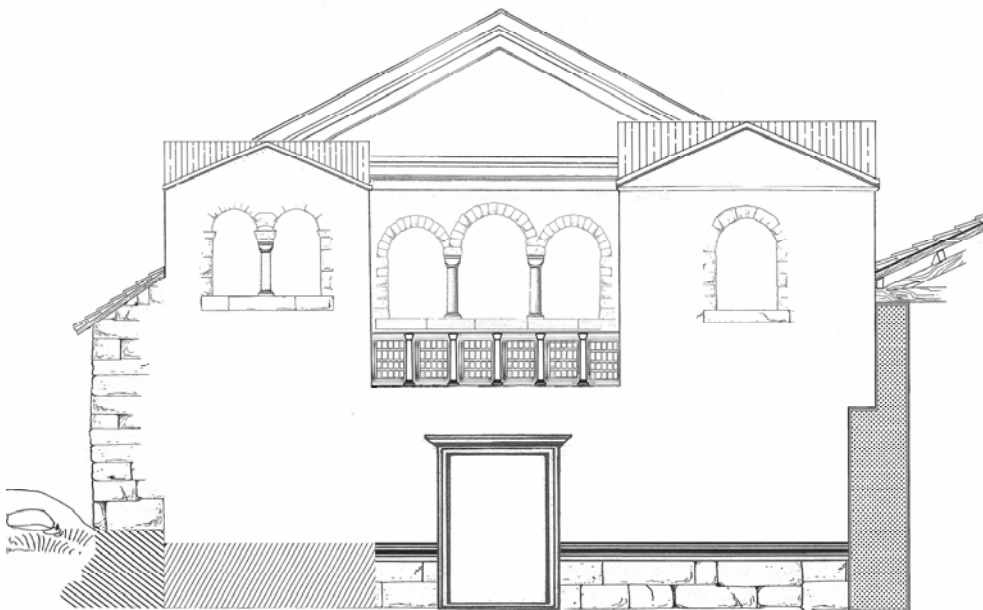


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THE BYZANTINE CHURCH AT LABRAUNDA



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ABSTRACT

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This thesis examines the Christian context of the former pagan sanctuary of Zeus Labrandeus in Caria during the Early Byzantine period, *ca.* 325-730 A.D. The focus is on the church, positioned outside the pagan sanctuary's temenos area. The architecture of the church has been empirically analysed. It is argued that the church shows strong Syrian influences. The Syrian features are a tripartite sanctuary enclosed by a straight back wall, an interior supported by pilasters and a west part with two towers. The study of the architecture has also been used in an attempt to discuss the liturgy at Labraunda.

The finds from the excavations of 1951-2005 have been categorized and examined in order to establish a *terminus post quem* for the Christian presence at the site of the church. This has been crucial for the dating of the church. Furthermore, the finds illustrate the social and economic conditions that prevailed at Labraunda during the Early Byzantine period. Finally, this study tries to enlighten the process of transition from a pagan sanctuary into a Christian place of worship.

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Keywords: *Labraunda, Caria, Early Byzantine, Justinian, Christianity, liturgy, church, Roman bath, tripartite sanctuaries, Christian graffiti.*

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1. INTRODUCTION

The region of Caria is situated on the southwestern coast of Anatolia (*Fig. 1*). To the north the Meander River separates Caria from Ionia, and the region beyond the Cnidian Peninsula marks the east periphery towards Lycia. Western Caria is, to a large extent, dominated by the Latmos, a mountainous area in which several ancient cities and sanctuaries were situated, among them the sanctuary of Zeus Labrandeus at Labraunda (*Pl. 1*). Preserved pieces of



Fig. 1. Map of western Anatolia

architecture and pottery trace this cult back to the Archaic period. The sanctuary belonged to the large city of Mylasa¹, at least during the Hellenistic and Roman periods, well known during classical antiquity as the home of the famous satraps Hecatomnus, Mausolus and Idrieus. It was also these satraps who erected most of the preserved Late Classical buildings at Labraunda, among them, the temple of Zeus. Concerning the architecture of the sanctuary, Swedish archaeologists have excavated and published Classical and Roman buildings at Labraunda. These publications do not focus on Late Antique and Christian activity at the sanctuary.

In the Early Byzantine period a Christian church was erected in Labraunda. It was 25 m long and nearly 10 m wide. It had a rich interior, including a floor paved with polychrome marble slabs. The church was partly built into an earlier Roman bath establishment situated immediately south

of the East Propylaea. The excavation history of the Byzantine church at Labraunda began when Inge Dahlén first came across the building while excavating the South and East Propylaea in 1950 and 1951. Two notebooks are available from these excavations. The church and a preserved room to the south, which contained a *hypocaust* of the Roman East Bath, were almost fully unearthed in 1953. From this excavation there are two written notebooks describing the finds and the architectural structures. Alfred Westholm excavated the last parts of the church, the *pastophoria* in 1960. I have not found any notebook from that excavation. In the apse of the church a new excavation was carried out during the summer of 2005. On this occasion one notebook was written by the present author and some of the finds will be discussed in this thesis.

¹ Mylasa was the capital of Caria until it was transferred to Halicarnassus in the fourth century by the satrap Mausolus (see Vitruvius 2.8.11). The city is located in a valley approximately 12 km south of Labraunda.

1.1 Presentation of the thesis

The main purpose of this thesis is to establish an adequate chronology for the Byzantine church of Labraunda, and to develop a better understanding of the Christian period at the site. This will be done initially by dating the construction of the church through the study of finds excavated between 1951-1960, and through an architectural analysis. The context will include economical and social aspects. Furthermore, I intend to trace the origin of the ecclesiastic architecture used at Labraunda, and to study the liturgical conditions and its influence on the architectural plan. There is also the aspect of cult, continuity versus innovation. What function did the church at Labraunda serve in the Early Byzantine period? One aim is to focus on the transformation of the sanctuary from a pagan to a Christian one. And finally, concerning the location of the church, the intellectual conception of topographic and symbolic requirements must be considered according to early Christian traditions and beliefs. My aims are to:

- Empirically date the church through excavated finds and architectural features;
- Discuss the function and location of the church;
- Study the origin and shaping of the architecture and liturgy;
- Obtain evidence for continuity and changes in the social and economic climate in Byzantine Labraunda.

1.2 Ancient and Byzantine sources

Famous Greek and Roman writers such as Herodotus, Plutarch, Strabo, Pliny the elder and Aelian mention Labraunda. Herodotus speaks of the sanctuary's holy atmosphere, while Strabo mentions the Sacred Way that leads from Mylasa to Labraunda and the local marble quarry that provided building material for Mylasa and Labraunda. Pliny and Aelian speak of a pond in Labraunda, devoted to holy fish and eels with necklaces and earrings of pure gold. However, neither Pliny nor Aelian mention the word *oracle*, when speaking of the pond. An oracle function of the fish shrine is thus uncertain.

In Roman times there were extensive building activities at the site, such as the erection of stoas, and public baths. Good economical resources and a willingness to construct monumental architecture seem to continue into the fourth and fifth centuries A.D. during the transformation of the Late Roman period into the Early Byzantine era. At some point during the early Christian period the Roman East Bath of Labraunda was partly rebuilt as a church, as previously noted. There are, unfortunately, no written sources mentioning this church or

any other Christian activities in Labraunda during late antiquity or the Byzantine period. In fact we do not even know whether the name Labraunda was still used after the Roman period. There are, however, a few Christian inscriptions or rather *graffiti* found at Labraunda and these were published by Jonas Crampa in 1972. Alas, these contain too little information to provide us with a certain date. It has therefore been impossible to form a chronology of the sanctuary during the Christian era through preserved inscriptions or through Byzantine literature. The city of Mylasa, on the other hand, is mentioned as an important city within the Byzantine provincial administration in *De thematibus* (14.1-5), written in the 10th century by the emperor Constantine VII Porphyrogennetus. This document is believed to be based on earlier sources, so its reliability as an historical document describing Mylasa's status during the 10th century is uncertain. However, it confirms the significance of the Labraunda region in post-Iconoclastic times, from *ca.* 843 A.D. and onwards. Mylasa was also represented by a bishop at the second council of Nicaea in 787. Bishop Gregory of Mylasa attended all sessions of the council attested from 24 September to 23 November. He was an iconophile and he therefore opposed the iconoclasts at the council.

Christian architecture erected by the emperor Justinian I (527-565) is described by the historian Procopius of Caesarea, in his book *Peri Ktismaton*. However, Procopius does not describe any buildings in Caria but in the neighbouring regions, for example Ionia. This adds some material for empirical studies of the architecture in Caria. Some places on the west coast of Anatolia, important for their churches, relics or saints, are mentioned in Byzantine hagiographies in medieval times. It gives a glimpse of how the Christian landscape may have appeared previous to the conquest of the Seljuk Turks in the 11th century, at least viewed through the eyes of hagiographers, certainly not reliable in all aspects. These hagiographies clearly show that the rural landscape of southwest Anatolia had a very different sacral climate and appearance in the use of liturgy and cult, contrasting with that of the metropolis of Constantinople. An illustrating example is the *vita* of Hagios Nicholas of Sion. The monastery of Holy Sion was located close to Myra in Lycia. It speaks of Christian cult acts that are rather similar to those considered pagan, for example animal sacrifices. This is important considering that the liturgy is essential to the architectural planning of a church.² The edifice is formed according to the liturgical needs of the Mass, which means that different areas with various liturgies also exhibit different forms in sacral architecture.

² Animal sacrifices were surely not a common feature of the Mass at this monastery, but rather a consequence of desperation in hard times. Still, it shows the contrast to the urban customs of the Byzantine Empire.

1.3 Modern sources

As previously mentioned, so far as known Alfred Westholm did not keep a notebook during his excavation of the church's *pastophoria* in 1960. However, Westholm gives some information about the finds and architectural features found in 1960 in his publication: *Labraunda, Swedish excavations and researches*, I:2, *The architecture of the Hieron*, from 1963. A number of finds from the excavation of 1953 have been studied; in 1965 Pontus Hellström published some pieces of pottery and glass found in the church and his study also includes various medieval vessels excavated in other parts of the sanctuary. This thesis offers a chronological framework for the different epochs of Christian Labraunda.

Concerning the Christian landscape of Caria in general, some studies have been presented. Ufuk Serin's *Early Christian and Byzantine churches at Iasos in Caria: an architectural survey* from 2004 discusses the churches at the city of Iasos, close to Labraunda. One of these churches shows similarities in plan, which makes it a good comparison for empirical studies. The leading scholars to write about the Latmos Mountains during the Byzantine period are Urs Peschlow and Anneliese Peschlow-Bindokat. They give an important chronological survey of the region around the ancient city of Herakleia in *Der Latmos; Eine unbekanntes Gebirgslandschaft an der türkischen Westküste* from 1996. The Christian capital of Caria during the Byzantine period was the city of Aphrodisias. Charlotte Roueché compiles the Late Antique epigraphic material from Aphrodisias in the book *Aphrodisias in late antiquity*. This volume provides us with a chronology for this early Christian Episcopal centre of Caria. The great church of Aphrodisias erected within the temple of Aphrodite also shows an important resemblance in plan to the church of Labraunda. Certainly there are more remains of Christian architecture in Caria than the examples previously mentioned. However, these are the best objects for empirical studies, referring to the church at Labraunda. Alas, the Christian landscape of Caria has not been studied in proportion to the numerous remains of the architecture available, something that hopefully will change in the future.

Thomas F. Mathew's book *The early churches of Constantinople, architecture and liturgy* from 1971 deals with the problem of early Christian liturgy in a way that can also help to reconstruct the liturgy outside the capital of the Byzantine empire. The development of the Christian liturgy and its relation to architecture is also discussed in the book *From synagogue to church, the traditional design*, written by John Wilkinson in 2002.

Much has been written regarding studies in Early Christian and Byzantine ecclesiastic architecture. Authors focusing on Anatolia are particularly Richard Krautheimer in his *Early*

Christian and Byzantine architecture from 1986 and Cyril Mango in *Byzantine architecture* from 1978. Furthermore, Robert Ousterhout has recently written an analysis of Byzantine architecture in general *The master builders of Byzantium* from 1999, in which he deals with initial architectural problems like engineering and building materials. Concerning the Roman East Bath of Labraunda, which was partly reused in the church, the book *Baths and bathing in classical antiquity* by Fikret Yegül, offers the empirical material from Anatolia for the study of the remaining walls and the construction techniques. Yegül deals with the region in question, in which similarities may be seen with baths at Aphrodisias and Tralles. Furthermore, Inge Nielsen's *Thermae et balnea: the architecture and cultural history of Roman public bath* from 1990, offers more information on the transitions of bath establishments during the expansion of Christianity.

1.4 Method

This thesis will mainly focus on Christian architecture at Labraunda in the Early Byzantine period, previous to the so-called iconoclastic controversy (*ca.* 730-843). The period between the 8th century and the Latin conquest of Constantinople in 1204 is usually called the Middle Byzantine period, a period that will occasionally be mentioned and referred to in this study. The “set off” of the Early Byzantine period is very differently defined; personally I argue that it should be used, when speaking of the east part of the Roman Empire, from as early as the middle of the 4th century, due to the increasing significance of major Christian cities such as Constantinople, Ephesus and Antioch. The Byzantine period was a strict Christian phenomenon where a monotheistic belief not just coloured, but controlled the cultural, theological and the intellectual ideas at the time. In the east Mediterranean these tendencies are clearly visible, radiating from the large Christian cities already in the second part of the 4th century.

The method used in this thesis is mainly an empirical and analytical study of architecture of Early Byzantine churches in Caria, and also, on a wider geographical level, to outline the origin of and external influence on the architectural plan. The planning of the church-space will hopefully show which type of liturgy that was used in Labraunda. Furthermore, I will apply the dating of the church established through the architectural analysis on the chronological context of the archaeological finds, such as coins and pottery from the excavations of 1951, 1953, 1960 and 2005. Through the excavated finds I also hope to be able to ascertain changes in the economic environment, when examining the quantity and quality of coins and fine-ware pottery. I will furthermore study reasons behind the location of the

church outside the temenos area, and search for indications of Christian antagonism towards pagan areas and buildings, compared to other sites in Caria.

1.5 Glossary

Aisle: In a church built on the plan of a basilica, the aisles are the areas to either side of the nave and running parallel with it.

Anathyrosis: Dressing of the margin of ashlar blocks or the drums comprising the shaft of a column to ensure an accurate masonry joint.

Asklepieion: A sanctuary dedicated to the healing god Asklepius. These establishments often served as hospitals and also provided facilities for the sick.

Bay: A unit of space in the nave defined by architectural elements such as columns, piers, and walls.

Bema: Raised part of the nave or the apse, enclosed by a balustrade, chancel, or screen, allotted to the clergy.

Buttress: An architectural support, usually consisting of massive masonry built against an exterior wall to brace the wall and counter the thrust of vaults or other heavy elements. Transfers the weight of the vaults to the ground.

Caldarium: The hot part of a Roman bath.

Ciborium: Fixed canopy over the altar, usually supported on four columns.

Diaconicon: In Byzantine churches, a chamber situated south of the sanctuary, serving as sacristy and vestry. It was in the charge of the deacons and used for storing books, vestments and vessels needed at the altar.

Exonarthex: Narthex outside the main façade of the church, usually part of a colonnaded or arcaded atrium.

Follis: The most common copper coin struck between 498 and 685 A.D.

Hypocaust: The major heating system of Roman baths, hypocaust literally meaning “a furnace that gives heat from below.” In fully developed hypocausts the floor of the room is supported by short pillars (*pilae*); the hollow space is heated by the circulation of hot gasses produced by a furnace (*praefurnium*), stoked from the outside.³

Incubation: Healing sleep used in the Asklepieia.

Nave: The long central area of a church.

³ The best ancient description is given by Vitruvius, *De architectura libri decem* (5.10.2-3).

Narthex: A transversal church vestibule.

Opus caementicium: Roman concrete; undressed stones, brick fragments, and loose aggregate are laid in a thick mortar of sand, lime, and, in central Italy and Campania, a volcanic sand known as *pozzolana*. In Asia Minor the popular local variety of *opus caementicium* is described as “mortared rubble” in which *pozzolana* is replaced by lime.

Ossuary: A space for storing aging human bones.

Pastophorium: A room in an Early Christian or Byzantine church serving as a *diaconicon* or *prothesis*; as a rule, flanking the apse of the church.

Peripteros: Row of columns around a temple, so called peristyle. A peripteral building, such as a Greek temple, has a continuous colonnade around it.

Pillae: Small pillars (*ca.* 0.6-1.3 m high, placed *ca.* 0.8 m from each other) supporting the hypocaust floor. Usually they are made of brick, stone or terracotta pipe sections.

Praefurnium: Furnace of a Roman bath. The term may denote only the stoke hole (*fornix*) of the furnace, or larger area of the furnace or furnaces.

Pronaos: Vestibule flanked by three walls.

Propylaea: Monumental porch, often with a colonnaded façade, giving access to a Greek sanctuary.

Prothesis: In Byzantine churches, a chamber to the north of the sanctuary where the solemn preparation of the Eucharistic gifts takes place.

Sanctuary: In a Christian church, the east area of the nave, reserved for the clergy. It encases both the apse and the *pastophoria*.

Synaxis: In Greek churches, a public meeting for worship. Eucharistic *synaxis*: the Mass.

Terminus ante quem: The latest possible date.

Terminus post quem: The earliest possible date.

Transept: The transverse unit of a basilica plan, as a rule inserted between nave and apse.

Voussoir: A component of a stone arch or vault, usually of roughly trapezoidal shape.

2. DESCRIPTION OF THE ARCHITECTURAL ELEMENTS

The Byzantine church of Labraunda (*Pl. 2*) is set out along an east-west axis, and the building is 25 m long and about 10 m wide. It is located directly south of the East Propylaea (*Fig. 2*), and is partly built within the area of a previous Roman bath-complex (the East Bath). The southwest wall of the church is a preserved part of the Roman bath, built in the Claudian era of the first century A.D. (*Pl. 3*).⁴

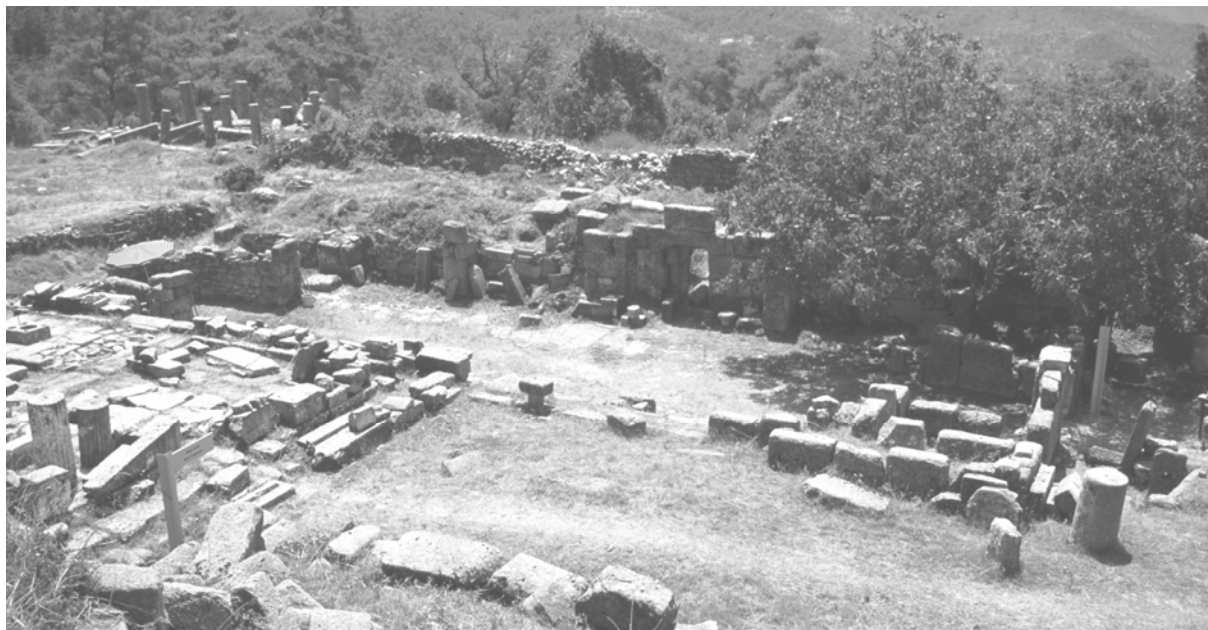


Fig. 2. View over the church looking south.

The west entrance of the church opens into a vestibule (Room 1) with two smaller rooms on either side, Rooms 2 and 5 (*Pl. 4*). The church is without *aisles* and contains one, 9.45 m wide *nave*, divided into four *bays*. The nave (Room 4) is furnished with a paved floor of polychrome marble. The marble paving slabs are laid north-south on either side of an east-west marble band in the centre of the nave. The east part of the church forms a tripartite end, a semicircular apse (Room 4b) flanked by two *pastophoria* (Rooms 4a and 4c.) The apse is closed by a straight east wall.

Attached to the south wall of the church, there are two visible rooms; both of them preserve structures of the previous Roman bath. Room 9 was fully excavated and seems to be the hypocaust of the bath. Room 6 was only partly excavated, around the west and north

⁴ According to a dedication inscription by Claudius Menelaus found in the church; see Westholm 1963, 124.

entrances. However, it may have been a functioning element in the church's liturgies, perhaps the baptistery. This matter will be further discussed in chapter 5.⁵

Room 1 is rectangular in shape and the length of the room (east-west direction) is 2.72 m. The width of the room (north-south direction) is 3.57 m. This gives the room a total area of 10.2 m². The main entrance to the church is located in the west wall of the room. Two doorframes, though not preserved in full height, stand on a marble doorstep. The width of the marble threshold block is 0.95 m and it is 2.7 m in length (*Fig. 3*).



Fig. 3. The entrance to the church with its doorframes *in situ*.

The west entrance is 1.17 m wide. Its northern marble doorframe is 1.5 m high and projects 1.25 m from the wall of the room. The width of the frame is 0.45 m. The preserved height of the wall behind the northern doorframe is 1.71 m. The southern marble doorframe is 1.35 m in height, and 0.45 m wide. The frame projects 1.15 m from the southern wall of the room. The height of the wall behind the southern doorframe is preserved to a height of 1.3 m.

The thickness of the north wall is in the north 0.4 m, while the south wall is 0.35 m and the west wall *ca.* 0.5 m. The north wall of the room is preserved to a height of 0.92 m in the northeast corner and *ca.* 0.5 m in the northwest corner of the room. The south wall has a preserved height of 1.22 m in the southeast corner, and 0.93 m in the southwest corner.

