Transformation and Re-Use of Public Baths in Western Asia Minor, 400 – 700 A.D.

By

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Abstract

By the third century A.D., most cities in western Asia Minor could boast of at least one large public bath, but during the fourth through seventh centuries A.D., many public baths in this region underwent significant transformations and were re-used, in whole or in part, for other purposes. This dissertation focuses on the transformation and re-use of a select group of public baths in western Asia Minor throughout the Roman Imperial period, and especially during the fourth through seventh centuries A.D.

In addition to describing how the buildings were altered or used differently over time, I evaluate potential causes for why the buildings -- or in many cases, parts of the buildings -- were available for re-use. My case studies include the Sardis Bath-Gymnasium Complex, the Vedius Bath-Gymnasium Complex at Ephesus, and the Sagalassos Bath-Gymnasium Complex. By implementing a comparative approach, I seek to demonstrate that large public baths were re-used in a variety of ways, according to local needs and circumstances, and that decisions were influenced by multiple complex factors. Among these are the social pressures brought about by the rise of Christianity, military attacks, disruptions in trade networks, people moving from cities to the countryside, and natural disasters such as severe earthquakes, fires, floods, and outbreaks of plague. The types of transformations and re-use that I consider include functional changes, privatization and subdivision, changes to the buildings' statuary programs, and the re-use of the buildings and their materials after the buildings were no longer used as baths.

Chapter 1: Introduction

1.1 Why public baths?

Public baths were important buildings in the Roman world. By the early second century A.D., a visit to a public bath was part of the daily routine for most people who lived in cities, regardless of their social status. People would go to public baths for the practical purpose of maintaining personal hygiene, but also -- and perhaps, more importantly, since basic washing could be managed at home -- to socialize, enjoy the lively atmosphere, and sometimes to cultivate interests in sports, art, music, or literature. Some public baths were equipped with libraries, lecture halls, and meeting rooms. Some public baths also served as venues for special occasions, such as welcoming dignitaries, banquets, other displays of munificence, or ceremonial events. Legal proceedings were also sometimes held in public baths.[1]

The size and grandeur of Roman public baths varied tremendously. Imperial type baths, which are sometimes called bath-gymnasium complexes in modern scholarship because they combined the forms and functions of traditional Roman baths and Greek gymnasia, were the largest and grandest facilities.[2] They usually occupied multiple urban *insulae* and were lavishly decorated. Only the most important cities could afford imperial type baths, and even then, they were often supplemented by imperial funds.[3] There were also a variety of smaller public baths

[1] On the social significance of Roman public baths, see: Dunbabin 1989; Nielsen 1993, 16, 144-48, 163-66; Yegül 1995, 2010a; DeLaine 1999; Fagan 1999.

[2] For Asia Minor, see: Yegül 1995, 250-56, 282-84; Nielsen 1993, cat. 290, 292, 295, 297, 298, 300, 302, 303, 315.

[3] The founder of the Vedius Bath-Gymnasium Complex at Ephesus wrote to Antoninus Pius asking for financial assistance for the building's decoration. See Kalinowski 2002, 113-14. The construction and decoration of the Baths of Zeuxippos in Constantinople were also imperially funded. See Bassett 1996, 491-93. For a discussion about the benefactors of baths, extending beyond construction and decoration to maintenance, and beyond emperors, see: Fagan 1999, 104-75. See also Nielsen 1993, 122-25; DeLaine 1999, 12; Yegül 1995, 43-46.

designed to appeal to specific social groups or tastes.[4] The accounts of several ancient authors tell us that the status of cities was unofficially judged by the quantity and quality of their public baths.[5]

What is perhaps most interesting about Roman public baths is how embedded they were in the social fabric of cities, and how long the tradition of public bathing endured. After growing in popularity in Rome and throughout the Italian peninsula in the late Republic and early Empire, designs and desires for public baths spread rapidly to provincial cities and towns.[6] In the second century A.D., there was a major wave of public bath constructions in all parts of the Roman Empire. Many of the baths that were built during that wave continued to be maintained for hundreds of years. This was especially true in the east, where many cities continued to flourish into the sixth and seventh centuries A.D. Some of the baths that continued to be used for such long periods of time – in some cases four or five hundred years – were transformed or used differently over time. When public baths were no longer used as baths, they were often repurposed, but in many cases, a gradual relinquishing and/or repurposing of space occurred even before the buildings stopped being used as baths.[7] Transformations of Roman public baths, including physical alterations or other evidence of different ways that the buildings were used -- or re-used -- are important to study because they tell us about the later histories of these

[4] Yegül 1995, 66; 2010a, 36.

[5] *Ael. Aris.* 15.232; Tac. *Agr.* 21.2; Lucian, *Hippias* 6-8; Lib., *Or.* XI.244-45 (I, 523-24); Procop. *Aed.* 4.10.21, 5.2.5, 6.4.11; Saradi 2006, 325-26; Yegül 2010a, 3; Pickett 2018, 114-18; Maréchal 2020, 28-30.

[6] Yegül 1995, 30, 48, 79; Nielsen 1993, 1, 149; 1999.

[7] Kennedy 1985, 8-10; Milojevik 1996, 259-62; Leone 2003, 269-82; Saradi 2006, 335; McDavid 2019, 1; Maréchal 2020, 204-05; on the privatization of public space in late antiquity, more broadly, see Saradi 2006, 186-208; Jacobs 2009.

buildings, which have been neglected in scholarship until recently. They also tell us about the changing expectations, needs, and circumstances of the people who used the buildings.

1.2 Central research questions and selection criteria

In this dissertation, I focus on the transformation and re-use of a select group of baths in western Asia Minor between circa 400 and 700 A.D. These chronological boundaries span a period of great change in the region: from the rise of Christianity to military attacks, disruptions in trade networks, and natural disasters including severe earthquakes, fires, floods, and outbreaks of plague. They also span the period when most public baths stopped being used in their original or full capacities. The buildings that I focus on include the Sardis Bath-Gymnasium Complex (chapter 2), the Vedius Bath-Gymnasium Complex at Ephesus (chapter 3), and the Sagalassos Bath-Gymnasium Complex (chapter 4). I begin each chapter with a brief introduction to the city and its history, an overview of the city's water supply and bathing landscape during the Roman period, and an introduction to the bath-gymnasium complex that is the true focus of the chapter. Next, I describe and analyze changes that were made to the building, focusing on details such as water supply and drainage, heating systems, blocked doorways, new floors, and revisions to sculptural programs. I organize the content by room or by type of renovation, all within an overarching chronological framework.

My early thinking for this project developed while I was working as the site photographer at Sardis. My exposure to the Bath-Gymnasium Complex there led me to question how it fit within the larger scope of baths in Asia Minor. Were there other baths that had similarly long building histories? If so, were they transformed or re-used? Preliminary research revealed that many baths in western Asia Minor fit a similar pattern. I wanted to delve further into my research of baths to identify a range in the types of transformations that baths were subjected to in late

antiquity, and to explore the motives that cities may have had for modifying or repurposing their baths.

I chose to limit the geographical scope of my study to western Asia Minor to focus on baths in cities that were facing similar pressures. I also wanted the baths in my study to be similar in scale, purpose, and design. All three of the buildings that I ultimately included are large bath-gymnasium complexes with imperial dedicatory inscriptions, and since all three cities were *neokoros* cities in their heyday, each of the buildings may occasionally have been used for ceremonies related to imperial cult festivals or other large-scale athletic competitions.[8] I also selected these buildings because they are well preserved, have already been excavated and studied, and are accessible through publications. It was important to me that each of the baths was transformed in different ways, and for different reasons -- or as it ended up being, for many of the same reasons, but in different combinations, and at different times – because I wanted to be able to showcase the variety, creativity, and flexibility that these cities demonstrated when it came to making decisions about their beloved baths.

1.3 Introductions to case studies

All the buildings that I have selected as case studies were used as baths from the time of their construction around the middle of the second century A.D. until at least the late fifth century A.D. The Sardis and Sagalassos Bath-Gymnasium Complexes continued to be used as baths even later, into the late sixth or early seventh century A.D. The fact that all three of these buildings continued to be maintained and modified for a long time shows that the cities continued to value them. Even after the buildings stopped being used as baths, the cities still found value in them by utilizing them in other ways – mainly as quarries or for other industrial

[8] A *neokoros* city is a city that had been granted a special privilege to build and maintain an imperial cult temple. Price 1984, 62-77; Burrell 2004.

purposes. The modifications to each of these buildings were not made according to strict rules, but rather according to the diverse needs and circumstances of the cities. Often, the needs and circumstances of the cities were similar, and that seems to be the best explanation for why some of the transformations were similar. The statuary programs of all three of the Bath-Gymnasium Complexes in this study are relatively well preserved, and that has also influenced my selection. Other baths would not have enabled me to address – at all, or as well -- some of the topics that are unavoidable and make these baths so interesting, such as the differential treatment towards traditional pagan themes and/or nudity, and the fate of imperial statues in late antiquity.

1.3.1 Sardis Bath-Gymnasium Complex

The Bath-Gymnasium Complex at Sardis is the first building that I consider. It is one of the largest bath-gymnasium complexes in all western Asia Minor, and its plan is reminiscent of the large imperial baths in Rome.[9] Like all the baths in this study, its size and grandeur are commensurate with the status and economic success of the city. In the late third century A.D., Diocletian promoted Sardis to be the provincial capital of Lydia, and it became especially prosperous during the fourth and fifth centuries A.D. The Sardis Bath-Gymnasium Complex was extensively renovated during the late fourth or early fifth century A.D. One of the major transformations around that time was the conversion of the long hall to the south of the palaestra into a synagogue. Although several baths were converted in whole or in part into Christian churches in late antiquity, the Sardis Bath-Gymnasium Complex is the only bath that is known to have had a synagogue built into it.

Other important transformations of the Sardis Bath-Gymnasium Complex include the paving of the palaestra, which made it unsuitable for athletics, and the blocking of the screen

[9] Yegül 1986 is the main source for the Sardis Bath-Gymnasium Complex.

colonnades, which helped to further separate the bath-block, both physically and ideologically, from the palaestra. The paving of the palaestra and the blocking of the screen colonnades are tentatively dated to between the fourth and sixth centuries A.D. Other parts of the building were also given over to other non-bath purposes. For example, pottery kilns were installed in one area, and another part of the complex was converted into a humble kitchen and metalworking area. Most of these conversions probably occurred after the building had stopped being used as a bath, but some of them may have occurred before. The building stopped being used as a bath after the earthquake and fire of circa 615/6 A.D. and it was not rebuilt. Instead, lime kilns were installed to re-use the building in a different way – for its materials. The city could have rebuilt the bath, but they -- or the imperial officials that would have had to approve and allocate funding for the project and may have had access to private baths -- decided to focus their efforts on other projects, such as fortifying the acropolis and reconstructing the main road.

1.3.2 The Vedius Bath-Gymnasium Complex at Ephesus

The Vedius Bath-Gymnasium Complex at Ephesus is the second bath that I consider.[10] It is frequently commented how similar in plan this building is to the Sardis Bath-Gymnasium Complex, and that is probably because Sardis and Ephesus were two of the most influential cities in western Asia Minor in Roman times, and ideas, including architectural plans, could be transmitted quickly between them. The Vedius Bath-Gymnasium Complex may have been damaged by one or more of the third or fourth century A.D. earthquakes. It was renovated during the late fourth or early fifth century A.D., and less than one hundred years later, stopped being used as a bath. Unlike the Sardis and Sagalassos Bath-Gymnasium Complexes, the decision to stop using the Ephesus-Vedius Bath-Gymnasium Complex as a bath does not seem to have been

[10] Steskal et al. 2008 is the main source for the Vedius Bath-Gymnasium Complex.

immediately caused by a catastrophic event. Instead, the decision was probably because Ephesus had multiple other large public baths, and it became too expensive to continue to maintain and heat all of them. The city may have decided to close the Vedius Bath-Gymnasium Complex, as opposed to one of the other bath-gymnasium complexes, because it was in an area that was less frequented once the religious, administrative, and social focus of the city had moved closer to the harbor.

1.3.3 Sagalassos Bath-Gymnasium Complex

The Sagalassos Bath-Gymnasium Complex is the third and final bath that I consider.[11] It is smaller than the Sardis and Ephesus-Vedius Bath-Gymnasium Complexes, and asymmetrical in plan. Sagalassos was a much smaller and less politically important city than Sardis or Ephesus, and as a result, it had access to fewer resources, and probably fewer baths. Only two public baths have been discovered at Sagalassos. This may well explain why the city was so persistent in its efforts to maintain its largest bathing facility. One of the most significant transformations of the of the Bath-Gymnasium Complex occurred during the late fourth or early fifth century A.D., when the entire eastern part was converted from a frigidarium with adjacent apodyteria (a cold-water bathing room with adjacent changing rooms) into a multipurpose space that could have been located anywhere in the city, as it no longer had a specific bath-related purpose. Around the same time, another room that had previously not been used for bathing was converted into a smaller frigidarium, and a room that may have originally functioned as a Marble Hall was converted into a caldarium (a hot-water bathing room). Later changes have also been

[11] There is not yet a monograph on the Sagalassos Bath-Gymnasium Complex, but detailed information is available in the annual reports in *Kazı Sonuçları Toplantısı* and in the longer annual publications produced by the Sagalassos Archaeological team: Waelkens 2009, 338-77; Waelkens et al. 2010; Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011; Rens et al. 2012. See also The Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: Waelkens et al. Sagalassos Field Notes 2003-2010; and Waelkens 2013.

detected in the building. Graduated rows of seats were installed in the former frigidarium to make an improvised auditorium, which was later replaced by a kitchen, and later still, by a workshop with kilns.

1.4 Previous Scholarship on Roman Baths:

Roman baths have been the subject of scholarly inquiry for a long time. Whereas early scholarship focused on identifying and describing the remains of bath buildings, and establishing typological categories, more recent scholarship has focused on the socio-historical contexts of the buildings.[12] Early bath scholarship was usually written in a descriptive, almost biographical manner that focused on the heyday of Roman baths and bath culture in the second century A.D. Although evidence for re-use, such as kilns, heaps of broken marble that were waiting to be burnt for lime, and mortar and rubble walls were visible to 19th and 20th century excavators, early excavators were not really interested in re-use and destroyed much of the evidence for it. Their priority was to make the earlier, more glamorous period come alive through reconstructions of daily life at the baths. More recent studies, including the studies that I have relied on to write about the Sardis, Ephesus-Vedius, and Sagalassos Bath-Gymnasium Complexes, are better about describing, analyzing, and contextualizing the later history of the baths, but their scope is limited, and this is where regional studies can be helpful.

Several regional studies have been added to the rapidly expanding corpus of Roman bath scholarship since the publication of the works listed in the extensive bibliography compiled by

[12] For useful overviews of bath scholarship, see: DeLaine 1988; Underwood 2019, 31-32. Dunbabin 1989; Brödner 1992; and Nielsen 1993. Yegül 1995, 2010a, and Fagan 1999 were at the forefront of the shift towards a more socio-historical approach to baths and bathing culture. Allyson McDavid's 2015 dissertation on the Hadrianic Baths at Aphrodisias is an example of how a single building can be placed, effectively, in its wider socio-historical context.

Hubertus Manderscheid, which covers the years 1988-2001.[13] Italy, North Africa, Spain, Gaul, and Palestine are particularly well represented in new regional studies.[14] For Asia Minor, the main regional studies are Andrew Farrington's book *The Roman Baths of Lycia: An Architectural Study* (1988); and Fikret Yegül's chapter: "Baths and Gymnasia in Asia Minor" in his book *Baths and Bathing in Classical Antiquity* (1995).[15]

Monographs and shorter studies of individual buildings constitute perhaps the largest portion of the scholarship on baths.[16] They consider architectural details such as heating systems, water supply, drainage, ancillary rooms and their functions, inscriptions and decorative elements including mosaics, wall paintings, molded reliefs, and especially sculpture. The best examples situate a particular bath building within a regional or typological context. The ornate rooms at the center of many of the Bath-Gymnasium Complexes in Asia Minor, the so-called *Marmorsaal,* have received attention for their debated connections with the imperial cult.[17] The attached *palaestrae,* or courtyards inspired by Hellenistic gymnasia, have not received as much attention as the actual bathing facilities.

Synthetic works that deal with the late antique history of baths and bathing culture have been slow to emerge, but important work is now being done in this area. Yegül's *Baths and Bathing in Classical Antiquity* was one of the first books to include a full chapter on the late antique history of baths, and Yegül's 2010 publication, *Bathing in the Roman World,* had an

[13] Manderscheid 2004.

[14] Stirling 2001; Leone 2003; Underwood 2019, 48-69; Maréchal 2020, 261-455.

[15] Farrington 1995; Yegül 1995, 250-313.

[16] Underwood (2019, 31) points out that Manderscheid's bibliography for the years 1988-2001 lists 1,749 site or regional studies, and that there are even more published sites and regional studies now. Manderscheid 2004.

[17] Yegül 1982; Burrell 2006.

even greater focus on the survival and transformation of the classical bathing tradition into late antiquity and beyond.[18] In 2013, there were two PhD dissertations that focused specifically on late antique baths and bathing culture.[19] Sadi Maréchal's book *Public Baths and Bathing Habits in Late Antiquity,* which was published in 2020, was a timely and most welcome contribution.[20]

Scholarship that discusses the transformation and re-use of baths in late antiquity often frames it in the broader context of what happened to cities in late antiquity. This has led to many value judgments about late antique transformations and re-use of urban properties. Some of the main works in this vein include Kennedy 1985 and Saradi 2006.[21]

1.5 Social and environmental factors that affected large public baths in late antiquity

Some of the factors that are typically blamed for the transformations and ultimate closures of public baths in late antiquity include administrative and financial difficulties, failing infrastructure, water supply issues, natural disasters, invasions, urban population decline due to recurring outbreaks of Justinianic Plague and large numbers of people moving to the countryside (ruralization), changing educational and athletic practices, and the rise of Christianity and moralists objecting to nudity and bodily pleasures at the baths.[22] There also seems to have been a growing preference for private bathing in late antiquity, which may have been influenced by Christian ideals, or a result of other social and economic realities.[23]

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[18] Yegül 1995; 2010.

[19] Deforest 2013; Zytka 2013.

[20] Maréchal 2020.

[21] Kennedy 1985, 8-10; Saradi 2006, 325-43.

[22] Saradi 2006, 325-43; Steskal 2010, 575; Niewöhner 2017c, especially 44-45.

[23] Yegül 1995, 315-18; 2010, 186-88, 199-206; Saradi 2006, 341-42; Blid Kullberg 2016, 154-59; Maréchal 2015, 125-30; 2020, 206-10. Late antique urban mansions with private baths have been recorded in all three of the cities where my case studies are located. **Sardis,** private bath in sector PN: Hanfmann 1961, 24-29; 1962, 15-19; 1963,

1.5.1 Administrative and financial difficulties

Cities in Asia Minor were traditionally governed by local councils, and membership in these councils was both an honor and a responsibility that young men from upstanding, wealthy families were expected to seek out.[24] Wealth was a requirement, as council members were expected to support their cities through generous financial gifts, often in the form of new construction projects, or the upkeep of roads, colonnades, aqueducts, fountains, or public buildings. Other typical gifts or demonstrations of *euergetism* included distributions of food or entertainments. After the reforms of Diocletian in the late third and early fourth centuries A.D., imperial administration was drastically changed, and this, in turn, affected administration at the level of individual cities. Local councils began to wane in importance as administrative responsibilities were transferred to imperial representatives. Local elites were still forced to contribute monetarily, but it went to the imperial coffers, rather than directly to benefit their home cities. Being a member of the curial class -- the wealthy elites who traditionally filled the seats on local councils -- became more of a burden than an honor, as they were expected to cover any tax deficit, sometimes to their own financial ruin. Many fourth century A.D. laws were designed to keep the curial classes from abandoning their duties, even after they had reached the point of personal financial ruin.[25] The result was that cities were financially drained and at the

18-23; 1964, 20-24. **Ephesus**, Byzantine Palace baths: Uytterhoeven, 2011; **Sagalassos**, private bathing complex in the urban mansion: Uyterhoeven et al. 2001.

[24] Saradi 2006, 148-85.

[25] Book 12 of the Theodosian Code collates 192 laws, ranging in date from 315-436 A.D., threatening various penalties to the decurions, members of the curial class, if they should abandon their duties. For example: 'persons who are of the birth status of decurions shall be led forth and from their hideouts and shall be dragged forth to undergo the performance of their compulsory public services. The harbourers of such persons shall be threatened with loss of their property as well as loss of their status if they should proceed farther and should esteem the public welfare less than their personal desires and their protection' (*Cod. Theod.* 12.1.76).

mercy of the emperor – through complex and often corrupt channels -- to maintain their public infrastructure. Of course, some local elites managed to hold on to their wealth, and the social practice of *euergetism* did not die out entirely, but there was a significant shift.[26] Large donations or liturgies were not as frequent as they had been during the early Empire, and donations were increasingly made by private individuals, many of whom were merchants or tradesmen. Bishops also gained significant administrative power over cities during late antiquity, and it is significant that the major new construction projects in the fifth and sixth centuries A.D. were churches and bishops' palaces. The priorities of the Church clearly influenced the dispersal of funds.

1.5.2 Christianity's influence on public baths

Nineteenth and twentieth century scholarship painted Christianity as one of the most severe factors that brought about the closure of public baths, but most recent scholarship is moving away from that notion, emphasizing that although some Christians objected to public baths, most Christians -- including priests, continued to use them.[27] It is interesting that churches were often constructed near public baths, sometimes even directly inside them or attached to them (there are multiple examples of this at Ephesus).[28] Also, most of the baths that were built as new constructions in late antiquity were financed by the Church, so it seems that the Church's goal was not to completely end the practice of public bathing, but to reform it by encouraging modesty and moderation, and removing what Christian moralists considered to be problematic,

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[26] On *euergetism* in late antiquity, see: Saradi 2006, 163-85; Salzman 2017; Underwood 2019, 190-93. Zuiderhoek (2009) is a key text for studying *euergetism* in Asia Minor, but focuses on the first through third centuries A.D.

[27] Nielsen 1993, 146-48; Saradi 2006, 325-29; Yegül 2010a, 199-206; Maréchal 2016, 208-09; Schoolman 2017, 225-31; Underwood 168-69, 175-76.

[28] Milojevic, 1996, 259-62; Saradi 2006, 328-29; Blid Kullberg 2016. Ephesian baths connected to churches: church attached to the East Bath-Gymnasium Complex, small bath to the south of the baptistery in the Church of Saint Mary, baths inside the Byzantine Palace/Sarhoş Hammam. See Steskal 2010.

such as licentiousness, gambling, excess drinking, prostitution, or pagan religious practices and superstitions. Mostly, Christianity seems to have encouraged people to bathe more as a practicality than as a luxury.

1.5.3 Changing attitudes towards athletics in late antiquity

Athletics were important in the ancient world, especially in Asia Minor where they were closely associated with religion and traditional educational practices.[29] The athletic competitions (*agones*) that were held in Asia Minor during the second and third centuries A.D., corresponding to the cultural movement known as the Second Sophistic, were reminiscent of the Greek athletic competitions that emerged in the seventh and sixth centuries B.C., and continued to be important throughout the Classical and Hellenistic periods. Many Greek city-states were establishing new colonies in the seventh and sixth centuries B.C., so there was a need for politicians, as representatives of the city-states, to be able to come together in a neutral place to discuss political matters. For this reason, these important diplomatic meetings were originally held at sanctuaries, where violence was forbidden.[30] Athletic competitions became an important part of these international diplomatic meetings not only for their entertainment value, but also – and more importantly – because they allowed cities to compete, to demonstrate their fitness, and to obtain glory in a less violent or risky way than on the battlefield. These early competitions soon led to the professionalization of athletics and to the growing cult of the body and idealization of

[29] Price 1984, 101-32, especially 110; Newby 2005, especially 246-48; Burrell 2006, 460-61; Kyle 2007, 329-32; Yegül 1995, 309-13; 2010, 120-25; Remijsen 2015, especially 27-32, 70-88.

[30] Some of the most important, early athletic competitions -- or most well-known because Pindar wrote about them – include the competitions at Olympia in honor of Zeus, at Delphi in honor of Apollo, at Isthmia in honor of Poseidon, and at Nemea in honor of Zeus. All these competitions were originally held in the respective sanctuaries of the gods being honored. See Remijsen 2015, 28.

physically fit male youths. They became a way for cities to bolster their pride and garner international recognition.

The new athletic competitions that were established in the first century A.D., and more frequently in the second and third centuries A.D., were often held in honor of the emperor rather than the traditional gods of the host cities, although the traditional gods could be honored alongside the emperor and the imperial family during these festivals.[31] The new athletic competitions served much the same purpose as the original competitions that they were inspired by, which was to establish the host cities as centers of regional, and sometimes international, importance. The host cities sometimes held the status of *neokoros,* or temple warden, which was a special honor that only the most ambitious cities achieved due to a rigorous vetting process -- cities had to apply and be approved.

Beginning in the late third century A.D., fewer athletic competitions were held, and modern scholarship often attributes it to some of the same factors that are blamed for the ultimate closures of large public baths: financial and administrative difficulties, the rise of Christianity and Christian objections to nudity, and especially failing infrastructure due to earthquakes and invasions.[32] These explanations for the decline of deeply rooted athletic traditions are not entirely satisfying because, as Sophie Remijsen argues, cities could have made relatively simple adjustments: if the infrastructure was damaged, they could have rebuilt or held competitions in a field, or if nudity was the problem, they could have reintroduced loincloths.[33] The decline of

[31] Friesen, 137-41. It is not difficult to imagine that individuals who had traveled a long way to be present for what Friesen refers to as the Ephesian Olympics, may have also visited the Temple of Artemis.

[32] Yegül 1995, 313; Saradi 2006, 306-09; Remijsen 2015, 12-13.

[33] Remijsen 2015, 12.

athletic competitions seems instead to have been caused by a fading interest in athletic pursuits, which coincided with a turn towards more intellectual pursuits.[34]

Gymnasia were the traditional places of physical and intellectual education for young men during the Classical and Hellenistic periods. Under Roman rule, the Greek cities of the east -- including the cities of Asia Minor -- continued this tradition, but they were less strict about physical training, as that was more of a concern for the Roman military to sort out, and physical training at gymnasia -- or bath-gymnasium complexes, which in some cities came to replace their old gymnasia -- came to be more of a pastime, an opportunity to socialize with peers and enjoy moderate or less strenuous activities.[35] Elite young men were taught that athletics were admirable, but best left for performers or professional athletes because intellectual pursuits offered a more realistic path towards a successful career.[36] This shift – the new prioritization of intellectual pursuits over athletic pursuits – can be detected in the transformation of many bath-gymnasium complexes, as their palaestras often stopped being used or were converted for other, non-athletic purposes prior to the repurposing or abandonment of the actual baths.[37]

1.5.4 The shift towards private bathing in late antiquity

It is possible to detect a shift towards private bathing in late antiquity.[38] This may have been due to changing preferences or caused by other social or economic realities. Some people

[34] Steskal 2003a, 234-37; Newby 2005, 16; Remijsen 2015, 75.

[35] Newby 2005, 1-7.

[36] Newby 2006, 272-81, especially 273-74; Yegül 2010a, 120-21.

[37] Steskal 2003a, 234-37; Yegül 2010a, 170-73.

[38] Yegül 1995, 315-18; 2010, 186-88, 199-206; Saradi 2006, 333. Note that private bathing did not mean bathing alone or in private as we think of it today. It meant bathing in smaller baths, often attached to private residences. 'Privately owned' may be a better way to think of private bathing in antiquity. See Blid Kullberg 2016, 146; Maréchal 2020, 206-10.

may have been influenced by moralists that criticized baths – especially large public baths - as dens of immodest and immoral behavior and spoke harshly against the enjoyment of bodily pleasures, which ranged from gambling, gluttony, and sexual encounters, to spending too much time relaxing, cutting into time that could be spent for more productive tasks, such as work, prayer, or study, or something seemingly as harmless -- to us -- as enjoying the natural release of muscle tension after soaking in warm water.[39] Other people may have preferred smaller, more private baths for reasons that had nothing to do with religion, and everything to do with personal taste. With fewer people, smaller baths could be more peaceful. Smaller baths could cater to a particular clientele and focus on quality over quantity. Some people may have preferred private bathing facilities for the same reason that some people today prefer private clubs over their local YMCA: private bathing facilities enable(d) people to be more selective about their bathing companions.

The shift towards private bathing culminated with large, public baths ceasing to be maintained, and no new ones built, but it was a gradual process, and the early stages can be detected in some of the modifications that were made to many large, public baths, for example, with the closures of palaestras, which were important areas for socializing, and the installation of smaller pools (*alvei*) and hip baths in frigidaria, which previously only had large communal pools. A palaestra should have been less expensive to maintain than the actual baths, but they were often the first areas to be abandoned or converted for other purposes, which suggests that it was not all about expense, but about tastes or finding a compromise. A compromise could have

[39] Fagan 1999, 30-39; Saradi 2006, 327. On the pleasures and dangers of baths, see: Dunbabin 1989. See also Yegül 2010a, 19-34; Blid Kullberg 2016, 156; Maréchal 2020, 37, 39, 48, 50 n. 201, 52 n. 227.

meant sacrificing a palaestra for extra income, perhaps in the form of rent that could be used to support the baths. There are several indications that cities found it increasingly difficult to cover the cost of fuel for baths, and that may have forced them to downsize and/or to privatize. Cities may also have been forced to limit their use of water. All these factors may have contributed to the downsizing (or preference) for smaller, private baths in late antiquity.

1.6 Marble Courts in Context

Ornate rooms known in modern scholarship as Marble Courts or Marble Halls have been identified in many of the large public baths in western Asia Minor, including in all three of the bath-gymnasium complexes that I focus on in this study. The rooms are always in a prominent position, sometimes directly across from the main entrance or centered along one of the sides of the palaestra.[40] The prominent position of Marble Courts in public baths, their large size, and especially the vocabulary of their architectural adornment indicate that the rooms were important, both within the contexts of individual buildings, and within the larger contexts of cities. But why they were important, or what activities they might have been used for, have been a subject of considerable debate. One theory was suggested by Josef Keil in 1927 after the discovery of the ornate, marble clad room at the center of the Vedius Bath-Gymnasium Complex at Ephesus.[41] A similar inscription to the architrave inscription in the Sardis Marble Court was found in the Vedius Bath-Gymnasium dedicating it to the Antoninus Pius, the goddess Artemis of Ephesus, and the city itself.[42] An altar was also discovered in front of the central niche in the

[40] Yegül 1982, 7.

[41] Keil 1929a, 1929b. See also Maccanico 1963, 38-41. In 1927, the inscribed plaque (IvE 438) from Room VII of the Vedius Bath had not been found yet. Keil was only aware of the architrave inscription from the palaestra of the Vedius Bath-Gymnasium.

[42] Petzl 2019, cat. 419.

Marble Hall of the Vedius Bath-Gymnasium. Based on these related, but non-conclusive finds, Keil asserted that the niche behind the altar must have held a statue of the emperor, and that the altar served as a place for making sacrifices to the imperial cult.[43]

Fikret Yegül revived and promoted Keil's theory in an article in the *Art Bulletin* in 1982, which he wrote while he was ardently involved with his work on the Sardis Bath-Gymnasium Complex.[44] Excavations of the Sardis Marble Court did not yield an altar or an imperial statue, but Yegül proposed that a monumental table that was discovered in another area of the complex, the Synagogue, might have originally come from the Marble Court, and not merely that it might have been part of the Marble Court's décor, but that it might have been the altar for the imperial cult.[45] If an imperial statue ever occupied the central apse in the west wall of the Marble Court, then it was removed when the apse was cut to create a passage between the Marble Court and the frigidarium (Room BE-H). The altar, if there ever was one, would have been removed when the statue was removed.

Barbara Burrell, on the other hand, argues that Marble Courts were not specifically designed to be imperial cult halls, nor is there any irrefutable evidence to suggest that they were ever used that way.[46] The imperial cult was staunchly observed in Asia Minor, but as Burrell emphasizes, there was a difference between honoring emperors as mortal rulers and worshipping them as immortal gods. It was one thing to erect statues of emperors as a way of expressing gratitude, this would not have been altogether different from erecting statues of regular citizens

[43] Keil 1929a, col. 36.

[44] Yegül 1982.

[45] Yegül 1982, 12-13.

[46] Burrell 2006.

that had contributed money to a building project, but it was another to make sacrifices *to the emperor,* or as Burrell says: "in explicit recognition of him as divine."[47] True imperial cult activities, that is, worship of the emperor as divine, would have been done in temple precincts, some of which have been preserved well enough to study, and not a single one contained an aedicular facade.[48] Burrell also emphasizes that aedicular facades were used for all sorts of structures: nymphaea, theaters, bouleuteria, gates, libraries, even tombs. They were appropriate backdrops for a variety of cultural performances, including everyday urban life. Aedicular facades were versatile, she argues, precisely because they *did not* convey the symbolism of the imperial cult.

The building surge of rooms like the Marble Court at Sardis corresponded to a renewal of interest in competitions during the first through the third centuries A.D.[49] Louis Robert famously referred to the phenomenon as the "agonistic explosion" of the imperial age.[50] The vast majority of the competitions were athletic, but debates, theatrical performances, and musical competitions were also popular, and large public baths or bath-gymnasium complexes sometimes served as venues. Marble Courts may have served as venues for some of the non-athletic agonistic events, as well as for associated ceremonies and banquets. The competitions varied in size and significance. Some of the competitions awarded monetary prizes, while others awarded more symbolic prizes, such as public statues, the right to public processions, or crowns made of

[47] Burrell 2006, 439.

[48] Burrell 2006, 439, 459. See also Burrell 2004, 12, 309, 330.

[49] See Remijsen (2015, 72) for a list of some of the largest competitions in Asia Minor.

[50] Robert 1982, 38. See also van Nijf 2000, 177-81; Remijsen 2015, 10.

olive or laurel branches.[51] Olive oil was also a valuable and sought-after prize, and it may have influenced how the term *aleipterion* (a word that was used in the architrave inscription in the Sardis Marble Court) was used in the Roman Imperial period.[52]

Marble Courts were also venues for the distribution of public benefactions.[53] Benefactors not only needed *to be* generous, but above all, they needed *to be seen* to be generous to gain the social and political clout that was due to them. One way to accomplish this was to stage their distribution of gifts in a magnificent hall, where the spectacle would be enhanced by rich colors and stone surfaces. Competitions and benefactions both changed significantly in late antiquity. Competitions dwindled in number, variety, scale, and prestige. This has frequently been attributed to a loss of interest in competitions, especially athletic ones, beginning in the late third century A.D.

1.7 Methods

The methods that I have employed to conduct this research are primarily drawn from archaeology, material culture studies, architectural history, social history, and re-use studies. Anything that is produced or used by humans – tools and other objects, such as toys, figurines, jewelry, artworks, textiles, documents, buildings, or even entire cities, are considered material culture. Archaeologists often rely on material culture as primary sources in their studies of past civilizations. While the two fields are closely related, an important difference is that material culture studies often focus on object histories – what went into the process of making an object?

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[51] Remijsen 2015, 28-29, 94, 331.

[52] Burrell's phrasing on this point is spot on: "The word *aleipterion* came to be used not only for rooms where oil was applied privately, but also for rooms where oil and other prizes or gifts were bestowed publicly." Burrell 2006, 460-61. See also the discussion of the word *aleipterion* in Petzl 2019, cat. 419.

[53] Burrell 2004, 461.

Who were the makers? How were the materials procured? Who commissioned or purchased the object, and how was the object used? Archaeology does this too, but it frequently prioritizes the final context of the object.[54]

The primary subjects that I focus on – the Bath-Gymnasium Complexes -- are ancient buildings that have been excavated and published, and so they are archaeological subjects as well as material culture. The excavated, physical remains of the buildings, and the publications that make the buildings and their contents (inscriptions, artifacts) available to others who may not have been involved with the excavations are what make further analyses possible. I have relied on excavation reports, articles, monographs and other books, conversations and email correspondences with the archaeologists and specialists who were directly involved with the excavations, excavation blogs, and database records. I have also utilized the maps, architectural plans, photographs, and drawings that are contained in these sources to analyze and interpret the buildings and their transformations.

Since the aim of this study is to move beyond a straightforward architectural analysis of the buildings, and to situate the buildings and the transformations that were made to them within the broader context of late antiquity, I have also integrated ancient and modern textual sources that pertain to the social history of the cities and the baths. This has enabled me to evaluate the effects of the various social factors that are typically 'blamed' or said to be the catalysts for the transformations and ultimate closures of baths to determine whether – or to what extent – they played a role in the transformations and ultimate closures of the baths that form my case studies.

My approach has also been influenced by current discourses in re-use studies. For a long time, the transformation and re-use of classical buildings was interpreted as evidence of decline,

[54] For material culture as a field of study, see: Buchli 2004.

then in the 1970's, more positive interpretations that emphasized continuity, innovation, and resourcefulness emerged. B. Ward-Perkins has famously identified the different schools of thought as "catastrophists" and "continuists."[55] The bibliography is now so voluminous that it can be overwhelming.[56] Today, there is generally more awareness and effort to avoid value laden associations with re-use.

The phase plans that I have created for each of the bath-gymnasium complexes have helped me visualize and better understand the transformations of the buildings. Phase plans are a standard tool in architectural history.

Focusing on the transformation and re-use of three of the most well-preserved, studied, and published bath-gymnasium complexes in western Asia Minor enables me to contextualize the buildings in a way that is grounded in details and archaeological data that can be observed at the local level of individual cities. In keeping with evidence from elsewhere and from the larger discourse about what happened to cities in late antiquity, I show that decisions to transform public baths were based on multiple complex factors, and that transformations and decisions about re-use were the results of local pressures and priorities.

[55] Ward Perkins 1997.

[56] Some of the strongest voices include: MacMullen (1988) and Liebeschuetz (2001) in the "catastrophist" group, and Brown (1971), Kennedy (1985), and Whittow (2001, 2003) in the continuist group. For a useful overview of the debate, see: Cameron 2003.

Chapter 2: Sardis

This chapter explores the transformation and re-use of the Sardis Bath-Gymnasium Complex, which remained in use as a bath into the early seventh century A.D., until it was destroyed by an earthquake and fire circa 615/6 A.D., and the city decided not to rebuild it. In the late fourth or early fifth century A.D., part of the building was transformed into a synagogue, and the palaestra was paved, which made it unsuitable for athletics. Strategically placed inscriptions on the floor of the Marble Court that mention city councils suggest that this grand space continued to be used for important civic functions, such as meetings or ceremonial events, quite late, perhaps until the building stopped being used as a bath. Statuary representing pagan gods and mythological subjects were kept on display, although some of them, for example, a statue of Caracalla, which may once have occupied the central niche in the Marble Court, may have been relocated due to their subject matter. After the building was no longer functioning as a bath, it was repurposed as a quarry. Pottery kilns, or kilns that may have specialized in producing industrial pipes, were installed in an enclosed, and relatively remote area, and several limekilns were installed, including an extremely large one that was easy to access from the main road, and perhaps operated by the troops of Constans II that were engaged in repairing the road in the middle of the seventh century A.D.

2.1 History and Landscape

Sardis is located approximately one hundred kilometers inland from modern Izmir / ancient Smyrna (fig. 1.1). It is perhaps best remembered as the capital of the Lydian Empire that was ruled by the wealthy King Croesus in the sixth century B.C., but it remained an important city under subsequent political entities into the 13th century A.D.[57] Sardis' location was its greatest asset. Nestled between freshwater streams in the southern foothills of the Tmolus Mountain (modern Bozdağ), the city spread north towards the fertile Hermos River Valley (figs. 2.1 and 2.2). The mountain was a natural defense against invading armies; it also provided

[57] For an overview of the history of Sardis from Prehistoric through Roman times, see: Hanfmann and Mierse 1983. The website for the Archaeological Exploration of Sardis curates an extensive bibliography with links to full texts of publications related to the excavations: sardisexpedition.org. More information about all periods of Sardis' history can be found there.

resources, from the famous gold of the Pactolus Riverbed to a wide variety of wild and cultivated flora and fauna. The valley provided resources as well, and it served as a natural corridor connecting the inland cities of Anatolia with the Aegean Coast. Sardis benefitted from trade and was able to control the mobility of people, including armies, as well as military supplies, food, and other goods, by virtue of its location. The combination of these strategic traits enabled Sardis to remain attractive and prosperous for much of its long history.[58]

Sardis was thoroughly Hellenized by the time Attalos III, the last king of Pergamon, willed his kingdom, which included Sardis, to the Roman Republic in 133 B.C., and it flourished under Roman rule. Sardis was awarded neokorate status at least twice, and during Diocletian's reforms in the third century A.D., it was named the capital of the Roman province of Lydia. It was home to one of the largest Jewish communities outside of Israel, and was also an important place for early Christianity, as the Christian community of Sardis was one of the Seven Churches of Asia mentioned in *The Book of Revelation*. An imperial arms factory was also established at Sardis during the third century A.D., which further enhanced the city's prestige and contributed to its wealth in late antiquity.[59]

Sardis continued to prosper throughout the fourth, fifth, and sixth centuries A.D., but like many cities in western Asia Minor, the physical remains show signs of a clear break with the past in the early seventh century A.D. While the invasions led by the Sassanian Persian King Chosroes II may have been partly to blame, other events and circumstances, such as earthquakes, epidemics, and changing administrative policies also probably contributed to people leaving

[58] For the location and natural resources of Sardis, see: Hanfmann and Waldbaum 1975, 1-34; Foss 1976, 19-52; Hanfmann and Mierse 1983, 1-16. For production and trade at Sardis in late antiquity, see: Foss and Scott 2002.

[59] For Roman and Late Antique Sardis, see: Hanfmannn and Waldbaum 1975, 31-32; Hanfmann and Mierse 1983, 139-210; Rautman 2011; 2017.

cities for more rural settlements and not maintaining urban infrastructure to previous standards.[60] At Sardis, some of the buildings were abandoned and destroyed by fire. The latest coins that were found in the abandonment and destruction contexts were the issues of 615/6 A.D. For this reason, the year 616 A.D. has found its way into modern scholarship as a pivotal moment in the history of Sardis, marking the divide between the city's most prosperous years under Roman rule and the beginning of its retreat from the international theater of politics and trade.[61] Although Sardis is occasionally mentioned by later authors and continued to hold the status of a metropolitan center with high-ranking bishops and imperial treasury officials, by the middle of the seventh century A.D. it had a distinctly different character. The lower city was mostly abandoned, and a reduced fortified settlement and castle were constructed on the Acropolis. Most of the city's former inhabitants had probably moved to smaller villages, although they may have continued to use the lower city as a centralized hub for local trading and commerce. The Seljuk Turks conquered Sardis in the 14th century A.D. [62]

2.1.1 The Water Supply

The many freshwater streams and springs of Mount Tmolus ensured a plentiful supply of water throughout all periods of settlement at Sardis. The Hermus River and the Gygaean Lake, which was approximately 12 kilometers north of urban Sardis, were also potential sources of water. The construction of the only known aqueduct at Sardis was probably begun after the

[60] Niewöhner 2017b, 3-4, and many of the syntheses and case studies in the same volume.

[61] In the 1970's, a dominant theory was that Sardis may have been attacked in 615/6 A.D., but now, it seems more probable that the fire and destruction of the city was caused by an earthquake. Foss 1975a; 1975b, 736-38; Hanfmann and Waldbaum 1975, 32-33; Rautman 2017, 234-35; Cahill 2016, 157; 2018, 336-37; 2019b, 130-33; 2020, 495-96.

[62] Hanfmann and Waldbaum 1975, 32-34; Foss 1976, 56-91; Scott 1987, especially 78-86; Rautman 2011, 24-26.

major earthquake of 17 A.D., as part of the program to rehabilitate the city.[63] An inscription that records the completion of the aqueduct by the Roman Emperor Claudius has been found in a reused context, built into the northeast bastion of the acropolis.[64] Traces of the aqueduct are still visible in the landscape, although large segments are now missing or buried due to the accumulated effects of earthquakes, erosion, floods, and pillaging over time. The aqueduct originated at the Kocapınar springs, about fourteen kilometers south of the city and 400 to 450 meters higher than urban Sardis, on the slopes of Mount Tmolus (fig. 2.3). Another source connected at approximately six kilometers from the origin; it may have been just one of several auxiliary sources along the route. Around kilometer ten, the single line of the aqueduct split. The western branch carried water towards the Sanctuary of Artemis, while the eastern branch carried water towards the main part of the city. A little less than one kilometer beyond where the western branch diverged, the eastern branch also split, with one line supplying the central and eastern parts of the city, and the other line supplying the western part of the city, seeming to run directly towards the Bath-Gymnasium Complex. The point where the aqueduct connected to the Bath-Gymnasium Complex was not discovered, but it most likely was at the extreme western end of the building, where the furnaces and the rooms that required the largest quantities of water were located. This would be an analogous position to where the line from the Aristion Aqueduct connected to the Vedius Bath-Gymnasium Complex at Ephesus, which will be discussed in the next chapter.

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[63] The earthquake and its aftermath are discussed in further detail below, in connection with the Bath-Gymnasium Complex. For the physical remains and the route of the aqueduct, see: Butler 1922, 35-36; Bricker 2016, 48-49. For information about the water supply of Sardis, beyond the aqueduct, see: Hanfmann and Waldbaum 1975, 26-28; Rautman 1995b, 81-82.

[64] Buckler and Robinson 1932, 29, no. 10. The acropolis fortifications were probably under construction in the seventh century A.D. See Butler 1922, 21-25; Foss 1976, 57-61; Rautman 2017, 234-35.

2.1.2 The Bathing Landscape

Two large public bath buildings have been identified and partially excavated at Sardis. They are both located only a few meters north of the main east-west road, one on the west and one on the east side of the city (fig. 2.2). The bath on the east side of the city, labeled by the excavators as Bath CG, is not very well-known (figs. 2.4 and 2.5).[65] It was excavated between 1958 and 1960, but much of it lies under the modern water table and is difficult to access. The much larger Bath-Gymnasium Complex on the west side of the city, however, has been extensively studied (fig. 2.6 and 2.7).[66] It was excavated and partially restored between 1958 and 1975, and the Harvard-Cornell monograph on the building was published in 1986. It is this building that I will focus on in this chapter. There may have been other large public baths at Sardis that have not yet been identified, and probably several smaller, private, or semi-private baths, as well. During the Roman Imperial period, it was not uncommon for important cities with large populations to have multiple baths.[67] Ephesus, for example, had at least four large bath-

[65] For the lesser-known Bath CG on the eastern side of the city, see: Hanfmann 1959, 18-22; Hanfmann 1960, 38-43; Hanfmann 1961, 43-47; Hanfmann and Waldbaum 1975, 129-66.

[66] For the Bath-Gymnasium Complex, see: Hanfmann and Mierse 1983, 148-61; Yegül 1986; 1995, 270-71, 306-07; Nielsen 1993, 98-99, 105-08, 111, cat. 315. Annual reports in *BASOR* on the excavations of the Bath-Gymnasium Complex and its immediate environs, including the Synagogue, the Byzantine Shops, and the Marble Road: Hanfmann 1959, 13-18; 1960, 35-38; 1961, 40-43; 1962, 46-49; 1963, 37-51; 1964, 25-50; 1965, 17-27; 1966, 30-45; 1967a, 28-31; 1967b, 9-62; 1968, 16-38; Hanfmann 1970, 42-53; Hanfmann 1971, 12-22; Ramage 1972, 20-39; Hanfmann 1974, 44-52; Greenewalt 1976, 66-68. For the Synagogue: Seager 1972; Kroll 2001; Magness 2005; Mitten and Scorziello 2008; Rautman 2011; Hanfmann and Mierse 1983, 168-90; Seager, Rautman, Rousseau, and Fine, forthcoming. For the Byzantine Shops: Crawford 1990; Harris, 2004. For the monumental arch and porticos: Cahill 2016, 157-58; 2018, 337; 2019c 106-07; 2019b, 133-35; 2020, 496-97.

[67] The population of Sardis is estimated to have been between 50,000 and 100,000 in the fourth century A.D. See Hanfmann and Mierse 1983, 146; Rautman 2011, 11.

gymnasium complexes and several smaller baths. So far, the only known private bath at Sardis is in the villa that was constructed in the fifth century A.D. in Sector PN.[68]

2.2 The Bath-Gymnasium Complex

The Bath-Gymnasium Complex was one of the largest buildings at Sardis during the Roman Imperial period, covering an area of approximately 10,700 square meters.[69] It was constructed with heavy ashlar piers that supported the weight and thrust of domes, pendentives, and vaults that were made of stone, brick, and concrete. The piers also supported thick timber beams and trusses. Although the superstructures did not survive intact, hypothetical reconstructions of them have been published (figs. 2.8 and 2.9).[70] The exterior walls of the Bath-Gymnasium Complex were long and impenetrable except for a monumental entrance at the center of the eastern side and a few smaller doorways on the south and east sides, some of which may not have been part of the original design. The rooms were arranged symmetrically along a central east-west axis that extended from the monumental entrance in the east, through the palaestra, which consisted of a large peristyle courtyard that had rooms to the north and south of it, to the heated, far side of the bath block in the west. The symmetrical arrangement would have been discernable from a bird's eye view, but not immediately apparent to passers-by.

2.2.1. Date of Construction of the Bath-Gymnasium Complex

Plans for the Sardis Bath-Gymnasium Complex may have begun shortly after the major earthquake of 17 A.D. The earthquake damaged many towns and cities, but according to Tacitus,

[68] For the villa and private bath at Sector PN, see: Hanfmann 1961, 24-29; 1962, 15-19; 1963, 18-23; 1964, 20-24; Buchwald 2015, vii, 26 n. 293.

[69] Nielsen 1993, cat. 315.

[70] Yegül 1986, figs. 11-12.

the damage to Sardis was most severe, and special relief was necessary.[71] The Roman Emperor Tiberius sent a senatorial representative to assess damages and lead a recovery program. He also excused Sardis from taxes for five years and granted the city ten million sesterces to help rebuild.[72] While there is not an inscription or any other document that explicitly states that the Bath-Gymnasium Complex was part of the recovery program, large public baths were a hallmark of Roman architecture, and plans or planners arriving directly from Rome would almost certainly have included at least one of them in the city's reconstruction.

In modern times, when cities are destroyed by earthquakes or other natural disasters, rebuilding efforts often extend over a long period of time. This was true in antiquity as well. Although Sardis might have desired, or even planned, to build a large public bath soon after the earthquake of 17 A.D., the actual construction of the building may not have begun until many years later. In the aftermath of the earthquake, the city probably had more urgent matters to resolve, such as providing food, water, medical assistance, and temporary shelter to its inhabitants. The people of Sardis might also have preferred to salvage, or demolish and rebuild, pre-earthquake buildings before diverting precious resources towards a new building, especially a new type of building that the city may not have previously possessed.[73]

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[71] Tac., *Ann.* 2.47, see Pedley 1972, 64, no. 220. For an overview of rebuilding at Sardis after the 17 A.D. earthquake, see: Hanfmann and Mierse 1983, 141-43; Hanfmann 1986, 22-23.

[72] A cylindrical statue base with an inscription that honors the deified Tiberius as the founder of the city may date the completion of the groundwork, terracing and basic street system for the bath-gymnasium complex to shortly after 41 A.D. Hanfmann and Mierse 1983, 160; Foss 1986, 169, cat. 1; Yegül 1986, 12, 21, 169, no. 1, fig. 32; Petzl 2019, cat. 333.

[73] A passage from Polybius (*Hist.* 31.6, see Pedley 1972, 61, no. 210) would seem to confirm that Sardis had at least one gymnasium during the Hellenistic period, and Hanfmann (in Johnson 1960, 10) suggests that Sardis may have had two gymnasia by the late first century B.C. For the origins and development of Imperial bath-gymnasium complexes, and the influence of Hellenistic gymnasia, especially in Asia Minor, see: Yegül 1986, 147-51; 1995, 250-313; 2010, especially 158-60.

Two inscriptions provide information about the early history of the Sardis Bath-Gymnasium Complex and help date its construction: one is from a statue base that was found *in situ* on the podium of the south apse of Room BSH (figs. 2.10 and 2.11); the other one was carved into the first story architrave of the Marble Court (figs. 2.12 – 2.13). The inscription from the statue base indicates that the now-missing statue was dedicated to Lucius Verus. It also identifies the donor of the statue as 'Claudius Antoninus Lepidus, High Priest of Asia, First Treasurer, who from the beginning took care of the arrangements for the gymnasium.'[74] George M.A. Hanfmann and A. Henry Detweiler suggested that Lucius Verus may have visited Sardis in 165 or 166 A.D. on his return from the Parthian campaign, and that the statue was installed in the Bath-Gymnasium Complex by the time of his visit.[75] This is possible, but the statue could have been installed at any time during Lucius Verus' reign, which lasted from 161 A.D. until his death in 169 A.D. The statue base seems to confirm that the construction of the Bath-Gymnasium Complex, or at least the construction of the bath block, was mostly finished by the middle of the second century A.D. (phase plan 1 in appendix 1).

The architrave inscription from the Marble Court dedicates the building, or part of it, to Caracalla and Geta, along with their mother, Julia Domna, Mother of the Troops, but it does not mention their father, Septimius Severus.[76] Caracalla and Geta ruled jointly for less than one year after Severus died. Geta was murdered in December of the same year. That Caracalla and Geta are both mentioned in the inscription, and Severus is not, is a strong indication that it was carved in 211/12 A.D. Geta later suffered *damnatio memoriae* and his name was erased from the

[74] Yegül 1986, 12, 15, 106, 169; Hanfmann and Ramage 1978, cat. 276, fig. 469; Petzl 2019, cat. 378.

[75] Hanfmann 1959, 14; Hanfmann and Detweiler 1959, 58.

[76] Yegül 1986, 5, 6, 12-13, 45, 48, 170, no. 3; Petzl 2019, cat. 419.

inscription. If the construction of the Bath-Gymnasium Complex was mostly finished by the middle of the second century A.D., as the Lucius Verus statue base suggests, then the Severan inscription would seem to indicate building progress or possibly even completion. At the very least, the Severan inscription testifies to an important renovation of the complex in the early third century A.D. (phase plan 2 in appendix 1).

The Lucius Verus statue base and the Severan architrave inscription do not provide conflicting information about the construction date of the Bath-Gymnasium Complex. Instead, they may simply indicate that the construction of the building extended over a long period of time. One might imagine that the building took a long time to build due to its sheer size, but if further evidence was needed: the quality of the materials and the workmanship are also not consistent throughout the building. The main piers in the western part, for example, are larger and carefully finished. They are also made with solid blocks, usually of marble, whereas the piers in the eastern part contain rubble cores. The infill between the piers is also different. The western-most wall is made of small rectangular blocks that have been purposefully cut and arranged in horizontal rows (*petit appareil*), whereas the infill between piers in other parts of the building is made of banded brick and rubble (*opus vittatum mixtum*). The eastern part also contains a much higher percentage of reclaimed building materials, which suggests a later date. These details may suggest that the Bath-Gymnasium Complex was constructed from west to east, or that the eastern part of the complex was heavily rebuilt (or both scenarios could be true). The palaestra and the rooms to the north and south of it may still have been unfinished, even by the time the Severan architrave inscription was carved in 211/12 A.D.[77]

[77] For the possibility that the palaestra was still unfinished by the time the architrave inscription was carved, see: Yegül 1986, 15.

In antiquity, it was not unusual for buildings to be in use while they were still under construction. Construction was frequently drawn out over long periods of time, and some buildings were left unfinished. The Temple of Artemis, another prominent building at Sardis, for example, was begun in the Hellenistic Period, probably during the third century B.C., and was still unfinished, but in use, during the Roman Period.[78] Many of the peristyle columns and the superstructure of the Temple of Artemis were never completed.

2.2.2 Location of the Bath-Gymnasium Complex

Several factors contributed to the decision about where to build the Bath-Gymnasium Complex. First, the city planners needed to identify and acquire a piece of land that was large enough to accommodate a building of monumental proportions, manageable for future patrons and construction crews carting heavy materials to access, and able to be connected to a reliable source of water. The land also needed to be available, or at least not extraordinarily difficult to obtain. Ultimately, the Bath-Gymnasium Complex was built immediately outside the Lydian fortification wall, on the western side of the city. Hellenistic and early Roman graves have been found immediately outside the line of the Lydian fortification wall, and none have been found inside, so it seems that the Lydian fortification wall still marked the limits of the city when the Bath-Gymnasium Complex was built.[79] This is significant because it means that the Bath-Gymnasium Complex was built outside the official boundary of the city and it remained outside,

[78] Yegül 2020.

[79] For the graves, see: Hanfmann 1960, 22-29; 1963, 51; 1964, 47-50; Hanfmann and Waldbaum 1975, 30; Hanfmann and Mierse 1983, 123-25.

unprotected, until the Late Roman fortification wall was built, probably in the late third or early fourth century A.D.[80]

Until the Late Roman fortification wall was built, the Bath-Gymnasium Complex was probably the first monumental building that visitors approaching Sardis from the west would have encountered, just as Bath CG probably would have been the first monumental building that visitors approaching from the east would have encountered. Building baths along major thoroughfares, especially at main entrances, was a tactic that many cities employed to create strong and lasting impressions about their wealth and civilized status in the minds of visitors.[81] Other factors that may have influenced the choice of location for the Bath-Gymnasium Complex may be that extramural land was more abundant and less urgently contested than land inside the walls of the city; it was also flatter, although it still required massive terracing.[82]

The site that was selected for the Bath-Gymnasium Complex may also suggest that the city was anticipating or wanting to encourage future growth.[83] One of the main reasons for extending a branch of the aqueduct towards the city's western outskirts was probably to supply water for the baths. Another reason might have been to bring water to an area that previously relied on wells, rainwater catch-basins, or other sources of water that had to be transported by hand. The city planners of Sardis knew that the extended line of the aqueduct would be tapped, and they probably encouraged it, so long as a sufficient volume of water was still able to reach

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[80] For the Late Roman fortification wall, see: Hanfmann and Waldbaum 1975, 35-52; Hanfmann and Mierse 1983, 143-44; Rautman 2017, 231.

[81] Baths as indicators of a city's status: Ael. Ar. *Or.* 15.232; Tac. *Agr.* 21.2; Lucian, *Hippias* 6-8; Lib., *Or.* XI.244-245 (I, 523-524); Procop., *Aed.* 4.10.21, 5.2.5, 6.4.11; Kennedy 1985, 5; Saradi 2006, 325-26; Yegül 2010a, 3; Pickett 2018, 114-18; Maréchal 2020, 28-30.

[82] For the terracing operations, see: Hanfmann and Mierse 1983, 110; Cahill 2008, 119-24.

[83] Bricker 2016, 50-51.

the baths. Practical considerations for removing wastewater may also have influenced the city's decision about where to build the Bath-Gymnasium Complex. If a more central location had been selected, the large volume of wastewater that had to be evacuated from the building would have had to travel further to reach an extra-urban outlet. It would have created extra pressure for the city's drainage systems.

2.3 Transformations of the Bath-Gymnasium Complex

The Bath-Gymnasium Complex was renovated numerous times throughout the four or five hundred years that it was used as a bath. Some of the renovations are known, some are even possible to date, and there may be other changes, especially changes in function, that have gone undetected because they left little to no physical trace. The building was not converted in its entirety from a bath-gymnasium complex into a church, a commercial complex, or even a quarry, for example, as were some other public baths in western Asia Minor.[84] Instead, the building was transformed gradually for different purposes through the breaking apart of interdependent rooms or areas into smaller, independent, and functionally diverse units. Even after the building was destroyed by the earthquake and fire that tore through the city in the early seventh century A.D., parts of the building continued to be renovated and used for industrial purposes and perhaps also for commercial purposes, but never again as a bath.

In the remainder of this chapter, I will focus on some of the transformations that enabled the Sardis Bath-Gymnasium Complex to continue to meet the city's needs while it was in use as a bath, and after it had ceased to function as a bath. The content will be organized chronologically within the architectural limits of the rooms. I will focus on select areas with the

[84] The Bath-Gymnasium Complexes at Hierapolis and Aizanoi were converted into churches. See Jeffery 2019; 153; Lavan 2020, 437. The Theater Baths at Aphrodisias may have been partially converted into a commercial complex.

best evidence for change, including the Marble Court, Room BE-H, Rooms BE-N and BE-S, Rooms BE-A through BE-C, the palaestra, and the rooms to the north and south of the palaestra.

2.3.1 Marble Court

The Marble Court was designed to be the interior focal point of the Bath-Gymnasium Complex.[85] It was a large, lavishly decorated room that was located along the central east-west axis of the building, immediately to the west of the palaestra (figs. 2.14 – 2.16). It may have been used for a variety of activities, including important public ceremonies and banquets. For much of the building's early history, the Marble Court could only be accessed from the palaestra. Then, probably during the late fourth or early fifth century A.D., passages were cut through the apses in the room's north, south, and west walls (phase plan 4 in appendix 1). The passages enabled people to move between the palaestra and the bath-block more easily and they may also have influenced the types of activities that the Marble Court and other rooms were used for.

Another important late alteration was the blocking of the screen colonnade (phase plan 6 in appendix 1). Probably after the blocking of the screen colonnade, four *topos* inscriptions were carved into the *opus sectile* floor of the Marble Court.[86] They mention the *gerousia* and *boule* (city councils). Their presence suggests that the Marble Court continued to be used for important civic functions, although perhaps different types of civic functions than the room was used for originally. The room was probably used for civic functions right until the earthquake and fire that destroyed the building in the early seventh century A.D.

The Marble Court was restored through an extensive anastylosis project undertaken by the Harvard-Cornell Expedition in the 1960's and 70's. The *opus sectile* floor has been covered

[85] Yegül 1986, 45-66. Also, see the section "Marble Courts in Context" in the introduction, pages 17-20.

[86] For a discussion about how *topos* inscriptions are usually interpreted, see Appendix 4. I talk more about the *topos* inscriptions in the Marble Court on pages 44-46.

with earth to preserve it, but the towering walls and beautiful masonry details stand out in the landscape. The restoration conveys a sense of how grand this space was in antiquity, and it continues to be a source of local pride.[87]

Transformations of the Marble Court

Pre-Severan Phase, circa 160's A.D. (phase plan 1 in appendix 1)

Aside from the heavy masonry walls that comprised the north, south and west limits of the room, no pre-Severan features were identified. This suggested to the excavators that the room might have been left unfinished, or that pre-existing features were removed at the time of the Severan Renovation.[88]

Severan Phase, circa 211/12 A.D. (phase plan 2 in appendix 1)

The inscription that runs along the first story architrave of the Marble Court provides the first *and only* absolute date for any of the architectural events connected with the Marble Court. It provides the type of information that an epigrapher might expect (or hope!) to find in an official building inscription: a reference to a specific event, information about when the event was completed, and the names and other details, such as official titles or indicators of status, of the individuals or groups who were financially responsible. The inscription was, above all else, a statement of pride and *romanitas*. It began with the expected rhetoric: a dedication of something, in this case, the *aleipterion* and all its stone decoration, to the gods and men that the citizens of Sardis most wanted to impress, probably in hopes that they would be looked upon favorably in

[87] Hanfmann 1972; Yegül 1976; 1986, 152-68.

[88] Yegül 1986, 49.

return.[89] The Emperors Caracalla and Geta, along with their mother, Julia Domna, Mother of the Troops, are in the list of honorands. Septimius Severus' name was not included, which suggests that the inscription must have been carved in 211/12 A.D. Here is Georg Petzl's reconstruction of the text:

> To the gods of our fathers and to Imperator Caesar Marcus Aurelius Antoninus Pius Augustus and to Imperator Caesar Publius Se⟦ptimius Geta⟧ Augustus and to Iulia Augusta, Mother of the Camp and of the *imperatores*, and to the entire house of the *Augusti* and to the sacred Senate and to the People of the Romans the city of the Sardians, the *metropolis* of Asia and keeper of two Koinon temples of the *Augusti* by virtue of the decrees of the sacred Senate, friend and ally of the Romans and relative of our lords the *imperatores*, has built the *aleipterion* from the foundations, with the entire [- - - decoration] under the proconsul T⟦ - - - ⟧, while the *vir egregius* Dionysios was procurator of Asia and the *vir egregius* [- - -], proconsul of Hellas, was curator of the city. The building was gilt by the city and by the woman of consular rank Antonia Sabina and by the woman of consular rank Flavia Politta while the *vir egregius* Iulius Antonius Quadratus Attalus was curator.[90]

The aedicular architecture and the colonnade that separated the Marble Court from the western ambulatory of the palaestra were both installed during the Severan phase. The apse in the west wall of the Marble Court was enhanced by four spirally fluted columns of *giallo antico* marble that framed it, two on each side, extending all the way from the floor to the architrave of the first story. The rest of the first story columns were raised on top of an approximately two-meter-high podium. All the second story columns were approximately the same height; the ones above the four monumental columns supported a Syrian pediment, which in turn, was crowned by ornately carved marble acroteria.

The screen colonnade also had two stories. The first story consisted of ten double-engaged columns set between two rectangular piers, one at the north and one at the south end. The bases of all the columns were discovered *in situ.* Although none of the first story column

[89] The exact meaning of the word *aleipterion* in this context is debated. It may have meant the Marble Court in particular, or some other part of the building, or the entire Bath-Gymnasium Complex. See Petzl 2019, cat. 419, with further bibliography.

[90] Petzl 2019, cat. 419.

shafts of the screen colonnade were preserved in full, many fragments were found, and the total height of the first story was restored to the same height as the first story of the aedicular facade. Fragments of a second story screen colonnade were found in the excavations, but that part was not restored.

The Marble Court's Severan decoration also included marble wall revetment and paved floors, but most of what was recovered attests to later renovations. A single marble paving slab was discovered *in situ* in the west apse and it may belong to the original floor. Near the screen colonnade, the excavators recorded two other paving events: "A thick, dark red mortar mixed with brick and marble chips," might have been associated with a mosaic floor. On top of it, a "hard pink mortar" was spread as the bedding for an *opus sectile* floor.[91] The walls of the Marble Court were unevenly preserved to between three and five meters in height. Many fragments of white and colored marble revetment were found during the excavations, but patterns from where they were affixed to the walls or to the podium were unable to be determined.

Parts of the Marble Court may also have been gilded. None of the gilding from the Marble Court or any of the other rooms of the Bath-Gymnasium Complex has survived. The first story architrave inscription from the Marble Court is the only evidence for gilding, and unfortunately, it is somewhat vague. It records the names of the women of consular rank that paid for the gilding, and the name of the curator that was in office when the work was completed, but it does not specify what was gilded or provide any indication about the extent of the gilding. It simply states that the 'the work' -- το ἔργον, which Petzl has translated as 'building' in this context -- was gilded, which in the absence of physical evidence, could be interpreted as any part of the architecture or decorations, not just of the Marble Court, but anywhere in the building. The

[91] Yegül 1986, 46.

ambiguity of το έργον would not have been a problem for ancient viewers because they could see what was gilded.

Late Antique Renovations of the Marble Court

There are two late antique inscriptions that are particularly important for the architectural history of the room: the Simplicius Inscription (fig. 2.17) and the Podium/Memnonius Inscription (fig. 2.18). The Simplicius Inscription comes from two marble architectural blocks that were discovered in Room BE-H. Originally, the matched pair belonged to the Marble Court. Their combined length is the same as the width between the two central, spirally fluted columns in the west wall, and so they have been restored as part of the first story architrave above the arched entryway to Room BE-H. Petzl dates the Simplicius Inscription to 400 A.D. It is only two lines, but it is complete. It states:

> This work of the *aleipteria* also was restored under Severus Simplicius, *clarissimus* count of the first rank, administering the office of prefect.[92]

The Podium/Memnonius Inscription was carved into the top of the Marble Court's podium, facing into the court. It records the name of a benefactor: a man by the name of Memnonius, who is also reverently identified as *pater poleos,* father of the polis. It is missing entire words and phrases, but it is still possible to recognize that its style is very different from the Simplicius Inscription. The first part is a poem. The poem is followed by two lines of prose describing what Memnonius' renewal entailed and when the work was conducted. Petzl dates the Podium/Memnonius Inscription to 570 A.D., and his reconstruction of the surviving text is as follows:

[92] Petzl 2019, cat. 423. See also Hanfmann 1967b, 54; Yegül 1986, 48, 171 no. 6.

(a) I am amazed how the Earth [was capable of bringing about] such a gigantic edifice with a high-vaulted, gold-shining roof; formerly it was an old, [dilapidated building]; but when Memnonios, the Father of the city, saw this, he set about restoring [the building] to its former beauty and turned it into an eternally living jewel that envy cannot [destroy]. He added a broad foundation, unfolding [- - -], always bearing in mind that [- - -].

(b) The [- - -] with the golden roof was refurbished [by - - -] of the city in the eighth year of the indictio, in the month of July, in this way the revetment [- - -] the pavings of the floor [- - -] apart from the mosaic and the other [- - -].[93]

The probable/restored location of the Simplicius Inscription suggests that 'the work' that it refers to might be related to the cutting-through of the apse directly beneath it. The cutting created a passage that connected the Marble Court directly to the main room of the frigidarium with the *natatio* or main cold-water pool (Room BE-H), from which the rest of the bath block could easily be accessed (phase plan 4 in appendix 1). This was an important change because in addition to facilitating movement by creating a new route for people to move through the rooms, it entailed the removal of the statue or statue group that held pride of place in the central niche in the west wall of the Marble Court.

