning of the gradual transformation of the city from a wealthy and cosmopolitan metropolis built at the base of Mount Pion (Panayir Dag) to a pair of walled urban settlements: one on the hill of Ayasoluk and the other at the part of the ancient city near the Roman Harbour (Figure 1).[2] Although the churches of St. John and St. Mary were built before this urban transformation, they very soon found themselves at the heart of the two settlements of medieval Ephesos. This suggests that the two monuments and the institutions they

[1] Indeed, according to Foss (1979, p. vii), "…Ephesus is perhaps the most striking example of the rich late antique urban culture in the Mediterranean." De Bernardi Ferrero (1983, 97) states that in the fifth century, Ephesos was still a rich and powerful city. However, Scherrer (1995, 16) claims that in the Late Antique period, the city had already entered its period of decline.

[2] See Foss 1979, 103 and 185.

represented had a great influence on the city's development, becoming two of the rare elements of continuity in the development of the city from Late Antiquity to the Middle Ages. Today, these monuments provide rare evidence about this development. Although much of the Ephesian settlement on the hill of Ayasoluk is lost to us forever, the transformation of the church of St. John can still be studied. The history of this building can provide limited but rare evidence for the development of what became one of the religious and administrative centres of Ephesos.[3]

Besides its historical significance and urban role, our monument also constitutes an ideal source of information about the development of church architecture in west Asia Minor. This was a region of considerable creative energy during the Early Byzantine period and the evolution of St. John's reflects this.[4] By the sixth century, the original timber-roof Martyrium had been rebuilt and covered entirely with vaults. This shift from timber-roof to vaulted structure is also observed in the church of St. Mary at Ephesos.[5] Both monuments provide information about a crucial technological development in the history of Byzantine Architecture: the break from the tradition of the timber-roof basilica in favour of vaulted architecture.

The architectural development of the church of St. John was marked by alternating phases of destruction and re-development. The monument was repeatedly modified before its final collapse. It is this frequent modification that gave its ruins the character of an architectural palimpsest. The dilapidation and complexity of these ruins complicate the study of their evolution: today's explorer is confronted with overlapping layers of walls and supports that fail to form a coherent picture (Figure 2). The loss of the superstructure of the building and the scarcity of written records about it further complicates our attempt to understand it. Although major parts of the church have been excavated and surveyed, the question concerning the date and form of its building phases remains open.[6]

The systematic archaeological investigation of the church of St. John started in 1921 with an excavation carried out by the Archaeological Society at Athens under the direction of

[3] See Foss 1979, 121.
[4] For the role of west Asia Minor as a major center for the development of church architecture, see Buchwald 1984, 199-234.
[5] See Karwiese 1999, 84; Knoll, Keil 1932, 51-62, fig. 73.
[6] Two notable references to the incomplete understanding of the history of this church occur in Verzone 1965, 603-610 and Russo 2010, 32.

George Sotiriou. In 1922 the excavation had to be abandoned under duress.[7] It was continued by the Austrian Archaeological Institute from 1927 to 1931 (Figure 3). By the 50s, most of the remains of the church had been uncovered and it was possible to trace the greatest part of its plan with accuracy.[8] Hans Hörmann provided us in 1951 with the first complete study of St. John at Ephesos, as far as the main church building is concerned. The two ancillary buildings north of the church, which have been interpreted as the baptistery and the skeuophylakion, as well as the atrium of the church were excavated by the Ephesus Museum in the early 60s and late 70s respectively, and published by Mustafa Büyükkolancı in 1982 (Figure 4).[9]

Despite more recent scholarship, Hörmann's publication remains influential.[10] It includes accurate surveys, a plethora of daring, but, alas, largely unsubstantiated reconstruction drawings, and a prudent, if not hesitant, approach to the problem of chronology.[11] More importantly for the present study, Hörmann tried to organise the unearthed material into a series of building phases. His approach to this problem is characterised by the tendency to make clear-cut distinctions between the phases. The possibility of overlaps between phases forming hybrid structures, so frequent in surviving Byzantine monuments, was overlooked and the heterogeneous nature of the remains was toned down. As a result, Hörmann attributed almost all the current remains of the church of St. John to Justinian's sixth-century building campaign, which, allegedly, replaced the previous phases entirely.[12]

The above theory formed the foundation of subsequent studies, such as the ones of Mark Restle and Clive Foss.[13] Andreas Thiel and Eugenio Russo also follow this general direction, which leads them to slightly different results. Russo claims that constructional differences between parts of the remains do not indicate different phases but two different

[7] The results of this excavation were published by Sotiriou (1924, 90-206).
[8] According to Russo (2010, 23), the discovery of the deepest layers of the church was carried out at the expense of several sizeable vaulted fragments that were, unwisely, destroyed to reveal what lay beneath them. Hörmann et al (1951, 92) explains the destruction of these fragments by his team as a prerequisite for the discovery of the covered ruins of the church.
[9] Buyukkolanci 1982, 236-257.
[10] Indeed, Hörmann's reconstruction drawings were reproduced in major textbooks, such as Krautheimer 1986, 243, fig. 196.
[11] Lemerle (1953, 542) criticises Hörmann for his failure to develop a dating hypothesis.
[12] See Hörmann et al. 1951, 165-169 and 296-299, esp. 297.
[13] See Restle 1971, 186-190; Foss 1979, 89-90.

workshops working simultaneously at the times of Justinian.[14] On the other hand, Thiel raises the possibility that the eastern portion of the Justinianic church includes few elements of a slightly earlier phase.[15] But, not all scholars agreed with Hörmann's interpretation. Verzone's reading of the phases of the church was challenged by Hugh Plommer, Paolo Verzone, Daria De Bernardi-Ferrero, and Mustafa Büyükkolancı.[16] Following these efforts, Nikolaos Karydis published a new interpretation of the remains raising the possibility that what had been considered as a homogeneous Justinianic foundation is, in fact, the result of at least two building phases.[17] This interpretation illustrated what can be achieved by re-evaluating the evidence in our disposal. It suggested that the role of the previous building phases in the creation of the definitive church was probably more important than we thought. However, due to its narrow focus on the reception of Justinianic St. John's, this recent publication did not address sufficiently the building phases before the time of Justinian.

The conflicts between the above theories reflect the difficulty in distinguishing the phases of the two monuments and determining their exact date. The architectural forms that marked the development of these sites also remain unclear. The present article seeks to fill these lacunae. It proposes a new interpretation of the remains that helps to retrace the "formative" building phases of the church. What interests us here is the period from the origins of our church in the fourth century to the sixth-century completion of the great vaulted monument whose ruins dominate the site today.

The point of departure of our new approach to the building phases of St. John's 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

[14] According to Russo (2010, 32), "techniche murarie differenti non implicano automaticamente epoche distinte". After all, Russo (2010, 41) notes that there are not only differences between the east and the west part of the church , but also between the north and the south wall of the nave. According to the Italian author, this indicates "due squadre diverse contemporaneamente all'opera". However, we should note that the differences between the nave and the transept are far more important and radical than the differences between elements of the nave. Russo also argues (2010, 36) that, in many cases, walls of different structure are, in fact, coeval because they are connected with blocks of stone that penetrate both structures. However, the interpenetration between different structures doesn't necessarily mean that they are coeval. It may well be a method to connect walls built in different phases, by "scarfing" the new into the old structure for optimal structural continuity and cohesion.
[15] See Thiel 2005, 101-103.
[16] See Plommer 1962, 122; Verzone 1965, 603-610; Verzone 1982, 215-216; De Bernardi-Ferrero 1983, 93-113; Büyükkolancı 2001, 48-78.
[17] See Karydis 2013, 97.

misinterpreted or overlooked. The aim of this article is, therefore, to review, synthesise, and reinterpret all the evidence published since the 1950s. Grouped together and re-interpreted, these clues provide new insights into the history of the church.

What distinguishes this new interpretation from previous ones is its architectural standpoint. The remains of St. John's are viewed both as *structural fragments* but also as *design fragments*. In other words, traces of walls and pilasters are not only indicative of dates and construction methods. They also reveal the design ideas that shaped the church. Identifying parts of structure that correspond to different design ideas helps to distinguish building phases that are difficult to be spotted otherwise. Another characteristic of this methodology is its multifaceted approach to the remains. Archaeological evidence is compared with information from written records. The examination of construction details is combined with the study of the overall design. The combination of structural survey, design analysis, typological investigation, and research in written records addresses the need for a holistic approach to the development of the church. A detailed investigation of the evolving fabric of this intriguing monument is found in what follows.

The Site and the Tomb of St. John

The imposing remains of the church of St. John occupy a commanding location at the foot of the hill of Ayasuluk, south of the Cayster river (Küçük Menderes) and 2.5km east of the site of Late Antique Ephesos (see figure 1).[18] In the Middle Byzantine period, this site lay at the heart of the settlement of 'Theologos', the civic and administrative centre of Medieval Ephesos.[19] However, in the second century, just before the history of our church begins, this was a semi-deserted, dry, and unfertile land, occupied by a Roman cemetery. This is attested by several Roman tombs that have been excavated there.[20] The most elaborate of these tombs were the four burial chambers in cruciform formation, excavated below the center of the later church.[21]

Sotiriou and other scholars have associated this burial complex with the Tomb of St. John the Theologian. This theory is based on a fifth-century Syriac account of the life of St. John, which states that St. John was buried at a site "above the Temple of Artemis" with a

[18] According to Sotiriou (1924, 127), the Greek name of the hill was "Hélibaton" or "Libaton".
[19] See Foss 1979, 121.
[20] See Foss 1979, 87.
[21] See Sotiriou 1924, 202; Hörmann et al 1951, 200.

view towards the Temple.[22] Our site matches this description. This theory is also substantiated by the find of second-century coins and a fragment of a Sidamara-style sarcophagus inside the tomb found on site.[23] Therefore, the identification of this tomb – the site's earliest structure – as the "Tomb of St. John" appears plausible. However, the written records supporting this theory were written after the alleged death and burial of St. John, and, as we will see, after the building of the first Church of St. John at this site.[24] Also, there is no conclusive physical evidence from the tombs themselves associating them directly with St. John, not to mention that the identity of St. John is still uncertain.[25] One should be prudent, therefore, and consider the possibility that this burial site had a different origin and was only associated with St. John after the Christian community of Ephesos decided to build a church devoted to the Saint at this spot.

The First Church in the Written Records

The first memorial building of St. John was built early enough to be mentioned in Etheria's account of her pilgrimage to the Holy Land from 381 to 384 AD.[26] This account does not clarify the exact nature of this memorial building, and whether it was considered a Martyrium, or a church. However, recurrent reference to an early church of St. John occurs in the Acts of the Ecumenical council that took place in Ephesos in 431 AD.[27] It is likely that this was the same building mentioned by Etheria, or a later church built in the same site. The construction of this church, which, according to the above documents may have occurred by the early fifth century, must have sacralised a site with strong pagan connotations.[28] As we saw, this location overlooked the nearby Temple of Artemis. This grandiose and iconic temple was the venue of the annual festival devoted to Artemis, a

[22] This Syriac account is based upon the *Acts of John* of the second century. It has been published in Wright 1871, 42-43. The same document has been discussed by Sotiriou (1924, 120), and Foss (1979, 35). Less specific references to the place of burial of St. John the Theologian at Ephesos occur at the *Ecclesiastical History* of Eusebius, book 3, 39 and book 5, 24.
[23] For a summary of the theories concerning the date of the tombs, see Foss 1979, 87, fn. 85. The coins and the sarcophagus fragment were published in Sotiriou 1924, 202, fig. 34, 44. Plommer (1962, 121), raises the possibility that the Sarcophagus fragment is earlier than the period of the Sidamara type.
[24] Sotiriou (1924, 117-8) has dated the death and burial of St. John the Theologian to 100 AD on the basis of Saint Jerome's *Commentary on Galatians* 6,10.
[25] See Foss 1979, 33.
[26] See Mc Clure and Feltoe 1919, 44.
[27] For the interpretation of the Acts of the Council and the Homily of Cyril of Alexandria that refers to the Church of St. John, see Foss 1979, 88. None of these documents provide us with the exact location of the "church of St. John." The fact that this early church was built at the same site as the later church (i.e. at the foot of the hill of Ayasoluk) is attested by archaeological finds, the sixth century account of Procopius (*Buildings*, V, i, 4–7), and the written records that associate this with the worship of St. John from a very early time.
[28] For the "holiness" of this hill, see Parvis 1945, 68.

major religious ritual. The "Artemision", as the temple is also known, was destroyed by the Goths in 262 AD, but it is likely that it was restored and partially used at least until the end of the fourth century and the Imperial edicts of 391-2 AD, which prohibited pagan cults, opening the way for the spoliation of temples.[29] We do not know if the Artemision and the first church of St. John coexisted briefly prior to this, early in the fourth century, but it is probable that they did. As for the apocryphal legend stating that St. John destroyed the Artemision, we know that, in fact, the latter continued to be used for some time after the death of the Saint.[30] If the church and the temple did coexist, they would have symbolised the confrontation between two religions, the one in its decline and the other in its infancy.