⁵ The numbers given to the rooms are those mentioned by Inge Dahlén in the archaeological notebook of 1953. Room 2a is a new addition and the three rooms in the tripartite shrine have been given separate numbers (4a-c).

Room 2 is almost square and the length (east-west) is 2.38 m. The width of the room (north-south) is 2.63 m. The total area of the room is 6.3 m². The entrance is 1.29 m wide. The north marble doorframe is 1.84 m long but has fallen from its original place. It now lies across the entrance to the room. The south doorframe is 1.55 m high. It projects 0.64 m from the west wall of the room and is 0.47 m wide. For information concerning the north doorframe, see *pilaster 1* (page 22).

The thickness of the north wall is 0.32 m, while the west wall has a thickness of 0.38 m and the south wall is 0.4 m. The entire north wall of the room has an even level, ca 1.6 m. The west wall of the room is at its highest in the south corner, 1.66 m. It becomes lower towards the northern corner, where it measures *ca.* 0.71 m. The south wall has a preserved height of 0.92 m in the east corner, and *ca.* 0.5 m in the west corner.

All of the walls of the room are built with large gneiss ashlar blocks. These are between 0.75-1.3 m in length and about 0.40-0.55 m high. They are laid one on top of each other, and are joined together with mortar.

Room 2a has not earlier been drawn into the church plan, nor has it been viewed as a structure belonging to the church phase, which is likely. The room was drawn during the summer of 2005 and it has been given the name Room 2a, because it is close to Room 2. There are, however, no connecting doorways between the Rooms 2 and 2a. The room is rectangular in shape and it has a total area of 4.8 m². The length of the room (east-west) is 2.33 m. The width (north-south) is 2.05 m. The thickness of the south wall is 1 m, the east wall is 0.38 m and the north wall is 0.92 m.

The entrance of Room 2a is 1.15 m north of the main entrance of the church (the west entrance of Room 1). The entrance is 1.25 m wide. The western doorframe is still in an upright position, while the eastern one has fallen and lies in front of the doorway. It is 0.25 m thick. The west doorframe is 1.51 m high, 0.5 m wide and 0.2 m thick. The wall behind the west doorframe projects 1 m from the west wall of the room. The east wall is preserved to a height of 1.7 m high on the east side of the entrance.

The north wall has a preserved height of about 0.85 m. It consists of two courses of ashlar blocks. The east wall of the room is at its highest in the east corner, 1.66 m. It becomes lower towards the northern corner, where it is *ca.* 0.71 m. The south wall is *ca.* 0.45 m in height measured from the floor level of Room 2a.

The so-called Room 3 seems to be a large mortar-filled space inside the north wall of Room 2. It is thus likely to be a buttress, or possibly a foundation of an exterior staircase. The space has no visible entrances or other openings. The length of the unfilled space (east-west) is 3.41 m and the width (north-south) is 0.8 m. A total area of 2.7 m². The thickness of the north wall is 0.38 m, the south wall is 0.35 m and the west wall is 0.4 m. The east part of the wall continues into the north wall of Room 4. The present level of the mortar “floor” is 1.15 m above the floor level of Room 2. Only one wall course stands above the bottom of this unfilled space called Room 3. The height of the course is *ca.* 0.45-0.5 m on all four sides.

Room 4, is the nave of the church (*Fig. 4*). It has a total length of 17.35 m. The width of the room (north-south) is *ca.* 9.45 m. This measurement is taken from the south wall to the north, between the pilasters. The total area of the room measures 164 m².



Fig. 4. The eastern part of the nave (Room 4) looking towards the tripartite sanctuary (Rooms 4a-c).

The thickness of the north wall is in the east *ca.* 0.9 m, and in the west corner *ca.* 1.55 m. The preserved height of the wall is in the west corner 1.42 m and behind Pilaster 3 *ca.* 1.6 m.

The south wall measures, above the entrance to Room 6, *ca.* 2.8 m in height and is 1.15 m thick. The entrance to Room 6 is 0.88 m wide and 1.64 m high (see *Fig. 17*). This opening stands upon a doorstep, which is 12 cm higher than the floor level of the nave. The door

preserves both its two parallel lintels *in situ*. Above the north lintel there is an extra stone course also still *in situ*. The rest of the south wall has an even height of *ca.* 2.3 m.

The west part of the south wall of the room is a reused part of the earlier Roman bath complex from the first century A.D. The wall is built with heavy courses of gneiss ashlar blocks (*Fig. 5*). The ashlar blocks measure 0.85-1.25 m in length and are about 0.55-0.6 m high. Perpendicularly laid headers continuously flank the horizontal stretchers. The headers have the same height as the stretchers, but they are just about 0.15-0.25 m in width. The walls of the previous Roman bath building do not exhibit any cut markings from attached marbles or other elements.

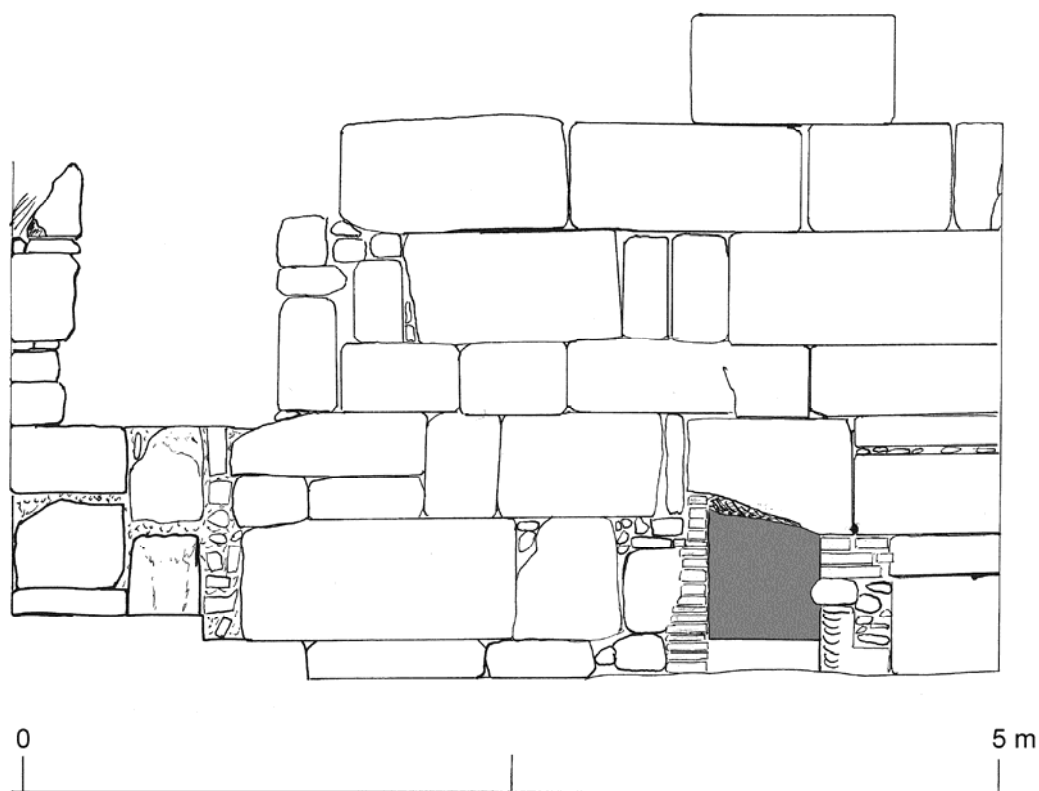


Fig. 5. Elevation of wall belonging to the Roman East Bath seen from Room 9 towards the north. Notice the heating tunnel running under the wall, corresponding with the previous *praefurnium* (Room 5), in the lower right corner.

The west part of the north wall is built of ashlar blocks of gneiss (*Fig. 6*). These are between 0.55-0.8 m in length and *ca.* 0.4-0.55 m high. The blocks are laid in courses and joined together with mortar. There are no headers. The technique is similar to the Roman *opus caementicium*, with two separated sections of stone courses with an empty space between them, which is filled with rubble and mortar. The building technique is regular throughout this

whole wall section. The mortar space is *ca.* 0.35 m thick. The east part of the north wall is partly demolished between the Pilasters 3 and 5, *ca.* 1 m remains in height.

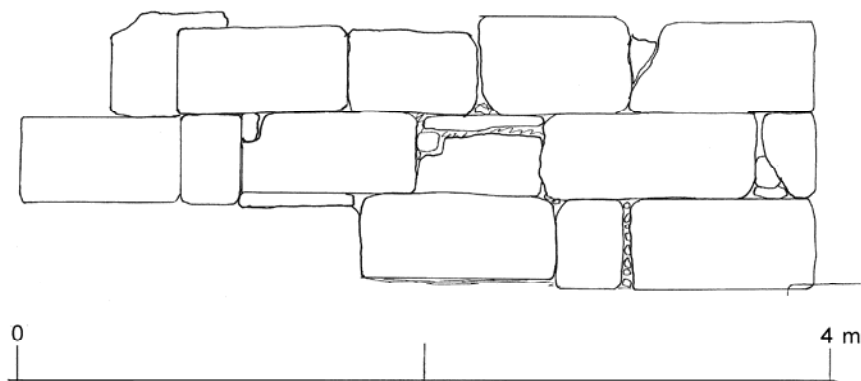


Fig. 6. Western part of the north wall of Room 4, built in the Early Byzantine period.

The east part of the southern wall keeps a rather even height of 1.3 - 1.4 m. It is *ca.* 0.7 m thick. This is mainly a rubble wall. It is built of small blocks of stone (gneiss), which are randomly joined together with mortar and occasionally with fragments of brick. The construction of this wall differs widely from the other walls of the room, which are built out of more regular courses of larger ashlar blocks. The mortar of the different walls of the room looks very similar. The colour is white and it looks as if it contains a big quantity of crushed marble.

In the middle of the northern wall, just in front of Pilaster 3, stands a statue base. The height of the marble base is 1.25 m, the length (east-west) is 0.92 m and the width (north-south) is 0.9 m.



Fig. 7. Pilaster 8 attached to the south wall of Room 4.

The entire floor of Room 4 is paved with marble slabs, *ca.* 1 cm thick. The marble used is white with patchy stripes of dark grey or dark green.⁶ The marble type is local and quarried at the mountain Sofra, close to Mylasa.⁷ The convenience of a local quarry obviously provided the area with huge quantities of building material; also the churches at Iasos have preserved pieces of this local marble.⁸

The rooms of the tripartite end of the church were not given any room numbers in the excavation notebooks of 1953. They have therefore been given numbers during the summer of 2005, Room 4a is the room north of Room 4b (the apse) and Room 4c is the one south of it (*Fig. 8*).

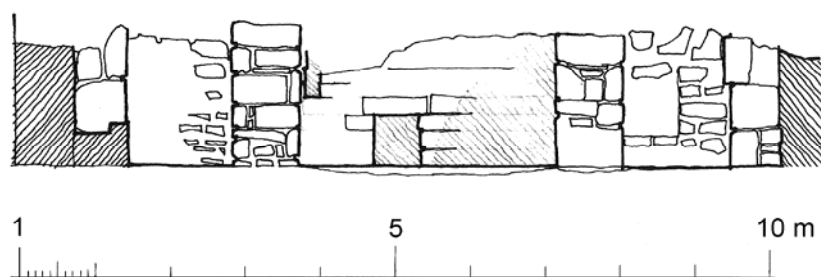


Fig. 8. Section of the nave with an elevation of the tripartite sanctuary (Rooms 4a-c) seen from the west

The length of the Room 4a (east-west) is *ca.* 3.28 m. The width of the room (north-south) is *ca.* 2.49 m. The room is rectangular in plan and total area is 8.2 m². The entrance is 1.48 m wide. For information concerning the north wall of the entrance, see Pilaster 5. The height of the wall projecting south of the entrance is 1.71 m and it is 0.5 m thick. This wall projects *ca.* 0.3 m from the south wall of the room.

All walls of the east part of the church are built in a rubble technique. The thickness of the north wall is 1.05 m, the east wall is 0.8 m and the south wall is 0.65 m thick. The north wall is lower than Pilaster 5. The preserved height in the west corner is 1.43 m. It then slopes towards the east to a height of 1.3 m in the east corner. The sloping of the wall is due to a subsidence in the floor of the room; the top course of the wall is even in height. The south wall has its highest part in the west corner, 1.6 m. The top course has been removed to the east so that the height of the wall is 0.83 m in the east corner of the room. The east wall of the

⁶ Dahlén 1953a, 69.

⁷ Probably the place indicated by Strabo, *Geographika*, 14.2.23. This is also claimed by Westholm 1963, 11.

⁸ Serin 2004, 101.

room is lower in height than the other walls, *ca.* 0.7 m in the south corner. The central section of the wall has been partly damaged; only a height of a few centimetres is preserved here.

Room 4b (the apse) is a semicircular structure closed by the east wall of the church. The width on the chord of the apse is 3.38 m. The depth of the structure (east-west) is *ca.* 3.9 m. This gives an area of 12 m². The height of the northwest end of the wall is 1.71 m. The top course has been removed towards the east, so that the eastern part of the apse wall is 1.15 m high. The thickness of the wall at the curve of the apse is 0.69 m, the north wall is 0.65 m, and in thickness the south wall is 0.67 m.

In the east apse wall there is a square opening. The opening is 0.55 m wide and *ca.* 0.6 m high. This space presumably housed the marble block with the horse relief published by A.C. Gunter.⁹ By the entrance, towards the north wall of the apse there is a piece of a big marble threshold (see *Fig. 21*, lower left). The length (north-south) is 1.11 m. It is 0.5 m wide. The marble threshold shows a circular marking in the north part. It is likely that there was a circular base, probably for a column, that once stood on top of it. The marking is *ca.* 0.65 m in diameter. However, the marking continues over the west and east edges of the threshold. This implies that the marble threshold is not *in situ*, but is rather a reused piece of a stylobate.

A preserved piece of tile from a vault found joined together with mortar indicates that a half-dome covered the apse.¹⁰ The floor of the apse is paved with cut stones, randomly laid and in various sizes. In the central area of the apse there are two tomb-shaped structures, one within the other; the smaller one is likely to be an *ossuary* (see *Fig. 9*).¹¹ A secondary funeral may be the case, since it is obvious that these two structures were used in different periods. The large structure is 0.7 m wide and the small one is about 0.2 m wide and 0.6 m deep (*Fig. 9*). The total length of the larger grave is 1.8 m. The two long sides of the ossuary are completely built with stone. The short ends are not built. About 0.2 m east of the ossuary there is an ashlar block, which may mark the end of the larger tomb, however, it may also be a foundation for an altar. This ashlar block, which is of gneiss, is about 0.75 m in length (north-south direction.) There is also a semicircular marking in the stone pavement running parallel with the apse wall. This was probably made by a *synthronon* (see *Fig. 21*).

⁹ Gunter 1995, 17, 41f. See also fig. 50 in Westholm 1963, 74.

¹⁰ Dahlén 1953a, 121.

¹¹ Due to the prominent situation of the ossuary it is likely that it is a reliquary.



Fig. 9. The ossuary in the central part of the apse.

Room 4c is rectangular in shape and is almost identical with Room 4a. The entrance is 1.41 m wide. The wall projecting north of the entrance is 1.68 m high and 0.51 m wide. It projects 0.28 m from the north wall of the room. For information concerning the projecting south wall of the entrance, see Pilaster 10. The length of the room (east-west) is 3.31 m, while the width (north-south) is 2.4 m. The total area of the room is 7.9 m². The thickness of the north wall is 0.67 m; the east wall is 0.8 m. The south wall could not be measured correctly due to the unexcavated backside of the wall.

The north wall of the room is preserved to a height of 1.3 m in the west corner and 1.2 m in the east corner. The south wall is continuous in height, about 1 m. The east wall is more destroyed than the other walls of the room. It is *ca.* 0.6 m at its highest point.

Room 5 was originally the *prae-furnium* of the Roman East Bath. A part of a terracotta chimney was found during the excavations of 1953.¹² Therefore it is likely that the bath's furnaces were placed in this area. There is also a built tunnel under this room, which connects it with the hypocaust of Room 9 (see *Fig. 5*). The architecture of the present room does, however, most likely belong to the Byzantine church.

The length of the room (east-west) is 2.25 m, while the width (north-south) is 3.1 m. The total area of the room is about 7.0 m². The entrance is 1.37 m wide. The height of the wall on

¹² The diameter is *ca.* 30 cm and the outside is fluted horizontally. The ware is red as brick and burnt at a very high temperature; See Dahlén 1953a, 73f.

the south side of the entrance is 1.4 m. The wall (Pilaster 6) projects 1.10 m from the south wall of the room. The wall north of the entrance is 1.22 m high and 40 cm thick. The length of this wall is *ca.* 0.65 m from the north wall of the room. The thickness of the north wall is 0.35 m, the west wall is *ca.* 0.5 m and the south wall is *ca.* 0.8 m thick.

The preserved height of the north wall is 1.22 m in the east corner, and 0.93 m in the west corner. The west wall stands to a fairly even level, *ca.* 1.3 - 1.4 m. In height the south wall has its highest part in the east corner, *ca.* 2.4 m. The height is about 1.7 m in the southwest corner.

The north wall is built with large gneiss ashlar blocks. These are between 0.75-1.3 m in length and about 0.40-0.55 m high. They are laid one on top of each other, and are joined together with mortar. The west wall is built of rubble and contains fragments of stone and brick in different shapes and sizes (see *Fig. 4*). The bricks used seem from the shape to be Roman or Byzantine. This wall is most likely a later rebuilding of the original wall. To date this construction is difficult, but it is possible that it was made after the church ceased to be used.

Room 6, is located south of the nave (Room 4). The room has two visible entrances, one at the northeast corner and one at the northwest. The northwest entrance is however placed in the west wall. The entrance connects this room with Room 9. The northeast opening connects the room with Room 4 (see *Fig. 17*). Room 6 is just partly excavated, mainly around the entrances, which makes it impossible to estimate the width (north-south) of the room, while the length (east-west) is, in the north part, 6.15 m. The thickness of the north wall is *ca.* 1.1 m and the west wall is *ca.* 1.1 m thick. The north wall of the room can only be seen in full height at the east entrance. The entrance, measured from Room 6 is 0.85 m wide. The height above the floor level of Room 4 is 1.64 m. Viewed from Room 4, the corners of the doorposts have cut-back edges. These were probably holders for doorframes in another material (marble or wood). There are no similar cuttings around the entrance inside of Room 6. The southern lintel of this entrance does not have an extra course of blocks as is the case at the northern lintel. The wall is *ca.* 2.3 m in height, measured from the floor level of Room 4.

The height of the wall is *ca.* 2.3 m above the floor level of Room 4. The top course is leaning heavily inwards. It is likely that it will fall soon, if it is not put back in place. The east wall seems to be parallel to the west wall of the room, slightly oriented towards southwest. The west wall is only visible in the north corner. Only the upper part of the northwest entrance can be seen from here. There are two lintel blocks over the entrance. An extra course

of blocks is resting upon the eastern lintel. The blocks are shaped like a pediment. The length of the lintel (north-south) is 1.75 m.

Room 9 was, as was earlier mentioned, originally the hypocaust of the Roman East Bath (*Fig. 10*). The *pilae* are still preserved in the room. The west wall of the room is not perfectly parallel with the east wall. The east wall is slightly oriented towards southwest; it is *ca.* 4.9 m in length. This makes a total length (east-west) in the north of 5.2 m and in the south of *ca.*



Fig. 10. The hypocaust (Room 9) of the Roman East Bath.

4.6 m. The width of the room (north-south) is 5.15 m. The room covers a total area of 25.2 m². The north entrance of the room is 0.98 m wide.¹³ The height of the east doorpost is 1.16 m. It projects 0.31 m from its backer wall and is 0.8 m thick. The height of the west doorpost is 1.42 m and 0.87 m thick. It projects 1.2 m from the Doric House¹⁴ (on the outside of the room) and 0.4 m from the west wall of Room 9 (on the inside). The height of the doorposts are taken from the Late Roman floor level, outside the room 9. The measurement from this level down to the bottom of the hypocaust of Room 9 is *ca.* 1.05 m.

The thickness of the walls are in some angles difficult to measure, due to the unexcavated surrounding rooms. However, the thickness of the north wall is *ca.* 0.8 m, the west wall is *ca.* 0.55 m thick. The north wall of the room measures about 2.46 m in height at the west corner and is *ca.* 3.45 m in height, above the hypocaust level. About 0.9 m from the east corner there is an opening in the wall. The opening is located at the lowest part of the wall, 0.85 m wide, and 0.65 m high (see *Fig. 5*). This opening is the end of a built tunnel, which goes under the wall and connects Room 9 with Room 5. This was most likely the heating tunnel from the *praefurnium* (Room 5) of the hypocaust. It is not possible to see the north end of the passage from Room 5, only from Room 9. The east wall of the room is *ca.*

¹³ This entrance was filled with rubble during the Byzantine epoch and was opened again during the excavations, probably in 1953.

¹⁴ Built by Idrieus in the fourth century B.C.

3.4-3.5 m high in the north corner and approximately 3.1 m in the south corner. About 0.4 m from the north corner there is an entrance to the room, from Room 6. The entrance is 0.9 m wide and *ca.* 2.7 m high. The threshold is placed 0.3 cm above the hypocaust level. The door has its two parallel lintel blocks preserved *in situ*. The room's south wall keeps an even height of *ca.* 3 m above the hypocaust. The wall has an entrance *ca.* 1.5 m from the west corner. The entrance is 0.95 m wide. A fallen lintel is lying in the middle of the opening. This door connected Room 9 with an unexcavated room south of the wall. The previous eastern foundation wall of the Doric House, runs from the north entrance along the lower level of the hypocaust, *ca.* 0.65 m from the west wall. This wall was removed to make place for the Roman bath in the first century A.D. The wall is *ca.* 0.4 m thick and meets the west wall of Room 9 *ca.* 0.7 m from the southwest corner.

Along the nave of the church there are ten pilasters. They are the only visible supports for the roof. The Pilasters 6, 7 and 8 (see *Fig. 7*) are not anchored into the main wall, as are all the other pilasters. These three pilasters are thus built up against the older wall of the Roman East Bath. This indicates that these three pilasters are not original, but rather an added architectural element belonging to the church phase. It is important to notice that the two central (Pilasters 3 and 8) and the four corner pilasters (1, 5, 6 and 10) are larger (see *Pl. 4* and further discussion in chapter 2.1.1).

Pilaster	Height (m)	Width (m)	Projecting length (m)
1	1.84	1.12	0.73
2	1.34	0.68	0.67
3	0.97	1.18	0.7
4	1.46	0.68	0.74
5	1.69	1.08	0.67
6	1.4	1.17	0.73/ 1.10
7	1.68	0.67	0.65
8	2.36	1.18	0.68
9	1.65	0.68	0.67
10	1.16	1.10	0.72

Table 1. Measurements of Pilasters 1-10

2.1 Discussion on the architectural references

This chapter will discuss some architectural elements that were only briefly mentioned in the previous section. This discussion focuses mainly on comparative studies. The selected elements of the church are the pilasters and the roofing.