The north and south apses of the Marble Court may have been transformed into passages at the same time as the west apse, circa 400 A.D. Alternatively, they may have been cut later, perhaps during the renovation that is commemorated by the Podium/Memnonius Inscription, circa 570 A.D., or anytime in between (fig. 2.19). The passages could not have been created later than the Podium/Memnonius Inscription because the inscription was strategically planned to account for the doorways.[94] Like the creation of the passage in the west wall, the creation of the north and south passages helped to achieve more flexibility in the ways people could move through the building and perhaps also more flexibility in the types of activities for which the

[93] Petzl 2019, cat. 429. See also Yegül 1986, 48-49, 171-72, no. 8.

[94] Yegül 1986, 48.

Marble Court was used. The creation of the north and south passages probably also entailed the removal of statues.

The removal of statues from the apses may have been paramount to the desire or need to create the passages. Around 400 A.D., many baths in western Asia Minor were extensively renovated and their sculptural programs were revised. This may have been due to a variety of factors including increased prosperity and changing attitudes towards particular iconographic themes and subjects. Cities may also have been responding to new laws issued by Theodosius I, aimed at eliminating pagan idolatry. Instead of replacing the original statues in the apses with statues that were less problematic, the city may have used the vacant apses as an opportunity to make further improvements by creating the passages, thereby creating more flexibility for people to move through the building.[95]

Although it is not possible to confirm the subject matter of any of the statues that occupied the apses and other aediculae of the Marble Court, reasonable hypotheses about their content can be made based on sculpture fragments that were found in the Marble Court, and the sculptural programs of other baths, some of which have survived in various degrees of fragmentation.[96] Mythological subjects were popular for baths, especially representations of gods and demigods that referred to the healing and cultural activities associated with baths.[97] The whimsical heads that peered into or out of the Marble Court from the capitals of the screen

[95] Fountains or benches would probably not have been practical in the north or south empty apses due to the podium, and the fact that there were no provisions for water already embedded in the walls. However, a fountain or bench would have been feasible for the western apse, which was not obstructed by a podium, and could have been connected to the water supply that was already embedded in the wall to feed the fountains in the niches in Room BE-H.

[96] For the sculpture finds from the Sardis Marble Court, see: Hirschland 1967; Ramage 1972, 29, fig. 18; Hanfmann and Ramage 1978, cat. 117, fig. 243; Yegül 1986, 47, 63-64.

[97] Manderscheid 1981; Dunbabin 1989; Bassett 1996.

colonnade attest that mythology was also part of the visual world of the Sardis Bath-Gymnasium Complex, and specifically, part of the visual world of the Marble Court.[98] Some of the head capitals from the screen colonnade depict Dionysos and his merry followers, others are more difficult to interpret, but they may depict other divinities from the Olympian pantheon. There is also at least one gorgon (figs. 2.20 – 2.28). Fragments of two, free-standing satyrs were also found in the Marble Court (figs. 29 and 30).[99] It is possible that they were carried in from elsewhere during the lime-burning phases, but it is also possible that they were part of the Marble Court's decor, especially since they are consistent with the prevalent theme of the surviving head capitals.

Dionysos, satyrs, and maenads may have been appropriate for the Marble Court in the Sardis Bath-Gymnasium Complex for several reasons. Dionysos was the Hellenized version of a traditional Lydian god (*Baki*).[100] Also, according to Euripides, Dionysos was born on Mount Tmolus.[101] In selecting this theme for the Marble Court, the Sardians may have been intentionally referencing their own local history and religious traditions, while also paying homage to Rome, as Hadrian was celebrated as the "new Dionysos."[102] Lydia was famous for its wine in antiquity, so the choice of theme may also have been a reminder about a local source of

[98] Hirschland 1967; Hanfmann and Ramage 1978, cat. 198-206; Yegül 1986, 63-64.

[99] Hanfmann and Ramage 1978; cat. 117, 118. Yegül 1986, 47.

[100] Hanfmann and Mierse 1983, 86, 92-93.

[101] Eur., *Bacch.* 461; Hanfmann and Mierse 1983, 185.

[102] Hanfmann and Mierse 1983, 145, 271. This may suggest that the Sardis Bath-Gymnasium Complex was begun under Hadrian and only dedicated under Caracalla. Hanfmann observed that the head of Dionysos (S66.010) and possibly the head wearing a helmet or phrygian cap (S59.079) bore a resemblance to portraits of Caracalla. Perhaps the intent was to conflate, or visually assimilate, Rome with Sardis on one hand, and the Roman Emperor (Hadrian? Caracalla?) with Dionysos and possibly also the divinity or hero represented by the other head – Hermes? Perseus? on the other hand.

pride and an endorsement for one the many successful economic endeavors that enabled the city to afford to build and maintain spaces like the Marble Court.

The Dionysiac theme may also have been selected because of its suitability for the types of activities the Marble Court was intended to be used for. For example, Dionysiac themes are particularly well-attested in Greek and Roman dining and drinking contexts.[103] The popularity of the theme is probably due to hosts believing, or wanting to believe, that by displaying artistic representations of merriment, they could encourage a convivial atmosphere at their own banquets, symposia, and other festive occasions. The Dionysiac theme also would have been appropriate for theatrical performances, since Dionysos was the god of theater. Bath-gymnasium complexes are most frequently associated with the athletic aspects of agonistic festivals, but agonistic festivals also had theatrical components that sometimes may have been held at bath-gymnasium complexes.[104] Banquets and symposia, which the Marble Court may also have been used for at times, also had theatrical components. Distributions of olive oil, grain, etc. would also have been well-suited to take place amidst Dionysiac imagery since Dionysos was an agricultural deity, and therefore, responsible -- even more than the benefactor -- for the generous bounty that was being bestowed. Gorgons were also popular for dining, symposia, and theatrical contexts.[105]

At some point, the screen colonnade that separated the Marble Court from the palaestra was blocked (phase plan 6 in appendix 1; figs. 2.31 and 2.32). Walls made of recycled materials (mortar and rubble, as opposed to new, cut and dressed blocks of marble) were constructed

[103] Parrish 1995; Raff 2011.

[104] Dunbabin 2003, 43, 173-74; Dodge 2014, 282.

[105] For the contexts and significance of gorgons in Greek art, see: Mack 2002; Glennon 2017; For gorgons in Roman art, see: McKeon 1983.

between the columns, leaving only the three central intercolumniations open. The column bases on both sides of the intercolumniations that were not blocked were cut to make room for the vertical edges of doors, so they could also sometimes be closed. These adaptations indicate that there was a new interest in regulating access between the palaestra and the Marble Court. The alteration date is unknown. I think of it as part of the renovation commemorated by the Podium/Memnonius Inscription, circa 570 A.D., but it could have been earlier. The colonnade that separated the Marble Hall from the palaestra in the Vedius Bath-Gymnasium at Ephesus was similarly blocked in the early fifth century A.D., and it would not be surprising if the equivalent colonnades in the Sardis Bath-Gymnasium Complex and the Vedius Bath-Gymnasium Complex were blocked at the same time. Therefore, anytime between circa 400 A.D. and 570 A.D. would be plausible for the blocking of the screen colonnade in the Sardis Bath-Gymnasium Complex. Whether the *topos* inscriptions on the floor of the Marble Court were carved before or after the blocking of the screen colonnade is unknown (figs. 2.32 – 2.38).[106]

All four of the *topos* inscriptions in the Sardis Marble Court are clustered together in the south-east part of the room at approximately *N56 / *E29-30.[107] Three of them are carved into a single marble paving stone and one of them is carved into the marble paving stone located immediately to its west. Positioned side by side, the inscriptions form an approximate line in one

[106] Petzl (2019, 174-75, cat. 576) dates the *topos* inscriptions to the "Advanced Roman Imperial Period?," which is too vague, and Yegül (1986, 51) concludes that they were carved during the sixth or early seventh century A.D., which is too narrow, although probably correct. Theoretically, they could have been carved anytime between the installation of the *opus sectile* floor that they were carved into, and the collapse of the Marble Court that buried them, which means between circa 400 A.D. and 615/6 A.D. I considered the possibility that they may have been carved in a different architectural context, but even if the marble pavements were re-used from somewhere else, I think that the *topos* inscriptions were not carved until the pavements were installed in the locations in which they were found because the four inscriptions are spread across two pavements - three on one pavement, and one on an adjacent pavement - and they align with the southern edge of the southern-most intercolumniation that was left open. Their placement is too precise to be a coincidence.

[107] Yegül 1986, 49, 51; Petzl 2019, 174-75, cat. 576.

of the east-west borders separating the fields of colorful *opus sectile*. The border that they are carved into is located next to -- or to the west of -- the fourth column from the south pier of the screen colonnade. This is important because the intercolumniation located immediately to the north of the fourth column was kept open, while the intercolumniation located immediately to the south of it was blocked. The *topos* inscriptions cannot all be read facing the same direction. The two closest to the screen colonnade must be read facing south, while the other two must be read facing north. The location, alignment, and orientation of the four *topos* inscriptions suggest that they helped to create or maintain a central pathway leading from the openings in the screen colonnade, through the middle of the Marble Court, to the entrance of Room BE-H under the Syrian pediment. Here is the text of the *topos* inscriptions:

a.	γερουσίας ΣΥΜΦΟΡΙΟΥ	gerousia	Of the four *topos* inscriptions, this one is located closest to the column, and it can be read facing south.
b.	τόπος βουλῆς Ρ ΙΥΦΙΝ ϹΟΛΙϹ	"Place of the *boule* - - - ."	Read facing south. Lines 3 and 4 are unclear.
c.	βουλῆς ΙΙΙΚΡΙΔΙΣ ἔγραφε	"Of the *boule* [- - -] wrote."	Read facing north. Line 2 is unclear; Petzl (2019, cat. 576) suggests "Πικριδις."
d.	τόπος βουλῆς	"Place of the *boule*."	Read facing north.

One of the *topos* inscriptions in the Sardis Marble Court mentions the *gerousia* and the other three mention the *boule*.[108] The *gerousia* and *boule* were both city councils, so unlike some *topos* inscriptions (e.g.: "[the place of] "Zoticos the Peddler" from the South Agora at Aphrodisias[109] or "[the place of] the *eikonophoroi*, sellers of religious icons" from the Embolos at Ephesus[110]) the ones in the Sardis Marble Court do not seem to have had commercial purposes. They may indicate that the *gerousia* and *boule* met in the Marble Court for official meetings, or that members could be encountered there on certain occasions if the public wished to speak to them. In this respect, they seem more like the *topos* inscriptions marking the place for the "secretary of the city" found on a reused architectural block at Ephesus, or "people who are responsible for the youths" in the South Agora at Miletus.[111] Alternatively, the *topos* inscriptions in the Marble Court could have been reserving a place for the *gerousia* and *boule* for a ceremony or procession.[112] That might explain why they are grouped so close together and in a line, as if they were continuing the path from the raised marble walkway that was installed through the center of the palaestra, leading from the main gate to the openings that were left in the screen colonnade, probably during the fifth or sixth century A.D.[113]

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[108] The Greek in the table above is adapted from Petzl 2019, cat. 576.

[109] Lavan 2012, 339, 378; *IAph2007* 4.9; Saliou 2017, 139.

[110] *IvE* 546; Lavan 2020, 378.

[111] *IvE* 552: τόπος / Προσόδου / γραματέως; *I. Milet* 212: Λολλιανοϋ / Διογένου / νεανισκαρχών.

[112] Hendrik Dey is doing interesting work on *topos* inscriptions that may have been used for ceremonial and/or processional purposes. Dey 2015, 99.

[113] For information about how *topos* inscriptions have traditionally been interpreted, see Appendix 4.

Pliny and Vitruvius tell us that in their day, the *gerousia* of Sardis met in the old Palace of Croesus.[114] By late antiquity, something may have happened to the Palace of Croesus that prevented the *gerousia* from using it, and the Bath-Gymnasium Complex may have been used as an alternative meeting place. The *boule* also probably had their own dedicated chambers, but many cities gave up on maintaining their *bouleuteria* or converted them for other purposes in the fifth and sixth centuries A.D., as the administrative authority of cities passed into the hands of bishops and other imperial officials.[115] There is no indication about when the *boule* or *gerousia* of Sardis stopped meeting, but in some of the inscriptions from the Synagogue, many of which date to the fifth and sixth centuries A.D., eight men are identified as *bouleutes* (members of *boule*), attesting that the *boule* had survived, at least in name, beyond the fourth century A.D., when the councils of other cities were already beginning to disappear.[116]

2.3.2 Room BE-H: Frigidarium

Room BE-H, the frigidarium or main cold water bathing room, was located directly behind, or to the west of, the Marble Court (figs. 2.39 and 2.40).[117] It was equipped with a large pool in the center of the room. The pool had apsidal ends and three marble clad steps that ran the full length of the long east and west sides. On each side of the pool, water supply and drainage systems were buried beneath the floor. The northward sloping gradients of both systems suggest that new water was supplied from the south, and old water was evacuated north. The east and west walls of the room had alternating semi-circular and rectangular niches that all originally had

[114] Plin., *HN.* 35.172; Vitr., *De arch.* 2.8.9-10. Rautman (2011, 7) cautions that it is a 'dubious tradition.'

[115] Hanfmann and Mierse 1983, 280 n. 55; Lavan 2020, 358, 498 graph 45a.

[116] Hanfmann and Mierse 1983, 171, 184.

[117] Hanfmann 1965, 21-25; 1966, 32-33; 1970, 42-43; Greenewalt 1973, 21-23; Yegül 1986, 67-76.

fountains in them. The pipes that supplied the fountains branched out from the main north-south supply systems on both sides of the pool.

Eventually, water stopped being supplied to all the niches. According to Yegül, it is not possible to tell if this happened all at once or if it was gradual, but Yegül confirms that it began while the building was still in use as a bath, since some of the pipes were deliberately cut, cemented, and paved over, and he says that they do not seem to have been replaced by new pipes.[118] Some of the fountains were replaced by hip baths, while others were replaced by benches (phase plan 4 in appendix 1; figs. 2.41 and 2.42). The niches that were empty when they were excavated may have had statues in them. Some of the fountains may have continued to function for a while alongside the hip baths and benches. It is not clear when these alterations were made, or whether the benches and hip baths were installed at the same time or during separate renovations. It is also not clear why the fountains were replaced. The city may have been responding to water shortages, damages to the water supply system, changing aesthetic tastes, or perhaps a combination of these factors. Benches tucked away in niches and hip baths that could accommodate only a few people at a time may allude to the new penchant for privacy that arose in late antiquity.

One of the most interesting finds from Room BE-H was an inscribed fountain base that attests to the reuse of a fountain that was moved from its original location "in the middle of the public road" to the Bath-Gymnasium Complex (fig. 2.43).[119] Although the entwined snakes that

[118] Yegül 1986, 72-73.

[119] Petzl 2019, cat. 428. See also, Yegül 1986, 146 n. 40, 41; Hanfmann and Waldbaum 1975, 173; Foss 1976, 21; Hanfmann and Ramage 1978, 179, cat. 278, fig. 471; Greenewalt 1973, 22, fig. 4; Rautman 2011, 12, n. 50.

formed the main part of the fountain have not survived, the inscription on the base describes them. Here is the text of the inscription:

> These are the snakes which were once seen by everyone passing by, above the fountain in the middle of the public road. Basiliskos, who held the office of judge, brought them there and set them up, wound round with brazen scales, reddened with gold from their necks to their heads, sending up the streams of the fountain from below to their mouths.[120]

The so-called Basiliskos base is of interest for a few reasons. We are conditioned to think of Roman baths populated with beautiful objects, but such a picture can be frustratingly vague. The vivid description of the snakes on the fountain base helps fill the gaps more reliably than any purely imagined reconstruction.

The fact that the snakes were reused is also interesting because it suggests there was an underlying reason the snakes were available for reuse. The water supply system for the original fountain may have fallen into disrepair and fixing it may have been too expensive, or there may have been water shortages and the city had to reevaluate where to direct its limited resources. There may also have been problems with the aqueducts. Water management practices and modes of consumption were also changing, as attested by greater reliance on wells and other private water sources at Sardis in late antiquity.[121] Water from the public supply systems was also increasingly carried to private outlets in late antiquity, and the city may have found it challenging to continue to supply the public fountain in addition to all the new, private demands.[122] Another possibility is that the public road where the snakes were originally displayed may have been in a

[120] Petzl 2019, cat. 428.

[121] Rautman 1995b; Bricker 2016, 51-53.

[122] Rautman 2011, 14.

part of the city that had become less densely inhabited than when they were first set up.[123] The snakes may have been moved so more people could enjoy them.

Unfortunately, the relocation of the snakes cannot be dated more precisely than sometime between the fourth and sixth centuries A.D., and the exact location they were installed in after they were moved is also unknown. The base of the fountain was found on the floor between the pool and the west wall in the south part of Room BE-H, but it may have been moved there during the lime-burning phases, as many of the other finds in Room BE-H clearly had been.

A base for a statue of Caracalla was also found in Room BE-H, in the pool (fig. 2.44).[124] Yegül suggests that its date, size, and subject make it a good candidate for the statue that may have originally occupied the central niche of the west wall of the Marble Court, or the niche above it, framed by the Syrian arch and close to the dedicatory inscription that honors the Severan Imperial Family.[125] After the passage was created between the Marble Court and Room BE-H, around the time that emperor worship was abolished (circa 400 A.D.), the statue would have been moved. It may have been set up somewhere else in the Marble Court or moved, at that time, into Room BE-H, perhaps to one of the niches or one of the semicircular ends of the pool. A statue of Caracalla in the central niche of the Marble Court would have been possible, even probable, even if the Marble Court was not a venue for worshipping the imperial cult. The

[123] According to Rautman (2011, 11, 25-26), the area around Bath CG was 'remote' by the fifth century A.D., and other parts of the city were unoccupied, or being subdivided and used for poorer housing and workshops by the later sixth century A.D. Greenewalt, Ratté, and Rautman 1993, 11; Rautman 1995a, 62-64; Whittow 2001, 146, especially n. 49, which lists the preliminary reports on the late antique contexts from excavation sectors MMS/N, MMS, and MMS/S.

[124] Hanfmann 1965, 23, fig. 23; Yegül 1986, 171, no. 5; Petzl 2019, cat. 389.

[125] Yegül 1986, 69, 146, 171 no. 5.

central niche was the focal point of the room, a clear place of honor, and who better deserving of honor than the emperor?

After the building had stopped functioning as a bath, Room BE-H, like many of the other rooms, was used as a quarry and processing center for building materials. Architectural fragments and ornaments from the Marble Court were identifiable in the debris. There was no strong evidence for a limekiln, but a lot of ash and rusted industrial slag.[126] A column shaft with scoring marks dividing it into thirteen equal parts, lengthwise, suggests that the workers were preparing to give the good quality marble (*giallo antico*) a second life as wall revetment.[127]

2.3.3 Rooms BE-N and BE-S: Entrance Halls

Rooms BE-N and BE-S, located immediately to the north and south of the Marble Court, functioned as monumental entrance halls to the bath block for most or all the time that the building was in use as a bath (fig. 2.45).[128] They were accessible from the palaestra through abbreviated screen colonnades, each consisting of two free-standing columns between two rectangular piers that stood against the terminal ends of the north-south walls of the rooms. Rooms BE-N and BE-S opened to suites of auxiliary rooms in their north and south walls, respectively. Prior to the creation of the passage in the west wall of the Marble Court around 400 A.D., and the creation of the passages in the north and south walls of the Marble Court, either at the same time as the creation of the passage in the Marble Court's west wall or up to

[126] Unpublished field notebook from the archives of the Archaeological Exploration of Sardis, "BE-H 1965," 42.

[127] There is no mention of a saw, but an unpublished field notebook from the archives of the Archaeological Exploration of Sardis, "BE-H 1965," mentions an iron tool point on page 107. Perhaps this was used to make the score marks on the column.

[128] For Room BE-N, see: Yegül 1986, 81-88; Hanfmann 1965, 25; 1967, 54-58; 1968, 33. For Room BE-S, see: Yegül 1986, 77-81; Hanfmann 1961, 40; 1965, 25; 1966, 30-31.

approximately 170 years later, these two rooms formed the main access from the palaestra to the other rooms of the bath block.

Two floors were preserved in Rooms BE-N and BE-S. This is important because it indicates continued maintenance and use of the rooms. The earlier floors in both rooms were mosaics, while the most recent floor of Room BE-N was multicolored *opus sectile,* similar to the *opus sectile* in the Marble Court*,* and the most recent floor of Room BE-S was rectangular slabs of white and bluish-gray marble (figs. 2.46 and 2.47). The installation dates of the floors can only tentatively be established. In Room BE-N, a coin of Constantius II (351-361 A.D.) was found in the red-mortar bedding of the *opus sectile*. This means that the *opus sectile* could have been installed as early as the middle of the fourth century A.D., but since the coin only establishes a *terminus post quem,* it could also have been installed later.[129]

A coin of Zeno (474-491 A.D.) provides a *terminus post quem* for the installation of the marble paving slabs in Room BE-S.[130] The coin was found directly on top of the mosaic floor, under a thin layer of debris that consisted of charcoal, bones, and coarse pottery. Since the layer of debris continued under the mortar bedding of the marble paving slabs, the excavator, Andrew Ramage, interpreted it as evidence for "a temporary period of desertion and neglect" of the room in the middle of the fifth century A.D.[131] While the words 'desertion' and 'neglect' may be too strong, ultimately, I agree that the layer may be evidence for an important turning point in how Room BE-S was used.

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[129] Yegül (1986, xvii) tentatively dates the *opus sectile* floors (Rooms BE-N, BE-E, and MC) to the mid to late fourth century A.D. Hanfmann (1967, 57) preferred a slightly later date in the late fourth or early fifth century A.D.

[130] Yegül (1986, xvii) tentatively dates the marble slab floor in Room BE-S to the second half of the fifth century A.D. and suggests that it may be part of the renewal works that are referred to in the Podium/Memnonius Inscription. Petzl (2019, cat. 429), however, has recently dated the Podium/Memnonius Inscription to 570 A.D.

[131] Hanfmann 1966, 30.

The coarse pottery and bones that were found underneath the marble slab floor in Room BE-S may indicate that the room was used for dining before the marble slabs were installed. If that is true, the room may have continued to be used for dining after the marble slabs were installed, but it is difficult to confirm since the room was cleared of most of its contents and overburden in antiquity so it could be used as a workspace or storage space associated with the post-destruction lime burning activities that are attested in many areas of the complex. Pottery and glass fragments were found on the *opus sectile* floor of Room BE-N, so that room, at least, does seem to have been used for dining in the fifth and sixth centuries A.D. The pottery and coins found on top of the *opus sectile* floor of Room BE-N are consistent with a fifth and/or sixth century A.D. use of the space.[132] There was a lot of coarse ware in Room BE-N, but also some nicer material -- especially closer to the floor, which suggests that it was not brought in later, but used there when the room was still in use -- including a fragment of a stemmed, heavy red-ware plate with a relief of a cross, and a fragment of a glass cup with gold paint.[133] The creation of the passage in the western wall of the Marble Court around 400 A.D. may have contributed to the potential diversification of use for Rooms BE-S and BE-N, as it transformed the Marble Court into a third monumental entrance hall to the bath block. Due to the creation of the passages, it may have been possible to use the entrance halls more permanently for other activities including, but perhaps not only, dining.

The differences in the most recent floors of Rooms BE-N and BE-S do not necessarily indicate that the rooms were repaved at different times. In late antiquity, there was less concern

[132] Yegül 1986, 82-83.

[133] Unpublished field notebook from the archives of the Archaeological Exploration of Sardis "BE-H 66.2." The fragment of the red-ware plate (P66.30:6990) is mentioned on page 133, and the fragment of a glass cup with gold paint is mentioned on page 145.

for uniformity, as is evident by the widespread use of spolia and the infrequent attempts to hide it.[134] Also, Room BE-S may have received more foot traffic than its northern counterpart due to being closer to an exterior doorway (the doorway that was created around 400 A.D. in the south wall of Room BE-A), and that may have influenced what materials were used for the floor. Other high-traffic areas inside the Bath-Gymnasium Complex were repaved with plain marble slabs as well, for example, the floors in the western ambulatory of the palaestra in front of Rooms BE-N, BE-S, and the Marble Court, and the floor in front of the main entrance in the eastern ambulatory of the palaestra. The palaestra was also paved with plain marble slabs, probably in the second half of the fifth century A.D., when it was no longer used for athletic pursuits.[135]

At some point, the screen colonnades that separated Rooms BE-N and BE-S from the palaestra were partially blocked (fig. 2.48). Some of the intercolumniations were narrowed by spolia and had doorways created in them, while other intercolumniations were entirely blocked or had only windows created in them. Recycled materials were typical and used even for the most important buildings, so the fact that recycled materials were used for the blocking walls does not indicate that the walls were 'crude,' as they have been characterized by others, or that they were part of a low quality or low status project. On the contrary, the quantity of recycled materials, the scope of the project (cohesiveness across most of the eastern façade of the bath-block), and perhaps also the labor, suggest that the construction of the blocking walls would have

[134] The colonnade of the Marble Road, which was reconstructed around 400 A.D., for example, contains an eclectic mix of columns (see Jacobs 2012, 142-43). Some of the columns were mounted on tall bases to make up for the differences in height. Whereas the differences in height of the columns of the Marble Road's colonnade would have been noticeable because they were close together, differences in the interior decorations of Rooms BE-N and BE-S would have been less noticeable because they were further apart. The point is that even if they were close together, people probably would not have cared.

[135] Yegül 1986, 25. The marble paved areas in front of the Marble Court and the main entrance (PA-E, E Gate) were part of a walkway that was installed probably in the late fifth or sixth century A.D. The paving of the palaestra is important because it indicates a change of function. See infra. 81.

been expensive and not undertaken lightly. The blocking walls probably would have been covered with marble revetment and/or painted plaster, which also would have contributed to the overall expense of the project.

The walls of Rooms BE-N and BE-S were preserved between three and four meters in height, but the marble revetment, painted plaster, and stucco that covered them in antiquity had either collapsed or been stripped away to be reused or burnt for lime. Fragments that were found *in situ* indicate that there was a white marble dado, surmounted by colorful marble plaques, and a carved molding in Room BE-S.[136] Room BE-N seems to have had a similar decorative scheme.[137] Painted plaster covered the upper portions of the walls and probably the ceilings of both rooms. Glass and stone tesserae found in the debris in Room BE-N suggest that the ceiling or the upper walls may have had mosaics.[138] The rooms also contained architectural details in stucco relief. Some of the fragments of painted plaster in the debris from Room BE-N indicate that the painted surfaces were not dull expanses of monochrome. Some of the walls had vegetal motifs or painted frames featuring different colored zones of imitation marble. Some of this wall decoration may have been part of the rooms from an early date, but some of it -- at least on the eastern sides of the rooms -- was installed after the blocking of the colonnades.

The blocking of the screen colonnades of Rooms BE-N and BE-S were probably contemporaneous with each other and with the blocking of the Marble Court's screen colonnade. In the absence of any coins or pottery associated with the blocking walls, which would help to

[136] Yegül 1986, 78-81.

[137] Yegül 1986, 87-88.

[138] Unpublished field notebook from the archives of the Archaeological Exploration of Sardis "BE-H 66.2," 125, 155, 161, 191.

date them more closely, it is tempting to connect the blocking of all three screen colonnades with the renovation commemorated by the Podium/Memnonius Inscription in the Marble Court, circa 570 A.D.[139] The Podium/Memnonius Inscription mentions revetment being part of Memnonius' splendid gift to the city, however it does not specify which room(s) received the revetment or any of the other updates. The blocking of the screen colonnades would have necessitated new wall revetment on both faces of the walls -- inside the rooms, and on the wall faces towards the palaestra.

In the inscription, Memnonius emphasized that the building was in a severely dilapidated state before he renovated it. This should be taken with a grain of salt because exaggeration was often part of the rhetoric of late antique patronage.[140] By calling attention to the poor condition of a building, even if the building was not in poor condition, benefactors could make their own contributions seem greater. However, it is also possible that Memnonius was not exaggerating and that the Bath-Gymnasium Complex, or parts of it, really had fallen into disrepair before he renovated it. It is often assumed that the building underwent repairs and renovations between the renovations that are commemorated by the two latest inscriptions in the Marble Court -- the Simplicius Inscription (circa 400 A.D.) and the Podium/Memnonius Inscription (circa 570 A.D.) -- but if not, then that is about 170 years of heavy wear and tear that Memnonius was fixing.

The Podium/Memnonius Inscription says that Memnonius restored the building to its former beauty. It does not say that he restored the building to its former function(s). While there is no evidence to suggest that the baths had stopped functioning before 615/6 A.D. -- although,

[139] On the absence of coins or pottery: unpublished field notebook from the archives of the Archaeological Exploration of Sardis "BE-H 66.2," E32.70 – 35.50 / N80.80 – 87.50 *98.20-97.80, all stones and rubble, no sherds.

[140] Jeffries 2019; Ware 2019.

for many reasons, it would not be surprising if some of the rooms were not regularly heated -- the palaestra had probably stopped being used for exercise by the late fourth or early fifth century A.D.[141] The high volume of fifth and sixth century A.D. coins that were recovered from the palaestra suggest that it may have been used for commerce.[142] Perhaps Memnonius was not restoring a Bath-Gymnasium Complex, but rather a Bath and multipurpose public square, or a Bath-Market Complex. If that was the case, then it may help explain why the blocking walls were built. Greater separation between the bath-block and the former palaestra may have been desired, or necessary for security and/or privacy reasons, as the units were no longer functionally dependent on each other in many of the ways that they previously had been.

The creation of the blocking walls made it easier to regulate traffic between the palaestra (or former palaestra) and Rooms BE-N, BE-S, and the Marble Court. Prior to the construction of the blocking walls, access could have been restricted with cordons or other movable barriers, but solid walls with doors and windows that could be closed and locked would have provided greater peace of mind if security and/or privacy were the main concerns. The blocking walls also may have made Rooms BE-N and BE-S less conspicuous from the former palaestra, and perhaps enabled them to be used differently. I imagine Rooms BE-N and BE-S being used for meetings and banquets after the blocking walls were installed, but they could have been used for other activities, perhaps even commercial, or semi-industrial activities. This may be especially compelling if the former palaestra had been converted into a multipurpose public square or market.

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[141] Greenewalt 1973, 19-20; Yegül 1986, 26; 2010, 170-73.

[142] Bates 1971, 4, 150; Jeffery 2019, 153 makes a similar suggestion.

With the addition of the blocking walls and doors, Rooms BE-N and BE-S were made more like the cellular units of the Byzantine Shops along the south exterior of the building in terms of their safety features. When the passages between the Marble Court and Rooms BE-N and BE-S were created, double doors were installed inside of them at the entrances to Rooms BE-N and BE-S. The presence of the doors is indicated by the pivot and bolt holes in the threshold blocks. They are reminders that access between the Marble Court and Rooms BE-N and BE-S could sometimes have been restricted. There was also a door on the south side of Room BE-S, and probably another door on the north side of Room BE-N, which was not excavated, that could occasionally have restricted access between Rooms BE-S and BE-C (and Rooms BE-N and BE-CC). Rooms BE-N and BE-S were equipped to be fully closed, locked, and their contents kept safe.

Soon after the fire and earthquake of around 615 A.D., Rooms BE-N and BE-S seem to have been temporarily reinhabited and used for industrial or semi-industrial purposes. A limekiln was found in the southwest corner of Room BE-N.[143] The layer associated with the limekiln was on top of a light layer of building debris consisting of bricks, stucco, and wall revetment that probably collapsed during the fire and earthquake, but it was also underneath an upper burn layer and a second, heavier layer of architectural debris, which indicates that at least some of the lime burning in Room BE-N occurred before the final collapse of the vaults (fig. 2.49). More evidence of lime burning was found on top of the collapsed vaults.[144]

A coin from the 30th year of the reign of Heraclius (640 A.D.) may help date the earliest layer of lime burning, as it was found 'under a layer of windblown brown earth,' on top of the

[143] Unpublished field notebook from the archives of the Archaeological Exploration of Sardis "BE-H 66.2," 39.

[144] Hanfmann 1967b, 57-58.

earliest layer of architectural debris.[145] A coin of Theophilius (829-830 A.D.) provides a *terminus ante quem* for the collapse of the ceiling vaults.[146]

Animal bones and mollusk shells were also found in Room BE-N.[147] They were associated with the second lime burning layer. Some of the bones have signs of charring or cutting on them, which suggests that they may have been left over from a meal. The meal may have been a large feast, but if it took place in this room, on top of collapsed architectural debris and with a limekiln nearby, it was probably not an elaborate or grand occasion, not like the meals that may have been served in this room while the building was still in use as a bath.

Room BE-S did not have a limekiln in it, but it may have been used as a storage area for marble pieces that were going to be broken up and burned in one of the nearby rooms with a limekiln -- Room BE-C, for example, had a huge limekiln in it -- or perhaps specifically for marble pieces that were waiting to be transported to another location and used as building material. Six substantial marble architectural pieces were found in a neat row in the northern part of Room BE-S (fig. 2.50). They had clearly been placed there, as they were not part of the architecture of Room BE-S, and even if they had been part of Room BE-S, an earthquake would not have deposited them in such a neat row.[148] In addition to the plain column drums, capitals, and bases that were neatly lined up in Room BE-S, there were statue fragments and sculpted capitals that were not lined up. They may have been part of the room's decorations before it was

[145] Hanfmann 1967b, 57-58.

[146] Yegül 1986, 83.

[147] Yearly inventories and notes about the bones found in Room BE-N and other excavated areas are contained in the unpublished "bones" notebooks in the Sardis archives. According to Yegül (1986, 82), the breakdown of animal bones from Room BE-N is: goat and sheep, sixty seven percent; horse, ten percent; pig, ten percent.

[148] That they were not part of the architecture of Room BE-S, see: Yegül, 1986, 78.

destroyed, or like the architectural fragments found in a neat row, they may have been moved there later. Lumps of charcoal, iron, and a pithos fragment with slag coating its interior were also found in Room BE-S. They suggest that Room BE-S may also have been used for metal working after the building had stopped being used as a bath.[149]

2.3.4 Southern Auxiliary Rooms

Most of the rooms to the south of the Marble Court and Room BE-H were excavated. They include Rooms BE-A through BE-E (fig. 2.51). The northern rooms were not excavated, but test trenches confirmed that they mirrored the southern rooms. They include Rooms BE-AA through BE-EE.[150] Rooms BE-A and BE-B, and their counterparts in the north, have been interpreted as apodyteria. Rooms BE-C and BE-CC have been interpreted as lounges or collecting rooms, and they were also the main corridors between the palaestra and the main rooms of the bath block. Rooms BE-E and BE-EE were also important corridors for movement, as they enabled more direct routes between the apodyteria and the frigidarium (Room BE-H) than the routes through the apsidal halls (Rooms BSH and BNH). Rooms BE-E and BE-EE also contained stairwells that may have led to rooftop cisterns.

Around 400 A.D., the southern auxiliary rooms underwent a major renovation. Some of the walls were rebuilt along their original lines -- in particular, the long south wall of B-East seems to have been reconstructed, as the smaller piers between the larger corner piers at E/W 0 and E 30 are unevenly spaced, not uniform in size, and the infill between them contains spolia; a doorway was created in the south wall of Room BE-A, allowing access between the bath block

[149] Hanfmann 1966, 30-31; Yegül 1986, 78.

[150] For the auxiliary rooms, see: Yegül 1986, 7, 89-103; Hanfmann 1965, 26; 1967, 10-21, 54-58; Room BE-D was the only southern auxiliary room that was not excavated.

and the Marble Road; and many of the rooms were paved, or perhaps re-paved, with mosaics.[151] New wall revetment may also have been installed in some of the rooms, and some of the statues were moved or newly installed. Some statues may also have been removed or revised in other ways. This is difficult to confirm because of the fragmentary state of the remains. However, none of the surviving sculptural material seems to have been deliberately censored for nudity, and there are no crosses carved into human or divine figures. These are two of the more common types of revisions that statues were subjected to in late antiquity.

The alterations that were made around 400 A.D. may have been necessitated or inspired by some of the other alterations that were being made in other parts of the building and immediately outside of it. For example, this was around the time that the long hall to the south of the palaestra was being converted into a Synagogue, with beautiful new floor mosaics, wall revetment, furniture, etc.[152] The Marble Road was also being upgraded with the construction or renovation of the so-called Byzantine Shops along the south exterior of the Bath-Gymnasium Complex and along the opposite side of the street, the porticoes in front of the shops were paved with mosaics, and the Marble Road Colonnade was lowered and rebuilt with spolia.[153] The monumental arch that spanned the Marble Road at the southeast corner of the Bath-Gymnasium Complex may also have been restored, or perhaps newly built, at that time.[154] The portico along

[151] For the south wall of rooms BE-A and BE-B, and the doorway in the south wall of Room BE-A, see: Yegül 1986, 96. For the mosaic pavements, see: Yegül 1986, 94-95; Scheibelreiter-Gail 2011, 374. Several fourth century A.D. coins were found in the mortar bedding of the mosaics in Rooms BE-A, BE-B, and BE-C.

[152] Seager 1972; Yegül 1986, 5; Hanfmann 1963, 38-48; 1964, 30-44; 1965, 17-21; 1966, 34-45; 1967, 9-50; 1968, 23-28; 1970, 45-53; 1986, 23-27; Kroll 2001; Scheibelreiter-Gail 2011, 362-72; Rautman 2011, 15-17.

[153] For the shops: Crawford 1990; Harris 2004. For the Marble Road and especially the porticoes: Yegül 1986, 17-21; Scheibelreiter-Gail 2011; Jacobs 2012, 142-43; Rautman 2017, 233; Cahill 2019b, 106.

[154] Cahill 2019a, 133-35.

the east side of the building, the so-called East Road Colonnade, was also paved with mosaics, and a road and latrines were built on the west side.[155]

Excavation Objectives for Rooms BE-A, BE-B, and BE-C

Rooms BE-A, BE-B, and BE-C were excavated with the intent of discovering whether they may have been associated with the Synagogue, as synagogues often had other units, such as kitchens, schools, or guest rooms, in addition to a main hall, which is sometimes called a prayer hall, although it could also have been used for other activities designated by the Jewish community. Another objective was to see whether the apse of the main hall of the Synagogue may ever have been a fountain or nymphaeum.

Room BE-A

Room BE-A is the westernmost of the two, almost identical rooms that may have served as apodyteria on the south side of the Bath-Gymnasium Complex (fig. 2.51). Originally, Room BE-A may not have had an exterior door on its south side, although this is difficult to confirm since the entire B-East wall may have been rebuilt around 400 A.D.[156] The door in the south wall of Room BE-A seems to have been created (or re-created) at that time. There was also a door in the center of the north wall of Room BE-A that connected to Room BE-C. This door provided the only access to Room BE-A from inside the Bath-Gymnasium Complex.

The floor of Room BE-A was paved with mosaic during the renovation of circa 400 A.D., and so was the narrow corridor that served as an entryway between Units W1 and E1 of the

[155] Latrines: Hanfmann 1960, 21, 34-35; Yegül 1986, 2, 16, 22-23. The East Road Colonnade: Yegül 1986, 21-22; Scheibelreiter-Gail 2011, 376.

[156] According to Yegül (1986, 93, 90-91), there was not originally a door in the south wall of Room BE-A.

Byzantine Shops.[157] One might expect that the walls of Room BE-A were covered with marble revetment at that time as well, but wall revetment was not recovered from Room BE-A in large quantities, and the portions of the walls that survive do not have clamp or pin holes, which suggests that they may instead have been covered only in plaster.[158]

A fragment of plaster from the east wall of the room has part of a religious graffito in red paint preserved on it: "Εὐλογητὸ[ς - - -]," which translates to "[someone or something] is blessed!" or "may [someone or something] be blessed!"[159] (Fig. 2.52)**.** John Kroll argues that the graffito could be Christian or Jewish, and therefore should not be used as evidence that Room BE-A was associated with the Synagogue, especially since it has been proven that there was no doorway between the Synagogue and the rooms to the west of it.[160] There was no access between the Synagogue and the Bath-Gymnasium Complex, anywhere, until after 615/6 A.D., during the post-destruction / lime-burning phase (phase plan 7 in appendix 1), when the wall between the Synagogue and Room BE-B was smashed through, probably so marble could be transported more easily between the Synagogue and the limekiln in Room BE-C. After the long south hall had been transferred to the Jewish Community, all points of access from the Bath-Gymnasium Complex were blocked so that the Synagogue could only be accessed from the Marble Road or from the East Road.

At some point, Room BE-A was drastically altered. A wall had been built to make a smaller room out of the eastern third of the room, and a "cooking pit" with kitchen debris

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[157] Yegül 1986, 90; Crawford 1990, 5.

[158] Hanfmann 1967b, 12; Hanfmann and Mierse 1983, 151.

[159] Petzl (2019, cat. 568a) translates the graffito as: "[The - - -] be / is blessed." It has variously been restored as "Blessed be the people" by Foss in Yegül 1986, 94 and "Blessed is God" by Kroll 2001, 15 n. 32.

[160] Kroll 2001, 15 n. 32.

consisting of animal bones with cutting or butchers marks on them, several cooking pots, and a complete trefoil jug (P66.021.6980) were found in that part of the room.[161] There was also a heavy burn layer and many fourth and fifth century A.D. coins, which suggested to the excavators that the transformation of the room into an "improvised kitchen" could have been as early as the fifth century A.D., although I think it was later, probably after the building had stopped being used as a bath. One reason I think the transformation was later is because the mortar and rubble wall was built on top of a "tile" marble slab floor (fig. 2.53). Yegül suggests that the tile floor may have been installed after the destruction of 615/6 A.D., when the room was transformed for more industrial purposes.[162] I do not think they would have installed a new floor for heavy industrial work where it was likely to be ruined, and especially not in a building that was actively being dismantled. The "tiles" look like the marble slabs that were used in Room BE-S, and may have been installed at the same time, all perhaps part of the renovation commemorated by the Podium/Memnonius Inscription, circa 570 A.D.

On the western side of the room, there was a row of seven bricks extending from the south wall that may have served as a platform for an "anvil" -- an old column drum with a metal slab affixed to the top of it.[163] There was also a lot of charcoal and slag. The original doorway between Room BE-A and BE-C was widened, probably during the same phase that the room was being used for metal working. Also, a new doorway was created in the northeast corner of Room BE-A (in the 'kitchen' area), also giving access to Room BE-C.

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[161] The interpretation of the area as a "cooking pit" and "improvised kitchen" is from Hanfmann 1967b, 12-13; Yegül 1986, 94-95.

[162] Yegül 1986, 94.

[163] Hanfmann 1967b, 14; Greenewalt 1973, 26; Yegül 1986, 93; Crawford 1990, 2 n. 13.

Room BE-B

Room BE-B is the easternmost of the two, almost identical rooms that may have served as apodyteria on the south side of the Bath-Gymnasium Complex (fig. 2.51).[164] Originally, Room BE-B was accessible from Room BE-C, and perhaps also from the portico in front of the Byzantine Shops through a doorway at the back of Unit E3, but it was not accessible from the Synagogue. The doorway between Room BE-B and Byzantine Shop Unit E3 was eventually blocked, probably after the renovation of circa 400 A.D. and before the earthquake and fire of 615/6 A.D. (Fig. 2.54) It is not clear whether the exterior doorways in Rooms BE-A and BE-B functioned alongside each other for long after the renovation of circa 400 A.D. The exterior doorway of Room BE-B may have been blocked soon after the renovation of circa 400 A.D. so that Unit E3 could be converted into an independent shop or residence.[165]

The most interesting features of Room BE-B are the water works (figs. 2.55 – 2.57). There was a circular fountain in the center of the room, which seems to have been an original, or at least early, feature of the room. The channels, pipes, and drains were embedded in the floor up to a meter below the surface. Some of them may not have been associated with the fountain, but perhaps carried water to other rooms further north. Repairs to the water works would have required the floor to be dug up, so there may have been multiple flooring events, although only two were detected in the poorly preserved remains: a mosaic floor with fourth and fifth century A.D. coins in the bedding, and a later, plain marble slab floor, both of which were like the floors in Rooms BE-A and BE-S, and perhaps contemporary. Fifth century A.D. coins were also found

[164] Hanfmann 1967b, 15-18; Yegül 1986, 96-100.

[165] For the blocked doorway and Unit E3 of the Byzantine Shops, see: Yegül 1986, 96; Crawford 1990, 51.

mixed in the mortar packing around the central pipe of the fountain, which suggests that the fountain was maintained, and that there was at least one repair in the fifth century A.D. or later.

The blocked doorway in the south wall of Room BE-B was re-opened, probably after the fire and earthquake of 615/6 A.D.[166] This was probably because the Byzantine Shops were no longer in use, and the workers who were stripping the building and using it for other industrial activities, such as lime burning and metalworking, wanted to use it as a shortcut. Probably around the same time and for the same reason, a passage was also created in the east wall of Room BE-B (figs. 2.57 and 2.58). Without the passage between Room BE-B and the Synagogue, workers would have had to transport materials over a much longer distance to the main limekiln in Room BE-C.

There is no indication that any of the water features in Room BE-B went into the east wall to connect with the apse of the Synagogue. There were also no indications of water works connected to the apse in the main hall of the Synagogue. All of this suggests that the apse of the Synagogue probably did not contain a fountain or nymphaeum at any point in its history.[167]

Room BE-C

Room BE-C is the largest room in the southern suite of auxiliary rooms (figs. 2.51 and 2.59).[168] It is also one of the most important connective spaces in the Bath-Gymnasium Complex, as people coming from the palaestra or from the Marble Road originally could not access the bathing rooms without going through Room BE-C. In addition to being an important corridor for movement, it may also have been a reception area, a lounge, or a collecting space

[166] Crawford 1990, 2, 51; Yegül 1986, 96, 98.

[167] Hanfmann 1967b, 17; Greenewalt 1973, 26.

[168] Hanfmann 1967b, 19-21; Greenewalt 1973, 27-28; Yegül 1986, 89-93.

where people may have collected items that they needed for the baths, such as oils, perfumes, or towels, if they did not bring their own. It may also have functioned as a collecting space in the sense that people would meet their friends or colleagues there to move through their bathing and exercise routines together. The south doorway in the eastern wall of Room BE-C was blocked when the south hall of the palaestra was converted into a basilica with an apse at its western end (phase 3 in appendix 1 and fig. 2.60).

Room BE-C was beautifully decorated. It had a mosaic floor that was visually divided into three sections corresponding to the three bays of the room. The borders and the central fields were filled with black, white, and red tesserae in geometric patterns and floral motifs (fig. 2.61). The mosaic floor was probably installed at the same time as the mosaic floors in Rooms BE-A, BE-B, and BE-S, which was probably around 400 A.D.[169] The walls were covered with marble revetment that was probably installed at the same time as the mosaic floor, or prior to it, since the edges of the mosaic abut the marble revetment. Polychrome glass mosaics decorated the upper portions of the walls.[170]

A statue base was discovered *in situ* against the north wall of the room, in the central bay (figs. 2.62 and 2.63). It bears an inscription dedicating statues of the Children of Kore -- two or possibly three figures: Koros and Euposia, and there is space in the missing part of the inscription for a third name – Robert suggested Eueteria, all three of which are fertility figures -- to Caracalla.[171] Geta's name is erased from the inscription, just as it is on the architrave

[169] Yegül 1986, 90-91, 142; Scheibelreiter-Gail 2011, 107, 374, 377. The date of circa 400 A.D. is based on the large number of mid fourth century A.D. coins that were found embedded in the mortar beneath the mosaics. The mid fourth century A.D. coins were also the latest coins found underneath the mosaics.

[170] Scheibelreiter-Gail 2011, 374.

[171] Greenewalt 1973, 27.

inscription from the Marble Court. The statues have not survived, but the inscription on the base at least tells what they were, when the dedication was made (211/12 A.D.) and that a wealthy, but otherwise unknown individual named Glykon paid for it.[172]

The Glykon ensemble was probably part of the early decorative program of the Bath-Gymnasium Complex, and it continued to be displayed in a prominent location inside the Bath-Gymnasium Complex until the building's destruction, which suggests that the inhabitants of Sardis still found the statues acceptable in late antiquity.[173] The Children of Kore were personifications of the concepts of Satiety (Koros) and Abundance (Euposia).[174] In some cities, they were worshipped as divinities, but whether that was true at Sardis is unknown, as they are not mentioned in any other inscriptions or in texts pertaining to the city, and no representations of them survive from Sardis. Late antique viewers may have ignored any pagan religious connotations of the statues and kept them because Satiety and Abundance continued to be virtues of the city, or perhaps because they represented blessings or conditions that the citizens of Sardis continued to pray for. Happiness and a good harvest were as welcome in the sixth century A.D., for example, as they were in the early third century A.D. when Glykon dedicated the statues.

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[172] Hanfmann and Ramage 1978, 178-79 cat. 277; Hanfmann and Mierse 1983, 92, 131; Yegül 1986, 90-91, 170-71, no. 4; Petzl 2019, cat. 447. Glykon chose to identify himself as "Glykon, son of Glykon," not by an official title, rank, or profession, like some other inscriptions do, for example, the Basiliskos base that identified the donor as a local magistrate, or the architrave inscription in the Marble Court that says that the gilding was paid for by Antonia Sabina and Flavia Politta, women of consular rank. De Hoz (2016, 200) suggests that Glykon may have been a civic official, perhaps an *agoranomos*, and that he made the dedication as a sort of prayer, asking for a good harvest for the city during his term in office.

[173] Yegül (1986, 90-91) suggests that the dedication by Glykon may have originally been displayed against the south wall of Room BE-C, in the central bay, so that it would be more in the direct line of sight of people moving through the building (coming from any of the rooms except Rooms BE-A or BE-B), and that it was moved to its location against the north wall after the creation of the doorway in the south wall of Room BE-A and the installation of wall revetment and mosaics during the circa 400 A.D. renovation.

[174] De Hoz 2016, 200; Hanfmann and Ramage (1978, 180-81) interpret the figures as personifications of "Happiness" and "Surfeit" or "Surplus"; Greenewalt (1973, 27) says that elsewhere in the Greek world, they are associated with fertility.

After 615/6 A.D., when the building was no longer functioning as a bath, a large, circular limekiln was constructed in the center of Room BE-C (fig. 2.63).[175] Yegül suggests that it was used by the troops of Constans II, who may have been engaged in the construction of a cobbled road over the old Marble Road and shop colonnades.[176] Two coins of Constans II help to date the activity of the limekiln and are consistent with Yegül's hypothesis. One of the coins was found below the accumulated layer of lime near the kiln, and one was found on top of the accumulated layer of lime.[177] The interior of the kiln was not excavated.

The limekiln had been constructed directly on the mosaic floor of Room BE-C, which suggested to the excavators that it had been built soon after the events of 615/6 A.D.[178] The coins, though, are more reliable for dating the construction and use of the limekiln, as the room could have been cleared of any heavier debris before the limekiln was built. The most recent floors in Rooms BE-A, BE-B, and BE-S were marble pavements, but no trace of a marble pavement floor was found in Room BE-C. It is possible that Room BE-C also had marble pavements and that they were taken up before the limekiln was installed, and perhaps burned in the limekiln after it was installed. It is also possible that there was never a marble floor in Room BE-C.

It is interesting that the wall revetment in Room BE-C was not stripped and burned, and that the statue base for the Children of Kore also escaped the limekiln. Perhaps the statues were burned, but the base may have been too large and cumbersome. There was probably sufficient

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[175] Greenewalt 1973, 27-28; Yegül 1986, 16, 90-91.

[176] Yegül 1986, 16; after Foss 1972, 106.

[177] Yegul 1986, 90.

[178] Greenewalt 1973, 28.

material already at the workers' disposal just laying around that did not require the tedious and more labor-intensive work of stripping or breaking. The roof of Room BE-C was apparently still standing when the limekiln was built, as it collapsed on top of the limekiln. The latest coins that were sealed under the collapsed roof were minted under Constans II, so it is possible, as Yegül suggests, that the lime burning activities in Room BE-C were stopped short. However, if lime was still needed, new lime kilns may have been built in other areas that simply have not yet been identified. There was a break, or perhaps a deliberate cut, in the base for the statues of the Children of Kore. Perhaps the workers were intending to move or burn it but were prevented by the collapse of the roof.

2.3.5 South Hall of the Palaestra / Potential Civil Basilica / Synagogue

When the Sardis Bath-Gymnasium Complex was first built, the palaestra was equipped with rooms to the north and south of it. Their exact functions are unclear, but based on precedents from other bath-gymnasium complexes, they may have been used -- or intended to be used -- as lecture halls, libraries, changing rooms, medical offices, massage or oiling rooms, meeting rooms, or rooms for storing exercise equipment.[179] It is unclear whether the construction of this phase was ever completed, although Andrew Seager, the foremost expert on the architectural history of the Sardis Synagogue confirmed that the rooms' foundations had at least been laid, and that the north and south rooms were mirror-symmetrical to each other.[180] (See fig. 2.64 for the location of the south hall of the palaestra and fig. 2.65 for Seager's plans illustrating the different stages of that area).

[179] Hanfmann and Mierse 1983, 172; Yegül 1986, 43; 1995, 130; Steskal et. al. 2008, 11-12.

[180] Hanfmann 1972, 271; Yegül 1986, 15-16; Seager 1972, 431. Seager's much-anticipated manuscript on the Sardis Synagogue is in the final stages of preparation: Seager, Rautman, Rousseau, and Fine, forthcoming.

At some point, probably during the third or early fourth century A.D., the rooms to the south of the palaestra were rebuilt as a basilica with the main entrance and vestibule at its east end, and an apse at its west end (phase plan 3 in appendix 1). The apse extended into the south extension of the palaestra's western ambulatory, obstructing the southern doorway of Room BE-C. All the partition walls and piers of the south hall may have been demolished at that time and replaced by two rows of columns that created a nave and two narrow side aisles. Detweiler suggested that it may have been used as a civil basilica and law court, and that the apse may have functioned as a tribunal.[181] Seager agreed that it was a possibility, but he cautioned against a firm identification of the use of the south hall at that time, as "no objects were found which would elucidate the change of function […] that must have accompanied the drastic alterations of [that phase / what Seager identified as 'stage 2']."[182]

During the late fourth century A.D., the Jewish community acquired the south hall and transformed it into a Synagogue (phase plan 4 in appendix 1).[183] The narrow passages in the apse were blocked. The northern passage was the only point of access from the Bath-Gymnasium Complex in the second stage, when the south hall may have functioned as a civil basilica and law court, but in the third stage, even that connection was severed.[184] Three tiers of semi-circular marble benches were installed in the apse, replacing the earlier 'tribunal' with a *synthronon* for

[181] Hanfmann 1967b, 23-25; Seager 1972, 430-32; Hanfmann and Mierse 1983, 172.

[182] Seager 1972, 432.

[183] Some early publications suggested a late third or early fourth century A.D. date for the construction of the Synagogue (see Magness 2005, 460 n. 110 for a list of these early publications), and Jodi Magness (2005, 443-75) has argued for a sixth century A.D. date. However, continued analysis of the building and its stratified contents by Seager and others have clarified and confirmed that a late fourth century A.D. date is most probable. See Rautman 2011, 15-17; Seager, Rautman, Rousseau, and Fine, forthcoming.

[184] Seager 1972, 427; Hanfmann and Mierse 1983, 188.

the elders of the Jewish community. The dividing walls at the east end of the hall were also removed so there was no longer an architecturally distinct vestibule, and the columns were replaced by piers. The columns may have been repurposed as fill beneath the mosaic floor of the apse.[185]

The fourth and final stage that Seager identified was a renovation of the Synagogue, which was probably during the fifth or sixth century A.D.[186] (Figs. 2.65 – 2.67; I have included Seager's stage 4 on phase plan 6 in appendix 1). This is the phase that the modern restoration is based on, and what visitors to the site can see today. The fifth or sixth century A.D. renovation involved the construction of a new dividing wall, so that there was again an architecturally distinct vestibule, or more accurately, a peristyle forecourt, at the eastern end. The forecourt was beautifully decorated with mosaic floors in the porticos, marble pavements in the courtyard, and colorful marble revetment on the walls. It also had a large central fountain in the shape of a *kantharos*, where people could wash their hands before praying.[187] To make the forecourt more private, two of the three doorways in the eastern wall were blocked, leaving only the central doorway and a doorway in the south wall of the forecourt as entrances to / exits from the Synagogue. The dividing wall between the forecourt and the main hall had three doorways in it, and flanking the central doorway, on the side of the main hall, two pedimented aediculae, or shrines, were built to hold the Torah scrolls (fig. 2.68). They created an eastern focal point for the main hall. A baldachin or *bimah* (a platform where the Torah and Prophets were read) may

[185] This all corresponds to Seager's 'architectural stage 3.' For the columns reused as fill: Seager 1972, 430 and fig. 4; Hanfmann and Mierse 1983, 173; Mitten and Scorziello 2008, 137.

[186] Seager 1972, 432-35; Hanfmann 1972, 271; Hanfmann and Mierse 1983, 172-73.

[187] For the *kantharos* fountain, see: Mitten and Scorziello 2008, 139-40. For the forecourt, see: Hanfmann 1968, 29-31; Seager 1973, 93-97; Rautman 2010.

have been set up in the center of the main hall, and a heavy marble table with eagle supports flanked by two back-to-back lion statues created another focal point at the western end of the hall, in front of the benches in the apse (figs. 2.69 and 2.70). The eagle table and the lions are especially interesting as they may be from other, non-Jewish religious contexts. The different focal points of the main hall have been used to argue that the Synagogue did not function only as a prayer hall, but also perhaps as an assembly hall, a school, a dining hall, and a shelter where Jewish travelers could spend the night.[188] The installation of many of the furnishings and decorative elements of the Synagogue cannot be dated closer than between the late fourth and early seventh century A.D. Even so, the Synagogue and its contents are still among the earliest and best-preserved specimens of Jewish diaspora material culture.[189]

Like the rest of the Bath-Gymnasium Complex and the row of shops to the south of it, the Synagogue was destroyed by the earthquake and fire of 615/6 A.D. It was not rebuilt. The passageway that was created in the western wall, connecting to Room BE-B, suggests that the work crews that were scavenging materials from the Bath-Gymnasium Complex may also have been scavenging materials from the Synagogue (fig. 2.58). The passageway created a convenient shortcut to the limekiln in Room BE-C, but other materials -- not only marble intended for the limekiln -- were probably also taken out of the Synagogue through the late passageway. It is not difficult to imagine that the onyx fragments that were found in Room BE-B, for example, may once have been part of beautiful inlaid furniture from the Synagogue.[190]

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[188] On the potential significance of the multiple focal points in the Sardis Synagogue, and alternate functions of the main hall, see: Seager 1973, 90-91.

[189] The Torah shrines, the '*bimah,*' and the eagle table may have been installed at different times within Seager's 'stage four.' See Seager 1973, 90; 1974, 9; Hanfmann 1986, 26; Rautman 2011, 15-16.

[190] For the onyx fragments, see: Hanfmann 1967b, 17.

The discovery of the Synagogue in the Bath-Gymnasium Complex was unexpected and extremely important. Bath-gymnasium complexes often had large halls that could be rented or borrowed by local groups. What is different at Sardis is that a group was able to claim part of the Bath-Gymnasium Complex more permanently. This is an interesting and early example of privatization and subdivision in bath-gymnasium complexes, and it raises an important question: how or why was it able to happen?

The inscriptions inside the Synagogue attest to private donations, but they pertain to the interior decorations and say nothing about the acquisition or construction of the hall.[191] The Jewish community may have purchased the hall, or it may have been given to them, perhaps by an imperial decree or for some other reason.[192] Seager suggested that the city may have given the hall to the Jewish community or allowed them to purchase it because the Bath-Gymnasium Complex had already been under construction for a long time, and the city may have been struggling, financially, to complete it.[193] Turning over an incomplete area to a private group may have been the best way to ensure its completion. On the other hand, the city may have sold the hall or rented it on a more permanent basis to a private group, even if its construction was already complete, to help with the maintenance and operation expenses of the Bath-Gymnasium Complex. The question might then be asked, why did the city sell / rent / give the hall to the Jewish community as opposed to another group?

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[191] Seager 1974, 4, 10; Kroll 2001, Cross 2002.

[192] That the hall may have been granted to the Jewish community by an imperial decree is not an outlandish suggestion, as other protections and rights for the Jewish community at Sardis had previously been granted by similar measures. Joseph., *AJ* 16.171, 14.235, see Pedley 1972, 62 no. 212; 75 no. 275. Also, Joseph., *AJ* 12.148-153, which is not specifically about the Jewish community at Sardis, but still relevant, as it preserves a letter from Antiochus III promising land to exiled Jewish families from Babylon and Mesopotamia in Lydia and Phrygia. See Rautman 2020, 2-5.

[193] Seager 1974, 4.

Many factors may have affected the city's decision. Perhaps the Jewish community was the most reliable or highest bidder, or networking or political pressure affected the outcome. All of this is speculation, but what is certain is that before any candidate was settled on, the city had to decide (or confirm) that the hall was expendable. Even if the city did not advertise that the hall was available, and they waited to be approached about the possibility of transferring ownership or exclusive usage rights, the city still had to decide whether a) the activities that the hall was previously used for could be curtailed or moved to a different location and b) whether the hassle would be worth the reward. (Would moving law court hearings to the Marble Court, for example, have been worth the extra income, or would it have been a hardship? Or would it be worth giving up the south hall in exchange for being able to afford heating the baths?) All of this came down to strategy and stewardship – finding the best way to balance the resources and opportunities that were available.

Before the discovery of the Sardis Synagogue in 1962, it was widely believed that individuals that adhered to the Jewish faith in antiquity lived on the fringes of Roman society, neither fully welcome nor perhaps fully able to participate in all aspects of urban life.[194] There was also speculation that some early Jewish communities outside of Israel may have tried to assimilate with their gentile neighbors, perhaps even at the risk of diluting their faith and other important cultural traditions.

The discovery of the Sardis Synagogue has enabled a different story to emerge. Its size, location, and decorations attest that the Jewish community at Sardis was large, visible and active in urban life, proud, devoted to maintaining the purity of their ancestral religion and cultural

[194] Hanfmann 1986, 23-24; Hanfmann and Mierse 1983, 178-80.

traditions, prosperous, and influential.[195] They did not settle for a small Synagogue in a remote part of the city, but wanted, and were able to obtain, a highly desirable piece of real estate at the intersection of two major thoroughfares. Also, the shops along the south façade of the building attest that Jews and Christians lived and worked side by side.[196]

I think that Sardis' long history of being exposed to diversity through conquest and trade (remember its strategic military position and being on the Royal Road) may have preconditioned many of its inhabitants to adopt a non-exclusionary attitude towards individuals or groups that other, less-metropolitan centers may not have been as welcoming towards. I also think that this non-exclusionary attitude had to work both ways. If the Jewish community had not been willing to live and work side by side with their gentile neighbors, they would not have been able to flourish as well as they clearly did at Sardis.

Just as faith was part of Jewish individuals' identity, and a source of pride, so too was their status as citizens of Sardis. Many of the donor inscriptions from the Synagogue reinforce this idea.[197] There are several that refer to Jewish individuals as citizens of Sardis (Σαρδιανοί), specifically calling attention to this secular aspect of their identity. Other donor inscriptions from the Synagogue attest that Jewish individuals were not prevented from attaining high civic rank: There were nine *bouleutes* (members of the city council), and three individuals who held offices in the imperial provincial administration: a *comes* or count, a former procurator, and an assistant

[195] Seager 1974, 10.

[196] Seager 1974, 10-11; Hanfmann and Mierse 1983, 161-62, 166, 184; Crawford 1990, 17-18; 1999, 190-200; Kroll 2001, 8 n. 9.

[197] Hanfmann and Mierse 1983, 184; Seager 1974, 10-11; Kroll 2001, 10.

in the state archives. These individuals were clearly proud of their civic titles, as they chose to be remembered that way in their donor inscriptions.

Object Spotlight: The Eagle Table

The so-called Eagle Table that was discovered firmly anchored into the floor at the west end of the Synagogue, in front of the benches in the apse, takes its name from the carved eagles clutching thunderbolts on its supports (figs. 2.69 and 2.70). The table is just over 2 meters long, 1.63 meters wide, and approximately 1 meter tall. It is made of large-grained, grayish-white marble.[198] Nancy Ramage estimates that the eagles were carved during the late Hellenistic or early Imperial period based on their style and technique. Detweiler arrived at a similar conclusion for the table-top based on the style of its egg and dart molding.[199] If the table's component parts were assembled as a table prior to being installed in the Synagogue, then the table must have been moved from a previous location. Alternatively, the table may have been purpose-built for the Synagogue using reclaimed materials from a Hellenistic or early Imperial monument.

Where might the Eagle Table (or its component parts) have come from, and how did it end up in the Synagogue? Yegül proposed that the Eagle Table may have been moved from the Marble Court, and that it may have served as an altar for the imperial cult.[200] Burrell objects to the idea that the Marble Court was ever used for imperial cult worship, so in her opinion, if the Eagle Table had been part of the Marble Court's furnishings, it would not have served as an altar

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[198] Hanfmann 1972, 128; Hanfmann and Ramage 1978, 148-49, cat. 217, figs. 379-382; Hanfmann and Mierse 1983, 169-70; Yegül 1986, 6, especially n. 24; 1982, 12, figs. 11, 12; Magness 2005, 449, 452, fig. 6, 258-59; Burrell 2006, 446-47.

[199] Hanfmann and Ramage 1978, 148-49, cat. 217, figs 379-382.

[200] Yegül 1982, 12, figs. 11-12; 1986, 6.

to the imperial cult.[201] Burrell also points out that the tabletop does not have burn marks on it, which suggests that in addition to not having been used as an altar for the imperial cult, it also probably was not used as an altar for other gods or heroes that were frequently associated with baths. One may think that if the table had previously been used as a pagan altar of any kind, then the Jewish community probably would not have been comfortable installing it in their place of worship. However, that view is complicated by the discovery of spolia from a destroyed Metroön that was also used in the construction of the Synagogue, and sometimes prominently displayed.

Detweiler proposed that the eagles may have been the decorative ends of the tribunal when the south hall may have functioned as a civil basilica, and that when the tribunal was dismantled, the Jewish community repurposed them as supports for their monumental table.[202] This may seem like the least problematic explanation, although, that does not mean that it is correct. As symbols, eagles conveyed a message about Roman imperial authority and were meant to evoke a sense of pride and patriotism for Roman viewers. The symbolism would have been appropriate for the Marble Court or for a civil basilica. It also should not be ruled out that the table or its component parts may have come from a different, unknown context. I think that the Jewish community at Sardis used the eagles not only because they were beautiful objects that were available to them -- even if they had to negotiate to acquire them, if they did not come from the civil basilica -- but more importantly, because using them was another way to demonstrate their civic pride and their pride in being Roman citizens. I argue that by displaying the eagles and

[201] Burrell 2006, 446-47.

[202] Hanfmann and Ramage 1978, 148-49. For historical context of eagles and lions being displayed together in synagogues, see: Magness 2005, 449, especially n. 24.

lions side by side, the Jewish community was acknowledging, displaying, and celebrating their intersectional identity.

The use of spolia in the Synagogue

It is interesting and perhaps significant that the Jewish community re-used spolia from some of the city's oldest and most important monuments. In the previous section, I mentioned that spolia that probably came from a destroyed Metroön somewhere in the city was also used in the construction and decoration of the Synagogue. This material has been discussed at length by other scholars, so I will not go into too much detail here.[203] However, some of the most interesting questions that the material raises are exactly the types of questions that I have been thinking about in relation to bath-gymnasium complexes (not just at Sardis, but all my case studies). Mainly, how were people able to acquire space/real-estate or objects/art, and why did they do it?

The availability of spolia from the Metroön implies that the Metroön may have been damaged or destroyed by a natural disaster, or abandoned due to changing religious beliefs, local consensus, or imperial decree. Abandonment was even more devastating than a natural disaster from the perspective of the Metroön and the goddess(es) that resided there because at least after a natural disaster, if people still cared enough and were physically and financially able, they would probably rebuild. With abandonment, that probability was significantly diminished.

Some of the edicts of Theodosius I may have been responsible for the closure and dismantling of the Metroön at Sardis. The edicts were issued around 400 A.D., around the same time that the Jewish community at Sardis was building or renovating the Synagogue. The Jewish

[203] Hanfmann 1972, 133-35; Hanfmann and Ramage 1978, 63-69 cat. 25, 26, 32, 33, figs. 92-104, 123-24; Hanfmann and Mierse 1983, 169-70; Mitten and Scorziello 2008; Cahill 2019c, 91-95; Gallart Marques 2019, 122-24.

community may have been able to acquire spolia from the Metroön because the dismantling and construction of the buildings overlapped. Typically, the edicts of Theodosius I that pertain to the abolition of paganism and the closure or dismantling of pagan temples are discussed in connection with (or against the background of) Christianity becoming the dominant religion of the Roman Empire. While Christianity was an important catalyst for these laws, and we often think of Christians as being the sole inheritors of cities' pagan legacies, the Sardis Synagogue is a reminder that Jewish communities were also affected by these important cultural changes, and materialistically, they also benefitted from them.