Eventually, the church of St. John replaced the Artemision as the key sanctuary in this area of Ephesos.[31] But, what was the form of this early church and how did it evolve until Justinian's intervention? One could argue that Procopius' sixth-century panegyric on *Buildings* helps to answer this question. Indeed, this document refers to the early church that stood in the site before the times of Justinian. This is described as a church of limited length, and in bad condition. However, it is difficult to ascertain if the derelict old church described by Procopius is the same church as the one mentioned in the Pilgrimage of Etheria of 384 AD or in the Acts of the Council of 431 AD. Procopius may well refer to a subsequent building phase, which replaced the first church on this site.[32] Written records like the ones examined above are useful in establishing the date of the first church. But, to

[29] For the destruction of the Temple of Artemis, see Foss 1979, 30. Plommer (1962, 127) has published a series of architectural fragments and inscriptions that were reused in the church of St. John and may have originated in the Artemision. If this is true, then it is very likely that the construction of St. John's contributed to the destruction of the great temple in its vicinity.

[30] According to Foss (1979, 86), the Temple of Artemis was partially rebuilt by Diocletian after its destruction in the Gothic attack of 262 AD, and, probably, kept being used until the visit of Patriarch John Chrysostom (401 AD), who allegedly "despoiled" the monument. Scherrer (1995, 23) notes that, in the early fifth century, "a large basilica was built into the *sekos* of the Artemision". The last attempts of the pagan community of Ephesos to revive the abandoned Temple in the fifth century are related in a passage written by Isidore of Pelusium and noted by Foss 1979, 32, fn. 7.

[31] Of course, the two monuments were very different. But, it is worthy of note that the new church seems to have maintained at least one of the key services offered by the Pagan institution: the right of asylum to aristocratic political refugees: just as the Temple of Artemis had offered asylum to Arsinoë in the first century BC, six centuries later, the neighbouring church of St. John is reported as the chosen refuge of Theodosius (not to confuse with any of the homonymous Emperors), the lover of Antonina, wife of General Belisarius. Even if the veracity of the events reported by Procopius in the Anekdota can be challenged, the sixth-century author had no reason to lie about the role of the church of St. John as a place of asylum. The story of Arsinoë is mentioned in Thomas 1995, 105 and the one of Theodosius, Antonina's lover, in Procopius, *The Anekdota*, Chapter 3, p. 35.

[32] For instance, such a phase could date back to the mid-fifth century, one century or so before Procopius wrote his panegyric.

recapture its form, we need to study the material remains brought to light and recorded during the Austrian excavations.

The Material Remains of the First Church: Literature Review

The sondages of the 1920s and 30s revealed parts of the deepest layers of construction on this site (Figure 5). These include the foundations of a pre-Justinianic, cruciform building layout: four aisled cross arms with colonnades converge towards a central space dominated by four mighty piers surrounded by a heavy wall. The east cross-arm seems to have had five aisles that terminated in an apsed wall. The articulation of the west cross arm is harder to decipher. There, the rows of column bases seem to be interrupted by no less than seven transverse walls, forming a rather atypical pattern.[33]

Hörmann attributed these early foundations to two distinctive building phases.[34] The first phase he identified included the four central supports and their surrounding wall. Hörmann claimed that these elements belonged to a timber-roofed, square "Martyrium", built over the so-called "Tomb of St. John" (Figure 6). The internal space of this building was allegedly dominated by four protruding corner piers forming niches between them, and four detached columns defining a square space in the centre. Here, Hörmann seems to have overlooked the blatant contradiction between the huge corner supports, whose foundations he found, and the light timber roof he reconstructed. But this is not the only weakness of his interpretation: the four slender internal columns shown in Hörmann's visualisation cannot possibly correspond to the four massive foundations found at the same locations.

But let us return to Hörmann's narrative. He suggests that, in a second phase, the original, square "Martyrium" was extended in four directions, and transformed into a timber-roofed, cruciform church. Hörmann reconstructed this with five aisles in the east cross-arm and three aisles in the other ones (Figure 7).[35] The oddest element of this reconstruction occurs in the west cross arm: this combines an entrance hall, two narthexes and two bays of unequal size, in other words, a peculiar series of spaces with no parallel in Early Christian church architecture. This atypical west cross-arm leads to an equally

[33] See Hörmann et al 1951, 200-227, esp. 205, 227.
[34] See Hörmann et al 1951, 225-226, fig. 59, 60.
[35] See Hörmann et al 1951, table LXXII.

implausible crossing: the latter's walls and supports block the side-aisles, hindering communication between the cross-arms.

The forms associated with the two first building phases were as difficult to establish as their date. Hörmann found no indications for the chronology of the first phase (the so-called "Martyrium"). His dating of the second, "pre-Justinianic church", was based on mosaic fragments, attributed to either the fourth or the fifth century, without attempting a more specific dating hypothesis.[36]

Hörmann's reading of the phases was used as the basis for typological and dating-related interpretations by André Grabar and Paul Lemerle.[37] However, Plommer and Verzone raised serious concerns about Hörmann's interpretations, noting their flimsy evidence, and exposing the obvious circulation problems of the cruciform church.[38] Verzone doubted the existence of the square mausoleum, and proposed an alternative reconstruction for the first cruciform church (Figure 8).[39] His reconstruction freed the crossing from Hörmann's obtrusive piers and featured the same number of aisles in all the cross-arms. Verzone attributed this cruciform church to the late 4th century, claiming that this was the very first phase of the church of St. John.[40] Still, these hypotheses were not substantiated by adequate evidence, and are in conflict with some of Hörmann's finds, as, for instance, the foundations of the four sizeable central supports at the area of the crossing. The bulkiness of these supports is not taken into account in Verzone's plan.

Although Plommer and Verzone raised some legitimate issues, Hörmann's theory kept influencing the scholarly understanding of the monument. Clive Foss repeats Hörmann's claim that the first phase was a "small square Martyrion" adding that this building was

[36] The rather "loose" dating hypothesis in Hörmann et al 1951, 205, 230, fn. 8, is based on comparisons between the mosaic fragments of pre-Justinianic St. John with the ones of the churches of Grado and Parenzo. For a comment regarding the lack of a specific dating hypothesis in Hörmann's work, see Lemerle 1953, 542.
[37] Grabar (1946, 154), believes that the transformation of the initial "Martyrium" to a cruciform church occurred in the fifth century. Lemerle (1953, 535) also accepted Hörmann's phase sequence and its reconstruction, noting, however that "the plan is surprisingly clumsy. The crossing is manifestly inaccessible to the congregation. (…) The passage from one [cross-arm] to the other becomes impossible".
[38] See Plommer 1962, 121.
[39] See Verzone 1965, 606.
[40] According to Verzone (1982, pp. 215-221), the centralised Mausoleum published by Hörmann never existed.

extended into a cruciform church "around 390-420 AD".[41] Hörmann's reconstruction of this cruciform church has been reproduced in influential textbooks such as the ones of Restle and Krautheimer.[42] The work of Andreas Thiel also follows Hörmann's reading of the pre-Justinianic phases, without addressing sufficiently the issues raised by the Italian scholars.[43] These issues are revisited in the recent publication by Eugenio Russo, but the latter puts emphasis on the dating of Justinian's church, leaving many questions about the form and chronology of the earlier phases unanswered.[44]

The examination of previous publications suggests that, despite all the evidence that has come to light, scholars have not yet managed to trace the early, formative phases of the church of St. John. The point of departure of all these efforts, the excavations of the Austrian Archaeological Institute, produced ample evidence but many of the finds have not been entirely interpreted. I therefore propose to re-examine Hörmann's sondages, focusing on the crossing and the west cross arm of the church, where, as we saw, the conclusions of the Austrian author seem to be weak from a functional and a typological point of view.

The Material Remains of the First Church: A New Interpretation

As we saw, Hörmann's sondages produced evidence for no less than five foundation walls dividing the area of the west cross arm in five bays of unequal size.[45] His reconstruction was based on the assumption that all these walls belong to one phase: the one that transformed the square Martyrium into a cruciform Basilica. However, if we examine figure 5, the survey drawing documenting these finds, we realise that not all foundation walls have the same thickness. Two of these walls, B1 and B2, stand out from the lot: they are 1.20m thick, much thicker than the other walls (A1, A2, and A3), which are only 0.70m thick.[46] This difference is not acknowledged in Hörmann's reconstruction, which takes these foundations for traces of coeval walls (cf. figure 7). The possibility that the thick foundation walls belong to a different phase from the thin ones has clearly not been evaluated. However, there is a specific detail that suggests precisely this: in figure 5, one

[41] See Foss 1979, 88, fn. 86.
[42] See Restle 1971, 181-182.
[43] See Thiel 2005, 100-103.
[44] See Russo 2010, 9-56.
[45] See Hörmann et al 1951, 200-233, esp. 227-229, fig. 58-59, table LXXII.
[46] Hörmann also discovered the foundations of a wall west of wall B1.

of the "thick" walls stands too near a "thin" wall for the two walls to have been parts of the same design scheme.[47] The two thicknesses indicate that these foundations belong to different building phases and supported different superstructures.

Once we realise this, the evolution of the plan becomes much easier to understand, at least as far as its central part is concerned. The foundations of the two "thick" walls (B1 and B2) clearly belong to a different building phase from the remaining foundations. These include the thin foundation walls in the north-south direction, and the column foundations that are organically connected with them. Eliminating the two "thick" walls from Hörmann's survey makes reconstruction much simpler and more coherent. The two remaining walls (A1 and A2) formed a single narthex which gave access to the aisled interior of the west cross-arm. Let us now pass to the west cross arm itself. Did the latter consist of two unequal bays leading to the central square Martyrium as Hörmann suggested? This is highly unlikely. First of all, Hörmann's idea was based on the strong foundation wall surrounding the crossing. Hörmann interpreted this as the foundation of the external wall of a Martyrium (see figure 6). However, nothing indicates that this heavy wall belongs to the original phase. The connection of this wall with the foundations of the four heavy piers that partly survive (which, as we will see, belong to a later period) suggests that the interpretation of this wall as a trace of the original church is also unlikely. Indeed, this foundation does not connect with any of the elements identified in the sondages. Once this wall is eliminated, we make an interesting discovery: the remaining foundation walls and column bases form a west cross arm divided into two equal bays. These bays led to a crossing demarcated by four major pier foundations. These are the foundations that that both Hörmann and Verzone had implausibly interpreted as the bases of slender supports. These can only be interpreted as bases of sizeable piers defining a square crossing measuring 6.20x6.20m.

We realise that the first church of St. John was not a square building, as Hörmann had suggested, but a cruciform church. This is very likely to be the church mentioned by Etheria in her late fourth-century account. So far, we have managed to recapture some elements of the plan of this church: it was cruciform with four cross arms of roughly

[47] Indeed, the 70cm that separate them are hardly enough for a bay, and, therefore it is highly unlikely that the two walls belonged to the same phase. But, Hörmann et al (1951, table LXXII) does not seem to have addressed this problem: the thin foundation wall – which did not fit in his "one-phase theory" was not taken into account in his reconstruction.

similar length. The west cross arm was divided into two bays and was preceded by a narthex. The crossing was marked by four mighty piers (Figure 9). Given their dimensions (approximately 3.5x3.5m), these piers must have supported a dome. But, this use of vaulting seems to have been limited to the centre of the church. Given the size of their foundations, the cross arms must have been covered by timber roofs.[48] The number of aisles in the cross arms is uncertain. Hörmann's soundings suggest that the east cross arm had five aisles but we do not know whether the other cross arms had a similar configuration. Although the central spaces of the first church can be established, the form of its perimeter is uncertain. However there is a part of this perimeter that can be investigated with better chances of success: this is the area of the two ancillary buildings excavated north of the church. As we will see in the following paragraphs, the examination of these buildings can broaden our understanding of the first church.