2.1.1 Pilasters

The function of the ten ashlar pilasters erected along the walls of the church is puzzling. Their rough appearance suggests a practical function rather than an aesthetic. However, they have presumably been decorated in some way, perhaps with stucco. The most reasonable explanation for these pilasters is their role as supports for the roof. This type of pilaster-system is *not* seen in other churches of the west coast of Asia Minor. Could it therefore be a local phenomenon? The use of arcades, supported by similar pilasters along the walls is nevertheless a common feature of the public baths in Asia Minor during Roman times. Their function was to support barrel-vaults, spanning across the rooms. Normally, barrel-vaults seem to have been preferred in the ubiquitous Roman baths. Therefore, there are examples preserved to compare with, for example the Agora Bath at Side in Pamphylia (*Fig. 11*).



Fig. 11. Blind arcades supported by ashlar pilasters in the Agora Bath at Side in Pamphylia.

The pilasters in the church at Labraunda could have carried similar arcades to those of the Roman baths at Side. But, as earlier mentioned, they were built during the church phase, and this excludes the possibility that they originally belonged to the Roman bath. The use of pilasters in the church of Labraunda may have been influenced by the baths, but could their function have remained the same? Otherwise one could assume, in this narrow church without inner freestanding supports, that the pilasters and blind arcades could have given the room a visual effect of being wider. Perhaps, in creating the optic impression of a wider room, they served as a passage to fictional aisles and, at the same time, buttresses to the walls and support for the roof, which in this case would not be a barrel-vault.

Another possible explanation is the influence from the Syrian use of similar pilasters added directly to the walls in churches, already in the early 4th century. Usually, transverse arches of *voussoirs* sprang from the pilasters and divided the room into bays. At the church of Iulianus in Syria the span between these arches is 7.3 m.¹⁵ The arches were used to carry wooden truss roofs. In Anatolia a preserved example of the Syrian type of the transversal arch-system is seen at the late 5th century East Church at Alahan Monastir (*Fig. 12*). The spans of these arches are narrower than those recorded in the church at Iulianus in Syria. At Alahan Monastir in Cilicia the width is *ca.* 5 m¹⁶, approximately 1.3 m shorter than the span at the church at Iulianus in Syria recorded by Howard C. Butler. The transversal arches at Alahan Monastir were, however, carried by engaged columns instead of ashlar pilasters along the walls of the nave. The East Church at Alahan Monastir was according to Richard Mainstone roofed with timber.¹⁷ The *voussoirs* are *ca.* 1 m in width, which is similar to the width of the larger pilasters of the church in Labraunda (i.e. the two central ones and the four in the corners of the church; see *Pl. 4*). Thus it is possible that this system was used in the church of Labraunda too. However, no *voussoirs* have been found that could belong to transverse arches.

¹⁵ Butler 1929, 16 and 18.

¹⁶ See Krautheimer 1986, fig. 200.

¹⁷ Mainstone 1988, 159.



Fig. 12. Transversal arches of the East Church at Alahan Monastir in Cilicia, late 5th century.

2.1.2 Roofing

The nave of the church at Labraunda measures 10 m in width, whereas the distance between the pilasters is approximately 8 m. This span was certainly roofed, but how was it constructed? We know of several stone-vaulted churches built in the Early Byzantine period, though it has been stated by Richard Krautheimer that vaulting was not chosen because of a lack of timber.¹⁸ Krautheimer refers to a request written by St. Gregory of Nyssa in 380 A.D. to the bishop of Iconium (Konya). The bishop of Iconium requested workmen skilled in vaulting in stone. According to St. Gregory the area around Nyssa did not provide enough timber for the roof so they were therefore forced to vault one of their chapels in stone.¹⁹ These workmen would also build the vault without centering, the temporary supports used during the construction. This further indicates a shortage of timber since the supports for the constructed vault were usually built of wood.²⁰

¹⁸ Krautheimer 1986, 135.

¹⁹ Krautheimer 1986, 135.

²⁰ Mainstone 1988, 172.

There is no reason to believe that the region surrounding Labraunda would lack material for roof timbers. Labraunda is even mentioned by Herodotus as a holy grove of plane trees.²¹ Situated approximately 600 m above the plain of the ancient city of Mylasa, the area probably had as abundant vegetation then as it has today. However, excavations confirm that brick vaulting was used in Labraunda during Byzantine times. During the excavation in the Oikoi²², a building situated on the temple terrace, the upper part of a cupola made of brick was found in the south room of the edifice (*Fig. 13*).²³ The excavation also showed that in the Byzantine period, four piers were added to the corners of this square room to support the cupola.²⁴ This cupola measured *ca.* 5 m in diameter, a large span that can easily be compared to the large churches of Constantinople. For example, the 10th-century dome of the Myrelaion in Constantinople measures *ca.* 3.3 m in diameter.²⁵ Prof. Erik Sjöqvist, who visited the excavation, noticed that the bricks in the cupola were placed in a spiral-pattern²⁶, a common construction technique used to build cupolas without a centering.



Fig. 13. Byzantine brick cupola found in the Oikoi.

Tiles of terracotta from a vault were also found in the apse of the church (Room 4b) and inside the Roman hypocaust (Room 9).²⁷ This suggests that a vault or a half-dome of brick covered the apse and also the previous Roman hypocaust during the Byzantine period.²⁸ The

²¹ (...) μέγα τε καὶ ἅγιον ἄλσος πλατανίστων, Herodotus 5.1.19.

²² An edifice that was serving as a treasury during pagan times. It was erected in the reign of Idrieus (351-344 B.C.); see Hellström 1987a, 32.

²³ Dahlén 1951-1953, 42.

²⁴ Westholm 1963, 92.

²⁵ See pl. 6 in Striker 1981.

²⁶ Dahlén 1951-1953, 42.

²⁷ Dahlén 1953b, 121, 186.

²⁸ Half-domes are a common feature of the Byzantine apse, due to its acoustical function, projecting the sound of the chanting of the priests, according to Ousterhout 1999, 13.

half-dome of the apse could not be earlier than the 4th century since there were no such vaults made entirely of brick before that century.²⁹ The argument put forth by R. Krautheimer, that brick and concrete vaults and domes were only constructed because of a shortage of wood, is therefore not applicable to the case of Byzantine Labraunda. The question one must ask is not just why, but also how there can be constructions of brick vaults and cupolas at Labraunda during this time. Following Krautheimer's argumentation, the main problem lies in the access to building materials. How did new brick reach Labraunda? Or *were* the bricks *spolia* from previous Roman buildings? We know that during the Middle and Late Byzantine periods, the reuse of brick and stone was frequent. Older buildings with brick façades (*opus testaceum* or *opus latericium*) were dismantled and gave a huge quantity of new building materials.³⁰ The 13th-century churches of Latmos³¹ were built entirely of *spolia* from ancient Herakleia.³² If the bricks used during Labraunda's Byzantine period were *spolia*, from which building or buildings were they taken? As earlier mentioned, most of the buildings at Labraunda are built of gneiss ashlars. The terracotta bricks that *have* been found are from the *pilae* and from small arches in the baths. The most common construction technique of the Roman baths in Caria and in neighbouring regions is also ashlar.³³ However, the use of bricks in the *pilae* of the baths of Labraunda offers the possibility of more brick buildings within the area.³⁴ Since there are no recorded finds of stamped bricks in Labraunda of the Roman or Byzantine periods, it is not possible at the present, to classify the bricks found in the cupola of the Oikoi as *spolia*. Therefore we cannot yet dismiss the possibility that bricks were transported to Labraunda for the purpose of vaulting the church and the Oikoi in post-Roman times. Though, due to the great expense of the materials, this does not seem as likely as the *spolia*-theory.

Regarding the roof of the nave, there are no excavated finds that can give evidence for either a vault or a wooden roof, neither roofing tiles nor *voussoirs*. It is, nevertheless, most likely that this major part of the church has been covered by a roof of timber due to the simplicity of this construction and the quantity of building materials within the area.

²⁹ Lassus 1967, 71.

³⁰ Ousterhout 1999, 140.

³¹ The mountain ridge that crosses Caria in which also Labraunda is situated.

³² Ousterhout 1999, 177.

³³ Brick constructions are highly unusual in Caria and Lycia. It derives mainly from the Hellenistic masonry technique, though mortared rubble (*opus caementicium*) is occasionally used; see Yegül 1995, 258.

³⁴ The west wall of the *frigidarium* of the great baths in Carian Tralles has a preserved piece of a brick vault, which shows the presence of the technique within the region of Labraunda; Yegül 1995, 258.

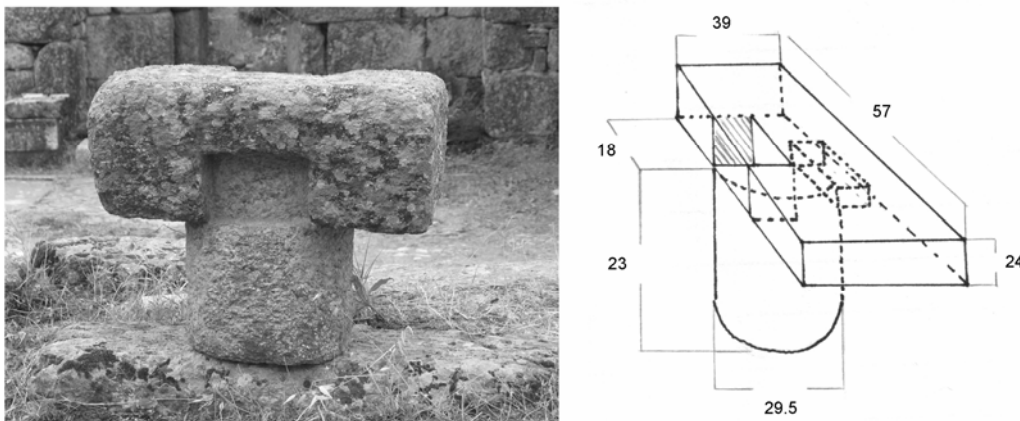


Fig. 14. Gneiss capital found west of the church in 1950. Measurements are in cm.

During the excavation of 1950 a capital of gneiss was found immediately to the west of the church (*Fig. 14*). The capital is rectangular in shape, provided with deep rectangular holes cut into both sides.³⁵ The hole on one side is somewhat larger than that on the other. The larger is 12.5 cm deep, while the smaller measures 7 cm in depth and is 17.5 cm wide. Two identical capitals were found in the nave (Room 4) of the church in 1953 (one seen upside down in *Fig. 17*).³⁶ As there are no decorative elements in these pieces, the use of the capitals must have been purely functional. They may have been used as consoles for wooden tie-beams of the roof. Since there are cuttings on both sides of the capitals, there might be one aimed for the end of the wooden beam over the nave and one cutting for a timber bonding with the top course of the wall. Another option is that the cuttings have been used to carry wooden beams in both directions, possibly providing a second building of the same height as the nave with a roof, perhaps the edifice to the south. Since all capitals, save one, were found in the nave, it shows that this part of the church was indeed covered by a roof-truss of timber.

Empirical studies confirm that a wooden roof in the Early Byzantine period could cross a larger span than 10 m, which is the width of the nave at Labraunda. The large Episcopal Church at Aphrodisias in Caria was a wooden roofed basilica, divided into three aisles (see *Pl. 10*).³⁷ The span between the preserved colonnades of the nave measures approximately 19.5 m. With a width of the nave that is twice the size of the church at Labraunda, the possibility for a wooden roof at Labraunda cannot be dismissed. Richard Mainstone argues that in the 6th century a truss roof could actually cross a span of 30 m, though probably with considerable difficulties.³⁸

³⁵ Dahlén 1950, 29.

³⁶ Dahlén 1953a, 142f.

³⁷ Cormack 1990, 76.

³⁸ Mainstone 1988, 160.

3. DISCUSSION ON THE ARCHITECTURE

The church of Labraunda shows a remarkable fusion of architectural elements, which gives it an astonishingly independent plan, compared to other churches on the west coast of Asia Minor. What is it then, that makes this church so interesting? The west part of the church lacks the typical narthex and *exonarthex*. Instead of a long perpendicular space in front of the nave and the aisles, which a narthex provides, the church has been divided into three square rooms, all of them communicating with the nave. The entrance gives access to a narrow vestibule (Room 1), flanked on either side by two slightly smaller rooms. These flanking rooms (Room 2 and Room 5) are not entered from the vestibule, but from the nave.

Proceeding to the central area of the edifice, one of the most interesting aspects is the lack of aisles. There are no traces of any inner freestanding supports, columns or piers. However, the absence of colonnades provides plenty of space for worshippers in this narrow room. Instead of freestanding supports, there are massive ashlar pilasters along the south and the north walls. These pilasters divide the nave into four bays. Another interesting characteristic is the absence of a *transept*, giving the nave a very simple rectangular plan.

The *sanctuary* of the church is *not* kept to merely a projecting apse, but has rather a tripartite area containing a semicircular apse enclosed by a straight east wall and flanked by two *pastophoria* (Rooms 4a and 4c.) The side chambers, *diaconicon* and *prothesis* are entered from the nave and they have no direct access to the apse.

The great variation of architectural features combined in the plan of the church of Labraunda, can perhaps be connected to Caria's geographical position. Caria was a very complex religious area with several different liturgies during the Early Byzantine period. The location of Caria made it susceptible to influences from the Latin west³⁹ and the imperial city of Constantinople, as well as from eastern Anatolia and Syria. In order to reconstruct the liturgy and the religious activity during the Christian period in Labraunda, we must first investigate the origin of this architecture.

3.1 Origins of and influences on the plan

The church of Labraunda has an unusual plan, which can be compared to a few examples on the west coast of Asia Minor. The tripartite sanctuary and the apse closed by the straight east wall speak of an architectural language far removed from the basilicas of the western Mediterranean, or of the polygonal apse-façades of Constantinople. The absence of aisles,

³⁹ Greece was a part of the Latin west under the supervision of the Pope of Rome until the reign of Leo III (717-741 A.D.); see Mathews 1971, 120.

transept and the construction of mainly ashlar blocks and heavy pilasters supporting the roof instead of arcades or architraves carried by columns refer rather to the churches of east Anatolia and Syria.⁴⁰ An illustrating example is the 4th-century church at Dama in Leja, in southern Syria (*Pl. 5*). This rather short edifice is divided into three bays, one less than the church of Labraunda. The bays are framed by ashlar pilasters anchored to the walls of the nave. The pilasters are connected across the nave through transverse arches, which support a flat roof of basalt slabs. The *pastophoria* are both built in two storeys. The church is remarkably similar in plan to the temple of Tyche at iṣ-Ṣanamên in Syria.⁴¹ Krautheimer argues that the first churches in Asia Minor did not have aisles and, provided with an apse, they should probably be assigned a date not before 400 A.D.⁴²

The unusual narthex of the Labraunda church is another interesting aspect, which concerns the origin of the plan. The narrow vestibule with two rooms on either side show architectural ideas radiating from the east, rather than from the west. Occasionally, in a plan of the secular Roman basilica, there appear to be two rooms on either side of a semicircular apse (*Pl. 6*). These rooms often contained a staircase leading to a gallery above the aisles. In Syrian churches, these rooms have instead been built in several storeys so they become small towers, projecting from the roof.⁴³ However, these Syrian towers, when it comes to the plan, belong to the local temple architecture of the Hellenistic and early Imperial era, rather than to the Roman basilicas of the Latin West and North Africa. These features also appear in the Syrian civic basilica. A good example of a temple with the typical Syrian features mentioned is the first-century edifice at Slim, ancient Selaema (*Pl. 7*).

Chambers on either side of the *pronaos* appear also in domestic Syrian architecture. This element has surely created the tripartite entrance often seen in early Christian churches of Syria. In contrast to the continuous transverse narthex seen in other parts of the Byzantine Empire, these two flanking rooms could be built in several storeys, already in pagan times. Cyril Mango states that Syrian architecture not only was little affected by Constantinople, but that it was itself a radiating force extending northwest to eastern Asia Minor.⁴⁴ There is strong evidence showing that these Syrian towers became a popular element in the entire Mediterranean area during the 4th century.

⁴⁰The usual building material of this architecture is the local stone, cut into large ashlar; small stones or rubble masonry are rarely used. These walls in Anatolia often encase a core of rubble masonry; in Syria they comprise the full thickness of the wall; Krautheimer 1986, 135.

⁴¹ A temple erected in 191 A.D.; see Butler 1929, 14, 21.

⁴² Krautheimer 1986, 141.

⁴³ Lassus 1967, 40.

⁴⁴ Mango 1978, 84.



Fig. 15. 5th-century scene from the wooden doors of S. Sabina showing a twin-tower façade, Rome.



Fig. 16. Late 4th-century mosaic from Tunisia, featuring a country villa with the typical Syrian twin-tower façade connected with a gallery.

The Syrian use of towers on either side of the entrance was obviously becoming a trend and it has been suggested to have inspired even the Imperial palace of Constantinople.⁴⁵ This is however yet to be proven. A certain evidence for the adoption of the Syrian twin-tower façade around the empire is shown on the wooden doors of S. Sabina in Rome (*Fig. 15*). These are dated to the middle of the 5th century.⁴⁶ Also there is a floor mosaic figuring a prosperous 4th-century country villa of the Tabarka region in northern Tunisia (*Fig. 16*). It depicts a large building flanked by the typical Syrian towers and in front of these there are several rooms covered with cupolas.⁴⁷ These obvious Syrian architectural features spread over the empire and it is likely that they may also have been used on church façades, as was the case in Syria.

With this close similarity in plan it is quite possible that also the church of Labraunda had towers flanking the west entrance. The roof of Room 1 would thus have been flat and support a gallery or a balustrade with a low barrier of colonettes (*Pl. 8*). To this space staircases gave

⁴⁵ Krautheimer 1986, 156.

⁴⁶ Magnusson 2001, 172.

⁴⁷ Ennaifer 1996, 168f and 290 (fig. 122).

access from the towers above Rooms 2 and 5.⁴⁸ This is a common feature in the Syrian church plan.⁴⁹ In the church of Marata, in northeast Syria, the aisles terminate in a triple-arched narthex, with two square towers corresponding with the aisles (*Pl. 9*).⁵⁰ The close similarity to the church at Labraunda is not better illustrated than through the plan of the Marata church.

3.1.1 Building materials and construction techniques

There are three different construction techniques used in the walls of the church. The first is the construction technique used in the churches of east Anatolia during the Early Byzantine period. It consists of heavy ashlar blocks in contrast to the mortared rubble masonry with brick bands used during the Middle Byzantine period. R. Krautheimer argues that the ashlar technique was a revival from Roman times, which seems to be linked with neighbouring Syria.⁵¹ At the church of Labraunda we can see three different wall-construction techniques being used. The oldest wall, the southwest wall of the church, is the remaining part of the Roman East Bath. This wall consists of thick courses of gneiss ashlars (*Fig. 17*).



Fig. 17. The south wall of the church at Labraunda, originally belonging to the Roman East Bath. Notice the ashlar Pilasters 7 and 8 on either side of the entrance to Room 6.

⁴⁸ An exterior staircase might possibly have been used to reach the balustrade from Room 3.

⁴⁹ This balustrade was probably used for calling people to prayer, similar to the Muslim use of minarets; see Mango 1978, 80.

⁵⁰ Butler 1929, 79f.

⁵¹ Krautheimer 1986, 108.

The blocks are divided into headers and stretchers, measuring between 0.85-1.25 m in length and about 0.55-0.6 m in height. The short sides of the headers are *ca.* 0.15-0.25 m in length. F. Yegül suggests that the more regularly laid ashlar walls were the common scheme in Carian bath establishments, except for more prominent parts such as the exterior. It is a technique based on Hellenistic masonry.⁵²

The second technique used in the church is seen in the north wall. This wall is constructed out of gneiss ashlars. These ashlars are most likely reused blocks, originally of the same size as the ashlars of the preserved Roman wall. However, the blocks are re-cut in two, so that these blocks are between 0.55-0.8 m in length and *ca.* 0.4-0.55 m high. The blocks are piled in courses and joined together with mortar, instead of with headers. The technique is similar to the Roman *opus caementicium*, which had two separated sections of stone courses with an empty space in between that was filled with rubble and mortar. The building technique is regular throughout the whole wall section. The central mortar core is *ca.* 0.35 m thick. This local example of *opus caementicium* is occasionally employed in smaller baths. It shows though, that the wall was built in the 4th or 5th centuries, since the Roman building technique is still used. This wall section, however, belongs most likely to the Byzantine period due to the fact that the pilasters are anchored in all walls but not to the south Roman one.



Fig. 18. Section of rubble wall (the north wall of the *diaconicon*) in the Episcopal Church at Aphrodisias.

⁵² Yegül 1995, 258.

The third example of construction technique is the mortared rubble walls of the *pastophoria* and of the southeast wall (see *Fig. 4*). Since these walls represent such a large part of the church it is most likely that they belong to the first church phase. This is a typical Byzantine building technique, which is difficult to date. Rubble walls built in a similar technique are seen in the *pastophoria* of the 5th-century Episcopal Church at Aphrodisias (*Fig. 18*). There is also a second type of mortared rubble wall seen in the west wall of Room 5 (*Fig. 19*). This section is a later restoration of the church's original wall, which is obvious due to the poorly made execution. The rebuilding has not been dated.

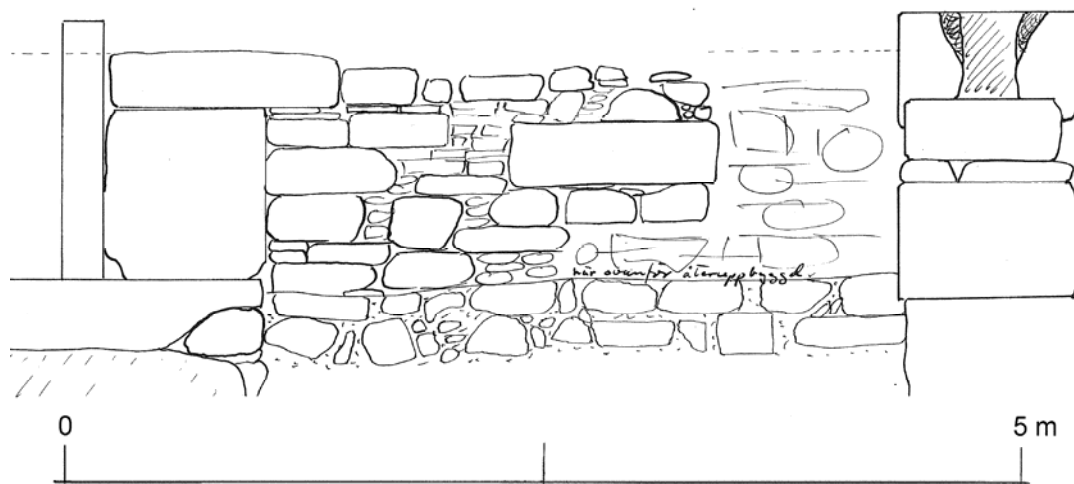


Fig. 19. Elevation of rubble wall (west wall of Room 5).