It is easy to imagine that objects, art, or even building materials from pagan sanctuaries may have been tainted in the minds of faithful Jewish or Christian individuals, but this may be a modern misconception. Reuse of pagan material culture was widely practiced and encouraged. The Jewish community at Sardis may have wanted, and ultimately acquired, some of the spolia from the Metroön simply because they needed construction material for the extensive renovations they had planned, and spolia from the Metroön is what was available, and perhaps easiest to claim. On the other hand, some of the spolia may have been selected and kept because it held special meaning for the Jewish community. The lions, for example, may have been kept because they were traditional symbols of Lydia, Sardis, and Jewish culture.[204]

2.3.6 Palaestra

The palaestra was designed for athletic training (fig. 2.71). It occupied most of the eastern half of the Bath-Gymnasium Complex and consisted of a large square peristyle courtyard

[204] Lions: Hanfmann and Mierse 1983, 184; Mitten and Scorziello 2008, 140; Rautman 2010; Gallart Marques 2019, 130.

surrounded by ambulatories.[205] The main entrance to the Bath-Gymnasium Complex was centered on the east side of the palaestra, and the Marble Court was centered on its west side. Originally, there were also rooms to the north and south of the palaestra that may have been used, or intended to be used, as lecture halls, libraries, changing rooms, medical offices, massage or oiling rooms, meeting rooms, or rooms for storing exercise equipment. These are all types of rooms that were standard near palaestras.[206] The foundations show that the north and south rooms were accessible from the palaestra, but it is unclear whether their construction was ever complete. Eventually, the south rooms were rebuilt as a basilica, which was transformed into a Synagogue in the late fourth century A.D. The Synagogue was not accessible from the palaestra. The eastern-most room on the north side of the palaestra (LNH 3) was an impluviate style latrine that was accessible from the palaestra as well as from the exterior of the building through a doorway in its eastern wall. Whether the latrine was part of the original plan or added later is uncertain.

The palaestra's peristyle consisted of one hundred columns, twenty-six per side, with the corner columns counted twice. The columns and their entablature probably supported a sloping roof to protect the ambulatories from the sun and rain, and shed rainwater into the palaestra, which was open to the sky. Rainwater and runoff eventually found their way into drains along the palaestra's perimeter. Originally, the palaestra was not paved. As was typical for palaestras, it was an earthen yard, perhaps with a *skamma*, an area with soft, raked dirt that was especially appropriate for palé (wrestling), pygmachia (boxing), and pankration (a combination of wrestling and boxing), which were typically practiced in palaestras, and competitions in these sports were

[205] Hanfmann and Mierse 1983, 151-52; Yegül 1986, 25-36.

[206] Vitr. *De arch.* 5.11; Nielsen 1993, 4,10; Yegül 1995, 14-17, 130.

also held in palaestras.[207] At some point, probably not earlier than the late fourth century A.D., when athletics were not as popular as they previously had been, and cities were no longer hosting prestigious agonistic festivals, the palaestra was paved with marble or limestone slabs that made it unsuitable for athletic training.[208]

The fact that the palaestra was paved in late antiquity is important, as it suggests that it was not simply abandoned after it had stopped being used for athletic training. It suggests that the city was still interested in maintaining the large area (6,650 square meters), which was in a desirable location, at a busy intersection, and reusing it in a way that could serve the city's needs more appropriately.[209] I have argued elsewhere in this chapter that the reason that the colonnades to the Marble Court and Rooms BE-N and BE-S were blocked may have been due to the palaestra being converted for use as a public square, or for commercial use.[210] Memnonius, the wealthy benefactor whose restoration of the building is commemorated by an inscription in the Marble Court, may have been restoring a Bath-Market Complex, or perhaps a space for walking, conversation, meditation, and occasionally, ceremonial events and processions, as opposed to a Bath-Gymnasium Complex. It is possible that the marble or limestone paving of the former palaestra was part of Memnonius' restoration around 570 A.D., but it is also possible that the

[207] Katzoff 1986, 437-40; Poliakoff 1987, 12. A *skamma* has not been identified at the Sardis palaestra, although ancient textual sources, such as Lucian, *Anach.,* and Philostr., *Gymnasticus*, suggest that they were typical features of palaestras. According to Katzoff (1986, 440 n. 25), *skammas* or other special sand or mud areas for athletic training are notoriously difficult to identify in the archaeological record.

[208] For the end of athletic festivals and the effects on gymnasia, see: Saradi 2006, 306-09; Remijsen 2015, 173-76. For the paving of the palaestra in the Sardis Bath-Gymnasium Complex, see: Greenewalt 1973, 19-20; Yegül 1986, 26; 2010, 170-73.

[209] The size of the palaestra is given by Yegül 1986, 25.

[210] *Infra* 56-57. Yegül (2010, 173) similarly suggests that the palaestra may have been used as a civic plaza and for ceremonial purposes after it was no longer used for its traditional purposes.

paving was part of an earlier renovation. The palaestra may have been renovated multiple times, even after it had stopped being used for athletic training. Some of the renovations may have been extensive, while others may have been minor repairs or adjustments.

The ambulatories were paved with mosaics at least since the fourth century A.D., probably while the palaestra was still used for athletic training, and the mosaics were repaired in a few places during the fifth and sixth centuries A.D.[211] The mosaics in the eastern ambulatory, in front of the main entrance, and in the western ambulatory, in front of the entrances to the Marble Court and Rooms BE-N and BE-S were replaced with marble slabs, perhaps because marble slabs were sturdier than mosaics, and these areas had more foot traffic.[212]

Two walkways were installed across the center of the former palaestra (phase plan 6 in appendix 1; fig 2.72). One of them led directly from the main entrance of the Bath-Gymnasium Complex to the three intercolumniations that were left unblocked -- but equipped with doors -- in the colonnade of the Marble Court. The other walkway connected the mid points of the north and south ambulatories.[213] The walkways were slightly raised because they were installed on top of the marble or limestone pavements that covered the rest of the courtyard. They may have been installed as part of the same renovation when the rest of the courtyard was paved, or as part of a later renovation. Occasionally, they may have been used for ceremonial processions.

The main entrance, on the east side of the palaestra, was also adjusted. Originally, it consisted of three doorways with the central one being slightly larger than the two side

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[211] Scheibelreiter-Gail 2011, 374-76; Yegül 1986, 31.

[212] Yegül 1986, 30.

[213] Greenewalt (1973, 19-20) describes the raised walkway as a "cobbled structure of apparently cruciform plan," and that is what the photograph seems to show, but Yegül (1986, 26, 30) only mentions the east-west walkway, and describes it as a paved "road" or "ceremonial access way from the main Palaestra entrance directly into the Marble Court." See also Hanfmann and Mierse (1983, 152).

doorways. At some point, the central and northern doorways were blocked, although it is unclear exactly when or why they were blocked.[214]

Another, more substantial renovation involved the reconstruction of the continuous south wall of the rooms to the north of the palaestra. This would have disturbed the roof of the northern ambulatory, as the south wall of the northern rooms probably supported timber beams that extended out over the ambulatory to meet corresponding holes in the entablature of the peristyle. The south wall of the northern rooms was probably rebuilt, if only so the roof of the ambulatory could be restored. It is not clear whether the rooms were ever finished.

The peristyle was also renovated. Some of the original Corinthian column capitals in the southwest and southeast corners were replaced by Ionic impost capitals, which Yegül has dated to the mid to late fifth century A.D.[215] Yegül has also described the entablature of the peristyle as "of a much poorer quality than the shafts or capitals."[216] It is possible that the entablature may also have been replaced.

Even if the former palaestra of the Bath-Gymnasium Complex was not intended to be used exclusively for commercial purposes after it was no longer used for athletic training, but perhaps more as a multipurpose public plaza, it may have gradually been taken over by commercial enterprises. Much has been written about how all types of public and private spaces in cities were increasingly encroached upon or entirely taken over by commercial enterprises in late antiquity.[217] This also happened at Sardis. Some of the areas that best illustrate this

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[214] Yegül 1986, 30.

[215] Yegül 1974; 1986, 26, 35-36.

[216] Yegül 1986, 26.

[217] Kennedy 1985; Crawford 1990, especially 6-7; Ward-Perkins 1996, 148-52; Saliou 2005, 207-24; Saradi 2006, 186-258, 271-94; Jacobs 2009; 2013; Lavan 2012.

occurrence at Sardis are close to the Bath-Gymnasium Complex: the porticoes along the Marble Road, for example, and the eastern colonnade in front of the Synagogue.[218] In some cases, permanent or semi-permanent structures were built, such as the L-shaped brick construction in front of Shop W 2 that claimed about half the width of the public portico for a private shop (fig. 2.73).[219] Other times, indications of encroachment can be more difficult to detect. A piece of rope tied between two columns to display textiles, for example, would have disintegrated. Wooden stalls also usually did not leave much trace. In the Upper Agora at Sagalassos, Luke Lavan identified where wooden stalls and perhaps other types of ephemeral retail outlets may once have been set up by looking for post holes and *topos* inscriptions on paving stones.[220] If the paving stones had not survived, then all traces of commercial activity in that area would have been lost. Only about three percent of the paving stones have survived in the former palaestra of the Sardis Bath-Gymnasium Complex, so unfortunately, any post holes or *topos* inscriptions that may once have been there have not survived.

Several coins were recovered from the former palaestra, and it is significant that most of them date to the sixth century A.D. They may attest to commerce in that area, but it is difficult to say for certain. The Byzantine Shops yielded over a thousand coins, but only about fifty were recorded from the palaestra.[221] However, there are important differences between the contexts. The Byzantine Shops were mostly undisturbed, their contents, including the coins, were buried, and thus preserved for the excavators to find. The palaestra, on the other hand, was heavily

[218] Hanfmann 1964, 46-47; Crawford 1990, 7; Rautman 2011, 25.

[219] Crawford 1990, 7, 37, figs. 126, 132; Hanfmann 1959, 16-17, fig. 12.

[220] Lavan 2012, 336-40; Lavan 2015, 328-33.

[221] For numbers and lists of coins from the palaestra, see: Bates 1971, 4, 150. For numbers and lists of coins from the Byzantine Shops, see: Bates 1971, 4, 149-50; Crawford 1990, 12-13.

scavenged during the post-destruction, lime-burning phase of the Bath-Gymnasium Complex. It was also generally more exposed and may have been reused later, for example, as a point of access to the pottery kilns in LNH 1, which will be discussed below. Some coins may have been casually picked up during the many years the area was exposed. Also, some of the coins from the Byzantine Shops were from hoards, whereas the coins from the palaestra were stray finds.

2.3.7 Rooms to the North of the Palaestra (LNH 1, 2, 3)

The rooms to the north of the palaestra are collectively referred to as the Long North Hall (LNH), even though there were three distinct units: LNH 1, 2, and 3, that were separated from each other by cross walls (fig. 2.74).[222] The rooms are not very well understood because the area was poorly preserved and never fully excavated. Originally, the rooms may have served, or were intended to serve, as auxiliary rooms to the palaestra, but aside from the easternmost room (LNH 3), which was used as a latrine, their construction may never have been complete. It is unclear whether the latrine in LNH 3 was part of the original plan, or whether the room was converted into a latrine during one of the many renovations of the Bath-Gymnasium Complex.

The rooms shared a continuous south wall that was rebuilt, perhaps during the second half of the fifth century A.D., when the palaestra's peristyle was also being renovated.[223] The wall was pierced by six doorways that were evenly spaced, creating a balanced façade from the vantage point of anyone in the palaestra. To anyone inside the rooms, the doorways may have seemed awkwardly placed. One of the doorways to LNH 1 was partially blocked by a pre-existing pier, which suggests that the doorway may have been created primarily to maintain the rhythmic break in the wall that was visible from the palaestra. Even if the north rooms were not

[222] Hanfmann and Mierse 1983, 151-52; Hanfmann 1968, 33; 1970, 43; Yegül 1986, 37-44.

[223] Yegül 1986, 38-39.

used, their south wall was important because it supported the timber beams of the roof for the northern ambulatory. It also would have helped to hide any ongoing or incomplete construction work, abandonment, or perhaps industrial activities that the rooms may have been used for from anyone in the courtyard.

LNH 1 was eventually converted for industrial purposes. Three large pottery kilns were installed against the north wall, completely filling three of the bays, and benches or worksurfaces were built in the southern part of the room (figs. 2.75 and 2.76).[224] The benches or worksurfaces were constructed using recycled materials, including broken inscriptions and architectural fragments. Without knowing where this material came from, it is not possible to say for certain that LNH 1 was converted for industrial use only after 615/6 A.D. It may have been converted earlier, while the building was still in use as a bath.

There were also a few late walls constructed in this area. One may have served as a dividing wall or potentially as a heat blocker between the pottery kilns and the southern half of the room. Two other late walls closed the two southeast bays of LNH 1, blocking access between the two easternmost doorways and the courtyard.[225] If the main purpose of these walls was to block the doorways, then it would have been more efficient and more economical to fill the doorways. The fact that the doorways were not filled and that the blocking walls were constructed about a meter away from the north face of the south wall of LNH 1, may indicate that when these walls were constructed there was still an interest in maintaining the appearance

[224] Yegül 1986, 40-42.

[225] Yegül does not consider these walls to be late. He suggests that they pre-date the construction of the long south wall. However, he suggests that they may have helped to make the room more fireproof than it was originally, even though he interprets the kilns – which would have been the main reason to fireproof this area - as part of the post-destruction phase of the building. See Yegül 1986, 40 (The East-West Wall between Piers 151-152-153), 43-44 (Phases IIa and IIb).

of evenly spaced doors from the vantage point of anyone in the courtyard. This is interesting because it may suggest that LNH 1 was converted for industrial purposes before 615/6 A.D., while the courtyard was still in use, beyond being scavenged for materials, and while people still cared about its appearance. Another possibility is that the two late walls blocking the southeast bays were created before LNH 1 was converted for industrial purposes, perhaps to restrict access and hide the unfinished state of LNH 1.

Walls that may have been part of the conversion of LNH 1 for industrial use were also constructed immediately to the west of LNH 1, in the northern extension of the western ambulatory.[226] In addition to restricting access to LNH 1, the northern occlusion wall blocked the northern doorway to Room BE-CC. The southern occlusion wall, which Yegül suggests was probably built later than the northern one, restricted access to the southern doorway of Room BE-CC. Unfortunately, these walls do not help with dating the conversion of LNH 1 for industrial purposes. Whether the walls were constructed before or after 615/6 A.D., restricting access to LNH 1 after that area had been converted for industrial purposes made good sense in terms of safety and security.

Dating the construction and use of the pottery kilns, specifically, is also difficult because they are a standard type that was used for centuries throughout the Mediterranean. Yegül suggests that they were probably constructed during the seventh or eighth century A.D., after the building was no longer used as a bath.[227] Yegül suggests that the pottery kilns are probably contemporary with the lime burning activities, perhaps all part of the endeavors of the troops of Constans II. Clive Foss suggests that some of the industrial activities, including the pottery kilns

[226] Yegül 1986, 31-33.

[227] Yegül 1986, 16, 40, 44.

and some of the lime kilns, may be as late as the tenth or eleventh century A.D.[228] The objects that were found in LNH 1 are also not particularly helpful for dating the construction or use of the pottery kilns since most of the objects were unstratified.

The ceramic objects that were found in LNH 1 include segments of terracotta pipes, as well as the usual types of pottery (drinking vessels, plates, the handle to a pilgrim flask, etc.) and terracotta figurines. It is unclear if all these types of objects were produced in the pottery kilns in LNH 1, or if this may have been a specialized workshop, perhaps exclusively for producing drains and sewage channels for the new road, for example.[229]

Another consideration is that ceramic production requires access to water. It is often assumed that the building's main water supply had been damaged by the events of 615/6 A.D., and never repaired, but this has yet to be confirmed. Perhaps part of it survived, or was repaired, or a new water supply system, perhaps a cistern or a well, may have been devised for the post-destruction, industrial phase of the building. Another possibility is that they relied on water that was manually brought in.

2.4 Conclusions

The Sardis Bath-Gymnasium Complex was one of the city's most impressive buildings, and although Sardis had other large public baths -- at least Bath CG on the eastern side of the city, and probably others that have not yet been identified -- the one that has been the focus of this chapter is the one that we know for certain continued to be maintained and used as a bath

[228] Foss 1976, 74-75.

[229] Yegül 1986, 40.

into the late sixth and probably the early seventh century A.D.[230] There is no evidence or reason to believe that the Bath-Gymnasium Complex had stopped being used as a bath prior to the earthquake and fire that destroyed parts of the building, the adjacent shops, and many other areas of the city in 615/6 A.D. In addition to the continued maintenance of the building, the fact that the Late Roman fortification wall was extended to include the Bath-Gymnasium Complex attests to the building's importance in late antiquity.[231]

After 615/6 A.D., the city did not restore the Bath-Gymnasium Complex. Instead, they chose to repurpose the building as a quarry and for other industrial activities such as lime burning, metal working or smelting, and the production of terracotta pipes and perhaps pottery. This may suggest that there was a pressing need for construction materials and industrial workspaces, to the extent that the city felt pressured to give up its beloved Bath-Gymnasium Complex. However, this chapter has shown that there may have been multiple other factors that influenced the city's decision to repurpose the building, such as fewer people bathing, financial difficulties, or increased difficulties in being able to supply water to the baths. While there was a need for construction materials and industrial workspaces to restore other extensive damages throughout the city and to rebuild the highway, the city could have found some other solution, rather than give up its Bath-Gymnasium Complex, if there was still a desire and financial means to restore the baths and keep them functioning.

By the time of the renovation sponsored by Memnonius, around 570 A.D., there had already been a significant relinquishing of space, where parts of the Bath-Gymnasium Complex

[230] The Podium/Memnonius Inscription, which Petzl (2019, cat. 429) dates to 570 A.D., is the strongest confirmation of late sixth century A.D. maintenance of the building.

[231] The Late Roman fortification wall may have been built as early as the late third or early fourth century A.D. See Hanfmann and Waldbaum 1975, 35-52; Hanfmannn and Mierse 1983, 143-44; Rautman 2017, 231.

had already been converted for non-bath purposes. The south hall of the palaestra, which had been converted into a Synagogue in the late fourth century A.D., is the most remarkable example, but the conversion of the palaestra for non-athletic pursuits, probably in the late fourth or early fifth century A.D., is also significant. There may also have been rooms in the bath block that were allowed to fall into disrepair, not regularly used, or converted for other purposes. The motivation for repurposing some areas of the Bath-Gymnasium Complex may have been because the areas that were converted were no longer needed, or used, or the city may have been being resourceful and looking for ways to subsidize and keep the essential parts of the building suitably maintained and functioning for as long as possible.

Chapter 3: Ephesus

This chapter explores the transformation and re-use of the Vedius Bath-Gymnasium Complex at Ephesus, which stopped being used as a bath earlier than both the Sardis and Sagalassos Bath-Gymnasium Complexes. Ephesus had been struck by multiple earthquakes during the third and fourth centuries A.D. and launched an extensive urban renewal program to repair the buildings that had been damaged. The Vedius Bath-Gymnasium Complex was renovated after the earthquakes, but not extensively until the early fifth century A.D., after some of the city's other large baths had already been repaired. Less than one hundred years after it was renovated, it stopped being used as a bath. The city may not have needed or been able to sustain all its public baths, and the Vedius Bath-Gymnasium Complex may have been the least popular – perhaps due to its location or its particularly strong association with athletics. Some important changes can be traced while the building was still in use. Most notably, the sculptural program was revised to censor nudity, and benches replaced the fountains in the basilica thermarum – a change that seems not to have been necessitated by failing water infrastructure or water shortage, but because the room may have been used more frequently for smaller, more intimate social gatherings, and perhaps reading and lectures, than for physical activities. After the building no longer functioned as a bath it was reused primarily for its materials and as a storage facility.

3.1 History and Landscape

Ephesus is located approximately 70 kilometers south of modern Izmir / ancient Smyrna, at the mouth of the ancient Kaystros River (fig. 1.1). Today, the river is known as the Küçük Menderes River. The bay served as a natural harbor where ships could anchor, which made the location attractive both as a military base and for trade. The history of settlement near Ephesus can be traced to the seventh millennium B.C., and it is intricately connected with natural changes in the landscape. Geologically, Ephesus is in the Selçuk Trench. In addition to making the area prone to earthquakes, the shifting of tectonic plates creates friction in the metamorphic material of the Menderes Massif, which contributes to the large quantity of silt that is transported by the Küçük Menderes River and other smaller rivers and deposited along their banks and in the bay. This natural process of sedimentation has gradually caused the Aegean shoreline to recede

further and further west, leading to several relocations of the main settlement and harbor over the past 9,000 years.[232]

Some of the early settlements in the territory of Ephesus were wealthy and influential. The remains of a Bronze Age settlement on Ayasoluk Hill, for example, have been tentatively identified as Apasa, the capital of the Kingdom of Arzawa, which was conquered by the Hittites in the fourteenth century B.C. These early settlements, however, were distinct from the Greco-Lydian settlement known as Ephesus. According to Greek sources, Ephesus was an Ionian Greek settlement that was founded during the Ionian Migrations of the eleventh century B.C., but it had a strong Lydian presence in the region at the time of its foundation and for many years after its foundation.[233] The Lydian Kings based at Sardis were especially involved in Ephesus' political affairs during the seventh and sixth centuries B.C. Herodotus tells us, for example, that the famous Lydian King Croesus 'dedicated many columns' when the Temple of Artemis at Ephesus was rebuilt.[234] This was around 580 - 570 B.C., and the story is corroborated by several inscribed column drums that were recovered from the site. A fragment of one of the column drums is in the British Museum. Its Greek inscription can be restored as 'King Croesus dedicated (this).'[235]

[232] Ladstätter et al. 2016, 413; Stock et al. 2013, 57-60.

[233] This is one reason why the early settlement is referred to as Greco-Lydian; another reason is to clearly distinguish it from the Hellenistic-Roman settlement, which has been the focus of the modern excavations at Ephesus. The culture and population of Greco-Lydian Ephesus must have been a unique blend, as reflected in the city's patron goddess, who was called Artemis, but who was clearly an assimilated version of the Greek deity that retained many traits of the indigenous goddess. For the geography of early Ephesus, see Stock 2014; Kerschner 2017.

[234] Hdt. 1.92.

[235] British Museum inventory number 1872,0405.20. For the date of Croesus' reign, see Wallace (2016, especially 172-78); Croesus' contribution to the archaic temple of Artemis at Ephesus is mentioned on 177.

Greco-Lydian Ephesus had established itself as a wealthy and influential city by the fifth century B.C., and it continued to be successful, despite the accumulation of silt that forced its inhabitants to move further inland during the early third century B.C.[236] New Ephesus, or Arsinoeia, as the Hellenistic settlement was temporarily called, was built with a more regularized plan and monumental appearance that was maintained, embellished, and inhabited into the seventh century A.D., when many other cities in western Asia Minor were exhibiting a clear break with the past.[237] More recent excavations have revealed that some parts of the Hellenistic-Roman city were inhabited even later, into the fourteenth century A.D.[238] (See fig. 3.1 for a plan of the city).

Ephesus had become part of the Hellenistic Kingdom of Pergamon under the Peace of Apamea (188 B.C.). When King Attalos III, the ruler of Pergamon died in 133 B.C., he left his kingdom to the people of Rome, and Ephesus became subject to Roman rule. During the first century B.C., Ephesus was embroiled in the chaotic events that led to the culmination of the Roman Civil Wars and the Roman Republic. Mark Antony had established Ephesus as his headquarters when he was the administrator of the eastern provinces, and he and Cleopatra resided there for a few months prior to the Battle of Actium to gather supplies, build alliances, and assemble their naval fleet. After Antony and Cleopatra's defeat in Alexandria, Octavian

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[236] Greco-Lydian Ephesus may have been wealthy and influential before the fifth century B.C., but I call attention to the fifth century B.C. because that is when Ephesus became more autonomous. There is also an anecdote from Strabo that illustrates and reinforces that Ephesus was powerful in the fifth century B.C. According to Strabo, when Xerxes destroyed the Greek temples in Asia Minor, he spared only the Temple of Artemis at Ephesus (Strabo, *Geography,* XIV.1.5).

[237] For information about the topography and settlement history of Ephesus, see Scherrer 2001; Raja 2012, 57-59; Ladstätter et al. 2016, 413-17.

[238] Foss 1977, 472-75; Foss 1979, 103-37; Ladstätter and Pülz, 2007, 407-08, 417; Pülz 2009; 2011, 73-78; Ladstätter and Binder 2017, 32-33; Ladstätter 2011, 25-26; 2017, 245-48; 2019, 37-65.

lifted the excessive taxes that Antony had imposed on the city, and he returned large tracts of confiscated land, including land that had previously belonged to the city's most important deity, Artemis of Ephesus, whose temple in the territory of Ephesus was one of the Seven Wonders of the Ancient World.[239]

Octavian also established Ephesus as the new capital of the Roman Province of Asia. Unlike the remote, hillside city of Pergamon that had been the administrative center of the region since the third century B.C., Ephesus had plenty of room to expand. Ephesus was also much more accessible than Pergamon, which made it a convenient repository for the large quantities of natural and manufactured goods that were imported to, and especially exported from, the region.[240] In addition to the harbor, which was already one of the major ports in the Mediterranean by the time Octavian promoted the city, Ephesus was located near important land routes. It was the western terminus of the Persian Royal Road and it had relatively easy access to two other inland routes along the Hermus and Maeander Rivers. It was also located near an important north-south road that connected it with other coastal cities, such as Smyrna and Alexandria Troas in the north, and Miletus in the south.[241]

Under Roman rule, Ephesus was the cultural and religious center of the region, as well as the political and economic center. It was named *neokoros,* or temple warden of the imperial cult, multiple times, and it received special permission to host the agonistic games connected with the

[239] The Temple of Artemis at Ephesus was rebuilt many times; the version that King Croesus helped to build was destroyed by fire in the fourth century B.C. It is the Hellenistic successor that Philo of Byzantium was referring to in his treatise *On the Seven Wonders.* See: MacLean Rogers 2012, 117-18.

[240] Ephesus was a major supply center for Rome and for the western provinces for all types of commodities, but especially grain, spices, and textiles. Strabo 14.1.24 called the city of Ephesus the most important trading center west of the Taurus mountains. Ladstätter 2019b.

[241] Foss 1979, 3.

Cult of the Sebastoi and Zeus Olympios.[242] Ephesus was also important for the early development of Christianity. Many early Christian leaders resided in Ephesus or visited the city to deliver public speeches. Mary, the mother of Christ, for example, is said to have spent her last years in Ephesus. Saints John and Paul also resided in Ephesus and helped to establish it as the head of the Seven Churches of Asia. In 431 A.D., Ephesus hosted the Third Ecumenical Council, for which approximately two hundred bishops from all over the Roman Empire were called together to debate the divine nature of Christ. The outcome of this debate resulted in one of the central tenets of Christianity: the declaration that Christ is both fully mortal and fully divine.[243]

Ephesus' conversion from an important pagan center to an important Christian center was gradual, but the major earthquake of 262 A.D. may have significantly facilitated the process. While Ephesus was still suffering and struggling to recover from extensive earthquake damage, the Temple of Artemis was plundered and burned by invading Goths, which probably caused many people to doubt the strength and protective power of the city's ancestral goddess. More earthquakes and economic challenges throughout the later third and fourth centuries A.D. made it even more difficult for Ephesus to swiftly recover, but by the fifth century A.D., it had regained most of its strength and reinvented itself as an important Christian pilgrimage site.[244] Many buildings were restored, converted for new purposes, or dismantled so that their materials

[242] Friesen 1993, 137; Burrell 2004, 62.

[243] Foss 1977, 472; Scherrer 2000, 32; Külzer 2010, 522.

[244] For more information about Ephesus' transformation from an important pilgrimage site for worshippers of Artemis to an important pilgrimage site for Christians, see Scherrer 1995; Ladstätter et al. 2016, 428; Ladstätter and Binder, 2017.

could be re-used to improve other parts of the city. Water infrastructure and baths became priorities.[245]

3.1.1 The Bathing Landscape: An Introduction to the Ephesian Bath Buildings

All the known baths at Ephesus are marked on the city plan in Figure 3.1. They range from large public facilities to small private or semi-private facilities.

At least four large public baths of the imperial type have been identified in the archaeological remains at Ephesus.[246] (Fig. 3.2). The Harbor Bath-Gymnasium is the earliest; it is also, by far, the largest. Built during the first century A.D., it covers an area of approximately 70,000 square meters and is comprised of three distinct architectural units: the thermal baths in the west, the palaestra in the center, and a second, larger quadriporticus or xystos (an enlarged exercise area) in the east. Not including the xystos, which none of the other baths at Ephesus had, the combined size of the bath block and the palaestra is 22,910 square meters, which is still significantly larger than the next largest bath-gymnasium complex at Ephesus, the East Bath-Gymnasium, which measures 13,500 square meters. The Harbor Bath-Gymnasium was clearly intended to impress visitors because it dominates the view of the city from the harbor, and the harbor was the main gateway to the city in antiquity. The building's conspicuous size and location were almost certainly intended to convey how civilized - and Roman - Ephesus was by emphasizing how important the Roman institution of bathing was in the city.[247]

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[245] Foss 1979, 3, 96-98; Scherrer 1995, 15-22; Ladstätter and Pülz 2007, 391-98; Ladstätter and Binder 2017, 28-29; Ladstätter 2019, 17-28.

[246] For overviews of Ephesian baths, see: Maccanico 1963; Alzinger 1970, cols. 1608-25; Yegül 1995, 250-313; Steskal 2003, 231-35; Auinger and Rathmayr 2007, 237-48; Steskal 2010, 576-87; Steskal 2019, 211-18.

[247] The construction of the Harbor Bath-Gymnasium was mostly complete during the reign of the Roman Emperor Domitian, as attested by the architrave inscription in the palaestra (*IvE* 427), which has been dated to 93/94 A.D. Other inscriptions indicate that construction was still ongoing during the reign of the Roman Emperor Hadrian. See: Kalinowski 2002, 123. Friesen (1993, 121-37) uses the terms *xystos* and *gymnasium* interchangeably.

The Harbor Bath-Gymnasium was studied in the 1890's and again in the 1930's, but only brief reports were published. New studies focusing on the palaestra and the xystos have been underway since 2006.[248] The studies that were conducted in the 1890's revealed that the building had been damaged by one or more of the third and fourth century A.D. earthquakes and that large quantities of spolia had been used to rebuild and redecorate it. After extensive renovations, the Harbor Bath-Gymnasium was reopened in the middle of the fourth century A.D., under the Roman Emperor Constantius II, with a different name: *Thermae Constantianarum*, but already by the fifth century A.D., peristyle houses with colorful mosaics and *opus sectile* floors were being built in the palaestra and in the xystos.[249] For exactly how long the baths of the Harbor Bath-Gymnasium continued to function alongside the peristyle houses remains unknown, but most of the building was destroyed by fire during the seventh century A.D. Although the excavations have not been able to prove that the baths of the Harbor Bath-Gymnasium continued to function alongside the peristyle houses into the seventh century A.D., the possibility that the baths continued to function that late cannot be ignored.[250] The baths and the rest of the heavily damaged building were demolished in the late seventh century A.D., but some of the houses were eventually rebuilt at a higher level. The area that the Harbor Bath-Gymnasium once

[248] Early reports on the Harbor Bath-Gymnasium include: Benndorf 1898, cols. 62-69; Heberdey 1904, col. 43; Benndorf 1906, 181-204; and Keil 1933, cols. 14-23. For an overview of more recent studies, see Pülz, 2011, 62-65. Steskal (2010, 577 n. 47) provides a more extensive bibliography for the Harbor Bath-Gymnasium. See also Alzinger 1970, 1608-11; Nielsen 1993, cat. 295; Karwiese 1997; and Auinger 2011, 69.

[249] The name 'Harbor Bath-Gymnasium' is modern. Steskal (2010, 579) explains that prior to the late third / early fourth century reconstructions, the building had been known as the "Emperor's Baths" (βαλανεῖα τῶν Σεβαστῶν or Σεβα- στοῦ, *IvE* 1104. 1125. 1155) and the "Emperor Gymnasium" (Σεβαστὸν γυμνάσιον; *IvE* 621. 633. 661), but after the baths were reconstructed, the facility was called the "Thermae Constantianarum" (*IvE* 1314. 1315).

[250] Steskal (2019, 213) suggests that it is likely that they did continue to function into the seventh century A.D. since they were not built over and other areas of the complex were built over.

occupied became part of the main residential quarter of Ephesus during the seventh through thirteenth centuries A.D.[251]

The Theater Bath-Gymnasium is located immediately to the east of the Harbor Bath-Gymnasium. Its construction probably began shortly after the Harbor Bath-Gymnasium was complete.[252] Although it was equipped with its own palaestra, bathers probably had the option of using the much larger xystos of the Harbor Bath-Gymnasium, which functioned as a semi-independent athletic facility before it was destroyed and subsequently built over with peristyle houses. The Theater Bath-Gymnasium was studied by Franz Miltner from 1928-1930, but only brief reports were published, and there have been no more recent studies of the building. The building covers an area of 11,680 square meters and it is still relatively well-preserved.[253]

The East Bath-Gymnasium, which is located at the south-east edge of the city, on the road leading to the Magnesian Gate, is also well preserved, and has not been very well studied. Joseph Keil and Franz Miltner excavated parts of the building in 1930 and 1931, but again, the published reports are brief. They focused on the late second century A.D. reconstruction of the palaestra, which is thought to have been financed by a member of the prominent Vedii Antonii family, the same family that paid for the construction of the so-called Vedius Bath-Gymnasium,

[251] Pülz 2011, 62-65; Ladstätter 2015, 604.

[252] Steskal 2010, 579.

[253] For the Theater Bath-Gymnasium, see: Keil 1929b, cols. 42-45; Keil 1930, cols. 18-29; Keil 1932, cols. 16-25; Alzinger 1970, 1611-13; Nielsen 1993, cat. 300; Yegül 1995, 279-82; and Steskal 2010, 579-80.

also at Ephesus.[254] Covering an area of 13,500 square meters, the East Bath-Gymnasium is the second largest bath-gymnasium complex at Ephesus.[255]

The Vedius Bath-Gymnasium, which will be the focus of this chapter, was the last large public bath that was built in Ephesus. Located at the northeast edge of the city, just north of the stadium, its main entrance opened onto the Sacred Way, which led out of the city towards the Temple of Artemis, and later, to St. John's Basilica and the Late Byzantine / Early Medieval settlement on Ayasoluk Hill. The Vedius Bath-Gymnasium was studied in the 1920's and 1950's by Max Theuer and Franz Miltner. Between 2000 and 2005, it was a major focus of the Austrian Archaeological Institute's expedition at Ephesus. Today, it is the best-preserved and most thoroughly studied out of all the Ephesian baths. In addition to excavation reports, articles, book chapters, and conference proceedings, a monograph on the Vedius Bath-Gymnasium was published in 2008.[256] Measuring 10,600 square meters, it was the smallest of the four imperial style bath-gymnasium complexes at Ephesus.[257]

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[254] Dillon 1996, 272-74. For more information about the Vedii Antonii, see Steskal 2001; Kalinowski 2002, 2021; and Steskal et al. 2008, 303-08. The Vedii Antonii have long been thought to have been the patrons of the East Bath-Gymnasium Complex (cf. Scherrer 1995, 13-14), but Steskal et al. (2008, 305-06) argue that the founder of the East Bath-Gymnasium was the same individual (M. Claudius P. Vedius Antoninus Phaedrus Sabinianus) who paid for the construction of the Vedius Bath-Gymnasium, not his father or anyone else.

[255] For the East Bath-Gymnasium, see: Keil 1932, cols. 23-52; Keil 1933, cols. 6-13; Alzinger 1970, 1613-15; Nielsen 1993, cat. 298; Yegül 1995, 279-82; Dillon 1996, especially n. 36; Steskal 2010, 580-81, and Auinger 2011, 76-79.

[256] The best source for the Vedius Bath-Gymnasium is the two-volume monograph: Steskal et al. 2008. See also: Keil 1929a, cols. 20-52; Keil 1929b, cols. 21-38; Keil 1930, cols. 17-18; Miltner 1955, cols. 23-28; Miltner 1960, cols. 69-72; Maccanico 1963, 38-42, 51; Alzinger 1970 cols. 1615-17, 1620-25; Nielsen 1993, cat. 297; Yegül 1995, 282-84; Steskal and La Torre 2001; Steskal 2003a; Steskal 2003b; Steskal and Ladstätter 2004; La Torre 2006; Steskal 2008a; Steskal 2008b; Steskal 2010, 581-82; Auinger 2011, 71-76; La Torre and Steskal 2012.

[257] For the four imperial type bath-gymnasium complexes at Ephesus, I have used the sizes as given in Nielsen (1993), which does not include the substructures of any of the buildings. Steskal (2003b, 159) gives the size of the Vedius Bath-Gymnasium as 12,500 square meters, but this measurement includes the substructure.

There were also several smaller baths that had a public or semi-public character. The Baths of Varius / Scholastikia, for example, were constructed in the second century A.D. by a wealthy local citizen, P. Quintilius Varius Valens, on the north side of the Embolos, close to the Library of Celsus (fig. 3.3). The building was refurbished as a bath by a wealthy Christian woman, Scholastikia, in the first half of the sixth century A.D. The Baths of Varius / Scholastikia were excavated in the 1950's by Franz Miltner, and new architectural discoveries that have helped to establish a more secure chronology for the building were made in the late 1990's and early 2000's when the neighboring Stoa of the Kouretes was being studied.[258] While research and excavations have not yet been able to confirm the final date of use for the Baths of Varius / Scholastikia and most of the other bathing facilities at Ephesus, it is worth mentioning that the Baths of Varius / Scholastikia is the only bath building at Ephesus that has been confirmed to have definitely still been functioning as a bath in the sixth century A.D.[259] The Vedius Bath-Gymnasium is the only bath building at Ephesus where a final date of use for the baths (late fifth century A.D.) has been confirmed.

The bath building on the State Agora, which is sometimes referred to as the Upper Gymnasium, has not been fully excavated, but its construction is attributed to the middle of the second century A.D., and inscriptions suggest that it may have replaced a Hellenistic predecessor (fig. 3.4).[260] Although there is evidence for renovations to the building as late as the fifth century

[258] For the Baths of Varius / Scholastikia, see: Miltner 1955, cols. 34-44; Miltner 1956-58, cols. 15-26; Alzinger 1970, cols. 1619-20; Auinger and Rathmayr 2007, 241-42; Steskal 2010, 583; Steskal 2019, 215-17.

[259] Steskal 2019, 215. The renovation of the Varius Baths by Scholastikia, an event that is commemorated on an inscribed statue base (*IvE* 453) was previously thought to have taken place in the fourth century A.D., but the work on the Stoa of the Kouretes, to which the bath building is connected, identified that spolia from the Prytaneion was used during the renovation, and spolia from that building would not have been available for re-use until the late fourth or even the fifth century A.D.

[260] For the Upper Gymnasium, see: Nielsen 1993, cat. 299; Steskal 2010, 582; and Auinger and Rathmayr 2007, 240.

A.D., it is not clear that it was still functioning as a bath when the renovations were made.[261] Other known baths at Ephesus include the baths inside Terrace House 2 (fig. 3.5), the baths inside the Byzantine Palace, which is sometimes referred to as the Sarhoş Hammam, (fig. 3.6), the small bath to the south of the baptistery in the Church of Mary (fig. 3.7), and the small baths above the theater (fig. 3.8).[262] There may also be other baths that have not yet come to light.

3.1.2 The Water Supply of Ephesus during the Roman Imperial Period

Supplying all these baths with water required a significant feat of hydraulic engineering. By the second century A.D., Ephesus had four main aqueducts that carried water into the city, and a complex, mostly subterranean network of pipes, channels, and drains that helped further distribute the precious resource to various outlets or points of consumption throughout the city.[263] (Figs. 9 and 10). The main aqueducts were the Kenchiros / Değirmendere Aqueduct, the Marnas / Aqua Throessitica / Derbentdere Aqueduct, the Selinus / Sirinçe Aqueduct, and the Kaystros / Aristion Aqueduct. For more information about these aqueducts, including brief overviews of their routes and subsequent distribution networks throughout the city, see Appendix 5. The Kaystros / Aristion Aqueduct supplied the Vedius Bath-Gymnasium.

Wells and rainwater were also important sources of water at Ephesus, but a city of this size would have been unsustainable, perhaps even dangerous, without aqueducts to ensure a

[261] According to Steskal (2019, 213-14), the Late Antique renovations in the Upper Gymnasium include the installation of a new floor mosaic in the basilica, which was located to the south of the bathing area, and the construction of a wall with a late fifth or early sixth century A.D. sculpture that had been repurposed as building material.

[262] All of these are mentioned in Steskal (2010, 583-87; 2019, 211-18), with additional bibliography. For the Terrace House 2 baths, Steskal only mentions the ones in Unit 6 since the others were destroyed before the early Byzantine period. For more information about the Terrace House 2 baths, and other private or semi-private baths at Ephesus, including the baths in the Byzantine Palace and the small baths above the theater, see Uytterhoeven, 2011. See also Groh et al. 2006, 103-04.

[263] Ortloff and Crouch 2001; Crouch 2004, 235-36; Pickett 2016; Wiplinger 2011; 2016; 2019.

sufficient supply of water for cooking, drinking, and basic hygiene. It also would have been impossible to sustain so many large bath complexes without aqueducts. Although water was plentiful at Ephesus, it was also judiciously managed. Latrines in baths were sometimes equipped with impluvia, which caught rainwater to be used for cleaning and flushing. Bath water was also not usually discarded after a single use. It was often re-used as greywater or process water to clean floors, to hydraulically remove ashes from furnaces, and to flush latrine channels.

3.2 The Vedius Bath Gymnasium Complex

I have chosen to focus on the Vedius Bath-Gymnasium in this chapter because it has been the most thoroughly studied and well published of all the baths at Ephesus. (Figs. 3.11 and 3.12 indicate the areas inside the Vedius Bath-Gymnasium that have been excavated). Ephesus has been the focus of serious archaeological investigations for 125 years, and as a result, large swaths of the city have been studied, which enables me to compare changes in the Vedius Bath-Gymnasium with changes in other parts of the city, and most importantly, to place the transformation of the building within a more robust and scientifically verified historical context.

3.2.1 More about the name, location, and construction of the building

In antiquity, the bathing complex on the north side of the city may have been known as the Gymnasium in Koressos, after the neighborhood where it was located. It came to be known as the Vedius Gymnasium or the Vedius Bath-Gymnasium in modern times, after its donor was identified from the building's dedicatory inscriptions as M. Claudius P. Vedius Antoninus Phaedrus Sabinianus.[264] The building contained two nearly identical inscriptions that dedicate the

[264] According to Aelius Aristides (Ιερῶν λόγων / Sacred Tales β 82), Asklepios, the god of healing, ordered Aelius Aristides to give a speech at Ephesus and to take a cold bath as a medicinal cure. Aristides performed the bath in public, at the γυμνάσιον πρὸς τῶ κορεσσῶ, which for a long time was thought to have been the Harbor Bath-Gymnasium, but the consensus now is that the 'Gymnasium in Koressos' probably referred to the building that is now known as the Vedius Gymnasium or the Vedius Bath-Gymnasium. See Maccanico 1963, 38; Steskal and La

building to Artemis, to Antoninus Pius and the rest of the imperial family, and to the City of Ephesus. One of the inscriptions was carved into the architrave of the palaestra (*IvE* 431), and the other inscription (*IvE* 438) was part of a broken wall plaque that was restored from fragments found on the floor in the western part of Room IIIa and in the south part of Room VI. The dedicatory inscriptions confirm that the building's construction was completed in the middle of the second century A.D., under the Roman Emperor Antoninus Pius.[265]

Settled in the eighth century B.C., the Koressos was one of the oldest and most venerable neighborhoods in Ephesus. It was eventually taken over by craft production, probably due to its location at the edge of the Hellenistic-Roman city, and its proximity to the Temple of Artemis.[266] (Fig. 3.13). Artisans and merchants would have benefitted from the high volume of people traveling through the Koressian Gate, especially religious pilgrims, many of whom may have wanted to purchase votive offerings or souvenirs.[267] Craft activities like metal working and pottery production were often relegated to the edges of cities because they were fire hazards.[268] Baths were also fire hazards due to their large furnaces that were kept running for long periods of time. This may be one of the reasons that baths were frequently located at the edges of cities.

Torre 2001, 221-24, 231-34; Steskal 2010, 581; Petsalis-Diomidis 2010, 139. For the modern name of the building: "Vedius Gymnasium" vs. "Vedius Bath-Gymnasium," see Yegül (2010b, 544-45).

[265] For the dedicatory inscriptions, see: Keil 1929a, cols. 26-30; Keil 1929b, cols. 22-29; Steskal 2001, 183-84; Steskal and La Torre 2001, 225-27; and Steskal and Ladstätter 2004, 239-41. According to *IvE* 438, the building was dedicated during the proconsulate of L. Antonius Albus. Dillon (1996, 269) points out that there has been some debate about the precise dates of Albus' term in office, but the consensus is that it was in the late 140's. Steskal (e.g.: Steskal 2001, 183-84, n. 34; 2008b, 557) places Albus' term as proconsul, and thus the dedication of the Vedius Bath-Gymnasium, between 147 and 149 A.D.

[266] For the Koressos neighborhood, see: Engelmann 1991; 1997; Scherrer 2001, 60-61, 63, 67; Kalinowski 2002, 124-27; Knibbe 2002, 213; Kerschner et al. 2008; Steskal et al. 2008, 92-93; 309-12; and Harrison 2018, 17-22.

[267] Pilgrims visited the Temple of Artemis during the early Roman period. See Kleijwegt 2002, 117-18. Christian pilgrimage succeeded this tradition.

[268] Putzeys 2007; Putzeys and Lavan 2007b; Lavan 2012, 351-52.

The construction of a bath-gymnasium in this location did not erase the commercial aspect of the Koressos neighborhood. Instead, it may have intensified it. With the addition of the Vedius Bath-Gymnasium in the second century A.D., the Koressos was no longer just a destination for occasional, specialized shopping, or for artisanal production and humble living. The bath-gymnasium complex helped the Koressos neighborhood become more integrated in the day-to-day routine of the local population. With the stadium and a colonnaded street lined with shops also located in this part of town, the Koressos was transforming into an entertainment district.[269] Shopping and all the other diversions associated with sports and public baths, such as eating, drinking, visiting with friends -- perhaps even musical or theatrical events, lectures, and poetry readings, were part of that entertainment. (See figs 3.14 and 3.15 for aerial views of the Vedius Bath-Gymnasium and its immediate environs. Figs. 3.16 and 3.17 are models that make the ruins of the Vedius Bath-Gymnasium more legible).

3.2.2 Original Organization of Rooms

Phase plan 1 in appendix 2 shows the original organization of rooms in the Vedius Bath-Gymnasium. The main entrance is labeled “Propylon;” it opened into the palaestra on the south side of the building and was oriented north-south, whereas the rest of the building was arranged symmetrically along a central east-west axis, with the northern rooms, originally, equal and opposite to the southern rooms. The palaestra was located on the eastern side of the building, and the bath block was located on the western side of the building. The bath block comprised slightly less than two thirds of the total area of the complex, and it consisted of everything on the main level except for the palaestra and the rooms to the north and south of the palaestra. The palaestra

[269] According to Kalinowski (2021, 321), the shops along the south side of the Vedius Bath-Gymnasium were part of the original plan of the structure, unlike at Sardis. See Kalinowski (2002, 124-27) for more about the commercialization of this neighborhood.

had 14 columns along the north and south sides, and 18 columns along the east and west sides. The central part of the palaestra measured approximately 40 x 50 meters; with the porticoes, it measured approximately 48 x 60 meters. As was typical, it had an unpaved, earth or sand floor.[270]

The Marble Hall (Room MH) was located on the western side of the palaestra. It had a row of six double-engaged columns that separated it from the palaestra's covered ambulatory. The bath block was not accessible from the Marble Hall. To reach the bath block, visitors had to go through Rooms I or II, then progress north or south into Rooms IIIc or IIIa, which were part of the large, I-shaped basilica thermarum. Visitors could also access the bath block from the palaestra through doorways that opened directly from the ambulatory / western portico into Rooms IIIa and IIIc, or they could enter Rooms IIIa and IIIc from the rooms at the southwest and northwest corners of the palaestra. From the basilica thermarum, visitors had the option of progressing further into the bath block through the apodyteria (Rooms VI and VII), or they could go directly to the natatio / large cold pool (Room IV).

Within the bath block, there was a strategically designed progression from the unheated rooms in the east, to the heated rooms in the west. This arrangement helped regulate temperatures in the different rooms by preventing hot air from escaping too quickly from the caldaria (Rooms XVI, XVII and XVIII). The heated air had to travel through a sequence of rooms before reaching the frigidarium (Room V) and the natatio (Room IV), by which time it would have cooled, allowing the frigidarium, the natatio, and all the rooms located further to the east, to remain unheated. Identifications of all the rooms in the bath-block are included with the phase plans in appendix 2.

[270] Steskal et al. 2008, 12-14, 294.

A staircase that was located at the southeast corner of the bath-gymnasium complex led either to a second story above Room XX or to the roof for maintenance. The staircase, which was located on the exterior of the building, may also have led to a lower-level room associated with the corner shop. Whether the staircase was accessible from Room XX or from anywhere else on the main level was not able to be determined. This is the only area in the complex where a second story may have existed.[271]

There was also a staircase at the northeast corner of the palaestra that led down to the substructures of the building. Once it reached the landing outside of the cryptoporticus, there was another staircase that ran west, along the building's northern façade, to the area outside the building at a lower level. While the main level of the building was on street level on the building's south side, there was a steep drop on the north side of the building since the bath-gymnasium complex had been built on an artificial terrace. Mirror-symmetrical stairs may have existed at the northwest corner of the building, connecting to Room XV.[272]

3.3 Transformations of the Vedius Bath-Gymnasium

In the previous section, I have described the organization of rooms in the Vedius Bath-Gymnasium from the time of the building's construction. In the next sections, I will focus on changes that were made to the building throughout its long life. According to the chronology presented by Martin Steskal and Martino La Torre, the Vedius Bath-Gymnasium was used as a bath from the middle of the second century A.D. until the second half of the fifth century A.D. During the first two hundred years, only minimal changes were made. They are described below under the subheading 'Early and Potentially Early Changes.' In the first quarter of the fifth

[271] Steskal et al. 2008, 11-12.

[272] Steskal et al. 2008, 14-15, 49.

century A.D., a major renewal of the Vedius Bath-Gymnasium was launched. Enjoyment of the early fifth century A.D. renovations, however, was short-lived. By the second half of the fifth century A.D., the Vedius Bath-Gymnasium was no longer functioning as a bath, and its furnishings and decorations began to be systematically removed. A fire destroyed most of what was left of the building during the second half of the sixth century A.D. After the fire, some areas inside the former bath-gymnasium complex continued to be used into the eighth century A.D.[273]

3.3.1 Early and Potentially Early Changes (late second / early third century A.D.)

Most of the early and potentially early changes that have been detected in the Vedius Bath-Gymnasium are in the rooms located to the north and south of the palaestra. (Compare phase plans 1 and 2 in appendix 2). Originally, there were two equal rooms at the northwest and southwest corners of the palaestra. Each of them had three doorways leading into, and out of, the palaestra, and one doorway leading into, and out of, the basilica thermarum. When the southwestern room was converted into Latrine 2, probably during the late second or early third century A.D., the doorways between that room and the palaestra were walled up.[274] Benches with holes to serve as seats for the latrine were installed against the room's north wall and all the other walls inside the room, leaving only two breaks – one for the new doorway that was cut through the south wall, opening into the shop between Latrine 2 and the covered walkway of the street, and one for the pre-existing doorway leading into Room IIIa (figs. 3.18 and 3.19).[275]

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[273] This succinct overview of the building's history is adapted from Steskal 2008b, 558, although it amends the end of use date, which Steskal says here is in the middle of the seventh century A.D., to the eighth century A.D., after Steskal, 2008a 298-99; and Steskal et al. 2008, 95.

[274] The Vedius Bath-Gymnasium was not equipped with a latrine on the main level when it was first built. Latrine 1 was in the basement, and accessible from the north side of the building by a staircase.

[275] For the installation of Latrine 2, see: Steskal et al. 2008, 296-97; La Torre and Steskal 2012, 287-88.

In the northern counterpart to Latrine 2, the central doorway was walled up when the room was subdivided to create Rooms XXI and XXII. It is not clear whether the subdivision of the original, large room in the northwest corner of the palaestra was part of the major renovations that were made during the first quarter of the fifth century A.D., or if the room was subdivided earlier, possibly when the room at the southwest corner of the palaestra was converted into Latrine 2 during the late second or early third century A.D.[276]

The original function of the palaestra's northwest and southwest rooms are not known, but Steskal and La Torre suggest that due to the rooms' sizes, locations, and multiple doorways, they were designed to be accessed frequently, and probably by groups, rather than by only one or two individuals at a time. Steskal and La Torre suggest that the rooms may have functioned as lecture halls or libraries when the complex was first built, and that the clay pipes and drain that were installed in Room XXI at an undetermined date may indicate that the northern rooms were converted into *unctoria* (rooms with oil and perfume for massages), *destrictaria* (rooms for scraping off oil and sweat), or medical offices. This change would have been made while the building was still functioning as a bath, and possibly earlier than the major renovation of the building in the first quarter of the fifth century A.D.

Room XX, located to the east of the propylon, also originally had three doorways leading into, or out of, the palaestra.[277] Like Latrine 2, Room XX contained columns that may have supported either a wooden roof or a wooden second story. Whereas Latrine 2 was equipped with an impluvium in the center of the floor to catch rainwater and runoff from the western half of the propylon's gabled roof, as well as runoff from the inward sloping roof of Latrine 2, Room XX

[276] For Rooms XXI and XXII: Steskal et al. 2008, 297.

[277] Room XX: Steskal et al. 2008, 11-12.

did not have an impluvium, which indicates that it was not open to the elements and that it must have had either a full second story or a full roof above it. The columns were not original features of the room; they were probably installed when the two eastern doorways in the room's north wall were blocked, and a doorway in the room's south wall was added. All these changes were probably done during the late second or early third century A.D., when similar changes were made to the palaestra's southwest room to convert it into a latrine. The door in the south wall of Room XX opened into the back of one of the shops along the colonnaded street, which means that access to Room XX, at least, was probably not restricted only to people who were using the baths. At an undetermined date, a smaller room was created in the western side of Room XX. Steskal and La Torre suggest that Room XX may have functioned as a *destrictarium*, medical office, classroom, or storage room for sports equipment from the time the bath-gymnasium was built until the building stopped being used as a bath in the late fifth century A.D.

The northeast corner of the palaestra is poorly preserved and therefore it is difficult to tell what was original versus later transformations. The rooms are not clearly delineated because most of the walls have been robbed out, but the mosaic floors, which have survived, enable a partial, hypothetical reconstruction. In the area that was studied, there are two distinct mosaic fields.[278] Both mosaic fields feature a geometric pattern framed by a white border, but the one in the northern part of the room is much narrower, and 20 centimeters lower than the one in the southern part of the room. A wooden wall or half wall separated them. The room was supplied with water via terracotta pipes that were embedded in the floors, beneath the mosaics, at the time of the room's construction. At least one pipe was installed later, probably in the first quarter of the fifth century A.D., when other work was being carried out in the northeast corner of the

[278] Steskal et al. 2008, 14-15, 83-85.

palaestra. The pipe ran on top of the mosaic floor in the northern part of the room. Again, it is unclear exactly what this room or any of the other rooms in the northeast corner of the palaestra were used for. (Figs. 3.20 – 3.22).

3.3.2 Major renovation in the first quarter of the fifth century A.D.

Ephesus had been struck by multiple earthquakes during the third and fourth centuries A.D., and while repairs were probably made to keep the building in working order after the earthquakes, and as a matter of general maintenance, they are difficult to distinguish from repairs that were made during the major renovation of the building in the first quarter of the fifth century A.D. Earthquake damage may still have been an important catalyst for some of the renovations that were made at that time. Not all the renovations that were made had the aim of repairing or restoring all the Vedius Bath-Gymnasium's features to their original appearance and function. Other factors also affected the decisions that were made, either by the city or by private patrons. Unfortunately, the names of individuals or groups responsible for repairs are unknown. Other buildings at Ephesus were also being repaired in the first quarter of the fifth century A.D., so this is not an isolated or unique event. One of the major urban renewal projects during the late fourth or early fifth century A.D. at Ephesus may have been the construction of a new fortification wall that incorporated the north wall of the Vedius Bath-Gymnasium into its circuit while the building was still in use as a bath.

Possible incorporation into the Byzantine fortifications

At the northeast corner of the Vedius Bath-Gymnasium, a 2.70-meter-thick wall was detected.[279] (Fig. 3.23). It can be traced for 11.60 meters running east-west, from the channel of Latrine 1 / Room A, towards the Marnas River (due east). The core of the wall consists of quarry

[279] Steskal et al. 2008, 312; Steskal 2008a, 300.

stones held together by lime mortar, while its exterior consists of cut limestone and marble blocks. Steskal and La Torre identify the wall as either a massive terrace wall or part of the Byzantine fortification wall. If it was part of the Byzantine fortification wall, then its location suggests that the north façade of the Vedius Bath-Gymnasium may have been incorporated into the Byzantine fortification wall (fig. 3.13). The Bath-Gymnasium Complex at Sardis was used in a similar way when the Roman fortifications of that city were built, possibly in the late third or early fourth century A.D (fig. 2.2).[280] In both cases, the location of the bath-gymnasium complexes were in strategic locations to be incorporated into the city walls.

For many years, the Byzantine fortification wall at Ephesus was tentatively dated to the late sixth or early seventh century A.D., but in a new interpretation, Sabine Ladstätter suggests that it was probably built in the late fourth or early fifth century A.D.[281] Ladstätter argues that too much emphasis has been placed on the two inscriptions that have traditionally been used to date the Byzantine fortification wall (*IvE* 1195 and *IvE* 1196), especially since they were not physically part of the wall. Ladstätter also points out that the Byzantine fortification wall was not constructed from spolia, and it does not have the appearance of being hastily built, as it may have had if it was built in response to an immediate threat. The fifth century A.D. in western Asia Minor was relatively peaceful; there was more concern about military threats in the third century A.D. and in the late sixth and seventh centuries A.D.

[280] For the construction date of the Roman fortification wall at Sardis, see: Hanfmann and Waldbaum 1975, 35-52; Hanfmann and Mierse 1983, 143-44; Rautman 2017, 231.

[281] Late sixth or early seventh century A.D. construction date of the Byzantine fortification wall: Foss 1979, 106; Scherrer 2001, 80; Niewöhner 2010, 258; Pülz 2011, 68-70; Külzer 2013, 5, 8; Crow 2017, 94-97; Ladstatter 2017, 241. Late fourth or early fifth century A.D. construction date of the Byzantine fortification wall: Ladstätter 2019, 39-40.

The area enclosed by the Byzantine fortification wall is significantly smaller than the area enclosed by its Hellenistic predecessor. It enclosed the core settlement, from the Vedius Bath-Gymnasium in the north, to the theater in the south, and from the harbor in the west, to the near western slope of Panayır Dağ in the east. (Fig. 3.13). Although it was a protective barrier, it may have been equally or more important for its symbolic significance / as a status symbol for the city, or as a visual manifestation of the bishop's power.[282] In the late fourth or early fifth century A.D., the seat of government shifted from the state agora to the Church of Mary and the Bishop's Palace.[283] Even though some of the traditionally inhabited neighborhoods on the outskirts of Ephesus continued to be inhabited, with the construction of the Byzantine fortification wall, the physical landscape -- or its spatio-visual impression -- was made to resemble the ideological landscape more closely: the Bishop's Palace was made to be the literal epicenter of the city and urban life.

Installation of a New Water Supply and Drainage System

The main source of water for the Vedius Bath-Gymnasium was the Kaystros / Aristion Aqueduct, which had been built by a wealthy Ephesian, Claudius Aristion, during the reign of Trajan, between 102 and 113 A.D.[284] It carried water from the Kayapınar springs, which were located approximately 40 kilometers north of Ephesus, and from the Pranga springs, which were located approximately 10 kilometers north of Ephesus, to supply water, originally, to the stadium, the theater district, and some of the residential units along the western and southwestern

[282] Ladstätter 2019, 39. Saradi (2006, 47-146) and Dey (2015, 11-13, 21-25) demonstrate how city walls became prestige buildings and useful for self-representation. Late Antique literature and art proclaimed that the best cities had walls: the idea was so pervasive that even heaven is described as a walled city in *Revelation* 21:9-21.

[283] Ladstätter and Pülz 2007, 404-05; Ladstätter 2019, 28.

[284] La Torre and Steskal 2012, 285; Steskal et al. 2008, 283-84. For the Aristion Aqueduct, see: Ortloff and Crouch 2001, 853, 855-56; Scherrer 2001, 74; Wiplinger 2011, 595-98; Wiplinger 2019, 9-12.

slopes of the Panayır Dağ. A separate branch of the Kaystros / Aristion Aqueduct supplied water to the Harbor area. When the Vedius Bath-Gymnasium was built, it was connected to the pre-existing water network via an offshoot of the main line that ran under the seats in the stadium. A double-tiered pipe channeled some of the water north, so that it would pass under the colonnaded street to connect with the Vedius Bath-Gymnasium at the southwest corner of the building. From there, a further network of pipes supplied water to all areas of the bath-gymnasium complex that required it (fig. 3.10).[285]

Two sets of pipes that distributed water throughout the Vedius Bath-Gymnasium have been discovered. The original pipes are approximately 3 meters beneath the marble floors of the bath block, in the substructures of the building, whereas the second set of pipes are only 60 centimeters or less beneath the marble floors of the bath block. A secure date for the installation of the second set of pipes has not been confirmed, but the marble floors that were installed on top of them, which have been dated to the first quarter of the fifth century A.D. based mainly on the ceramic material that was found beneath the floors, provide a *terminus ante quem* for the installation of the second set of pipes. The installation of the new pipes and the reflooring events may very well have been part of the same phase of renovations.

In many areas, the second set of pipes overlaid the original pipes. Some of the original pipes may even have continued to function with the new pipes feeding into the original pipes. Of particular interest are the new pipes that connected to the main lines in the colonnaded walkway:

[285] Steskal et al. (2008, 283-84) explain that there was a distribution box at the southwest corner of the Vedius Bath-Gymnasium, and that there were six pipes leading out from it. Four pipes ran north along the western façade of the building in two tiers. The pipes were embedded in the wall, and they helped to regulate the temperatures of the caldaria and tepidaria by supplying water for steam. Two pipes ran east, in front of the shops, along the southern façade of the building. They were buried under the pavement of the colonnaded walkway, and offshoots from them routed water to key areas within the bath-gymnasium, for example, the main service areas (Rooms X and XII), the central fountain in the Frigidarium (Room V), the fountains in the basilica thermarum (Room III), the natatio and drinking fountains in Room IV, and the drinking fountains in the caldaria (Rooms XVI, XVII, XVIII).

they branched north into Rooms VIII, VI, IIIa, and probably also into Latrine 2, delivering water to the same rooms and even to some of the same equipment, such as tanks, fountains, and pools, to which the original pipes previously delivered water. (Fig. 3.24). Only some of the fountains in the basilica thermarum (Rooms IIIa-c) were not re-supplied with water; they will be discussed in more detail below under the subheading 'Basilica Thermarum.'

The fact that new pipes - some for supplying water and some for removing water - were installed, perhaps as part of the major renovation in the first quarter of the fifth century A.D., is important because it demonstrates that there was an interest in keeping at least the baths and some of the fountains in the Vedius Bath-Gymnasium functioning. It also demonstrates that the city had the funds and the technological ability to make repairs.

New Floors

The excavations have confirmed that new floors were installed in many areas of the Vedius Bath-Gymnasium in the first quarter of the fifth century A.D. The installation of the new water supply and drainage system was probably one of the motivating factors for the new floors since the installation of the new pipes necessitated the old floors having to be dug up in some places.

All three rooms of the basilica thermarum (Rooms IIIa, IIIb, and IIIc) were originally finished with a quasi-checkerboard patterned floor mosaic in black, white, yellow, and gray tesserae. During the first quarter of the fifth century A.D., grayish-white marble paving slabs were installed on top of the original mosaics in Room IIIb, and new polychrome mosaics were installed in Rooms IIIa and IIIc.[286] (Figs. 3.25 - 3.27). The paving slabs that were installed in

[286] Krinzinger (2003, 497) proposes a date of circa 300 A.D. for the installation of the marble paving slabs in Room IIIb based on coin finds. Krinzinger's report explains only that the marble floor could not have been laid in 284 A.D., which presumably means that coins that were issued in 284 A.D. or later were found in the mortar or fill beneath the paving slabs. All that this really indicates is that the floor must have been installed at some later date. 300 A.D.

Room IIIb were not made from newly quarried blocks of marble. Instead, they were cut from re-used blocks that had probably previously belonged to another Ephesian monument. Around the same time as the installation of the new floors in the basilica thermarum, the Marble Hall's original *opus sectile* floor was repaved with new *opus sectile* (figs 3.28 - 3.31), and the ambulatory of the palaestra was repaved with new polychrome mosaics (figs. 3.32 and 3.33).[287] The palaestra may also have been paved with marble slabs, like at Sardis, rendering it unsuitable for athletics.[288] All the new floors may have belonged to a unified renovation plan, but the different materials and techniques make it difficult to assess temporal relationships.

The established chronology for the new floors is mostly based on recovered ceramic material. In Room IIIb, the fill beneath the marble paving slabs contained fragments of LRC dishes of Form 3 / small variant, LRC plates of Form 1 / late variant and foot fragments of LR 3 amphorae. In the Marble Hall, a disc fragment of LRC plate / Hayes Form 2 was embedded in the mortar of the most recent *opus sectile* floor. The form, as well as the stamp decoration on this piece suggests a date either in the late fourth century A.D. or in the first quarter of the fifth century A.D. Other diagnostic fragments that were recovered from the same context are an edge

might be plausible, but it does not preclude an even later date, such as the first quarter of the fifth century A.D., which more recent studies, such as Steskal (2008a, 295-96) and Steskal and La Torre (2008, 320), have determined to be more reasonable, mostly due to ceramic finds.

[287] Steskal 2008a, 295; La Torre and Steskal 2012, 284.

[288] Steskal (2003a) has observed a decline in the athletic functions of the Ephesian palaestras beginning in the second half of the second century A.D. It is unclear when the palaestra of the Vedius Bath-Gymnasium was paved, it may have been before the major renovation in the first quarter of the fifth century A.D. Originally, the palaestra would have had an earth or sand surface to be suitable for athletic activities. Steskal et al. 2008, 13; Parrish 2010, 747; Yegul 2010b, 547.

fragment of an amphora (type LR 4) and a shoulder fragment of a lamp that also dates to the late fourth or first quarter of the fifth century A.D.[289]

The pipes that were exposed in Rooms VI, VIII, and IX (figs. 3.34 and 3.35) belong to the new system that was installed probably in the first quarter of the fifth century A.D., which means that the marble paving stones were not the original floors in these rooms.[290] If new pipes were installed beneath the unexcavated, mirror symmetrical rooms to the north (Rooms VII, XIV, and XIII), then those rooms were also probably equipped with new floors.

Blocked Doorways

From the time of the building's construction, people may have been able to access the Vedius Bath-Gymnasium through a doorway located further west on the colonnaded street than the main entrance. This secondary entrance led from the colonnade of the street, into a shop-like vestibule, and finally into the south apodyterium (Room VI). Whether this door was used by visitors or only by people who worked at the bath-gymnasium is unknown. It may also have been locked and not regularly used by anyone. The doorway was walled-up at an unknown date, although still while the building was in use as a bath since it was blocked by an unmovable ledge that was installed against the walls in Room VI, probably as part of the major renovation of the building in the first quarter of the fifth century A.D. (phase plan 3 in appendix 2). The ledge, which was 70 centimeters wide, 45 centimeters tall, and made of spolia, was installed on top of, and therefore after, the marble floor in Room VI. It contained cubby holes and was probably used for seating and storage while Room VI functioned as an apodyterium.[291] (Fig. 3.36).

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[289] Information about the ceramic material comes from Steskal 2008a, 296; Steskal 2008b, 557.

[290] Steskal et al. 2008, 35.

[291] For the ledge, see: Steskal et al. 2008, 33, 82.

The doorway between Latrine 2 and Room IIIa was also eventually blocked. It was an original feature of the building, and it had been left open when the room at the southwest corner of the palaestra was converted into a latrine, probably in the late second or early third century A.D. This is certain because unlike the long, uninterrupted bench that was installed against the north wall of Latrine 2, blocking the three doorways into the palaestra, a break was left in the benches in front of the doorway to Room IIIa.[292] That this doorway was left open when the room was converted into Latrine 2 demonstrates that there was not a problem with people and/or odors being able to pass between the two rooms at first, whereas later, there was a preference or a need for a more permanent separation.

Unfortunately, the temporal relationship between the blocking of the south doorway of Room VI and the blocking of the doorway between Latrine 2 and Room IIIa is unknown (both blocked doorways are included on phase plan 3 in appendix 2). After the doorway between Latrine 2 and Room IIIa was walled up, Latrine 2 could no longer be accessed from inside the bath-gymnasium complex. The only remaining doorway to Latrine 2 was the one that was accessible from the street. Blocking both doorways achieved a similar purpose, which was better control of access to the bath block. With both secondary entrances permanently blocked, everyone was forced to enter and exit the bath block through the palaestra.

The two easternmost doorways in the north wall of Room XX were also blocked, possibly at the same time the columns in that room were installed and the doorway in the room's south wall was added. Unlike the blocking of all three of the original doorways in the north wall of Latrine 2, this did not drastically alter any of the building's circulatory routes since Room XX was still accessible from the palaestra after this change was made. The same was true of the

[292] Steskal et al. 2008, 17.

blocking of the central doorway in the south wall of the palaestra's large northwest room. The central doorway was walled up when the room was subdivided to make Rooms XXI and XXII, but both new rooms continued to be accessible from the palaestra. Room XXI also continued to be accessible from Room IIIc, although the doorway between Room IIIc and the palaestra was walled-up at an undetermined date (the blocked doorway between Room IIIc and the palaestra is included on phase plan 3 in appendix 2, although the doorway could have been blocked before the first quarter of the fifth century A.D., or perhaps even later -- probably not too much later / sometime before the building stopped being used as a bath in the second half of the fifth century A.D.).[293]

The doorways between Rooms XV and XIII, and XIX and IX were also blocked. Exactly when they were blocked is unknown, probably as part of the major renovation in the first quarter of the fifth century A.D. or earlier. (Phase plan 3 in appendix 2). They were probably blocked more for heat retention than to deliberately alter how people moved through the building, although that was also a consequence. Rooms XV and XIX were tepidaria. They had hypocaust floors, but no *tubuli* in the walls to help keep the rooms warm.[294] (Fig. 3.37).