The Baptistery and the Skeuophylakion

Let us start with the remains of the octagonal building north of the west cross arm of the first church (see figure 4). The baptismal font at the centre of the building suggests that this was a baptistery. The core of this opulent structure was an octagonal central hall whose sides opened onto eight niches (Figure 10). The corners of this hall were punctuated by columns whose octagonal pedestals survive. This central core was surrounded by an ambulatory and flanked by two rectangular apsed halls. This tripartite organisation corresponds to the three main parts of the Baptismal rite: the pre-baptismal anointing of the "photizomenoi" (west rectangular hall), the triple immersion in the font (octagonal hall), and the second anointing through which the newly baptised received the "chrisma" from the Bishop (east rectangular hall – "Chrismarion").[49] Incidentally, the east-west orientation of the steps of the font is ideal for a procession linking the three spaces together. The ancillary triangular spaces between the octagonal hall and the lateral halls must have served as dressing rooms and storage spaces.

[48] This combination of dome and timber roof may appear rare but is encountered in at least one coeval monument: the fifth-century basilica of Ilissos in Athens combined a dome over the sanctuary with a timber roof over the nave and aisles. None of the two elements survive, of course, but their presence can be deduced from the plan of the remains. Each of the piers in the four corners of the square sanctuary measures approx. 3.40 x 2.60 m in plan. Supports of this size indicate the existence of a dome on pendentives. On the other hand, the remaining wall foundations, which are only 0.70 m thick, could only have supported a superstructure covered by lighter, timber roofs. For further information about the original form and date of this basilica, see Sotiriou 1919, 3-5.

[49] For further information about baptismal rites in the Early Byzantine period, see Maguire 2012, 99, as well as Murray and Devonshire Jones 2013, 51.

The form of the baptistery presents strong similarities with Early Christian centralised buildings. The quasi-symmetrical three-chambered layout of the baptistery is also encountered at the baptistery of Sidè (which is dated between the fourth and the sixth century), as well as at the fourth-century baptistery of the Holy Sepulchre in Jerusalem.[50] Octagonal halls similar to the one of our baptistery are typical of fourth-century baptisteries such as the ones of S. Tecla and S. Lorenzo in Milan and fifth-century baptisteries such as the one of Qal'at Sim'an.[51] Therefore, from a typological point of view, the baptistery of St. John is likely to belong to the period we are investigating, the time before Justinian's intervention.[52]

This "early" date of the baptistery is confirmed by the building inscription which is carved on the lintel of the entrance portal that faces the east rectangular hall, giving access to the ambulatory.[53] This inscription attributes all the portal frames and the entire façade of a "secreton" ("CHKPHTO") to the period of "John, the Holiest Archbishop", and John, the "humble Deacon". Defining the word *secreton* and identifying the "Holy Archbishop John" are essential to interpret this building. As previous scholars have suggested, a "secreton" was a hall in which meetings held by bishops took place. The term should be interpreted either as a public "audience hall where the Bishop presided as judge", or as a senior office for confidential meetings. Most scholars identify the "secreton" of the church

[50] See Eyice 1954, 577-84 and Khatchatrian 1962, 129 for the baptistery of Sidè, and Wharton 1992, 318, fig. 6, for the baptistery of the Holy Sepulchre in Jerusalem.
[51] For the Qal'at Sim'an, see Khatchatrian 1962, 90; the bibliography of the Milanese baptisteries is summarized by Kinney 1972, 97.
[52] Russo (2010, 29) has challenged this theory, attributing the baptistery, like the Skeuophylakion, to the sixth century. One of the indications that lead him to this conclusion is the fountain inserted in the south wall of the baptistery, just east of the main entrance. Russo dates the sculptural decoration of the fountain to the period of Justinian. Still, one could argue that the sculptural features of the fountain are not sufficiently distinctive from the ones of slightly earlier periods to justify such a definitive statement. Furthermore, it is questionable whether the date of the fountain coincides with the date of the baptistery. The latter could have been inserted long after the construction of the baptistery, perhaps to block an earlier doorway that had become redundant. Russo (2010, 50) also bases his dating theory on the discovery (by Andaloro) of Justinianic fresco fragments in the baptistery. However, this evidence is hardly sufficient. These fresco traces are so limited that it is questionable whether they can be dated with certainty and used as conclusive evidence for the exact date of the walls of the building.
[53] This inscription reads as follows:
+ECTHHCYNTAΞICTΩNΠEPIΘYPΩNKAIEKTICΘHHΠACAΠPO
--HCTOYCHKRHTOYEΠΙΙΩANNOYTOYAΓIΩTATOYAPXIEΠICKOΠOY
OIKONOMOYNTOCIΩANNOYTOYEΛAXICTOYΔIAKONOY+

of St. John as the rectangular hall east of the baptistery.[54] This is, of course, quite plausible given the fact that the inscription was viewed from this space. However, it is difficult to accept that the inscription distinguished this space from the complex in which it was so harmoniously inscribed. We should consider the possibility that the term "secreton" designated the entire baptistery. Indeed, as Thomas Mathews has shown, the use of a baptistery as a meeting place, serving the same function as a secreton was not uncommon.[55]

But, let us return to the identification of "John, the Holiest Archbishop." Verzone and Büyükkolancı claimed that this refers to John, the Bishop of Ephesus in the middle of the fifth century, known to us from the acts of the council of Chalkedon.[56] On the other hand, Castelfranchi identified this "Holiest Archbishop" as St. John Chrysostom, and attributed the inscription to the early fifth century.[57] Finally, according to Hermann Vetters, the inscription may refer to John of Ephesos, who lived in the sixth century.[58] However, Foss claims that this is implausible.[59] Indeed, it is more likely that the inscription dates back to the period from 400 to 450 AD as the other scholars have suggested. This indication and our typological considerations seem to suggest that the baptistery was constructed in the first half of the fifth century, probably to complete the complex of the first church, which , as we have seen, seems to have begun at some point between the mid-fourth century and 431 AD.

But, how does the Baptistery relate with the first church? To answer this question, it is necessary to examine the site plan of the remains, hoping to find an indication for the connection between the two buildings. This leads to an interesting find: the narthex of the first church and the octagonal hall of the baptistery are co-axial. Also, if we prolong the central axis of this narthex it intersects with the baptistery wall very near the point where a fountain has been inserted. Now, Russo attributes this fountain to the sixth century, on the basis of its structural decoration.[60] Was this fountain used to block an original entrance

[54] See Russo 2010, 25. Falla Castelfranchi (1999, 91-93) identified the "secreton" as the building known to us as the "skeuophylakion". This, however, seems implausible, given the distance between the inscription and the skeuophylakion.
[55] See Mathews 1971, 12-13.
[56] See Verzone 1982, 215-221; Büyükkolancı 2000, 80.
[57] See Falla Castelfranchi 1981, 138-142.
[58] See Vetters, 1966, 285.
[59] See Foss 1979, 91-92.
[60] See Russo 2010, 29.

door of the fifth century baptistery? It is impossible to say. Wherever the original entrance of the baptistery lay it is noteworthy that, unlike the narthex of Justinian's church (that we will examine shortly), the narthex of the first church clearly leads towards the baptistery and relates with it. This is an indication that the baptistery was conceived in relation to the first church.

Let us now turn to the other ancillary building, east of the baptistery (see figure 4). This is a small rotunda which was also inscribed within a rectangular boundary: the transition from circle to square was achieved once again with the use of four triangular chambers with niches in the walls (Figure 11). The central space was accessed through a narthex with two apsed terminations. Büyükkolancı has interpreted this building as a skeuophylakion, the treasury of the church, where precious objects such as censers, icons, cloths and books were kept.[61] This theory was grounded by reference to the comparable skeuophylakion at the northeast corner of Hagia Sophia at Constantinople.[62]

In spite of the constructional similarity between the skeuophylakion and the baptistery (same masonry, centralised form), most scholars believe that the skeuophylakion was built long after the baptistery, either during the period of Justinian or even after it.[63] Indeed, the narthex of the skeuophylakion incorporates the north wall of what is considered to be the transept of Justinian's church. This theory, however, overlooks the possibility that the adjacent transept of the church included material incorporated in Justinian's church at a later stage. The attribution of the skeuophylakion to the time of Justinian is also in conflict with the constructional similarity between this building and the nearby baptistery, which, as we saw, was probably built approximately one century before the time of Justinian (cf figures 10 and 11). These indications challenge the Justinianic *terminus post quem* for the skeuophylakion. To establish the date of the skeuophylakion with more certainty, we need to determine the date of the wall it shares with the church. Was this wall built in the sixth century, or was it built earlier and incorporated in the structure of Justinian's church? To

[61] See Büyükkolancı 1982, 257.
[62] For further information about the function of the skeuophylakion in Byzantium and its role in the liturgy, see Taft 1981, 49.
[63] Büyükkolancı (1982, 257) states that the building dates back to the end of the sixth or the beginning of the seventh century. Falla Castelfranchi (1999, 91-3), dates the building to the time of Justinian, on the basis of an opus sectile fragment. Russo (2010, 36) claims that the skeuophylakion was part of the same building campaign as Justinian's church. This argument is primarily based on the find of stone blocks that connect seamlessly the two buildings.

answer this question, it is necessary to examine the extents of Justinian's intervention at the church of St. John.

Justinian's Church in the Written Records

The church of St. John was drastically remodelled in the times of Justinian. The intervention of this Emperor was the most durable and memorable one on this site. It endowed the fringe of Ephesos with a sumptuous, iconic building, which was to be greatly admired for centuries after its construction. Procopius' sixth-century treatise "On Buildings" includes the only passage that refers to the rebuilding of St. John's.[64] This document is in many ways unique: it constitutes one of the rare records of church building outside Constantinople. However, we should also take into account that this account was meant to flatter the emperor and exaggerate the impact of his interventions.

Procopius states that Justinian demolished an earlier church on the same spot. This was thought to be too short ("βραχύν"), and had been in bad condition. The intervention of Justinian's architects is said by Procopius to have involved the complete demolition of the old church and the construction of a new one, with increased length.[65] At first sight, this document seems to suggest that the remodelling of the church took place between Justinian's ascension to the Imperial throne in 527 AD and the writing of Procopius' account in the middle of the sixth century. Still, this time scale may be broadened to include the years from 518 to 527 AD, a period in which Justinian had already started to play an important political role as principal adviser of his uncle and predecessor, Justin I.[66]

Apart from providing us with information about the date of the rebuilding of St. John, Procopius also gives us an indirect clue about the form of the new church. Indeed, he clearly states that the new church was identical to the shrine that Justinian "dedicated to all

[64] See Procopius, *Buildings*, V, i, 4–7. Thorough interpretations of the "Buildings", grounded by reference to contemporary records and the historical and political context of this work, occur in Cameron, 1985, 84-112 and Downey, 1947, 171–183. There seems to be a disagreement among scholars about the date of Procopius' book on Buildings. Both Whitby (1985, 141-147) and Downey (1947, 181) believe that this book dates back to c. 560. Their attribution is based on Procopius' reference to the imminent completion of the bridge over the Sangarius River, which, according to other sources was begun only in c. 560. On the other hand, according to Cameron (1985, 9, 85–86), an earlier date, around 554–5, "accords far better, on all grounds with Procopius' work". Indeed, Evans (1969, 29) claims that, given its particular character, Procopius' description of Hagia Sophia cannot postdate the collapse of the first dome of the 'Great Church' in 558.
[65] See Procopius, *Buildings*, V, I, 6.
[66] See Meyendorff, 1968, 45-47.

the Apostles in the imperial city".[67] Now, the sixth-century church of the Holy Apostles at Constantinople was demolished in 1469, but its plan is vaguely known to us through the description of Procopius and later authors. These accounts seem to suggest that the Constantinopolitan church had five domed bays arranged in a cruciform plan.[68] According to the above quote from Procopius, Justinian implemented this same design in the redesign of St. John at Ephesos. The following paragraphs will try to establish the extent to which the remains of Justinian's church confirm this claim. But, before addressing this issue we should refer to Procopius' claim about the importance of the church of St. John.

For Procopius, the Ephesian monument was not only similar to the Constantinopolitan one, but it also enjoyed the same status. The key administrative role of St. John's is reflected in another sixth-century account, attributed to John of Ephesos: the latter writes that in one night of 541 AD, John of Hephaestopolis, a Monophysite missionary, ordained no less than seventy priests in the paved precinct of the church of St. John.[69] The significant standing of the monument is also echoed, albeit indirectly, in two Justinianic inscriptions found in the church of St. Mary. These suggest that, by the sixth century, the peripheral church of St. John already competed in importance with the splendid church at the heart of Ephesos, which had hosted an Ecumenical council a few decades earlier. But let us now return to the archaeological remains of Justinian's rebuilding, which should now be examined in the light of Procopius' description.