3.1.2 The tripartite sanctuary

As was previously mentioned the church at Labraunda terminates in an eastern part, which is divided into three sections, none of which projecting beyond the straight east wall. The *pastophoria* consist of two square rooms on either side of a semicircular apse. It is an interesting phenomenon. We know from later Byzantine liturgy that the north room was called *prothesis* and was used during the Eucharist *synaxis* and the south room was called *diaconicon* and functioned as a sacristy. However, these side chambers remain liturgically inexplicable since we cannot certainly show this function prior to the sixth century.⁵³ Krautheimer says: “The tripartite sanctuaries were customary in Syrian temples still in the third century and church buildings may have followed such models”.⁵⁴ As was shown in the

⁵³ Lassus 1967, 41.

⁵⁴ Krautheimer 1986, 142.

previous chapter, H.C. Butler has argued that the architecture of the Syrian churches derived from Syrian temple architecture. Krautheimer suggests that in the 5th century this architectural language was radiating towards eastern Anatolia. I believe that this happened already during the 4th century, as I will try to show with the church at Labraunda.

A tripartite sanctuary may be seen in the great churches at Antalya (Attaleia) and at Side and Perge in Pamphylia. The large church at Antalya is from the sixth century while the large basilica next to the Episcopal palace at Side could not be dated later than the 4th century.⁵⁵ In the 6th century the use of *pastophoria* had evidently spread across the Mediterranean and may be seen in S. Apollinare in Classe at Ravenna, consecrated by bishop Maximianus in 549.⁵⁶ By the sixth century this scheme is seen also in Egyptian Christian architecture. The monastery of St. Catherine, built by the emperor Justinian I and consecrated in 565, employs a tripartite sanctuary.⁵⁷ The monastery is mentioned by Procopius as the holy place where Moses received the laws of God.⁵⁸

After the 6th century this originally Syrian architecture was reformulated by Constantinopolitan architects. The *pastophoria* were after this period rarely built as square rooms but rather as small semicircular apses.⁵⁹ An example of this is the Myrelaion at Constantinople, built about 920.⁶⁰

3.1.2 Liturgical reconstruction through architecture

Liturgy and architecture are very closely linked in the Byzantine church. Initially, in order to understand the architectural planning of the church, one has to study the liturgy in order to solve the puzzle. In the case of the church at Labraunda we must, however, undertake a reverse procedure, since the architecture is preserved but no sources mentioning the liturgical ceremonies. The early Christian liturgy contained many processional performances often starting at the atrium. These processions were a vital part of the Mass at least up to the 8th century.⁶¹ It has, however, not been possible to identify an atrium at Labraunda. Architectural elements like aisles and narthex were all symbolical references to sacred phenomena, the temple of Jerusalem for example. The way the liturgy shapes the architecture may also testify to the hierarchical systems used in the Mass, for instance, segregation between differently

⁵⁵ Krautheimer 1986, 108.

⁵⁶ Mango 1978, 79.

⁵⁷ Lowden 1997, 74f.

⁵⁸ Procopius, *Peri Ktismaton*, 5.8.4-6.

⁵⁹ Ousterhout 1999, 13.

⁶⁰ Striker 1981, 33.

⁶¹ Ousterhout 1999, 9.

ranked colleagues of clergy or citizens.⁶² In some churches, for example, there were barriers, so called closure slabs, placed between the nave and the aisles, separating the room into sections. Focusing on the nave, the church at Labraunda has only one central aisle. Thus one must therefore abandon the idea of a hierarchical segregation between the worshippers in Labraunda. The conclusion is that the nave of the church at Labraunda does not give any evidence of liturgical complexity, or of any opposition between social groups. One might possibly imagine that the bays of the church may have offered such hierarchical markers, though that theory has not, to my knowledge, been proposed in any scholarly text.



Fig. 20. A preserved *synthronon* in an Early Byzantine basilica at Side in Pamphylia.



Fig. 21. A possible ossuary in the lower part of the picture. The marking of a *synthronon* to the right of the ossuary, is marked with a white line.

Liturgical elements as *ambo*, *solea*, altar or chancel barriers have not been found in Labraunda, which complicates the reconstruction of the liturgy. There is, however, as pointed out in chapter 2, a semicircular marking in the paved floor, running parallel to the south apse-wall, which is possibly a mark made by a *synthronon* (see Fig. 21). Thomas Mathews argues that in most examples where there is a *synthronon* it precludes an altar in the apse, since it was exclusively a place for the clergy (Fig. 20).⁶³ Archaeological excavations of churches in Constantinople show that the altar in these cases stood a few metres in front of the apse.⁶⁴

⁶² Mathews 1971, 117.

⁶³ Mathews 1971, 109.

⁶⁴ The foundations of the altars in front of the apse were found during excavations in the churches of St. John Studius, Chalkoprateia and Hagia Euphemia in Constantinople; see Mathews 1971, 109.

However, there are examples in Constantinople where, in the larger churches, reliquaries have been situated directly on the chord of the apse, presumably with an altar or *ciborium* on top;⁶⁵ cf. the 5th-century churches of St. John Studius and Chalkoprateia.⁶⁶ The find of an ossuary in the central space of the apse at Labraunda is therefore probably a reliquary due to its prominent location (*Fig. 21*). This should also have been the natural place for a chancel or *ciborium*, even though there possibly was a *synthronon* in the apse. Nonetheless, the apse is rather narrow, which might have caused a lack of space, if both a *synthronon* and an altar were located there.

As argued above, the architecture follows a Syrian pattern. Shouldn't this mean that also the liturgy would possibly connect to that of the Syrian church? The liturgy used at Labraunda, in eastern Anatolia and in Syria is probably much the same, considering the tripartite sanctuary. The *pastophoria* are rather large, compared to the total area of the church. This indicates that the activity taking place within these rooms was of a relatively considerable importance. The Eucharist was probably prepared in the *prothesis*, following Syrian praxis. Thus, the *pastophoria* certainly follow the Syrian plan and so did the use of liturgy. In Syria, the altar is often placed in the apse, not at the crossing or under the central cupola, as in churches of Constantinopolitan type, such as the Holy Apostles in Constantinople or St. John in Ephesus.⁶⁷ This tradition is difficult to confirm at Labraunda since, on the one hand, the altar should be placed above the ossuary, and on the other, the apse is narrow which makes it hard to fit in an altar. Another typical feature of the Syrian liturgical furniture is the location of the *bema* in the centre of the nave.⁶⁸ In Labraunda there is no preserved evidence that indicates the presence of a *bema*, *ambo* or altar in that place.

⁶⁵ Mathews 1971, 27.

⁶⁶ Mathews 1971, 27.

⁶⁷ Procopius, *Peri Ktismaton*, 1.4.11-16.

⁶⁸ The *bema* was supposed to symbolize Jerusalem or the temple at Jerusalem. Its main purpose was to receive the book and the cross, both of which had initially, during the Mass, been kept at the altar; cf. Wilkinson 2002, 138.

3.2 Comparative architecture in Early Byzantine Caria

To complete this architectural analysis the church at Labraunda must be compared to other churches in the region of Caria. Is there a specific pattern in Carian church architecture in the Early Byzantine period, and can one derive a chronology for the church at Labraunda by studying other churches within the region? This study will focus on three large Carian cities: Iasos, Herakleia and Aphrodisias. Iasos and Herakleia are situated rather close to Labraunda while Aphrodisias is chosen due to its role as the religious capital of the province.

3.2.1 Aphrodisias

Aphrodisias was the Christian capital of Caria during the Byzantine period. The city had its own bishop and a large Episcopal church built inside the old pagan temple dedicated to Aphrodite, the goddess after which the city had its name.⁶⁹ The city's name was by time rejected due to its pagan association, and after the seventh century the town Aphrodisias was called Stauropolis ("the city of the cross").⁷⁰ The temple built in the Ionian order was remodelled and on that occasion the east and west parts of the temple were removed and replaced with a tripartite sanctuary in the east and a narthex and atrium in the west (*Pls. 10-11*). The columns of this *peripteros* were reused as colonnades in the nave of the church.⁷¹ Thus, the previous temple was divided into three aisles. The consecration of the church is dated through preserved epigraphic material, thought to derive from the second part of the 5th century. Charlotte Roueché has suggested that the church was consecrated at the time of the visit of Emperor Theodosius II to Aphrodisias in 443.⁷² The capacity of large building schemes can be strengthened through the increasing prosperity shown in the region at this time.⁷³ In the 11th century the church was abandoned due to an earthquake and a 12th century writer refers to the building as a place "where only the owls now sing".⁷⁴

The church has a large square atrium in the west, and it suggests that large processions were a part of the liturgy at Aphrodisias, which is not unlikely since it was a major city. The atrium gives access to the church through an *exonarthex* and a narthex. The *exonarthex* is

⁶⁹ The presence of a bishop at Aphrodisias may be traced back to 325; Roueché 1989, 154.

⁷⁰ Roueché 1989, 152.

⁷¹ Cormack 1990, 76

⁷² Roueché 1989, 153.

⁷³ Roueché 1989, 154.

⁷⁴ Statement written by George Tornikes, the bishop of St. John in Ephesos (1155-1156); see Cormack 1990, 84.

probably a remodelling of the atrium colonnade, often seen in post-Iconoclastic architecture.⁷⁵ In the south and north both narthex and *exonarthex* terminate in semicircular apses. The nave is divided into three aisles by 19 x 2 columns. The sanctuary is tripartite and the apse is closed within the straight east wall (*Fig. 22*). In front of the apse an altar-chancel projects into the nave. The *pastophoria* are square in plan. The empty spaces between the southeast curve of the apse and the east wall have been used for two inner *pastophoria*, enclosed in rhombic shapes. One may suggest that these inner rooms probably had a more important significance than the outer rooms.



Fig. 22. The straight east wall of the Episcopal Church at Aphrodisias.

3.2.2 Herakleia

The Latmos region around ancient Herakleia was a rich monastic area. Though the majority of the monasteries are Middle Byzantine, there are a few early churches situated in and around the city of Herakleia.⁷⁶ The city was represented at the Third Ecumenical Council at Ephesus in 431. Also Herakleia seems to have been an Episcopal town, since a bishop of Herakleia is mentioned in the hagiography of the *vita* of Paulus.⁷⁷ Since there are several churches at the site I have selected a church of typical architectural character situated in the centre of

⁷⁵ A common phenomenon in medieval architecture. Preserved buildings showing similar modulations are St. John in Ephesus and Hagia Sophia in Istanbul.

⁷⁶ Peschlow 1996, 58.

⁷⁷ Peschlow 1996, 59.

Herakleia (*Pl. 12*). Urs Peschlow dates it to the 5th or 6th centuries.⁷⁸ The church measures *ca.* 13 m in width and *ca.* 30 m in length, including the *exonarthex*. The plan of the church differs to a great extent from the church at Labraunda. It lacks the Syrian elements with the tripartite sanctuary and the broken narthex. Furthermore, the apse projects beyond the east wall, which is common in the Latin west and in Constantinople. In plan it rather resembles the 5th-century churches of Constantinople, for example the St. John Studius church, built *ca.* 450 (see *Pl. 17*).⁷⁹ However, the church at Herakleia does not have the typical Constantinopolitan polygonal apse, but rather a semicircular one. Furthermore, the church has an additional *exonarthex* similar to the church at Aphrodisias. The nave is divided into three aisles containing 6 x 2 columns. The aisles must have played a prominent role in the Mass since both have their own entrances from the narthex, likely to have been used during processions. The church has no *pastophoria*, which suggests a difference from the church at Labraunda in the use of liturgy.

3.2.3 Iasos

The ancient city of Iasos was situated on the east coast of the Aegean Sea, not far from Labraunda. Several churches are located at the site. Both Early and Middle Byzantine churches are represented. Episcopal lists show the presence of participants from Iasos at the Ecumenical Councils of Ephesus (431), Chalcedon (451), Nicaea II (787), and Constantinople (879).⁸⁰ Of all the churches at Iasos there is one in particular, which is empirically interesting for the study of the church at Labraunda. The church is extra-mural and is situated close to the Roman mausoleum today known as the Balık Pazarı. One sketch plan of the church was drawn in 1974 (*Pl. 13*). The site is unexcavated but architecturally analysed. It is according to U. Serin the largest church of Iasos, perhaps the Episcopal Church.⁸¹

The church has a narthex that appears to be broken, meaning divided into several rooms similar to the church in Labraunda. The north room of the narthex seems to correspond to the north aisle while the south room is entered from the outside. The interior is divided into three aisles through two colonnades. The sanctuary is tripartite; the *pastophoria* seem to be rectangular in plan and the apse semicircular in the interior but terminating in the straight east wall. The apse does not communicate with the *pastophoria*. The edifice lacks a transept, also comparable to the situation in Labraunda. The masonry is a coarse rubble including fragments

⁷⁸ Peschlow 1996, 59.

⁷⁹ Mango 1978, 38.

⁸⁰ Serin 2004, 12.

⁸¹ Serin 2004, 199.

of brick just like in the Labraunda church. Since this church is not excavated Serin chooses not to date it more precisely. She empirically refers to churches in Syria, Cilicia and Pamphylia, which with similar architectural features are dated to the 4th or 5th centuries.

3.2.4 A comparative study of the tripartite sanctuary

How large were the rooms of the tripartite sanctuary at Labraunda compared to churches with the same arrangement? Were the measurements of the rooms based on a specific ratio? The measurements of the selected churches drawn on (*Pl. 14*) have been presented in the following table:

Church:	<i>Diaconicon</i>	<i>Prothesis</i>	Difference in m and percent between the <i>diaconicon</i> and <i>prothesis</i>	Apse	Difference in m and percent between length and width of apse
Labraunda	3.31x2.4m	3.28x2.49m	Dif. <i>ca.</i> 0.3m & 0.9m: \approx 0%	3.38x3.9m	Dif. <i>ca.</i> 0.2m: \approx 0%
Dama in Leja	2x3.7m	2x3.7m	Dif. <i>ca.</i> 0m	3.87x4m	Dif. <i>ca.</i> 0.13m: \approx 0%
Marata	4.5x3.7m	4.5x3.7m	Dif. <i>ca.</i> 0m	6.2x4.1m	Dif. <i>ca.</i> 2.1m: 33%
Iasos (Extra-mural)	approximately 9.4x4m	9.4x4m	Dif. <i>ca.</i> 0m	7x4m	Dif. <i>ca.</i> 3m: 43%
Hierapolis (Basilica with piers)	10x4.5m	6x4m	Dif. 4m in width and 0.5m in length: 40% and 11%	10x4.7m	Dif. <i>ca.</i> 5.3m: 53%
Perge ⁸² (Basilica A)	4.5x4.5m	4.5x4.5m	Dif. <i>ca.</i> 0m	10.7x5m	Dif. <i>ca.</i> 5.7m: 53%
Aphrodisias	5x5.5m	5x5.5m	Dif. <i>ca.</i> 0m	10x6m	Dif. <i>ca.</i> 4m: 40%
St. Mary in Ephesus	6x6m	5.5x6m	Dif. <i>ca.</i> 0.5m: 8% in width	10x6m	Dif. <i>ca.</i> 4m: 40%

Table 2. Measurements of the three rooms in the sanctuary, *diaconicon*, *prothesis* and apse, given as width x length. All measurements are taken from published plans except Labraunda.

When comparing the measurements of the selected sanctuaries, some patterns may be seen, for example only two of the eight churches studied (Hierapolis and St. Mary in Ephesus; *Pl. 14:5* and 8) show a difference in size between the *diaconicon* and the *prothesis*. Furthermore,

⁸² Because of the large size of the apse, two smaller rooms have been formed between the apse walls. This feature is also seen in Perge (Basilica A). I do not, however, include these rooms in this comparative study.

only one church, Basilica A at Perge, has perfectly square *diaconicon* and *prothesis* (*Pl. 14:6*). This shows that the most common scheme, though not as a rule, was to create symmetrical *pastophoria*, though these rooms were rarely perfectly square.

The proportions of the apse seem to have been more static, considering the difference in percent between its width and depth. Only the churches at Labraunda and at Dama in Leja (*Pl. 14:2*) show an apse with a depth that is equal to its width. As seen above, the most common scheme is a difference in the ratio between the length and the width of 30-50%. However, there seems to be a correspondence in proportion between the depths of the apses of the churches compared. The church of St. Mary in Ephesus, which is *ca.* 125 m long and was one of Christianity's largest and most significant churches, home of the Ecumenical Council of 431, has a apse that is only 2 m deeper than the apse of the 25-metre-long church at Labraunda. The proportions of the apse and the *diaconicon* are similar at the largest churches compared, St. Mary at Ephesus (*Pl. 14:8*) and the Episcopal basilica at Aphrodisias (*Pl. 14:7*).

The width of the apse may on the other hand differ, but can through these measurements be roughly put into three groups: one with a width of *ca.* 3.5-4 m, one measuring about 6.2-7 m and one with an apse width of about 10 m. These groups may possibly be linked to an approximate division of 12, 24 and 36 Roman feet (of 29.5 cm giving the ideal measurements of 3.54, 7.08 and 10.62 m). Based on these measurements, it seems possible that there was a module followed by the Byzantine architect when building an apse of a church. Thus smaller churches with less width of the apse had a narrower, corridor-like apse-space, while the larger churches, like St. Mary in Ephesus and Basilica A at Perge, had a more open space, more suitable to contain liturgical furniture like *synthronon* and *ciborium*.

3.2.5 The Byzantine architect's scheme for the proportions of the nave

A study of the proportions of the nave and the apse-space in the church at Labraunda has resulted in the following suggestion. The scheme of proportions set out by the architect of the church has been revealed through the measurements of the spaces earlier mentioned (*Pl. 15*). The nave measures 8.1 m in width and 17.35 m in length, which is approximately a ratio of 1:2 ($\text{length}_{\text{nave}} = 2 \text{width}_{\text{nave}}$), however, with the slight difference between the width and the length of the nave of 1.15 m (*ca.* 7%). To define what the space called *nave* represents in the church at Labraunda, one should observe that the marble paving slabs are not placed up to the walls but instead they stop along a line following the outer edges of the pilasters (except for the area between Pilasters 8 and 9, see *Pls. 2* and *4*). The symbolic termination of the room is

thus represented by the line of the pilasters and not by the walls of the room, in the same way that the nave in other churches terminates in colonnades. It is important to recall that barriers of *spaces* were common features for to the attendants of the Mass in the Byzantine church. However, this special division was achieved more through mosaics and closure slabs than through the actual walls. This is evidently shown at least from the 6th century.⁸³ As Otto Demus expresses it “the architectural articulations disappear and new articulations are introduced in the mosaic surface itself”. This corresponds with the fact that all areas in the Byzantine church had a symbolic value as an allegory for a spiritual concept (see chapter 3.2.1). The importance of mosaics as symbolic markers for special division was, however, inherited from the synagogue, where the phenomenon is observed earlier, and definitely from the 4th century.⁸⁴

The relation of 1:2 between the width and the length of the nave of the church does make sense when the width of the apse is compared to that of the nave. The length of the apse is 3.9 m (*ca.* 4 m). The architect’s module is clear since the apse’s ratio stands 1:2 in proportion to the width of the nave. It gives in the following equation: $\text{length}_{\text{nave}} = 2 \text{ width}_{\text{nave}} = 4 \text{ length}_{\text{apse}}$. The proportion 1:2 is especially interesting considering that according to the Old Testament (1 Kings), this was the ratio of the so-called *Holy Place* in King Solomon’s temple at Jerusalem.⁸⁵ This space was arranged similar to the nave of the Christian church, situated in front of the place called *The House Within* described as the site where the ark was situated.⁸⁶ *The House Within* is therefore similar to the sanctuary of the Christian church. The inner room, which was *The House Within*, was an allegory for the heavens.⁸⁷ Its shape was perfectly square, with a ratio of 1:1. The room was therefore not shaped as an apse like in most churches.

The proportion of 1:2 in the nave of Early Byzantine churches is an unusual ratio, though it is seen at some churches, for example in the Agora Basilica at Iasos (*Pl. 16*), dated to the 5th or 6th century. The proportions are: $\text{length}_{\text{nave}} = 2 \text{ width}_{\text{nave}} = 4 \text{ length}_{\text{apse}}$. In the monastery church of St. John Studius in Constantinople (*Pl. 17*), the ratio of the nave is also 1:2. The apse does not, however, follow the ratio of 1:2 compared to the width of the nave. The equation for the proportions at St. John Studius is approximately: $\text{length}_{\text{nave}} = 2 \text{ width}_{\text{nave}} = 5.5 \text{ length}_{\text{apse}}$.⁸⁸ Another prototype is the proportion of the nave, which is seen at the

⁸³ Demus 1976, 46.

⁸⁴ See Wilkinson 2002, 88-113.

⁸⁵ The measurements are in cubits; see 1Kings, 6-7.

⁸⁶ See Wilkinson 2002, 23-36.

⁸⁷ The names of the rooms are taken from the Bible authorized by King James I in 1611.

⁸⁸ See Thieme 1985, 291-308.

Episcopal Church at Aphrodisias (*Pl. 10*). The scheme is approximately: $\text{length}_{\text{nave}} = 3 \text{ width}_{\text{nave}} = ca. 7 \text{ length}_{\text{apse}}$. Conclusively, this study has shown that the Byzantine architect, who planned the church at Labraunda, was working in the proportions of the units 1:2. He may have been inspired by the biblical description of King Solomon's temple at Jerusalem. Comparing this observation with other Early Byzantine churches, one can observe that the scheme of setting out the proportions in units was common, regardless of the actual size of the church.

3.3 Conclusions on comparative architecture

To begin with, the church at Labraunda is the only edifice without aisles of those compared, meaning that it lacks inner freestanding supports like columns or piers. Proceeding to the narthex area, the extra-mural church at Iasos shows the closest similarity to Labraunda in that it has a broken narthex divided into three rooms, whereas the central vestibule does not correspond to those on the sides. Furthermore, all three churches lack transepts. The sanctuaries of the selected churches at Iasos and Aphrodisias are both tripartite. The apses are in both churches semicircular and closed within a straight east wall. On either side of the apse, these churches have *pastophoria* similar to those at Labraunda. However, the Episcopal Church at Aphrodisias was provided with two additional *pastophoria*. The similarity between the *pastophoria* suggests that a common liturgy was used at Labraunda, Iasos and Aphrodisias. Also these buildings provide us with an empirical reference in dating the church at Labraunda, which should not be later than the 5th century. The selected church at Herakleia shows surprisingly more elements of Constantinopolitan design, than of a Syrian influence on the plan. Its architecture contains segregated spaces, surely indicating important parts of the liturgy and probably used during processions. The church at Labraunda shows a more humble form of architectural plan than that of Herakleia. At Labraunda no space-dividing elements have been found, such as aisles and choir closure slabs. The church at Labraunda has therefore an architectural plan that is unique; its closest similarities can be found in the extra-mural church at Iasos.