Renovations of the Sculptural Program

The sculptural program of the Vedius Bath-Gymnasium was also renovated during the first quarter of the fifth century A.D., and it is even possible to associate the deposition of some

[293] For the blocked doorway between Room IIIc and the palaestra, see: Steskal et al. 2008, 14.

[294] The reconstruction drawings published in Steskal et al. (2008, Taf. 178, and especially Taf. 195) suggest that the blocked doorways in these rooms were concealed by wall revetment or plaster and paint. The area directly in front of the blocked doorway in Room XV did not have hypocaust pillars beneath the floor because of the hallway and Room N on the lower level. Steskal et al. 2008, 42, Taf. 193, Taf. 194, 1, 2.

of the old sculptures with at least one of the new floor installations.[295] In the Marble Hall, the second layer of *opus sectile* was installed on top of a layer of aggregate fill that was used to fix the sinking foundation of the room. This means that the new floor of the Marble Hall was not merely a decorative decision, but rather a structural necessity. The fill included a magnificent discovery of over three hundred statue fragments, and many of them probably came from statues that were previously displayed in the Vedius Bath-Gymnasium. Unfortunately, it is not possible to determine whether the fragments were used as fill because the statues had been damaged, perhaps by one or more of the earthquakes, or whether the statues were no longer wanted due to new aesthetic tastes or concerns about content.[296] Most of the fill consisted of sculptural pieces: plinths, limbs, and facial fragments were among the most common finds, followed by statue supports, attributes, and relief fragments. Torsos and backs of heads were absent from the fill.[297] The reports do not specifically mention any architectural pieces, such as column capitals or cornice blocks, as being part of the fill, so it does seem like these sculpture fragments may have been deliberately buried.

A torso of Aphrodite was found embedded in the north wall of the palaestra, re-used as building material.[298] There is a strong possibility that it was once displayed inside the Vedius Bath-Gymnasium, although it could have come from some other building or monument. The presence of the torso suggests that the original wall had been damaged and needed to be rebuilt.

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[295] For the sculptural program of the Vedius Bath-Gymnasium: Keil 1929a, col. 38-58; Manderscheid 1981, 88-91; Krinzinger 2005, 443; Steskal 2008b, 558; Steskal et al. 2008, 296; Auinger and Rathmayr 2007, 245; Auinger 2011, 75; Stirling 2012, 71.

[296] Auinger and Rathmayr 2007, 248; Stirling 2012, 71.

[297] Auinger and Rathmayr (2007, 248) suggest that the torsos and backs of heads were probably re-used as building materials.

[298] Krinzinger 2005, 443; Auinger 2011, 72-73.

It was not typical for second century A.D. walls at Ephesus to be constructed with re-used statues. Regular use of spolia was a late phenomenon, usually fourth century A.D. or later in western Asia Minor.[299]

Not all the statues from the building's original decorative program, however, were destroyed, removed, or hidden in the fabric of walls in late antiquity. Early excavations yielded several mid to late second century A.D. statues that may still have been on display after the building was no longer used as a bath.[300] Among the statues that were kept on display are two reclining river gods that occupied the north and south ends of the *natatio* in Room IV (figs. 3.38 – 3.40), and fragments of at least nine free-standing, portrait, or ideal statues from the Marble Hall (fig. 3.41). Three of the nine full or near life-size statues that were kept on display in the Marble Hall are private portraits. One of them is a bearded male figure that has frequently been identified as the building's donor, P. Vedius Antoninus, and the others, one male and one female, both headless, probably represented other members of the donor's family. All the statues in this room seem to have been in place since the building was built. As far as it is possible to tell, no new statues were added. The private portraits were displayed alongside idealized portraits of young male athletes, including a runner, a discus thrower, and a hunter that has been identified as Androklos, the legendary founder of Ephesus. There were also statues of deities, including Hygieia and two other goddesses whose identifications are less secure.[301] The upper half of a statuette of the god Asklepios was also recovered from the Marble Hall.

[299] Kristensen and Stirling 2016, 14-17.

[300] Manderscheid 1981, 88-91; Aurenhammer 1990, cat. 23, 37, 66, 86, 87, 105, 135; Chi 2002, 91-98.

[301] Manderscheid (1981, 89-90) tentatively identifies them as Aspasia, a famous mortal woman, and Hestia.

The two story, Corinthian, columnar façade of the Marble Hall had niches for 21 statues, which means that only about half of the statues that were once displayed in the niches have been found. Also, the precise findspots for the statues from the Marble Hall were not recorded.[302] Despite so many unknowns, Hubertus Manderscheid created a hypothetical reconstruction of the statues' display locations (fig. 3.42). The reconstruction is balanced and hierarchical, however, it accounts only for the first story, and unless all the second story statues were removed -- possibly as part of the major renovation in the early fifth century A.D., or unless some of the second story niches were empty, as the hypothetical reconstruction of the Harbor Bath-Gymnasium suggests may have been a possibility, it is improbable that all the statues that were found in the Marble Hall were displayed on the first story.

Manderscheid arranged the statues in a logical, paired progression from real to ideal / mortal to divine / least important to most important beginning at the northeast and southeast corners of the room and moving towards the culminating view in the center of the west wall, where he placed a statue of the Roman Emperor Antoninus Pius. A statue of Antoninus Pius was not found in the Marble Hall or anywhere else inside the Vedius Bath-Gymnasium, but that does not rule out the possibility that one may have existed and has simply not survived.[303] Manderscheid's plan also indicates the altar that was found *in situ* in front of the central niche. The altar is a remarkable feature and will be discussed further below under the sub-heading "Marble Hall." (Figures 3.43 and 3.44 show reconstructions of niches in the Marble Hall of the

[302] Only the statue of Androklos has an approximate recorded findspot: Manderscheid (1981, 91) specifies that the statue of Androklos was found close to the northeast corner of the room.

[303] Other scholars also believe that a statue of the Roman Emperor Antoninus Pius probably occupied the central niche of the Marble Hall of the Vedius Bath-Gymnasium. See, for example, Keil 1929a, col. 36; Karweise and Thür in Scherrer 2000, 168-70.

Vedius Bath-Gymnasium. Compare with fig. 3.45, which is a reconstruction of the Marble Hall in the Harbor Bath-Gymnasium that gives a sense of what these rooms may have looked like in their heyday. Figures 3.46 and 3.47 show the remains of the Marble Hall in the Vedius Bath-Gymnasium in 1927 and 2006).

Asklepios and/or his daughter Hygeia were not unusual or unexpected figures to find represented at a bath.[304] Health was a major concern in ancient times, just as it is today, but hospitals did not exist. The ancient equivalent to modern hospitals were healing sanctuaries, and they were often located near natural hot springs or other sources of fresh flowing water so that visitors, many of whom were suffering from illnesses or other medical maladies, could benefit from the therapeutic and healing properties of clean water.[305]

Statues of powerful healing deities in baths may have been intentionally ambivalent at the time they were installed, and certainly after Christianity became the official religion of the Roman Empire.[306] Some individuals may have venerated the statues as sacred objects by praying to them or leaving offerings near them, while other individuals may have preferred to interpret them as allegorical figures or as visual reminders of the popular and medically espoused idea that baths were places where health and hygiene could be proactively managed.[307]

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[304] Fagan 1999, 88-89: "Of all the statues known to have once stood in the Thermae of Caracalla in Rome, the largest was a gilded colossus of Asclepius, of which only the head survives, and which was probably accompanied by an equally large statue of Hygieia, now entirely lost. Further, a general survey of fragments of sculptures from bathhouses in Italy, North Africa, and Asia Minor reveals that representations of these two health-associated deities are the third most common, after Bacchus and Venus. More recently, Asclepius and Hygieia have been promoted to first place in the sculptural rankings. Indeed, in many baths, the healing deities are found in multiple representations." Fagan cites Manderscheid 1981, esp. the table between pages 34 and 35.

[305] Man-made baths were also common at healing sanctuaries.

[306] This could be said of other pagan deities that were represented in baths as well. See Dunbabin 1989, 32.

[307] Dunbabin 1989, 32; Fagan 1999, 85.

For this dissertation, which focuses on how and why bath-gymnasium complexes changed or were used differently over time, the original or early outfitting of the Vedius Bath-Gymnasium with statues, and the original intent or reception of the statues, matters less than the late fourth or early fifth century A.D. decisions about whether to keep or discard statues. Decisions to add new or re-used statues would also be noteworthy, but most of the statues that were recovered from the Vedius Bath-Gymnasium have been attributed to the mid to late second or early third centuries A.D., meaning that they could belong to the building's original -- or at least pre-late-antique -- decorative program, but it is nearly impossible to prove because only the findspots are known, not the entire histories of the statues. For some of the statues, even the findspots are unknown. [308]

Art with pagan content was occasionally destroyed or removed from public buildings after Christianity became the official religion of the Roman Empire, but not always. People understood that they could participate in the new Christian religion while still being able to appreciate the beauty of statues with traditional, non-Christian themes. Whether the healing deities Asklepios and Hygeia were worshipped in the Marble Hall of the Vedius Bath-Gymnasium or not, their presence continued to be acceptable to late antique audiences. The statue of Hygeia was kept on display rather than being crushed and used to fix the sinking floor

[308] S. Dillon, 'The portraits of a civic benefactor of 2nd-c. Ephesos,' 271: "Whichever date one favors, it seems reasonable to assume that the sculpture which decorated the columnar façade of the marble hall – including Izmir 570 – was in place at the time of the dedication of the building, and is, therefore, Antonine. Indeed, the dedicatory inscription states explicitly that Vedius was responsible for building the gymnasium 'from the foundations together with all the decoration.' There is no specific archaeological evidence that suggests Izmir 570 or any of the other statues found with it were later additions to the sculptural program of the marble hall. According to Keil, all the statues found in this room are of the same imported marble and all are similar in technique. Each statue was carved from a single piece of marble, and each is of similar, very high quality. The columnar façade of the marble hall was designed to accommodate sculpture, and since all the sculpture found within the room appears to be technically consistent, there is every reason to assume that all the sculpture, including our portrait statue, was in place at the time of the dedication of the building."

of the Marble Hall or embedded in a wall, like the previously mentioned Aphrodite. The small statuette of Asklepios was also kept on display.[309]

If there had been only one statue of Aphrodite that was re-used as building material, then it would be easier to dismiss the removal as a coincidence: maybe it was destroyed by an earthquake. However, this scenario seems less likely because there were at least three Aphrodites associated with the Vedius Bath-Gymnasium that met similar fates, and not a single Aphrodite has been documented as having survived on display in the building in late antiquity.[310] It also seems doubtful that the Aphrodite statues would have been destroyed / hidden / re-used as building material simply because Aphrodite was a pagan deity, especially since other pagan deities were kept on display: Hygeia, Asklepios, and the two other female deities in the Marble Hall; the river gods in the *natatio*; and herms in the guise of Hercules and Hermes, the traditional patron deities of baths, in Room VI and in the propylon. A statue of Athena may also have been kept on display. What sets Aphrodite apart from the other deities that were kept on display is that she is both female *and* nude.

Statues of Aphrodite may have been removed from the Vedius Bath-Gymnasium because some late antique viewers objected to, or were uncomfortable with, female nudity.[311] Other

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[309] A large statue of Asklepios was not recovered from the Vedius Bath-Gymnasium, but that is not to say that one never existed. On the contrary, it would be more surprising if it had not. In Manderscheid's hypothetical reconstruction of the Marble Hall of the Vedius Bath-Gymnasium, he positioned the recovered statue of Hygeia in one of the projecting aediculae next to the central niche in the west wall and the recovered statuette of Asklepios in the corresponding aedicula on the other side of the niche. The statuette would not have filled the empty space, so it is doubtful that it would have been displayed there by itself in antiquity. Burrell (2006, 447) suggests that the statuette of Asklepios probably came from the higher level of aediculae, and that in Manderscheid's drawing, the statuette of Asklepios may have been a stand-in for a larger figure of the god to create a thematically balanced tableau.

[310] Auinger 2011, 76; Stirling 2012, 71.

[311] There is an extensive bibliography on Christian attitudes towards the body and nudity in Late Antiquity, but for female nudity, specifically, see: Auinger 2011, 76; Jacobs 2010, 288; Underwood 2019, 85.

females that were kept on display, regardless of whether they were goddesses or mortals, were not nude. They were dressed conservatively. Some of the other statues of divinities that were kept on display, such as Asklepios, Hygeia, Hercules, Hermes, and the river gods may have been kept because they were not as powerful as the Olympian gods, and therefore perceived as less threatening.

Fragments of the Athena statue were found in multiple locations. Her torso was found in the propylon, her head was found in Room VIII, and a small sphinx that attached to her helmet was found in the fill underneath the floor of the Marble Hall.[312] The sphinx, with its bare female breasts, was probably deliberately broken / removed so that the rest of the statue could remain on display (figs. 3.48 and 3.49).

Athena may have been kept on display because she was the patron goddess of wisdom and baths were places that fostered learning. Athena was also the patron goddess of arts and crafts, and it may have been this aspect of her identity that the city was thinking about when they first installed a statue of her in the Vedius Bath-Gymnasium, and it still may have been important when they decided to keep her on display in the fifth century A.D. As mentioned previously, the Koressos neighborhood where the Vedius Bath-Gymnasium was located was an important center for craft production and retail. Vedius was able to build there because the merchants and craftsmen of the city supported him.[313] Six *topos* inscriptions on columns from Latrine 2 confirm that merchants and craftsmen regularly used the Vedius Bath-Gymnasium. The *topos* inscriptions date to the late second or early third century A.D., and they mention bank dealers, hemp-

[312] Auinger and Rathmyer 2007, 245-46.

[313] Kalinowski 2002, 125-27; Harrison 2018, 17-22. For the political status of professional associations and collegia, see van Nijf 1997, 20-28, 243-47.

workers, wool dealers, linen weavers, basket makers, and 'those from Branchiane Street.'[314] Athena would not have been worshipped in the bath even in the second century A.D. She was probably only intended as a symbol of wisdom, and probably also (importantly!) as an acknowledgement of the merchants and craftsmen that frequented the baths, and probably held meetings and social events there.

Male nudity was apparently less problematic, probably because it could be interpreted as heroic or ideal. Several nude or mostly nude male statues remained on display in the Vedius Bath-Gymnasium. These included the runner, the discus thrower, the hunter (Androklos), and the river gods. Five herms were also recovered: two from the propylon, two from the apodyterium, and one from the caldarium. The genitals on all the herms had been mutilated; the pubic regions of the river gods, although disguised by drapery, have pick marks trying to hide or eradicate the hair; and the athletes, unfortunately, are so poorly preserved that the remaining fragments do not reveal the condition of the genitals.[315]

The building's original statues probably remained on display for as long as they were in reasonable condition and the people that used the building did not object to the content of the statues. The city may not have been financially able to replace the entire sculptural program, nor would the city have wanted to replace it, especially since antique statues often displayed superior craftsmanship to the statues that were produced in the fourth and later centuries A.D. Also, and

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[314] For the *topos* inscriptions from Latrine 2 of the Vedius Bath-Gymnasium, see: *IvE* 454 a-f; van Nijf 1997, 218-19; Kalinowski 2002, 125; Steskal et al. 2008, 17-18, 244. The exact meaning of 'those from Branchiane Street' is unknown, but it may refer to a professional association since practitioners of the same craft often worked near each other for logistical reasons, such as for labor sharing or so potential customers could easily compare prices or the quality of products. See, for example, Lavan 2012, 351-52. For professional associations and collegia using street names or other territorial markers to identify themselves, see van Nijf 1997, 10-11. Athena was particularly associated with textile workers due to the Arachne myth: Ov., *Met.* 6.1-69.

[315] Auinger and Rathmayr 2007, 248; Auinger 2011, 75; Stirling 2012, 71.

more importantly, statues acquired prestige and public rapport with age, so the removal of statues that had become beloved jewels of a city may have seemed like a cruel, or even a selfish / money-hungry move.[316]

Other renovations that indicate possible changes of room function while the building was still functioning as a bath: (changes organized by room rather than by type of change – still part of 3.3.2).

Basilica Thermarum

The basilica thermarum was by far the Vedius Bath Gymnasium's largest interior space. The vaulted ceilings, which have not survived, were held aloft by thick masonry piers located at regular intervals along the perimeter of each of the three halls, which were joined at right angles forming an I-shape from an aerial perspective. Large windows occupied the upper portions of the bays between the piers (see fig. 3.16). They reduced the weight of the superstructure and enabled natural light to illuminate the hall. Without the windows, the basilica thermarum would have had an entirely different visual affect. It would have seemed more like a dimly lit cavern than a spacious, welcoming interior. Braziers and lamps would have provided some light, as they must have done when the building was used at night, or perhaps during gray winter months, but open flames and smoke would hardly have been conducive for exercise, meetings, lectures, or reading – the main activities for which the basilica thermarum was probably used.[317]

From the time of the building's construction, the aesthetic appeal of the basilica thermarum was enhanced by pools of water in the bays between the piers. The pools seem to

[316] On the prestige associated with building statuary collections in late antiquity, see: Stirling 2005.

[317] On the function of basilicae thermarum, see: Nielsen 1993, 144. For the basilica thermarum of the Vedius Bath-Gymnasium, see: Steskal et al. 2008, 25-27, 291, 298-99.

have been part of the original design of the basilica thermarum because near the pools, the edges of the earliest floor (the quasi-checkerboard patterned mosaic) were not disturbed, as might be expected if the pools had been later additions. Also, there were two rows of tesserae on one of the pool's edges, which confirms that the pool was installed before the mosaic floor. Not all the bays were excavated, but there are estimated to have been 20 pools, each with a maximum capacity of approximately 8 cubic meters. The pools filled the floors of the bays, which were between 1.70 meters and 2.40 meters extending forward from the back wall, 4.92 meters and 5.20 meters between the piers, and not more than 1.3 meters deep. The only bays that did not contain pools were the ones with doorways. Although the maximum depth of the pools would be about chest-level for a Roman man of average height (1.67 meters), they may not have been row baths or hip baths. Due to the internal divisions of the pools, they have been interpreted by Steskal et al. as catch-basins for water fountains that enlivened the space as decorative features.[318] (Figs. 3.50 and 3.51).

By the first quarter of the fifth century A.D., some of the pools in the basilica thermarum were no longer supplied with water (compare phase plans 2 and 3 in appendix 2). The pools in the southwest and southeast bays of Room IIIb, for example, were completely built over with marble spolia and mortar, and benches that were also made of marble spolia and mortar were installed on top of them (fig. 3.52). Individual bays -- probably most of the bays in the basilica thermarum, but especially the ones along the east and west walls of Room IIIb -- were converted into semi-private seating areas, each with three inward facing benches. The central benches in each bay ran along the back walls between the piers, which were located approximately 5 meters apart, and the side benches extended forward into the room the same distance as the piers,

[318] Steskal et al. 2008, 26.

approximately 2 meters, creating discreet, booth-like areas.[319] The replacement of some of the pools and fountains with benches suggests that by the fifth century A.D., the basilica thermarum may have been used more frequently for activities that required seating, such as listening to lectures, participating in discussions, or reading, than for movement or exercise. It is doubtful that the pools were replaced with benches due to failing water infrastructure, at least not in the first quarter of the fifth century A.D., because new pipes were installed in other parts of the building around that time. The pipes that supplied the fountains in the basilica thermarum could easily have been replaced, as well.

Rooms V and XI

The central room of the frigidarium (Room V) was originally equipped with four alvei (pools), one on each side of the square, 11.20 x 11.20-meter room.[320] They were built into rectangular bays with tall, arched ceilings above them. The pools were approximately the same size as the ones in the caldaria, only slightly narrower. The fountain in the middle of the room may have been an original feature of the room, although the pipes that connected to it were part of the new water supply system that is tentatively dated to the first quarter of the fifth century A.D. The floor, which was made of marbled greenish stone was probably installed with the new water supply system.

The western pool of Room V was reoriented to Room XI, probably as part of the same renovation when the new water pipes were installed -- all tentatively dated to the first quarter of the fifth century A.D. (See phase plan 3 in appendix 2). The niche was reoriented so that the pool

[319] Steskal et al. 2008, 27, 299. Not all the bays were excavated, so it is not possible to confirm which bays, or how many of the bays, were converted into seating areas. At least two of the bays (the northwest and southwest bays in the western part of Room IIIa) were not converted into seating areas. The consoles and basins were still *in situ*.

[320] Room V: Steskal et al. 2008, 30-33.

could no longer be accessed directly from Room V. Whereas the pool originally had its parapet on the east side and a solid wall on its west side, it now had its parapet on the west side and a solid wall on the east side. Hypocaust pillars were installed beneath the floor and the pool. The arched ceiling above the pool was also lowered, probably to retain heat more effectively, since the walls of Room XI were not equipped with *tubuli*.[321]

Room XI had originally functioned as a heat lock and corridor, but with the reorientation of the pool, it was converted into a proper tepidarium. The effect was that two smaller rooms were created out of what had previously been one large room and a corridor. It shows the prioritization of smaller, more intimate spaces in baths in late antiquity, and heated over unheated spaces, since they were willing to give up a cold-water pool to gain a new heated pool. Steskal interpreted the basins in the basilica thermarum (Rooms IIIa-c) as catch pools for fountains, but if they had been pools for bathing – and they would have been cold pools, since this was in an unheated area of the building, then this would add to the body of evidence suggesting that cold water bathing was less popular in late antiquity because they replaced many of the pools / basins in the basilica thermarum with benches during the first quarter of the fifth century A.D.[322] Only the large pool (natatio) in Room IV, and the three smaller pools in Room V, were kept for cold bathing until the baths were closed in the late fifth century A.D.

Marble Hall

Another change that was made to the Vedius Bath-Gymnasium in the first quarter of the fifth century A.D. was the blocking of the colonnade between the Marble Hall and the palaestra

[321] Room XI: Steskal et al. 2008, 40-41.

[322] For Steskal's discussion of the pools in the basilica thermarum, see Steskal et al. 2008, 26.

(phase plan 3 in appendix 2).[323] Corresponding cuts in all the column bases indicate that marble panels were inserted between all the columns. The direction of the chisel marks indicate that the cuts were made in a downward direction: from the top of the column bases, down towards the stylobate, after the columns were already in place. The blocking occurred after the new floor was installed in the early fifth century A.D., but presumably, while the building was still being used as a bath. The heights of the panels are unknown. It is also unknown whether doorways were created in any of the panels since no indications were preserved in the stylobate.

Blocking the colonnade may have made the Marble Hall more private, especially if the panels were tall enough to prevent people from seeing in from the palaestra. If the panels were low, then they may have enhanced the Marble Hall's 'museum-like character,' as Steskal has described it, by allowing visual access from the palaestra, while restricting or not allowing physical access.[324] Alternatively, and particularly if there were doorways in any of the panels, the Marble Hall may have continued to be used for the same types of activities that it had previously been used for, such as ceremonies and meetings, although the types of ceremonies and meetings may have changed over time.[325] Steskal and La Torre point out that the location and décor of the Marble Hall of the Vedius Bath-Gymnasium are reminiscent of a Greek *andron* or a Roman *triclinium* in a Greek or Roman peristyle house and they suggest that it may have been used as a

[323] Steskal 2008a, 295; Steskal et al. 2008, 296.

[324] Steskal 2008a, 295. Steskal et al. (2008, 23) suggest that the installation of the panels may have transformed the Marble Hall into an inaccessible exhibition hall.

[325] If the Marble Hall had been used for worshiping the imperial cult, then it presumably stopped being used for that purpose after pagan cult practices were outlawed by Theodosius I in 391 A.D. (*Cod. Theod.* 16.10.11), or at least by 425 A.D., when Theodosius II cracked down on the already existing laws against paganism and emphasized that imperial statues should not be worshipped (*Cod. Theod.* 15.4.1).

banquet hall, an assembly hall, or a club hall.[326] The Marble Hall may have continued to be used for these types of functions even after the colonnade was blocked. The blocking of the colonnade may also have had some bearing on why the altar was left *in situ*. If the blocking of the colonnade transformed the Marble Hall into an inaccessible exhibition hall, then perhaps the altar was kept as a reminder of the room's former use, without continuing to be used as an altar. This may have been the case even if the room continued to be used.

Unlike the Marble Court in the Sardis Bath-Gymnasium, no *topos* inscriptions were found on the floor or anywhere else in the Marble Hall of the Vedius Bath-Gymnasium. If there ever were *topos* inscriptions, then they simply have not survived. The only legible graffito on the extant floor of the Marble Hall is a lightly etched figure of a donkey with a rider, which may or may not be a reference to the biblical story of Jesus entering Jerusalem (fig. 3.53). It is unknown when the graffito was etched into the marble paving stone, by whom, and what the carver's intent was.[327]

3.3.3 The last time the building was used as a bath and later re-use

The Vedius Bath-Gymnasium stopped being used as a bath in the second half of the fifth century A.D. [328] The strongest evidence for dating the last use of the building as a bath came from a layer of charcoal that was discovered in Room N of the basement. The charcoal indicated that the last heating of the baths was in the second half of the fifth century A.D. Shortly after the last heating of the baths, the sewers in the basement stopped being maintained and were re-used

[326] Steskal et al. 2008, 296; Steskal 2008a, 295.

[327] Steskal et al. 2008, 273-74.

[328] Steskal 2008b, 557; Steskal et al. 2008, 55, 320; La Torre and Steskal 2012, 284; Steskal and Ladstätter 2004, 244.

as dumps. Food waste, glass and ceramic vessels, lamps, and architectural debris were recorded as part of the refuse. Some of the other rooms in the basement also continued to be used, or were repurposed, after the building had stopped being used as a bath. (More about the basement rooms below).

Around the same time that the Vedius Bath-Gymnasium stopped being used as a bath, it began to be systematically stripped of its furnishings, decorations, and architectural elements. Some of the reclaimed building materials may have been hauled off and re-used, mostly intact, for other structures, while others may have been melted (metal, glass) or burnt for lime (marble). No kilns were found inside the Vedius Bath-Gymnasium, but they may have been located in one or more unexcavated areas of the building. Since the building was so heavily exploited for its materials, it would have been more economical to process reclaimed building materials on site rather than having to move the materials, possibly multiple times. Kilns for processing marble and metal are common in baths that were stripped for their building materials. The baths at Sardis and Sagalassos have both types of kilns in them, although they are of a later date.[329]

While it is impossible to say for certain where the reclaimed building materials from the Vedius Bath-Gymnasium were processed, or where they were re-used, the large quantity of sculpture and other architectural elements that were found in the propylon of the Vedius Bath-Gymnasium suggest that the propylon may have been re-used as a warehouse to store them

[329] According to Steskal et al. (2008, 25) the ash layers that were found in some of the rooms probably relate to the processing of marble in lime kilns on site, not from the burning of wooden roofs as Keil had suggested. There were probably many lime kilns and other types of equipment for processing building materials at Ephesus, especially in the fifth and sixth centuries A.D., when the city probably looked like one large construction site due to so many urban renewal projects. Terrace House 2 at Ephesus was converted into a marble workshop in the sixth century A.D., and a relatively well-preserved wooden contraption that was discovered there is among the best evidence from any archaeological site for how water-powered saws worked. For more information about the saw in Terrace House 2, see: Mangartz 2007, 235, 42.

before they could be transported to a secondary location (phase plan 4 in appendix 2).[330] The natatio in Room IV may also have been used to temporarily store materials that had been reclaimed from the Vedius Bath-Gymnasium, however, the low quality of the materials that were found inside the natatio (most of the fill consisted of broken bricks, wall panels, and floor slabs) may suggest that it had been deliberately in-filled, probably for safety reasons, rather than used for temporary storage (phase plan 4 in appendix 2).[331] This would demonstrate an even greater resourcefulness on behalf of the city: they were making use of even the lowest quality materials. Alongside this initial period of spoliation in the building, some of the rooms on the main level and in the basement may have provided temporary shelter.

In the second half of the sixth century A.D., the remains of the Vedius Bath-Gymnasium were damaged by fire.[332] Traces of the fire can be seen in most parts of the building and burnt-out walls and buttresses attest to its severity. Some of the roofs may have collapsed as an immediate result of the fire, while all the others were brought down by the earthquake at the end of the sixth century A.D. The roofs were not rebuilt.

Secondary structure in Room IIIb

After the fire and the ensuing collapse of the roofs, the building was a standing ruin, but parts of it continued to be used, or re-used, into at least the eighth century A.D. In the basilica

[330] Steskal et al. (2008, 311-12) suggest that some of the reclaimed building materials from the Vedius Bath-Gymnasium may have been re-used for the construction of St. John's Basilica on the nearby Ayasoluk Hill. A small chapel had existed on Ayasoluk Hill since the fourth century A.D., but in the sixth century A.D., only a few years after the Vedius Bath-Gymnasium stopped being used as a bath, Justinian ordered a huge basilica to be built on the site. For the propylon of the Vedius Bath-Gymnasium as a possible storage location for reclaimed building materials, see: Auinger 2011, 73.

[331] According to Ladstätter (2017, 241; 2018, 83), the natatio was deliberately in-filled when the building stopped being used as a bath.

[332] Steskal 2008a, 298; Steskal et al. 2008, 320.

thermarum, a secondary structure was built on top of the debris from the burnt-out hall during the seventh or eighth century A.D. (phase plan 4 in appendix 2; fig. 3.54). All that remains of the structure is a low, east-west oriented wall between two piers at the south end of Room IIIb. The finds that were associated with the floor of the secondary structure were mainly cooking pots, tableware, and a few Byzantine imported amphorae, which suggest that the secondary structure may have been a residence. The ceramic material also attests that the secondary structure was in use until the eighth century A.D.; it is the latest datable occupation evidence associated with the Vedius Bath-Gymnasium.[333]

The opening in the west wall of Room II that had been blocked while the building was still under construction to accommodate the fountain in the southeast bay of Room IIIb may have been unblocked and used as a doorway by the people who built or inhabited the secondary structure in Room IIIb. Not only had the fill that blocked the opening been removed, but the bench that had been installed in the southeast bay of Room IIIb during the early fifth century A.D. renovation had been broken, suggesting that the use of the opening as a doorway did not occur until after the bath-gymnasium had stopped being used as a bath. A crude window or robber's hole was also created to the north of the opening / doorway in the west wall of Room I (phase plan 4 in appendix 2; fig. 3.55).[334]

Secondary structure on the palaestra

In the palaestra, there was another secondary structure that was built above floor level (phase plan 4 in appendix 2; fig. 3.56).[335] Like the secondary structure in the basilica thermarum,

[333] Steskal 2008a, 298-99; Steskal et al. 2008, 95.

[334] Steskal et al. 2008, 24-25.

[335] Steskal et al. 2008, 91, 95, 312.

it was also made of re-used material: mostly quarried stones and brick fragments. It had a rectangular footprint that measured 26.54 meters from east to west and 7.08 meters from north to south. Despite being in the southern part of the palaestra, only a few meters north of the peristyle and centered in front of the propylon, its only entrance was on the north side, facing away from the propylon. To enter, or even see the doorway from the propylon, visitors may have had to walk around the structure, as the exterior walls of the Bath-Gymnasium Complex may have still been standing.[336] A coin minted under Justinus II that was found in the clay-like soil beneath the structure establishes a *terminus post quem* for its construction in the second half of the sixth century A.D. No divisions of interior space could be detected, and the walls were not preserved high enough to tell whether it may have had windows. There were also no finds that suggested what the structure may have been used for, and no indications about when it stopped being used or was destroyed. Steskal and La Torre suggest that the structure may have been a warehouse, but they do not suggest what the warehouse may have been used to store.

Warehouses are notoriously difficult to identify in the archaeological record because they usually contain few, if any, artifacts, and their architectural form and details can be ambiguous.[337] Since warehouses were built to store valuable commodities, their contents were usually moved before they were abandoned. If a warehouse had been abandoned with its contents inside, then the contents would have been retrieved in most circumstances. As one of the most important trading centers in the eastern Mediterranean, and as a provincial capital with

[336] The eastern wall of the Vedius Bath-Gymnasium has suffered greatly from stone robbing, but it is unclear how much of this damage was done soon after the baths stopped being used in the late fifth century A.D., and how much may have been done in the modern period. Today, the east wall is nearly flat, and it looks as though access to the palaestra may have been possible from the east. See fig. 3.15.

[337] See the section on 'warehouses' in the appendix by Lavan in Putzeys 2007, 75-76. According to Lavan, monumental storage facilities [warehouses or granaries] can be easier to identify than smaller ones because they often have diagnostic features, whereas smaller ones may not have diagnostic features.

a huge population of its own, Ephesus surely had several warehouses for the storage of grain and other food items, as well as for other commodities. The harbor area, especially, probably had several warehouses, although none have been securely identified.[338]

Warehouses were probably constructed in many places inside the city, not exclusively at the harbor. Steskal and La Torre's suggestion that the secondary structure on the palaestra of the Vedius Bath-Gymnasium may have been a warehouse is reasonable, and perhaps even too conservative. While it is impossible to say for certain that it was a warehouse specifically for storing grain, that is a strong possibility. Grain was the most important food in the ancient world, so protecting it was a serious matter. There would have been too much risk in storing the city's entire grain supply at the harbor, for example, where a single large fire, flood, or pest infestation could destroy all of it.[339] Also, not all deliveries of grain would have arrived at Ephesus by way of the harbor; some would have arrived from the countryside by carts. A warehouse inside the Vedius Bath-Gymnasium would have been a convenient, and safe, place to store it.

According to Geoffrey Rickman, grain warehouses (granaries or *horrea*) were often built near gates to facilitate the collection and distribution of grain and were 'always' long, narrow, rectangular buildings.[340] Rickman also emphasized that grain warehouses needed to be easy to

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[338] Compare, for example, the 'Ephesus' entry on the UNESCO website for the Silk Roads Programme https://en.unesco.org/silkroad/content/ephesus, which asserts that the harbor was "surrounded by warehouses," with Steskal 2014, 337: "We know only very little about the constructions in the area around the harbor. Presumably magazines and warehouses, stockyards and markets as well as ship houses and ship yards filled the space but these have not yet been discovered." No warehouses have been securely identified in the archaeological remains at the harbor or anywhere else at Ephesus, however, one warehouse is attested by an inscription. According to Miltner (1959, 279), the inscription does not indicate where the building was located, just that it was a grain warehouse dedicated by an individual named Diogenes, probably in the fourth century A.D.

[339] At Ostia, grain warehouses (*horrea*) have been identified, and they were not all clustered in one area of the city. See Rickman 1971, 15-16.

[340] Rickman 1971, 1-3. Rickman traces the changes in grain distribution from the beginning of the Republic to the late Empire. The Annona continued into the early seventh century A.D. in the eastern part of the Empire, and grain

access, have adequate space for loading and unloading, and be completely secure. This was probably true for other types of warehouses as well, but to a lesser extent since grain warehouses were at risk of being mobbed when harvests were poor. The secondary structure on the palaestra of the Vedius Bath-Gymnasium met all these requirements: it was on a main road for ease of access, near a gate, protected by the fortification wall, and in a discreet spot so loading and unloading would not obstruct traffic. No other secondary structures have been identified on the palaestra, which suggests that it may have been left intentionally unencumbered to serve this auxiliary purpose for the warehouse.[341] Security was also clearly a concern since the walls were built of stone, nearly a meter thick, with only a single doorway that was hidden from the street. The exterior walls of the Vedius Bath-Gymnasium also added a layer of protection for the warehouse since people still needed to go through the propylon to access the former palaestra. The gate of the propylon may have continued to be used. Grain warehouses often had raised wooden floors to facilitate airflow and help keep the grain cool.[342] This could explain the absence of floor pavements inside the structure, as wooden floors would not have survived.

Another reason that the identification of the structure as a grain warehouse is plausible (or probable) is because the Church had become responsible for grain distribution since the time of Constantine, and the northeastern sector of Ephesus was eventually taken over by the Church, probably in the late fifth or sixth century A.D., after the stadium stopped being used for traditional athletic competitions and gladiatorial fights, and after the Vedius Bath-Gymnasium

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continued to be stored in centralized locations. For bishops taking responsibility for grain distribution beginning in the sixth century A.D., see Doleac 2013, 100-03.

[341] The palaestra has not been fully excavated, but it has been surveyed.

[342] According to Rickman (1971, 1-2), storing grain below 60 degrees F was preferable to keep it from spoiling and to prevent vermin from breeding.

stopped being used as a bath.[343] At least two churches were built in the immediate area: one inside the west end of the stadium, re-using the monumental entrance underneath the north seating tier, and one approximately 150 meters to the east of the Vedius Bath-Gymnasium (figs. 3.57 – 3.59). The Stadium Church has been tentatively dated to the fifth century A.D., but the construction date of the church to the east of the Vedius Bath-Gymnasium is unknown.[344] Geophysical exploration using ground penetrating radar has confirmed that there was no physical connection between the Vedius Bath-Gymnasium and the church to the east of it.[345] However, given the proximity of the buildings, a grain warehouse inside the Vedius Bath-Gymnasium would have enabled the church to easily keep watch over the collection and distribution processes as well as the stored grain.

Another possibility may be that the secondary structure on the palaestra of the Vedius Bath-Gymnasium was not a grain warehouse controlled by the Church, but instead was a warehouse for storing supplies or merchandise to be used or sold in one of the shops lining the south façade of the Vedius Bath-Gymnasium, opening onto the portico on the north side of the

[343] For the redistribution of wealth and power under Constantine, including the Church's role in grain distribution, which was as much a privilege as it was a responsibility, see Lenski 2016, 167-206. According to Lenski (2016, 176), "The grant of such *beneficia,* including grain rations to cities, was of course nothing new for Roman emperors, but by channeling his largesse through the bishops and by targeting underserved communities that had long constituted a focal point for Christian euergetism, Constantine was turning the church into a crucial structure in the complex fabric of cities."

[344] The stadium probably stopped being used for traditional athletic contests and gladiatorial fights in the late fourth or early fifth century A.D., although the circular, arena-like construction that was built into its east end during the fifth century A.D. may have continued to be used for other types of performances, including wild-beast shows, probably into the sixth and possibly even the seventh century A.D. Roueché (2007b, 59-60) emphasizes that it can often be difficult to tell when entertainment structures, including the stadium and the circular structure inside the stadium at Ephesus, stopped being used. For the stadium, the circular structure inside the stadium, and the stadium church, see: Karwiese 1994, 21-24; 1995, 22-24; Karwiese in Scherrer 2000, 166; Rouché 2007; Ladstätter 2019, 25. For the church to the east of the Vedius Bath-Gymnasium, see: Pillinger 1996, 49 n. 125; Thür 2003, 265; Ladstätter and Pülz 2007, 409; Ladstätter 2019, 46, 49.

[345] Personal correspondence with M. Steskal, July 2021.

colonnaded street. In this hypothetical scenario, the 'warehouse' would have been owned by a wealthy merchant or artisan, or perhaps it was owned by an investor and operated by the person (slave? freedman?) that they left in charge of their storefront. The important point of this scenario is that the Church may have had nothing to do with the structure: although the Church was becoming a powerful entity at Ephesus and throughout the Roman Empire, many aspects of urban life continued the same as before. The shops were not excavated or significantly studied, so it is not possible to say whether they continued to be used as shops, were abandoned, or repurposed, possibly as modest dwellings, after the Vedius Bath-Gymnasium had stopped being used as a bath. The shops may have been damaged or destroyed by the fire that destroyed most of the bath-gymnasium complex in the second half of the sixth century A.D., and it is not possible to say if they were rebuilt. If they were not rebuilt, then they would not have been contemporary with the structure on the palaestra, and this second scenario would not have been possible. It would be convenient to say that the 'warehouse' may have been built or used by the shop owners on the opposite side of the street, but shops have not been identified on the south side of the street between the Vedius Bath-Gymnasium and the stadium. They may have existed, but that area has not yet been sufficiently explored.

Substructures

There is also evidence that some of the rooms in the basement continued to be used or were re-used for new purposes after the Vedius Bath-Gymnasium had stopped being used as a bath (both before and after the fire).[346] Most of the rooms in the basement originally functioned as service or storage rooms, although some, especially the ones along the northeast edge of the building, may have been used for other purposes by servants or perhaps even by visitors to the

[346] For information about the substructures of the Vedius Bath-Gymnasium, see Steskal et al. 2008, 50-55, 301.

baths (fig. 3.60). The rooms in the basement were accessible from the cryptoporticus. Servants *and* visitors used the cryptoporticus, since that is how Latrine 1 / Room A was accessed. Both the size and decoration of Latrine 1 / Room A suggest that it was not used only by servants: Latrine 1 / Room A was able to accommodate 54 people at once; also, it was equipped with a fashionable black and white floor mosaic with marine motifs.[347] While visitors may have used some of the rooms along the northeast edge of the building, they probably would not have had any reason to access the rooms in the northwest corner of the basement (Rooms H through N), since those rooms were related to the technical processes of the baths. Rooms I, J, and K were directly under the hypocaust floor of Room XV. Their main purpose was probably to ensure that the rooms above could be properly heated. Rooms H, M, and N had the main sewer running through them.

The windows in the north walls of Rooms E, F, and G were original features, and Steskal and La Torre suggest that the windows may indicate that Rooms E, F, and G were not used for service or storage, but rather like the rooms above them, perhaps as medical offices, lounges, or for private events. This would have applied to the early phases, while the baths were still in use. Room E contains the strongest evidence that it may not have been used exclusively for storage. A semi-circular niche was created in the center of the south wall of the room, and two semi-circular niches were created in the north wall of the room, flanking the doorway. Although the niches were not original features of Room E, they may have been created while the building was in use as a bath. There are also patches of preserved plaster and paint on the walls, and a small opening in the northeast corner of the room that served as a ventilation shaft for Room D, which did not have a window. The ventilation shaft was probably created after the building stopped

[347] Scheibelreiter 2005, 60-61, 71-74.

being used as a bath. People may have built fires to cook or stay warm, and the ventilation shaft was necessary to allow the smoke to escape. Steskal and La Torre suggest that Room E, with the niches, may have had a sacred purpose, although they emphasize there is not enough evidence to conclusively identify Room E as, for example, a chapel.

The rooms in the northeast corner of the basement would have been easier to re-use as residences, for example, than the rooms in the northwest corner of the basement since the rooms in the northeast corner each had their own exterior doorways, which enabled privacy when it was desired, as well as the infiltration of air and natural light. The rooms in the northwest corner of the basement did not all have external doorways. Rooms I, J, and K were accessed by a single doorway between Room J and the cryptoporticus, and Rooms M and N were also not immediately accessible from the cryptoporticus. Also, none of the rooms in the northwest corner of the basement had windows. The rooms in the northwest corner of the basement were probably not inhabited by people, but they may have been used as stables after the building stopped being used as a bath. The floor level of Room H, for example, has been significantly raised by manure. Latrine 1 / Room A may also have been re-purposed as a shelter or pen for sheep or goats. A date for these activities has not been confirmed – some of the rooms may have been used as shelters or pens for animals in late antiquity and perhaps into the 20th century.

Thick layers of water-proof *opus signinum* had been spread on top of the floors of the burnt-out rooms to the north of the palaestra to protect the rooms below from water penetration.[348] A roof consisting of re-used tiles had also been constructed on top of the floor of one of the burnt-out rooms to the north of the palaestra (phase plan 4 in appendix 2 and figs. 3.61 and 3.62). The tile roof was approximately 5 meters wide and shed rainwater through wide

[348] Steskal et al. 2008, 18-19, 52.

outlets that were created in the north façade of the building. The tile roof mostly protected Room E. These modifications indicate that the rooms in the basement on the northeast side of the building continued to be used, or were repurposed, even after the fire in the second half of the sixth century A.D.

After the building was no longer used as a bath, and probably after the fire, and after the rooms to the north of the palaestra were modified to protect the rooms beneath them from water penetration, some of the walls in the basement were crudely cut through to connect two or more of the rooms: for example, Latrine 1 / Room A was connected to Room B by a crudely cut passage, as were Rooms E and F. Rooms H and I were also connected by a crudely cut passage. There was also significant stone robbing in the basement, especially in Rooms F and G. Most of the lower part of the shared wall of Rooms F and G is missing. Stone robbing continued at the Vedius Bath-Gymnasium into modern times. As Steskal and La Torre have pointed out, some architectural blocks that were recorded in the early 20th century A.D. have gone missing, but this is not surprising since the Vedius Bath-Gymnasium is close to the modern highway.[349]

3.4 Conclusions

It is significant that the Vedius Bath-Gymnasium stopped being used as a bath in the second half of the fifth century A.D. The city had been experiencing a wave of prosperity since the early fifth century A.D. after more than 150 years of stagnation. It is also significant that the closure of the Vedius Bath-Gymnasium was not caused by a destructive event, such as an earthquake, invasion, or fire that damaged the building or its water supply. All of this is significant because it suggests that the Ephesians were not forced to stop using the Vedius Bath-Gymnasium as a bath due to circumstances beyond their control.

[349] Steskal and La Torre 2001, 225; Steskal et al. 2008, 257; La Torre and Steskal 2012, 284-85.

The water supply to the Vedius Bath-Gymnasium does not seem to have been damaged during the second half of the fifth century A.D., so that was not a reason for its closure. The building's main water supply, the Aristion Aqueduct, continued to function into the seventh century A.D. and perhaps beyond.[350] If the pipes that supplied the Vedius Bath-Gymnasium had been damaged in the second half of the fifth century A.D., and there was still a need or desire to use the building as a bath, then the city would have fixed them, as they had done less than a century before. There is ample evidence that the city had the funds and the technological ability to make repairs at that time, as it was involved in other large-scale building and restoration projects throughout the fifth and sixth centuries A.D.[351]

The decision to stop using the baths at the Vedius Bath-Gymnasium was not motivated by the institution of public bathing suddenly becoming unfashionable at Ephesus in the second half of the fifth century A.D. due to Christianity, for example, or for any other reason. As previously mentioned, most of the Ephesian baths have not been studied in enough detail to know when they stopped being used as baths. The Vedius Bath-Gymnasium is the only bath at Ephesus for which a secure date for its final use has been detected. However, there is still some available information that suggests that bathing was still important and widely practiced at Ephesus in the second half of the fifth century A.D. and beyond. The Baths of Varius / Scholastikia were renovated in the early sixth century A.D. Also, at least two new baths were

[350] Wiplinger (2011, 593, 595-98) describes repairs to the Aristion Aqueduct and says that it continued to supply water, especially to the harbor area, well into the 10th century A.D.

[351] Ladstätter and Pülz (2007, 398-405) list several examples of building or restoration projects at Ephesus during the fifth and sixth centuries A.D. Many of the water-related projects that they mention date to the early fifth century A.D., for example, the construction of a new well house and several new fountains, the conversion of the façade of the Library of Celsus into a fountain, and the restoration of imperial nymphaea. Prosperity continued in the later fifth and sixth centuries A.D., as attested by the new construction and repairs in the commercial agora and near the Bishop's Palace, as well as the renovation of the Baths of Varius paid for by Scholastikia and the new basilica on Ayasoluk Hill.

constructed: the Byzantine Palace Baths (probably constructed in the fifth or sixth century A.D.) and the small baths to the south of the baptistry in the Church of Mary (constructed in the second half of the sixth century A.D.).

The Theater and Harbor Bath-Gymnasium Complexes were both renovated in the fourth century A.D., and they were both in the part of town that continued to be densely inhabited later than most other areas; there is no reason to suspect that either of them had stopped being used as baths before the seventh century A.D. The palaestra and the xystos of the Harbor Bath-Gymnasium were built over with secondary structures in the fifth century A.D. (one of the secondary structures may have been a church), but the baths may have continued to be used until the building was destroyed by fire in the seventh century A.D. In the East Bath-Gymnasium, a church was constructed to the east of the palaestra in the fourth or fifth century A.D., but like the possible scenario at the Harbor Bath-Gymnasium, the baths may have continued to function alongside the church.[352]

Rather than wanting to obliterate baths and bathing culture, the Christians at Ephesus called for reform. They ultimately embraced the rich bathing traditions that they were already accustomed to, and helped further shape and imbue them with meaning.[353] Although there is little evidence of a church inside the Vedius Bath-Gymnasium: only the niches in Room E in the basement, which may suggest, but do not prove that the room was re-used as a chapel, the type

[352] The church at the East Bath-Gymnasium has been surveyed and is still visible, but not much is known about the church on the palaestra of the Harbor Bath-Gymnasium because it was removed during the early excavations. See Scherrer 1995, 17, n. 93. For more information about churches and other Christian monuments at Ephesus, see: Pillinger 1996; Thür 2003; Ladstätter 2019, 41-51.

[353] This is evident not only by the construction of new baths with Christian connections mentioned in the previous paragraph (the baths in the Church of Mary and in the Bishop's Palace), or the renovation of the Baths of Varius by a Christian woman, but also by the construction of churches inside at least two of the five large bath-gymnasium complexes: Harbor and East.

of 'spatial-fusion' that Jesper Blid Kullberg and others have written about is exceptionally well attested at Ephesus.[354]

There is no evidence for severe population decline at Ephesus due to plagues or wars in the mid to late fifth century A.D., but more people were beginning to move to the countryside around that time.[355] With fewer people as permanent residents, it may not have been necessary to keep all the baths open. The Vedius Bath-Gymnasium may have been the obvious bath to close because it was already in a remote sector of the city, and after the closure of the stadium, which is tentatively dated to the late fourth or early fifth century A.D., it probably seemed even more remote.[356] The Vedius Bath-Gymnasium may have already been less of a priority than the other baths earlier than the second half of the fifth century A.D. because when the city started large-scale restoration projects after the earthquake of 262 A.D., they renovated the Harbor and Theater Bath-Gymnasium Complexes first -- both in the fourth century A.D. They renovated the Vedius Bath-Gymnasium as well, but not until the early fifth century A.D.

In the second century A.D., the city had constructed monumental baths as indicators of status at all the main entrances to the city, but in late antiquity, churches -- or a fusion of baths and churches -- had become the most important monuments that Ephesus made sure to have at all

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[354] Blid Kullberg 2016.

[355] The shift to the countryside (or redistribution of people and wealth) has been observed in many places in western Asia Minor. It is often referred to as 'ruralisation' in late antique scholarship. P. Niewöhner has written extensively about 'ruralisation,' see, for example, Niewöhner 2017c, 46-48; 2017a 113-15. Several case studies in the edited volume by Niewöhner (2017) also address it. See also: Whittow 2001, 151-52; Chavarría and Lewitt 2004; Külzer 2013, 1, 5; Ladstätter 2019, 27; cf. Brandes and Haldon (2000, 148), who place 'ruralisation' in the seventh century A.D.

[356] The construction of the circular, arena-like structure in the east end of the stadium in the fifth century A.D. suggests a transformation, not a complete closure. This was not a completely abandoned area of town, although the crowds were probably significantly reduced in size. The harbor and the commercial agora were the centers of daily life at Ephesus in late antiquity. The commercial agora was located immediately outside the Byzantine fortification wall on the south side of the city – at the opposite end of the city from the Vedius Bath-Gymnasium.

the main entrances. Hilke Thür suggests that having churches at the main entrances may have been especially important for processions.[357] The church to the east of the Vedius Bath-Gymnasium would have been the first monumental building encountered by visitors entering the city through the northeastern gate (the Koressian Gate), along the colonnaded street between the Vedius Bath-Gymnasium and the stadium. The street had served as a processional route long before the construction of the Vedius Bath-Gymnasium because it was one of the main thoroughfares connecting the harbor and the Temple of Artemis. It continued to be important in late antiquity because it connected the harbor and the main part of the city with Saint John's Basilica on Ayasoluk Hill. Religious pilgrims probably used this road or the road that led through the north gate. The stadium church was the first church that visitors to the main part of Ephesus encountered when they arrived through the north gate, passing by the west façade of the Vedius Bath-Gymnasium.

[357] Thür 2003, 273; For the importance of processions in late antiquity, see: Lavan 2003, 327-31; 2007, 131-37; 2021, 150-234; Groh et al. 2006, 107. For street experience and the creation of meaning through movement, see: Yegül 1994; Roueché 1999.

Chapter 4: Sagalassos

Sagalassos was a much smaller and less influential city than Sardis or Ephesus, and this is reflected in the much smaller size of its Bath-Gymnasium Complex. Like the other two buildings that I have focused on in this study, the Sagalassos Bath-Gymnasium Complex was extensively renovated during the late fourth or early fifth century A.D. One of the most important changes that was made at that time was the conversion of the large frigidarium on the eastern side of the building into a banquet hall by filling in the large pool and installing colossal imperial statues that dominated the space in a truly magnificent, almost terrifying way. Around the same time, a new bathing circuit was installed at the center of the complex, taking over the Marble Hall and the basilica thermarum. The building stopped being used as a bath in the late sixth or early seventh century A.D. and was subsequently used for industrial purposes such as lime burning and smelting. Of the three case studies, this one perhaps tells the most compelling story of resilience, resourcefulness, and creativity.

4.1 History and Landscape

Sagalassos is located in southwest Turkey, approximately 110 kilometers north of the famous port town of Antalya (figs. 1.1 and 4.1). It is situated between 1,450 and 1,750 meters above sea level, on the southern slope of the Ağlasun Mountain in the western Taurus range, near the modern town of Ağlasun in Burdur province. The people of Burdur province have given Sagalassos the nickname "City in the Clouds" due to its extreme altitude.[358] Sagalassos was founded as a military outpost, but it grew to be one of the most important cities in Pisidia during Hellenistic and Roman imperial times, although it was always smaller and much less politically significant than Sardis or Ephesus. Sagalassos never achieved a reputation for wealth or greatness to the extent of those two great cities, or even to cities that were closer, such as Antioch, Attaleia, or Laodicea, for example, but those cities have all suffered from extensive stone-robbing and/or are buried beneath modern towns. Sagalassos' exceptional state of

[358] Waelkens 2011b, 63.

preservation, coupled with how well it has been excavated and published, has led to a common, modern misconception about the city's status in antiquity.[359]

4.1.1 The Roman Imperial Period at Sagalassos

Sagalassos had been increasing in regional importance for a long time, but it especially flourished during the Roman imperial period due to enhanced political and military stability. Augustus established colonies of retired Roman legionaries in Pisidia. The veterans were vital in transmitting Roman culture and contributing to the workforce. They helped improve the road system by formalizing and protecting the Via Sebaste, which linked Antioch, the capital of Pisidia, with Pamphylia, the province to which most of the southern ports belonged. Sagalassos was responsible for a 42 mile stretch of the Via Sebaste, and so the city was well-positioned to safeguard its economic interests by encouraging traffic and commerce.[360]

Climate change led to increased fortunes for Sagalassos and many other cities.[361] Beginning in the first century A.D. and lasting until about 500 A.D., temperatures were warmer than they previously had been, which was good for agriculture.[362] Bio-archaeological studies conducted in the territory of Sagalassos have demonstrated, for example, that grain cultivation

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[359] Jacobs 2007, 459.

[360] Waelkens et al. 2010, 232; Waelkens 2019b, 9-15.

[361] Waelkens 2011b, 68; Haldon et al. 2014, 121; Harper 2017.

[362] Harper (2017, 15), working at the scale of the entire Roman Empire, gives specific chronological parameters for the Roman Climatic Optimum: “from circa 200 BC to AD 150,” whereas Waelkens (2019b, 7), working at a regional scale, gives slightly later and more open-ended dates for the climatic optimum of Sagalassos / SW Turkey “starting with Augustus’ reign and lasting several centuries.” Waelkens (2011b, 68) gives more specific chronological parameters for the climatic optimum of Sagalassos: “beginning in the Augustan period and lasting until around 300 A.D.,” but in the same article, he points out that the economy, which relied heavily on agriculture, only reached its peak between 300 and 450 A.D. See also Bakker 2019; Haldon et al. (2014, especially 120-27); Haldon et al. 2018, parts I, II, and III.

expanded, and olives were able to be grown at a higher altitude.[363] In pre-industrial societies, economic success relied heavily on agricultural success, so warmer temperatures were also good for the economy.[364] Ultimately, the combination of multiple favorable factors, including military and political stability, a flourishing economy, and a surplus of food, led to population growth and increased building activity.[365]

Under the Julio-Claudian Dynasty, the city's two public squares that had existed since Hellenistic times were embellished, and the road leading up to the Lower Agora from the south was lined with columns, creating one of the earliest colonnaded streets in the region. Also under the Julio-Claudians, the Temple of Apollo Klarios was built to the west of the Lower Agora, and a public bath building -- the Old Baths -- was built to the east of the Lower Agora.

In 2007, this bath building was discovered to be the earliest known bath building of Roman (Campanian) design in Asia Minor.[366] The building known as the Capito Baths at Miletos, constructed circa 50 A.D., was previously believed to be the oldest Roman style bath in Asia Minor, but detailed studies of the Old Baths at Sagalassos have determined that it was already in use between 10 and 30 A.D. and that it therefore pre-dates the Capito Baths by at least two decades. The design may have been transported by veterans that Augustus had settled in the area, some of whom were from Campania and would have been familiar with baths from their

[363] Vanhaverbeke et al. 2004, 254, 258; Waelkens 2011b, 68; Waelkens 2019b, 7.

[364] For the importance of agriculture in the Roman economy, see Carrié 2012, 20; Dark 2001, 19-20; Erdkamp 2001; De Blois and Rich, eds. 2002; Kingsley and Decker, eds. 2001.

[365] For an overview of building activity at Sagalassos during the high Roman Imperial period, see Waelkens 1993, 45-47; Waelkens 2002, 321-58; Waelkens 2009, 65-378; Waelkens 2015, 191-198; Waelkens 2019a, 34-36; Waelkens 2019b, 7-16; Waelkens, Poblome, and De Rynck 2011. For a comparative approach to monumentalization at Sagalassos vs. other cities, see Willet and Poblome 2019, 77-80.

[366] Waelkens et al. 2010, 230-35; Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011, 60-61; Waelkens 2011a, 4; Waelkens, Poblome, Claeys, Lefere, and Uzunoğlu 2011, 267-69; Waelkens 2016, 328.

homeland that offered hot, warm, and cold facilities. Another possibility is that an architect from Italy who worked in Pisidian Antioch may have supervised the project.[367]

There was a second wave of major public building projects at Sagalassos in the early to mid-second century A.D., especially after Hadrian promoted the city to be a *neokoros* / temple warden of the imperial cult for all Pisidia.[368] The impressive Bath-Gymnasium Complex that replaced the Old Baths was part of it. The Old Baths was partially torn down and filled in to create the foundation for the Bath-Gymnasium Complex. Only one of the buildings existed at a time (figs. 4.2 and 4.3).

The Temple for the Imperial Cult, which is sometimes called the Temple for Antoninus Pius, was the most important building project at Sagalassos during the second century A.D. It was built on a natural promontory to the south of the city, where it could be seen from all directions. After the city was promoted to a neokorate, every year, delegations from all the Pisidian cities came to Sagalassos to honor the imperial family with sacrifices, festivals, and processions. The Temple for the Imperial Cult was the center of these activities until the end of the fourth century A.D., when they were prohibited by Theodosius I. Soon after the Temple for the Imperial Cult was closed, parts of it were hauled off and re-used elsewhere in the city.[369]

During the reorganization of the provinces under Diocletian (circa 295 A.D.), Pisidia became an independent province and Antioch was made its capital instead of Sagalassos.[370] In spite of this, Sagalassos continued to promote itself as the "first city of Pisidia," and it continued

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[367] Waelkens et al. 2010, 232, 234.

[368] Waelkens 1993, 45; Waelkens 2011b, 69; Waelkens 2015, 190-92; Waelkens 2019b, 14.

[369] Talloen and Waelkens 2005, 247; Waelkens 2019b, 17.

[370] Waelkens 1993, 47; Waelkens 2011b, 70; Waelkens 2015, 190; Waelkens 2019b, 16; Burrell 2004, 267. For more information about changing provincial boundaries, see Waelkens 2002, 325-26.

to flourish. It reached the height of its prosperity during the fourth and first half of the fifth century A.D.[371] Sagalassos was again bustling with new building projects and renovations during this period. The Bath-Gymnasium Complex was almost entirely rebuilt; an urban mansion with more than 70 rooms, including elaborate reception halls and private bathing facilities, was constructed in the eastern part of the city, not far from the Bath-Gymnasium Complex; and in the early fifth century A.D., the Temple of Apollo Klarios and the city's bouleuterion, both of which had fallen into disuse, were converted into Christian basilicas. The city's Hellenistic fortification walls were also repaired at this time (around 400 A.D.).

In the fifth and especially the sixth century A.D., there was military unrest in the region, and trade networks had begun to fall apart. Despite these precarious circumstances, Sagalassos managed to thrive and even to be moderately prosperous for a while. This is most readily apparent from the recovery program that was launched after a severe earthquake struck the city during the early sixth century A.D.[372] The city repaired and redecorated several public buildings, streets, and squares, frequently re-using materials that were already on hand. As Ine Jacobs and others have pointed out, monumentality and aesthetic appeal were still high priorities.[373]

Throughout the sixth century A.D., Sagalassos faced other challenges as well, such as increased military threats, colder temperatures, droughts, food shortages, economic restructuring, recurring epidemics, and population decline. Due to the collective impact of these hardships, the

[371] This claim, asserted by Waelkens (2011b, 68-70), is based in part on the study of animal bones. Before 300 A.D., there were more pack and draft animal bones than cattle, but there were more cattle bones for the period from 300 A.D. to 450 A.D. This timeframe also corresponds to the period of maximum settlement density in Sagalassos' chora. See also Turkish Ministry of Culture and Tourism; Jacobs and Waelkens 2013, 236-37; Mitchell and Vandeput 2013, 108; Waelkens 2019b, 17.

[372] For the earthquake, see Sintubin et al. 2003, 364-74; Similox-Tohon et al. 2006, 379.

[373] Jacobs 2011; Jacobs 2015, 166-68; Jacobs and Waelkens 2017, 175-76.

city was less resilient after another earthquake in the early seventh century A.D.[374] Large areas of the city were abandoned, and occupation gradually shifted to the promontory that had once been the center of the imperial cult.[375] By the middle of the seventh century A.D., the promontory was fortified separately, and the city was reduced to a defensive and administrative military outpost that was active until the 13th century A.D.[376]

4.1.2 The Water Supply of Sagalassos during the Roman Imperial Period

At least five aqueducts supplied water to Sagalassos during the Roman Imperial period.[377] As the city's main consumer of water, the Bath-Gymnasium Complex would have been connected to at least one of them, although the exact point of connection has not yet been discovered. Experts on the city's water management systems hypothesize that the point of connection was probably on the northeastern side of the building that has not yet been excavated.[378]

Three aqueducts approached the city from the west -- the upper, middle, and lower west aqueducts, and two aqueducts approached the city from the east -- the upper and lower east

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[374] Waelkens 2019b, 20-26, especially 22-23; Mitchell and Vandeput 2013, 108. Jacobs (2011, 80) demonstrates that the early sixth century A.D. was a period of relative prosperity at Sagalassos, as the city's aesthetic appearance continued to be a high priority. Existing buildings and monuments were maintained and there were also many new building projects. However, there was a 'sudden turn of fate' in the second half of the sixth century A.D., when "Sagalassos was drastically weakened within a short period of time." Jacobs 2015 describes the evidence for decline and abandonment of the city center around the middle of the sixth century A.D. but ultimately makes a strong argument for vitality and continuity into the 13th century A.D. Poblome et al. (2017) also emphasize continuity over an abrupt break. See also Waelkens 1993, 48-49; Waelkens, Poblome, and De Rynck 2011, 156-57.

[375] Waelkens, Poblome and DeRynck 2011, 157; Jacobs and Waelkens 2013, 221; Waelkens 2019b, 25.

[376] Jacobs 2015, 177-91; Poblome, Talloen, and Kaptijn 2017, 305; Waelkens 2019b, 25.

[377] For information pertaining to the water supply of Sagalassos, see Martens 2008; Martens 2009, 432; Owens 1995; Steegen et al. 2000; Waelkens 2016.

[378] Martens et al. 2012, 161.

aqueducts.[379] All of the aqueducts traversed the mountainside across long distances, and due to time, erosion, landslides, and earthquakes, none of them have survived intact. In several places, they cannot even be traced. The upper east aqueduct was probably able to supply enough water for the Old Baths, but the Bath-Gymnasium Complex was five times larger, and it may have necessitated the construction of the lower east aqueduct.[380]

4.2 The Bath-Gymnasium Complex at Sagalassos

Until recently, the Bath-Gymnasium Complex was the only large public bath known at Sagalassos, but another one has been discovered in the north wing of the gymnasium along the east side of the Upper Agora.[381] Baths were expensive to build and operate, and the population of Sagalassos was small enough that it may not have needed more than one or two large public bathing facilities. The population of Sagalassos, including its *chora*, probably did not exceed 10,000 inhabitants at any point during the Roman Imperial Period, whereas Sardis and Ephesus are both estimated to have had over 50,000 inhabitants.[382]

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[379] It used to be thought that Sagalassos had six aqueducts, but further investigations revealed that the middle east aqueduct was part of the upper east aqueduct. See Waelkens 2016, 327.

[380] Martens et al. 2012, 161; Waelkens 2016, 330-31.

[381] Personal correspondence with J. Poblome, March 2022. The new bath was discovered in 2021.

[382] Waelkens (2015, 193) emphasizes that Ephesus had a population that was forty times the size of the population of Sagalassos, and he says that the population of Sagalassos is "estimated to have fluctuated between no more than 3,500 and 5,000." This was during the early Roman Imperial period, when the Old Baths were still in use. The Bath-Gymnasium Complex was built on a much larger scale: approximately five times larger than the Old Baths. Around the same time that the Old Baths were replaced by the Bath-Gymnasium Complex, the theater was also enlarged to have a seating capacity of 9,000. Both of these projects demonstrate that Sagalassos was preparing to accommodate approximately double its local population for imperial cult festivals and/or anticipating new permanent growth. The population of Sagalassos may have expanded some, especially after the city was promoted to a neokorate, but 10,000 is probably an over-generous estimate. Until recently, 200,000 has been an accepted population estimate for Ephesus during the Roman Imperial period, but new research suggests that this figure is probably too high. Hanson (2011, 250-259) argues that a more realistic population estimate for Ephesus would be between 33,600 and 56,000. For Sardis, Rautman (2011, 11) estimates a population between 50,000 and 100,000. For a discussion of some of the difficulties in calculating population estimates, see Hanson and Ortman 2017.

Archaeologists have been aware of the Bath-Gymnasium Complex at Sagalassos at least since the research and mapping expedition led by Count Karol Lanckoronski in the late 19th century.[383] Modern excavations of the building and related interdisciplinary studies, however, only began in the late 20th century. They were conducted under the supervision of Professor Marc Waelkens between 1994 and 2013, and under Professor Jeroen Poblome since 2014. In addition to being one of the most recently excavated bath-gymnasium complexes in Asia Minor, the Sagalassos complex is also one of the most extensively investigated and thoroughly documented buildings of its type. A monograph on the building does not exist yet, but detailed information has been published in other formats, especially in the Sagalassos annual publications and in the reports in *Kazı Sonuçları Toplantısı*.[384]

The Bath-Gymnasium Complex was the largest building at Sagalassos, and it dominates aerial views of the site (figs. 4.4 and 4.5).[385] In 2013, geophysical investigations, surface study, and aerial photography identified a palaestra to the north of the exposed part of the building, and a second courtyard to the north of the palaestra (fig. 4.6).[386] With these additional areas and the rooms in the vaulted substructures, the total estimated size of the building is just over 7,000 m^2,

[383] Lanckoronski, 1892, 127-60; Waelkens 2006, 325; Martens et al. 2012, 159.

[384] **Sagalassos annual publications** with information pertaining to the Bath-Gymnasium Complex: Waelkens 2009, 338-77; Waelkens et al. 2010; Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011; Rens et al. 2012. **Reports in *Kazı Sonuçları Toplantısı*:** Waelkens and Vermeersch 1997, 132-33; Loots et al. 1998, 272-77; Waelkens et al. 1999, 289-92; Putzeys et al. 2001, 170-73; Putzeys 2002, 16-18; Corremans et al. 2004, 219-20; Claeys et al. 2005, 424-25; Claeys et al. 2006, 274-75; Corremans et al. 2007, 319-22; Poblome 2009, 435-38; Waelkens, Poblome, Claeys, Lefere, and Uzunoğlu 2011, 267-69; Rens and Waelkens 2013, 143-44; Rens and Waelkens 2014, 246-48; Van Beeuman and Waelkens 2015, 43-45; Van Beeuman and Yakar 2016, 88-90; Torun et al. 2018, 218-20; Torun 2017, 494-95; Üner and Torun 2020, 631-32. See also the Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: Waelkens et al. Sagalassos Field Notes 2003-2010.

[385] Waelkens et al. 1997, 199.

[386] Waelkens 2015, 193; Martens et al. 2012, 159; Van Beeumen and Waelkens 2015, 44.

which is a little more than half the size of Vedius Bath-Gymnasium at Ephesus, not including the substructures of the Vedius Bath-Gymnasium.[387] The total excavated area of the Sagalassos Bath-Gymnasium Complex is approximately 5000m^2.[388] Since 2015, efforts at the Sagalassos Bath-Gymnasium Complex have focused on documentation and conservation, and there are no immediate plans to resume excavating the building.[389]

The Bath-Gymnasium Complex at Sagalassos did not conform to a standard plan. Its footprint was not a large, symmetrical rectangle like the Bath-Gymnasium Complex at Sardis and the Vedius Bath-Gymnasium Complex at Ephesus. Instead, the architects used the mountain-slope and created a graceful façade that zig-zagged along the mountain's natural contours (fig. 4.7). In some places, they artificially terraced the slope to support the sprawling structure. They also built interconnected rooms with concrete vaults and brick facing for additional support.[390]

On top of the basement, which incorporated parts of the Old Baths, was an intermediate level where steam was generated to heat the baths on the uppermost (or third) level.[391] The outer walls of some parts of the building were nearly four meters thick with limestone ashlars facing the exterior, and mortared rubble and brick covered in marble veneer facing the interior. The building was lavishly decorated, not only with marble veneer, some of which may have been

[387] This figure includes 6,000 m^2 on the upper level of the Sagalassos Bath-Gymnasium Complex, and 1300 m^2 in the vaulted substructures.