The Remains of Justinian's Church

At first sight, the ruins of Justinian's church of St. John seem to dominate the entire site today (see figure 4). They belong to an enormous, aisled cruciform church, with an elongated west cross arm. Aisles and nave are separated by an alternation of ashlar masonry piers and columnar screens. The colonnades of the west cross arm preserve a detail of vital importance for the identification and dating of the building: the monograms of Justinian and Theodora are carved on the impost blocks of the columns' capitals (Figure 12). The colonnades are interrupted by piers made of reused stone blocks, and

[67] See Procopius, *Buildings,* V, I, 6. Comparing the two monuments, Procopius uses the word "εμφερέστατος". Dewing translates this as "resembling very closely in appearance". However, in another of his books (*History of the Wars* I. 23) Procopius uses this same word to suggest an even stronger similarity: that two people were indistinguishable, identical.
[68] See Krautheimer, 1986, 241; Procopius, *Buildings*, I. IV, 16. Procopius' description is corroborated by the tenth-century "ekphrasis" of Constantine of Rhodes, which has been analysed in Taylor, 1996, 72.
[69] See Foss 1979, 88, fn. 88.

arranged in a cruciform pattern that forms six bays.[70] In the crossing, a bema surrounded by a colonnade, a synthronon, and a ciborium mark the location of the tombs. In the west end of the church we encounter a narthex divided in three bays. West of the narthex lies a resplendent atrium. Wonderfully restored by the Ephesos Museum, this rests on a podium whose walls are made of alternating bands of rubble and brick masonry. Three colonnaded porticos enveloped the atrium. These included Corinthian columns typical of the time of Justinian.[71] The enclosure also included two pavilions in the west corners of the atrium. The southwest pavilion faced the ruins of the Temple of Artemis lying at its foot, and the northwest one currently overlooks the 14th century Seljuk mosque of Isa Bey, with the Kaystros valley in the background.

Hörmann, and, more recently, Russo attributed all these remains to Justinian's remodelling.[72] At first sight, this is very plausible, due to the statement of Procopius, as well as the existence of Justinianic monograms and other sculptural elements typical of Justinian's period. Yet, there are two main problems with this theory. First of all, the plan of the remains does not resemble the plan of the sixth-century church of the Holy Apostles, as Procopius suggests. The church whose remains we see today clearly had six bays (two in the nave, three in the transept and one in the chancel – see figure 4), whereas the church of the Holy Apostles only had five bays. Secondly, the attribution of all the remains to Justinian's rebuilding mentioned by Procopius overlooks the serious constructional and morphological differences between the west cross arm and the east part of the church (which includes the transept and the east cross arm, or "chancel"). Curiously, Hörmann actually noticed these differences, but minimised their importance as evidence for different phases. Plommer, Restle, and other scholars suggested that these differences should be given more attention.[73]

Let us examine these differences in more detail. The most obvious ones regard the shape of the central bays of the church (see figure 4). These are rectangular in the west cross-arm and square in the east part. The number of columns in the colonnades between the main piers also varies between the two parts (four-column screens in the west cross arm versus

[70] The northwest colonnade, projecting above the piers, has been restored to indicate the form of the arcades and the existence of galleries.
[71] See Russo 2010, 42.
[72] See Hörmann et al 1951, 100; Russo 2010, 55.
[73] See Hörmann et al 1951, 51, 69, 100, 297; Plommer, 1962, 122-124; Restle, 1971, 164-207, esp. 188.

three-column ones in the east part). The constructional separation between west cross arm and transept is further accentuated by a continuous joint interrupting their brick walls (Figure 13). As Plommer showed, this joint marks a change in brick sizes and the mortar bed thickness. Finally, comparing the sculptural decoration of the two parts, Deichmann has revealed important differences in the carving of the capitals, bases, and cornices between the two parts.[74] These are some of the characteristics of what proves to be very heterogeneous structure. To these, we must add two differences that have been overlooked by previous scholars and are published here for the first time. Firstly, whereas the piers of the east part are made of ashlar masonry courses of a more or less equal height, the ones of the west cross arm display an alternation of tall and short courses (Figure 14). The constructional differences between the piers are not limited to the pier faces. The cores are also different: the piers of the west part contain many cavities filled with mortared rubble. The eastern piers contain a lesser amount of mortared rubble, and most of their core consists of solid masonry.

If most scholars agree that the above differences are indicative of two building phases, there is no consensus about the time that elapsed between these phases. Hörmann and Thiel attribute the entire vaulted church to Justinian and Theodora, and explain the above differences as the result of a brief interruption of the construction process.[75] This cannot be the case: the constructional and morphological differences between the two parts of the vaulted church are far too important to have been caused by such a brief interruption. Indeed, for other scholars, these differences indicate that the vaulted church was built in two phases, which were distant enough to involve different architects and builders.[76] There are even some – briefly expressed – hypotheses about the form of the church following the first of these building phases, which is dated to a time before Justinian's remodelling.[77] In spite of these hypotheses, no evidence has been presented so far for these theories.

[74] See Deichmann, 1974, 549-570, esp. 562.
[75] See Hörmann et al 1951, 100–101. For a refutation of this argument, see Plommer, (1962), p. 122. Thiel (2005, 31, 109–111), believes that only the surrounding brick walls of the transept and chancel of the vaulted church belong to a building phase which is a bit earlier than Justinian's remodelling. However, this hypothesis overlooks the fact that the constructional differences between nave and transept are not only found in the surrounding walls, but in the piers and the vaults as well.
[76] See Plommer, 1962, 125, Restle, 1971, 188, Deichmann, 1974, 562, and Büyükkolancı, 2001, 48–49.
[77] Restle (1971, 188) suggests that the first phase of the vaulted church had a centralised plan, and that the second phase coincides with the construction of the nave. Büyükkolancı (2001, 48), attributes the first phase to the times of Justin I (518–527) and claims that the building was originally intended to have only one

The Nature of Justinian's Intervention: a New Interpretation

In the previous paragraphs we provided ample evidence to support that what has been considered as the result of one building phase in the past, was actually the product of two distinctive building phases. One of these phases clearly corresponds to the nave and the other to the remaining, east part of the church, including the transept and the east cross arm. Of these two phases, only the one that corresponds with the nave preserves evidence for the role of Justinian and Theodora as Emperor and Empress. Indeed, it is only there that we find the monograms of the Imperial couple adorning the capitals.

At this point, we need to establish which of the two parts, nave or transept, is older. One could argue that construction started from the nave that was given by Justinian and Theodora, and continued eastwards at a later period. But, this is highly unlikely. Indeed, as Deichmann has shown, the carved decoration in the capitals and the cornices of the eastern part should be attributed to an earlier period than the one of the nave. Additional evidence that shows even more clearly that building started from the eastern part may be found in a detail of major importance that no scholar seems to have noticed before: the small pilasters between the west piers of the crossing and the east piers of the nave (Figure 15). Let us start with the west piers of the crossing: their pilasters were clearly meant to establish a transition from a pier to a colonnade, as it happens to all the other sides of the crossing. Let us now observe the corresponding pilasters on the east face of the east piers of the nave. These pilasters cannot be justified aesthetically or structurally. There is no colonnade associated with them. If construction had started from the nave they would not have been there. These pilasters only serve to establish a transition from the earlier, eastern part of the building that required pilasters of this kind, towards a west addition that had no use for them. The "west addition" is the nave and the "earlier, eastern part of the building" is none other than the transept and the chancel.

The new theory that is introduced here is that the nave that Justinian and Theodora offered was adapted to an earlier church, which should henceforth be called "the second church". This was a vaulted church that replaced the "first", timber-roof church, elements of which we examined above. A significant part of the second church was not only maintained as

dome. Both arguments lack substantiation. The recent theories of Thiel (2005, 31) and Russo (2010, 55) do not take into account the serious differences between the east and west piers and colonnades.

the transept and the chancel of Justinian's final church, but also influenced the design employed in the final phase, which involved the construction of the nave. Now that we have established that Justinian's church of St. John was built in two phases, it is necessary to shed light on the date of these phases. If the final phase is clearly marked as Justinianic, what is the date of the enigmatic second phase? To answer this question, it is necessary to visualise the form of the second church and to understand how it fits within Procopius' narrative, our only record about the sixth-century development of the site.

Reconstructing the Second Church

The form of the church before the construction of Justinian's nave is one of the most crucial questions regarding the architectural evolution of St. John's. I have tried to construct a plausible model for the second church on the basis of four different sources of evidence. The first source is the architectural form of its transept and chancel, which survived the modification of the building during the construction of Justinian's nave. Secondly, many clues can be drawn from the details of the junction between the newer nave and the earlier transept. Thirdly, the foundations buried below Justinian's nave, which were revealed by Hörmann's sondages, can also provide valuable information for those parts of the second church that were replaced by Justinian's nave.

Let us start from the clues that can be drawn from those parts of the church that survive above ground: the transept and the chancel. First of all, the size and disposition of the piers indicate that this church was vaulted. In fact, many fragments of the vaults of the second church have been found were they fell several centuries afterwards (south of the transept, north of the transept and inside the east cross arm). Detailed examination of these fragments and their interpretation on the basis of comparisons with coeval buildings has helped to reconstruct the vaults. The crossing of the second church was surmounted by a full dome on pendentives, whereas the cross arms were covered by pendentive domes. Secondly, a series of wall fragments and sculptural elements suggest that the second church had galleries.[78]

Having drawn a rough sketch of the upper levels of the second church, we now come to the problem of establishing its complete plan (Figure 16). This is tricky, as the western

[78] See Karydis, 2011, 69-105.

section of the building has been replaced by Justinian's nave. The first indication for the missing part is found in the west piers of the crossing. As we have seen, the pilasters that project from the west side of these piers must have originally connected with a colonnade that is now missing. But how far did this colonnade extend from the crossing? The answer to this question lies in the examination of the two bulky wall foundations excavated by Hörmann in the west bay of Justinian's nave (B1 and B2 in figure 5). In a previous section, we suggested that, due to their unique thickness, these foundations cannot be attributed to the first church, as Hörmann wrongly assumed. Instead, it is very likely that these thick foundation walls belong to the second, vaulted church. These walls seem to trace the outline of a long space with its longitudinal axis perpendicular to the main axis of the church. This space can be plausibly identified as the narthex of the second church. The foundations excavated by Hörmann provide an interesting indication about the design of this space. Indeed, the presence of two wall foundations (D1 and D2 in figure 5) with an east-west direction seems to suggest that this narthex was subdivided into at least three bays. Taking into account similar designs elsewhere, such as the narthex of the church of Hagia Sophia in Constantinople and the one of the final phase of St. John at Ephesos, it is likely that these bays communicated through broad arched openings.

Let us now examine the context of this narthex, starting from the area to its west. The fact that wall D1 continues westwards, beyond the west wall of the narthex (marked by foundation wall B1 in figure 5) seems to suggest that another space, possibly an exonarthex, adjoined the western flank of the narthex. The relationship between the narthex and the baptistery is also interesting. The central axis of this narthex may not be exactly co-axial with the baptistery but aligns with its main entrance. This suggests that the earlier baptistery was taken very seriously into account during the design of the second church. Finally, the narthex also provides a good indication for the form of the main body of the church. The distance between the crossing and the narthex is enough for only one major domed bay like the ones encountered in the surviving cross-arms. This suggests that the second church had five bays and cross arms of similar length. Unlike the final plan of Justinian's church, the plan of the second church must have resembled a "Greek-cross plan".

The evidence presented above leads to the graphic reconstruction of the second church of St. John. The reconstructed plan and section of this church are presented in Figure 16.

This must have been a vaulted, centralized cruciform church, with five major bays instead of six (Figure 17). This reconstruction reveals for the first time a church that matches the description of St. John provided by Procopius. It is the second church, and not the third and "final" one that Procopius compares with the church of the Holy Apostles. Indeed, the claim concerning the similarity of the two buildings would not have made any sense after the addition of the two-bay nave, which gave the Ephesian church six domed bays, and an elongated, directional plan markedly different from the one of the church of the Holy Apostles. Therefore, the church that Procopius mentions is not the third and definitive church, whose remains we see today, but the second church of St. John at this site.

The presence of the Imperial monograms in the capitals of the two-bay nave, which clearly belongs to a third phase, seems to suggest that Justinian intervened twice at the church of St. John. As we saw, his first intervention involved the replacement of the "first" church by a vaulted monument with five bays. Procopius is clear: Justinian razed the first church to the ground and replaced it with the vaulted monument shown in figures 16 and 17. But this building campaign proved to be inconclusive. It did not address sufficiently one of the issues of the previous building, which Procopius also mentions: it was short ("βραχύν").[79] To increase the length and the capacity of the church, Justinian revisited the site, replacing the west cross arm of the second church with a new, two-bay nave (Figure 18). The date of these two interventions is difficult to establish. The absence of imperial monograms in the "second church" could be taken as an indication of an early date around 520 AD, before Justinian's ascension to the Imperial throne. The alteration of the second church created a building that Procopius could not have known well when he wrote his panegyric. If he was familiar with the building that resulted from the addition of the Justinianic nave, the sixth-century author would not have stated that the building is identical to the Holy Apostles. This seems to suggest that the third, definitive church should be attributed to the years between the early 550s and the end of Justinian's reign in 565 AD. However, the fact that some of the nave's Imperial monograms are the ones of Theodora, who died in 548 AD, seems to suggest that a date around 550 AD, closer to Theodora's lifetime, is more likely.