4. DESCRIPTION OF EXCAVATED FINDS

4.1 Excavation finds of 1951-1953 and 1960

The major part of the Byzantine church and the East Bath was excavated in the early fifties (1951-1953). The names of the trenches are not mentioned in the archaeological notebooks, only the names of the rooms⁸⁹ (see *Pl. 4*). Many objects were found in the different sections of the church-area. The tripartite east end of the church was, however, not fully unearthed until A. Westholm's excavation in 1960. Though Alfred Westholm mentions these rooms as *diaconicon*, apse and *prothesis*, Inge Dahlén does not.⁹⁰ However, Dahlén sometimes mentions the apse, as a location for some of the finds. A direct consequence of this is that occasionally it is hard to estimate the exact location of objects in Dahlén's notebooks. Thus, only dateable finds found between 1951- 1960 will be analysed in this first part of the chapter, since the chronological context is one of the main issues of this thesis. These dateable finds consist mainly of coins and pottery. However, some objects from the excavation of 2005 will be discussed in the latter part of this chapter.

4.1.1 Coins

Thirteen somewhat dateable coins are recorded in the archaeological notebooks of 1953. These coins were excavated in different parts of the church. Westholm describes two more coins, one of which was found in the *diaconicon* and which is chronologically important as a *terminus ante quem*. The notebooks do, however, contain several errors in the interpretations of the legends. Therefore, the correct legends are given in the text while the legends given in the notebooks are referred to in footnotes. I have given the coins the following numbers 1-13. The presentation will follow chronologically:

Bronze Coin no. 1. Diameter: 3.4 cm. Weight: not recorded. Found by the threshold between Rooms 4 and 6. It is likely to belong to the reign of Marcus Aurelius (161-180 B.C). On the obverse there is the right side profile of a man, with a beard and short curly hair. On the reverse there is a standing man, also with a beard. The man holds a bird-like figure in his right hand. To the right, is an altar. The obverse legend: ΑΛΑΒΑΝΔΩΝ.⁹¹ This legend indicates that the coin was struck at Alabanda, a neighbouring town to Labraunda (see *Fig. 1*).

⁸⁹ Room numbers given by the archaeologists.

⁹⁰ The description of this excavation is given in Westholm 1963.

⁹¹ Dahlén 1953b, 44-45.

Bronze Coin no. 2. Diameter: 2.2 cm. Weight: not recorded. The coin belongs in the reign of Maximianus (286-305) and it was found in Room 5. The only visible text is the reverse legend: CONCORD[...].⁹²

Bronze Coin no. 3. Diameter: not recorded. Weight: not recorded. A bronze coin from the reign of Galerius (305-311) was found 0.98 m from the north wall of the apse. On the obverse side there is a profile of a man, depicted from the right side. He wears a crown, and there is the following legend: GAL VAL MAXIMIANVS NOB CAES (Galerius Valerius Maximianus Nobile Caesar). The reverse legend: CONCORDIA MILITVM.⁹³

Bronze Coin. no. 4. Diameter: 2 cm and it is 0.1 cm thick. Weight: not recorded. The coin was found slightly west of the statue base in Room 4. It is from the reign of Licinius II, whose regnal years were 317-324. On the obverse there is the profile of a man, depicted from the left with following legend: DN V[...]L LICIN LICINIVS NOB (Dominus Noster Valerius Licinus Licinius Nobile).⁹⁴ On the reverse there is a naked man with a beard standing with a spear in his left hand.⁹⁵ There is also a bird and a sitting man. Legend: IOVI CONSERVATORI SMNT (Sacra moneta Nicomedia).⁹⁶

Coin no. 5. Diameter: not recorded. Weight: not recorded. The coin was found on the lower floor level of the *diaconicon* and it was from the reign of Valentinian I (364-375). This marks, according to Westholm the *terminus post quem* for the initial building period of the church.⁹⁷ This will be further discussed in chapter 4.3.

Copper Coins nrs. 6-8. Diameter: 3 cm. Weight: not recorded. The coins belong to the reign of Justinian I (527-565) and they were found in Room 2. They seem to be of the same type. On the obverse these coins show the imperial bust of Justinian, wearing a helmet. In his right hand he holds the royal apple, which is crowned with a cross. The emperor is depicted in the same manner on the reverse side of the coins. No more information is given on these coins.

⁹² Dahlén 1953b, 32. The legend can be either CONCORIAE AVGG NN or CONCORDIA MILITVM; (Mints of Cyzicus and Antioch); see Mattingly & Sydenham 1933, 290-295.


⁹³ Dahlén 1953a, 182f. The obverse legend given by Dahlén: GAL VAL MAXIMIANVS NOBCHES. The reverse legend: CONCORDIA MILITVM.


⁹⁴ Wearing a helmet; see Dahlén 1953b, 10f.


⁹⁵ Obverse legend given by Dahlén: ONV[...]L LICIN LICIVS NOB. Reverse legend: IOVICONSERVATOR SMNT.


⁹⁶ Harl 2001a, 29.

⁹⁷ Westholm 1963, 114.


 Copper Coins nrs. 9-12. Another four coins from the reign of Justinian I were found at different locations in the church. Copper Coin no. 9. Diameter: 2.75 cm. Weight: not recorded. Sketch of the reverse seen to the left. The letter “M” is the value mark of the *follis* (plural *folles*); it is the Greek numeral that designated a coin of 40 *mummiae*.⁹⁸ The letter “KYZ” shows that the coin was struck in Cyzicus (Erdek).⁹⁹


 Copper Coin no. 10. Diameter: 2.3 cm.¹⁰⁰ Weight: not recorded. The letter “K” is also a value mark and shows that the coin is worth 20 *mummiae*, or a half-*follis*.¹⁰¹ The half-*follis* is without mint-mark, since the K in this case also stands for (Κωνσταντινούπολις).¹⁰²


 Copper Coin no. 11. Diameter: 2.7 cm. Weight: not recorded. A half-*follis* from the reign of Justinian I (seen to the left) was found at the east end of the apse, just under the opening in the east wall.¹⁰³ On the obverse side there is a profile of the emperor. On the reverse side there is the text showing the number of the regnal year in which the coin was struck, the 13th year of the reign of Justinian I, which would be 539.


 Copper Coin no. 12. Diameter: 3.2 cm and it is 0.3 cm thick. Weight: not recorded. A *follis* from Justinian’s reign was found south of the centre of the apse.¹⁰⁴ On the obverse side there is the face of the emperor, on the reverse there is the legend: XXLIII indicating that the coin was minted or struck in regnal year 33 of Justinian I, 560 AD. The coin was minted in Constantinople, which the letters “CON” indicate.¹⁰⁵

Copper Coin no. 13. Diameter: not recorded. Weight: not recorded. Westholm refers to this coin found in the church and belonging to the reign of Emperor Basil II (976-1025).¹⁰⁶ This find was made in the *diaconicon* (Room 4c).

⁹⁸ Harl 2001b, 9.

⁹⁹ Harl 2001b, 16.

¹⁰⁰ Dahlén 1953a, 97-100.

¹⁰¹ Harl 2001b, 9.

¹⁰² Grierson 1982, 60.

¹⁰³ Dahlén 1953b, 40.

¹⁰⁴ Dahlén 1953b, 42-44.

¹⁰⁵ Harl 2001b, 16.

¹⁰⁶ Westholm 1963, 114 and 117.

Table 3 shows that there is a concentration of coins belonging to the sixth century A.D., more

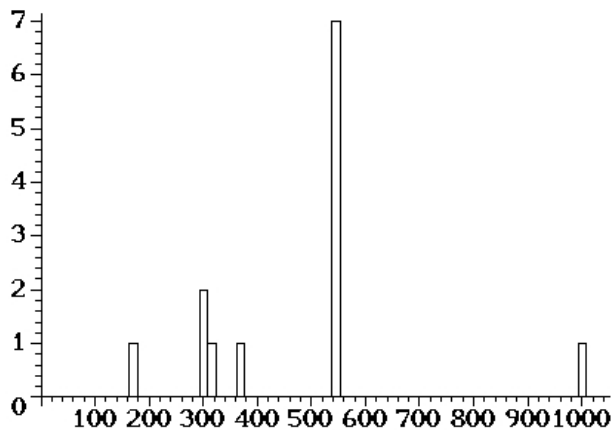


Table 3. Diagram showing the dating of coins excavated in the church.

precisely to the reign of Justinian I (527-565). These coins are all made of copper and are of lesser value. Furthermore, there are pre-Christian coins from the 2th to the 4th centuries A.D. The first Christian coin is from the second part of the 4th century belonging to the reign of Valentinian I. During the post-Justinian period there is no numismatic evidence that confirms the use of the church until the reign of

Basil II in the 11th century. The finds clearly shows that the days of prosperity were during the 6th century. From the 4th century there are several pagan Roman coins, which obviously cannot be used to date the erection of the church.

4.1.2 Pottery

Pontus Hellström has published and dated four terracotta vessels found in, and close to, the church during the excavations in 1951 and 1953. The numbers of the pottery objects in this thesis are taken from the publication of Hellström. Numerous pieces of pottery are mentioned in the notebooks of 1953, but the dating is not reliable due to the insufficient descriptions of the fragments.

Bowl. Cat. no. 329 was excavated by I. Dahlén in 1951 a couple of metres west of the church (*Fig. 23*).¹⁰⁷ The clay is orange-red and has a cross impressed on its surface, connecting it to the Christian period. At the centre of the base, surrounding the cross, almond-shaped designs are impressed. Hellström classifies this piece as a local imitation of the Late Roman B ware¹⁰⁸, which is usually dated to the 6th century.¹⁰⁹ This particular cross ornament is characteristic for red-slip ware of the Early Byzantine period according to K. Dark.¹¹⁰ This means that the design is “borrowed” from a standard design cross ornament, common in pre-Iconoclastic art.

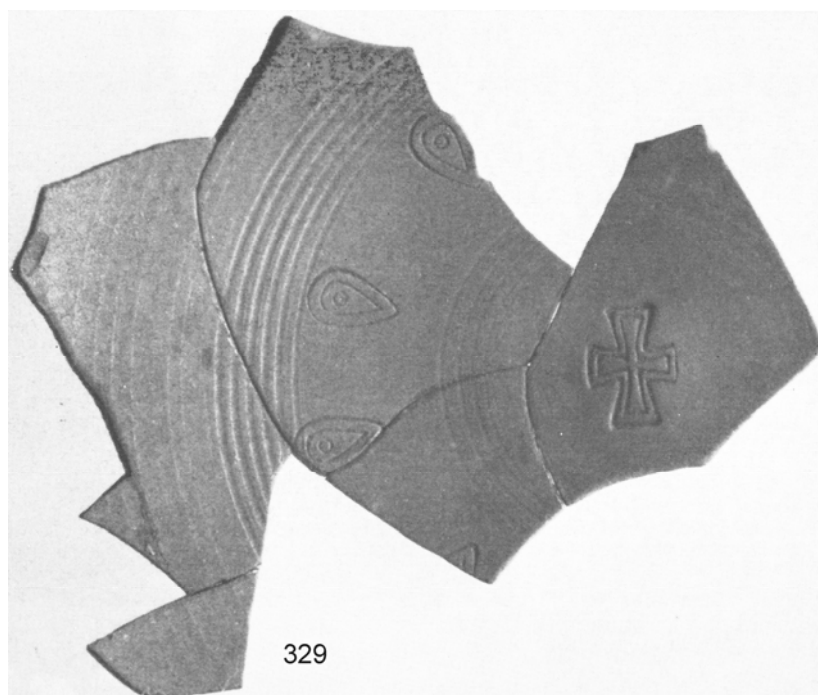


Fig. 23. Sixth-century bowl with cross ornament. Scale 1:2

¹⁰⁷ Dahlén 1951, 6.

¹⁰⁸ Described in Hellström 1965, 41.

¹⁰⁹ Hellström 1965, 43.

¹¹⁰ Dark 2001, 102.

Plate. Cat. no. 331 has a pigeon impressed on the floor and was found in the church in 1953 at a depth of 1.65 m.¹¹¹ The pigeon is 3.2 cm high and encircled by an impressed spherical ornament with a diameter of 5.4 cm. The fabric is reddish orange. The date of this vessel is set to the 4th century.¹¹²

Bowl. Cat. nrs. 333 and 334, two fragments of rims (*Fig. 24*). These were excavated somewhere in the church in 1953. I have not been able to trace these pieces in the archaeological notebooks of 1953 for further information. However, Hellström describes them as dark-red reddish brown with white inclusions and red glaze.¹¹³ Nrs. 333 is dated to the 5th century and 334 to the 5th or early 6th century.¹¹⁴

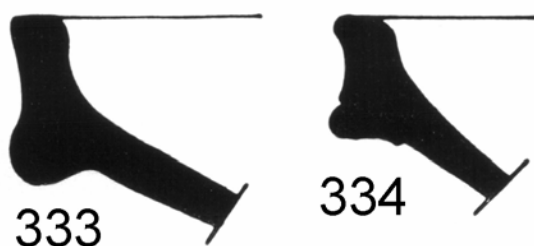


Fig. 24. Two fragments of bowl, dated to the 5th or 6th century. Scale 1:1

¹¹¹ Dahlén 1953b, 51-53.

¹¹² Hellström 1965, 44.

¹¹³ Hellström 1965, 74

¹¹⁴ Hellström 1965, 44.

4.1.3 Christian graffiti

Three cases of Christian *graffiti* has been located at Labraunda, one by the church and two slightly west of the church at the South Propylaea. Jonas Crampa published two of these in his volume *Labraunda, Swedish Excavations and Researches 3, The Greek Inscriptions Part 2*, in 1972. These inscriptions are carved on reused blocks, and are mainly pictographic. Crosses in various formations dominate these examples of *graffiti*. The find numbers are those used in Crampa's publication. Crampa does not suggest any dating of these inscriptions.

Graffito 1 (Cat. no. 81) was found on a gneiss ashlar block in the lowest course of the east wall in the *diaconicon* (Fig. 25).¹¹⁵ The block is depicted in Dahlén's *notebook 2* of 1953 but it does not give any useful information about it.¹¹⁶ The *graffito* consists of three crosses, a small Greek cross surrounded by two larger Latin crosses. The *graffito* measures 31.5 cm in width and it is 10 cm high.¹¹⁷ The letters α and ω stand on either side of the crosses.

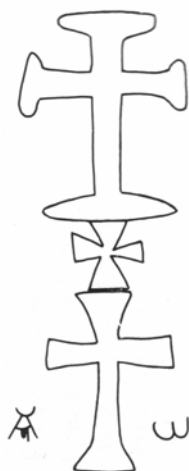


Fig. 25. Christian graffiti (no. 1) found in the church in 1953.

Graffito 2 (Cat. no. 82) was originally found by Kristian Jeppesen at the South Propylaea. The motif is a Greek cross with circles at the end of each arm. It is 17.5 cm high.¹¹⁸ To the left of the cross four letters are engraved. Crampa suggests that these might be a symbol meaning *νίκη*, referring to the letters as a common Christian *graffiti*, though the letters cannot be surely linked to the cross symbol.

Graffito 3 was found on a column-drum found by Jeppesen close to the South Propylaea in 1950. My knowledge of this example exists only through an old photograph, which, as far as I can see, contains 5 crosses and some letters that might possibly be interpreted as a *νίκη* inscription.

These crosses seem to be shallowly carved on the lower side of the drum, in the *anathyrosis*, and are likely to have been made as an act of exorcism. All of these cross symbols stylistically show a great similarity to cross ornaments used during the reign of Justinian I, for example in the apse mosaic in S. Apollinare in Classe at Ravenna¹¹⁹, and on the closure slabs in the gallery of Hagia Sophia in Constantinople.¹²⁰

¹¹⁵ Crampa 1972, 160.

¹¹⁶ Dahlén 1953b, 120.

¹¹⁷ Crampa 1972, 160.

¹¹⁸ Crampa 1972, 161.

¹¹⁹ See figs. 82-83 in Lowden 1997, 136f.

¹²⁰ See illustration on p. 27 in Kleinbauer 2004.

4.2 Finds from the excavation of 2005

During the summer of 2005, the apse (Room 4b) was re-excavated. A paved stone floor was discovered approximately 5 cm below the topsoil (see *Fig. 9*). Two small trenches were opened in the floor, Trenches 1a and 1b. Trench 1a was located just in front of the east wall of the apse. The main purpose of the trench was to investigate the depth of the foundation of the wall of the apse. The bottom of the foundation for the apse wall was, however, not reached. Trench 1a measures 1.2 m in length (north-south) and about 0.65 m in width. The total excavated depth reached in 2005, was *ca.* 30 cm below the paved floor. Trench 1b is the ossuary mentioned above. It is 0.2 m wide and was excavated to a depth of 0.6 m. In the excavation of 2005, beneath the present floor level of Room 4b (the apse), remains were found that look like an earlier church-phase, within the same walls as the present edifice. The finds of 2005 have not been studied closely enough to form a chronological context, though they offer a glimpse of the interior decoration of the church.

4.2.1 Pottery and glass

The pottery consists mainly of coarse wares in red fabric, often ornamented with horizontal slanting lines, typical for the Early Byzantine wares (*Fig. 26*).¹²¹ No closer possible dating can be given at present.

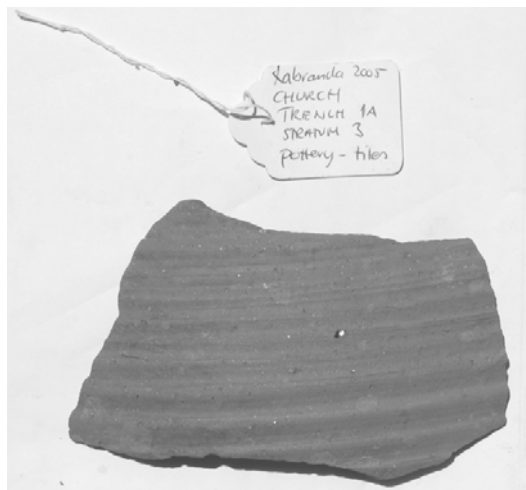


Fig. 26. Early Byzantine coarse ware in red fabric. Excavated in 2005.

Thick flat pieces of coloured glass were found in both Trenches 1a and 1b and were identified by Dr. Despina Ignatiadou, a restorer at the Archaeological Museum of Thessaloniki, as fragments of a glass window (*Fig. 27*).

¹²¹ Dark 2001, 32.

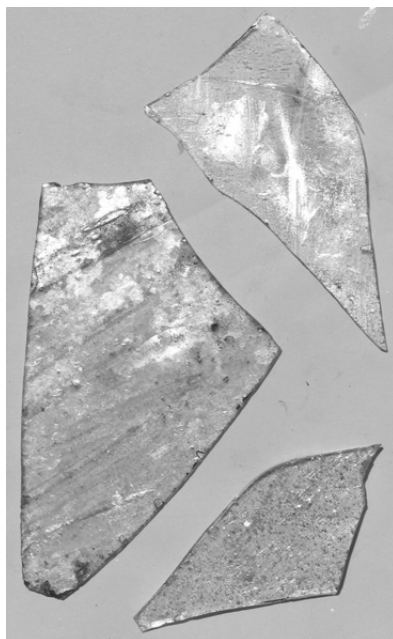


Fig. 27. Coloured window glass found in the apse in 2005.

4.2.2 Marbles

Several pieces of coloured marble were found, some moulded. The major group of marbles found is of the *pavonazzetto* type.¹²² A thin piece of the marble type called *greco scritto*, from Hippo Regia in present Algeria¹²³, was found at a depth of 0.6 m in Trench 1a (Figs. 28 and



Fig. 28. The marble piece of *greco scritto* found *in situ* during the excavation of 2005.

29), it is decorated with carved horizontal grooves. The chaotic position of the finds, especially the marble pieces, suggests that this layer is a destruction layer. Many of the marble fragments and some of the pieces of mortar, which were found in these strata, show signs of red paint. It is likely that these have been attached to an earlier red painted wall or plaster.

The marble may be *spolia* but empirical studies on the moulded fragments will be done in the future (Figs. 29-31).

¹²² A Phrygian marble type, quarried in Afyon, during the Roman antiquity called *Marmor Phrygium*, cf. Gnoli 2004, 264.

¹²³ See Gnoli 2004, 237.

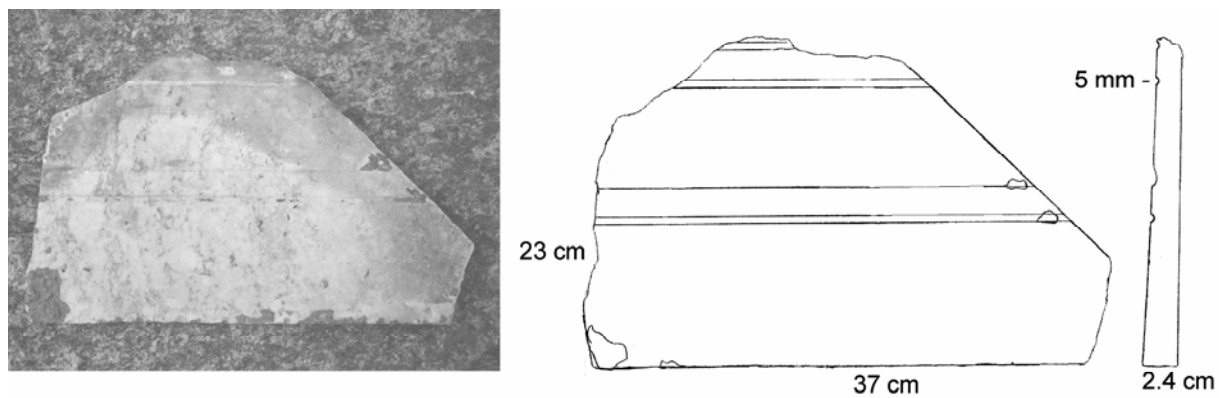


Fig. 29. Marble panel of *greco scritto* with carved grooves.