[388] Van Beeuman and Yakar 2016, 88-90; Torun et al. 2018, 218-20.

[389] Torun 2017, 494-95; Üner and Torun 2020, 631-32.

[390] Waelkens and Vermeersch 1997, 132-33; Waelkens et. al 1997, 201; Martens et al. 2012, 159; Waelkens 2015, 193; Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "The Roman Baths (2003)."

[391] Martens et al. 2012, 159; Waelkens et al. 1997, 201; Waelkens et al. 2000, 336-62; Loots et al. 1998, 275-76; Waelkens et al. 1999, 289-90. Waelkens 2009, 338; Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011, 53-54.

gifted to the city from special marble quarries that belonged to Hadrian, but also with mosaics, fountains, columns, sculptures, and large windows.[392]

Originally, the building had a double circuit of cold, warm, and hot baths (phase plan 1 in appendix 3). The circuits were L-shaped, with the smaller circuit (circuit I) occupying the north-west corner of the complex, and the larger circuit (circuit II) occupying the south-east corner of the complex. The heated rooms were located along the western side to take advantage of the heat from the sun through large windows that have not survived. Unheated rooms were in the center and along the north and east sides. Changing rooms, reception rooms, furnaces and other utility spaces were interspersed throughout the complex. A public latrine was located on the lower level at the southwest corner of the complex, close to the lower agora.[393]

The main entrance was located on the western side of the palaestra, on the north side of the building. Visitors progressing south from the main entrance, along the western portico of the palaestra, would have entered a large, formal reception room labeled 'Basilica Thermarum' on phase plan 1 in appendix 3.[394] The Marble Hall was located to the south of the basilica thermarum. The basilica thermarum and the Marble Hall both probably functioned as multipurpose spaces.[395]

If visitors had progressed further east along the southern corridor of the palaestra, without having entered the basilica thermarum, they would have come to another doorway in the south

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[392] Regarding the marble quarries of Hadrian as a source of marble for the baths, see: Waelkens 2015, 186. For information about the windows, see: Waelkens 2015, 193.

[393] Rens et al. 2012, 53.

[394] The large, formal reception room has been called different names: **Ambulacrum:** Waelkens 2009, 354; Waelkens 2013, 64; **basilica thermarum**: Waelkens et al. 2010, 239; **luxurious vestibule:** Waelkens et al. 2010, 239; Rens et al. 2012, 87; Waelkens 2013, 63-64.

[395] Waelkens 2009, 352-53; Waelkens et al. 2010, 239-42, 249-50, 252. See also Martens et al. 2012, n. 19.

wall of the palaestra that led to a large interior space in the shape of a Latin cross. At the center of the cross, four massive piers supported a cross-vault that rose higher than the barrel-vaulted arms that extended to the north and south. The east-west oriented hall comprised the main frigidarium (F II on phase plan 1 in appendix 3), while the north and south arms of the cross probably functioned as apodyteria (A II north and A II south on phase plan 1 in appendix 3). The identification of these side rooms as apodyteria is based on architectural analogy.[396] As Waelkens pointed out, the combination of two long, symmetrical rooms, one on each side of a high central space, has close parallels with other bath-gymnasium complexes in western Asia Minor, including the ones discussed in the previous chapters (figs. 4.8 and 4.9).[397]

The construction of the Bath-Gymnasium Complex at Sagalassos began around 120 A.D., shortly after Hadrian promoted the city to a *neokoros*. The best evidence for the start of the building's construction comes from pottery that was retrieved from vaulted rooms on the lower level.[398] The pottery provides a reliable date because it is from sealed contexts: the rooms were not accessible / not used; they served only as supporting elements.

A nearly six-meter-long dedicatory inscription honoring the municipal deities and the Roman Emperors Marcus Aurelius and Lucius Verus suggests that the majority of the building's construction was complete by 165 A.D.[399] The dedicatory inscription was found fragmented and in a secondary, re-used context lining a pool that was installed during the late fourth or early fifth

[396] For the identification of the east-west oriented hall as the main frigidarium, see Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011, 56-57. For the identification of the side rooms as apodyteria, see Waelkens et al. 2010, 237-39.

[397] Waelkens et al. 2010, 237; Waelkens 2015, 193.

[398] Waelkens 2002, 350-53; Waelkens 2013, 64; Waelkens 2015, 193.

[399] Waelkens 2002, 350; Martens et al. 2012, 159; Waelkens 2013, 65; Waelkens 2015, 193; Putzeys 2002, 17.

century A.D. in the same room where the inscription was probably originally displayed - in the Marble Hall, which had later been converted into a caldarium (C III). The monumental entrance of the building and the 'wind-blown' Corinthian corner capitals of the porticoes suggest that the palaestra was not completed until the reign of Alexander Severus (222-235 A.D.).[400]

4.3 Transformations and Re-use of the Bath-Gymnasium Complex

The earliest evidence for re-use that is not connected to the demolition of the Old Baths and the construction of the Bath-Gymnasium Complex, but that strictly involves the Bath-Gymnasium Complex, dates to two hundred years after its construction was complete. There may have been instances of re-use in the interim, but the extensive late antique renovations, and further destruction of the building after its abandonment in the early seventh century A.D., have made earlier interventions extremely difficult to detect.

4.3.1 The first major phase of transformations: late fourth / early fifth century A.D.

Around 400 A.D., the Sagalassos Bath-Gymnasium Complex was extensively renovated and almost none of the rooms were left untouched.[401] The changes are visible on phase plan 2 in appendix 3. Among the major changes, a new bathing circuit (circuit III) was installed in the center of the complex, taking over the Marble Hall and the basilica thermarum; the cruciform, which comprised Frigidarium II, Apodyterium II North, and Apodyterium II South, was closed off from the bathing rooms and converted into a banquet hall; and Caldarium I was almost entirely rebuilt.

[400] Waelkens 2015, 193; Van Beeumen and Waelkens 2015, 45.

[401] Waelkens (2013, 64) suggests that the major phase of renovations took place during the later part of the reign of Theodosius I (379 – 395 A.D.) and the early years of the reign of Arcadius (395 – 408 A.D.)

Caldarium I

Caldarium I was one of the first rooms in the building to be excavated. The marble floor was still *in situ* along the eastern edge of the room, while most of the floor had been crushed by the collapse of the brick vaulted ceiling in antiquity, probably after the earthquake in the early seventh century A.D. (figs. 4.10 – 4.13). The collapsed ceiling exposed the hypocaust system beneath the floor, which enabled the excavators to confirm that the room had functioned as a caldarium and that the large-scale renovation of the room that they had, at first, tentatively dated to the third or fourth century A.D. was more than a superficial or decorative renewal of the room because it involved several structural and functional repairs below the surface of the floors and behind the walls, as well as extensive rebuilding on top of the sub-surface or non-visible / intentionally hidden repairs.

The hypocaust system beneath the floor of Caldarium I, for example, was extensively rebuilt. The excavators confirmed that the round hypocaust pillars were installed during the construction of the room during the middle of the second century A.D., while the square hypocaust pillars were added later, probably around the same time that a new bathing circuit (circuit III) was installed at the center of the complex.

The floor of Caldarium I was comprised of marble pavements on top of at least two layers of mortar and terracotta slabs (fig. 4.14). The two layers of mortar indicate that there were at least two flooring events. The extensive sub-surface rebuilding also necessitated a complete renewal of wall veneering inside Caldarium I. Nearly 40 tons of wall veneering in Docimian

marble was recovered from Caldarium I, and the excavators linked it to the same renovation as when the new (square) hypocaust pillars were installed.[402]

After further excavations in other areas of the complex, the renovation of Caldarium I that the excavators had tentatively dated to the third or fourth century A.D. was discovered to have taken place in the late fourth or early fifth century A.D. The excavators link the installation of the square pillars of the hypocaust system beneath the floors in Caldarium I with the transformation of the central rooms of the complex into another bathing circuit (circuit III), and there is more, and better, evidence for dating that event -- particularly the transformation of the Marble Hall into Caldarium III, which did not happen until after the cruciform on the eastern side of the complex was closed off / separated from the rest of the building, around 400 A.D. This information was not available when Caldarium I was first excavated.[403]

Cruciform (Frigidarium II, Apodyterium II North, and Apodyterium II South)

Originally, the east-west oriented hall of the cruciform functioned as a large frigidarium (F II on phase plan 1 in appendix 3) and it had two adjacent apodyteria, one in the north and one in the south (A II north and A II south on phase plan 1 in appendix 3). The field notes explain that even before the excavators had set to the arduous task of removing tons of architectural debris and accumulated earth, they anticipated that the east-west hall of the cruciform might have been a frigidarium because it was a large, basilica-like space that, from the large quantity of

[402] The dates that I am going by are from Waelkens et al. 2000. The excavators' interpretation of the building's history and renovations may have changed since more of the Bath-Gymnasium Complex has been excavated, but Caldarium I is not discussed in later reports.

[403] The earlier, estimated third or fourth century A.D. date for the renovation of Caldarium I relies primarily on the stylistic dating of recovered pilaster capitals from Caldarium I. See Waelkens et al. (2000, 339-40) for a stylistic analysis of the pilaster capitals. For the transformation of the Marble Hall into a Caldarium, see Rens et al. 2012, 54, 89-91.

expensive marble mixed in the debris, they could tell had once been opulently decorated.[404] Most frigidaria fit this description. Frigidaria were usually built in large, basilica-like spaces so they could be equipped with long, narrow pools, whereas caldaria and tepidaria were both usually smaller, without so many wide doorways through which heated air could escape. The excavators also had good reason to expect that a frigidarium may once have existed in this part of the building because they had already begun to excavate and interpret the heated rooms in the south (Caldarium II and Tepidarium II), and they had not yet identified a frigidarium that was connected to them. A frigidarium located in the cruciform would have completed a similar arrangement of rooms as the bathing circuit in the northwestern corner of the complex (circuit I), thereby providing two complete, separate bathing circuits within the same building – one for men and one for women, according to the excavators.[405]

Further excavations revealed that Frigidarium II and the heated rooms in the south were connected by a doorway in the south wall of the west arm of the cruciform. The doorway allowed direct access between Frigidarium II and Tepidarium II. A cold-water pool ("pi," for piscina on phase plan 1 in appendix 3) was discovered in the east arm of the cruciform. The off-center location of the pool may have enabled the room to function more easily as a multipurpose space, with no obstructions along its north-south axis.[406] The north and south walls of the east arm of the cruciform, where the pool was located, have alternating square and semi-circular

[404] Waelkens et al. Sagalassos Field Notes from the Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: "Roman Baths: August 21-25, 2005;" "Roman Baths: July 8-20, 2007;" "Roman Baths: July 18-August 2, 2007."

[405] Waelkens et al 2010, 234; Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011, 59; Rens et al. 2012, 53.

[406] Van Beeuman and Waelkens (2015, 44) suggest that the north-south axis of the cruciform may have functioned as an ambulacrum and as a winter palaestra.

niches. They are like the walls alongside the cold-water pools in the frigidaria at the Sardis Bath-Gymnasium Complex and the Vedius Bath-Gymnasium Complex at Ephesus.

The excavations also revealed a fountain with a horseshoe-shaped pool located against the western wall of Frigidarium II (figs. 4.15 – 4.18).[407] The fountain was made in the likeness of Apollo, the sun god / god of music and healing who was particularly important at Sagalassos.[408] The pool associated with the fountain was large enough to accommodate approximately ten people on its bench. The water that drained from the pool may have been recycled and used to supply the footbath (pediluvium) that was located only a few meters to the south in Tepidarium II (see phase plan 2 in appendix 3).[409]

During the major renovation of the Bath-Gymnasium Complex around 400 A.D., the pool in the east arm of the cruciform was filled in and paved over (phase plan 2 in appendix 3). The pool or its water supply may have been damaged, and instead of repairing it, the city and/or the officials responsible for making decisions about the Bath-Gymnasium Complex may have decided to constrict the supply of water to the western and central areas of the building. This is unlikely because it probably would have been easier and less expensive to repair localized damages than to extensively renovate and almost completely rearrange the building. Also, the Apollo fountain and its catch-basin continued to function, so the water supply in the western part of the cruciform, at least, was unbroken or repaired. Another possibility that seems more probable is that the city and/or the officials responsible for making decisions about the Bath-

[407] Rens et al. 2012, 74; Waelkens 2013, 62.

[408] Talloen and Waelkens 2005, 219.

[409] Martens et al. 2012, 164.

Gymnasium Complex may have decided that they wanted or needed to use the cruciform more permanently for other activities.

Around the time that the pool was filled in, six colossal statues representing Roman emperors and their wives were installed in the niches in Apodyterium II South (Imperial Portrait Gallery on phase plan 2 in appendix 3; figs. 4.19 – 4.31). Only three statue heads were recovered: the two male heads are portraits of Hadrian and probably Marcus Aurelius, and the female head is a portrait of Faustina Major.[410] The heads that have not survived are thought to have represented Antoninus Pius, Sabina (the wife of Hadrian), and Faustina Minor (the daughter of Antoninus Pius and Faustina Major, and the wife of Marcus Aurelius). Aside from the three heads, only fragments of the rest of the statues survive. The surviving fragments include the toes of all the empresses, the left arm of Faustina Major, the right leg and foot of Hadrian, and both legs and arms of Marcus Aurelius. None of the torsos have survived, but that is not unusual because they were probably made from gilded bronze on wooden frames, as was typical for acrolithic statues. The gilded bronze would have been recycled, and the wooden frames would have been used as fuel for the kilns or disintegrated over time.

The subject matter, size, and materials of the colossal imperial statues would have been exceptionally grand for an apodyterium. They were almost certainly created for a different context and moved into the room in which they were found after it was no longer used as an apodyterium. Two theories about the original contexts of the statues have been put forward. One theory is that they may have originally been displayed in the Temple for the Imperial Cult at Sagalassos / the Temple for Antoninus Pius. The other theory is that they may have originally been displayed in the Marble Hall of the Bath-Gymnasium Complex.

[410] Waelkens et al. 2010, 246-51; Mägele 2013, 50.

A) Theories about the original location of the colossal imperial statues

Semra Mägele argues that the imperial portrait statues were probably created for the Temple for the Imperial Cult at Sagalassos.[411] She points out that the inscription in the Marble Hall of the Bath-Gymnasium Complex does not mention Hadrian or Antoninus Pius, the two Roman Emperors that are clearly represented by the statue group, and there is not enough room in the long, eastern bay of the Marble Hall, where the inscription was probably originally located, to enable their names to be reconstructed. Furthermore, she argues that the statues would not have fared well in the warm and humid microclimate of the baths due to their wooden components and gilded bronze-plated armor or garments.

Mägele points out that other colossal, acrolithic imperial portrait statues survive from other sites, and they were always associated with the imperial cult. Most of them are from imperial cult temples, and none are from baths.[412] Mägele agrees that the temple cella would have been crowded with six colossal statues inside of it, but she argues that ancient viewers probably would not have cared, and she cites crowded temple cellas elsewhere in the Roman world to demonstrate that it would not have been an anomaly.[413]

Another of Mägele's arguments for why the Temple of the Imperial Cult was probably the original context for the colossal imperial portrait statues relates to 'chronological congruence.' In the late fourth century A.D., the Temple for the Imperial Cult went out of use, and within a short period of time, it was disassembled, and its architectural materials were re-used for other building projects, including the city's late Roman fortifications and a church on

[411] Mägele 2013, 56-59; 2017, 433, 443-48.

[412] Mägele 2017, 444. Other colossal statues have been found in baths, but none of them were acrolithic.

[413] Mägele 2013, 58.

the western side of the city. Materials that originally belonged to the temple could also have been transported to the baths, which were being renovated around the same time. Mägele makes the point that recontextualizing the statues -- moving them from the temple to the baths -- would have been in keeping with the imperial legislation to preserve and protect pagan statues by rebranding them as 'purified,' and therefore, worthy of admiration only for their historical and artistic value; no longer because they were sacred.

In 2013, Marc Waelkens argued that the original location of the colossal imperial statues could not have been the Temple for the Imperial Cult because not only would the cella have been severely crowded with all six of them inside -- so crowded that there would have been less than three meters of unoccupied space between the statues, which would have prevented anyone that entered the cella from being able to clearly see the faces of the statues, but he also believed that there was a podium inside the cella specifically for the display of cult statues, and that it was too narrow to have supported the statues in question.[414]

In having to think more creatively about a potential original location for the colossal statues, Waelkens proposed that they may have been made for the Marble Hall of the Sagalassos Bath-Gymnasium Complex, where the niches in the north and south walls of the Marble Hall may each have held an imperial couple: Hadrian and Sabina, Antoninus Pius and Faustina Major, Marcus Aurelius and Faustina Minor, and Lucius Verus and Lucilla.[415] Colossal statues of

[414] Waelkens 2013, 71, n 2. Mägele (2017, 446-47, and 452, n. 80) offers a convincing rebuttal for Waelkens' claim that the podium was too small. Waelkens still considered the Marble Hall to be a strong candidate for the statues' original location, even after he acknowledged that his assessment of the podium was probably incorrect because it was based on previously misinterpreted information. See Waelkens 2019b, 15.

[415] Waelkens et al. 2010, 246-51; Waelkens 2013, n. 2; Waelkens, Poblome, Claeys, Lefere, and Uzunoğlu 2011, 269. The Temple for the Imperial Cult was, and still is, the intuitive choice for the statues' original location, but Waelkens was prudent to consider alternatives, especially since there was a conflict in scale according to his (misinformed) calculations.

Lucius Verus and Lucilla have not been found anywhere at Sagalassos, so if they did exist, then they were probably destroyed.[416]

The fact that Hadrian and Antoninus Pius are not mentioned by name in the inscription from the Marble Hall should not exclude the possibility that their portraits and portraits of their wives may have been included in the Marble Hall's decorative program. Marcus Aurelius and Lucius Verus were mentioned by name because they were the co-regents when the construction of the building was complete.[417] Including portraits of Marcus Aurelius and Lucius Verus' predecessors would have only strengthened the visual impact that the city was trying to achieve, which was to honor the imperial family and make clear the city's allegiance to Rome.

Waelkens argued that the warmth and humidity of the baths would not have affected the sensitive materials of the imperial portrait statues because the Marble Hall was unheated and most of the rooms that were near the Marble Hall were also unheated. Caldarium II was the main exception, but the shared wall was nearly two meters thick and would have protected the statues.

Ultimately, the reason for the statues' removal from either of these proposed locations would probably have been the same: the abolition of paganism in 391 A.D. by Theodosius I, and related legislature that made it imperative to disassociate statues that had any perceived pagan religious significance from contexts of worship.[418] The removal of the imperial portrait statues, either from a temple where they would have been the recipient of prayers and offerings, or from a room in the Bath-Gymnasium Complex where they would have presided over probably a

[416] The statues of Lucius Verus and Lucilla, if they existed, were probably not moved into the cruciform. The mosaic floors of the western niches in Apodyterium II North were well-preserved. There were no indications inside them of statues, plinths, or any other means of supporting colossal statues.

[417] For the date of the dedication of the Bath-Gymnasium Complex in 165 A.D., see Waelkens 2013, 66.

[418] Theodosian Code, books 15 and 16 contain many laws pertaining to the treatment of pagan statues and temples. See Waelkens (2013, 67) for an overview of the laws pertaining to pagan statues.

variety of events and still may have been the recipient of prayers and offerings, was part of an important process that may have been intended to de-sacralize or neutralize the statues and make them safe for display in a non-religious context. Unfortunately, it is unclear to what extent moving and recontextualizing them achieved this effect. Some individuals may have continued to regard the colossal imperial portrait statues as sacred objects or as objects that held magical or otherworldly powers. Laws forbidding sacrifices and other displays of religious enthusiasm towards imperial statues continued to be issued throughout the first half of the fifth century A.D., which suggests that despite being illegal, these practices continued at least throughout the first half of the fifth century A.D. in some places.[419]

B) The colossal imperial statues in their new context

What is most interesting about the colossal imperial portrait statues at Sagalassos is that they were not abandoned, buried, mutilated, or destroyed soon after they stopped being used as cult objects, while some equivalent statues at other sites were treated that way.[420] Instead, they were deliberately and carefully preserved, and moved to a place where they could remain

[419] *Cod. Theod.* 15.4.1 issued in 425 A.D., and *Cod. Just. C* 1.24.3 issued in 439 A.D.

[420] At Sardis, the colossal imperial cult statues representing members of the Antonine Dynasty that were once displayed in the western part of the Temple of Artemis met varying fates. The head of 'Marcus Aurelius' was used in the foundations for a small Christian church (Church M) that was built in the late fourth or early fifth century A.D. at the southwestern corner of the Temple of Artemis, while the head of 'Lucius Verus' was deliberately buried in one of the Temple porticoes. The heads of the empresses, except for 'Faustina Major,' were poorly preserved, and parts of them may have ended up in lime kilns. At Ephesus, the colossal head and arm of a statue representing 'Titus' or 'Domitian' was found in the cryptoporticus of the city's first neokorate temple. Other colossal body parts were found in a nearby wall. Some of them may have come from the same statue, but three colossal hands have been found, which confirms that there were at least two colossal statues. Experts suggest that Vespasian, Titus, Domitian, and probably Domitia (Domitian's wife) were once displayed inside the temple, the body parts may have come from statues of these individuals. Colossal statues of Augustus and Livia at Ephesus had crosses carved into their foreheads and were broken up and used as fill in the construction of a house. For the Antonine colossi at Sardis, see Burrell 2004, 103-07; for the Flavian colossi at Ephesus, see: Price 1984, 187, 255; Friesen 1993, 59-63; Burrell 2004, 64-65; For the colossal statues of Augustus and Livia at Ephesus, see: Friesen 1993, 63; Inan and Alföldi-Rosenbaum 1979, cat. no. 3, 5.

publicly and prominently on display.[421] It is worth considering why they were treated with such care, and why they were appropriate for the cruciform or what purposes they were intended to achieve after being installed there. I argue that they had more than a decorative purpose in their new context and that they were preserved not simply because they were 'works of art' and the city was being 'resourceful,' but because the city wanted to demonstrate proper respect towards the statues, which by custom and by law, was the same as demonstrating proper respect towards the (deceased) emperors and empresses that they represented.

One of the main reasons that the colossal imperial portrait statues were kept has to do with the fact that they were political as well as religious. For statues representing other pagan deities, once their religious significance was erased, their survival depended on their intrinsic value either as raw materials or, as laws eventually tried to encourage, as 'works of art.' Superstition may also have played a part in the preservation of some pagan statues, including statues of pagan Roman emperors and their wives. Imperial statues may have had an additional layer of protection though, because even with the removal of their pagan religious significance, they still held strong symbolic power because they represented historic imperial authority.

Much has been written about how the Romans used imperial iconography to establish and maintain power.[422] Imperial statues were tools of propaganda, and one of the ways they manifested power was by making the emperor physically present, symbolically, in all locations at once. Imperial statues were intended to foster inclusion by inspiring respect and loyalty from

[421] The colossal imperial portrait statues remained on display until the bath-gymnasium complex stopped being used as a bath in the late sixth or early seventh century A.D., and subsequently began to be stripped of its decorations. The statues had already begun to be sacrificed to the lime kilns when the ceiling vaults collapsed in the early to mid-seventh century A.D., thereby burying, and preserving the statutes.

[422] Ando 2000; Pandey 2018.

viewers. Clifford Ando writes that "[Imperial statues] were instruments of power, and, in representing a unique mortal with a superhuman power, they became powerful and animate in their own right."[423]

Another probable explanation for why the imperial statues were treated with care hinges on deep rooted social customs. Imperial statues were places of refuge. Anyone seeking asylum could flee to an imperial statue for safety. The imperial statues did not have to be set up in temples for this to work. Asylum continued to be attached to imperial statues until at least the sixth century A.D.[424] Also, reverence towards imperial statues was expected and required by law. There were repercussions for individuals or groups that neglected to demonstrate proper modes of conduct, which ranged from basic actions of respect, such as avoiding lewd behavior when in the vicinity of imperial statues, to adoration, depending on context.[425]

Most Christians did not object to imperial honors. *Adoratio,* which included gestures of praise, such as *proskynesis* (prostration and kissing hands or feet) and the presentation of gifts, was regularly performed by pagans and Christians towards the living emperor or towards statues or other images of the emperor. This continued even after the reforms of Theodosius I, outside the context of imperial cult temples, which were officially closed during his rule, and never re-opened.[426]

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[423] Ando 2000, 237.

[424] Milner 2015, 199; *Cod. Just.: Institutiones* 1.8.2, *Digesta* 47.11.5. See also Kitzinger 1954, 122-23.

[425] There were laws against the destruction of pagan statues in general, for example, *Cod. Theod.* 16.10.8; *Cod. Theod.* 16.10.15, but there were also laws that specifically protected imperial statues, such as *Cod. Just.: C* 8.11.16 and *Cod. Just.: C* 11.41.4. See Bono 2021, 5-6; Lavan 2011, 457-68.

[426] Kahlos 2016, 119-22.

Intentionally damaging an imperial statue would have been perceived as damaging the dignity of the emperor, and the emperor, according to Christian rhetoric, was God's vice-regent on earth / a holy intercessor.[427] Roman emperors could (and did) continue to function within the theological framework of Christianity, which was something that other, truly pagan deities could not do.

There are also well documented cases of imperial portraits of pagan emperors surviving due to mistaken identity.[428] I do not think that was the case, initially, when the statues were moved, because it would have been clear to the people moving them that they were pagan, especially if they had been moved from an imperial cult temple and had served as cult statues within living memory. Later, it is possible that they survived due either to forgetfulness or to a deliberate recontextualizing. People may have left out that they were pagan, and selectively remembered only that they were emperors and emperors' wives and therefore representative of imperial authority, and possibly powerful as Christian intercessors, or powerful in their own right due to the persistence of pagan superstitions.[429]

The colossal imperial statues at Sagalassos were also probably not destroyed because they were status markers. They kept the special link between the city and the emperors alive by reminding viewers that the city had been a *neokoros*, a distinction that had ceased to carry any real significance after the abolition of the imperial cult.[430] For this reason, the colossal format of

[427] Kahlos 2016, 121; Angelov 2014, 124; Stern 1999, 155, 157.

[428] Kleiner 2010, 191.

[429] Matthews (1993, 13-22) refers to the transference of imperial iconography into a more general iconography of authority and power as the "emperor mystique."

[430] The last time the title *neokoros* was used was in an inscription at Sardis that dates to 459 A.D. The inscription lists the incorrect number of times that the city was awarded the title of neokoros, listing too few, which suggests that although the title was still recognized as an honorific, its true significance had already started to fade. The same inscription invokes the Holy Trinity. The next to last use of the title comes from inscriptions at Side, Synnada,

the statues was especially significant. No other city in Pisidia could claim the right of having what were probably ex-voto statues of the Antonine Dynasty. They were a visual testament to the city's glorious past.

The statues also helped to establish a pedigree, or to make visible the city's long history of loyalty to Rome. Other imperial statues were set up along the colonnaded street, as attested by some of the statue bases that were recorded *in situ* by the survey of Count Lanckoronski. These included Trajan, Gallienus, and Septimius Severus with his wife and sons. A statue of Julian was also set up at the top of the street, near the Agora Gate.[431] Anyone entering the city would have passed by these statues on their way to the Bath-Gymnasium Complex, before encountering the colossal imperial statues.

Although the decision to stop using the south wing of the cruciform as an apodyterium was probably more directly a result of the filling in of the main pool in Frigidarium II than a result of the installation of the imperial portrait statues, the installation of the statues probably confirms that the room had ceased to function as an apodyterium because it would have been culturally unacceptable to disrobe in front of imperial statues. Not only was it culturally inappropriate, but it could be met with severe consequences. Domitian had a woman executed because she undressed near an imperial statue.[432]

The luxurious decorations that were kept in the cruciform, or that the cruciform was again refinished with, such as the expensive marble wall paneling, floor mosaics, glass tesserae

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and Sagalassos. They are all about one hundred and fifty years earlier than the Sardis inscription. See Burrell 2004, 113; Hanfmann and Mierse 1983, 193.

[431] Lavan 2008, 203-04.

[432] Dio. Cass. 67.12.2

on the ceiling or upper walls, the Apollo fountain and horseshoe-shaped pool against the west wall, and the newly installed colossal imperial portrait statues, suggest that the large interior space continued to be used for grand and/or formal activities after it was no longer a frigidarium with adjacent apodyteria.

One of the activities that the cruciform was used for after it was no longer a frigidarium with adjacent apodyteria was large public feasts or symposia. The excavations uncovered an inscription that was part of a floor mosaic explaining that someone had renewed the *demosion* -- a 'public hall' or 'banquet hall.'[433] The inscription was in the central part of the cruciform, under the tower, and so it may have referred to that area alone, or to the entire cruciform, or to some other combination of space within the cruciform (figs. 4.32 and 4.33). The floor mosaic that the *demosion* emblema is part of was installed in the sixth century A.D., but the word choice -- *ananeosan* / renewal -- suggests that the cruciform may have had the same function prior to the installation of the sixth century A.D. floor mosaic. The cruciform probably functioned primarily as a banquet hall since the major renovation of the building around 400 A.D., although occasionally, it may have been used for public feasts or symposia even before the pool in Frigidarium II was filled in and paved over. Public feasts and symposia are known to have been held in public baths, and although they are usually envisioned as having been held in Marble Halls, they could have been held in other rooms as well.

The public feasts and symposia that are most frequently associated with bath-gymnasium complexes are the ones that were held in association with imperial cult celebrations. Even if the

[433] The inscription is not preserved in full, but the words 'ΚΑΙ [ΑΝΑ]ΝΕωΣΑΝ ΤΟΣ ΤΟ ΔΗ[ΜΟ]ΣΙΟΝ ΠΟΛΛΑ' are visible in the bottom two lines. The word that is reconstructed as '*demosion'* here is sometimes restored as '*deipnosion,'* which also translates as 'banquet hall.' *Deipnosion*: Waelkens et al. 2010, 251; Rens et al. 2012, 92. *Demosion*: Waelkens 2013, 67; 2015, 196; Waelkens and Jacobs 2014, 117-19.

imperial cult was not explicitly worshipped in Marble Halls, there was still a strong association between Marble Halls and imperial cult celebrations because as grand locations within cities / locations that displayed the history and pride of cities, Marble Halls were favorite venues for the presentation of awards to the victors of agonistic contests.[434]

The cruciform could occasionally have been used as a banquet hall and/or audience hall while it still functioned primarily as a frigidarium with adjacent apodyteria, but it stopped being used for its original, primary purposes (cold water bathing and changing / storage of bathers' personal items) once it was more frequently, or permanently, used for these alternate activities. Although the Apollo fountain and horseshoe-shaped pool in the west arm of the cruciform were kept, they probably continued to function only as decorative features and would have no longer been used for bathing.

The colossal imperial portrait statues would have set a tone for the types of activities that the cruciform was used for. They lent gravitas by symbolically proclaiming the presence of the emperors and their wives. This would have been appropriate for festive occasions, such as banquets and performances, or for other, more somber occasions, such as lectures, sermons, or legal proceedings – all of which were sometimes held in baths.[435] The imperial statues may also have been intended to invoke justice or truth. *Imagines* were important in law courts; it is possible that the colossal statues of emperors functioned as *imagines* after they were installed in the cruciform.

[434] The main agonistic festival at Sagalassos was the *Klareia:* games honoring Apollo Klarios and the imperial family.

[435] On baths being used as law courts, see Lavan 2003, 326; 2007, 120. For *imagines* in law courts, See Lavan 2011, 462.

When the imperial portrait statues were installed in the niches in the former Apodyterium II South, a doorway in the southern-most niche in the west wall was bricked-up, closing access to the lower level of the Bath-Gymnasium Complex from the cruciform (phase plan 2 in appendix 3). The room on the lower level that this doorway had previously given access to had functioned as a sudatorium (steam room) since the Old Baths were in use. When the doorway in the niche was bricked-up, the sudatorium was converted into a boiler room for Tepidarium II. The conversion of the sudatorium into a boiler room suggests that Tepidarium II may have been made into an extension of Caldarium II during the renovations of circa 400 A.D.[436]

Another important change that was made to the Bath-Gymnasium Complex during the renovations of circa 400 A.D. further attests to the functional separation of the cruciform from the rest of Bath-Gymnasium Complex. In the palaestra, part of the southern portico in front of the entrance to the former Apodyterium II North was transformed into a room that functioned as a more enclosed entryway.[437]

Transformation of the Basilica Thermarum into F III, A III, and T III

Around the same time as the conversion of the cruciform into a public hall, which entailed the filling in and paving over of the large cold water pool (piscina) in the former Frigidarium II, possibly the construction of auditorium seating on top of the filled in pool, and the installation of the colossal, acrolithic imperial portrait statues in the former Apodyterium II South, a large cold water pool (piscina) was installed in the east side of the basilica thermarum,

[436] Poblome 2009, 435; Waelkens, Poblome, Claeys, Lefere, and Uzunoğlu 2011, 269.

[437] Van Beeumen and Yakar (2016, 89) tentatively identify this new room as a new apodyterium due to the rubble walls and spolia that may have been used as rows of seats. I think this would have been an unusual location to build an apodyterium in light of the cruciform being used for non-bathing purposes after the circa 400 A.D. renovation, especially with the filling-in of the pool. Rows of seats would be appropriate in an entryway as well as in an apodyterium. Further study is needed before a precise determination about the function of this new room can be made.

transforming it into a new frigidarium (F III), and the west side of the basilica thermarum was converted into a small apodyterium (A III) and a small tepidarium (T III) (phase plan 2 in appendix 3 and fig. 4.34).

New floors and wall veneers were also part of the transformation of the basilica thermarum into the frigidarium, apodyterium, and tepidarium of the new bathing circuit (circuit III). All three rooms that were made from the former single room were refinished with a combination of new and recycled materials. Many of the original wall panels and ornamental details, such as pilaster capitals, were kept, while some of the new materials included pilaster capitals with more intricate carvings than the original, Antonine pilaster capitals (fig. 4.35).[438] Recycled materials that had not been part of the room when it functioned as a basilica thermarum were also used. The floors, for example, were covered with *opus sectile* tiles that had been cut from re-used blocks of multi-colored marble or other types of stone (fig. 4.36).[439] Some of the tiles had fragments of poetic texts inscribed on them (fig. 4.37). Excavation reports suggest that they may have been cut from blocks or panels that were previously part of the Theater Gymnasium, which had been destroyed shortly before the Bath-Gymnasium Complex was renovated in the late fourth or early fifth century A.D.[440] There were also many marble fragments with Egyptian scenes (fig. 4.38), which suggests that a sanctuary for the Egyptian gods had also

[438] The new pilaster capitals were made of Dokimeion marble, like the earlier ones from the same room and the ones that were made around the same time for Caldarium I. See Waelkens 2009, 355.

[439] Waelkens et al. Sagalassos Field Notes from the Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: "Roman Baths: August 8-12, 2004;" "Roman Baths: August 15-19, 2004;" Waelkens et al. 2010, 241.

[440] The Theater Gymnasium may have been deliberately destroyed by Christians. Other buildings that may have been deliberately destroyed by Christians during the fourth century A.D. at Sagalassos include the Neon Library and pagan temples. Although there were laws condemning the destruction of pagan temples, the laws may have been created in response to the many temples that had already been destroyed. See Waelkens et al. 2010, 241; Waelkens and Jacobs 2014, 105-06.

been destroyed somewhere in the city, probably around the same time that all the other pagan temples were closed and/or destroyed in the fourth century A.D.[441]

Aside from the different patterns of *opus sectile* that covered the floors of Apodyterium III and Frigidarium III, only a pillar against the north wall marked the transition between the two rooms.[442] Mortared rubble and stone benches clad with marble veneers were installed around the perimeter of Apodyterium III in the early fifth century A.D.[443] The benches further blurred the boundary between the two rooms because the northern bench continued around the pillar into the western-most niche of Frigidarium III, and the southern bench turned south at the eastern terminus of Apodyterium III's southern wall and continued along the eastern face of the wall that separated Frigidarium III from Tepidarium III.

The benches were installed on top of *opus sectile* floors and against marble clad walls, which suggests that they may not have been part of the original design of the new bathing circuit. Less expensive materials might have been used on portions of the walls and floors if it had been known, in advance, that they were going to be hidden by unmovable furniture. Wooden benches may have temporarily been used.

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[441] Egyptian cult was popular at Sagalassos in antiquity. In addition to the Egyptian scenes that were found broken and re-used in the Bath-Gymnasium Complex, numerous terracotta figurines of Isis and Harpocrates have been found all over the city. Waelkens 2009, 355. According to Waelkens et al. (Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 25-29, 2004,") it should not be surprising that Egyptian cult was practiced at Sagalassos or that the Sagalassians developed an appreciation or taste for the distinct artistic style of Egypt because there was close and prolonged cultural contact through trade. From the first through seventh centuries A.D., Sagalassos exported red slip ware to the Nile Valley and Alexandria and imported Nile fish and glass.

[442] Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 11-15, 2004."

[443] Corremans et al. 2004, 219; Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 4-8, 2004."

The installation of the benches has been tentatively dated to the early fifth century A.D. because coins of Arcadius and Honorius, which date to between 395 and 408 A.D. were embedded in the benches' mortar. Also, fragments of a late fourth or early fifth century A.D. ceramic wine jug that was decorated with a grape harvest scene were found behind the northern bench. Although these finds do not exclude the possibility that the benches may have been installed later, benches in an apodyterium make good sense, and they probably were installed soon after the creation of the room.[444] Waelkens emphasizes that despite the fact that the materials associated with the benches provide only a *terminus post quem*, the materials from the benches are distinct from the finds made above floor level, which were mostly ceramics from between the fifth and seventh centuries A.D. A coin issued by Heraclius (610-640 A.D.) was also found close to the floor level. All these finds suggest that the room may still have been in use – or at least accessible -- in the early seventh century A.D.[445]

Three alvei (small pools) were also installed in the former basilica thermarum when the room was converted into Frigidarium III (figs. 4.39 – 4.41). They were inserted into niches that had been part of the long, northern room since the Bath-Gymnasium Complex was built. The north and south walls each had three rectangular niches and one semi-circular niche. The semi-circular niches were located at the eastern end of the room, flanking the large pool (piscina) and the shallower, broader semi-circular niche of the eastern wall. The pools (alvei) were installed in the central rectangular niche in the north wall, and in the central and west niches in the south wall. All the newly installed small pools filled their respective niches from pillar to pillar and

[444] A coin of Heraclius was also found close to the floor level, suggesting that the room may still have been in use or at least accessible -- if perhaps only by workmen operating the nearby limekilns -- in the early seventh century A.D.

[445] Corremans et al. 2007, 320; Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: August 24-30, 2003;" Waelkens 2013, 65.

from the front of the pillars to the back wall. Each of the pools was equipped with one or two newly installed water supply systems and drainage features in the floors.[446]

The new tepidarium (T III) that was installed in the west side of the former basilica thermarum was much smaller than Tepidarium I and Tepidarium II. It was so small that it was not equipped with bathtub-like pools for bathing, whereas Tepidarium I and Tepidarium II had both been equipped with multiple pools.[447] The floor of Tepidarium III was almost entirely covered by a shallow pool that helped generate steam and functioned as a footbath (pediluvium). In both other tepidaria, there were shallow pools front of the doorways that led into the frigidarium of each respective bathing circuit. The water that filled the shallow pool in Tepidarium III may have been re-used from the pools that had been installed in the southern niches of Frigidarium III.[448] The walls of Tepidarium III were hollow to allow heat to circulate and maintain the warm temperature of the room.

Transformation of the Marble Hall into Caldarium III

The Marble Hall also lost its original purpose and was converted into a caldarium (C III) as part of the large-scale renovation of the Bath-Gymnasium Complex around 400 A.D. (figs. 4.42 – 4.44). The transformation of the Marble Hall from a ceremonial, non-bathing room into a large, fully functioning caldarium required major infrastructural changes at the core of the building. The installation of the pools were the most visible changes, but other changes were

[446] Martens et al. 2012, 161-162.

[447] Martens et al. (2012, 163) refer to the small room labeled T III in phase plan 2 in appendix 2 as a 'heated corridor,' whereas Janssen et al. (2017, 596) label it a tepidarium in their more recent plan of the building that I have used as a base for the phase plans of the Sagalassos Bath-Gymnasium Complex included in this dissertation.

[448] Martens et al. 2012, 164.

necessary to supply them with water and properly heat them. Drains and channels for evacuating water also had to be installed.

First, the sculptural program was removed, and the original marble veneers were removed from the walls. If the Marble Hall was equipped with embellished walls, like the aedicular facades that were popular in the Marble Halls of other bath-gymnasium complexes, then all the highly decorative columns and entablatures were dismantled. Next, three of the four original doorways were sealed to prevent heat from escaping, hypocaust floors were installed, large furnaces were built, and brick *tubuli* (spacers that facilitated the circulation of hot air and steam) were mounted to the walls. Marble veneers, some new and some re-used, were then reattached to the walls of the new caldarium.[449]

The date for the transformation of the Marble Hall into Caldarium III is based on pottery and coins that were found under the floors. The floors consisted of re-used marble slabs and *opus sectile* panels. Most of the hypocaust pillars (figs. 4.45 and 4.46) under the floors in Caldarium III were like the square hypocaust pillars that were installed in Caldarium I, probably as part of the same phase of renovations. (For the square pillars in Caldarium I, see fig. 4.10). The new pilaster capitals that were installed in Caldarium I and Caldarium III also suggest that both rooms were being renovated around the same time.[450]

Pools were installed in all four of the niches in Caldarium III (two in the north, and two in the south). There were also two longer bays, one on each of the shorter (east and west) sides of the room. Larger pools were installed in both bays. The pools in Caldarium III were most like the

[449] Putzeys et al. 2001, 170; Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths (2003)."

[450] Waelkens 2013, 65.

pools in Frigidarium III, which were also built into niches, whereas the pools in all the other heated rooms were built against a single wall and were not enclosed in niches. The pools in Caldarium III were also of a similar depth to the pools in Frigidarium III and had steps in front of their parapets and benches inside.

The main reasons that pools were built against walls was so they could easily be supplied with water by the pipes embedded in the walls, and so they could be as close as possible to sources of heat. The entire room was kept warm by the hypocaust system beneath the floor and by the heat and steam that circulated behind the hollow walls. It was desirable, however, to have the heat concentrated -- or most intense -- as close as possible to the pools. This is exactly what the architects achieved.[451] When the Marble Hall was converted into a caldarium, furnaces (praefurnia) were installed in places where they had not previously been necessary. Notice the locations of new praefurnia by comparing phase plan 1 and phase plan 2 (both in appendix 3). On phase plan 1, the praefurnia are located behind the south wall of Caldarium I and behind the west wall of Caldarium II. On phase plan 2, new praefurnia have been added in multiple new locations, mostly around Caldarium III. Two new praefurnia were installed in the northwest corner of Caldarium III (one for heating C III and one for heating C I); three new praefurnia were installed in the shaft at the center of the complex (two for heating C III, and one for heating C II); and four new praefurnia were installed in the southwest corner of Caldarium III.

After the Marble Hall was converted into Caldarium III, visitors could no longer make their way through the building according to the same routes that they had previously used. Caldarium II and Tepidarium II were temporarily (and awkwardly!) left in the south of the complex without a frigidarium or an apodyterium. Since the full sequence of bathing circuit II

[451] Notice the space between the back wall of the pool and the wall on the right side of fig. 4.43, for example.

was disrupted by the transformation of the cruciform into a banquet hall, bathers that continued to use Caldarium II and Tepidarium II would presumably have used Frigidarium III.[452]

Less space was available to bathers after the transformation of around 400 A.D. was complete. The cruciform had become entirely separate, and all the bathing rooms were concentrated in the west and center of the building. There were no longer any grand reception halls left for visitors to travel through because all the rooms had become part of one of the bathing circuits, whereas previously, the basilica thermarum and the Marble Hall were not part of any bathing circuit. A preference for smaller bathing spaces, and more of them, is evident here, just as at the Ephesus, Vedius Bath-Gymnasium.

4.3.2 Interventions / Renovations / Transformations that took place after the major renovation of circa 400 A.D. and before the early sixth century A.D. earthquake.

All the rooms of the Bath-Gymnasium Complex continued to be maintained and used throughout the fifth century A.D. Most of the finds attest to repairs and continuity of function(s), although there are some finds that attest to new ways that the rooms were being used. Changes are marked on phase plans 3 and 4 in appendix 3.

Caldarium I

There is ample evidence that Caldarium I continued to be repaired and used as a caldarium after the major renovation of the room around 400 A.D. Several stamped tiles that were manufactured between the fourth and sixth centuries A.D. and a brick fragment with a Christian graffito inscribed with the words “Lord help us” in Greek were found mixed with the

[452] On my phase plans (appendix 3), which are based on the floorplan in Janssen et al. (2017, 596) it looks as though the only access between the heated rooms in the south and F III would be through the banquet hall, but the floor plan in Martens, Richard, and Waelkens (2012, 160) suggests that the southernmost caldarium (the one that I have labeled C II, but they have labeled C 3) opened to a service corridor in its north wall.

debris inside Caldarium I.[453] There were also several fourth and fifth century A.D. coins that were found in the destruction layers of Caldarium I. Some of the coins may have been dropped by visitors to the baths, and therefore, may attest to continued use of the room during the fourth and fifth centuries A.D. or possibly later since fourth and fifth century coins remained in circulation into the sixth and seventh centuries. Another possibility is that some of the coins may have been accidentally incorporated into the fabric of the building during later fourth, fifth, or perhaps even early sixth century A.D. repairs.[454]

All the Rooms of Bathing Circuit III (A III, F III, T III, and C III)

In the fifth century A.D., all the rooms of bathing circuit III continued to function as they had since the major renovation of the Bath-Gymnasium Complex around 400 A.D. This is attested by the continued maintenance of the bathing rooms, the service areas, and the water supply. It is also attested by the Christian graffiti on the parapets of the pools in Caldarium III, and the coins, pottery, and other finds, including bone and glass that were found in Frigidarium III.[455]

Cruciform / Banquet Hall

The cruciform continued to be used as a banquet hall throughout the fifth century A.D., although it may have been used for other purposes when it was not being used as a banquet hall. The eastern part of the cruciform was used, at least temporarily during the fifth century A.D., as an audience hall. Timber planks set on top of radially arranged mortar and rubble supports were

[453] Loots et al. 2000, 689.

[454] Waelkens et al. 2000, 336-47.

[455] Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 25-29, 2004." See also Claeys et.al. 2005, 424.

installed on top of the pool that had been filled in and paved over during the renovation of circa 400 A.D. (phase plan 2 in appendix 3; figs. 4.47 and 4.48). Waelkens suggested that the auditorium may have had a political function since it was constructed around the time that the city's bouleuterion was destroyed.[456] The auditorium may also have been used for theatrical or musical performances, poetry readings, speeches, debates, or lectures. By the end of the fifth century A.D., the auditorium was removed and the east arm of the cruciform was converted into a kitchen (phase plan 3 in appendix 3; fig. 4.49).[457]

The Apollo fountain in the west arm of the cruciform, together with the horseshoe-shaped pool in front of it, continued to function as a decorative element. (More on this below).

Latrine

According to Waelkens et al., the latrine on the lower level of the Bath-Gymnasium Complex was converted into a fertilizer production site during the early fifth century A.D. (figs. 4.50 and 4.51. For the location of the latrine, see phase plan 1 in appendix 3).[458] Carbon-14 testing confirmed that the room had functioned as a latrine as early as the second century A.D.[459] In the early fifth century A.D., the benches were removed, and the septic ditches were filled with

[456] Waelkens, 2013, 68-69.

[457] The identification of the east arm of the cruciform as a kitchen relies upon the discovery of large stone slabs that probably functioned as tables or counter tops for the preparation of food, and piles of waste along the edges of the room.

[458] They were collecting animal and human excrement to use as fertilizer and storing it in this centralized location. For information pertaining to the latrine, see: Martens et al. 2012, 164; Waelkens et al. 2010, 257; Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011, 78-80.

[459] Two samples of human feces from the septic ditch along the edges of the room were tested. One sample was taken from a depth of 1.3 meters, yielding a date of 230-240 A.D., and the other sample was taken from a depth of 1.6 meters, yielding a date of 130-150 A.D. Waelkens et al. 2010, 257.

animal excrement. Carbon-14 dates of multiple samples of animal excrement fall between 420 and 600 A.D.

The septic ditches were 1.9 meters deep and continuous along the perimeter of the room. They were filled with 1 meter of animal excrement, on top of nearly another full meter of human excrement. The smell must have been terrible, and the room was not built to contain it, as its west and south walls had large windows. The windows overlooked a street that was located directly behind the Lower Agora. To modern sensibilities, it is surprising that such a stench would have been permitted in such a busy place at the heart of the city. It is interesting that this change took place while the baths were still in use. It suggests that public bathing may not have been as high of a priority, and that the status of the building may have been diminished.

4.3.3 Interventions / Renovations / Transformations after the early sixth century A.D. earthquake

Damages from the earthquake that struck Sagalassos around 518 A.D. have been detected in many places inside the Bath-Gymnasium Complex. The city made considerable efforts to restore the building in the years that followed.

Cruciform / Banquet Hall

The early sixth century A.D. earthquake caused a crack in the south wall of the imperial portrait gallery in the former Apodyterium II South (figs. 4.52 and 4.53).[460] The crack was more than a meter wide and ran as deep as the foundations, six meters below walking level. In addition to necessitating extensive repairs of the interior and exterior facades, the crack also destroyed the original floor mosaics in the imperial portrait gallery. New black and white floor mosaics

[460] Waelkens 2013, 68; see also Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 13-17, 2008."

featuring geometric patterns and wide borders were installed in the imperial portrait gallery and in other areas of the cruciform (figs. 4.54 – 4.56).

It is unclear whether all the floor renovations in the cruciform were due to earthquake damages, or whether the city decided that since they were already making repairs in the south part of the cruciform after the earthquake, they may as well use it as an opportunity to make other changes. The floor levels in the cruciform were originally split so that A II North was lower than the east-west oriented hall (F II). Stairs would have enabled access between the two levels, but they were removed in the sixth century A.D., and no trace of them was found in the excavations.[461] During repairs after the early sixth century A.D. earthquake, a fill of 1.3 meters was brought in to make the floor of A II North flush with the floor of the east-west hall. Pottery confirms the early sixth century A.D. date of the fill. After this renovation, the floors in all parts of the cruciform were the same level. The inscription that identifies the cruciform as a public hall / banquet hall was part of the sixth century A.D. mosaic floor. It was located in the center of the cruciform, underneath the high vaulted tower. Since the inscription mentions a renewal of the *demosion,* the primary function of the room as a banquet hall seems to have remained the same.[462]

In the imperial portrait gallery, the new mosaic floor confirms that the imperial portrait statues were already in place because the tesserae neatly frame the feet or the bases of the statues (figs. 4.57 and 4.58).[463] If the statues had been moved to the former Apodyterium II South after

[461] Another possibility is that there were three levels: see Waelkens 2013, 67.

[462] Waelkens 2013, 68; Waelkens et al. 2010, 251-52.

[463] Waelkens 2013, 66; Mägele 2013, 57.

the earthquake in the early sixth century A.D., then they would have been installed on top of the sixth century A.D. floor mosaics.

White plaster was applied to the walls and piers of the cruciform during the renovations of the sixth century A.D. Eventually, the plaster may have been covered by marble veneers, but in the interim, the plaster was an attractive surface for graffiti. The graffiti attests to a continued use of the cruciform while repairs in that area were still being made. It is possible that repairs in the cruciform were never finished. The white plaster may have been visible until the collapse in the seventh century A.D. (fig. 4.59).[464]

The kitchen in the east arm of the cruciform continued to function until the outbreak of Justinianic Plague in 541/2 A.D., after which, the fortunes of the city never fully recovered. The municipal treasury was depleted, and grand public banquets may have become less frequent.[465] As a result, the kitchen and the banquet hall were both dismantled. There was no longer a need for such a grandiose public space as the banquet hall in the Bath-Gymnasium Complex, but there was a need for materials that could be taken out of it and re-used or burnt for lime.[466]

To facilitate breaking down the banquet hall and the rest of the baths, which had presumably stopped being used around the same time, and converting materials that the city already had at hand into a more reusable state, two large lime kilns and nine smaller kilns for melting bronze were installed in the east arm of the cruciform, taking over the space that had

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[464] Corremans et al. 2007, 321; Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 17-21, 2005;" Jacobs 2016, 94.

[465] Rens and Waelkens 2013, 144; Rens and Waelkens 2014, 247.

[466] The marble that was removed from the bath-gymnasium complex may have been used in the mortar for many of the new, more humble structures that were built to the south of the bath-gymnasium complex and in the porticoes of the Lower Agora in the sixth century A.D. It may also have been spread on the fields to help increase fertility. Sagalassos became increasingly agrarian in late antiquity. Surveys have identified numerous farmsteads across the countryside. See Waelkens, Rens, Claeys, Uzunoğlu, Schuitema, and Poblome 2011, 84-90.

previously functioned as a kitchen (the area is labeled 'workshop' on phase plan 5 in appendix 3).[467] The two large lime kilns occupied the center of the room and the smaller kilns were located along the periphery of the room and in the southern-most niche of the east wall of Apodyterium II North (figs. 4.60 and 4.61). The kilns were probably installed after the plague years (541/2 A.D.) and were in use until the earthquake in the early seventh century A.D. that caused most of the city, including the Bath-Gymnasium Complex, to be abandoned. The imperial portrait gallery had been partially dismantled and the pieces of the statues that were not recovered during the excavations were probably burned in these kilns. The dismantling of the imperial portrait statues would undoubtedly have progressed further if not for the collapse of the vaulted roof that buried them and protected them until they were able to be recovered during the modern excavations.

Caldarium II and Tepidarium II

Caldarium II and Tepidarium II were also damaged by the earthquake in the early sixth century A.D. After the earthquake, both rooms stopped being used for their original purposes and were converted into service areas. A praefurnium was built in the western part of Caldarium II to heat the pool in the south-eastern niche of Caldarium III (phase plan 4 in appendix 3). Large piles of kitchen scraps and refuse from meals that were probably served in the adjacent banquet hall were also found in the former Tepidarium II and Caldarium II.

Caldarium I and Tepidarium I

Caldarium I and Tepidarium I were both extensively damaged by the early sixth century A.D. earthquake. Although some repairs were made, the rooms may no longer have been used for their original purposes. After the earthquake, the entire south wall of Caldarium I was rebuilt

[467] Jacobs 2015, 173; Rens and Waelkens 2013, 144.

using mortared rubble and bricks.[468] Solid ashlars would have been used for the original wall, as they had been used in other original parts of the building. The praefurnium located to the south of Caldarium I was probably built (or re-built) at the same time as the reconstruction of the south wall of Caldarium I. It was also built using mortared rubble and brick. According to some sources, Caldarium I and Tepidarium I were entirely abandoned after the early sixth century A.D. earthquake.[469]

Caldarium III

Caldarium III continued to be used as a caldarium at least for part of the sixth century A.D. This is indicated by the shoring up of walls and efforts to surround Caldarium III (again) with praefurnia after some of the praefurnia that were installed in the fourth century A.D. had been destroyed by the early sixth century A.D. earthquake. Caldarium III may have continued to be used as a caldarium until the building went out of use after the earthquake in the early seventh century A.D., when the rest of the city was also mostly abandoned, since there is no clear indication that Caldarium III stopped being used prior to that event. However, it seems more probable that Caldarium III stopped being used around the same time that the kilns were installed in the former banquet hall (shortly after the plague of 541/2 A.D.). The city would probably not have been actively dismantling a building that was still in use.

[468] Waelkens et al. 2000, 340.

[469] Martens et al. (2012, 160) say that the rooms were abandoned. Waelkens et al. Sagalassos Field Notes from the Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: "Roman Baths: July 13-17, 2008": "After the first earthquake, the northwest corner room of the baths, previously accessible from outside and inside, was blocked off completely and its debris – reaching almost to the ceiling – was never removed."

4.3.4 Final Occupation of the Bath-Gymnasium Complex

The earthquake in the early seventh century A.D. made the Bath-Gymnasium Complex unstable, and soon after, it began to collapse.[470] There are several indications that the collapse did not happen all at once. It may have taken many years for the wall veneers, stucco, *opus sectile*, and vaults to fall, creating layers of debris that helped to protect the floors by lessening the impact of the rest of the falling structure. The *opus sectile* floors in Frigidarium III and the mosaics in the cruciform were exceptionally well preserved because they had been gradually buried and protected by debris that accumulated on top of them. The pilaster capitals that were recovered from Frigidarium III were also remarkably well preserved, probably for similar reasons. A depth of between 5 and 7 meters of architectural debris eventually covered the floors in the cruciform and in Frigidarium III.

A few items that were found during the excavations shed light on the final occupation of the building and help date various phases of the collapse. In 2004, the remains of about 25 sheep and goats that had been butchered for a meal were found in the middle of a thick layer of rubble, several meters above the original floor of Frigidarium III. The meal is estimated to have fed between 50 and 100 people. In 2005, pellets from a pair of eagle owls containing the bones of their prey, were found in a soft plaster layer, several meters above the floor in the cruciform. This indicated that at least one pair of eagle owls had made the abandoned and already partially destroyed building their home before the roofs had finally collapsed. Carbon-14 testing yielded dates between 605 and 670 A.D. for the bones of the sheep and goats, and between 530 and 645

[470] For information pertaining to the collapse of the bath-gymnasium complex, see Poblome 2009, 436-37; Waelkens 2013, 71; Waelkens et al. Sagalassos Field Notes from the Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: “Roman Baths: July 24-28, 2005;” “Roman Baths: July 10-13, 2006.”

A.D. for the owl pellets. The most recent coins that were found underneath the architectural debris, on the actual floors in the cruciform and in Frigidarium III, were minted under Phokas (602-610 A.D.). The coins suggest that the earthquake that destabilized the Bath-Gymnasium Complex and caused the building, along with most of the city, to be abandoned occurred between 602 and 610 A.D. or shortly after.[471]

4.4 Conclusions

4.4.1 Statuary program

In addition to the colossal imperial portrait statues, a few other statues were recovered from the baths, but they are not as remarkable and have received far less attention.[472] The statue of Apollo from the small pool in the west arm of the cruciform was created during the mid-Antonine period and was probably part of the original decorative program of Frigidarium II (fig. 4.62). It represents a type known as 'Apollo Kitharodos,' named after the undecorated band that is placed diagonally across the upper body.[473] The band is the only piece of clothing on the

[471] Previously, the earthquake that destroyed Sagalassos was thought to have occurred in the 640s A.D. Waelkens et al. Sagalassos Field Notes from the Interactive Dig website hosted by the Archaeological Institute of America and Archaeology Magazine: "Roman Baths: July 10-13, 2006." There are also some sources that place the earthquake around 590 A.D. See Martens et al. 2012, 160 and n. 16; De Cupere et al. 2009, 4. According to Jacobs 2015, 175: "The animal bones in the pellets could be dated between AD 560 and 605 with 68.2 per cent probability (one σ), and between AD 540 and 620 with 95 per cent probability (two σ), with a peak of the distribution of the calibrated dates around ca. AD 590. However, a restudy of the agorae complexes of the town, including a comparison of coin find underneath the debris, made it possible to determine that the seismic shock only occurred after 602 and possibly even after 611."

[472] Mägele 2009 is the main source. Brief mentions of the statues from the Bath-Gymnasium Complex can be found in Waelkens (2009, 350-52); Waelkens et al. Sagalassos Field Notes from the Interactive Dig website: "Roman Baths: July 24-28, 2005;" Jacobs (2010, 294, cat. 9); Jacobs and Stirling (2017, 215-16).

[473] Arachne database: Object 67586: Torso of Apollo Kitharodos. Accessed on 14 April 2021. The database says that the Apollo statue was found in the small corridor near Caldarium II, but Semra Mägele has confirmed via personal correspondence that this is the statue that is thought to have been associated with the fountain in the west arm of the cruciform. Here is a direct link to the object record on the Arachne database: https://arachne.uni-koeln.de/arachne/index.php?view[page]=11&view[category]=overview&view[section]=uebersicht&view[layout]=objekt_item&search[data]=ALL&search[mode]=meta&search[match]=similar&search[constraints]=sagalassos%20thermen&view[active_tab]=overview&view[active_tab]=info_plastik

otherwise nude body. Only the slightly under-life-sized torso survives. The Apollo statue was mounted on a console in a central niche in the west wall of Frigidarium II. The pool was filled by water that cascaded down from a pipe behind the statue. After the major renovation of the Bath-Gymnasium Complex around 400 A.D., the fountain and its associated pool probably stopped being used for bathing, but they were maintained as decorative features for the new banquet hall. Importantly, the statue of Apollo was also kept on display. The fountain, the pool, and the Apollo statue continued to be well maintained during the first half of the sixth century A.D.[474]

In Frigidarium III, two statues of Aphrodite and two statues of a boy with a hydria -- probably Eros -- were found where they had fallen from their final display places along the edges of the pool in the late sixth or early seventh century A.D., after the baths were no longer in use (figs. 4.63 – 4.65; also notice the fallen pedestals inside the pool in fig. 4.34). Their original display places are unknown, but their mid-Antonine date suggests that they may have belonged to the original decorative program of the Bath-Gymnasium Complex. If they were part of the original decorative program of the Bath-Gymnasium Complex, they may have been displayed in the basilica thermarum or they may have been moved from another room when the basilica thermarum was converted into Frigidarium III, Apodyterium III, and Tepidarium III during the major renovation of the building around 400 A.D.

Fragments of several other statues were also discovered in the Bath-Gymnasium Complex, but it is not certain that they all belonged there. Since most of the fragments were found in and around the pool in Frigidarium III, Ine Jacobs and Lea Stirling have suggested that Frigidarium III may have been used to store complete statues or statue fragments before they

[474] Waelkens 2013, 62.

were taken to the lime kilns.[475] Jacobs and Stirling point out that aside from the two Aphrodites and the two youths that had fallen from their pedestals and had clearly been displayed in that room, not all the fragments of the other statues were found. They also point out that other rooms of the Bath-Gymnasium Complex would have seemed bare in comparison to Frigidarium III.

Aphrodite and nude male youths were among the most popular visual subjects in Roman baths. This was true for the early Roman Imperial period, and they continued to be popular, especially in bathing contexts, even in late antiquity.[476] In late antiquity, statues of Aphrodite and nude male youths were sometimes deliberately mutilated or destroyed, as they were in the Ephesus, Vedius Bath-Gymnasium Complex.[477] Christian discomfort with nudity is usually emphasized and blamed for the destruction of nude statues.[478] The Sagalassians must not have objected much to nudity in the context of the baths, since Apollo and both pairs of Aphrodite and Eros were kept on display until they were finally knocked off their pedestals when the building collapsed.

In some cases where statues of Aphrodite were mutilated or destroyed, her divinity, not her nudity, has been argued to have been the cause for offense.[479] At Aphrodisias, for example, she had been the premiere goddess / protectress of the city / patron divinity. In late antiquity, those honors and titles had to be detached from her because they conflicted with Christian theology. At Aphrodisias, they went so far as to rename the city Stauropolis, which means 'city

[475] Jacobs and Stirling 2017, 216.

[476] Bassett 1996, 501; Jacobs 2010, 293-94; Manderscheid 1981.

[477] See above in the Ephesus chapter, page 125.

[478] Dunbabin 1989, 7, 12; Jacobs 2010, 288; Remijsen 2015, 275-77; Smith 2012, 306-12.

[479] Smith 2012, 294-99, 318-21.

of the cross.' It was almost like a *damnatio memoriae* of the goddess: her temple was converted to a Christian church, her images were destroyed, and the most visible inscriptions bearing the old name of the city: Aphrodisias, which means 'city of Aphrodite,' were erased and re-carved with the city's new Christian name.[480] At Sagalassos, Aphrodite was not held in such esteem; she was not one of the main divinities that was ever worshipped there.[481]

The main divinities at Sagalassos during Hellenistic times included Poseidon, Zeus, Athena, Hermes, Heracles, and Ares.[482] These divinities were represented on the earliest bronze coins of the city, which were minted in the late first century B.C. They were also represented together on monuments located in some of the most important and visible areas of the city. Under Augustus, Apollo Klarios became the main divinity at Sagalassos, and that is why it is noteworthy that a statue of Apollo was kept on display in the Bath-Gymnasium Complex until the building collapsed in the early seventh century A.D.

Apollo Klarios was originally worshipped at Klaros, which was an important sanctuary and oracular site near Ephesus. Sagalassos' decision to build a temple to Apollo Klarios was probably motivated by the fact that Augustus promoted Apollo as his own patron divinity.[483] The decision to build a temple to Apollo Klarios was the city's way of honoring their new ruler in a way that would have been familiar to them: by establishing a thinly veiled ruler cult.[484]

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[480] Roueché 2007a, 187; Smith 2012, 300-03.

[481] If Aphrodite was worshipped at Sagalassos, there was probably a sacred shrine for her, probably near one of the springs, but not in a bath-gymnasium complex.

[482] Waelkens, Poblome, and De Rynck 2011, 41.

[483] Waelkens, Poblome, and De Rynck 2011, 72.

[484] Talloen and Waelkens, 2004, 171-72.

The cult of Apollo Klarios and the imperial cult were closely associated at Sagalassos from the time of Augustus, but under the Flavian dynasty the Temple of Apollo Klarios was restored and rededicated to the divine emperors and the *patris* in addition to Apollo Klarios.[485] The building inscription that commemorates the restoration and rededication of the Temple of Apollo Klarios to these entities also mentions that the patron of the restoration work was Titus Flavius Collega, and that he had paid for the work out of his own resources and from the 10,000 denarii that he was given while he served as the high priest of the imperial cult. The inscription made the connection between the cult of Apollo Klarios and the imperial cult more explicit. This is interesting because Apollo is displayed in the same area near the imperial statues in the Bath-Gymnasium Complex, and this may have been a visual cue for people to remember the connection between the imperial statues and the imperial cult. Modern viewers might expect that the city would have wanted to avoid such an association if moving the statues from their original location was intended to distance them from their previous religious significance.

In addition to the statue of Apollo that was recovered from the Bath-Gymnasium Complex, at least two other statues of Apollo have been found at Sagalassos. One of them was a colossal, 4-meter-high, seated representation of the god (figs. 4.66 – 4.69). It occupied the central niche of the lower level of the Hadrianic Nymphaeum (figs. 4.70 – 4.74) and was probably based on the cult statue of Apollo Klarios that resided in the Temple of Apollo Klarios at Sagalassos.[486] The other one was a much smaller, approximately 0.6-meter-high, statuette of the god leaning on a support comprised of a laurel bush, a cithara, and an overturned hydria (fig. 4.75).

[485] Talloen and Waelkens 2004, 176; Waelkens, Poblome, and De Rynck 2011, 72.

[486] The cult statue of Apollo Klarios that resided in the Temple of Apollo Klarios at Sagalassos was probably, in turn, based on the cult statue of Apollo from Klaros. See Waelkens, Poblome, and De Rynck 2011, 109.

The Hadrianic Nymphaeum was located close to the Temple of Apollo Klarios. It was a two-story fountain that disguised the austere, highly visible south-west wall of the Odeon. The Hadrianic Nymphaeum was built on a slightly different axis than the Odeon to align with the city's main colonnaded street. Visitors would have seen its upper story as they entered the city and moved along the paved incline of the street towards the Lower Agora (figs. 4.76 and 4.77). The Hadrianic Nymphaeum was damaged by the early sixth century A.D. earthquake, but it was restored and redecorated with re-used statues from other locations within the city. The Apollo statue in the central niche on the lower level remained on display until it fell and smashed to pieces, probably during the earthquake in the early seventh century A.D. [487]

The much smaller Apollo was found on top of the pavement of the main north-south colonnaded street of Sagalassos, next to an overturned pedestal on which it had probably been displayed. Ine Jacobs and Lea Stirling suggest that it was part of a statuary group that had been set up along the side of the street in the late sixth century A.D.[488] They suggest that the statuette of Apollo, and the others that it was displayed with, probably came from a private collection, but the important point is that it was still available and considered appropriate for re-use in a public context, even at this late date. Jacobs and Stirling interpret the group as Apollo and the Muses, and they point out that the Hadrianic Nymphaeum tableau also probably represented Apollo and the Muses. They say that "Although Apollo had been one of the main deities of Sagalassos, the reasons for preserving his statue in the Hadrianic Nymphaeum and for reusing his statuette on

[487] Claeys et al. 2006, 275-76; Jacobs 2016, 107; Mägele et al. 2007, especially 281-82; Van Daele et al. 2006, 276; Waelkens, Poblome, and De Rynck 2011, 108-12; Waelkens 2015, 194. Lavan (2008, 207, 209) mentions game boards that were carved into the steps of the Hadrianic Nymphaeum; he suggests that some of them may have been carved in the fifth or sixth century A.D., which suggests that the fountain continued to be maintained and still functioned as a place of social recreation in late antiquity. See also Lavan 2015, 306, 326-28, 339, 341, 346.