[79] See Procopius, *Buildings*, V, I, 6.

The Relationship between the First and the Second Church

The previous paragraphs showed that what we have so far designated "Justinian's church" was built in two phases. Like countless other Early Byzantine churches, the sixth-century St. John's was the result of retrofit: a new nave was attached to the transept and chancel of the second church, which had been built early in the reign of Justinian or slightly before it. As the third church on this site incorporated elements of the second church, one might ask whether the second church also included elements of an earlier building, namely the first church. This is a crucial question. Indeed, examining the transept and the chancel yields crucial information about the first phase of St. John's.

A close observation of the perimeter wall of the transept and chancel clearly indicates that this wall is the result of two distinctive building phases. The first clue for this is found at the junction between transept and chancel. At this junction, the two brick walls interpenetrate each other and are extended to form corner pilasters (Figure 19). The brick structure of these pilasters creates an internal re-entrant angle which is filled with stone masonry, markedly different from the brick structure of the walls. The brick and stone parts cannot possibly be considered coeval: there is no design-related or structural reason for the brick pilasters, which fail to align with any column. The architect of the second church must have inherited them, together with the brick perimeter walls. Having no use for them in the new design, he tried to mask their obtrusive re-entrant angle by filling it with stone masonry.[80] It is clear that, at this point, the architect was trying to integrate an older structure with thinner, brick walls into the structure of the second church, which was vaulted. This was achieved by attaching a series of columns and internal buttresses to the inner face of the perimeter wall (see figures 4, 16). These are observed in both the transept and the chancel. The fact that these internal buttresses were attached to an earlier wall is confirmed by the joint between them and the wall. Another confirmation for the hybrid character of the east part lies in the comparison between the transept and the two-bay nave (see figure 18). The architect of the nave of the third church, free to construct his perimeter walls from scratch did not maintain the use of columns next to the walls, creating one more difference between the east and the west parts of the church. We realise

[80] Previous scholars, such as De Bernardi Ferrero (1983, 99), and Thiel (2005, 101-103) have observed this part of the church and noticed that the transept and chancel resulted from a modification of an earlier structure. However, the implications of this observation for our understanding of the phases of the church have not been fully evaluated.

that the transept and the east cross-arm of the church are not solely the products of the second phase but include the perimeter walls of an earlier cruciform building. This building is most probably the first church, whose foundations were found beneath the present remains.

Completing the Reconstruction of the First Church

In a previous section, we started constructing a new, plausible model of the form of the first church, on the basis of a new interpretation of Hörmann's excavations (see figure 9). It was suggested that the first church was built on a cruciform plan (approximately, a Greek cross plan), its crossing was marked by four heavy piers and its west cross-arm was divided into two bays. This unfinished picture can now be completed thanks to information drawn from those elements of the first church that were identified in the perimeter walls of the second church.

Let us start with the north extremity of the transept. This area preserves two elements that help to understand the first church. The first element is the core of the perimeter wall of the transept, which, as we saw, was originally made for the first church. The second element is continuous wall foundation excavated by Hörmann, approx. six metres south of the north perimeter wall, and parallel to it (see figure 5). This belonged to a wall of the first church that had to be demolished to make way for the massive piers of the second church. These two parallel walls are coeval. They seem to provide evidence for the existence of corridors enveloping the core of the first church (Figure 20). These corridors were probably compartmentalised in bays defined by pilasters projecting from the inner face of the walls. Two pairs of these pilasters are preserved in the junction between transept and east cross arm, so clumsily disguised by the architects of the second church. But, let us return to the design of the corridors enveloping the first church. One could ask whether they communicated with the core of the church. Given the continuity of their foundation walls, it seems that openings were limited and that the only area where the central space was visible from the corridor was the east cross-arm. Here, the inner wall dissolved into a series of columns, which together with the other colonnades divided this space into five aisles.

Figure 20 illustrates our attempt to combine the excavated and surviving remains of the first church (both shown hatched) into a hypothetical reconstruction plan. The tomb at the centre of the church, and its cross-shaped plan are typical elements of Early Christian Martyria. Two famous examples, comparable to our church, are the great cruciform Martyrium at Qal'at Si'man, and the Martyrium of St. Babylas at Antioch-Kaoussié. The Martyrium at Qal'at Si'man dates back to the late fifth century, and like the first church of St. John, it had aisled cross arms.[81] In both examples, the crossing represents the climax of the design. This was achieved with heavy corner piers carrying a dome in Ephesos, and a massive octagonal space in Qal'at Si'man. The Martyrium of St. Babylas, built probably in the last decades of the fourth century, did not have aisles.[82] However, its design also emphasises the crossing with heavier walls, which presumably supported a sophisticated roof, which was probably pyramidal. Other examples of cross-shaped basilicas include Constantine's legendary church of the Holy Apostles at Constantinople, the cruciform church at Salona (dated to the period from the late fifth to the mid-sixth century), the so-called Mausoleum of Gala Placidia, and an enigmatic church discovered by Anastasios Orlandos on the island of Thasos.[83] And, of course, Early Christian records provide several references to cruciform Mausoleums that have not survived.[84]

But, what distinguishes the first church of St. John from all the above examples is the spatial complexity of its plan. This is largely due to the compartmentalisation of the nave into bays, the juxtaposition of three and five-aisled parts and the existence of corridors along the perimeter. Of all the above elements, the corridors are the most difficult to explain as they do not occur often in Early Christian basilicas. One could argue that these spaces were destined to the Catechumens, the recent converts to Christianity that had not yet been baptised. Catechumens had to abandon the central space of the church after the first part of the Mass, moving to adjacent spaces from which they could hear but not see, the Mass of the Faithful.[85] However, the scanty evidence for the existence, form, and

[81] See Krautheimer 1986, 145.
[82] See Mango 1978, 52.
[83] For the church on Thasos, see Lemerle, 1953, 531-543 and Orlandos 1952, 189. A thorough analysis of the Mausoleum of Gala Placidia occurs in Deliyannis, 2010, 74-84.
[84] Gregory of Nyssa has provided a description of the Mausoleum he built at Nyssa. This was a cruciform structure with an octagonal core. See Gregory of Nyssa (2007), 199-202.
[85] Krautheimer (1986, 40) provides an interesting insight into the role of the catechumens in the liturgy. "During the Mass of the Faithfull", he states, the catechumens "were required to withdraw to a segregated part of the building: entrance, aisles, atrium, or rooms attached to the flanks of the church".

layout of these spaces, makes it difficult to identify them in the reconstructed plan of the first church of St. John.

Conclusions

The building we described above was the first episode in the architectural evolution of the church of St. John. This evolution was extremely creative. Within two centuries, our church witnessed some of the most daring architectural experiments in the history of Early Byzantine architecture. It all started with the construction of a cruciform church or "Martyrium", with aisled, timber-roofed cross-arms converging to a domed crossing. This paper proposed a new, reasoned interpretation of the excavated material, which led to a revised reconstruction of this church. Built no later than 431 AD, this gradually became the heart of a large building complex. One of the first additions to this complex was the baptistery, whose remains survive north of the church. The construction and type of this building, together with the inscription on its eastern entrance suggest that it was built in the first half of the fifth century. The axial alignments between the narthex of the first church and the baptistery suggest that the architects tried to adapt the new building to its setting. Harmonious adaptation also characterises the design of the skeuophylakion. The latter was coaxial with the north-western corridor of the transept. The fact that the skeuophylakion incorporates the elements of the baptistery (east wall) and the first church (north transept wall) indicates a building date after the completion of these two buildings, but not a long time afterwards. Indeed, the constructional similarity between the baptistery and the skeuophylakion indicates that both were built in the first half of the fifth century. The skeuophylakion was the last addition to the complex of the first church of St. John, which was probably completed in the time of Theodosius II, by the middle of the fifth century.

By the first decades of the sixth century, the first church was already "ruined because of its great age" of almost two centuries. During this period, the building must have suffered several earthquakes which took their toll on the integrity of the structure. Justinian probably saw the problems of this building as an opportunity to become patron of the flourishing Christian community of Ephesos, a city of strategic importance from a theological, political and commercial aspect. He took this opportunity and replaced the derelict building with a new church. The "second church" maintained the general proportions of the earlier cruciform plan and the alignment of the narthex with the

baptistery. Justinian's additions also maintained parts of the perimeter walls of the first church. However, the second church also introduced some innovative structural ideas. Unlike the building it replaced, the new church was entirely vaulted. The construction of its enormous domes, which reached a diameter of 14m, represented one of the great technological achievements in the history of Byzantine architecture.

Despite its importance, this development has so far eluded the attention of architectural historians. This article represents the first attempt to reconstruct this short-lived building, shedding light on an unknown aspect of the history of the church of St. John. This reconstruction showed that the second church was very similar to Justinian's church of the Holy Apostles at Constantinople. This realisation led us to attribute the second church to the Justinianic rebuilding of St. John's mentioned by Procopius. Given the absence of Imperial monograms from the surviving parts of this church (transept and chancel), we have argued that the latter was commissioned in the 520s, slightly before Justinian's ascension to the throne.

The second church has not been sufficiently recorded. Perhaps, this is because it lasted very little: it was partly modified a few decades after its conception. The resulting church, which was also offered by Justinian, seems to have obscured the Emperor's earlier efforts on this site. Yet, much of the fabric of the definitive church was actually created for the previous church. Only the nave was new. The transept and the chancel belonged to the previous phase. The constructional and morphological differences between these two parts indicate that the third church of St. John was a hybrid building, which was created in two chronologically distant phases. As we saw, the second church was the first Justinianic phase, and seems to date back to the 520s. The third church was probably built at least three decades later. Indeed, construction must have taken place soon enough after the death of Theodora in 548 AD to include her monograms in the decorative programme. The completion of the third church must have taken place after the writing of Procopius' panegyric. The latter is not aware of the intervention that made the Ephesian church different from the Holy Apostles. As a result, the venerable church of St. John was immortalised in Procopius' *panegyric* as a rival to the legendary Constantinopolitan church. One can only guess what Procopius would have written had he known that Justinian would enlarge the Ephesian church even further, making it more distinctive, and turning it into one of the greatest Byzantine monuments in west Asia Minor.

Illustrations

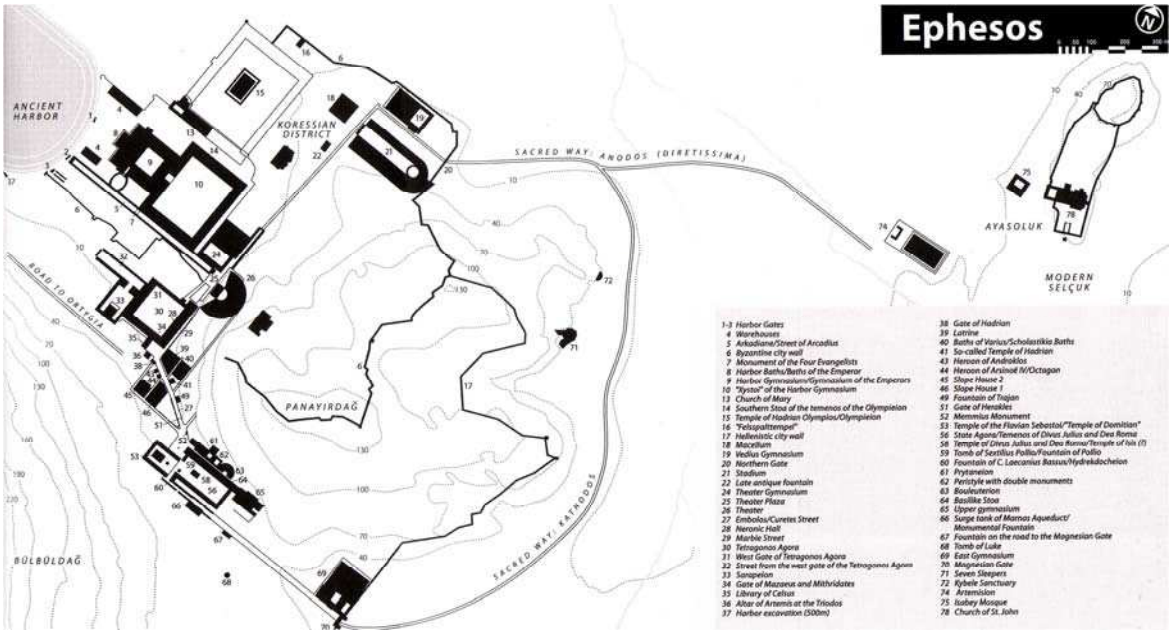

Figure 1. Map of Ephesus showing the key monuments from the Hellenistic to the Early Byzantine Period. The Church of St. John lies on the hill of Ayasoluk, 2km east of the "Koressian District" (Helmut Koester 1995). (To be replaced by OAI Map)

Figure 2. The remains of the church of St. John. View from the crossing looking west.