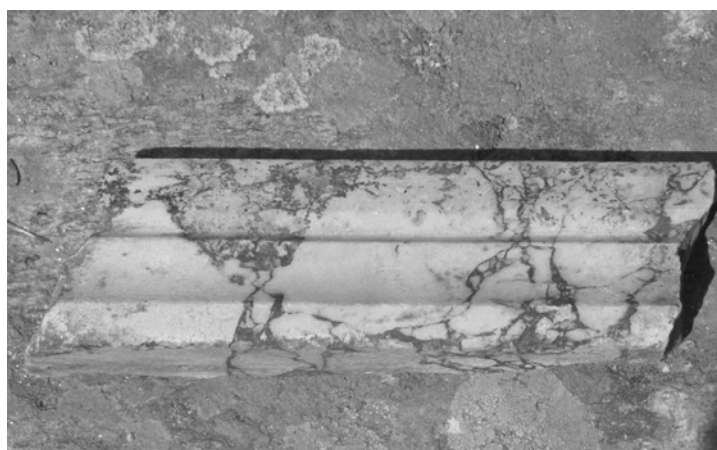


Fig. 30. Moulded marble fragment in *Marmor Phrygium*.

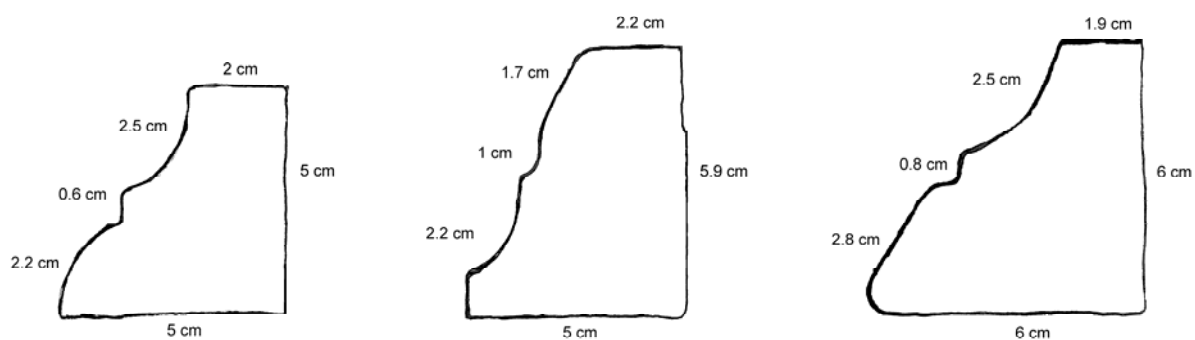


Fig. 31. Selection of moulded marbles excavated in the apse 2005.

4.2.3 Various finds

A small metal object, probably made of lead, was found close to the window glass fragments in Trench 1a. Dr. Ignatiadou identified it as a small piece of a leaded window bar. A needle-shaped metal object was found at the depth of *ca.* 25 cm (*Fig. 32*). It is slightly bent on one side, and on the other there is a loop, resembling that of a needle's eye. It is most likely a part of a chain, possibly used to carry a lamp.¹²⁴



Fig. 32. Needle-shaped metal object, probably a piece of a chain.

The discovery of bones just above, as well as inside the grave-structure (Trench 1b) indicates that it may be a looted ossuary. Awaiting the final judgement by an osteologist a preliminary inspection has suggested that some of the bones could be human.

4.3 Discussion on the finds

The coins found in the excavations of 1953 and 1960 indicate a long chronological span for the church. Dahlén identified several coins in 1953 to the reign of Justinian I, a period represented by 7 of the 13 coins. The coins were according to the notebooks found just above the floor level. Therefore it is likely that the present edifice was standing in the 6th century. However, the *terminus post quem* for Christian presence at the site is set to the reign of emperor Valentinian in the second part of the 4th century. A coin from this emperor was found in the *diaconicon*, which was a vital and central part of the Christian sanctuary. The *terminus ante quem* is the coin that Westholm refers to, belonging in the reign of Emperor Basil II. This tells us that the building was probably still in use at the beginning of the 11th century. Traces of destruction and fire are seen from the carbonised matter on the marble slabs of the floor and on markings on the ashlar of Room 4. This may be connected to the invasion of the Seljuk Turks in the latter part of the 11th century; this is, however, uncertain.

The pottery from the church area, published and dated by Hellström, shows a notable concentration of objects of the 4th to the 6th century A.D. There are pictographic *graffiti*, with

¹²⁴ Blid 2005, 45.

the shape of a cross and a pigeon. The pottery seems to consist of high quality import but there are also pieces of imitation domestic manufacturing.

The excavation of 2005 revealed an earlier church-phase in the apse, beneath the present church. This phase does not need be much earlier than the present church. It is not yet known whether this layer extends further than the apse. It is, however, most certainly a destruction layer, due to the chaotic position of the finds. The destruction layer was covered by a paved secondary floor, which was probably constructed soon after the destruction. The huge quantity of charcoal found in the excavation may also lead to this conclusion.¹²⁵

Two grave-like structures were unearthed in the apse, a small built tomb inside a bigger structure. The inner one seems to be an ossuary. Perhaps this is the result of a secondary funeral. The ossuary was empty except for some small bone fragments, but its prominent location suggests significance. Perhaps it is a reliquary, preserving the bones of a local saint or martyr.

Several pieces of painted window glass were found, which indicates that a window illuminated the apse. It also bears witness of good economic resources. Furthermore, polychrome moulded marbles testify to a richly decorated interior of the apse. The marbles used can be traced locally, but also to remote places like North Africa and Phrygia. The marbles might be *spolia*.

¹²⁵ A small sample was carbon-14 dated in December of 2005. It gave a puzzling date in the first century A.D. and could thus relate to a possible destruction of the Roman bath below the church. New samples will be carbon-14 dated in 2006.

5. THE FUNCTION AND LOCATION OF THE CHURCH

Initially, it is essential to understand that the churches of the Early Byzantine period did not necessarily follow the modern schemes concerning function and liturgy. At the same time there existed several different categories of Christian shrines, for example *martyria*, baptisteries, monasteries, convents, and even shrines in a more pagan sense. The practical function and intellectual aim behind the situation of Early Byzantine churches is therefore not always certain. This chapter will therefore speculate about the aim of the architects who built the church at Labraunda.

5.1 Discussion concerning the location of the church

One could ask if there existed an old praxis in deciding where to build a church in Early Byzantine Anatolia? Obviously there was no static regulation saying where you were allowed to build a church and where it was forbidden. Even though one can occasionally see patterns, the erection of churches might often seem organic and unplanned. However, the place where the Labraunda church was built was most likely neither chosen by mere chance, nor from a spontaneous eagerness to build. These are too simple conclusions to the Early Byzantine architecture, more in line with Roman antiquity than following the medieval notion of proportion and planning. As I see it, there can be two underlying motives for the location of the church. However, there may also be cases where these aspects are combined. The two motives are:

- Practical aspects
- Ideological aspects

For example, the church at Labraunda is built outside the temenos area of the old Zeus sanctuary. So what aspect, practical or ideological, did the architect have in mind? If the church was built into the East Bath, due to the Christian liturgical importance of water, the location for the church was dedicated out of functional reasons and is therefore submitted to the practical aspect. On the other hand, if the intention of the architect was to place the Christian church outside the temenos area because of religious considerations it would be a matter of ideological aspect. One difficulty that must be considered is the matter of a second bath establishment in Labraunda, the South Bath. This bath is located inside the temenos area. Why was this edifice not rebuilt as a church? One possibility is that the South Bath was in use

when the church was built and therefore it did not allow the necessary space. Another possibility is that the members of the Christian community of Labraunda deliberately placed the church outside the temenos wall, away from the “polluted” pagan area, a consequence of religious antagonism. However, anti-pagan attitudes among the Christians are hard to find in Caria and the neighbouring regions during the Early Byzantine period. The idea of former pagan sanctuaries as haunted and stained by evil does not seem to have existed but is rather a conception that evolved during the Dark Ages.¹²⁶ In the large Carian city of Aphrodisias the Episcopal Church was built in the middle, or in the late part of the 5th century, inside the pagan temple dedicated to Aphrodite.¹²⁷ The erection of such an important Christian building inside a pagan temple indicates that an opposition towards earlier sacral buildings did not exist in Aphrodisias during the 5th century. This is an interesting phenomenon considering that Aphrodisias was the ecclesiastical capital of Caria.¹²⁸ In the sanctuary of Lagina, close to Labraunda, there stood a large temple dedicated to the goddess Hekate, built sometime between 125 B.C. and the reign of Augustus.¹²⁹ In Byzantine times a church was built towards the altar of the temple, using its stylobate and colonnade as an aisle. This means that likewise, in Lagina there is no indication of opposition towards the pagan temenos area.

Since there is evidence to prove that the Christians in Caria built their churches within previous pagan sanctuaries, the situation of the church at Labraunda, outside the temenos-area, is not likely the result of a religious conviction. It must rather be seen as a consequence of other circumstances. Again we have to consider the practical aspect, the access of water. If the South Bath were still in use by the time of the erection of the church, then it is natural to place the new church by the East Bath, where there was plenty of water to provide for the liturgical needs. Possibly the so-called Doric House, slightly west of the main entrance to the church, provided water during the Early Byzantine period, perhaps even more effectively than the baths.¹³⁰ This is likely since there are post-Roman water-pipes close to this building. If this was the case, then the situation of the church was chosen for mere practical reasons than due to hostile attitudes towards the non-Christian temenos-area. An essential aspect of the church’s location is, however, its situation right between the South and the East Propylaea. The edifice is also actually built directly against the exterior of the temenos wall, which creates a sense of radical opposition between the sacred area of the pagans and that of the

¹²⁶ Rosenqvist 2003, 72.

¹²⁷ Roueché 1989, 153.

¹²⁸ Serin 2004, 11.

¹²⁹ Bean 1971, 95.

¹³⁰ This building is presumed to be a fountain house, originally built during the reign of Idrieus and thereafter partly incorporated into the East Bath by the time of Emperor Claudius, during the first century A.D.; Hellström 1987b, 157-166, esp. 159f.

Christian church. On the plan it looks as if the church was not allowed inside the temenos-area and therefore was located close to the propylaea, but still outside the sacred area. If the reason for the church's situation was to use the water provided by the Roman bath and the Doric House we can again dismiss an antagonism between the religious groups. The East Bath was logically built between the two *propylaea*, since the visitors of a sanctuary *were* expected to perform a cleansing rite before entering the sacred area. This tradition was taken over by the Christians. Since the two propylaea give access to the sanctuary from two different roads, built close to each other, the area between the propylaea was the most convenient for the erection of the East Bath.¹³¹ Considering this, the location of the church at this place is most likely due to practical reasons rather than ideological.

5.2 The liturgical significance of water

Examples of churches situated in previous bath establishments are not uncommon. In Anatolia there are numerous examples of reused *thermae* that have gone through an alteration in Christian times.¹³² Why is this so frequently seen in baths and not in other public buildings? The answer is likely to be found in the need for water used in liturgical rites, perhaps in the use of water for sacred cleaning acts or as baptisteries. A baptistery has, however, not yet been identified at Labraunda. Certainly the baptisteries of the Early Byzantine era needed much water since the baptismal fonts were often quite large. Such examples could be seen in the Episcopal palace at Side and at the church in Ephesus dedicated to the Virgin Mary. Up until the late 4th century adults still went to baptisteries to become Christians. The baptizing was done at the end of the Eucharist. This practise disappeared gradually due to the expanding Christianity and after the 4th century most were baptized as babies.¹³³ This did not, however, initially change the proportions of the baptisteries. At Byzantine Macedonia there are several cases of churches situated close to bathing establishments, for example in Thessalonica, Philippi and Herakleia Lynkestis. The reason seems to be the systems of water pipes drawn to the baths for use in the baptisteries, which was done while the baths were still in use.¹³⁴ It has also been suggested that these bath establishments were privatised and maintained by the clergy.¹³⁵ In western Anatolia baths were often adjoined directly to monasteries and

¹³¹ Two sacred ways lead to Labraunda, each terminating in a propylaea. The south road went to Mylasa and the east road went over the mountains towards Alinda and Alabanda; the latter was identified last summer.

¹³² For example the Kaplıcalar-Basilica at Hierapolis in Phrygia, which was built into a *caldarium* of a Roman bath in the first part of the 6th century; cf. Ferrero 1988, 130.

¹³³ Wilkinson 2002, 147.

¹³⁴ Hattersley-Smith 1996, 35f, 123 and 236.

¹³⁵ Hattersley-Smith 1996, 236.

churches.¹³⁶ A typical feature of the period is that the cold section was beginning to dominate the space of the bath. It was in the cold bath (*frigidarium*) that the baptizing rite first appeared in the 4th century.¹³⁷ In this period the *baptisteria* were often built in a polygonal, especially octagonal shape, which later came to be the most common architectural design for baptisteries, from the 5th century onwards.¹³⁸ The *caldarium* (Room 9) of the East Bath at Labraunda was evidently removed to give way for the erection of the church. However, according to Inge Nielsen, *frigidaria* functioned in the 4th century often as baptisteries. Since the *frigidarium* of the East Bath at Labraunda has not been excavated one can therefore not reject the possibility that the bath was still in use at the time of the erection of the church.¹³⁹

Access of water did also become useful in the sacred cleansing acts, which were most important before entering the church. This was likely a heritage from the synagogue, but similarities are also seen in Greco-Roman sanctuaries of classical antiquity. In the church of St. John at Ephesus and in one of the large churches of Perge in Pamphylia (Basilica A), wells are seen in the centre of the atrium. Wilkinson suggests that “The water supply in the atria may have symbolised the spring, struck from the rock by Moses, which followed the children of Israel through the wilderness, but as Eusebius describes it, it stood for the laver like the one, which Aaron washed to prepare himself for holy service”.¹⁴⁰ This well, or other sources of water, should be standing in front of the church, if possible at the centre of the atrium. It is a possibility that the Doric House could have served as this source for washing water, used before attending Mass in the church. That the Doric House was used during late antiquity may be shown archaeologically, since old photographs taken in the 1950’s show three floors in different *strata*, whereas the first is probably original (4th century B.C.), the second one from the alteration of the Doric House at the time for the erection of the East Bath (first century A.D.), and the third one was probably built during late antiquity, perhaps in the church phase.

¹³⁶ Nielsen 1990, 99.

¹³⁷ Nielsen 1990, 115, 145.

¹³⁸ Nielsen 1990, 153.

¹³⁹ The Doric House has been suggested to be a *frigidarium*; See Hellström 1987b, 160.

¹⁴⁰ Wilkinson 2002, 132f.

5.2.1 Christian adaptation of pagan traditions

The pagan cults and sacred practises did not always go through a metamorphosis during the transition to Christianity. Several written sources speak of Christian use of sacrifices of animals,¹⁴¹ as well as *incubation* in churches very similar to the incubation performed in the ancient *asklepieia*.¹⁴² There is evidence showing that some ancient cults dedicated to sacred animals continued both in Christian and Muslim communities. A pond devoted to sacred fish/eels existed in Labraunda according to Pliny and Aelian. Pliny speaks of sacred eels, which wore earrings of pure gold.¹⁴³ Aelian gives us a slightly different version of the story, in which the eels where replaced by fish. These eels did however, also wear necklaces and earrings of gold, and came whenever they were called upon.¹⁴⁴ There exist several examples of sacred ponds with holy fish in Christian times.



Fig. 33. The sacred basin of the Zoodochos Pege in Istanbul. Above the vaulted basin (in the centre of the photograph) hangs the icon of the shrine. It is depicting the holy fish within the spring, healing the sick attendants of the Mass.

¹⁴¹ In the hagiography of St. Nicholas who was the abbot of the monastery of Sion, close to Myra in Lycia. The anonymous writer claims that St. Nicholas sacrificed over 30 bulls to God during the outbreak of the plague in 541. *The life of St. Nicholas of Sion*, 54.1-56.5.

¹⁴² In the hagiography *The Miracles of Artemios*, Christian *incubation* is used at the church of St. John in Oxeia in the central part of Constantinople; see Rosenqvist 2003, 48.

¹⁴³ Plinius, *Naturalis Historiae*, 32.17.

¹⁴⁴ Aelian, *Peri zoon idiotetos*, 12.30.

The church of Zoodochos Pege in Constantinople is mentioned by Procopius as a holy spring close to a church, erected during the reign of Justinian I (527-565) (*Fig. 33*).¹⁴⁵ The myth speaks of fish appearing in the sacred spring when Constantinople fell to the Turks in 1453.¹⁴⁶ This church has still an active fish cult and it is in Turkish called Balıklı, which means a place with fish. There are also similar fish shrines found within the Muslim community of Turkey, for example at Şanlıurfa. Even though the fish shrines at Zoodochos Pege and Şanlıurfa do not show a straight continuity from antiquity, the phenomenon remains alike. The use of *incubation* is, however, an astonishingly similar practise with a continuing pattern from the pagan to the Christian period. May we possibly assume or consider the church at Labraunda to have maintained the pond of holy fish? Since there are no archaeological or written sources to claim this, we can only speculate. The possibility remains, considering the Christian approval of this sort of cult during the entire Byzantine epoch. Similar functions are found in other Christian shrines, so it is not an unlikely scenario. However, we cannot tie the church's location to the ancient fish cult, because neither Pliny nor Aelian mention the location of the fish or eel basin. It appears likely though, that this important place for pagan worship was situated inside the temenos wall. Since the Byzantine church at Labraunda is not situated inside the temenos it is probable that the fishpond was located somewhere else.

¹⁴⁵ Procopius, *Peri Ktismaton*, 1.3.6-9.

¹⁴⁶ Walsh 1839, 29.

6. THE CHRONOLOGY OF THE CHURCH AT LABRAUNDA

At Labraunda pottery with certain Christian motifs, like the cross, first appears in the 4th century. The oldest coin from Labraunda struck by a Christian emperor was established to the reign of Valentinian in the second part of the 4th century. The locations of these finds were inside, and slightly west of the church. This confirms Christian activity at the site in the 4th century. The architectural language used in the church shows several features not seen after the 6th century. When comparing it to Syrian churches built in the 4th and 5th centuries, a remarkable resemblance is shown. Is it then anachronistic to speak of an active Christian cult in Labraunda, connected to a church as early as in the 4th century? As mentioned in chapter 3, written sources attest that the city of Iasos had a bishop already in 431. Furthermore, Aphrodisias was certainly an Episcopal town in 443 when the large Episcopal Church was consecrated. One must consider that the episcopates of Iasos and Aphrodisias ought to be somewhat older, even though they are not mentioned in the literary sources. However, this indicates that during the first part of the 5th century Christianity had become the most prominent religion in the large cities of Caria. This may also be the case in Labraunda. Here, however, it probably began earlier, during the second part of the 4th century, as is suggested by the archaeological finds.

Pottery dated to the 5th century was excavated in 1953, and it shows continuing Christian presence at the church. The major part of the finds, mainly coins, belong in the 6th century, during the reign of Justinian I. There are also pieces of pottery from this century. After the 6th century there are no finds made in the area of the church that testify to Christian activities. Some medieval pottery has been found in parts of the sanctuary, but not close to the church. Sometime in the late part of the Early, or in the Middle Byzantine period a large cupola was built on the old portico building of the Late Classical period (the Oikoi). The span of the vault was quite large, *ca.* 5 m. It gives a perspective when considering that this diameter is larger than in some churches at Constantinople. Thus, large building projects were carried out at Labraunda after the 6th century, even if there are no archaeological finds to confirm it in the area around the church.

The *terminus ante quem* for the destruction of the church is set to the 11th century (1025), due to an excavated coin from the reign of the emperor Basil II (963-1025). As Westholm points out, the church was most likely destroyed by fire, which has left marks on the walls and on the carbonised state of the marble floor of the nave.¹⁴⁷ The destruction of the church might

¹⁴⁷ Westholm 1963, 117.

be linked to the invasion of Caria by the Seljuk Turks.¹⁴⁸ According to Byzantine sources this lead to “an utter ruination of the maritime towns and districts”.¹⁴⁹ Even though the author of this claim, Anna Komnena, writes that the coast was in a ruinous state from Smyrna to Attalia (Antalya), archaeological evidence shows that at least some Byzantine settlements continued to exist after the Turkish occupation.¹⁵⁰ At Iasos, close to Labraunda, there is evidence of Byzantine maintenance of churches until the 13th century.¹⁵¹ At the church, however, the chronological context ends in the 11th century and there is, as far as I am aware, no Byzantine finds dating after this period.

¹⁴⁸ This invasion is set to the second part of the 11th century (1093-1095); see Serin 2004, 13.

¹⁴⁹ Anna Komnena, *Alexias*, 11.5.

¹⁵⁰ Anna Komnena, *Alexias*, 14.1.

¹⁵¹ Serin 2004, 210.

CONCLUSION

The church at Labraunda is an extraordinary building, situated high up in the Latmos Mountains in Caria. The building measures 25 m in length and 10 m in width and has a total area of 216 m². The church had a rich interior, seen in the preserved paving slabs of local white marble, which cover the entire floor of the nave. An uncommon scheme seen at Labraunda is the lack of inner freestanding supports such as columns or piers. Instead heavy ashlar pilasters have been erected along the walls of the nave, surely meant to carry a wooden ceiling. The east part of the nave terminates in an apse, closed behind the straight east wall and flanked by two *pastophoria*. The apse was covered by a half-dome in brick, surely to increase the acoustics during the chanting of the Mass. The architectural analysis indicates that the church is unique in its plan in western Anatolia, with the closest similarities seen in the Syrian churches at Dama in Leja and at Marata. In the region of Caria, the Labraunda church exhibits most similarities with the extra-mural church at Iasos. The lack of dividing architectural elements in the nave suggests a non-hierarchical structure during the celebration of the Mass. Through the architecture, the liturgy could be linked to that used in eastern Anatolia and Syria. This appears to be the case also at Aphrodisias and Iasos where the churches studied include a tripartite sanctuary, a typical eastern architectural element. The empirical architectural study has resulted in the suggestion that the church at Labraunda could not have been built after the 5th century.

A study of the proportions of the nave and the apse-space in the church at Labraunda indicates that the Byzantine architect, who planned the church, was working with the ratio of 1:2 between the length and width of the nave. He may have been inspired by the biblical description of King Solomon's temple at Jerusalem, which according to the 1 Kings was built after these proportions. Comparing this observation with other Early Byzantine churches, one can observe that the scheme of setting out the proportions in units was common, regardless of the actual size of the church.