[488] Jacobs and Stirling 2017.

the street are probably not local and need to be sought in his association with the muses and their communal reference to intellectual activities, education and culture."[489]

Although the Apollo statue from the Bath-Gymnasium Complex had not been moved in late antiquity, its physical context had changed. The room was no longer used for bathing, so the statue's connotation of good health -- the idea that it may have been a visual reminder that health could be achieved through cleanliness and bathing -- probably became less immediately relevant. Viewers probably continued to associate the Apollo statue with "intellectual activities, education and culture," which continued to be promoted in the new context, with the room being used as a banquet hall, but probably also for other activities which may have included: lectures, sermons, legal proceedings, musical performances, poetry recitals, meetings for professional associations or other groups, or other philanthropic pursuits or ceremonies.

Both other Apollo statues that survived were part of narrative scenes and that may be why they were not destroyed. They were not 'petitionable' in the way that R.R.R. Smith describes, and therefore, they posed no threat to Christians.[490] To make sure that the statues of Apollo were not dangerous, crosses were carved along the colonnaded street; and a cross was etched into the exact center of the front step of the Hadrianic Nymphaeum (fig. 4.74).[491] The Apollo statue from the Bath-Gymnasium Complex may also have been part of a group (a third representation of Apollo and the Muses?) Unfortunately, it is impossible to verify since any associated statues or reliefs probably ended up in the lime kilns.

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[489] Jacobs and Stirling 2017, 214.

[490] Smith 2012, 293-94.

[491] For the crosses inscribed along the street, see Lavan 2008, 207-09; For the cross pecked into the front step of the Hadrianic Nymphaeum, see Lavan 2015, 341, 343.

4.4.2 Overview of decisions regarding the transformation of the baths

The major renovations or transformations of the Sagalassos Bath-Gymnasium Complex align closely with known historical events, but a consideration of the specific choices that were made enables a more nuanced story about the city and its inhabitants to be brought to life.

The first major renovation of the Sagalassos Bath-Gymnasium Complex affected nearly all the rooms, yet it seems to have been motivated not by a natural catastrophe, as the later renovations were, but by another powerful catalyst: Christianity. Christianity had been declared the official religion of the Roman Empire in the early fourth century A.D., and by the late fourth century A.D., Theodosius I had issued laws, at first, only restricting, and a few years later, banning, pagan cult practices. The laws called for the closure of pagan temples and for the removal of statues that were venerated as religious objects, not only from temples, but from all public venues. On several occasions, it was made clear that pagan statues should not be destroyed. Similar laws may have been repeated because legislature was not always enforced, and the destruction of statues may have continued to be a problem.

Although the Marble Hall in the Sagalassos Bath-Gymnasium Complex was probably not a place where the emperors were ever worshipped, it still may have been too closely associated with pagan religious traditions to remain functioning as an illustrious venue for meetings and other important civic events after the late fourth century A.D. The city may have feared that the room would still be contaminated by its pagan past unless it was drastically transformed, and all memories of its previous function as a venue for ceremonies and feasts related to the imperial cult festival erased. The city was still in need of a place where they could host other large public ceremonies and feasts, and rather than constructing a new building for the purpose, they decided that the eastern part of the Bath-Gymnasium Complex -- the cruciform -- would be suitable.

The decision to claim the cruciform more permanently for non-bathing purposes may seem odd, especially when the city still clearly wanted two separate bathing circuits, as attested by the terrific amount of effort and financial resources that they expended to convert the central rooms. This solution probably appealed to them because it concentrated all bathing rooms in the western part of the building, but continued to keep them separate, possibly to preserve the custom of men and women having separate facilities, or to enable one of the circuits to be closed off for private parties or during winters when heating would have been more of a challenge. It also freed up a large part of the building (the cruciform) that was already well-suited for activities that the city wanted to use it for.

By moving the colossal imperial statues into the south arm of the cruciform, the city may have been trying to divest the statues of religious significance, while preserving other aspects of their symbolic significance. The city was still proud of its title 'friend and ally of the Romans,' and so displaying the statues in a new context - outside of a room that had previously been used for imperial cult celebrations - may have been a way to display their loyalty and call attention to the special status that the city had achieved (being a *neokoros*) in a manner that was acceptable to Christian sensibilities.

Interventions that did not change the functions of rooms, and that were made at the time of the major renovation around 400 A.D., were probably made so that the building would have a more unified and upgraded appearance. This seems to have been the case with interventions that were made in Caldarium I and Tepidarium I. The excavations confirmed that both rooms received new wall veneers and pilaster capitals. They did not change the functions of the rooms; they only improved the existing state of the building. The excavations also confirmed that some of the hypocaust pillars in Caldarium I and Tepidarium I had to be rebuilt. The hypocaust pillars

may have been damaged while some of the other changes at the core of the building were being made, or they simply may have needed to be repaired. The building was over two hundred years old before the first major renovation. Routine maintenance kept the baths in good working order, but it may have been time for more extensive repairs.

The alterations that were made to the Bath-Gymnasium Complex in the fifth century A.D., after the major renovation of circa 400 A.D. had already taken place, attest to other needs that the city was trying to satisfy. These alterations include the auditorium style seating that was installed in the eastern arm of the cruciform, the kitchen that replaced it, and the fertilizer collection site in the latrine.

The next time that multiple interventions were made to the building as part of a unified restoration effort was in the sixth century A.D. Although the immediate catalyst for the interventions was the earthquake of circa 518 A.D., multiple factors influenced the decisions. Many rooms were damaged by the earthquake, but not all of them were repaired.

Sagalassos was still prosperous during the sixth century A.D., as attested by renovations that were made in parts of the Bath-Gymnasium Complex, as well as in other buildings.[492] The nymphaea, streets, porticoes, and agoras of the city were also well maintained in the first half of the sixth century A.D. There were also some entirely new building projects. This suggests that it may not have been a lack of funds that prevented the city from repairing the entire building. Instead, the city may have preferred to focus on specific parts of the building because they thought that a total restoration would be unnecessary and/or unwise. Unnecessary because some

[492] Jacobs 2015, 166. According to Janssen et al. (2017, 594), the production of Sagalassos Red Slip Ware peaked again during the sixth century A.D., which is another indicator that the city's economy was thriving.

of the rooms may have become superfluous to the city's needs. Unwise because the damages may have been so severe that restoration expenses would have been over-burdensome.[493]

The rooms that were not repaired after the earthquake in the early sixth century A.D. include Caldarium I, Tepidarium I, Caldarium II, and Tepidarium II. Even with all four of these rooms in various states of disrepair, (Caldarium I and Tepidarium I had been left in shambles / entirely abandoned, and Caldarium II and Tepidarium II had been repurposed as service areas), bathing could continue elsewhere in the complex because there were other rooms that fulfilled the same functions. As a result of the earthquake, the Bath-Gymnasium Complex was left with only one fully functioning bathing circuit (circuit III), but by the sixth century A.D., that may have been enough.[494]

By the sixth century A.D. there were water shortages at Sagalassos.[495] The water shortages were not severe or life threatening, but they may have caused the Sagalassians to be more judicious about their water use. The earliest cistern that has been found at Sagalassos dates to the sixth century A.D. It confirms that Sagalassos was employing new approaches to ensure its water supply. The city's decision to leave at least four bathing rooms in a state of disrepair, or use them for other purposes, may have been a way of restricting or enforcing limits on water use.

The Sagalassians may also have been trying to reduce their use of fuel for the baths.

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[493] Some of the damaged rooms were on a hillslope. Engineers might have decided that the integrity of the ground was too compromised to rebuild without extensive new terracing operations or consolidation efforts. This would have added to the time and expense of the repairs.

[494] One fully functioning bathing circuit may even have been enough before the sixth century A.D. if not all the circuits were used at the same time (some may have been seasonal). The main difference was that the city had options about which circuit(s) to use while there were still multiple circuits available to them.

[495] Martens 2008; Jacobs and Richard 2012, 65-67; Jacobs and Waelkens 2013, 244; Similox-Tohon et al. 2006, 377.

A study that attempts to calculate wood consumption at Sagalassos during the second century A.D. focuses on the Roman Baths and pottery production.[496] The authors of the study argue that natural wood (as opposed to charcoal) was probably the main fuel source for the baths and for pottery production. According to the authors of the study, charcoal has the advantages of being lighter, easier to store, having a higher energy density, and producing less smoke, but the drawbacks to using charcoal are that it requires two to ten times more wood to reach the same energy content compared to using wood directly. Agricultural waste and dung were probably not the main sources of fuel for such large-scale endeavors because they were also valuable as fodder for livestock or as fertilizer for arable land. Firewood was assumed to have been the sole source of energy in the calculations presented in the study.

According to the study, at least 2,430 tons of wood were needed each year to supply the baths and pottery production centers of Sagalassos in the second century A.D. This would have been only a fraction of the total amount of wood that the city required. The study concludes that wood was being harvested at a rate that may have been difficult to sustain long-term.[497] No further studies have been conducted to show whether wood consumption changed dramatically between the second and sixth centuries A.D. Even if there was not a strain on wood fuel resources, as the palynological data suggests, the Sagalassians may have been inclined not to rebuild C I, T I, C II, and T II if it meant that they could save on fuel expenses.

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[496] Janssen et al. 2017.

[497] Janssen et al. 2017, 598: "[T]he community of Sagalassos was near the upper boundaries of sustainable use and was possibly stressing its territorial wood production potential during the second century CE. The palynological data, on the other hand, indicates that the forested area remained stable at around 20% until the 11th century CE, suggesting an intensive but non-depleting use over the longer term."

Another factor that probably weighed more heavily in the balance against restoring the bathing rooms that were destroyed by the early sixth century A.D. earthquake than either water or fuel provision concerns is that fewer people were bathing. Population decline was responsible in part, but bathing in public had also become less popular in late antiquity, as already discussed in the introduction. There are several indications that the city was less densely populated after the earthquake. Several places inside the city were abandoned and allowed to be used as dumps, whereas previously, great care had been taken to remove waste to the outskirts of the city.[498]

No inscriptions or other written sources record how many people were killed by the early sixth century A.D. earthquake at Sagalassos. However, given that the magnitude was enough to seriously damage or destroy most of the buildings and disrupt the water supply, and that the tear fault ran east-west just north of the city's center, it can reasonably be assumed that the death toll was steep.[499] Other factors that are frequently cited to explain population decline at Sagalassos beginning in the second half of the sixth century A.D. include: climate change (increasing aridity), the decline of long-distance trade, external military threats, brigandage, and recurring outbreaks of Justinianic Plague, beginning with the major outbreak in 541 and 542 A.D.[500]

Bathing circuit III may have been the least damaged by the early sixth century A.D. earthquake, but the city may have had other reasons as well for choosing to restore that circuit and not one of the others. Bathing circuit III had probably functioned as the main bathing circuit since the circa 400 A.D. renovation when it was created. It had the largest caldarium (C III), and

[498] After the earthquake in the early sixth century A.D., dumps were allowed to accumulate in the service areas and abandoned rooms of the Bath-Gymnasium Complex and in other places inside the city. For locations of dumps, see Jacobs 2015, 172-75. For more information about the extent and density of occupation, see Jacobs and Waelkens 2017, 176.

[499] For the tear fault, see Jacobs 2015, 175; Vanhaverbeke et al. 2004, 264.

[500] Vanhaverbeke et al. 2004, 263-68.

it could accommodate the most people. If the city had to choose which rooms to restore, it makes sense that they focused on the best rooms / the rooms that could accommodate the most people.

By the time the next earthquake struck in the early seventh century A.D., interest in repairing the building, and possibly the ability to repair it, was clearly not there. Parts of the building were already being used as dumps, and the statuary and building materials were already being disassembled and fed into the kilns. A widespread preference for private bathing may also have already taken hold.

Chapter 5: Conclusion

5.1 General Remarks

This dissertation has focused on the transformation and re-use of three of the most well-preserved and well-published bath-gymnasium complexes in western Asia Minor: the Sardis Bath-Gymnasium Complex, the Vedius Bath-Gymnasium Complex at Ephesus, and the Sagalassos Bath-Gymnasium Complex. By focusing on how and why these three buildings were transformed and used differently over time, especially during the fourth through seventh centuries A.D., I have been able to confirm that there were many similarities, but also instructive differences. Cities were responding to a variety of local needs and circumstances, and they found creative solutions to the various challenges they were facing, not least through the transformation and reuse of these buildings.

In this final chapter, I want to synthesize some of the separate strands of my research and reflect on some of the most interesting observations and results that have emerged from this project. I will organize my comments around four central ideas: first, that baths continued to be important places in late antiquity, despite the frequent and continued characterization of them as becoming socially irrelevant beginning in the fourth century A.D.; second, that although the bath blocks of these large buildings often continued to function into the fifth, sixth, and sometimes even the seventh century A.D., their palaestras often stopped being used for athletic pursuits in the fourth century A.D., which sometimes enabled them to be reused in interesting ways; third, that there is not an easy, one-size-fits-all explanation for why the bath-gymnasium complexes in this study -- and probably most bath-gymnasium complexes -- stopped being maintained and used, and that the ultimate closure, even of a single bath-gymnasium complex, often seems to have been the result of multiple underlying causes; and fourth, that the sculptural programs of all

three of the bath-gymnasium complexes in this study were carefully and meaningfully revised in late antiquity. I emphasize that the conclusions that I present here must be considered alongside the extensive and growing body of scholarship on baths and bathing culture, late antique urbanism, and reuse studies.

5.2 The continued importance of baths in late antiquity

There is a misconception that public baths, especially large bath-gymnasium complexes, started to become socially irrelevant beginning in the fourth century A.D. This misconception stems from a few interconnected realities: agonistic festivals were not being held with the same frequency as they had been during the second and third centuries A.D.; educational practices were changing and there was less emphasis on physical training, which meant that the palaestras of these large complexes were no longer in as much demand; and people may have been bathing less frequently, for several reasons.[501] One of the reasons had to do with where people were living. More people were moving to the countryside in late antiquity, so it was not realistic for them to travel into the city every day to bathe.[502] A visit to the bath would have become a special activity, reserved for special occasions or perhaps market days. People who were living in cities also may have begun to bathe less frequently, or at least less frequently in public baths. There is also the perpetuation of the scholarly bias that Christians objected to public baths and bathing, and that Christianity ultimately led to the downfall of public baths. Christian attitudes towards

[501] For agonistic festivals, see: Price, 1984; Newby 2005, Remijsen, 2015. For changing educational practices, see: Laes and Strubbe 2014. For the trend towards private bathing in late antiquity, see: Yegül 1995; Schoolman 2017; Maréchal 2020.

[502] For 'ruralization,' or the shift to the countryside in late antiquity, see: Niewöhner 2017, 3-4.

public baths and bathing were varied, but as this dissertation and other recent scholarship has begun to show, there is more evidence that they wanted to reform the practice than end it.[503]

All three of the bath-gymnasium complexes in this study continued to be used as baths beyond the fourth century A.D. The Vedius Bath-Gymnasium Complex stopped being used as a bath in the second half of the fifth century A.D., but Ephesus had multiple baths, some of which continued to be used later. The Sardis and Sagalassos Bath-Gymnasium Complexes may both have been used into the early seventh century A.D. It is significant that all three of the bath-gymnasium complexes in this study had major renovations after the fourth century A.D., which confirms that people still cared enough about them to reinvest in making them beautiful, safe, and functional. All three of the bath-gymnasium complexes in this study were renovated around 400 A.D. I was not aware of this similarity before I selected these buildings as case studies, but now it seems like a remarkable coincidence and perhaps indicative of a reinvestment in baths and bathing culture at the regional level.

5.3 Palaestras

While the bath blocks of bath-gymnasium complexes often continued to be maintained and used for their original purposes in the fifth and sixth centuries A.D., palaestras often stopped being used for athletic pursuits in the fourth century A.D. – and perhaps earlier in some cases -- due to changing educational practices and changing attitudes towards incorporating exercise into physical care routines.[504] That is why it became increasingly common for palaestras and/or their auxiliary rooms to be converted more permanently for other purposes. This was the case at all three of the bath-gymnasium complexes in this study. The palaestras in all of them were paved,

[503] Blid Kullberg, 2016.

[504] Steskal (2003a, 235-36) suggests that the palaestra in the Vedius Bath-Gymnasium Complex may have stopped being used for athletic purposes already by the third century A.D. See also Yegül 2010b, 547.

which would have made them unsuitable for athletic activities, but perhaps more suitable for the activities that they were used for – probably as multipurpose areas for walking and other light exercise, visiting with friends, listening to public speakers, and perhaps commerce.

Except for Sardis, there have been no other discoveries of bath-gymnasium complexes where the auxiliary rooms of the palaestra, or any other part of the building, were converted into a synagogue. However, there are parallel conversions where the auxiliary rooms of palaestras were converted into churches or for secular purposes that were no longer related to the function of the former palaestra, or where churches, shops, or houses were newly constructed on the former palaestra. The East Bath-Gymnasium Complex at Ephesus, for example, had a church built on its palaestra; and the palaestra and the Halls of Verulanus at the Harbor Bath-Gymnasium Complex, also at Ephesus, were built over with secondary structures, mainly houses, but also possibly a church.[505] The portico to the south of the palaestra in the Sagalassos Bath-Gymnasium Complex was subdivided into small rooms whose purposes are still unclear.[506]

5.4 Regarding the ultimate closures of these three bath-gymnasium complexes

While the immediate closure of a bath-gymnasium complex can sometimes be linked to a single, catastrophic event, multiple factors seem to have contributed to the decision to not rebuild. Some of the factors that seem to have affected all three of the buildings in this study include population decline, changes to the administrative and financial structures of the cities, rising maintenance and operation costs, and the construction and/or preference for new private bathing facilities. There may also have been complications with the cities' water supplies.

[505] Scherrer 1995, 17, n. 93.

[506] Van Beeuman and Yakar 2016, 89.

At Sardis, the earthquake and fire of 615/6 A.D. brought an immediate end to the Bath-Gymnasium Complex, as the building was never restored and used again as a bath. However, Sardis had demonstrated resilience many times before, including after the earthquake of 17 A.D., when the entire city was destroyed. The city could have given up then, but they rebuilt and made many improvements, for example, the extensive terracing of the lower city, the construction of the aqueduct, and eventually, the construction of the Bath-Gymnasium Complex. If the people living there after 615/6 A.D. still wanted a Bath-Gymnasium Complex, then they could have rehabilitated the building. The fact that they did not rehabilitate it suggests that it was not high on their list of priorities, or that for some reason, it was not possible at that historical moment. Perhaps they lacked sufficient funding for such an extensive undertaking. Unlike the situation in 17 A.D., there was no strong central authority that they could appeal to for relief, as the state of the Roman Empire (or Byzantine Empire, by then) was drastically different under Heraclius than it was under Tiberius; perhaps the people of Sardis were not using the baths enough to warrant rebuilding them, even if they could have afforded it; or perhaps they preferred to reuse the building to achieve another goal, such as the renovation of their main highway.[507] While the Bath-Gymnasium Complex was more of an amenity, the highway was a necessity, as Sardis could not have continued to be an important military or commercial center without it. There is also evidence that the water supply of Sardis was already under pressure by 615/6 A.D., as there was a greater reliance on private wells, especially in the second half of the sixth century A.D.[508] Perhaps the earthquake and fire of 615/6 A.D. exacerbated the situation, and made the prospect not only of rebuilding, but of being able to adequately supply the baths with water, an even more

[507] Foss 1972, 106; Yegül 1986, 16.

[508] Hanfmann and Waldbaum 1975, 26-28; Rautman 1995b, 81-82.

distant, and seemingly unattainable goal. Reusing the Bath-Gymnasium Complex for its building materials may have seemed like the best resolution to a local and immediately pressing problem.

The closure of the Vedius Bath-Gymnasium Complex at Ephesus does not seem to have been immediately linked to a catastrophic event. It also does not seem to have been due to water supply issues, as the continued use of other baths and the construction of new fountains and nymphaea suggests that water continued to be abundant at Ephesus in late antiquity. Also, it was not a situation where the city was relying on new sources of water that could not easily be attached to the Vedius Bath-Gymnasium Complex. The Aristion Aqueduct, the same aqueduct that had always supplied the Vedius Bath-Gymnasium Complex, continued to supply water to other parts of the city into the seventh century A.D. and perhaps later.[509] The city's decision to close the Vedius Bath-Gymnasium Complex seems to have been motivated, instead, by the fact that there were other baths still operating elsewhere in the city. Due to other civic expenses and priorities, for example, the construction of the fortification wall and multiple churches, and population decline, it may have become unjustifiable to continue to maintain and keep all, or several, of the city's large public baths open. The Vedius Bath-Gymnasium Complex may have been the most logical one to close, as it was further from the harbor than most of the other baths, and the harbor had become the epicenter of the city's commercial and religious life. If the decision about which bath-gymnasium complex to close was not based only on location, another factor may have been because the Vedius Bath-Gymnasium Complex had been the most closely associated with professional athletic training, since it was next to the stadium, and aside from the Harbor Bath-Gymnasium Complex, it had the largest palaestra.[510] As discussed elsewhere,

[509] Wiplinger 2011, 593, 595-98.

[510] Newby 2005, 230-46.

athletics had become less in demand, and less regularly practiced, personally and professionally, in late antiquity.

The Sagalassos Bath-Gymnasium Complex had been severely damaged by at least two major earthquakes, one in the early sixth century A.D. and one in the early seventh century A.D. After the earthquake in the early sixth century A.D., the city made extensive repairs to their Bath-Gymnasium Complex, but after the second major earthquake, one hundred years later, they seem to have lost the desire and/or ability to make repairs.[511] Beginning with the major renovation of circa 400 A.D., there had been a gradual relinquishing of space that had previously been used for bathing. The phase plans (appendix 3) seem to show an expansion of bathing space because the city had built an entirely new bathing circuit at the center of the complex, taking over rooms that had previously not been used for bathing, but it was more of a drastic reorganization since they simultaneously converted the largest cold water bathing room into a banquet hall or multipurpose public space. Although the Bath-Gymnasium Complex was equipped with three caldaria after the 400 A.D. renovation, not all of them would have been in operation at the same time; they were probably seasonal. The seasonal use of the rooms may have been planned from the beginning, or it may have been a consequence of the city's changing circumstances in late antiquity, for example, even if they could still afford to heat all the rooms, perhaps there was no need to heat them because fewer people were living there or wanting to bathe, or there may have been other demands on the city's fuel and water resources. Eventually, the city relinquished two of the bathing circuits after they had been severely damaged by the early sixth century A.D. earthquake, and focused all their efforts on maintaining the newest, and largest one, until it, too, was destroyed and not rebuilt after the early seventh century A.D.

[511] Jacobs and Waelkens 2017, 175-76; Waelkens 2019b, 25.

earthquake. It is unclear how acutely the closure of the Sagalassos Bath-Gymnasium Complex affected the day-to-day life of the city, as fewer people were living there after the later sixth century A.D. Many of the city's inhabitants may have suffered and died from the Justinianic Plague, while others moved to farms and villages. By the mid-seventh century A.D., Sagalassos may once again have been little more than a military outpost.[512]

5.5 Sculptural programs

The sculptural programs of all three of the bath-gymnasium complexes in this study were carefully and meaningfully revised in late antiquity. Some of the revisions may have been necessitated due to earthquake damage, but others seem to have been made due to changing tastes and circumstances. These are the types of revisions that are the most interesting because they allow brief glimpses into the minds of the people who used the buildings and made decisions about what to keep and what to change. They enable us to see how people's relationships to objects and concepts were changing. Through careful analysis, I have been able to confirm that the revisions do not seem to have been made according to a strict set of rules, but rather on a case-by-case basis. As a result, they exhibit a great range of diversity, creativity, and flexibility of thought.

In the Vedius Bath-Gymnasium Complex at Ephesus, the representation of nudity seems to have been a problem, but it does not seem to have been a problem in the Sardis or Sagalassos Bath-Gymnasium Complexes. In the Vedius Bath-Gyjnasium Complex, the pubic regions of all the surviving nude male statues were deliberately mutilated (five herms and two colossal river gods; the athletes were too fragmentary to tell) and nude female statues (at least three Aphrodites and a sphinx that was perhaps deliberately broken off from Athena's helmet) were removed from

[512] Waelkens 2011, 154-57; Jacobs 2015, 163-64.

display and used as construction material All the female statues that were kept on display in the Vedius Bath-Gymnasium Complex were modestly clothed.[513] In the Sardis Bath-Gymnasium Complex, at least one nude Aphrodite and multiple nude male statues, including gods, athletes, and satyrs, were kept on display, and none of them have deliberate breast or genital mutilations.[514] In the Sagalassos Bath-Gymnasium Complex, nude Aphrodites, nude male youths (Eros?), and at least one nude Apollo were kept on display.[515]

If one looked only at the sculptural program from the Vedius Bath-Gymnasium Complex, they might be left with the impression that late antique society did not approve of representations of nudity, or of nudity in general, and they could find several textual sources echoing that sentiment.[516] Early Christian moralists frequently cited nudity as one of the most problematic, immoral, loathsome aspects of bathing in public, and one of the many reasons that public baths should be reformed or avoided if they could not be reformed, but not everyone felt that way. Most people still went to public baths and as attested by the sculptural programs of the Sardis and Sagalassos Bath-Gymnasium Complexes, seem not to have objected to representations of nudity, at least not to the point where nude statues were mutilated or removed. In this study, I did not write about the sculptural programs of the other Ephesian baths, but even a cursory look through the catalogue of Ephesian sculptures by Maria Aurenhammer, for example, makes apparent that nudity was not censored in all parts of the city, and other baths at Ephesus kept

[513] For the sculptural program of the Vedius Bath-Gymnasium: Keil 1929a, col. 38-58; Manderscheid 1981, 88-91; Krinzinger 2005, 443; Newby 2005, 230-46; Steskal 2008b, 558; Steskal et al. 2008, 296; Auinger and Rathmayr 2007, 245; Auinger 2011, 75; Stirling 2012, 71.

[514] For the Aphrodite (S67.028:7493) from the Sardis Bath-Gymnasium Complex: Yegül 1986, 28; Hanfmann 1968, 29, fig. 22. For other nude figures: Hanfmann and Ramage 1978, cat. 75, 114, 117, 118, 120, 127.

[515] Jacobs and Stirling 2017, 216.

[516] Yegül 2010a, 201-06; Maréchal 2020, 68-70.

nude statues on display in late antiquity.[517] So, it is not that Ephesians, in general, were more sensitive to nudity or more observant of Christian morals than Sardians or Sagalassians. It was specifically the people in charge of making decisions about the Vedius Bath-Gymnasium Complex, or the people who used the Vedius Bath-Gymnasium Complex.

Just as nudity was sometimes censored or removed from the sculptural programs of bath-gymnasium complexes, representations of pagan divinities sometimes may also have been censored or removed. The Aphrodites from the Vedius Bath-Gymnasium Complex, for example, may have been removed because of the goddess' divinity, not because of her nudity, or at least not only because of her nudity. It is difficult to say for certain whether any representations of pagan divinities were removed from the bath-gymnasium complexes in this study due to their divinity because none are as obvious as, for example, the effacement of representations of Aphrodite from the Sebasteion reliefs at Aphrodisias, where the panels are preserved, but there are obvious spots where the goddess is missing.[518] For example, there is no evidence that Artemis was ever represented in the statuary programs of either the Sardis Bath-Gymnasium Complex or the Vedius Bath-Gymnasium Complex, although according to the dedicatory inscriptions of the buildings, both were dedicated to her, along with other honorands.[519] If she ever was represented, perhaps it is not surprising that she has not survived, as she was the most powerful deity of the respective cities (Artemis of Sardis and Artemis of Ephesus) since

[517] Aurenhammer 1990. See also Newby 2005, 230-46; Auinger 2011.

[518] Smith 2012.

[519] Whereas the Vedius Bath-Gymnasium Complex was dedicated explicitly to Artemis (*IvE* 438), the Sardis Bath-Gymnasium Complex was dedicated to 'the gods of our fathers,' (Petzl 2019, cat. 419) and Artemis was among the most important divinities in that category.

Hellenistic times and through the early Roman Imperial period, and therefore may have been too dangerous and too conflicting with new Christian ideals to keep on display.

Not all representations of pagan divinities were considered dangerous and removed from bath-gymnasium complexes. In fact, most of them seem to have been kept on display. This is probably because they were not cult objects but fit more easily in the category of decorations. That is not to say that they were *only* decorations, since some of them may also have had other purposes, such as the Children of Kore group in the Sardis Bath-Gymnasium Complex, which may have been offered as a prayer for the continued well-being and prosperity of the city.[520]

Some representations of pagan divinities may have been associated with new meanings or viewers may have ignored parts of the statues' pagan meanings in late antiquity. Rather than always leaving a physical mark, in some cases, revisions may have been in the minds of viewers. At Sagalassos, for example, a statue of Apollo was kept on display in the Bath-Gymnasium Complex. Apollo had been the main pagan divinity at Sagalassos since the time of Augustus, so one might expect that statues of the divinity might have been removed after the city had been thoroughly Christianized. However, that was not the case. Statues of Apollo were kept in prominent locations throughout the city, including in the Bath-Gymnasium Complex. Viewers may have reinterpreted -- or recast -- Apollo as Christ, or perhaps they chose to ignore Apollo's divinity and recognize him only as a personification of health, law, education, art, or other philanthropic pursuits.[521]

Similarly, representations of Dionysos and his merry followers were kept on display in the Sardis Bath-Gymnasium Complex, and other gods or demigods, including Asklepios,

[520] De Hoz 2016, 188.

[521] Jacobs and Stirling 2017, 214; Matthews 1993.

Hygeia, Athena, Hercules, Hermes, and river gods were kept on display in the Vedius Bath-Gymnasium Complex at Ephesus. Representations of divinities may also have served as visual reminders of the types of activities that people participated in at bath-gymnasium complexes, or as allusions to place. Pagan divinities and other mythological subjects had become an important part of secular life and culture, and for this reason, and in this neutralized way, they continued to be accepted and kept on display in late antiquity. Imperial portrait statues are a category of their own because even if they were not cult objects, they still seem to have held a quasi-divine status.

Some revisions to the sculptural programs may have been necessitated due to rooms being physically modified or used differently. For example, at Sardis, the removal of statues from the apses in the Marble Court may have been necessitated by the creation of the passages into the frigidarium and the entrance halls, or at Sagalassos, the colossal imperial portrait statues may have been removed from the Marble Hall so that the Marble Hall could be converted into a caldarium. Some revisions also attest to the redistribution of the city's resources. Whether the colossal imperial portrait statues at Sagalassos were from the Marble Hall of the Bath-Gymnasium Complex, the Imperial Cult Temple, or somewhere else in the city, the fact that they were kept and moved to the cruciform of the Bath-Gymnasium Complex demonstrates that the city was conscientiously trying to manage its resources with care and purpose. Perhaps by moving the statues, the people of Sagalassos were cleansing them of any lingering cultic significance, while simultaneously enhancing the visual effect of the cruciform by imbuing it, through their installation, with a sense of formality, majesty, and political authority that was appropriate for the new use(s) of the room.

5.6 Directions for Future Research

This dissertation would not have been possible without the excavations and publications of the buildings that formed my case studies. That type of labor-intensive, detailed work is crucial to furthering our collective understanding of bath-gymnasium complexes, and of course, there is still much more that could be done. However, it is also true that excavations and publications can be expensive and time consuming, and there are other research agendas that must be considered. For that reason, I advocate for more targeted excavations or surveys that could be designed to answer immediately pressing questions. A re-evaluation of previously excavated buildings through close re-readings of existing studies, especially older publications, and unpublished excavation reports and field notebooks, could also be helpful. The information that is already available has excellent potential to be utilized in new and creative ways.

Scholarship also still focuses on the heyday of bath-gymnasium complexes in the second and third centuries A.D., so there is a critical need to balance the discussion by focusing on the later history of these buildings. Focusing on the chronology of when specific changes were made would be particularly useful, as there is still a lot of ambiguity and uncertainty in the timelines of individual buildings. There also should be more research into the impact of Christianity on baths and bathing culture, as Christianity is frequently blamed for the ultimate closures of public baths, despite strong evidence that Christians wanted to reform public bathing practices, not end them. This may be a case where a greater reliance on archaeological evidence rather than literature, which has traditionally been used to shed light on this topic, could be beneficial.

Personally, I would like to take this research further by looking at the continuation of the bathing tradition. Bathing did not end abruptly with the closure of these large facilities. Even in the transformations of these large facilities, it is possible to see the emergence of something new:

a preference for smaller spaces that could be more private and less expensive to maintain. I think it would be useful to explore how similar, or how different, later Christian baths or early Islamic hammams were to these earlier buildings. What did the inheritors of this rich bathing tradition keep? What did they change? How were new constructions influenced by the negotiations or experiments of these transitional, re-purposed Bath-Gymnasium Complexes?

Appendix 1: Timeline and Phase Plans of the Sardis Bath-Gymnasium Complex

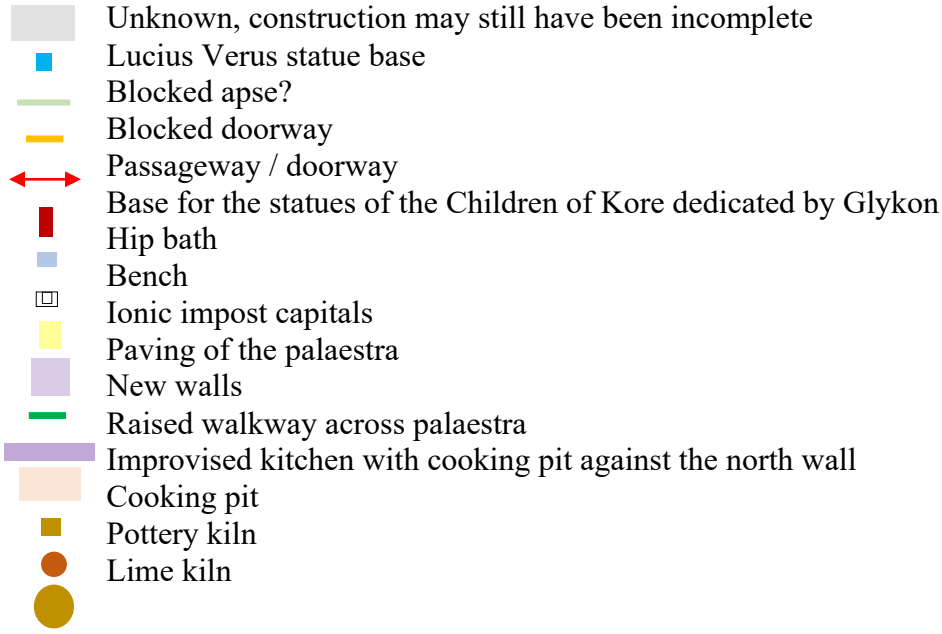
17 A.D.	Earthquake
Mid to late 1st century A.D.	Terracing operations in preparation for the construction of the Bath-Gymnasium Complex. Construction of the Bath-Gymnasium Complex begins from west to east.
Phase 1 Mid 2nd century A.D.	The construction of the bath-block is mostly complete - and perhaps in use - by the mid second century A.D., as indicated by the Lucius Verus statue base that was found *in situ* in Room BSH (Petzl 2019, cat. 378), but the palaestra and the rooms to the north and south of the palaestra may still be unfinished. Seager 1972, stage 1.
Phase 2 Early 3rd c. A.D.	The construction of the Bath-Gymnasium Complex is complete, or mostly complete, as indicated by the inscription from the Marble Court that dedicates the building, or part of the building, and all its decoration to the Roman Emperors Caracalla and Geta, and their mother, Julia Domna, and a host of other honorary recipients (Petzl 2019, cat. 419). The inscription can be precisely dated to 211/2 A.D. The Marble Court, which originally had only three large apses that were presumably filled with statues, or intended to be filled with statues, has been further embellished with a highly decorative, two-story, marble, aedicular façade. Additional statues would have been commissioned to fill the aediculae. The north and south apses may have been sealed off at this time to create a flat wall behind the aedicular façade. Work on the palaestra is underway. Some of the Corinthian capitals from the peristyle date to the early 3rd century A.D. A statue of Caracalla is installed somewhere in the complex, as indicated by the statue base found in the pool of Room BE-H (Petzl 2019, cat. 389). Seager 1972, stage 1: The rooms to the north and south of the palaestra may not be complete, but their foundations exist.

Phase 3 Late 3rd / early 4th c. A.D.	Seager 1972, stage 2: apse, law court?
Phase 4 Late 4th / early 5th c. A.D.	The long south wall of Rooms BE-A and BE-B seems to have been entirely reconstructed. An external doorway was newly built, or rebuilt, between Shop E3 and Room BE-B, and a new external doorway was created in the south wall of Room BE-A perhaps at the same time or slightly later. First major renovation of ornament in the bath-block. • Simplicius inscription in the Marble Court (Petzl 2019, cat. 423). • Creation of a passage through the west apse of the Marble Court, which also would have entailed moving whatever statue or statue group was originally displayed there. The passages through the north and south apses may have been created at the same time, or perhaps later. • New floors: BE-A plus entranceway between Shops W1 and E1, BE-B, BE-C, BE-S (mosaics); MC, BE-N, BE-E (also mosaic, or *opus sectile?*) • The Children of Kore statue group may have been moved to the location in which it was found, against the north wall in the central bay of Room BE-C (Petzl 2019, cat. 447). • Rededication of the fountain by Basiliskos? According to Petzl (2019, cat. 428) the inscription on the fountain base cannot be dated closer than between the fourth through sixth centuries A.D., so it could belong to a later phase. Some of the fountains that originally occupied the niches in Room BE-H may have been replaced by hip baths or benches starting in the fourth century A.D. This may be indicative of water supply issues. The long hall to the south of the palaestra was converted into a Synagogue and all points of access from the Bath-Gymnasium Complex were blocked, so that the Synagogue became a totally independent unit. (Seager's stage 3) Paving of the palaestra? This could also belong to a later phase. Outside, but in the immediate environs of the Bath-Gymnasium Complex: • The shops along the south exterior wall of the Bath-Gymnasium Complex were either newly constructed or renovated. • Construction or renovation of the tetrapylon at the south-east corner of the Bath-Gymnasium Complex. • Marble Road Colonnade rebuilt with spolia.

	• Construction or renovation of the portico along the east side of the Bath-Gymnasium Complex (colonnade? mosaics?). • Construction of the West Road and West Road Latrines.
Phase 5 Second half of 5th century A.D.	• Ionic impost capitals installed in the peristyle of the palaestra? • LNH: remodeled? • External doorway in Room BE-B blocked?
Phase 6 Between circa 500 and 615/6 A.D.	The Podium/Memnonius Inscription in the Marble Court, which Petzl (2019, cat. 429) dates to circa 570 A.D., mentions the refurbishment of wall cladding and floors, and the gilding of the ceiling(s). The extent of these renovations is uncertain, but they probably affected multiple rooms, and possibly also the palaestra. It is impossible to tell which specific alterations were part of Memnonius' renovation, and which ones may have been separate, but around the same time. For that reason, I am not saying that all the following changes were around 570 A.D., but instead, I am placing all of them in the broader spectrum between circa 500 and 615/6 A.D. • MC: new *opus sectile* floor? *topos* inscriptions (Petzl 2019, cat. 576), blocking of the screen colonnade, gilding? Creation of the passages in the north and south apses? • BE-N: new *opus sectile* floor? Blocking of screen colonnade • BE-S: marble floor, blocking of screen colonnade • BE-A: eastern part of room converted into a kitchen? • Palaestra: walkways, or ceremonial access ways, from the East Gate to the Marble Court, and from the mid-points of PA-N to PA-S are installed on top of the marble paving of the former palaestra. • PA-W and PA-E: segments repaved with marble slabs. • E Gate: blocking of two northern doorways? Synagogue: Seager 1972, stage 4?
Phase 7 After 615/6 A.D. and before circa 700 A.D.	The fire and earthquake of 615/6 A.D. cause severe damages to the Bath-Gymnasium Complex, and the building stops being used as a bath at that time and is repurposed for industrial pursuits. • The construction and use of the large lime kiln in BE-C is dated to shortly after 641 A.D. by two coins of Constans II. • BE-N: Lime burning. • BE-S used for storing marble architectural fragments before burning them or transporting them for reuse.

	• BE-A used for cooking and metalworking • The blocked doorway in the south wall of BE-B is unblocked to facilitate access between the Marble Road and the lime kiln in BE-C. • Creation of a crude passage between the Synagogue and BE-B. • Stripping of materials from probably all rooms, the palaestra, possibly the shops, and the Synagogue. • LNH 1: Pottery kilns.

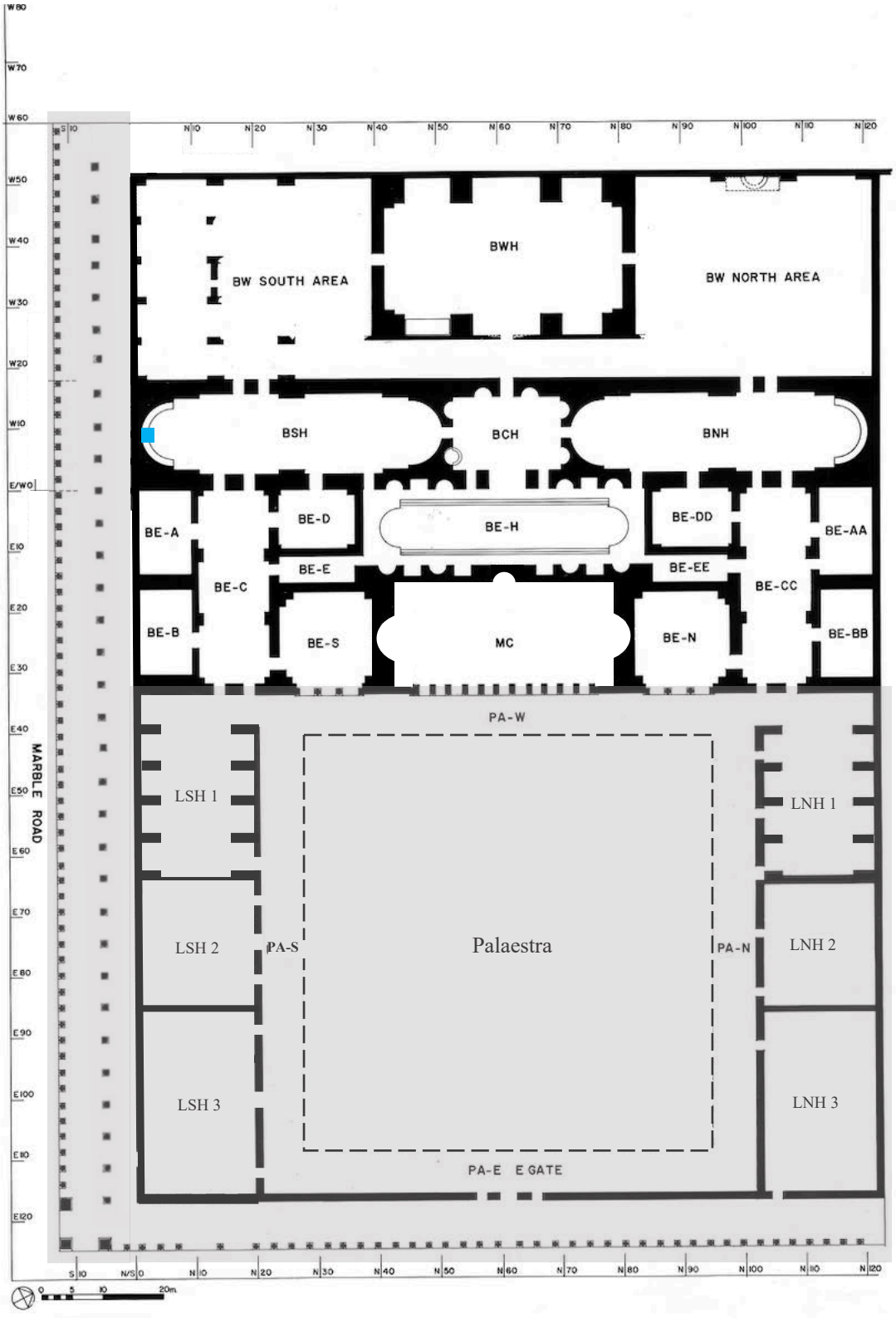
Key for the Sardis Bath-Gymnasium Complex phase plans



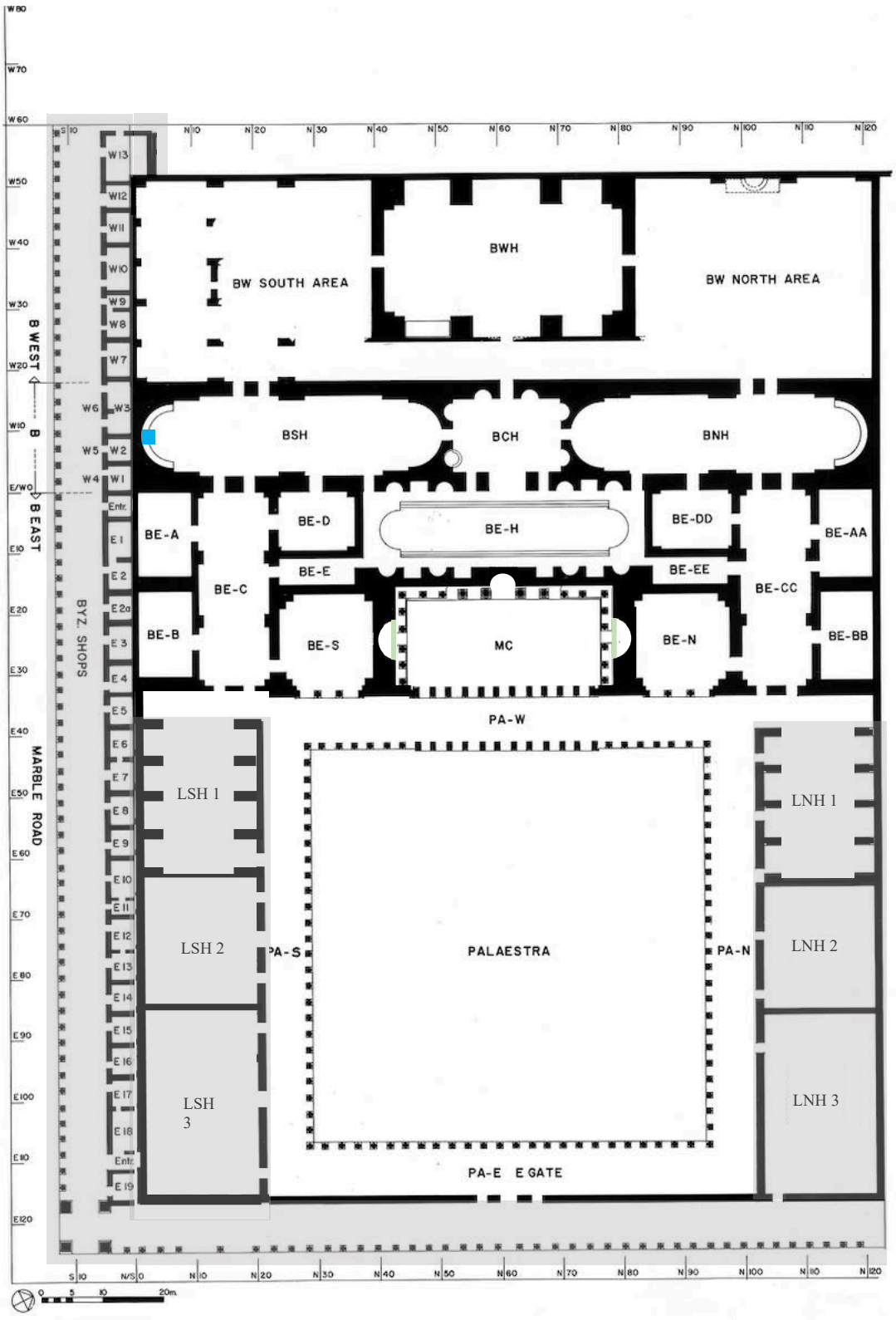
Identifications of Rooms in the Sardis Bath-Gymnasium Complex

E Gate	E Gate / Main Entrance
Palaestra	Palaestra (area for physical training)
PA-E, PA-W, PA-N, PA, S	Palaestra ambulatories identified by cardinal directions
LSH 1, 2, 3	Long South Hall, units 1, 2, 3
LNH 1, 2, 3	Long North Hall, units 1, 2, 3
SYN	Synagogue (main hall and forecourt)
MC	Marble Court
BE-H	Frigidarium
BE-S / BE-N	Entrance Halls to the bath block (south and north)
BE-A / BE-AA	Apodyteria (?)
BE-B / BE-BB	Apodyteria (?)
BE-C / BE-CC	Main connective spaces
BE-D / BE-DD	?
BE-E / BE-EE	Corridor and Stairwell
BCH	Probably a frigidarium or tepidarium based on analogy with the Vedius Bath-Gymnasium
BSH / BNH	?
BWH	Main Caldarium
BW South Area and BW North Area	Probably caldaria or tepidaria, based on analogy with the Vedius Bath-Gymnasium at Ephesus

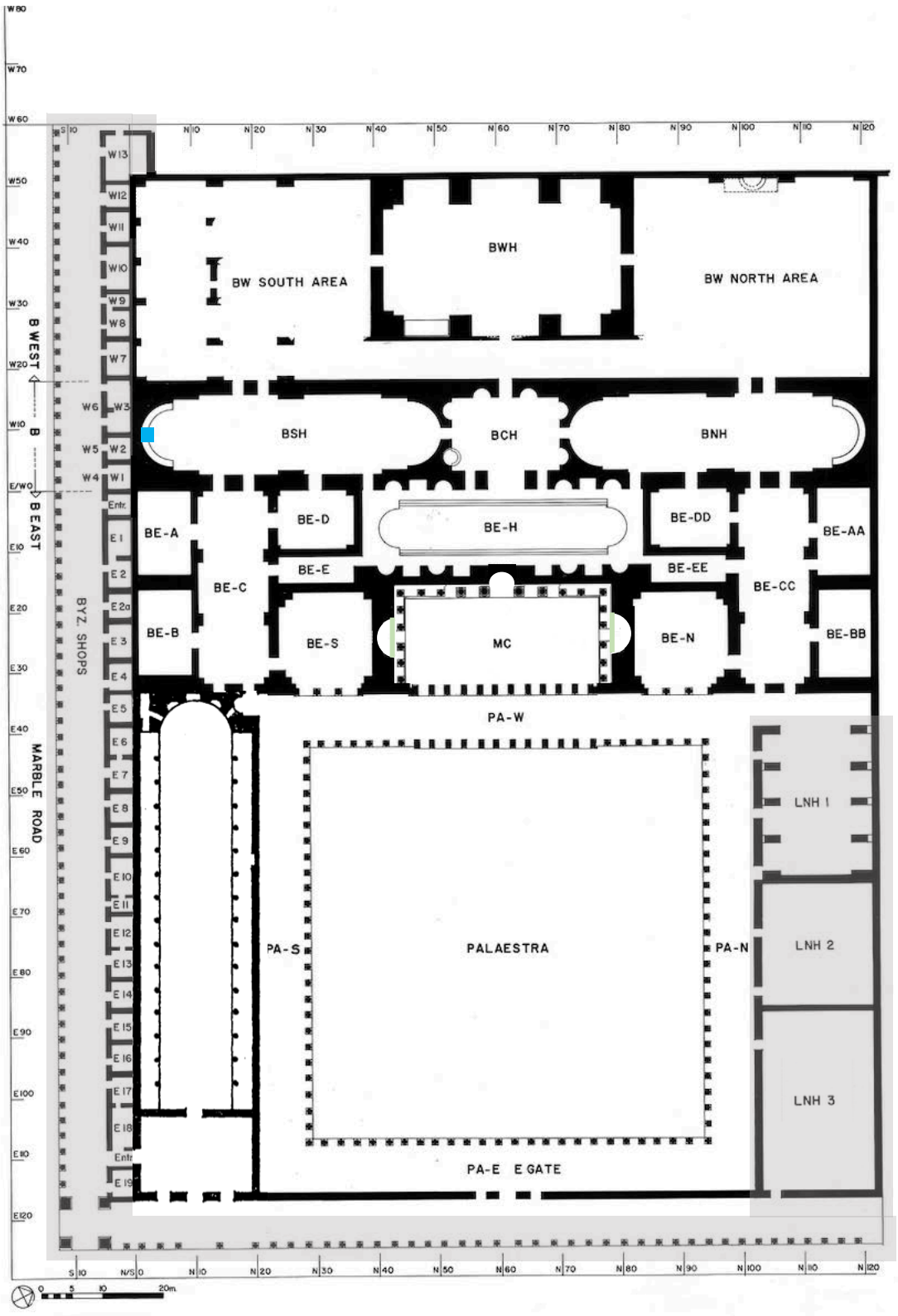
Phase 1: Sardis Bath-Gymnasium Complex circa 160 A.D.



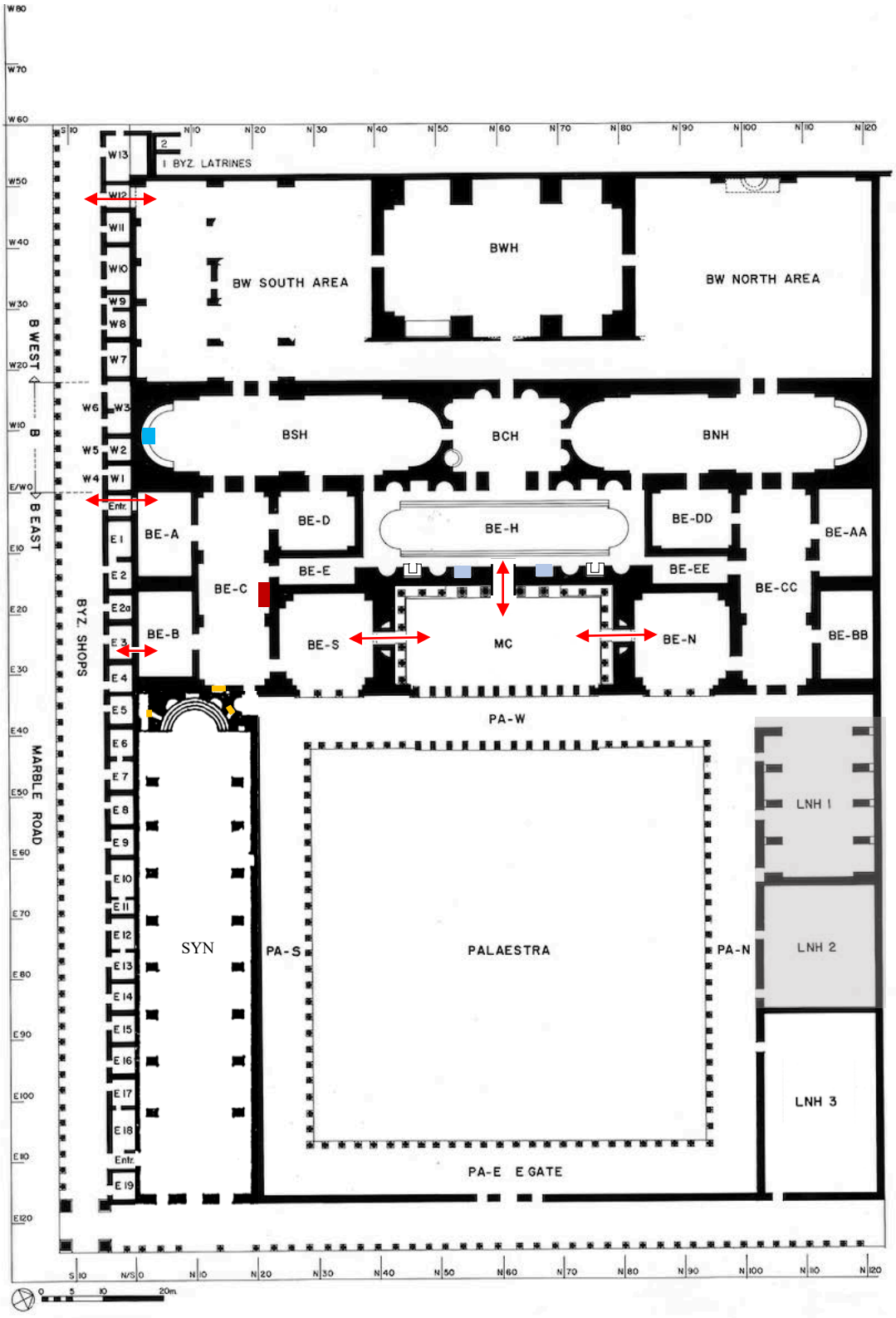
Phase 2: Sardis Bath-Gymnasium Complex circa 211/2 A.D.



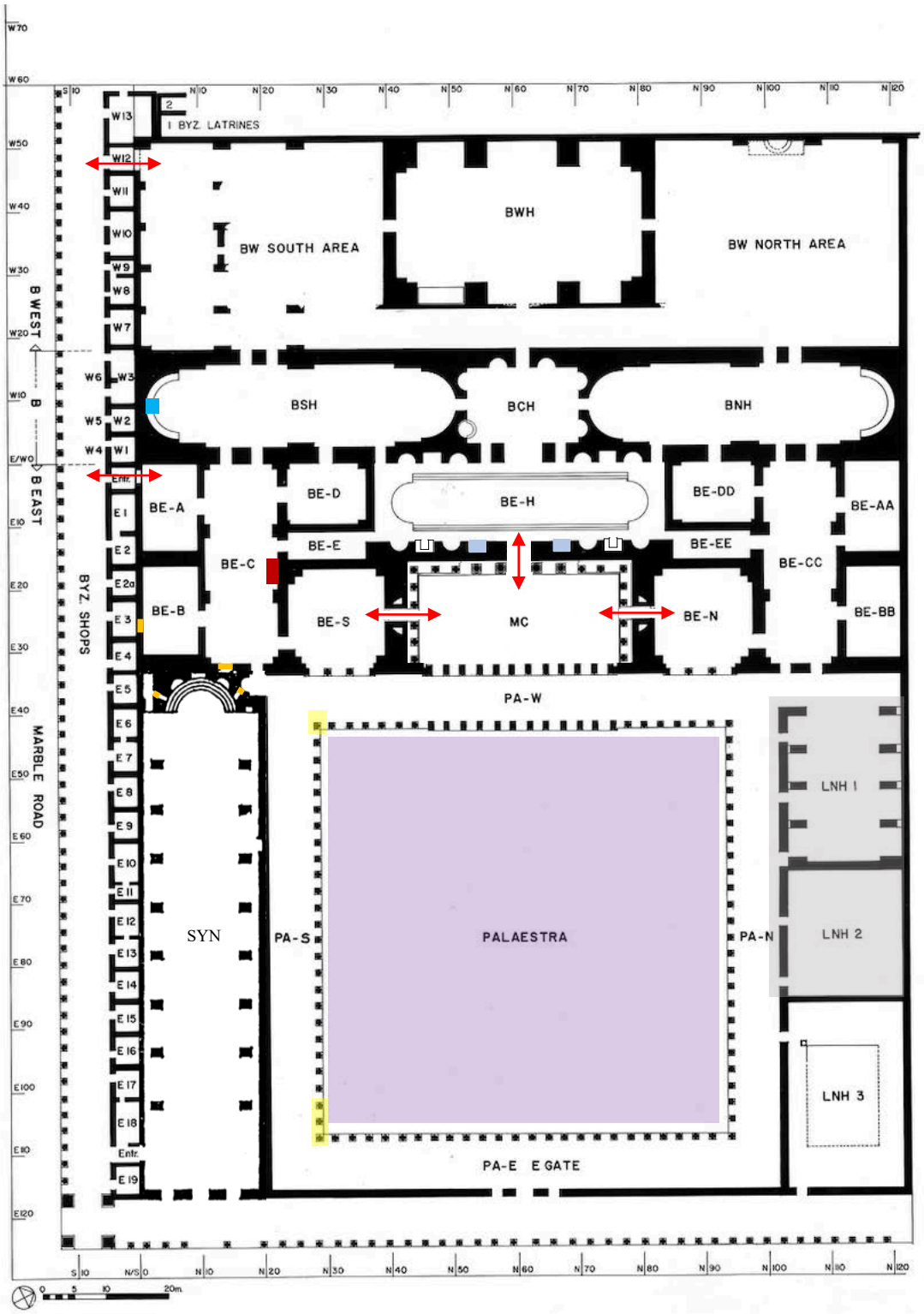
Phase 3: Sardis Bath-Gymnasium Complex in the late third / early fourth century



Phase 4: Sardis Bath-Gymnasium Complex circa 400 A.D. (late 4th / early 5th century

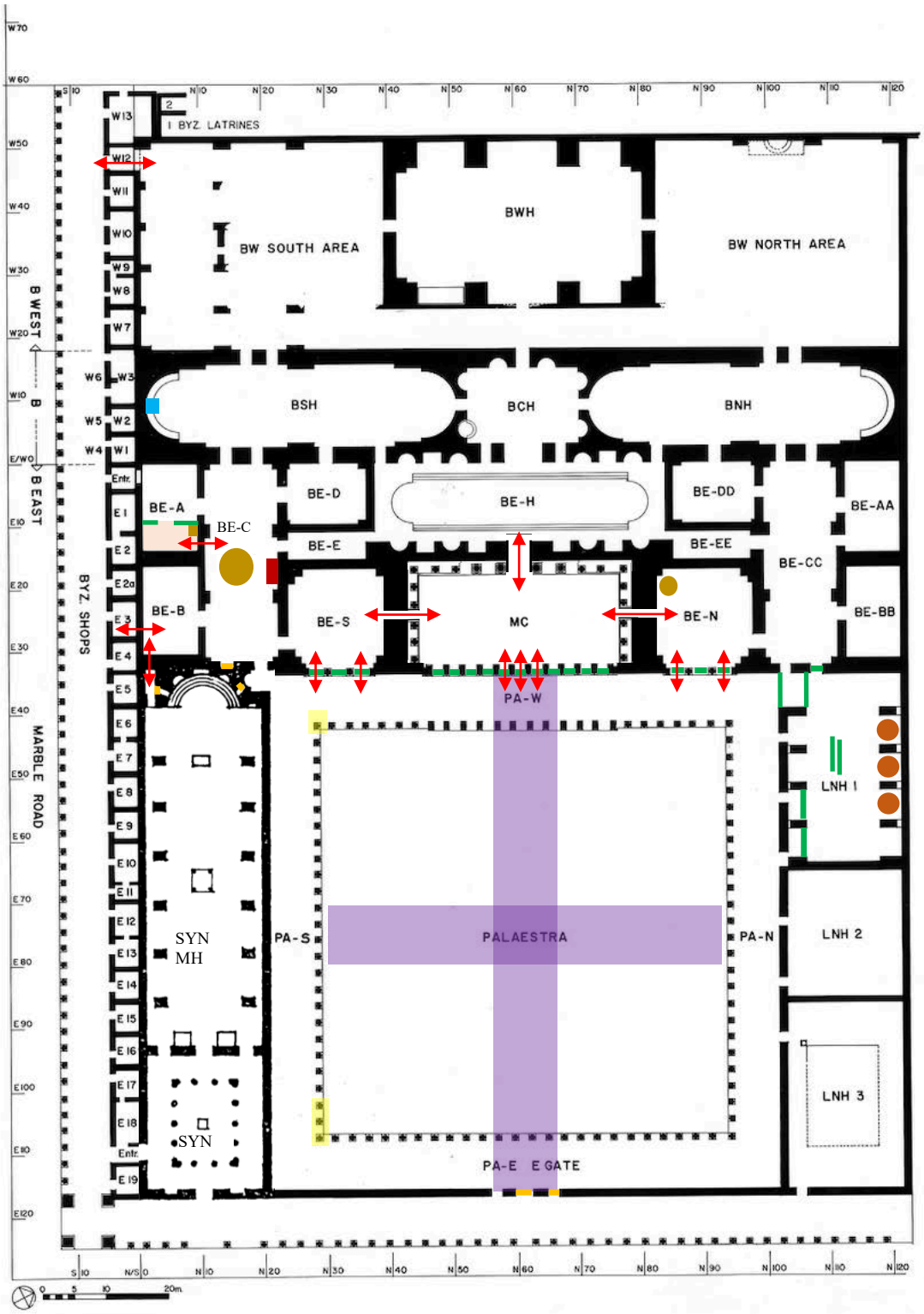


Phase 5: Sardis Bath-Gymnasium Complex in the second half of the fifth century A.D. (between 450 and 500 A.D.)



Phase 6: Sardis Bath-Gymnasium Complex in the sixth and early seventh century A.D. (between 500 and 616 A.D.)

Phase 7: Sardis Bath-Gymnasium Complex after 615/6 A.D. and before circa 700 A.D.



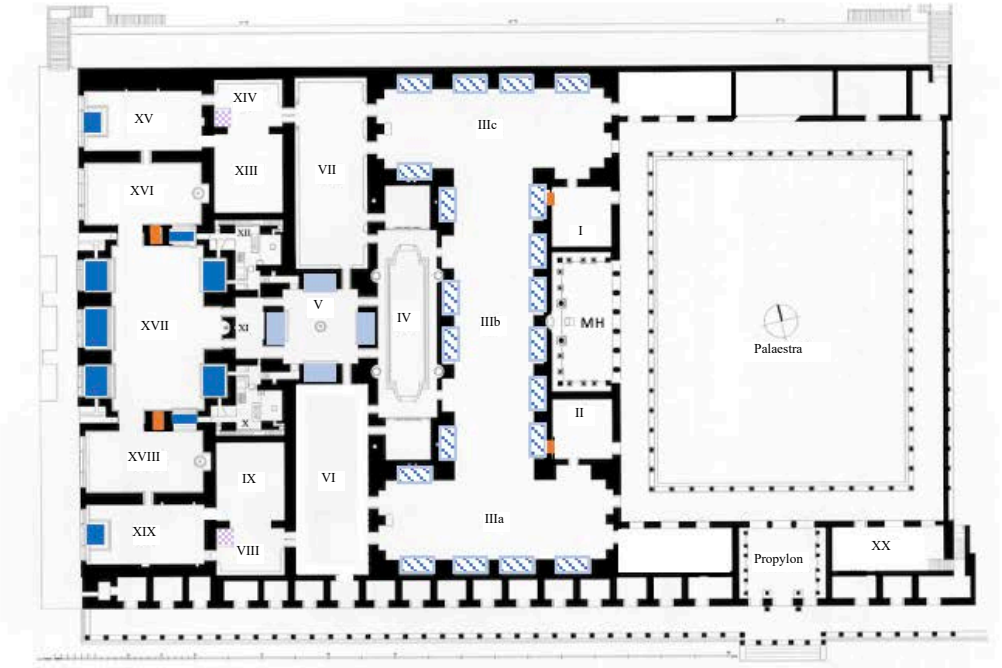
Appendix 2: Timeline and Phase Plans for the Ephesus, Vedius Bath-Gymnasium Complex

Phase 1 Mid 2nd century A.D.	The Vedius Bath-Gymnasium Complex is dedicated to Antoninus Pius between 147 and 149 A.D., which suggests that the construction of the building is complete, or nearly complete, by then. (*IvE* 431 and 438).
Phase 2 Early and potentially early changes to the Vedius Bath-Gymnasium Complex Between circa 150 and 400 A.D.	The room at the southwest corner of the palaestra is converted into Latrine 2. All three of the doorways in the north wall of the room are blocked so that a continuous seating bank can be installed against the wall. Latrine 2 can be accessed from Room IIIa and from the street. The room at the northwest corner of the palaestra was subdivided to create Rooms XXI and XXII. This entailed the blocking of what had previously been the central doorway in the south wall of the room. A small room was created in the western side of Room XX, at the southeast corner of the palaestra. New water supply and drainage features may have been installed. This may have necessitated new floors in some rooms.
Phase 3 Major renovation in the first quarter of the 5th century A.D.	The doorway between Latrine 2 and Room IIIa is blocked. The doorway between Room IIIc and the palaestra is blocked. The doorways between Rooms XIX and IX in the south, and between Rooms XV and XIII in the north are blocked. The western alveus in Room V is re-oriented to be part of Room XI and provisions are made in the substructures to heat it.

	New water pipes are installed, necessitating the installation of new floors in some rooms, for example, Rooms VIII and IX. Some of the fountains in Room IIIb are replaced by benches. New mosaics are installed in the ambulatories of the palaestra. The statuary program is revised. The floor in the Marble Hall is repaired using statue fragments as fill. The intercolumniations in the Marble Hall screen colonnade are blocked.
Phase 4 After the last heating of the baths in the second half of the 5th century A.D.	The natatio in Room IV is deliberately filled in. Systematic dismantling of the building so the marble can be re-used or burnt for lime. Trash begins to accumulate in the main sewer, indicating that the sewer and the latrines are no longer properly maintained. The Propylon is used as a storage area for sculptures and architectural materials. A fire causes extensive damage to the building in the first half of the 6th century A.D. The roofs collapse in the second half of the 6th century A.D. After the collapse of the roofs in Room IIIb, a secondary structure (possibly a house) is built in one of the bays. Removal of fill in the blocked doorway between Room II and Room IIIb. A long rectangular structure (a warehouse?) is built on the south side of the palaestra.

	Waterproof *opus signinum* is spread on top of the floors of the burnt-out rooms to the north of the palaestra, and re-used terracotta tiles are used to construct a roof on the floor of one of the rooms. Presumably, these efforts were to protect the rooms in the basement from water leaking through. A crude window or robber's hole is made to the north of the doorway between Room II and Room IIIb. Some of the rooms in the basement continue to be used, and stone robbing continues.