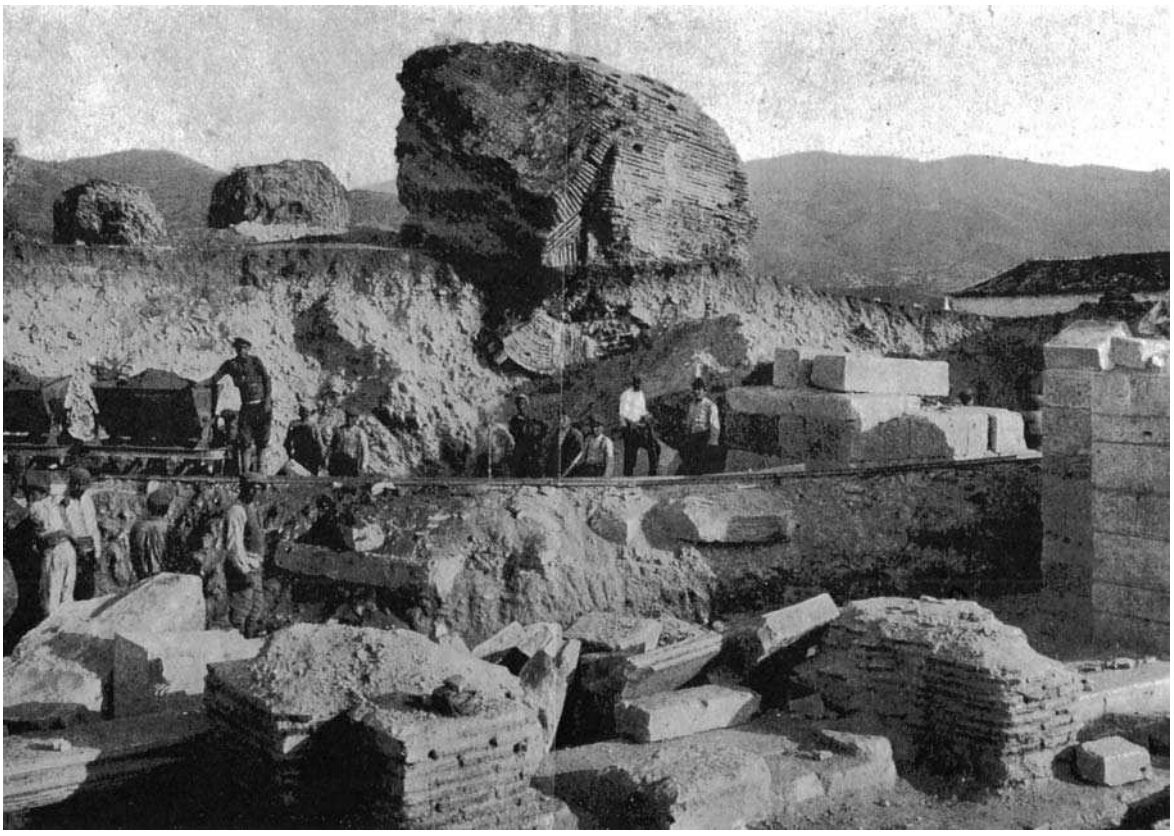

Figure 3. The church of St. John during the excavations carried out by the Austrian Archaeological Institute (Hörmann et al, 1951).

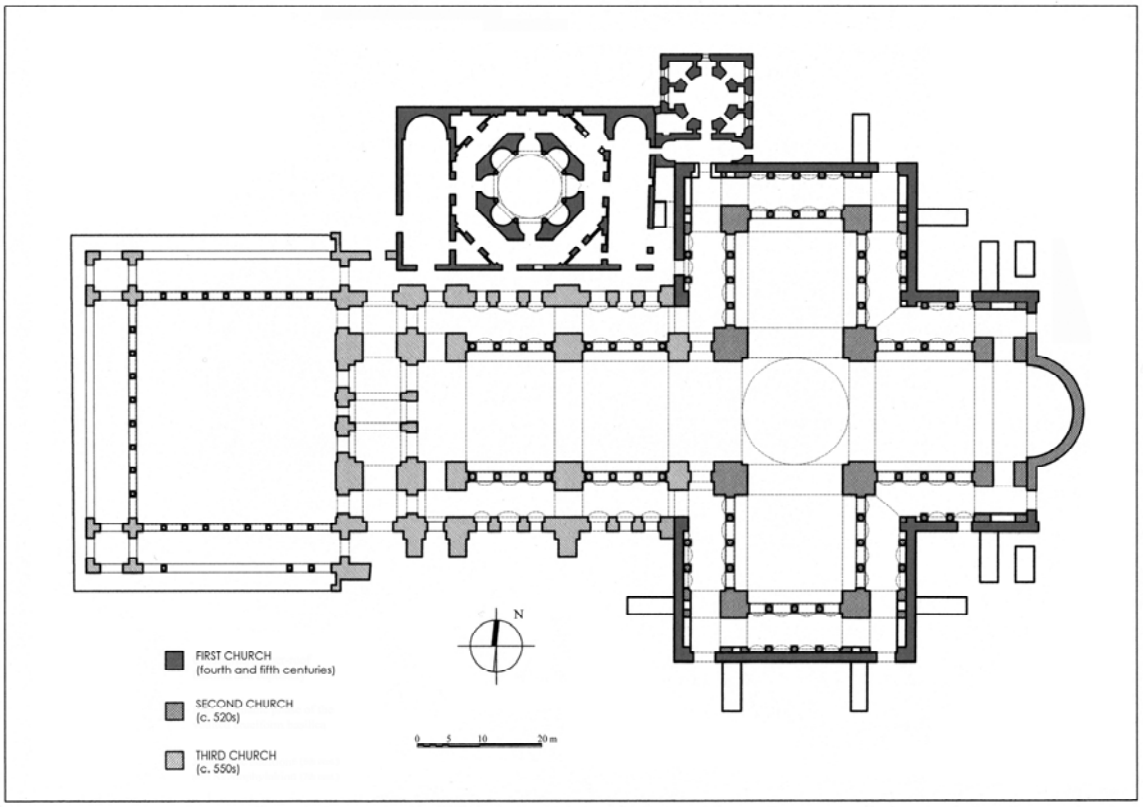

Figure 4. Plan of the remains (Carolina Vasilikou, 2009)

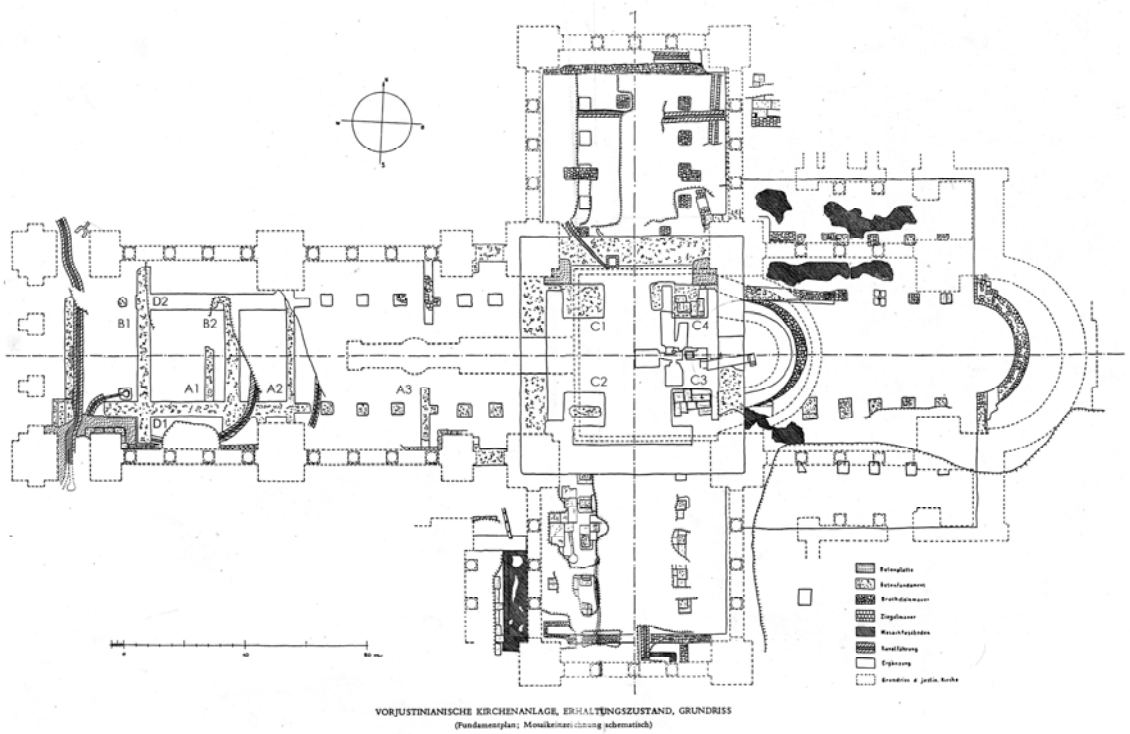

Figure 5. Plan of the foundations discovered by the team of Hans Hörmann (1951), superimposed on the plan of the present remains (shown in dashed lines). The foundation walls A1, A2, and A3 are much thinner than the foundation walls B1 and B2.

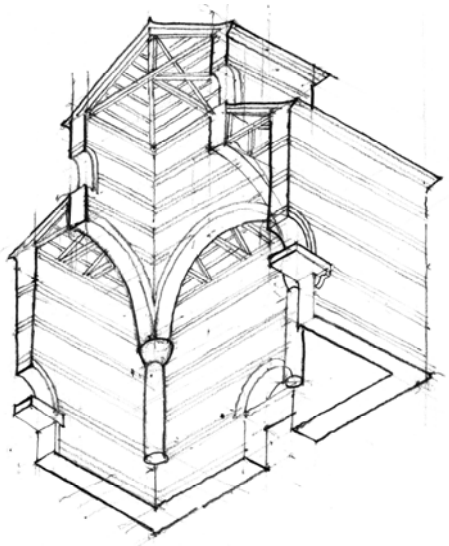

Figure 6. Reconstruction of the original Tomb of St. John, after Hörmann, 1951: cut-away axonometric (Nikolaos Karydis, 2006)

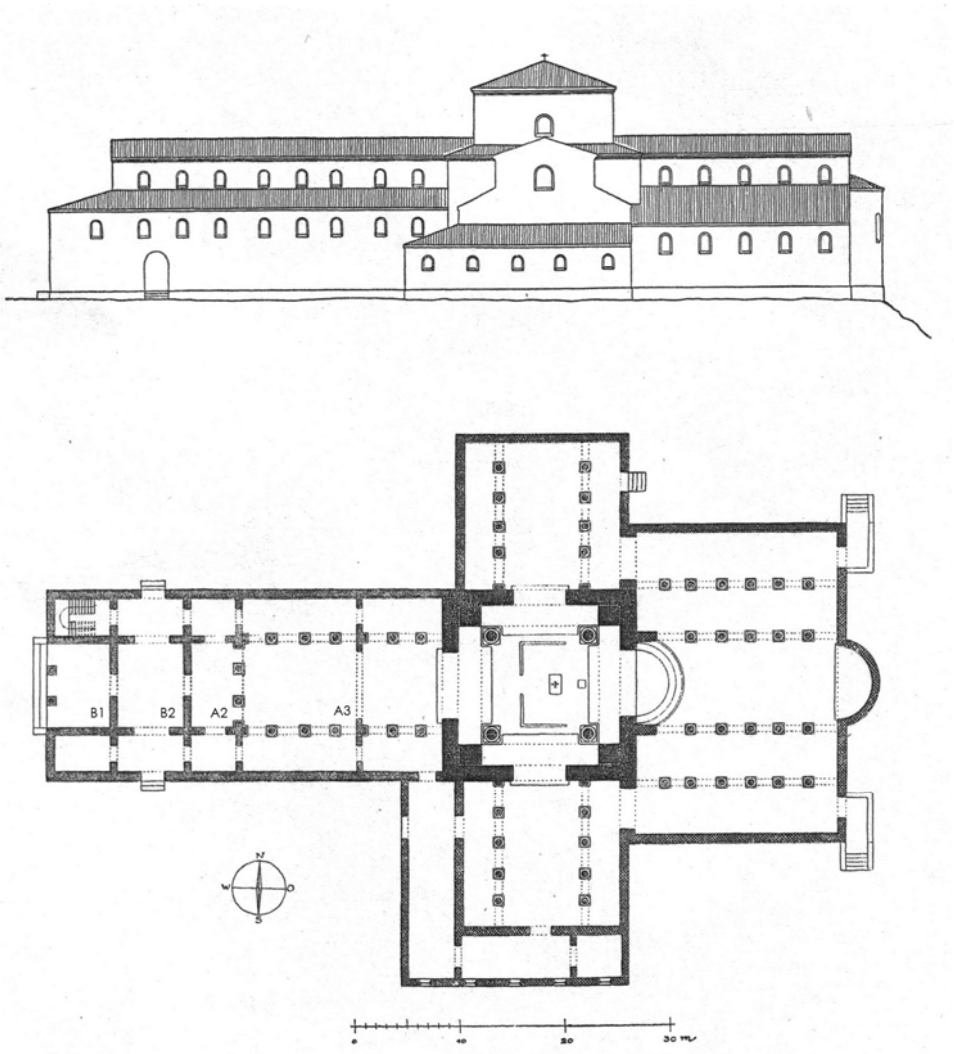

Figure 7. Reconstructed plan of the "Pre-Justinianic" church of St. John (Hans Hörmann, 1951). The original "Tomb of St. John" lies at the crossing. The foundation wall A1 has not been included. Differences in the thickness of foundations have been overlooked.