The excavated finds of 1951, 1953, 1960 and 2005 indicate a broad chronological time-span. The *terminus post quem* for Christian presence at the site of the church is set to the Christian emperor Valentinian I, whose regnal years were 364-375. Most of the coins found were, however, struck during the reign of Justinian I (527-565). One should nevertheless remember that all these Justinianic coins are of a low-value type, struck in copper. The study of pottery shows that the first vessels featuring Christian motifs, like the pigeon and the cross, are dated to the 4th century. The pieces analysed are mainly fine wares even though they are

local imitations. The pottery also confirms a Byzantine presence at the site through the 5th and 6th centuries. A Christian *graffito*, consisting of a cross-relief, has been published but not dated. A stylistic study of these suggests that they are from the 6th century, due to the similarity with cross-inscriptions made during the reign of Justinian I. An excavation made in the apse in the summer of 2005 has also brought to light what looks like a previous church-phase, with finds of painted window glass and rich marbles such as the *pavonazzetto* of Phrygia and the *greco scritto* of Hippo Regio in Tunisia. An ossuary was also found in the centre of the apse, presumably a reliquary due to its prominent position. Some fragments of bone found in the ossuary may, according to an osteologist, be human.

Concerning the function and location of the Early Byzantine churches in Caria, with focus on the church at Labraunda, it is suggested that no opposition was made by the Christians towards previous pagan buildings or ideological domains like the temenos area. The erection of the church at Labraunda seems to have been made for practical reasons, rather than because of an antagonism towards the pagan sanctuary. The church was partly built into a Roman bath establishment, due to the access of water probably needed in the baptistery and in cleansing rites. The function of the church is somewhat unclear, though one could imagine that the maintenance of the former pagan basin of holy fish at Labraunda could have been taken over by the Christians, when they appear in the 4th century. Examples of sacred ponds with holy fish may be seen in both Christian and Muslim communities for example at the Zoodochos Pege at Constantinople and at Şanlıurfa in eastern Anatolia.

After comparing the chronological context of the excavated finds with the dating of the architecture it is suggested here that the church at Labraunda was erected in the second part of the 4th century. It shows a continuing sequence of finds during the 4th and 5th centuries, with a culmination during the 6th century, most likely, as a sign of good economic conditions. Due to the church's remote situation and lack of dividing hierarchical features in the church-space, it might have been part of a monastery complex, commonly seen in the rich monastic region of the Latmos Mountains. However, if this really were the case, the complex at Labraunda would be the oldest known monastery in the Latmos region.

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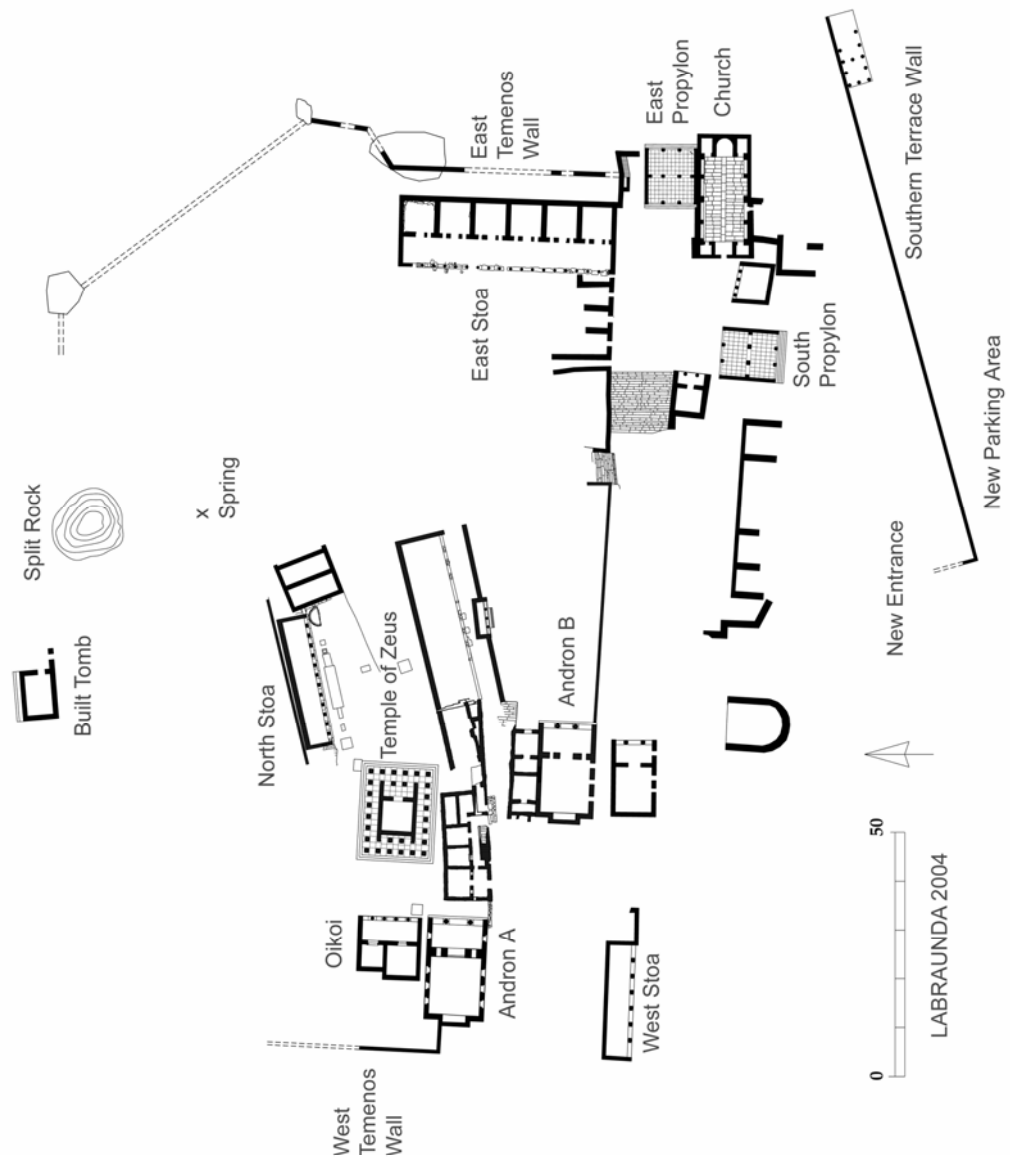


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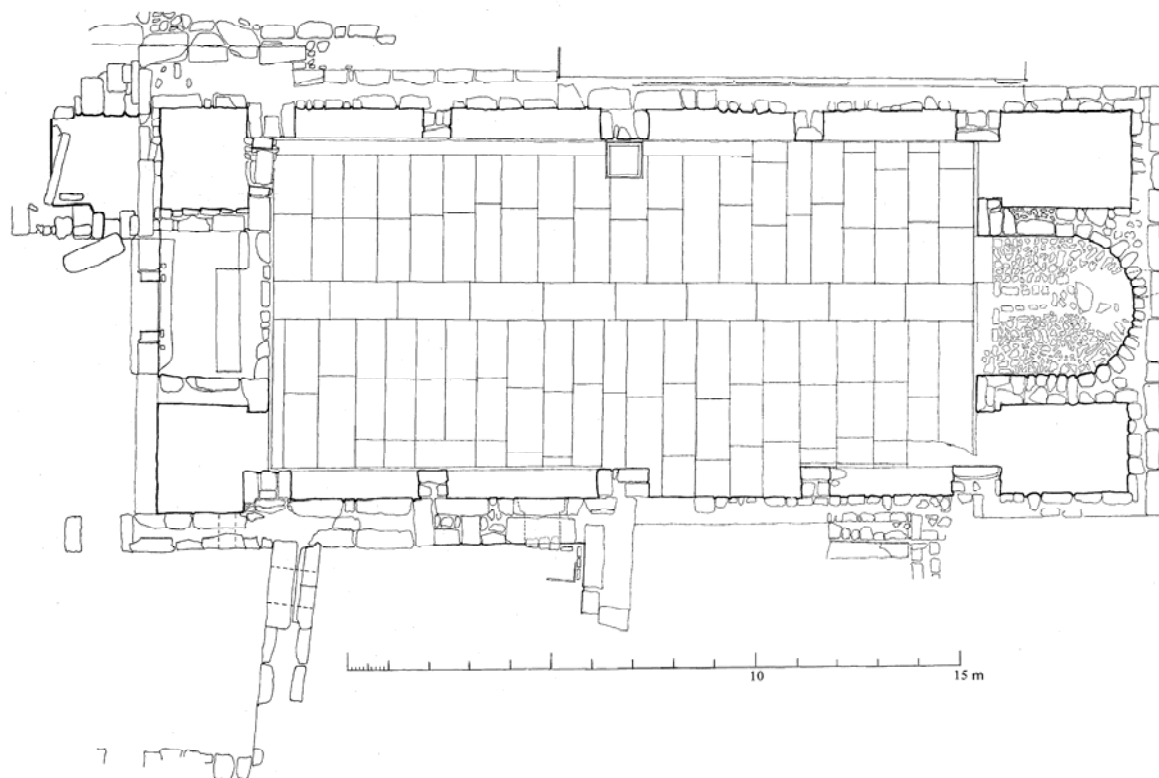


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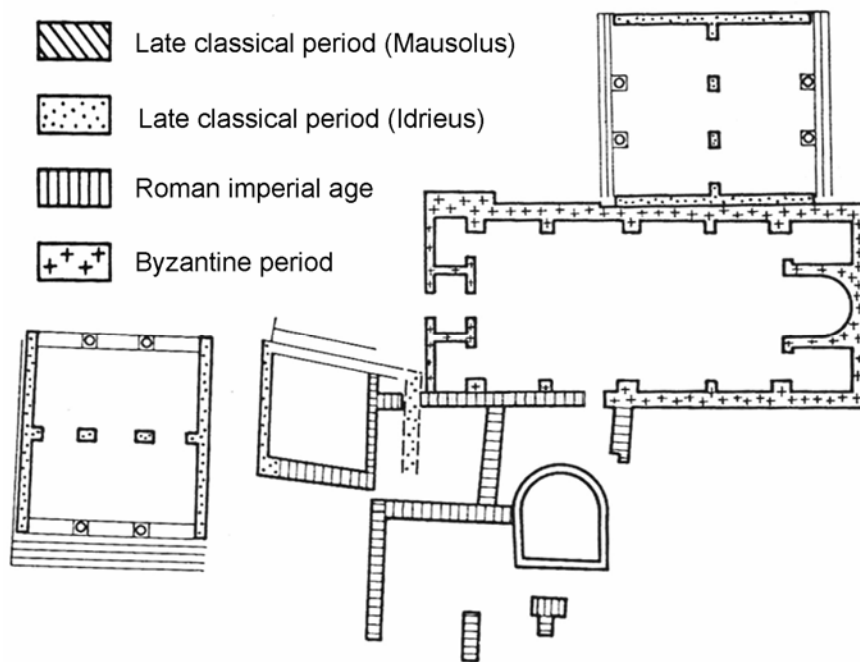


Plate 3. Plan of Area R at Labraunda, showing the church's location between the South and East Propylaea. The Late Classical fountain house (the Doric House) is seen southwest of the entrance to the church.

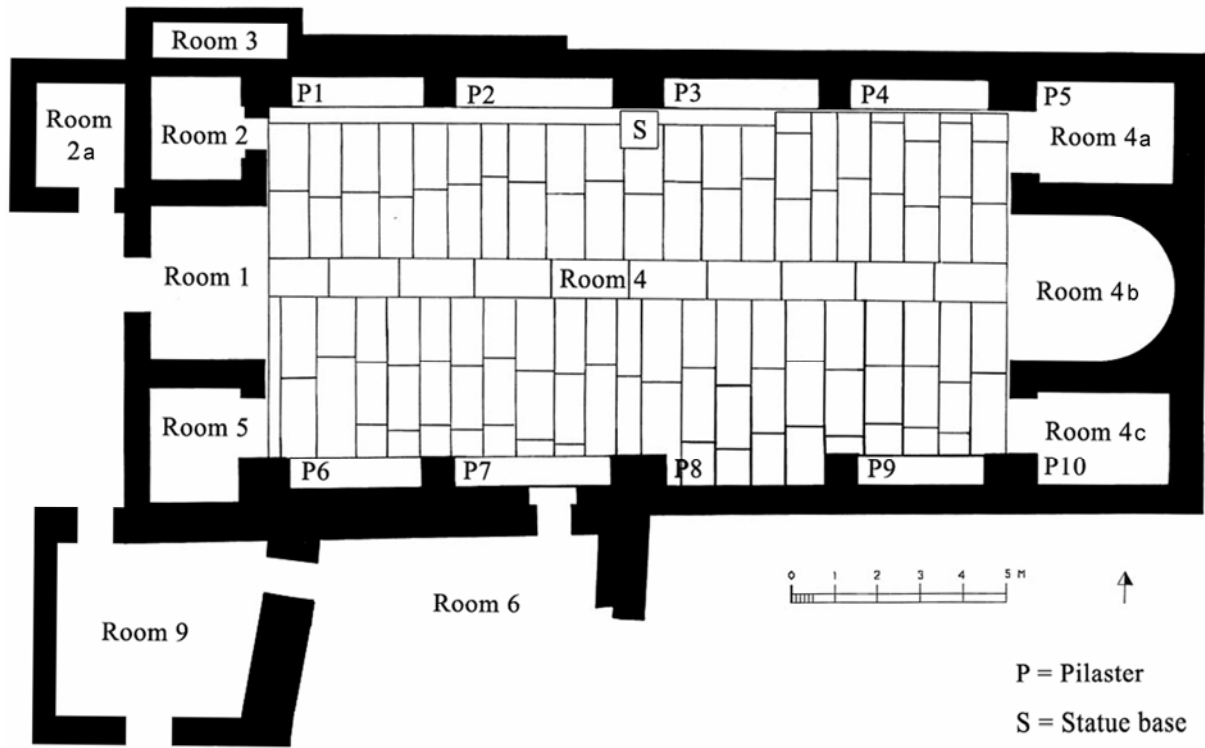


Plate 4. Plan of the Labraunda church showing the numbers of the rooms.

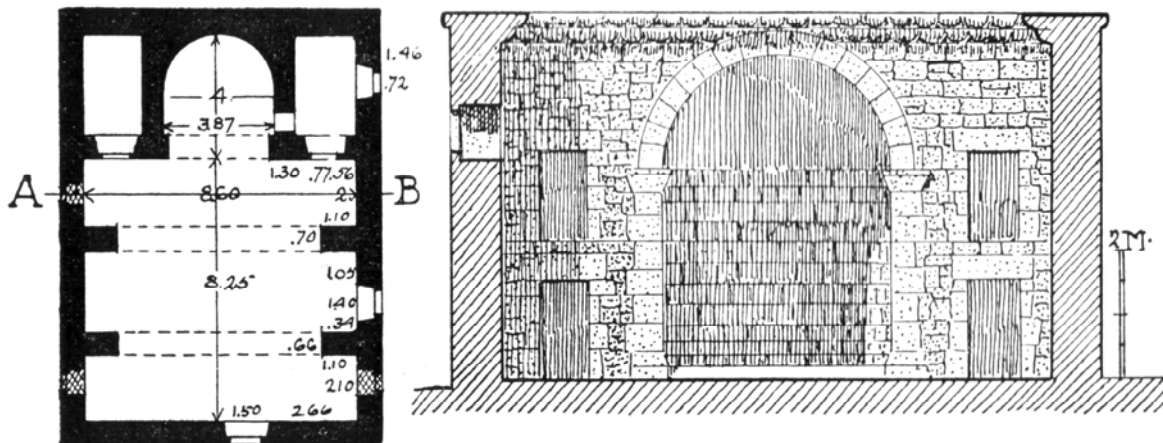


Plate 5. 4th-century church at Dama in Leja, southern Syria.

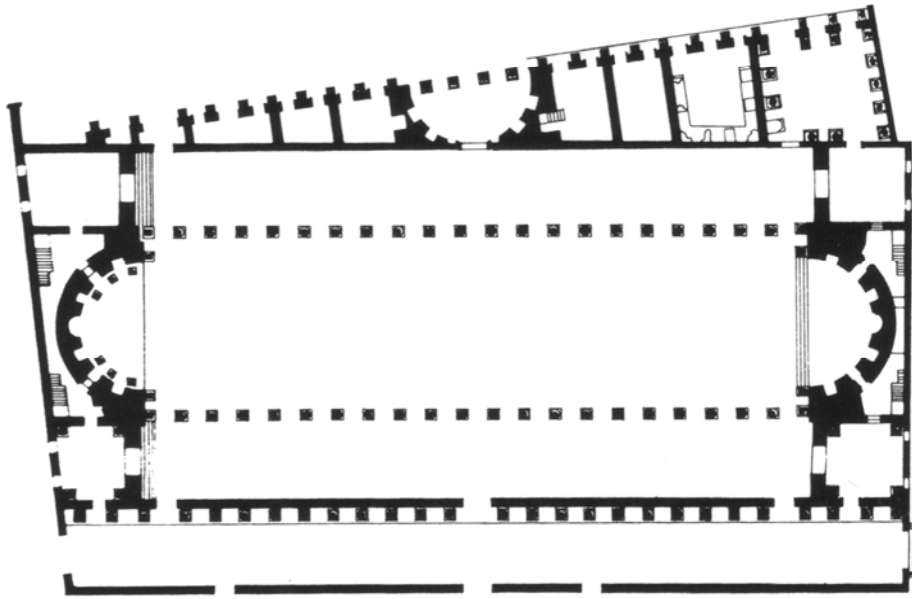


Plate 6. Early third-century Roman transversal basilica with tripartite ends, Lepcis Magna, Libya.

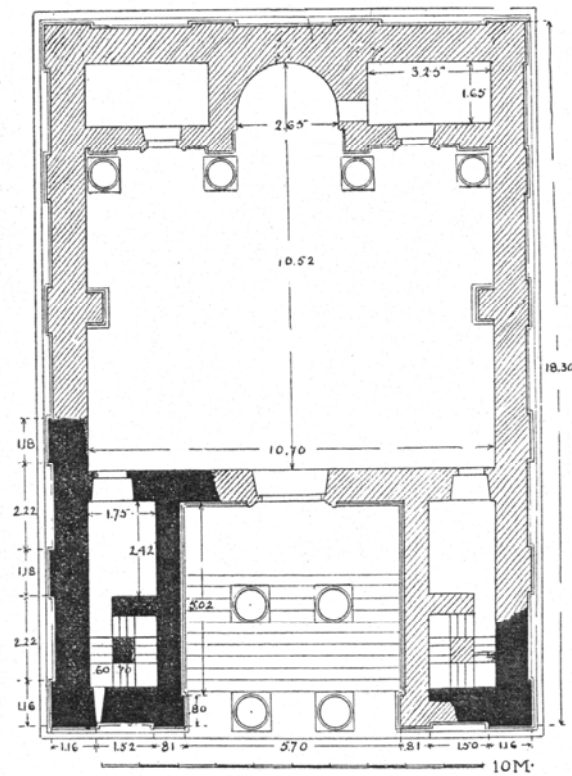


Plate 7. First-century temple at Slim, Syria.

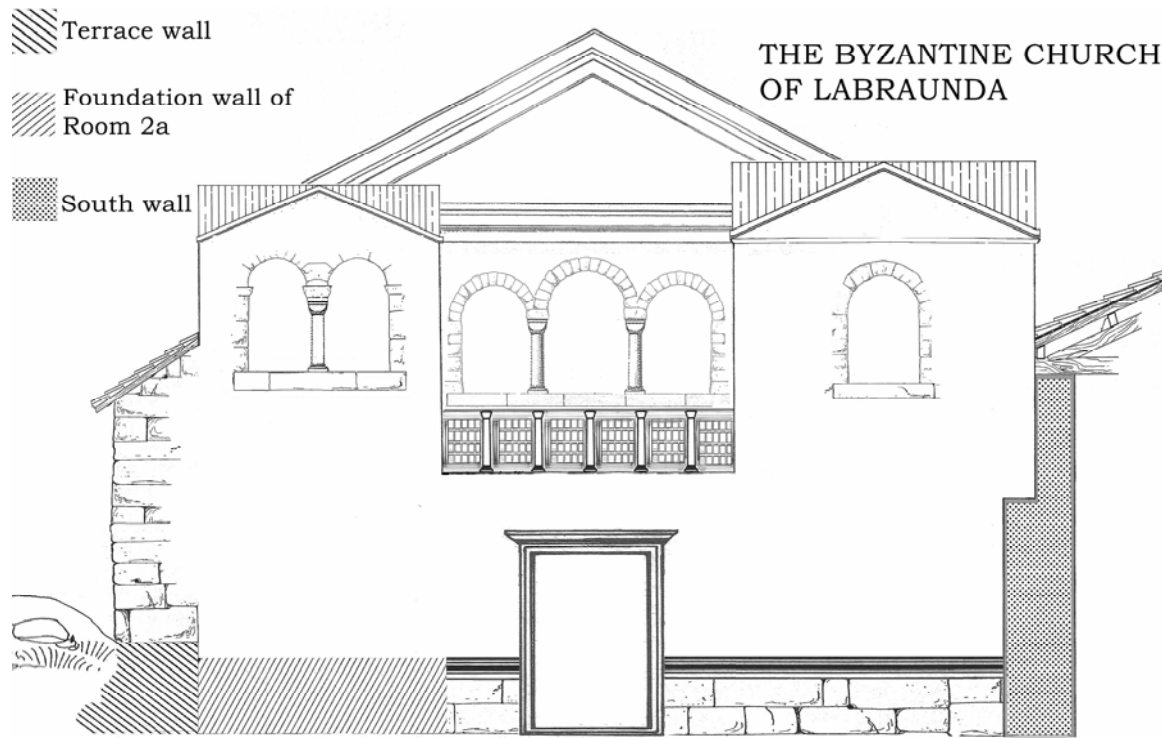


Plate 8. Reconstruction of the west façade of the Labraunda church.

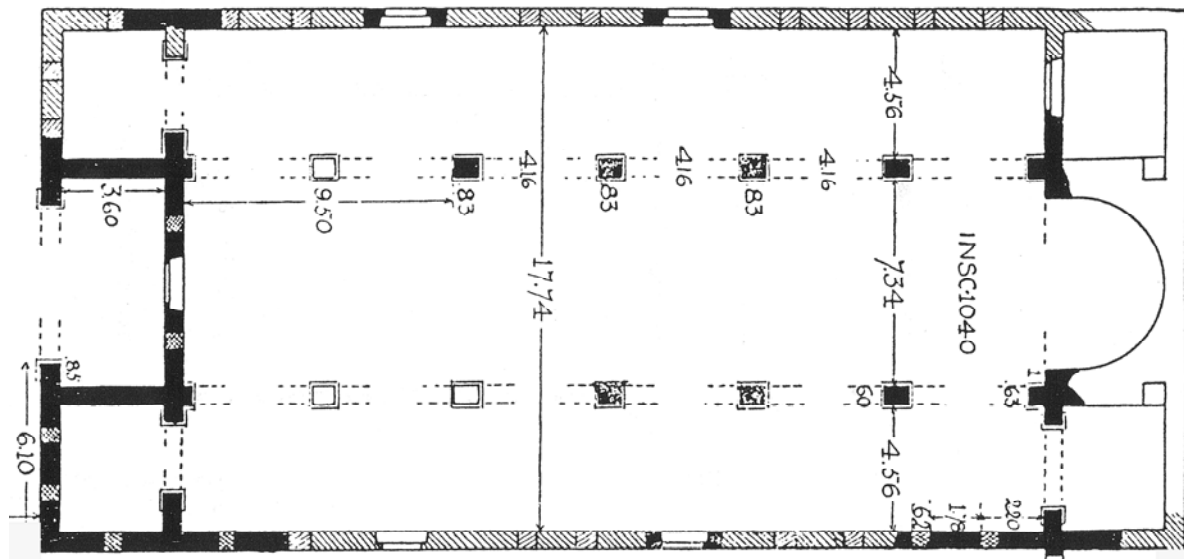


Plate 9. The 5th-century church at Marata in northeastern Syria.