Phase 1: Original Organization of Rooms in the Vedius Bath-Gymnasium Complex

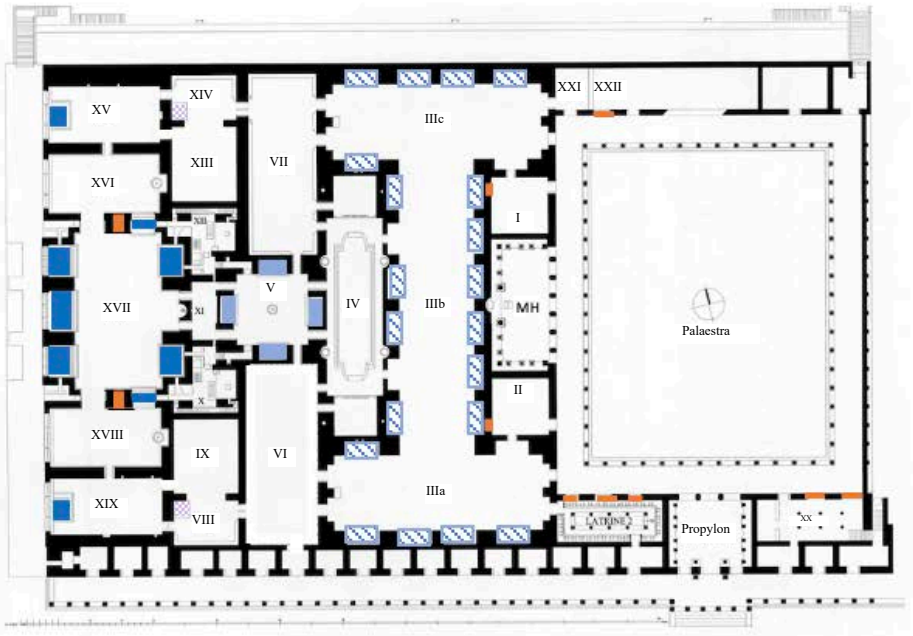


Identifications of rooms in the bath-block

MH	Marble Hall
I	Room next to the Marble Hall (not excavated)
II	Room next to the Marble Hall
IIIa-c	Basilica Thermarum
IV	Frigidarium with Natatio
V	Frigidarium, central room
VI	South Apodyterium
VII	North Apodyterium (not excavated)
VIII-IX	Destrictarium/Unctorium
X	South service area
XI	Heat lock corridor / Tepidarium
XII	North service area (not excavated)
XIII-XIV	Destrictarium/Unctorium (not excavated)
XV	Tepidarium
XVI	Caldarium, northern room
XVII	Caldarium, main room
XVIII	Caldarium, southern room
XIX	Tepidarium

Alveus (bathtub for hot water bathing)
Alveus (bathtub for cold water bathing)
Alveus (catch-basin for fountain)
Pediluvium (footbath)
Blocked doorway

Phase 2: Early and Potentially Early Changes to the Vedius Bath-Gymnasium Complex

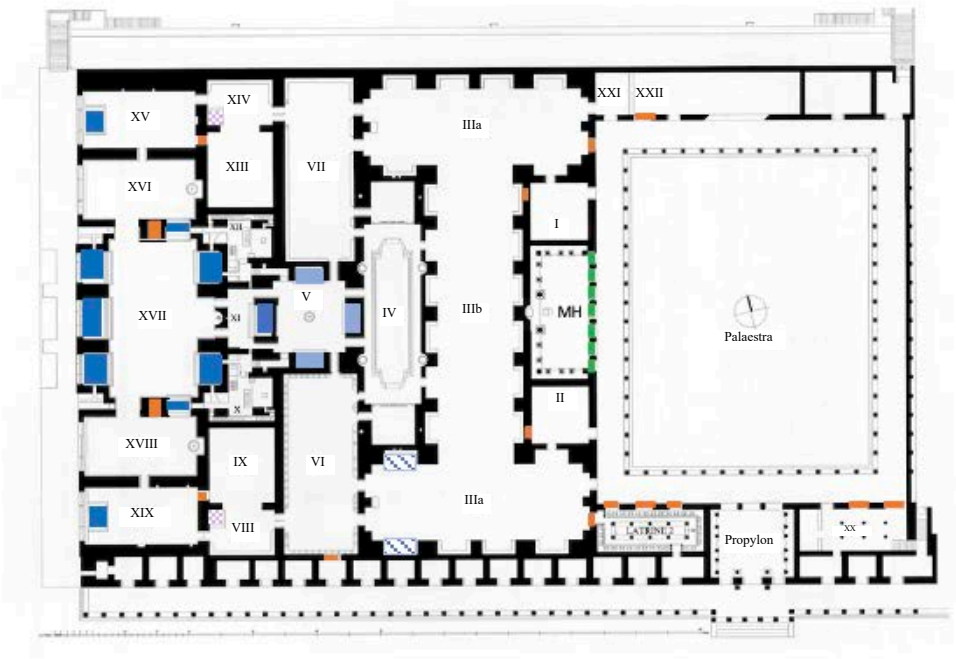


Identifications of rooms in the bath-block

MH	Marble Hall
I	Room next to the Marble Hall (not excavated)
II	Room next to the Marble Hall
IIIa-c	Basilica Thermarum
IV	Frigidarium with Natatio
V	Frigidarium, central room
VI	South Apodyterium
VII	North Apodyterium (not excavated)
VIII-IX	Destrictarium/Unctorium
X	South service area
XI	Heat lock corridor / Tepidarium
XII	North service area (not excavated)
XIII-XIV	Destrictarium/Unctorium (not excavated)
XV	Tepidarium
XVI	Caldarium, northern room
XVII	Caldarium, main room
XVIII	Caldarium, southern room
XIX	Tepidarium

- Alveus (bathtub for hot water bathing)
- Alveus (bathtub for cold water bathing)
- Alveus (catch-basin for fountain)
- Pediluvium (footbath)
- Blocked doorway

Phase 3: Vedius Bath-Gymnasium Complex after the first quarter of the 5th century A.D.



Identifications of rooms in the bath-block

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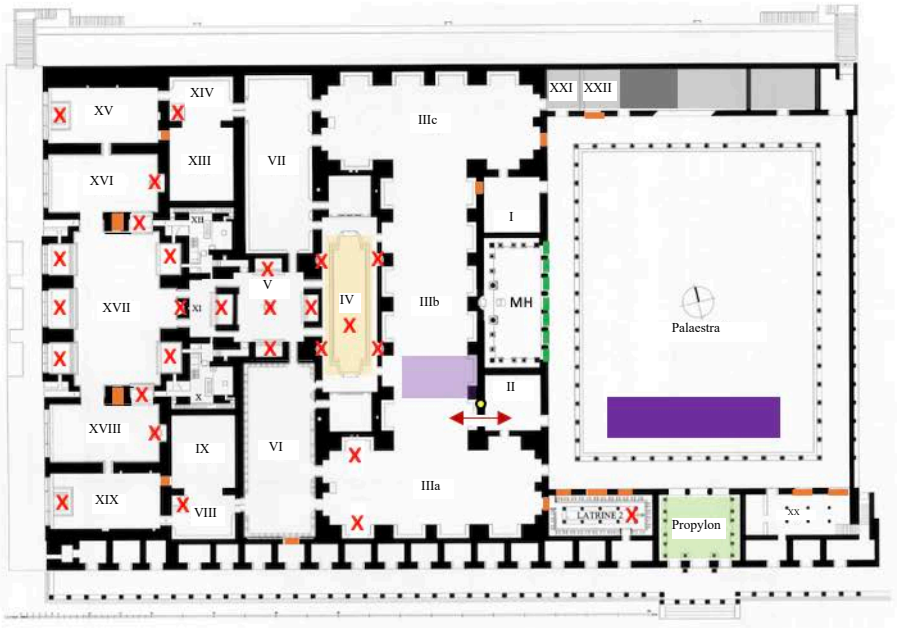
V	Frigidarium, central room
VI	South Apodyterium
VII	North Apodyterium (not excavated)
VIII-IX	Destrictarium/Unctorium
X	South service area
XI	Heat lock corridor / Tepidarium
XII	North service area (not excavated)
XIII-XIV	Destrictarium/Unctorium (not excavated)
XV	Tepidarium
XVI	Caldarium, northern room
XVII	Caldarium, main room
XVIII	Caldarium, southern room
XIX	Tepidarium

Alveus (bathtub for hot water bathing)
Alveus (bathtub for cold water bathing)
Alveus (catch-basin for fountain)
Pediluvium (footbath)
Blocked doorway
Blocked colonnade

Phase 4: Vedius Bath-Gymnasium Complex after the building stopped being used as a bath in the second half of the 5th century A.D.



Identifications of rooms in the bath-block

MH	Marble Hall
I	Room next to the Marble Hall (not excavated)
II	Room next to the Marble Hall
IIIa-c	Basilica Thermarum
IV	Frigidarium with Natatio
V	Frigidarium, central room
VI	South Apodyterium
VII	North Apodyterium (not excavated)
VIII-IX	Destrictarium/Unctorium
X	South service area
XI	Heat lock corridor / Tepidarium
XII	North service area (not excavated)
XIII-XIV	Destrictarium/Unctorium (not excavated)
XV	Tepidarium
XVI	Caldarium, northern room
XVII	Caldarium, main room
XVIII	Caldarium, southern room
XIX	Tepidarium

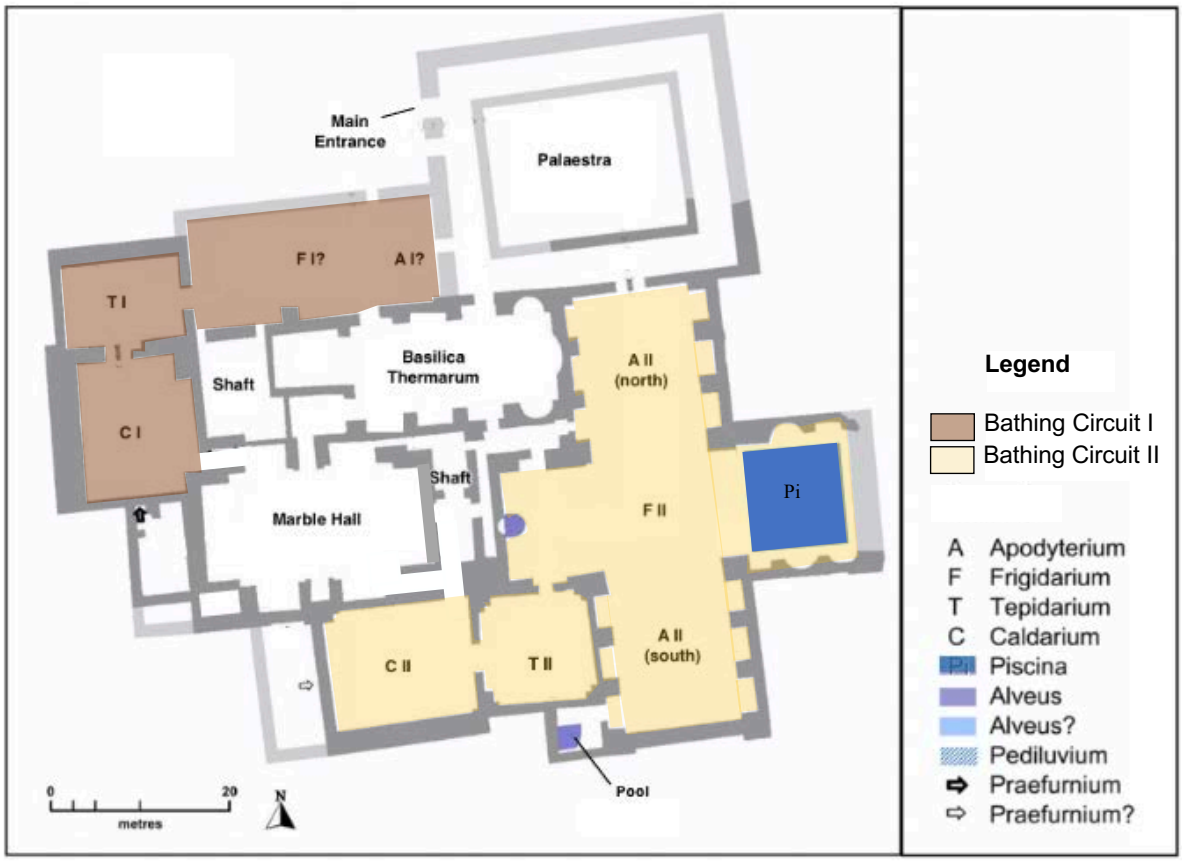
- Blocked doorway
- Blocked colonnade
- X Abandoned water feature
- Deliberately infilled natatio?
- Propylon re-used as a warehouse for building material?
- Secondary structure (house?)
- Secondary structure (grain warehouse?)
- Waterproof opus signinum on the floor of the burnt-out rooms, protecting the rooms in the basement from water penetration.
- Roof constructed of re-used tiles on the floor of one of the burnt-out rooms, protecting the basement (mostly Room E) from water penetration
- Removal of fill to create passageway
- Crude window or robber's hole

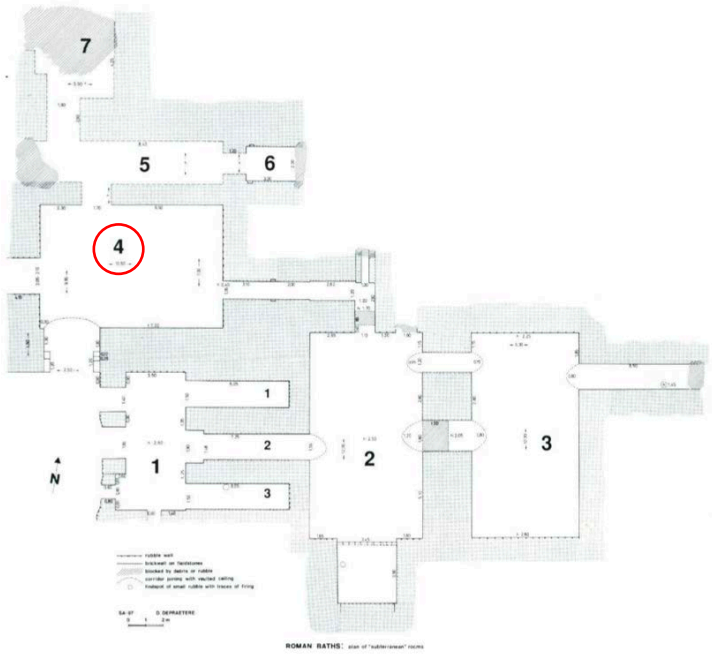
Appendix 3: Timeline and Phase Plans of the Sagalassos Bath-Gymnasium Complex

120 A.D.	Construction of the Imperial Bath-Gymnasium Complex begins on top of the partially demolished Old Baths.
Phase 1 Mid 2nd c. A.D.	Construction of the Imperial Bath-Gymnasium Complex is mostly complete by 165 A.D., except, perhaps, for the palaestra. An inscription from the Marble Hall dedicates the building to the co-regents Marcus Aurelius and Lucius Verus.
Phase 2 Late 4th / early 5th c. A.D.	A major renovation that affected nearly all the rooms of the complex. • Installation of new hypocaust pillars, new floors, new wall paneling, new pilaster capitals in Caldarium I. • Conversion of the cruciform (F II, A II North, and A II South) into a banquet hall. This includes the filling-in of the pool and possibly the construction of the auditorium seating on top of the filled in pool, although Waelkens (Rens et al. 2012, 96) suggests that the seating is slightly later than the filling in of the pool; the decision to retain the Apollo fountain; the gradual closing off of the cruciform from the rest of the building (e.g.: blocked doorways and redesigned entrance from the palaestra), and the installation of the colossal imperial portrait statues in the niches of the south apodyterium. • Installation of a new bathing circuit (circuit III) at the center of the complex. This entailed the conversion of the Marble Hall into a caldarium (C III) and the conversion of the Basilica Thermarum into a frigidarium (F III) with a small apodyterium (A III) and a small tepidarium (T III). • Conversion of the latrine on the lower level into a fertilizer collection site that continued to be used into the early 7th c. A.D.
Phase 3 Before the end of the 5th c. A.D.	The auditorium style seating in the eastern arm of the crucifix was dismantled and replaced by a kitchen.

Phase 4 After the earthquake of circa 518 A.D.	• Refurbishments that are mostly visible in the cruciform: Plaster wall covering, leveling of floors, new floor mosaics (notably the floor mosaic with an inscription commemorating the renewal of the banquet hall). • The kitchen in the eastern arm of the crucifix continues to function as a kitchen. • Some areas of the building are used as dumps for kitchen waste. • Abandonment of bathing circuit 1 (C I and T I, at least, were filled with architectural debris; F I was not fully excavated). • Conversion of the southernmost caldarium (C II) into a service room.
Phase 5 After 541/2 A.D.	Abrupt end of communal dining connected to the outbreak of plague. Kitchen converted into a workshop with 2 lime kilns and 9 smaller kilns for melting bronze. The workshop was active between the outbreak of plague in 541/2 A.D. and the earthquake in the early 7th century A.D. that caused most of the city to be abandoned. It is unclear whether bathing continued in the adjacent rooms. The Bath-Gymnasium Complex is abandoned and gradually begins to collapse after an earthquake in the early 7th century A.D. The earthquake is thought to have occurred between 602 and 610 A.D. because the most recent coins on the floors in F III and the cruciform date to the reign of the Roman Emperor Phokas. They were covered by tons of architectural debris. Owl pellets provide a *terminus ante quem* between 530 and 645 A.D. for the collapse of the ceiling in the cruciform; The butchered remains of sheep and goats (a final banquet) provide a *terminus ante quem* between 605 and 670 A.D. for the collapse of the ceiling in F III.

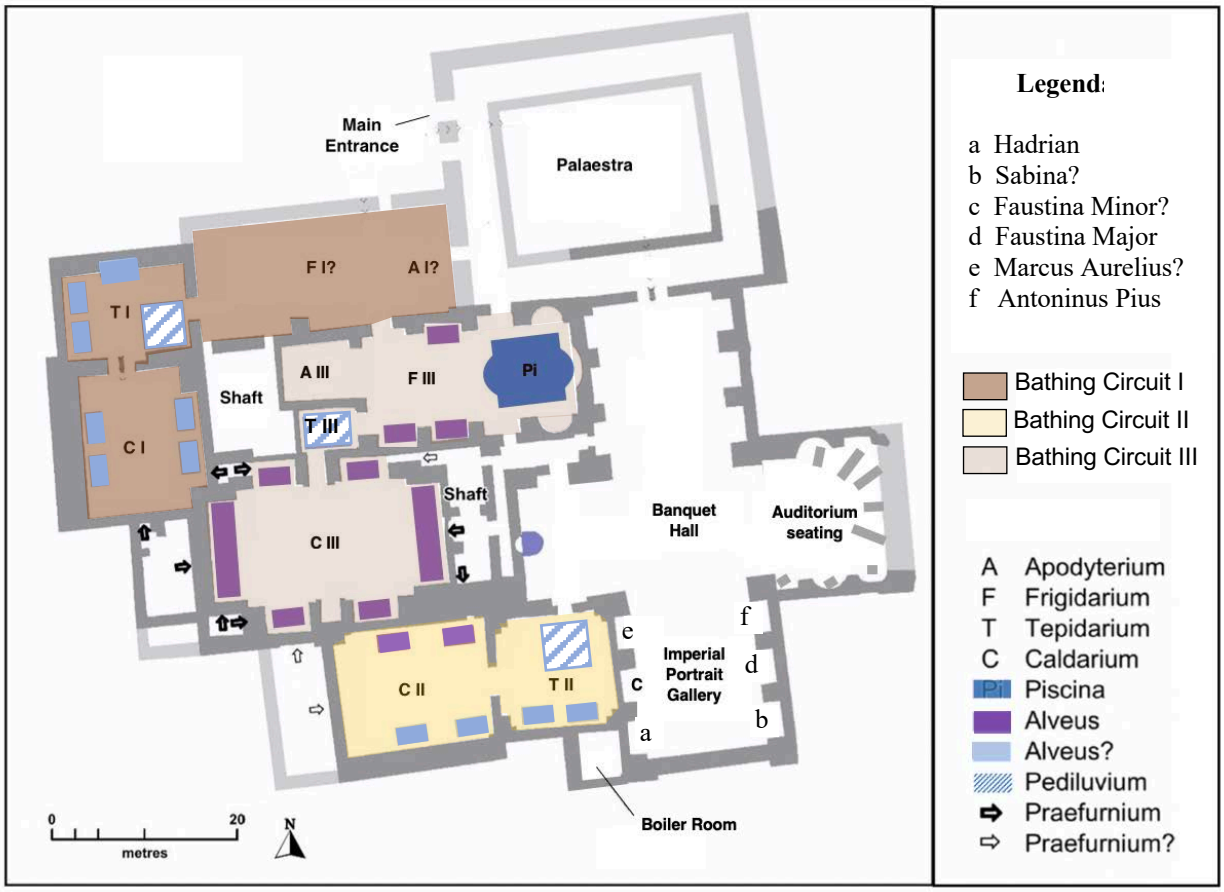
Phase 1: Sagalassos Bath-Gymnasium Complex in the mid 2nd century A.D.



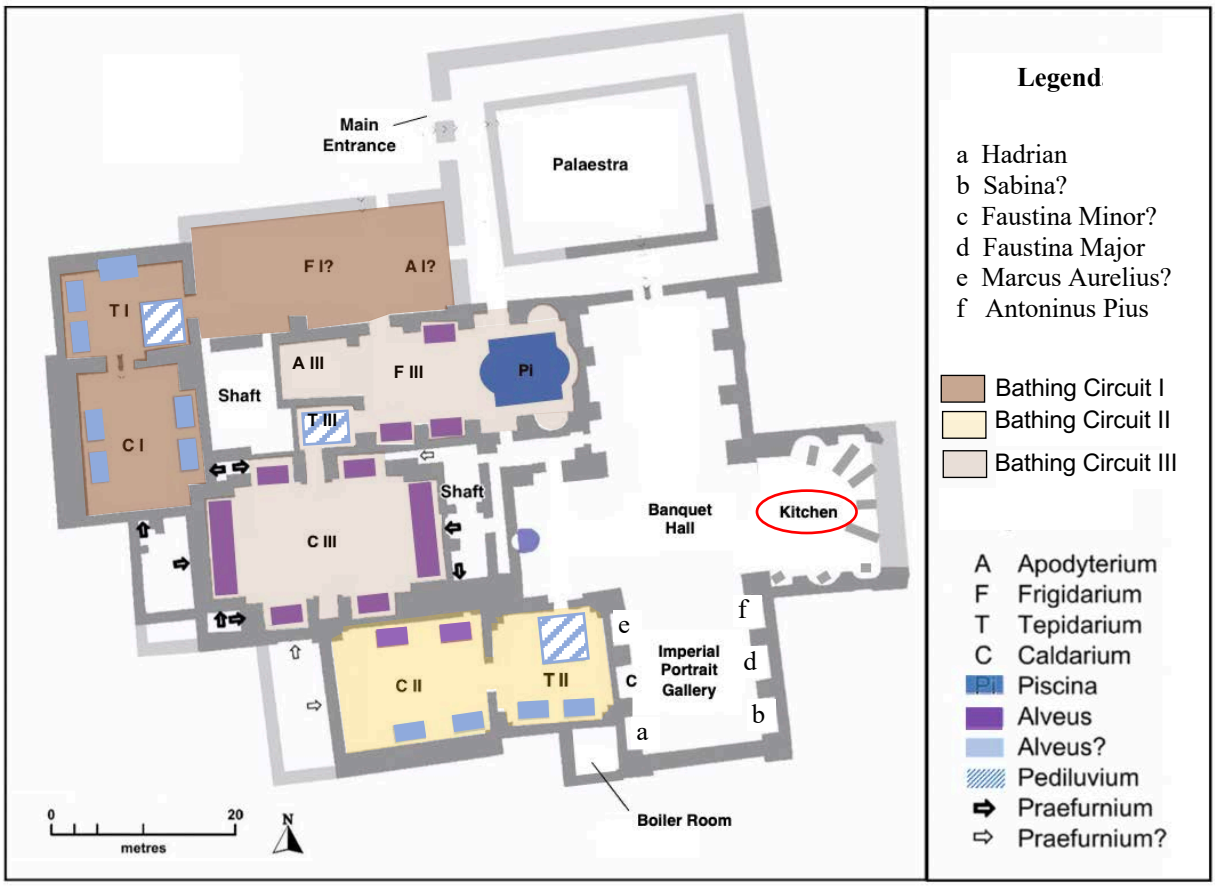


Lower level: the latrine is in Room 4, which is directly below C I on the floorplan above.

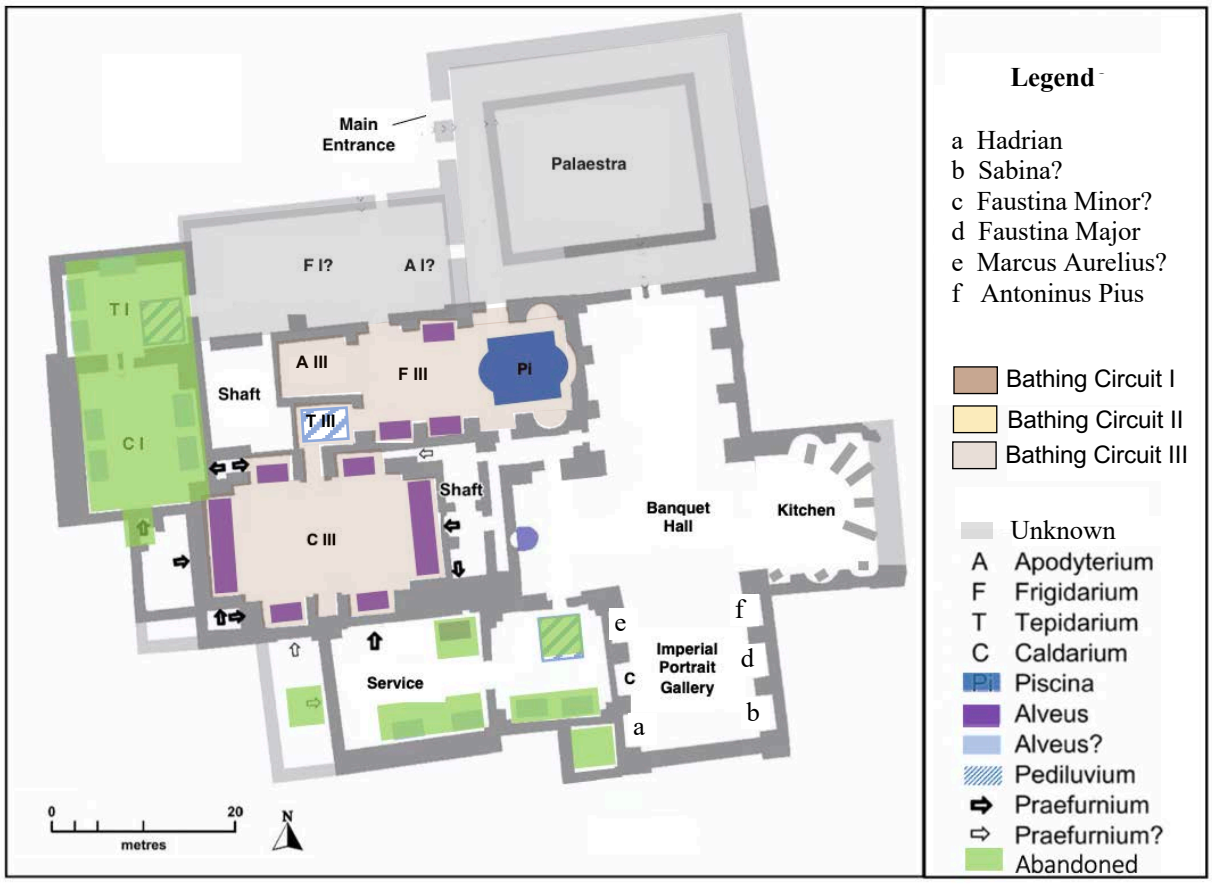
Phase 2: Sagalassos Bath-Gymnasium Complex after the major renovation of circa 400 A.D.



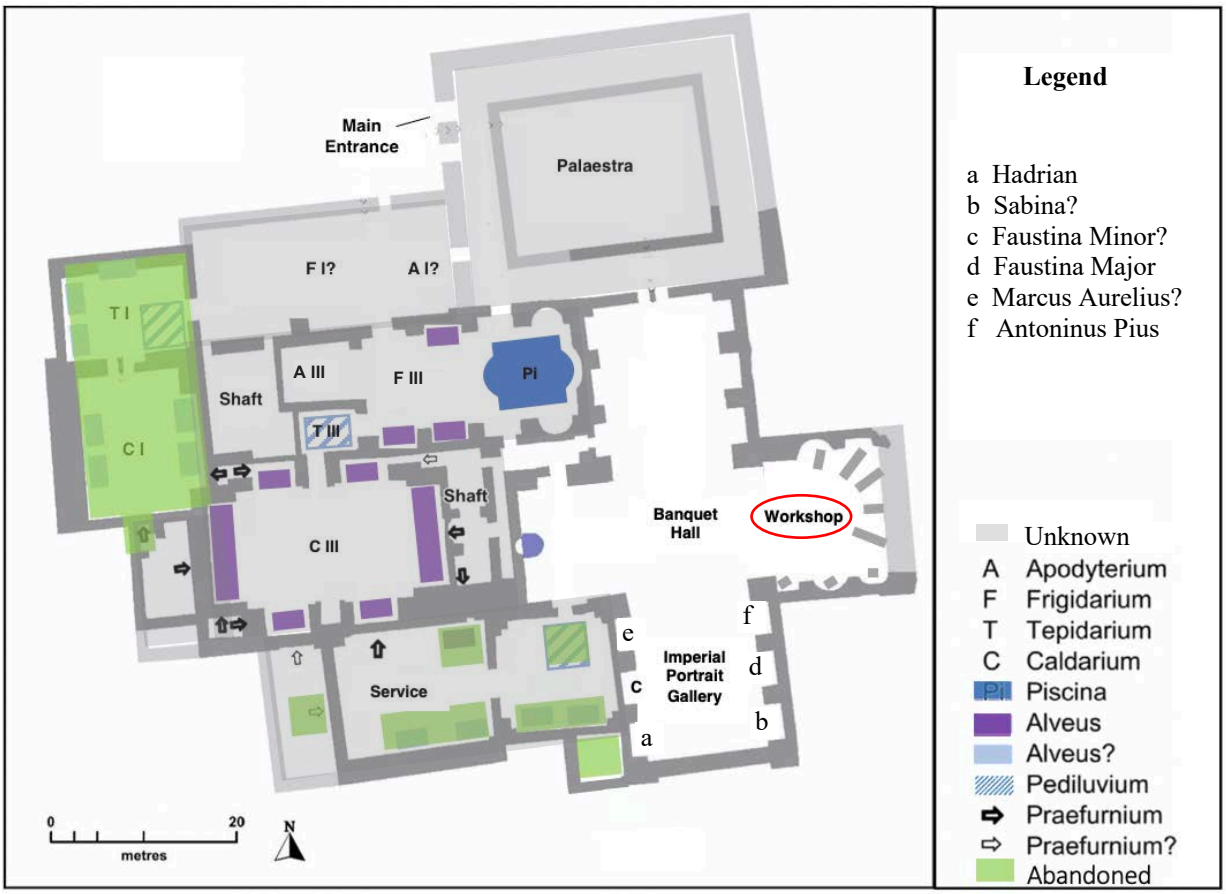
Phase 3: Sagalassos Bath-Gymnasium Complex after the auditorium was replaced by a kitchen. Late 5th century A.D.



Phase 4: Sagalassos Bath-Gymnasium Complex after the changes that were necessitated, in part, by the early 6th century A.D. earthquake.



Phase 5: Sagalassos Bath-Gymnasium Complex after the kitchen is replaced by a workshop with two large lime kilns and nine smaller furnaces for melting metal. (After 541/2 A.D.)



Appendix 4: *Topos* Inscriptions

The Greek word *topos* translates as *place* in English. While some *topos* inscriptions contain the word *topos* and a name in the genitive case, others omit the word *topos* and consist solely of a name in the nominative or genitive case.[522] Sometimes, other words are included, but in general, *topos* inscriptions are brief and seemingly enigmatic, which adds to the visual impression that they have more in common with graffiti, which is often hastily carved, scratched, or painted, than with official inscriptions, which are usually more skillfully executed. Like graffiti, *topos* inscriptions were also sometimes painted.

Topos inscriptions have traditionally been interpreted as place markers for individuals or groups within cities. They have been documented in a variety of spatial contexts, but especially in auditoria, agorai, and colonnaded streets.[523] In auditoria, *topos* inscriptions were usually carved, or sometimes lightly scratched or painted directly onto seats. Their purpose seems to have been to reserve the seats for the individuals or groups that are mentioned in the inscriptions. The *topos* inscriptions from the auditoria at Aphrodisias have been particularly well studied and published, so I have selected a few to illustrate the most common types of *topos* inscriptions that are found in auditoria.

Type 1: inscriptions that seem to reserve seats for individuals:

Example 1: |’Αδράσ|του τ[ό]π(ος)|vac.

“Place of Adrastus” (from the stadium at Aphrodisias)[524]

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[522] These formulae are also common for funerary inscriptions. For the form and content of *topos* inscriptions, see: Roueché 2004, nos. 187-211 with commentary; Saliou 2017, 125-27.

[523] Saliou 2017, 137-38 provides a more extensive list of the types of places in which *topos* inscriptions have been found. For auditoria, see: Van Nijf 1997, 209-40.

[524] *IAph2007* 10.31 row E.

Example 2: [Ἀπο|λλ]ωνίου [ἀ]γα|[λ]ματογλύφου

"(Place of) Apollonius, sculptor" (from the stadium at Aphrodisias)[525]

The first example includes the word *topos* plus the name of an individual (Adrastus) in the genitive case. It does not provide any further information about the individual. The second example does not include the word *topos*. It simply gives the name of an individual (Apollonius) in the genitive case and describes him as a sculptor. People frequently included their profession alongside their name to serve as a status marker. Sometimes, a religious or political affiliation, or an ethnicity or home city is given instead of a profession.

Type 2: inscriptions that seem to reserve seats for groups:

Example 1: | τό vac. | πος vac. | φυ vac. | λων vac. |' A vac. | φρο vac. | δεισι[έ]ων | vac.

"Place of the Aphrodisian tribes" (from the stadium at Aphrodisias)[526]

Example 2: Υ β | υ | ρ | vac. | σ | έ | ω | ν | σ | υ | [ντεχνία]

"(Place of) The association of tanners" (from the stadium at Aphrodisias)[527]

Example 3: τόπο|ς νεοτέρω[ν]

"Place of the younger men" (from the odeon at Aphrodisias)[528]

The groups that are most frequently mentioned by *topos* inscriptions in auditoria include tribal or city groups, professional associations, religious groups, or political groups.

In agorai and colonnaded streets, *topos* inscriptions were usually carved or painted on buildings, columns, or paving stones. Their purposes may have been, like the *topos* inscriptions

[525] *IAph2007* 10.6 row X.

[526] *IAph2007* 10.27 row Y.

[527] *IAph2007* 10.11 row D.

[528] *IAph2007* 2.6 row 5.i

in auditoria, to reserve a space, or alternatively, to declare that the individuals or groups that are mentioned in the inscriptions had been granted a special privilege by a civic authority, or by their own, unofficial authority to occupy or ply their trade in a particular location. At Aphrodisias, for example, *topos* inscriptions marking the 'place of Zoticos the Peddler' and the 'place of the association of chair-bearers' have been recorded in the South Agora.[529] They were probably associated with stalls where people could purchase whatever unspecified trinkets or specialty items Zoticos had to sell, or hire chair-bearers, respectively. At Ephesus, *topos* inscriptions for silversmiths have been recorded on two columns on the Arcadiane, one of the main streets. Luke Lavan suggests that the *topos* inscriptions for the silversmiths at Ephesus may reserve a space in the portico for a retail outlet that was more permanent or high-end than a stall.[530]

Topos inscriptions from streets and agorai did not always have commercial or artisanal functions. Individuals or groups with administrative or political roles also sometimes had *topos* inscriptions in streets and agorai, and probably in other types of public places, for example, a "secretary of the city" at Ephesus, or "people who are responsible for the youths" at Miletus.[531] Like the *topos* inscriptions that seem to have had more economic purposes, these examples seem to have marked places where individuals or groups with political or administrative roles could be met by anyone that needed to conduct business with them.

The *topos* inscription for the tanners' association probably meant something entirely different in the context of the stadium at Aphrodisias than it would have meant if it had been carved on a paving stone in a commercial agora or etched into a column along a colonnaded

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[529] Zoticos: *IAph2007* 4.9 and chair-bearers: *IAph2007* 4.12. The chair-bearer inscription is an acclamation, but it may have functioned like a *topos* inscription. See Lavan 2020, 378.

[530] *IvE* 547.1-2; Lavan 2020, 413-14.

[531] *IvE* 552; *I. Milet* 212.

street. If the same *topos* inscription had been found in a commercial agora or along a colonnaded street, then viewers may have interpreted it as an indication that that is where tanners made or sold their wares. In the context of the stadium -- or any other auditorium -- the economic sense would have been neutralized: the tanners were not actively plying their trade, which entailed making or selling leather goods; they were members of the audience like everyone else that was seated around them to view the spectacle and participate in a cultural event seated next to friends, colleagues, and other members of their community.

In some contexts, *topos* inscriptions may have been used to indicate social hierarchy. Notable individuals may have been allocated the best locations from which to view the spectacle, and in turn, to be viewed by other members of the community. Auditoria, agorai, and streets all served as venues for spectacles on occasion. The temporal contexts of *topos* inscriptions were important, just like their spatial contexts, because the inscriptions may have held meaning only under some circumstances or on some occasions -- only on market days for some inscriptions in agorai, for example. Catherine Saliou argues that *topos* inscriptions from gymnasia constitute a very specific category because they fit somewhere between auditoria on the one hand, and streets and agorai on the other hand.[532]

Here are some examples of *topos* inscriptions from other bath-gymnasium complexes:

Hadrianic Baths at Aphrodisias: [533]

a. Place of Epictetus, a *capsarius* (cloak room attendant)
b. another *topos* inscription in this building simply gives a name ‘Synodius.’

[532] Saliou 2017, 139-51.

[533] Roueché 2004, nos. 190 and 233.

Theater Baths at Aphrodisias, Marble Hall:[534]

a. Place of Alexander, barber
b. Place of Theodore
c. Place of Aelianus

Vedius Bath-Gymnasium at Ephesus, latrine:[535]

a. Of the money changers
b. Of the hemp workers of the Stoa of Servilios
c. Of the wool-traders / *astiopoloi?* linen-weavers
d. Of the Plateia Branchiane
e. Of the linen-weavers
f. Of the *sunergasia* of the basket makers

A *capsarius* and barber are expected trades to find in a bath-gymnasium complex. The *topos* inscriptions mentioning those trades were probably intended to announce where practitioners could be found or to reserve a place for them, whereas the purpose of the inscriptions that have only names are not as clear. The intended meanings of the *topos* inscriptions from the Vedius Bath-Gymnasium are also not clear. They mention professional *collegia,* but a latrine is not a place for retail or social gatherings, nor is it clear that the inscriptions were intended to reserve seats in the latrine for members of those professional *collegia*. Onno van Nijf suggests that their purpose might be more symbolic than practical.[536]

[534] Roueché 2004, nos. 191-193.

[535] *IvE* 454a-f.

[536] Van Nijf 1997, 219.

Appendix 5: Aqueducts at Ephesus

The Kenchiros Aqueduct, also known as the Değirmendere Aqueduct, was the longest aqueduct at Ephesus.[537] It carried water over a distance of 43 kilometers, originating at the Değirmendere spring, located to the east of Kuçadasi, and the Keltepe springs, located further to the north of the Değirmendere spring. The aqueduct approached Ephesus from the southwest, following the coast before turning east along the north face of the Bulbul Dag and into the city. The main line carried water towards a surge tank located near the Fountain House on the State Agora.

The Marnas Aqueduct, also known as the Aqua Throessitica or Derbentdere Aqueduct, was probably built during the first half of the second century B.C., and it was extended by Sextillius Pollio between 4 and 14 A.D.[538] It carried water into the city from the southeast, from the Klareas (Marnas) River, and the extension, the so-called Pollio Aqueduct, connected it to a spring on the east side of the Değirmendere Valley. The entire system was about 7 kilometers long, and it carried water through three or four parallel pipes until, similar to the Kenchiros / Değirmendere Aqueduct, it reached the surge tank located near the Fountain House on the State Agora. From there, water was distributed to other sites on the State Agora and along the Embolos. The Marnas Aqueduct may also have supplied water to the Magnesia Gate area.

The Selinus / Sirinçe Aqueduct was about 8 kilometers long and it carried water from the springs near the village of Sirinçe into Ephesus from the east.[539] Originally, it was built to supply water to the Artemision and to the fountains along the Sacred Way, and then it was extended,

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[537] Ortloff and Crouch 2001, 852, 854; Wiplinger 2011, 598-600; 2016, 55; 2019, 13.

[538] Ortloff and Crouch 2001, 854-55; Wiplinger 2011, 595; 2019, 7.

[539] Ortloff and Crouch 2001, 852-53; Wiplinger 2011, 600; 2019, 8.

probably during the late Hellenistic or early Roman period, to supply water to the northern and eastern slopes of the Panayır Dağ. By the second century A.D., the Selinus / Sirinçe Aqueduct also supplied water to the East Bath-Gymnasium and to fountains and houses along the city's southeastern edge. It may have combined with the Kaystros Aqueduct to supply water along the western slope of the Panayır Dağ, and to the northwestern part of the city, especially near the Harbor in Late Antiquity. Some of the ruined pillars of the Selinus / Sirinçe Aqueduct are still visible in the modern town of Selçuk.

The Kaystros Aqueduct, also known as the Aristion Aqueduct, was built by a wealthy Ephesian, Claudius Aristion, between 102 and 113 A.D.[540] It carried water from the Kayapınar springs, which were about 40 kilometers north of Ephesus, and from the Pranga springs, which were about 10 kilometers north of Ephesus, to supply water to the stadium, the theatre district, and some of the residential units along the western and southwestern slopes of the Panayır Dağ. A separate branch of the Kaystros / Aristion Aqueduct supplied water to the Harbor area. In some of the channel sections, the sintering is 30 centimeters thick, which indicates that the aqueduct was in use for a very long time. An inscription on the Nymphaeum of Trajan on the Embolos refers to the Kaystros / Aristion Aqueduct as the 'Byzantine Aqueduct.'

The Lysimachus Aqueduct, which also appears on the map, is not one of the four main aqueducts that supplied water to Ephesus in the second century A.D.[541] Built in the first half of the third century B.C., the Lysimachus Aqueduct was an early attempt to bring water from springs that were located approximately 1 kilometer southwest of the city. Gilbert Wiplinger estimates that the aqueduct was probably already out of use by the early Roman period because

[540] Ortloff and Crouch 2001, 853-55; Wiplinger 2011, 595-98; 2019, 9; Pickett 2016, 304.

[541] Wiplinger 2011, 594.

the sintering on the original clay pipe was not very thick, which indicates that the pipe was not in use for a very long time.[542] The pipe, which was encased in thick masonry, was never replaced. The city may have abandoned the aqueduct, rather than attempt to repair it, because the spring beds in this area were probably too low.

[542] Wiplinger 2011, 595.

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All the figures for chapter four are © Sagalassos Archaeological Research Project, University of Leuven unless otherwise noted.

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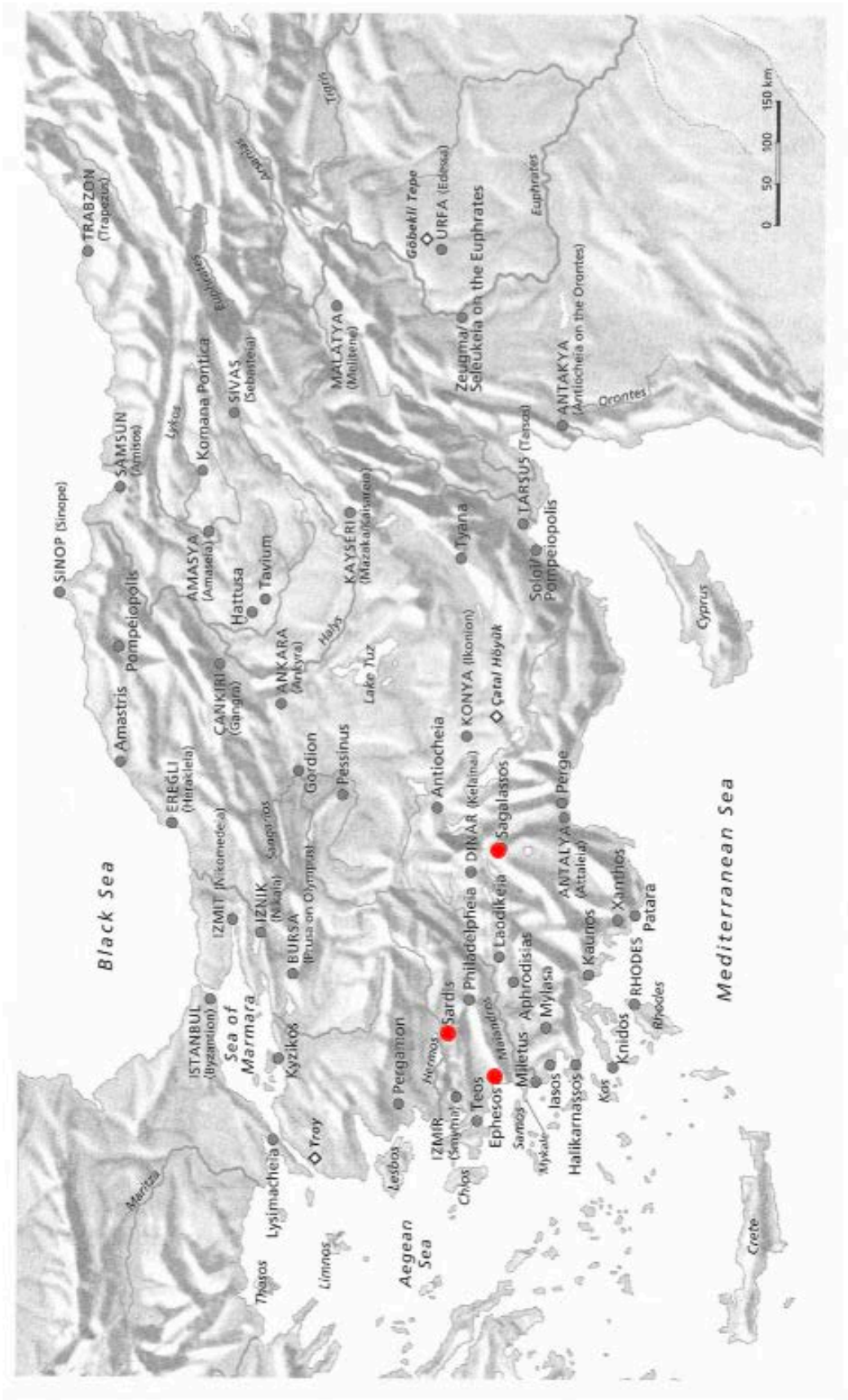
Model was processed in Reality Capture from 4451 Drone photographs. The data were collected by Global Digital Heritage in August 2019, as part of the



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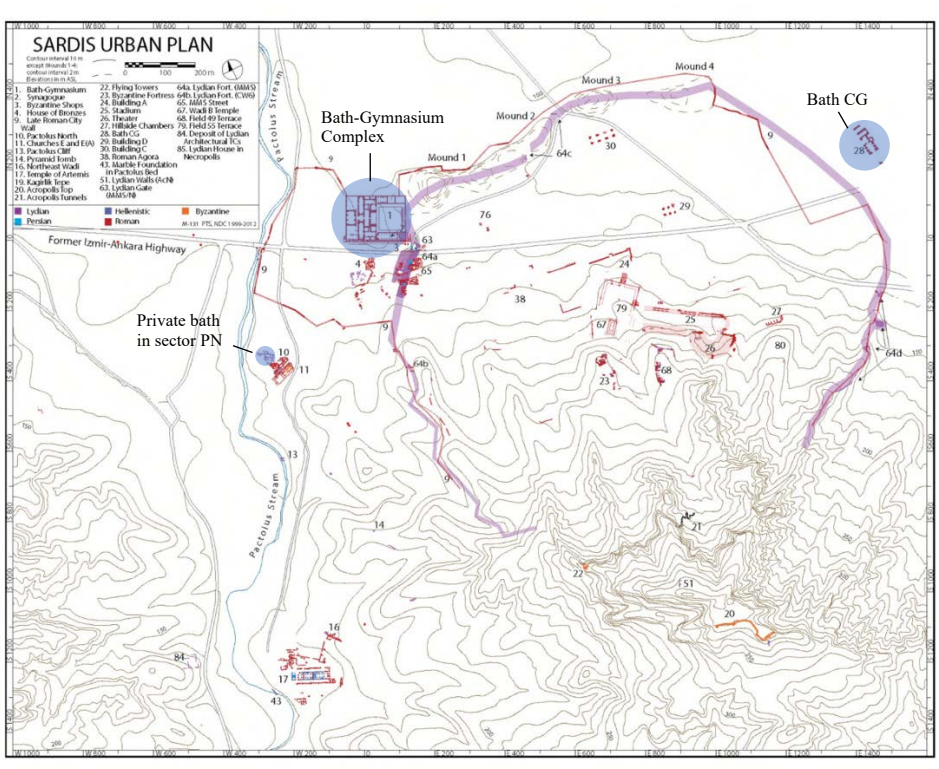

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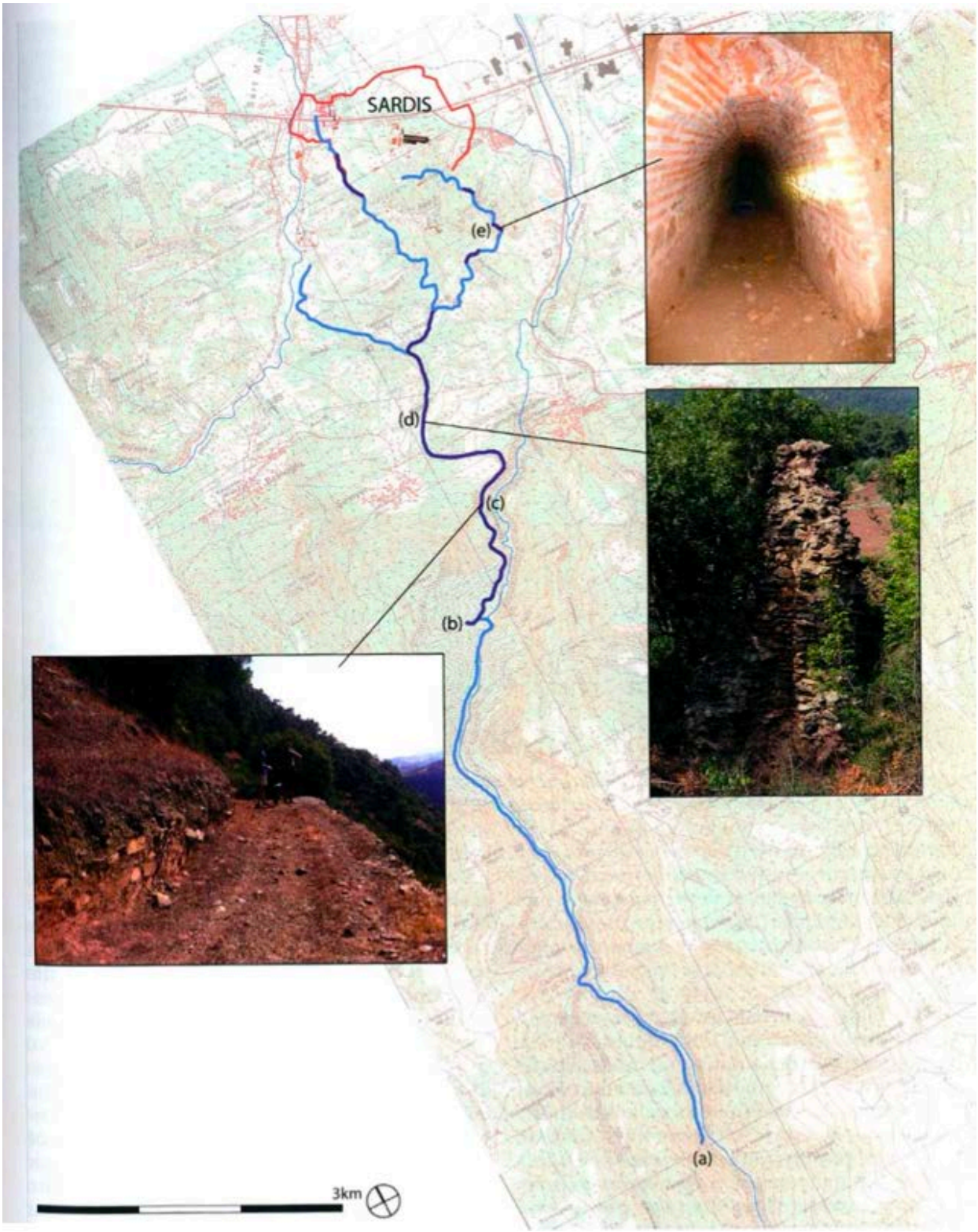

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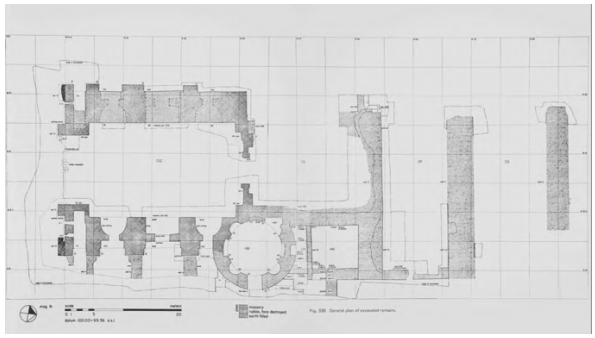

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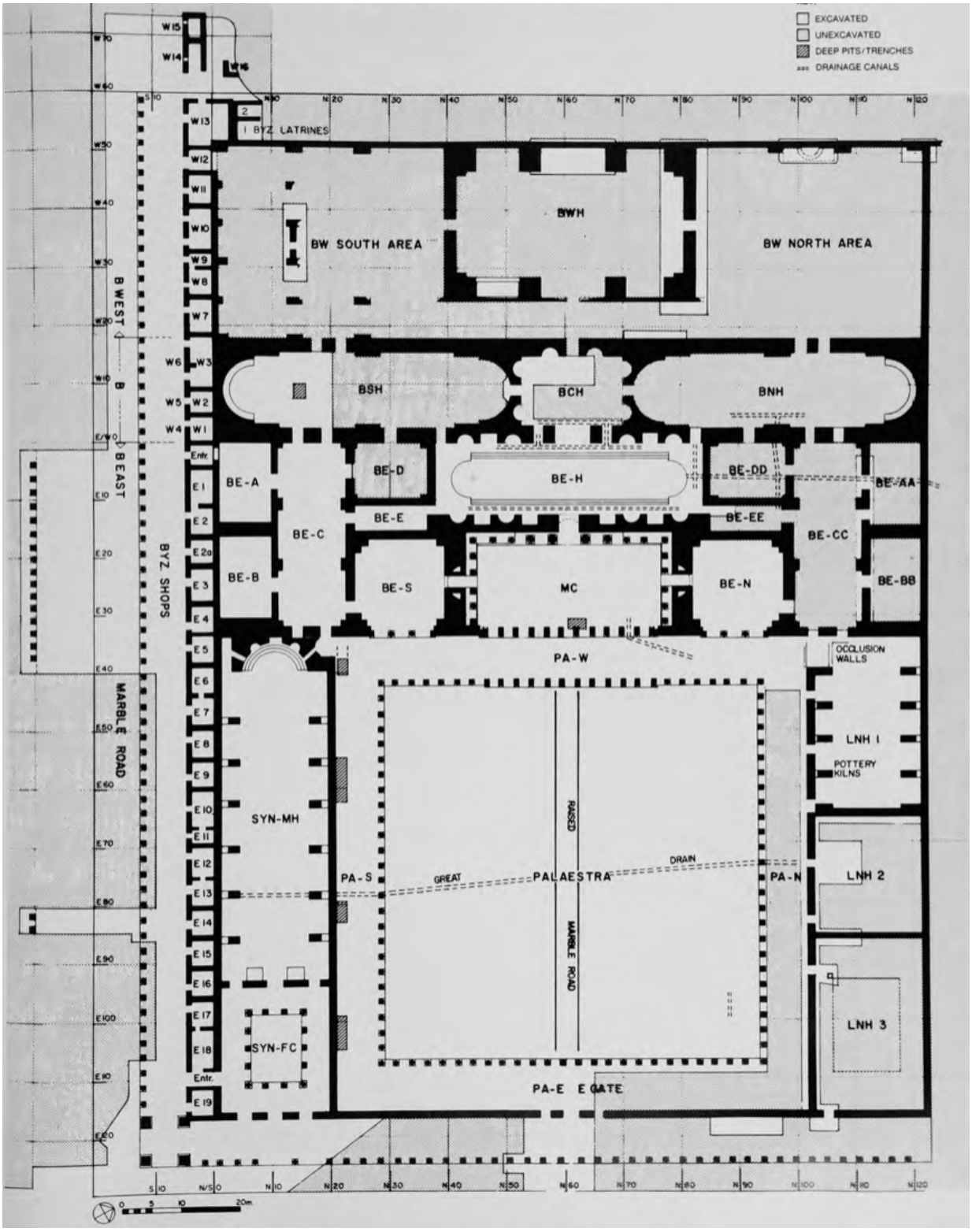

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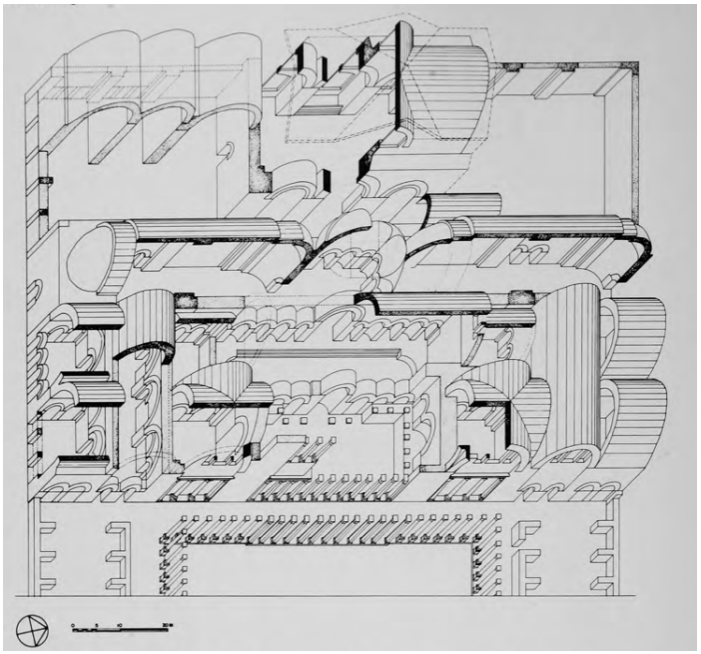

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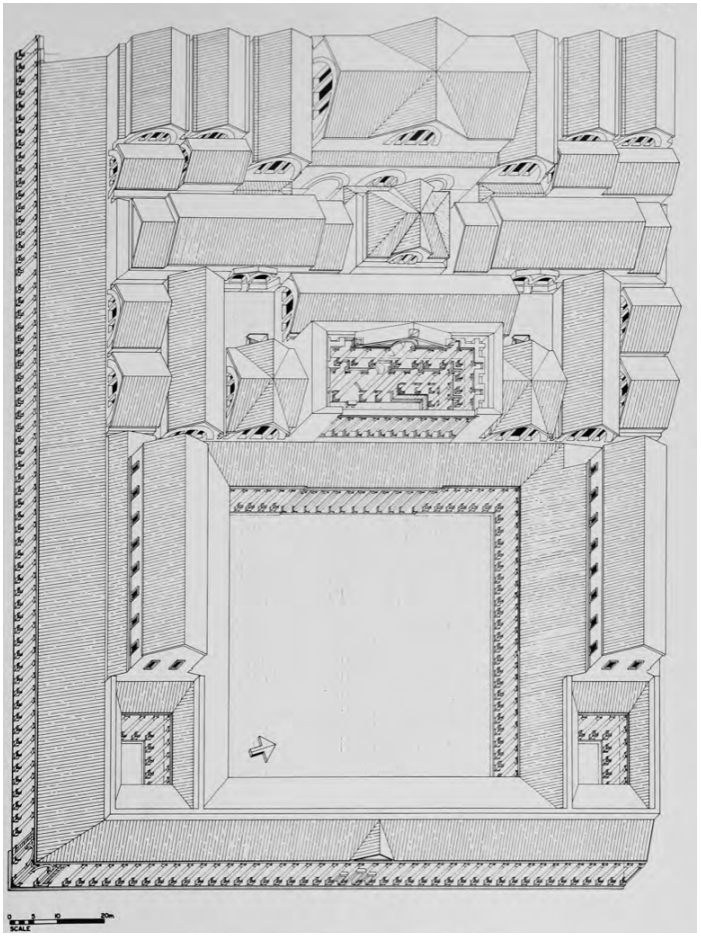

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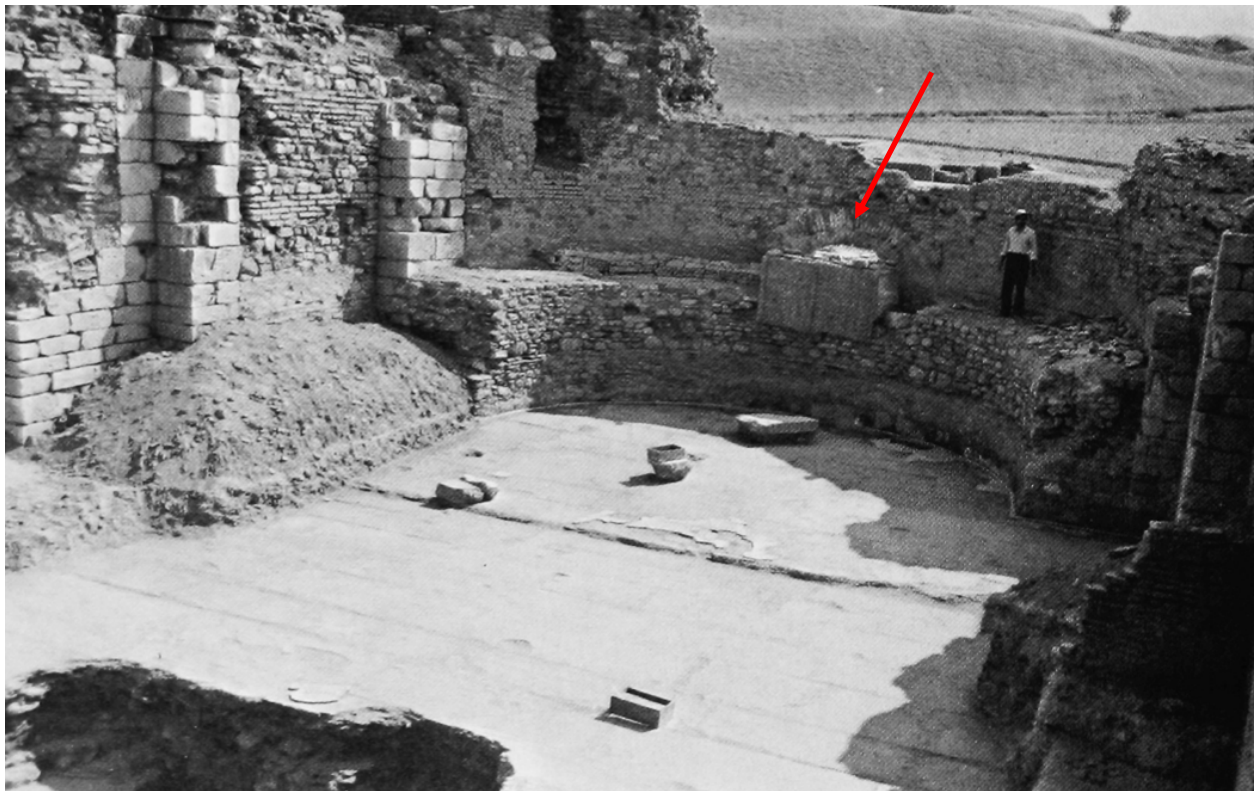

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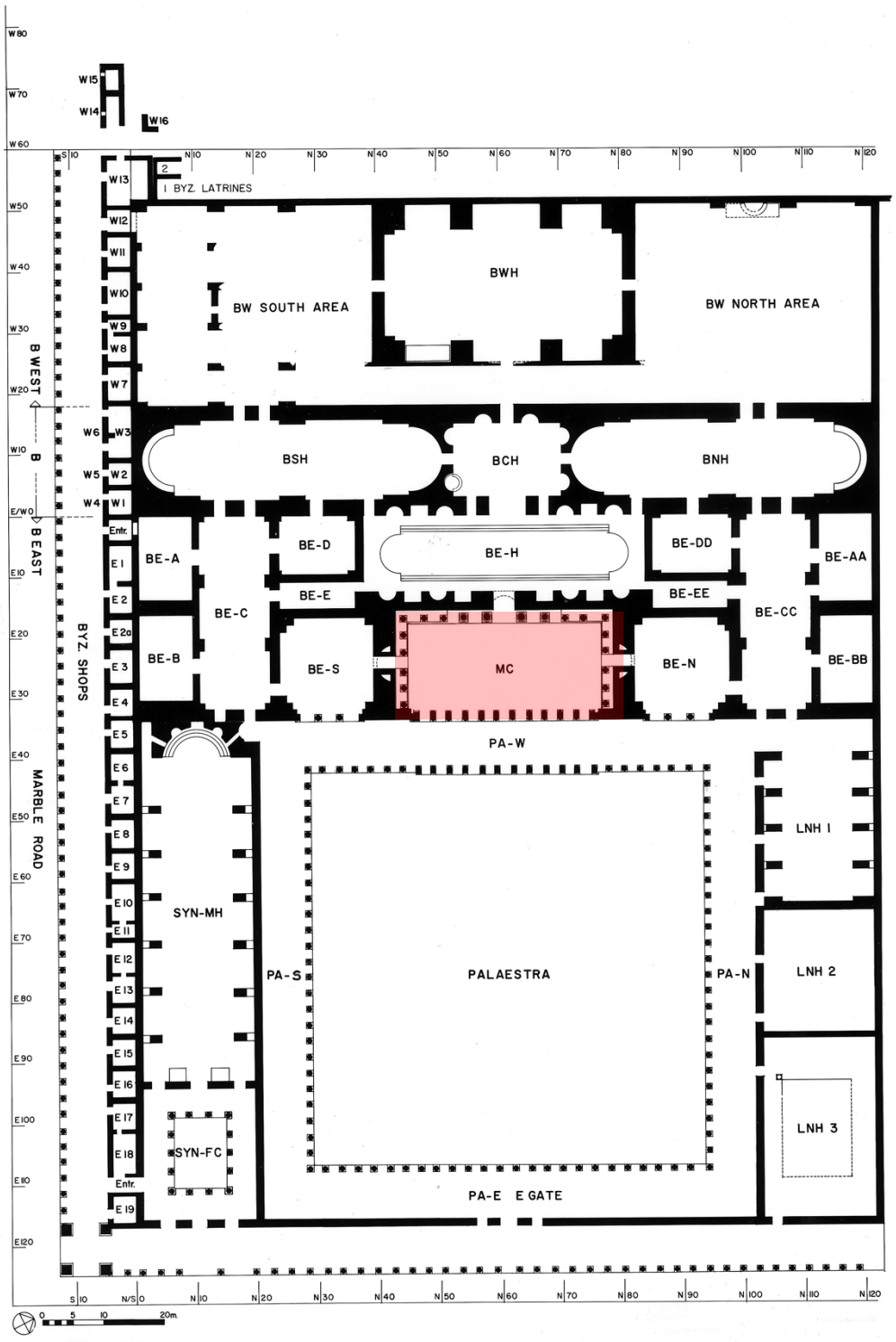

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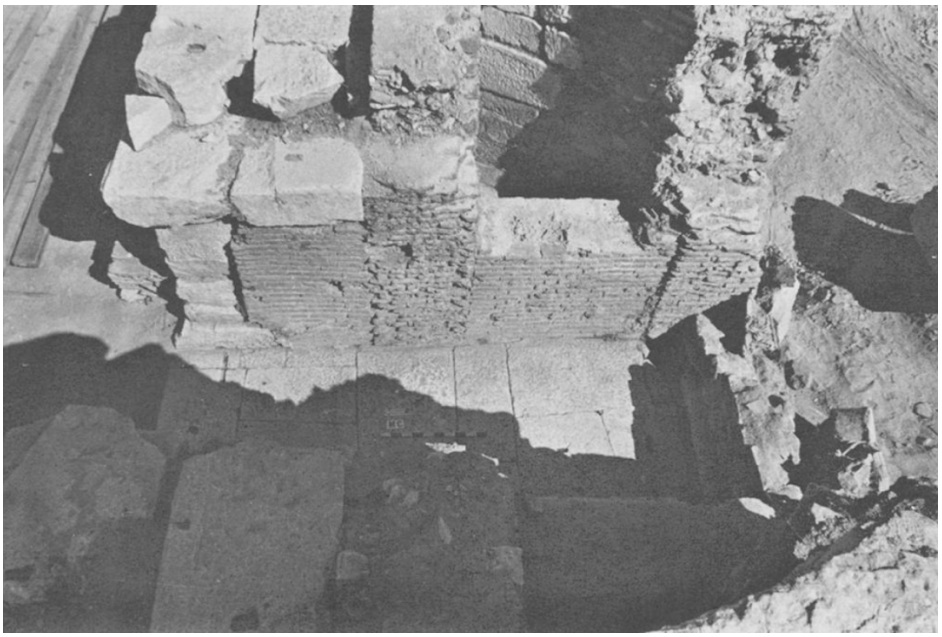


Figure 2.19. The semicircular apse of the south wall of the Marble Court. View to the east. An early renovation closed off the apse when the podium was installed in front of it. When the passage into Room BE-S (on the right) was created, the podium, the brick and rubble wall that closed the apse, and the back wall of the apse were all cut. The sides of the passage were then built up with brick walls. The situation of the north apse is mirror identical to this one.