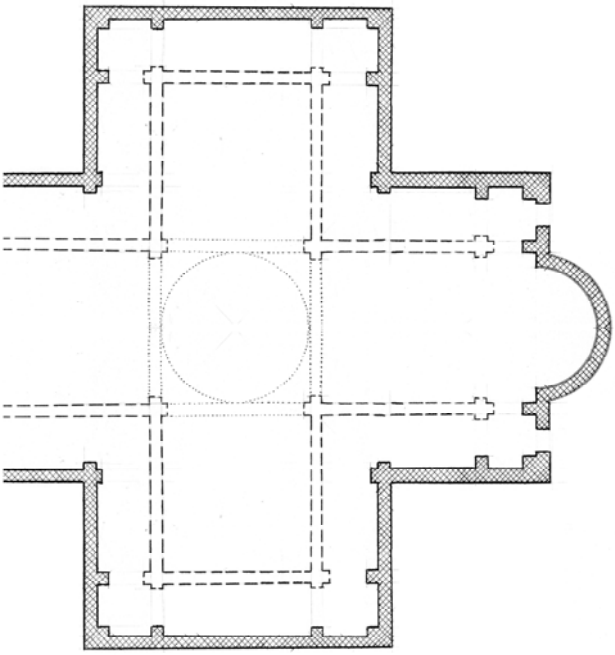

Figure 8. Reconstructed plan of the "Pre-Justinianic" church of St. John (Nikolaos Karydis after Paolo Verzone, 1965)

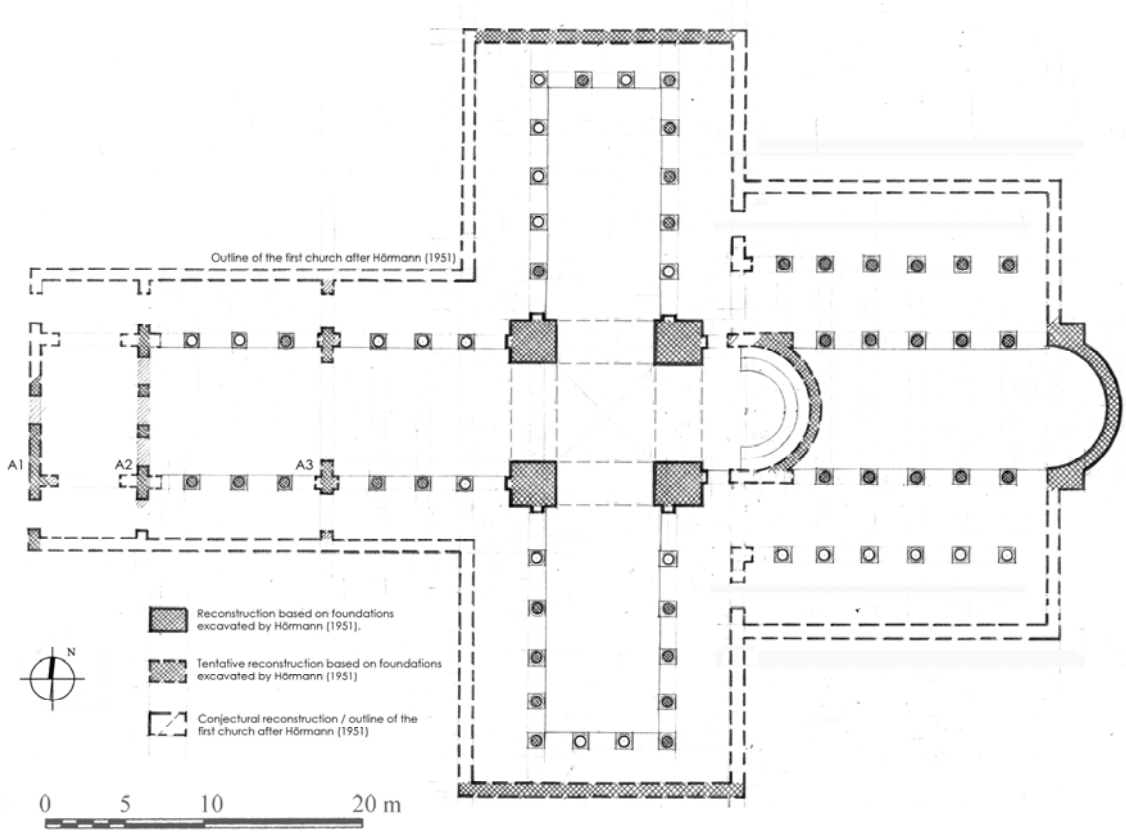

Figure 9. Preliminary reconstruction of the first church of St. John (Nikolaos Karydis, 2013)

Figure 10. View of the octagonal hall of the baptistery.

Figure 11. View of the central piers of the skeuophylakion

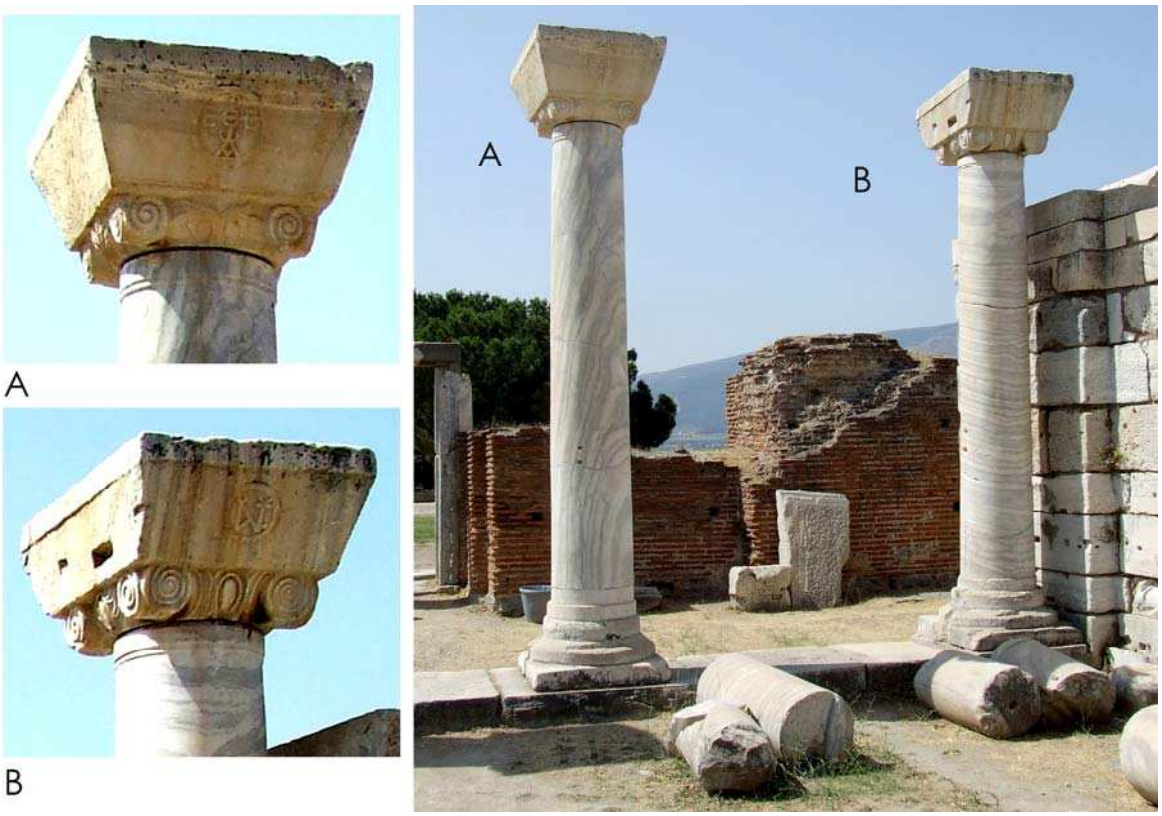

Figure 12. View of nave colonnade. Notice the monograms of Justinian (B) and Theodora (A) on the capitals.

Figure 13. Detail of the vertical joint between the external walls of the nave and the transept.

Figure 14. View of piers showing the constructional difference between the piers of the transept (right) and the piers of the nave (left). The piers of the transept are made of courses of similar heights, whereas the piers of the nave are built with an alternation of thin and thick courses.

Figure 15. Detail of the "redundant" pilasters between the piers of the crossing and the piers in the east extremity of the nave.

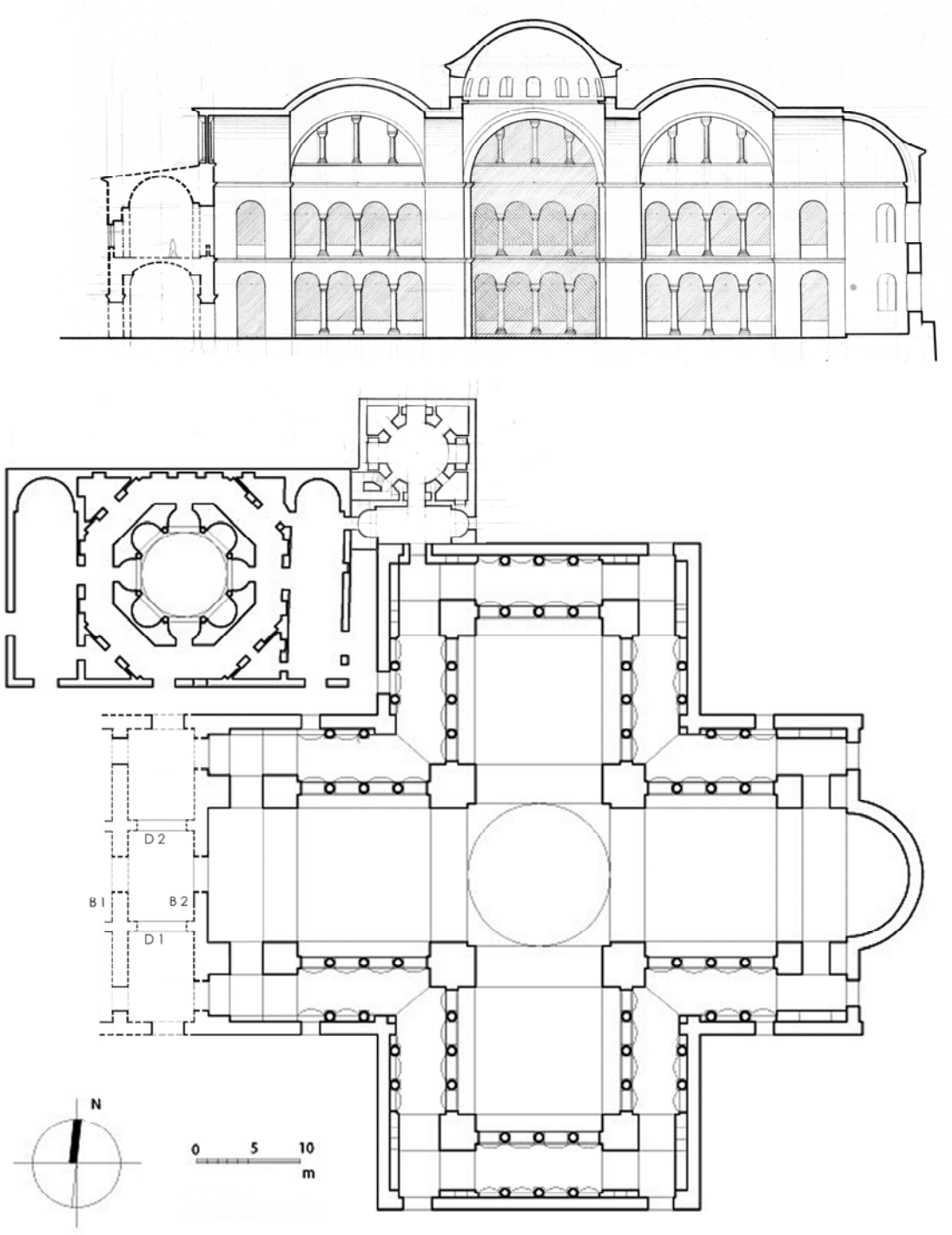

Figure 16. Reconstructed plan and section of the second church of St. John (Nikolaos Karydis, 2013).