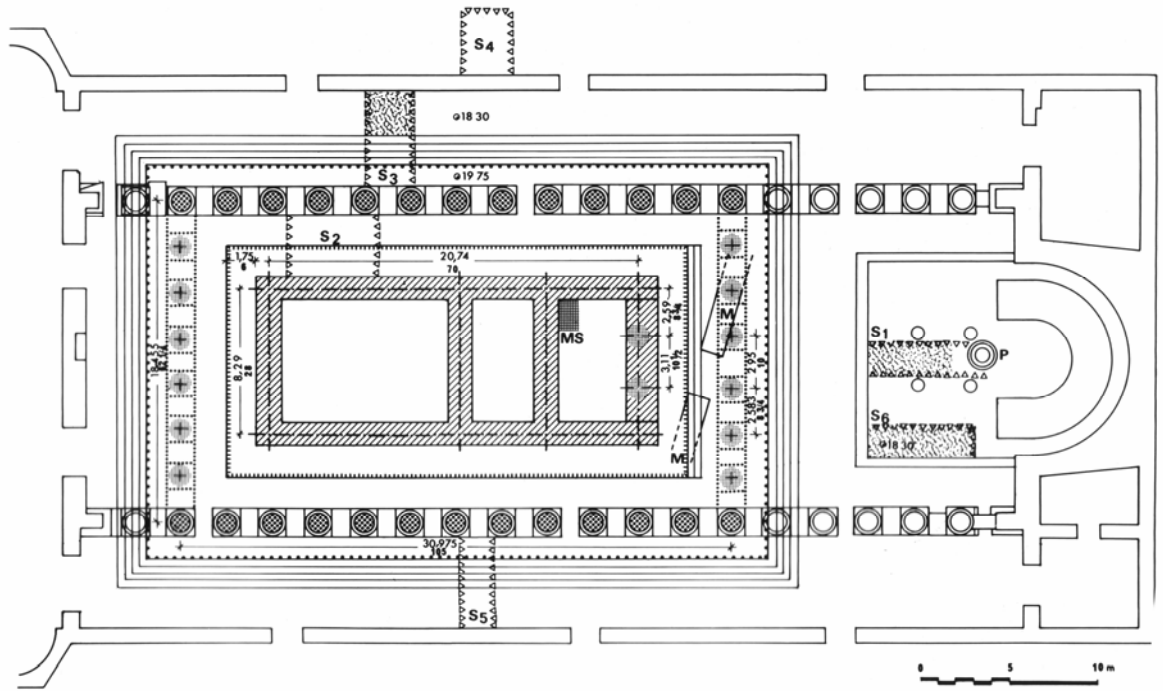


Plate 10. The 5th-century Episcopal Church at Aphrodisias in Caria.

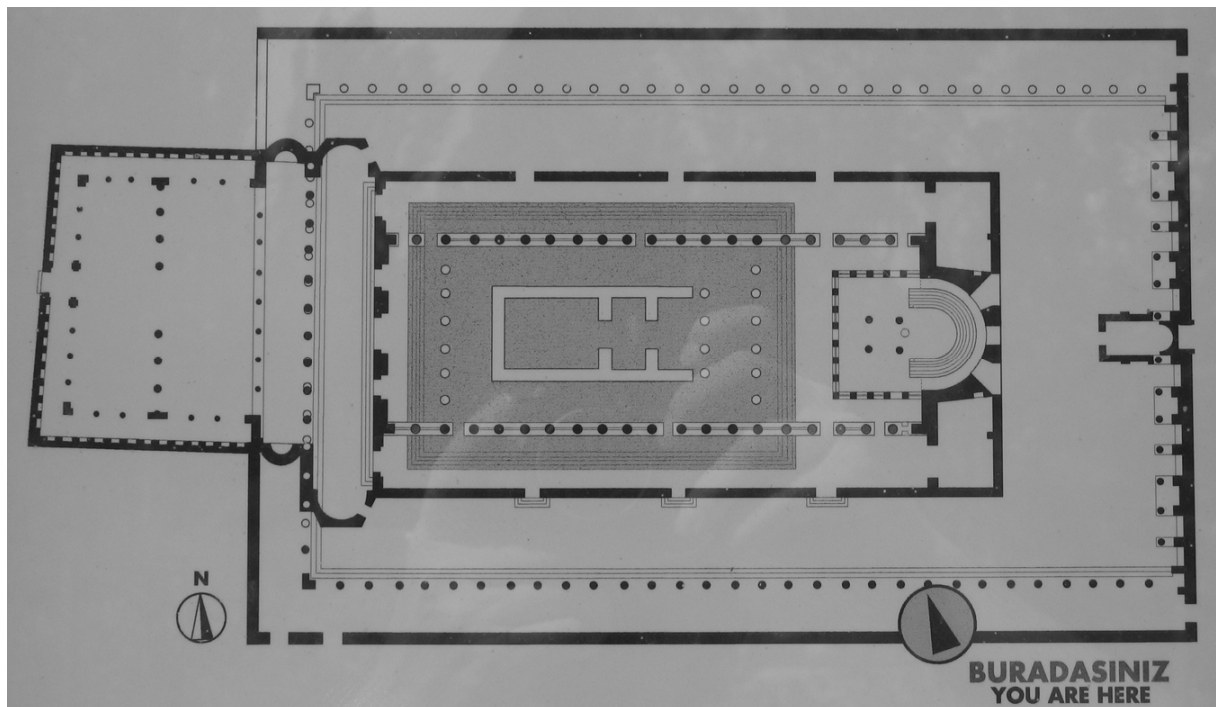


Plate 11. The Episcopal Church at Aphrodisias including *exonarthex* and atrium.

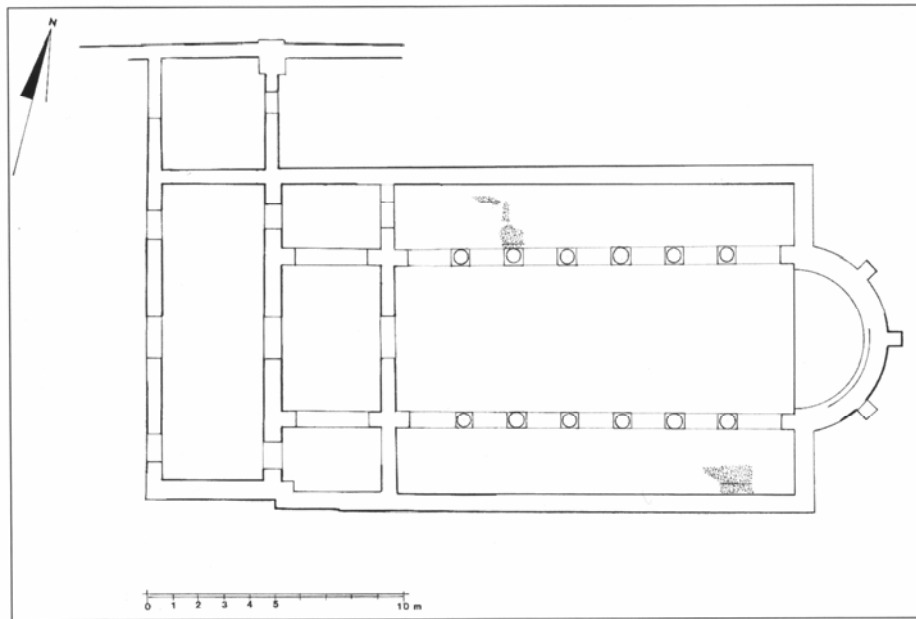


Plate 12. 5th- or 6th-century church at Herakleia in Caria.

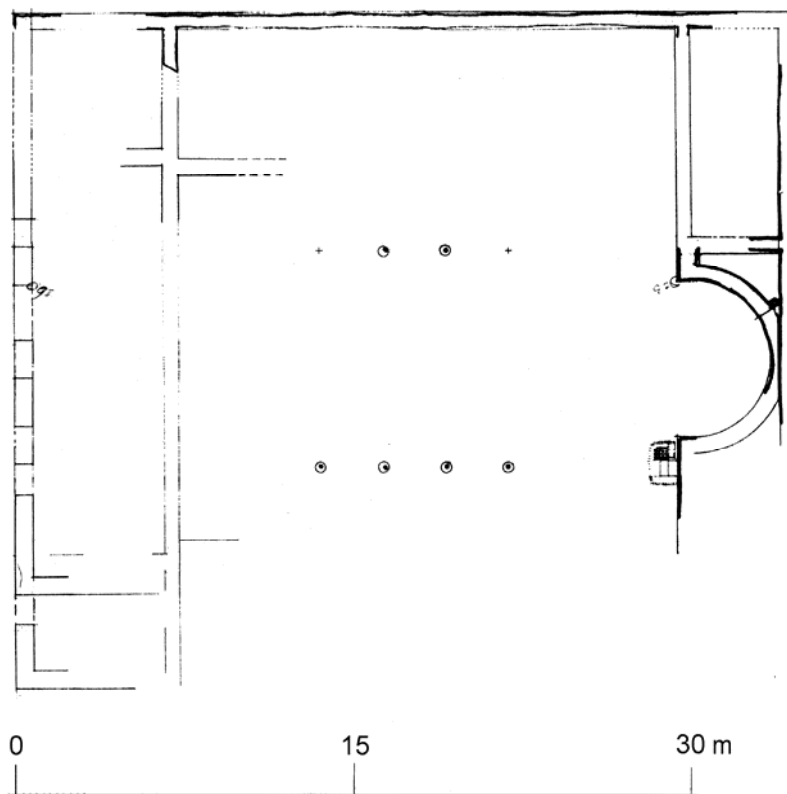


Plate 13. The extra-mural church at Iasos in Caria, probably 5th century.

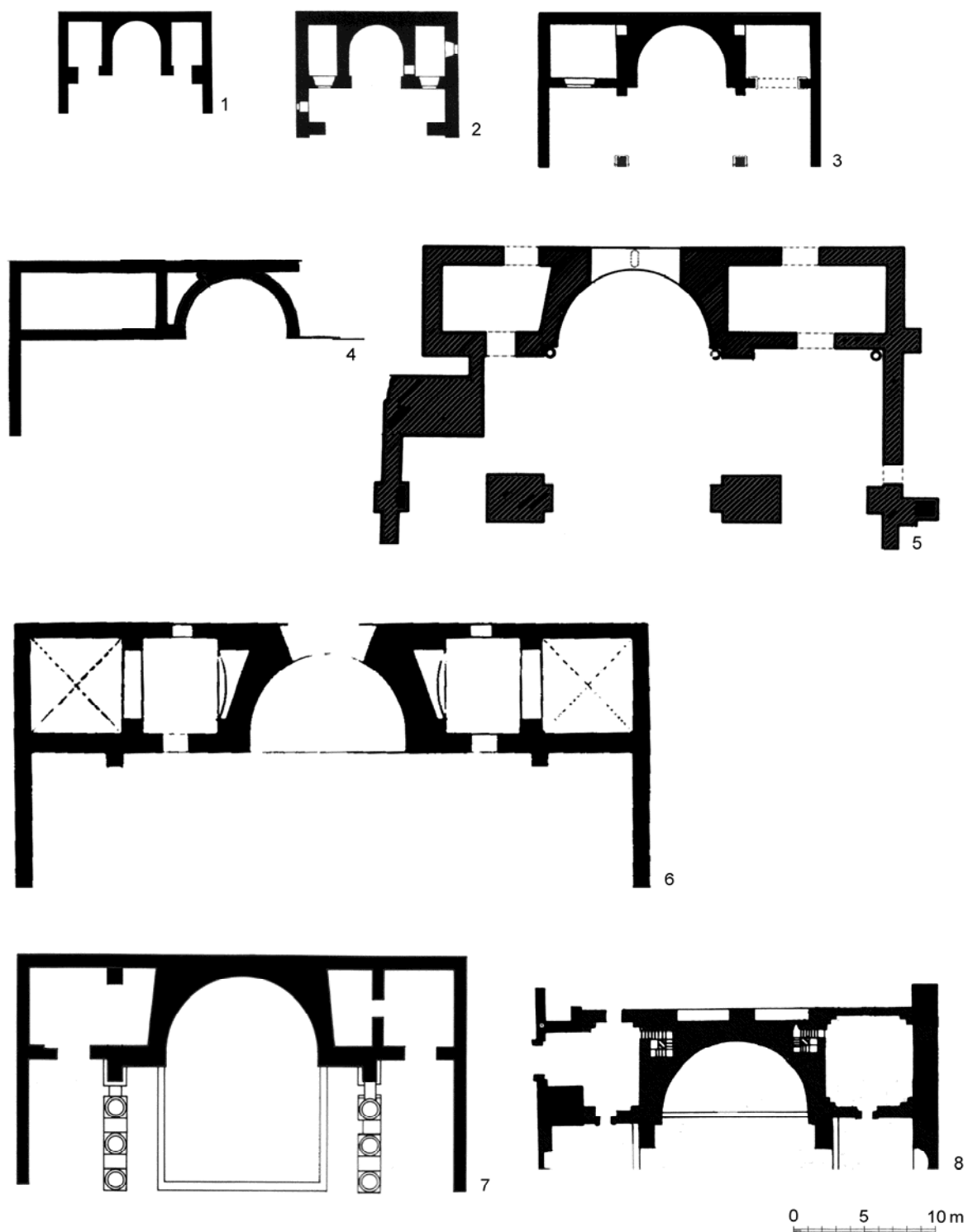


Plate 14. Comparative study of tripartite sanctuaries of 1. Labraunda in Caria; 2. Dama at Leja in Syria; 3. Marata in Syria; 4. Iasos in Caria; 5. Hierapolis (basilica with piers) in Phrygia; 6. Perge (Basilica A) in Pamphylia; 7. Aphrodisias (Episcopal Church) in Caria; 8. St. Mary in Ephesus, Ionia. All drawn to the same scale.

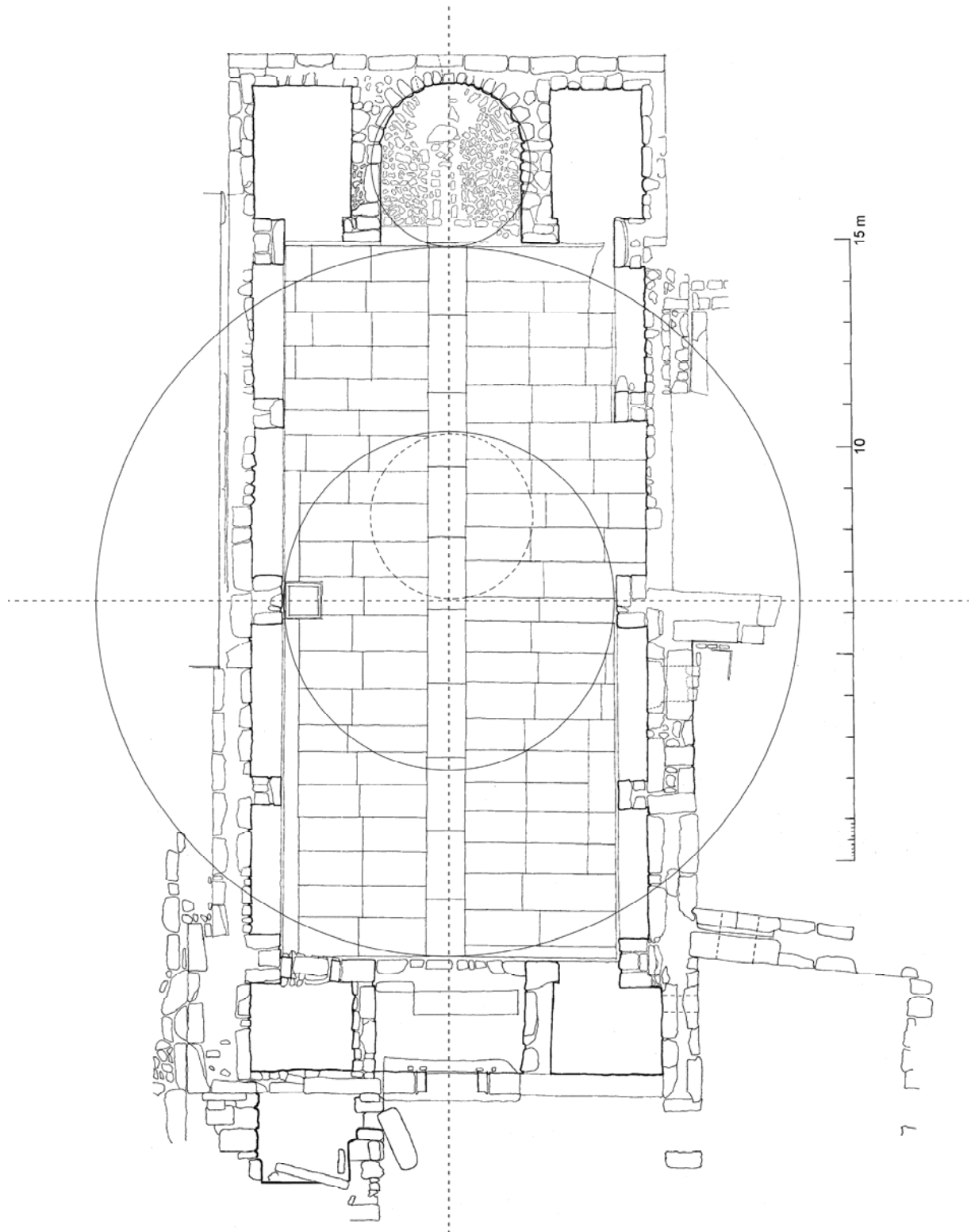


Plate 15. Plan of the Labraunda church showing the proportions of the nave and the apse.

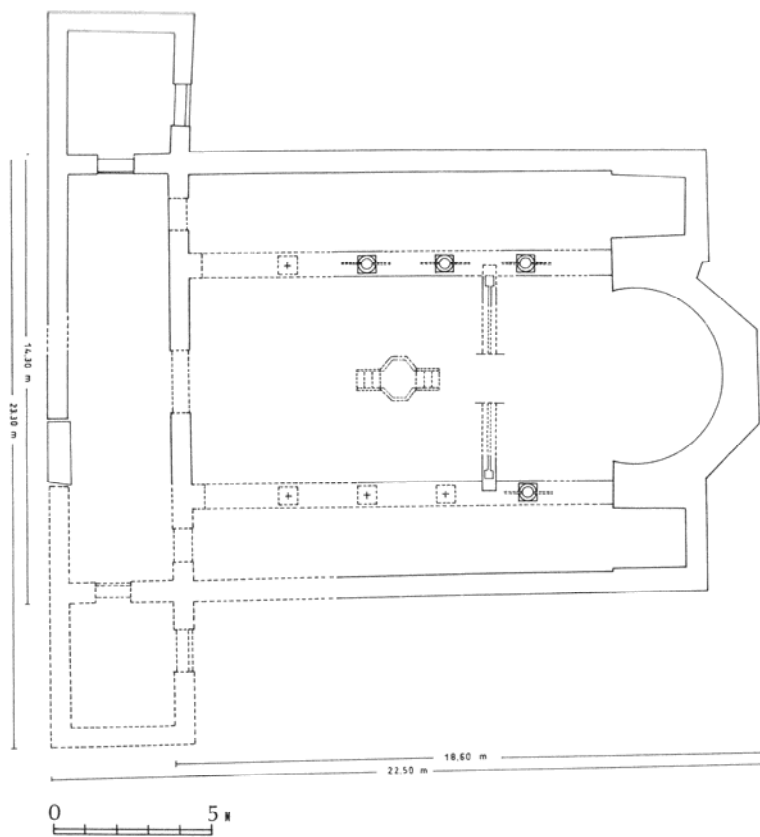


Plate 16. The Agora Basilica at Iasos, Caria.

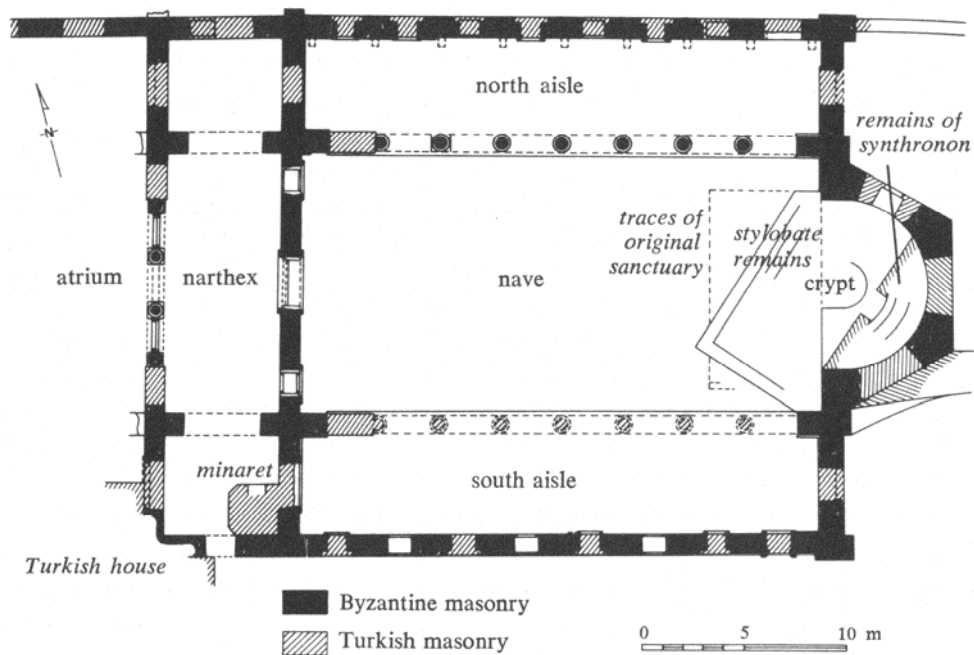


Plate 17. The monastery church of St. John Studius, Constantinople.