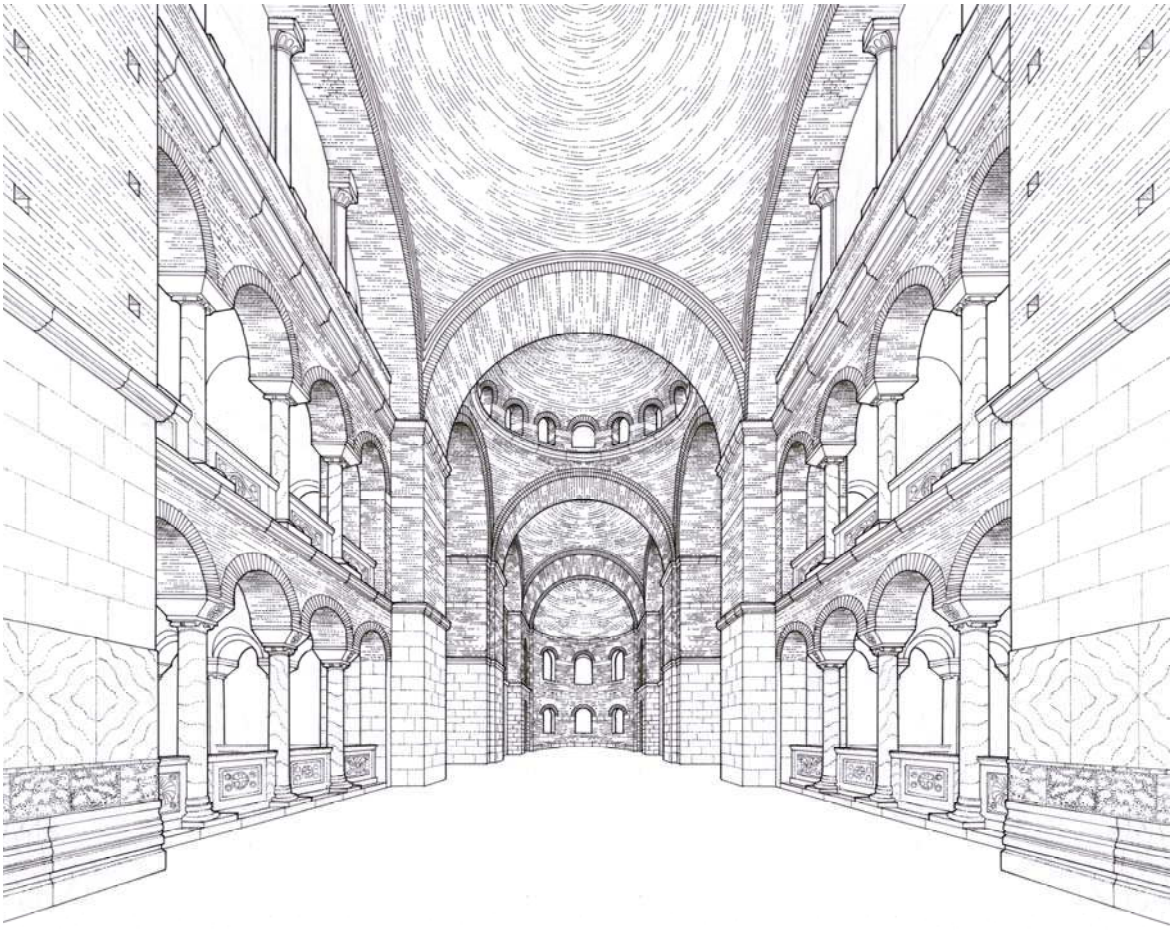

Figure 17. Reconstruction of the second church of St. John: view of the interior (Nikolaos Karydis, 2013).

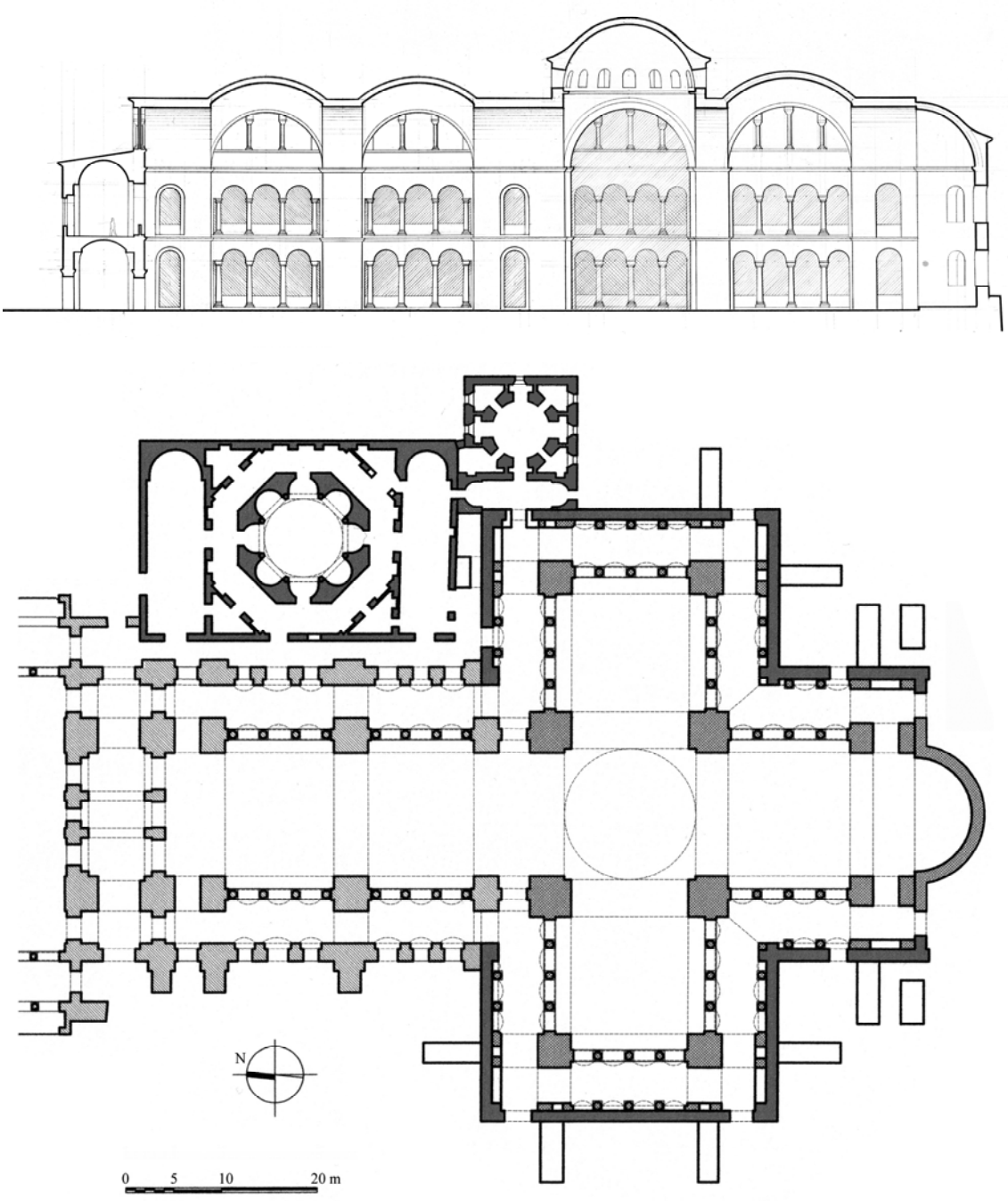

Figure 18. Reconstructed plan and section of the third church of St. John (Nikolaos Karydis & Carolina Vasilikou, 2009-2014)

Figure 19. Detail of the junction between the northeast external walls of the transept and the north external wall of the east cross arm.

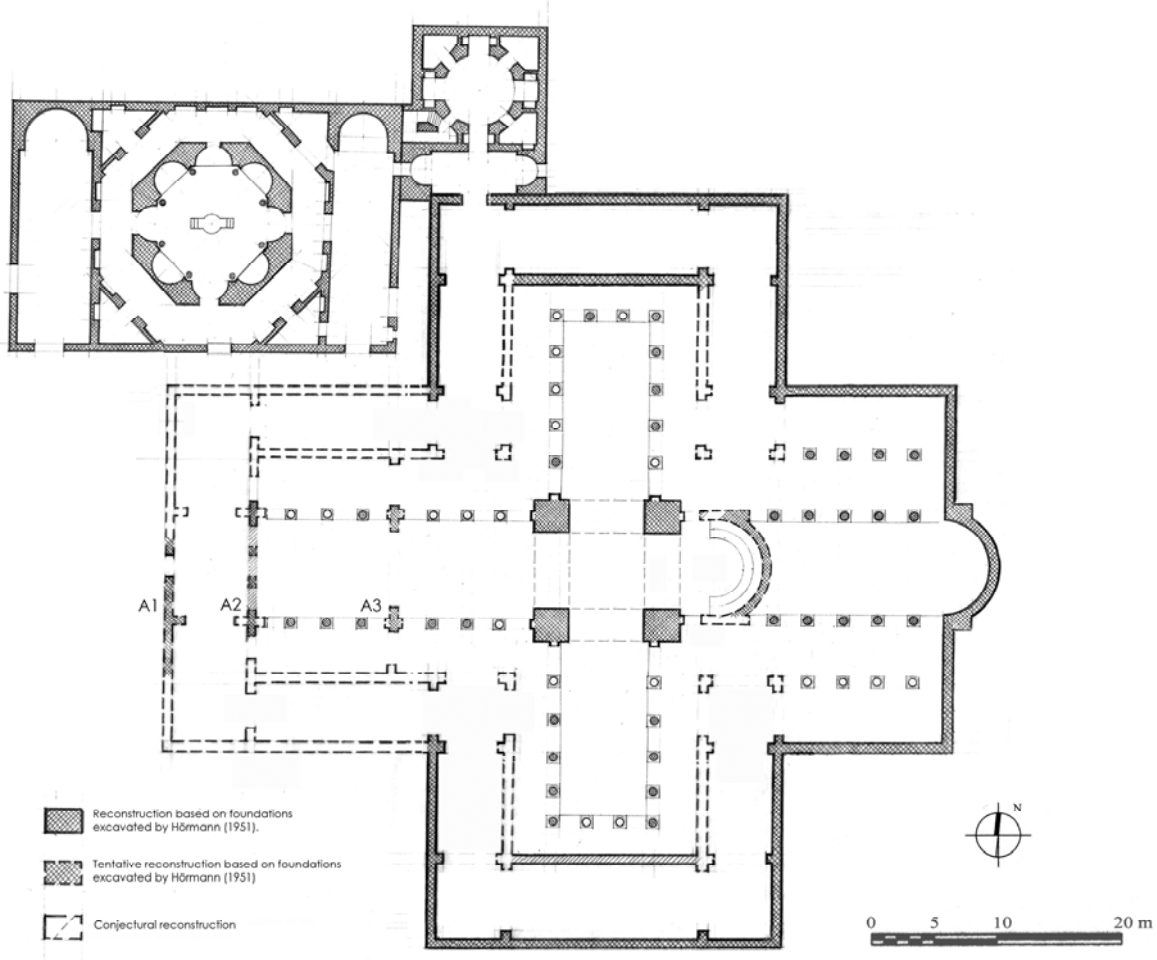

Figure 20. Reconstructed plan of the first church of St. John (Nikolaos Karydis, 2014).

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