Figure 2.20. Corinthian capital with head of laughing faun.

Figure 2.21. Head of Dionysos from a Corinthian capital, front view.

Figure 2.22. Capital with satyr head.

Figure 2.23 Capital with head of 'sad satyr.'

Figure 2.24. Capital with head of a gorgon.

Figure 2.25. Female head (Medusa?) broken off Corinthian capital.

Figure 2.26. Head with Phrygian cap or helmet. (Athena? Ares? Dea Roma? Perseus? Attis?)

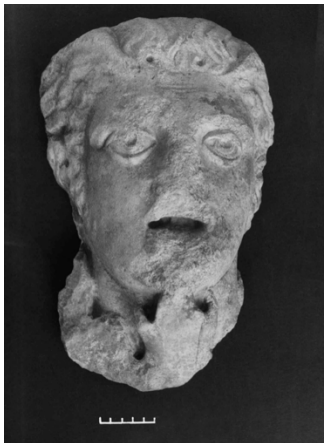


Figure 2.27. Male head with wings (Hermes?) from capital.

Figure 2.28. Fragment of female head broken off capital.

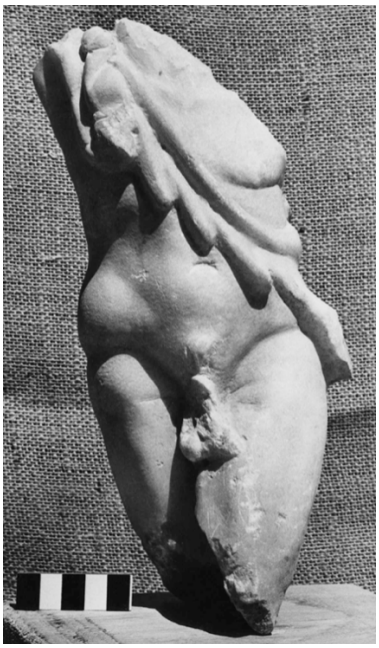


Figure 2.29. Dancing satyr, frontal view.

Figure 2.30. Torso and legs of satyr.

Figure 2.31. Southeast corner of the Marble Court, first blocked intercolumniation of the screen colonnade with revetment *in situ.*

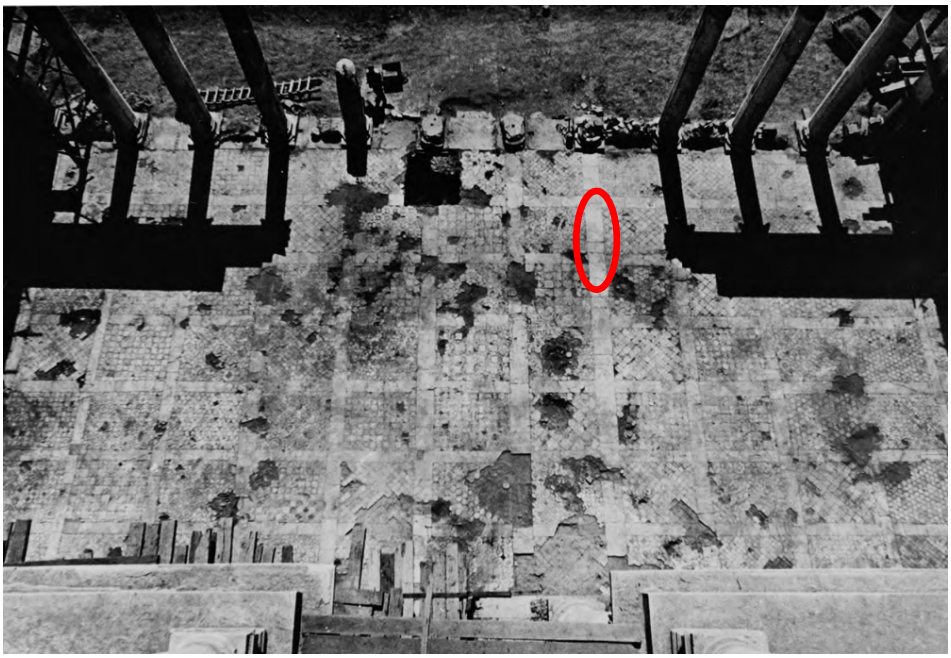


Figure 2.32. View of the o*pus sectile* floor of the Marble Court with the location of the *topos* inscriptions indicated in red. The restored screen colonnade is visible at the top of the frame. Remnants of the blocking walls are visible in some of the intercolumniations. The three central intercolumniations were not blocked.

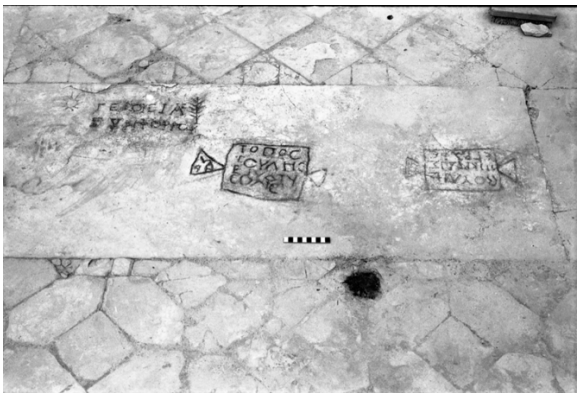


Figure 2.33. *Topos* inscriptions on the *opus sectile* floor of the Marble Court. Inscription (d) is to the right of where the right edge of the frame cuts off.

Figure 2.34. *Topos* inscription (a) mentioning the gerousia.

Figure 2.35. *Topos* inscription (b) "Place of the boule."

Figure 2.36. *Topos* inscription (c) "Of the *boule* [- - -] wrote."

Figure 2.37. *Topos* inscription (d) "Place of the boule."

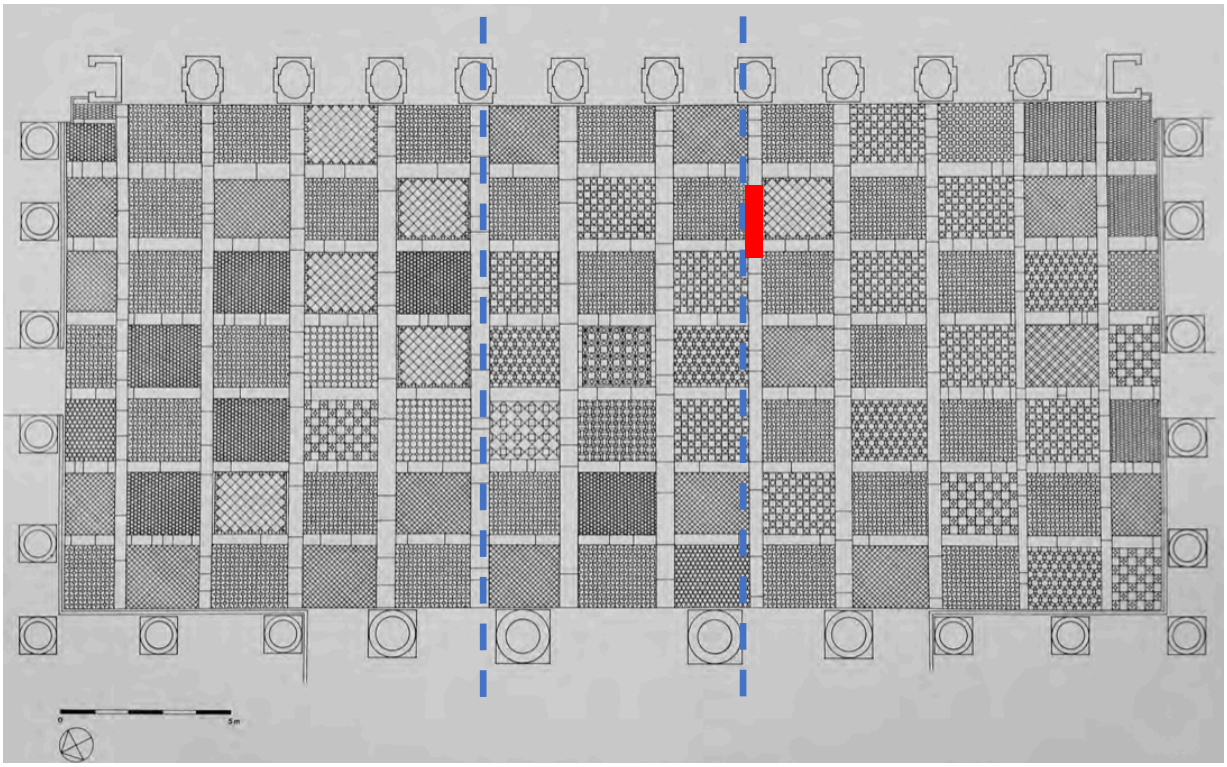


Figure 2.38. Drawing of the Marble Court *opus sectile* floor. The screen colonnade is at the top. The red indicates the cluster of *topos* inscriptions. The blue lines indicate the unmarked / unbounded pathway between the three unblocked intercolumniations in the screen colonnade and the entryway to Room BE-H (the frigidarium) underneath the Syrian pediment.

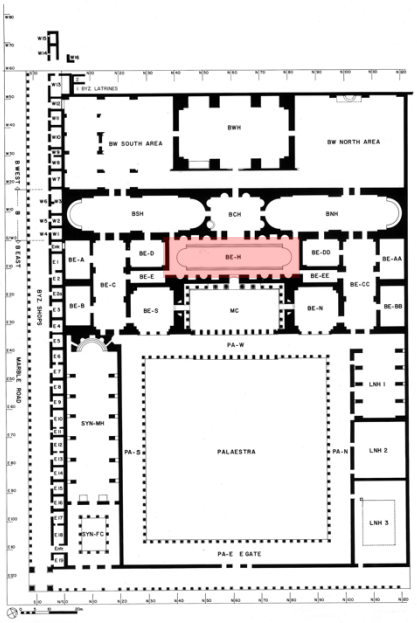


Figure 2.39. Plan of the Sardis Bath-Gymnasium Complex with Room BE-H (the frigidarium) indicated in red.

Figure 2.40. Room BE-H / frigidarium, view to the north.

Figure 2.41. Niche 106-107 in Room BE-H / frigidarium with fountain and stone junction box.

Figure 2.42. Niche 109-110 in Room BE-H / frigidarium with pool and stone junction box.

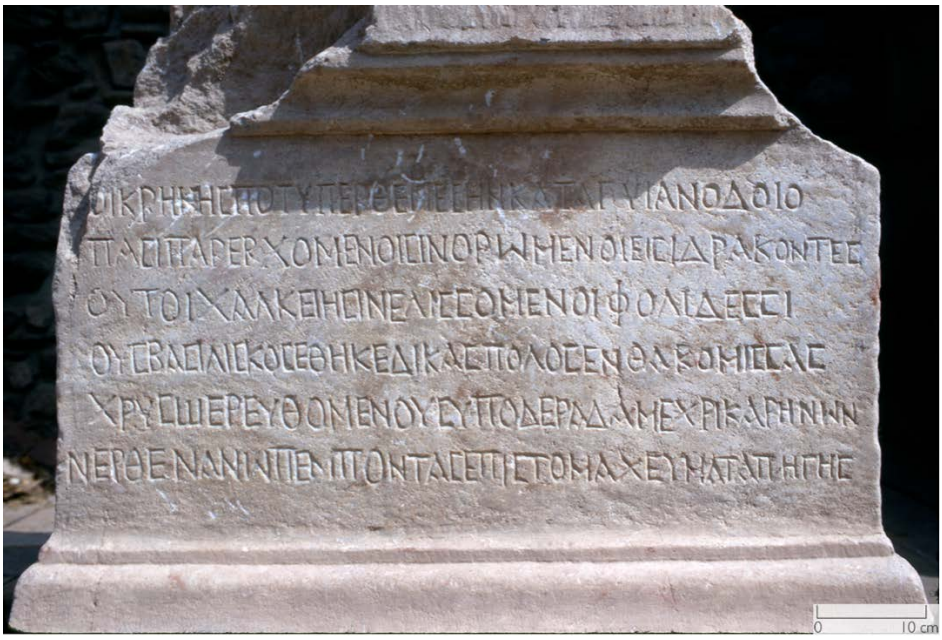


Figure 2.43. Inscribed base for the fountain with bronze snakes dedicated by Basiliskos. Found in Room BE-H but it may have been moved there.

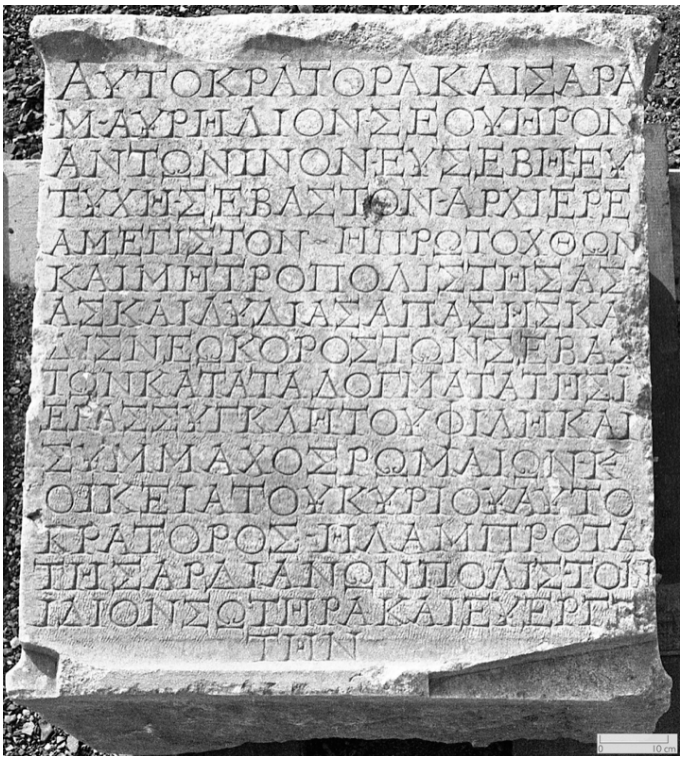


Figure 2.44. Inscribed base for statue of Caracalla. Found in Room BE-H.

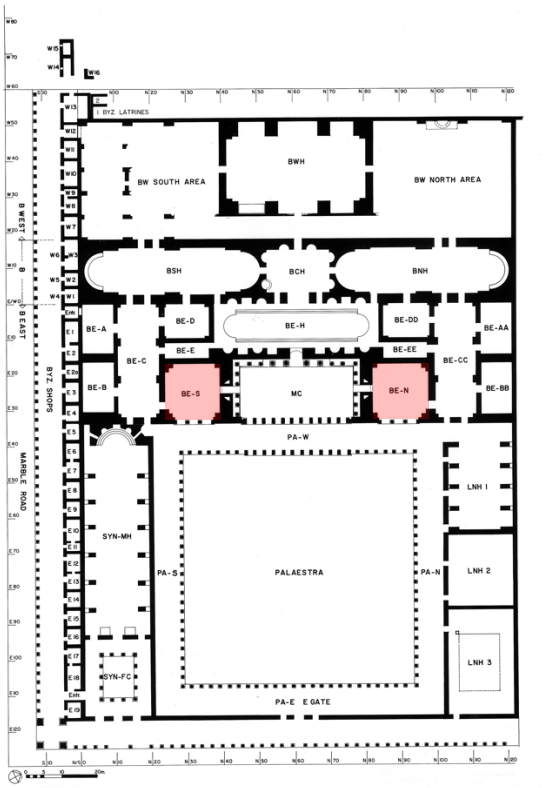


Figure 2.45. Plan of the Sardis Bath-Gymnasium Complex with Rooms BE-N and BE-S indicated in red.

Figure 2.46. Mosaic floor of Room BE-S, with marble slabs of the second floor visible behind the person.

Figure 2.47. *Opus Sectile* floor of Room BE-N.

Figure 2.48. View into Room BE-N from the palaestra with the blocking wall visible between the central intercolumniation of the screen colonnade.

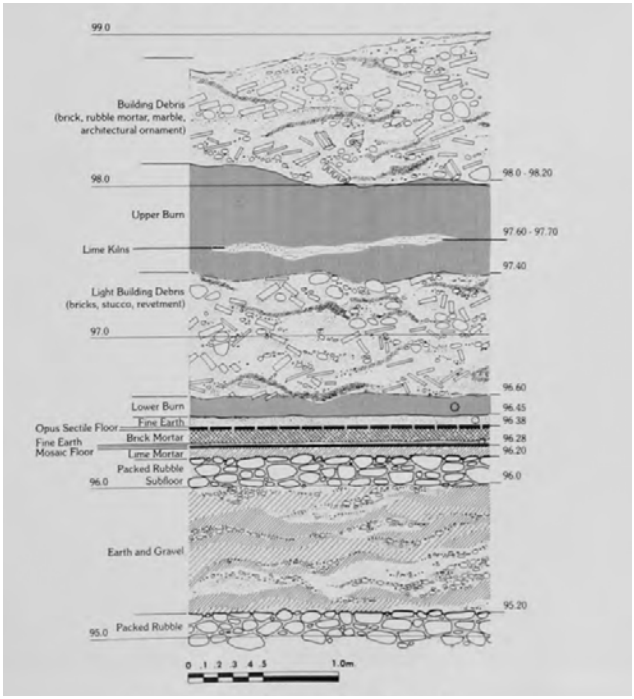
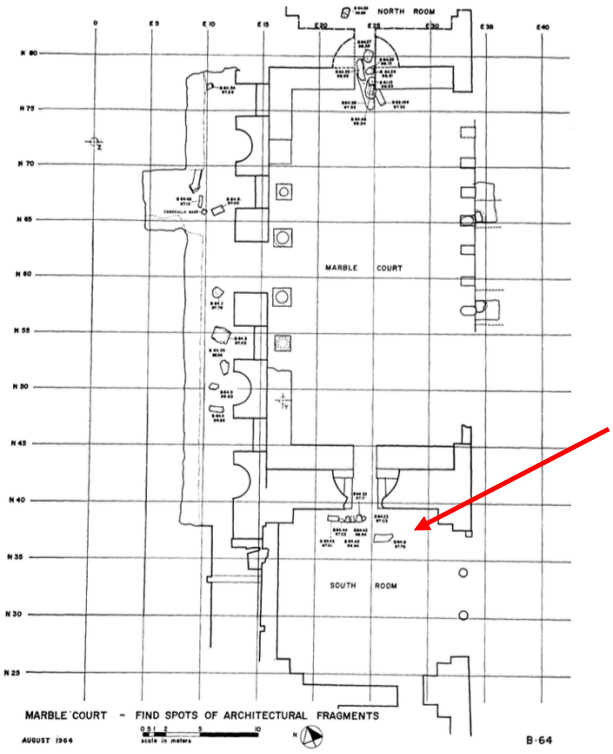


Figure 2.49. General stratigraphy for Room BE-N.



Architectural fragments lined-up neatly in Room BE-S during the post-destruction phase of the building.

Figure 2.50. Plan of Marble Court and adjacent units with the findspots of select architectural fragments marked.

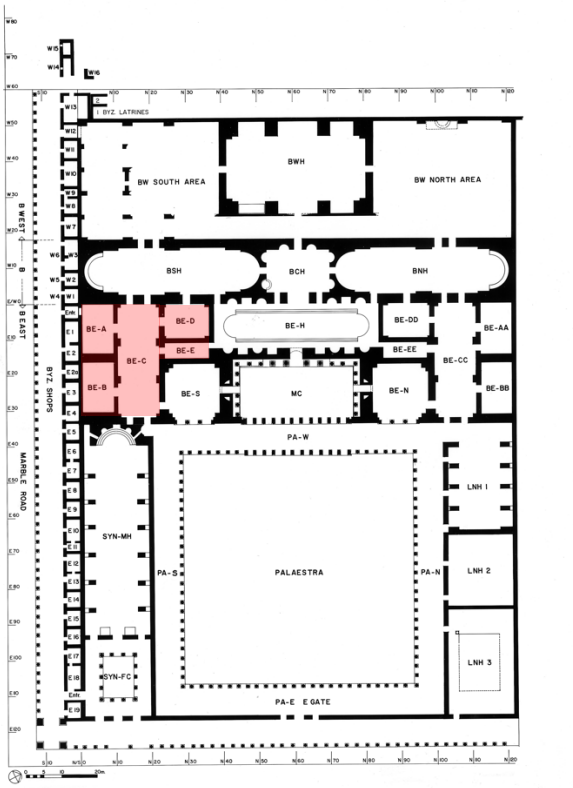


Figure 2.51. Plan of the Sardis Bath-Gymnasium Complex with the southern auxiliary rooms indicated in red.

Figure 2.52. Religious graffito in red paint preserved on plaster from Room BE-A. "Εὐλογητὸ[ς - - -]," which translates to "[someone or something] is blessed!" or "may [someone or something] be blessed!"

Figure 2.53. Aerial view of Room BE-A as excavated. South is at the top of the frame. The late 4th century A.D. mosaic floor is visible on the western side of the room (right) because the later, marble slab floor, which is preserved on the eastern side (left) has been robbed out. The late dividing walls that were installed on top of marble slabs are visible in the center. The 'cooking pit' is in the northeast corner of the room (lower left corner of photo). The column drum interpreted as an 'anvil' is visible at right edge of photo.

Figure 2.54. View of Byzantine Shop Unit E3 as excavated (1968), facing north, with doorway into Room BE-B.

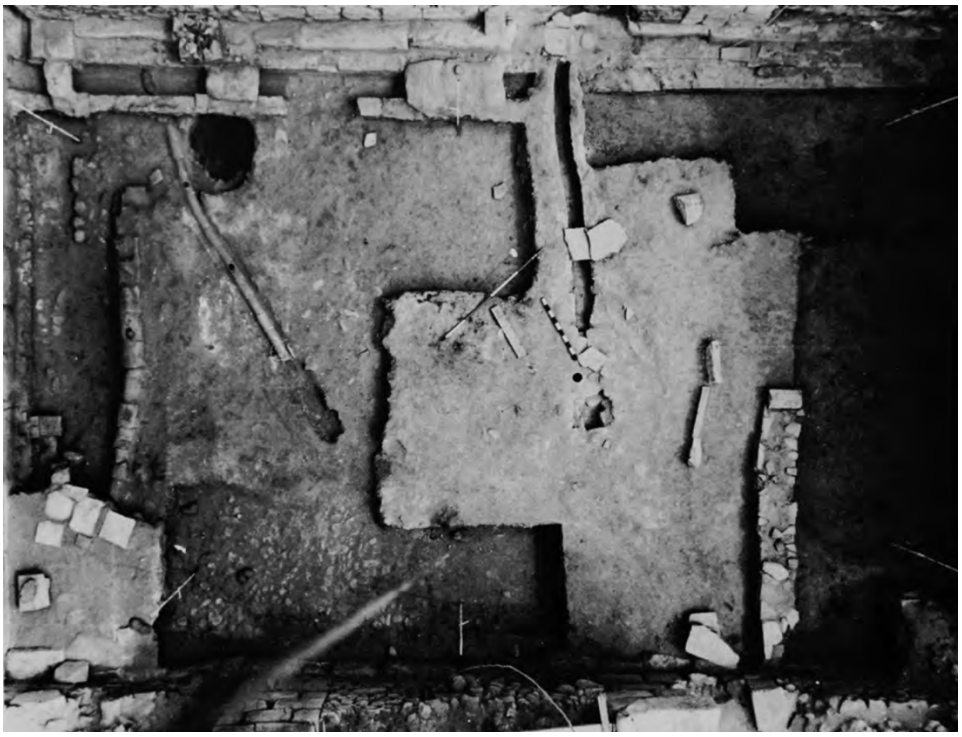


Figure 2.55. Aerial view of Room BE-B. North is at the top of the photo.

Figure 2.56. Fountain in the center of Room BE-B.

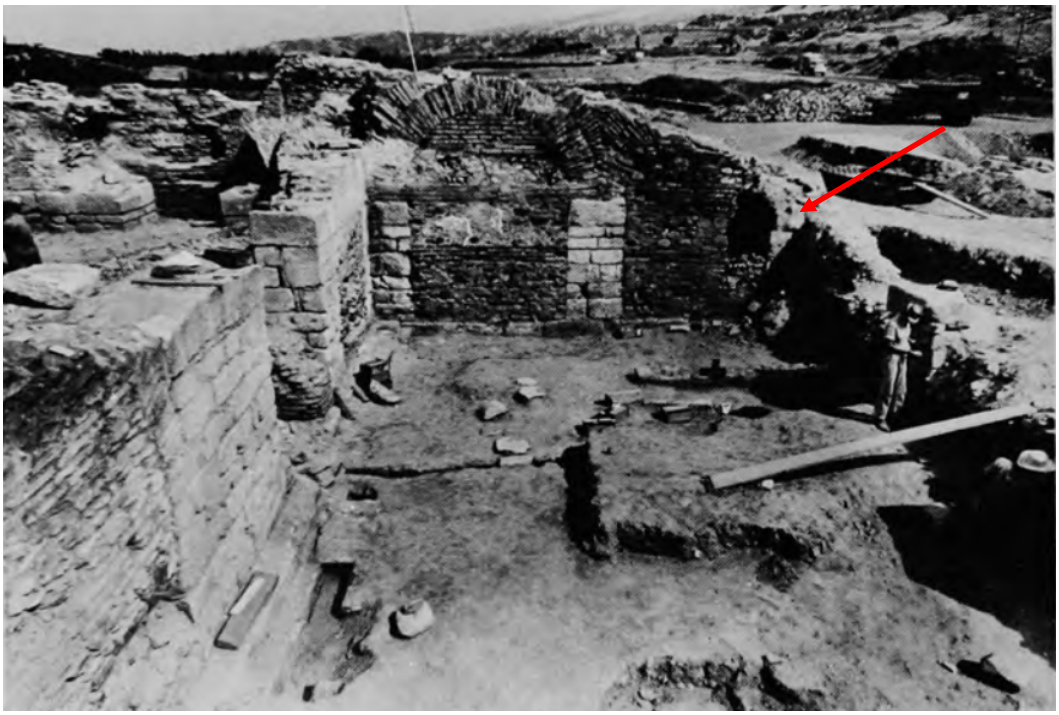


Figure 2.57. General view of Room BE-B towards the east. The passageway that was cut between Room BE-B and the Synagogue after the building was no longer functioning as a bath is indicated by the red line.

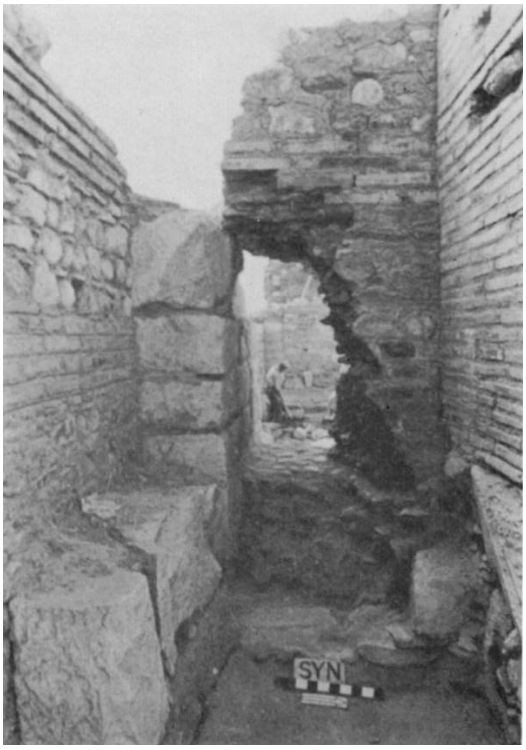


Figure 2.58. Detail of the passageway between Room BE-B and the Synagogue. Photo taken looking into Room BE-B.

Figure 2.59. View into Room BE-C with lime kiln in center; Rooms BE-B (left) and BE-A (right) in the middle ground, and the Byzantine Shops, portico, and Marble Road at the top of the frame.

Figure 2.60. East wall of Room BE-C with southern doorway blocked by the Synagogue apse.

Figure 2.61. Part of the preserved mosaic in Room BE-C in front of the entrance to Room BE-B.

Figure 2.62. Base for the statues of the Children of Kore *in situ* against the south wall of the central bay in Room BE-C.

Figure 2.63. Room BE-C with the large lime kiln in the center of the room. View towards the west.

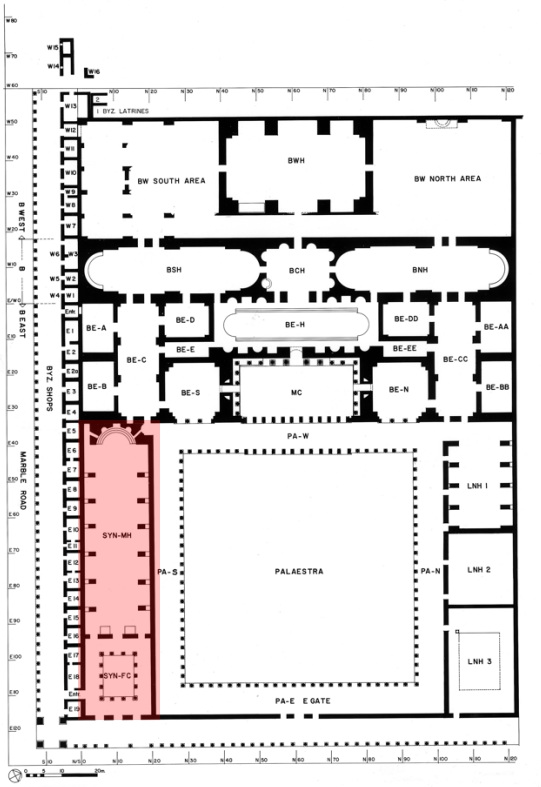


Figure 2.64. Plan of the Sardis Bath-Gymnasium Complex with the South Hall of the Palaestra / Potential Civil Basilica / Synagogue indicated in red.

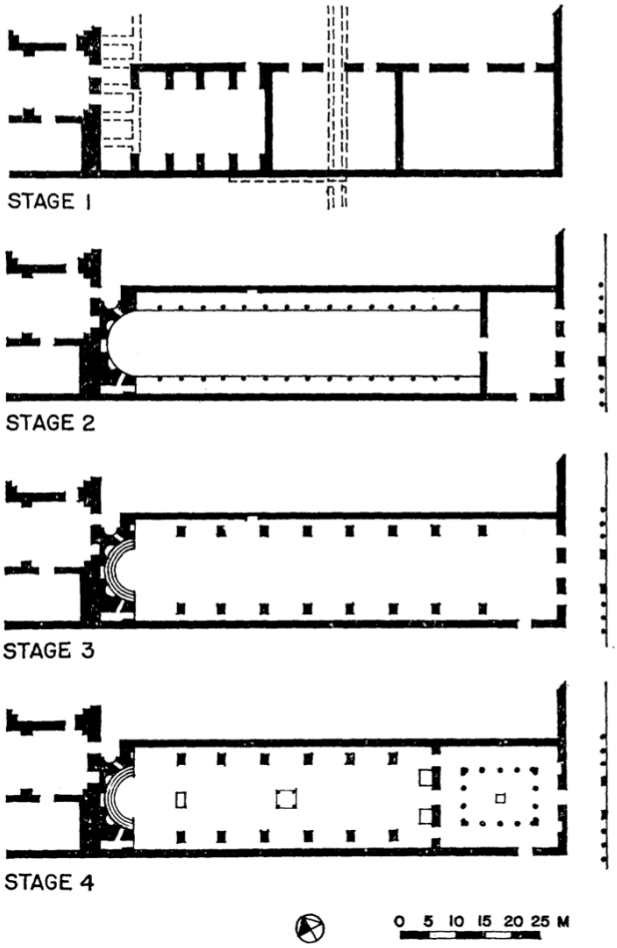


Figure 2.65. Conjectural plans of the Sardis Synagogue with the four stages identified by A. Seager, 1972.

Figure 2.66. Aerial view of the Synagogue facing west.

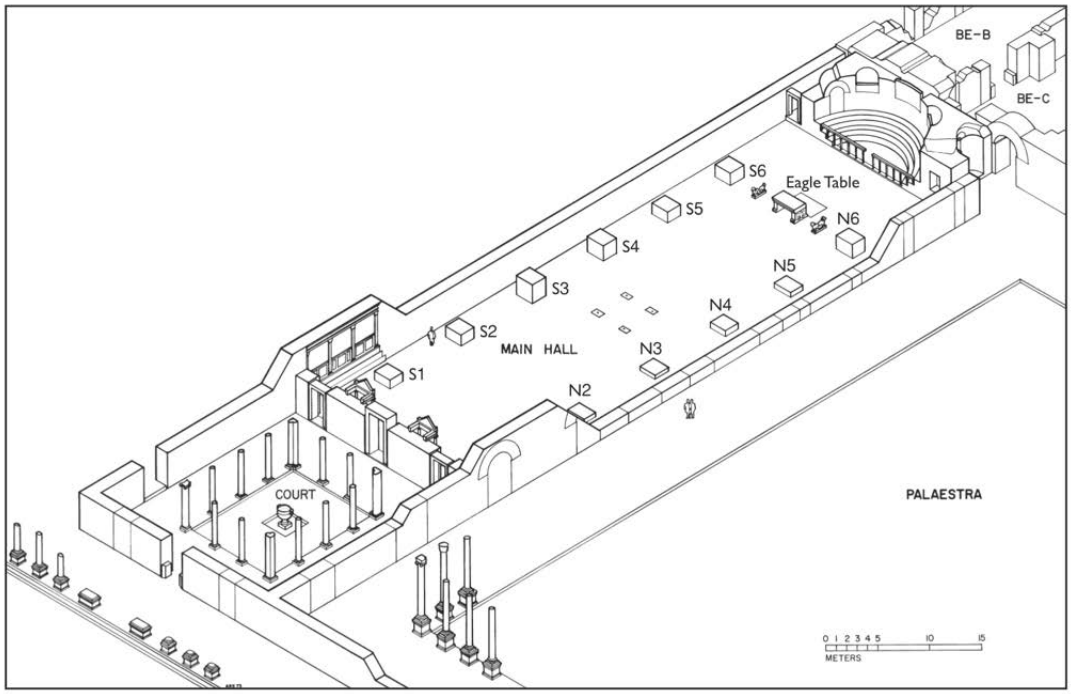


Figure 2.67. Isometric drawing of the Synagogue.

Figure 2.68. Shrines against the east wall of the main hall of the Synagogue.

Figure 2.69. View of the west end of the Synagogue with the restored semi-circular seating arrangement (*synthronon*), the Eagle Table, and back-to-back lion statues.

Figure 2.70. Detail of one of the supports of the Eagle Table.

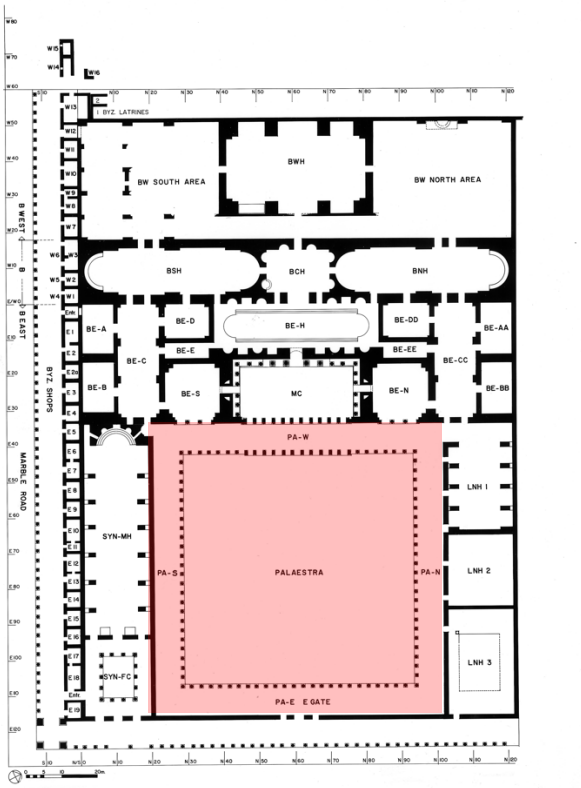


Figure 2.71. Plan of the Sardis Bath-Gymnasium Complex with the palaestra indicated in red.

Figure 2.72. Paved walkways across the palaestra.

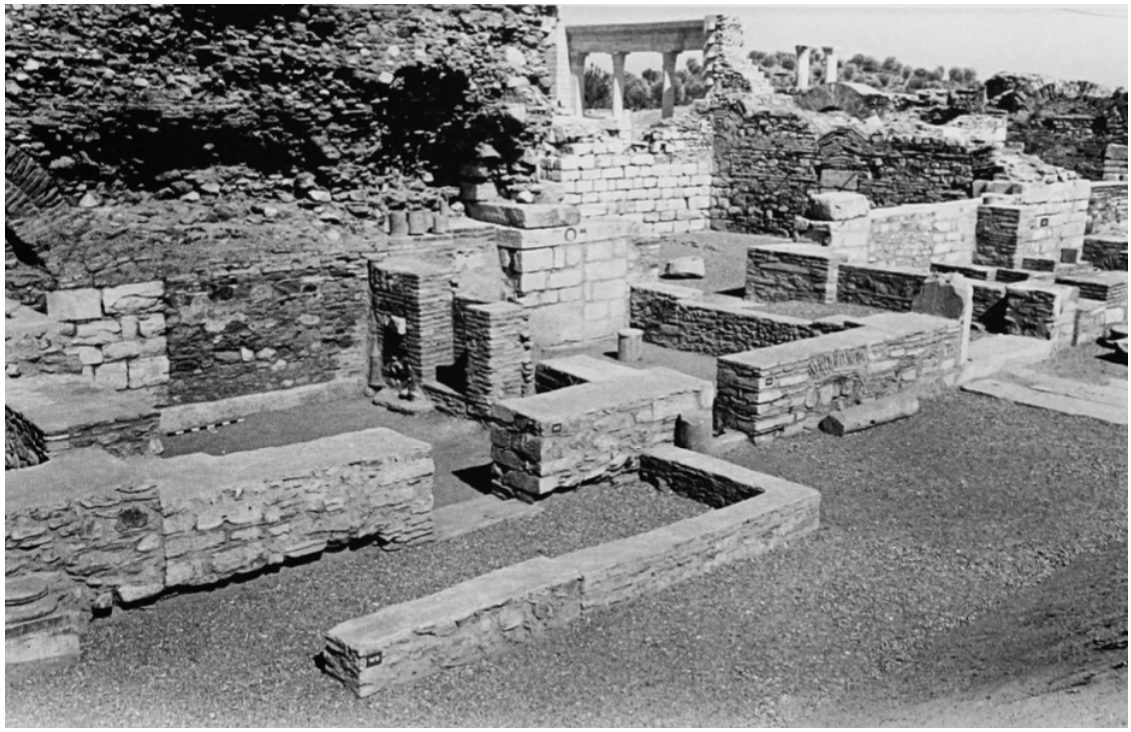


Figure 2.73. L-shaped brick construction in front of Shop W 2.

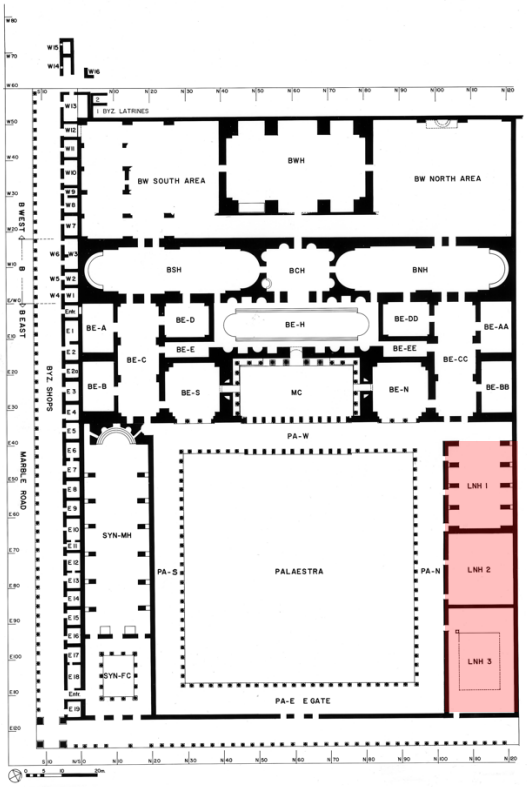


Figure 2.74. Plan of the Sardis Bath-Gymnasium Complex with the rooms that comprise the LNH indicated in red.

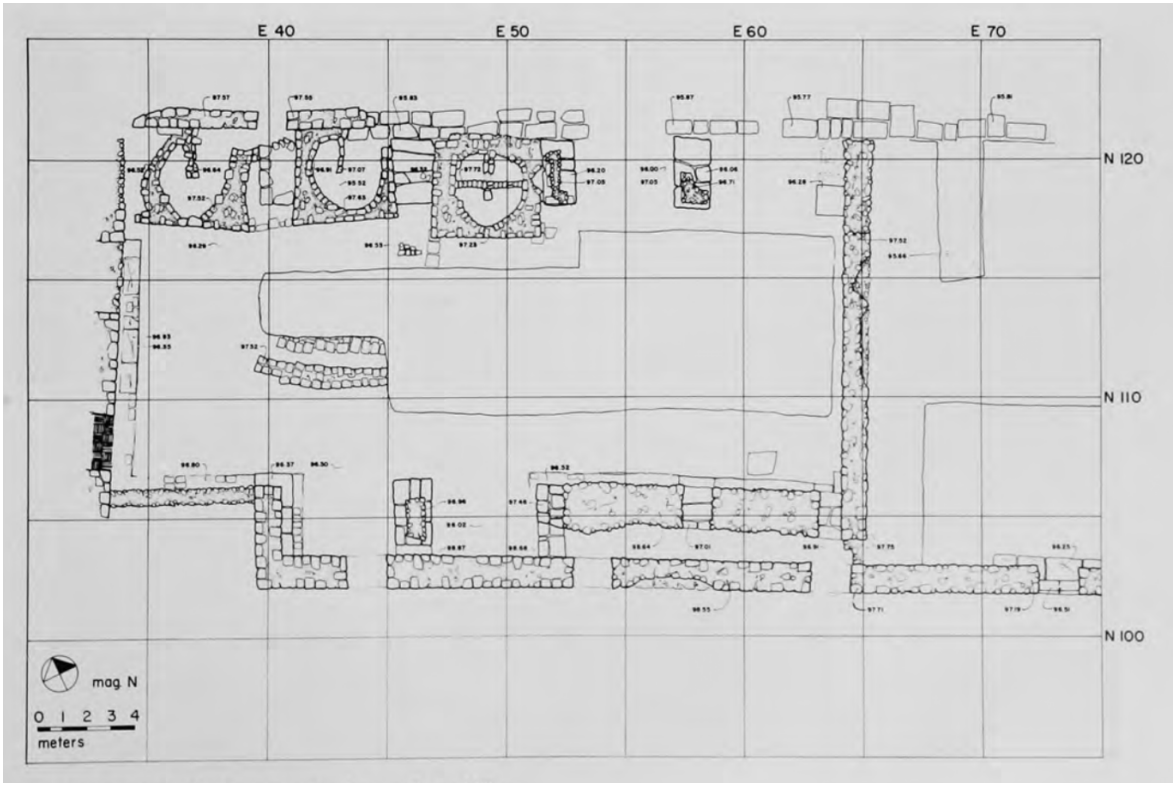


Figure 2.75. Drawing of LNH 1 with pottery kilns and late walls.

Figure 2.76. One of the pottery kilns in LNH 1.

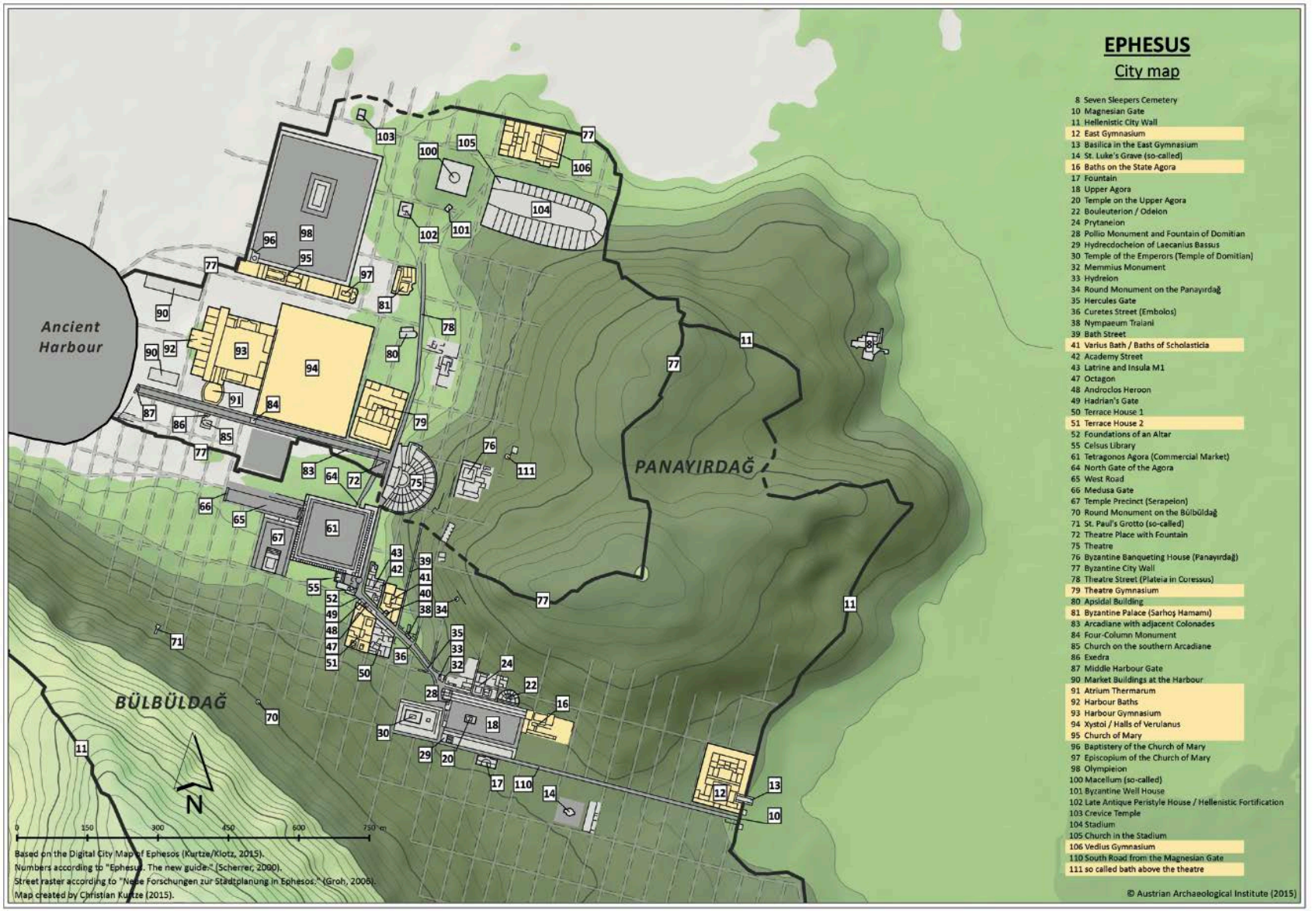
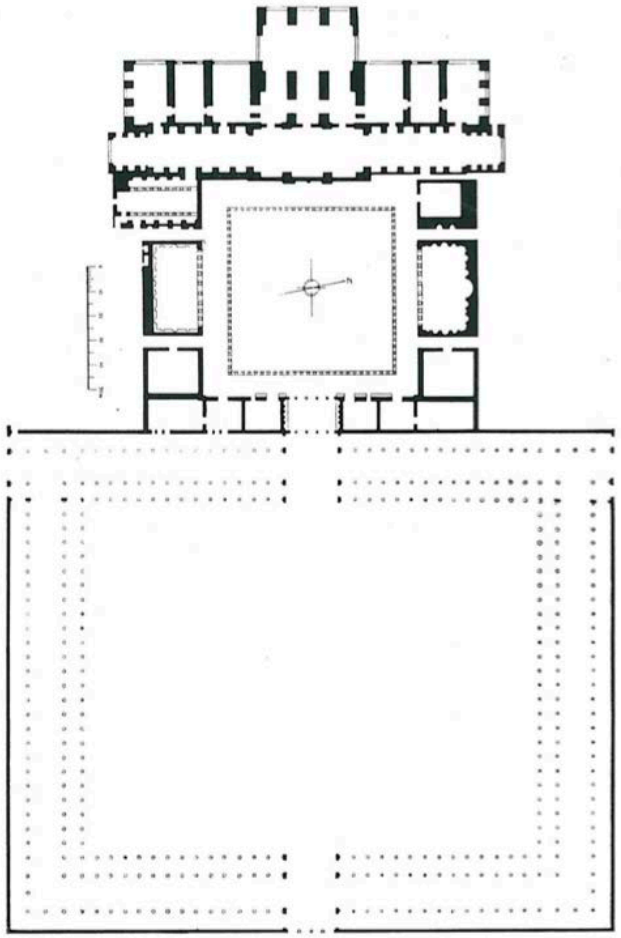
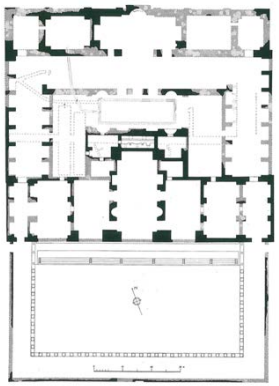


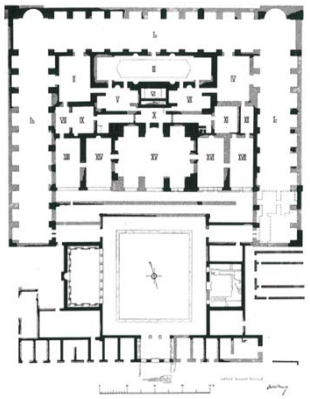
Figure 3.1. City plan of Ephesus with all the known baths marked.



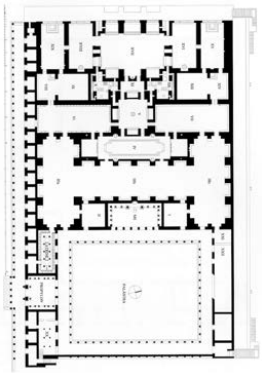
A



B



C



D

Figure 3.2: Plans of the four Imperial Type Thermae at Ephesus drawn to approximate scale.

A. Harbor Bath-Gymnasium
B. Theater Bath-Gymnasium
C. East Bath-Gymnasium
D. Vedius Bath-Gymnasium

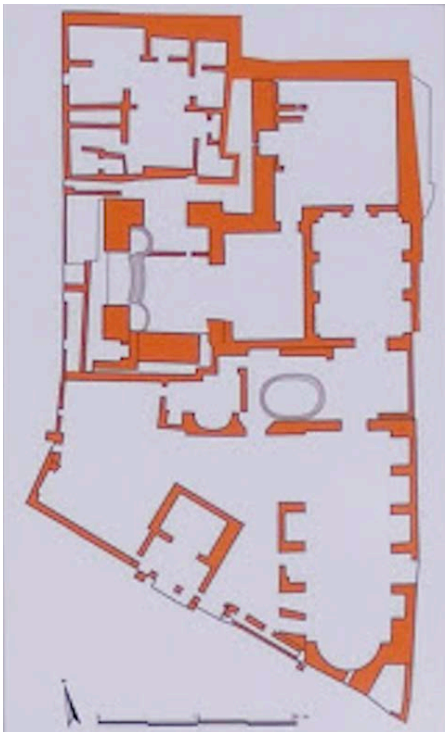


Figure 3.3: Plan of the Varius / Scholastikia Baths.

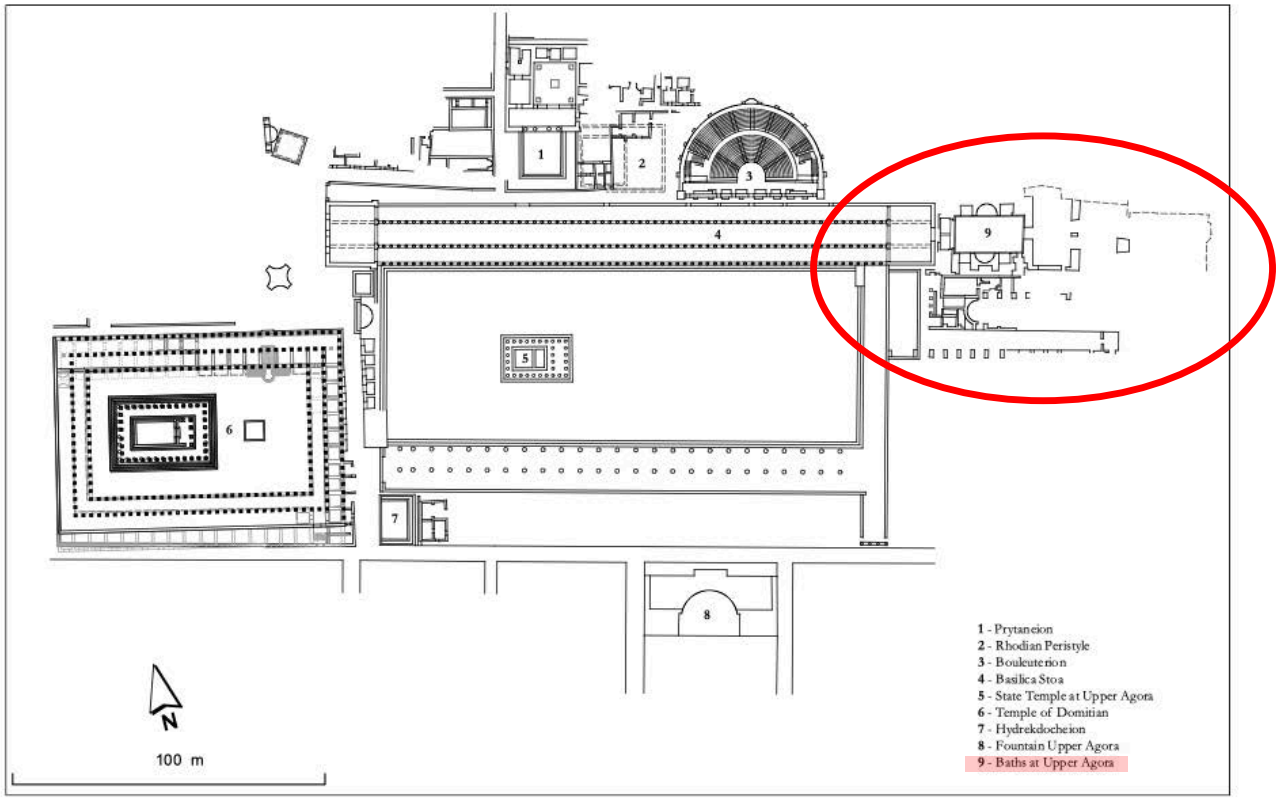


Figure 3.4: Plan of the State Agora with the bath building (Upper Gymnasium) at the northeastern corner.

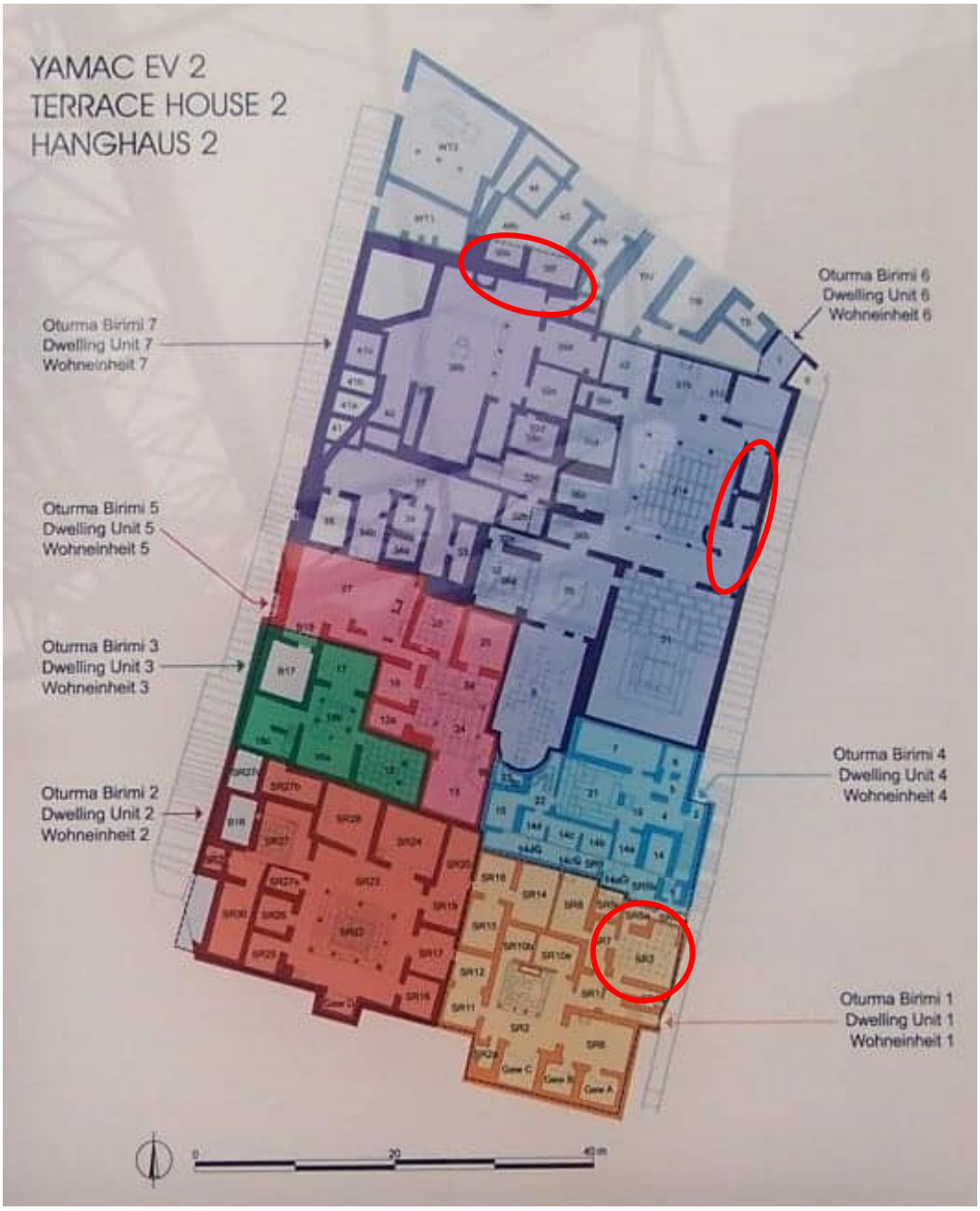


Figure 3.5: Plan of Terrace House 2 with the seven (originally six) residential units marked in different colors and the baths circled in red. Most of the Terrace House 2 baths were destroyed by earthquakes in the late 3rd century A.D. and not rebuilt. However, several finds dating to the 6th and 7th centuries A.D. were found inside the bathing rooms of Unit 6, suggesting that those rooms, at least, may have continued to function.

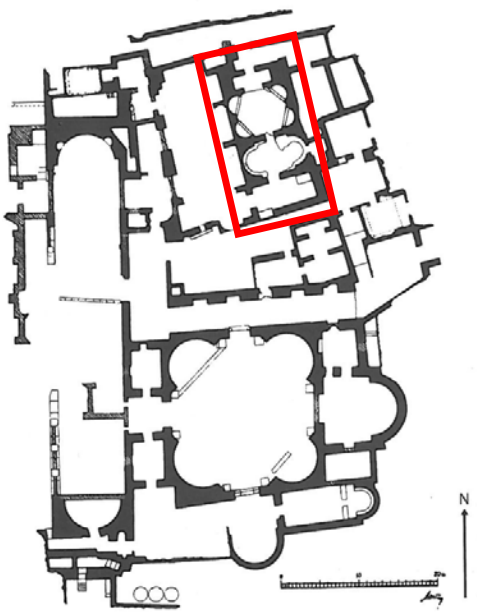


Figure 3.6: Plan of the Byzantine Palace with the baths (Sarhoş Hammam) marked in red.

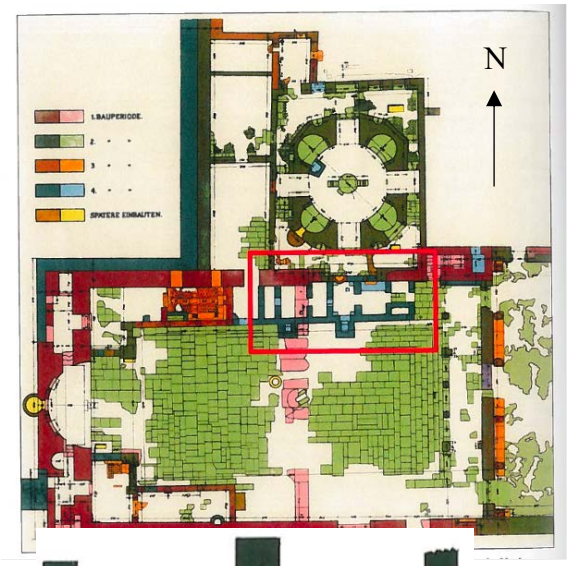


Figure 3.7: Plan of the small baths to the south of the baptistery in the Church of Mary.

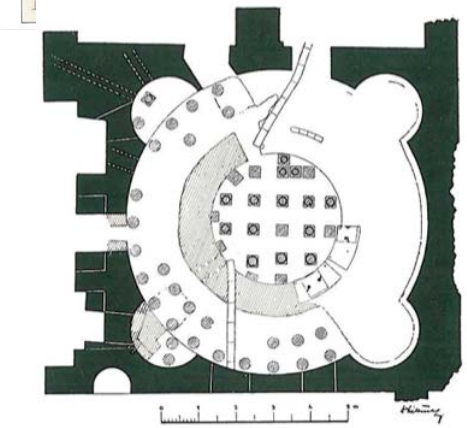


Figure 3.8: Plan of the small baths above the theater.

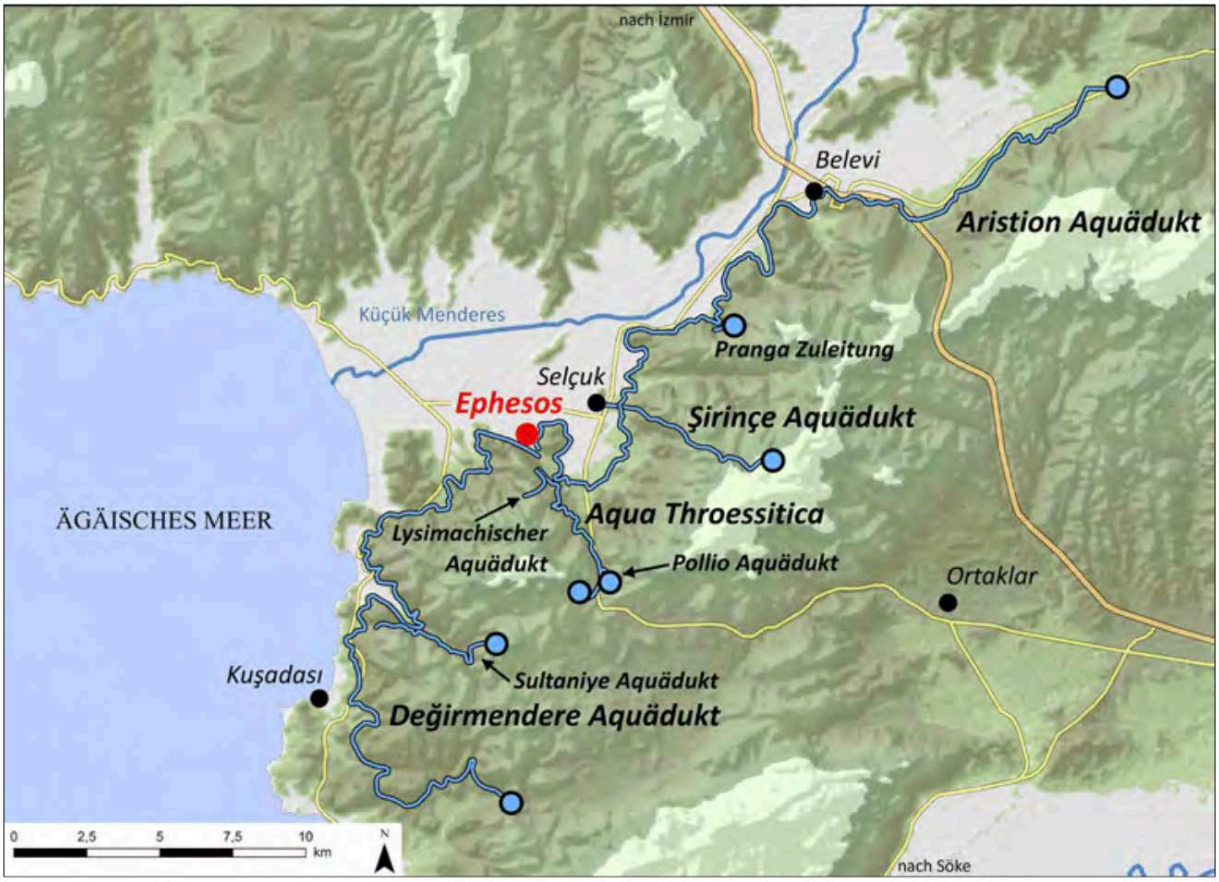


Figure 3.9: Map marked with the routes of the aqueducts that supplied Ephesus.

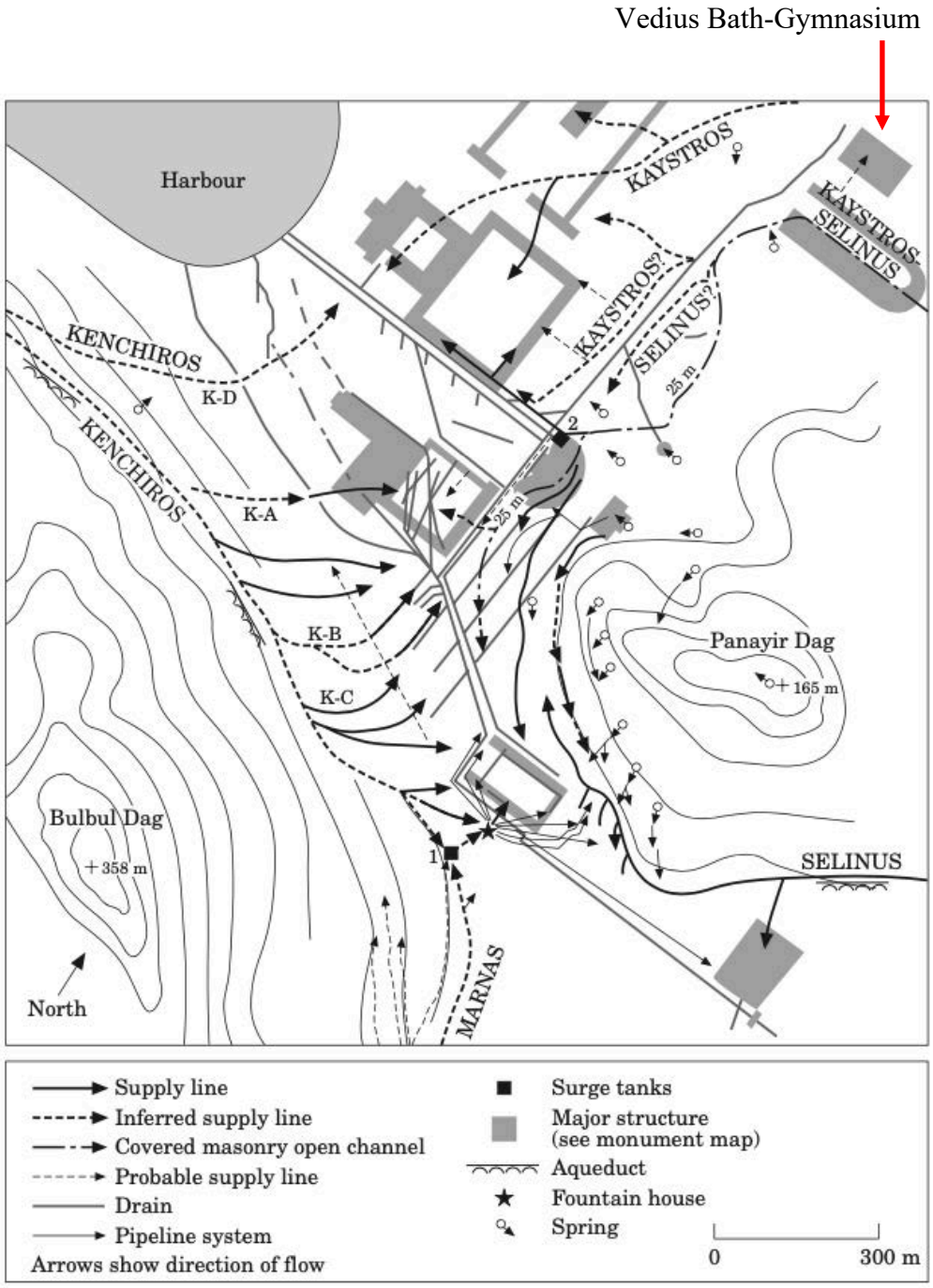


Figure 3.10: Water distribution pipeline and drainage system of the city of Ephesus in the Roman Imperial period.

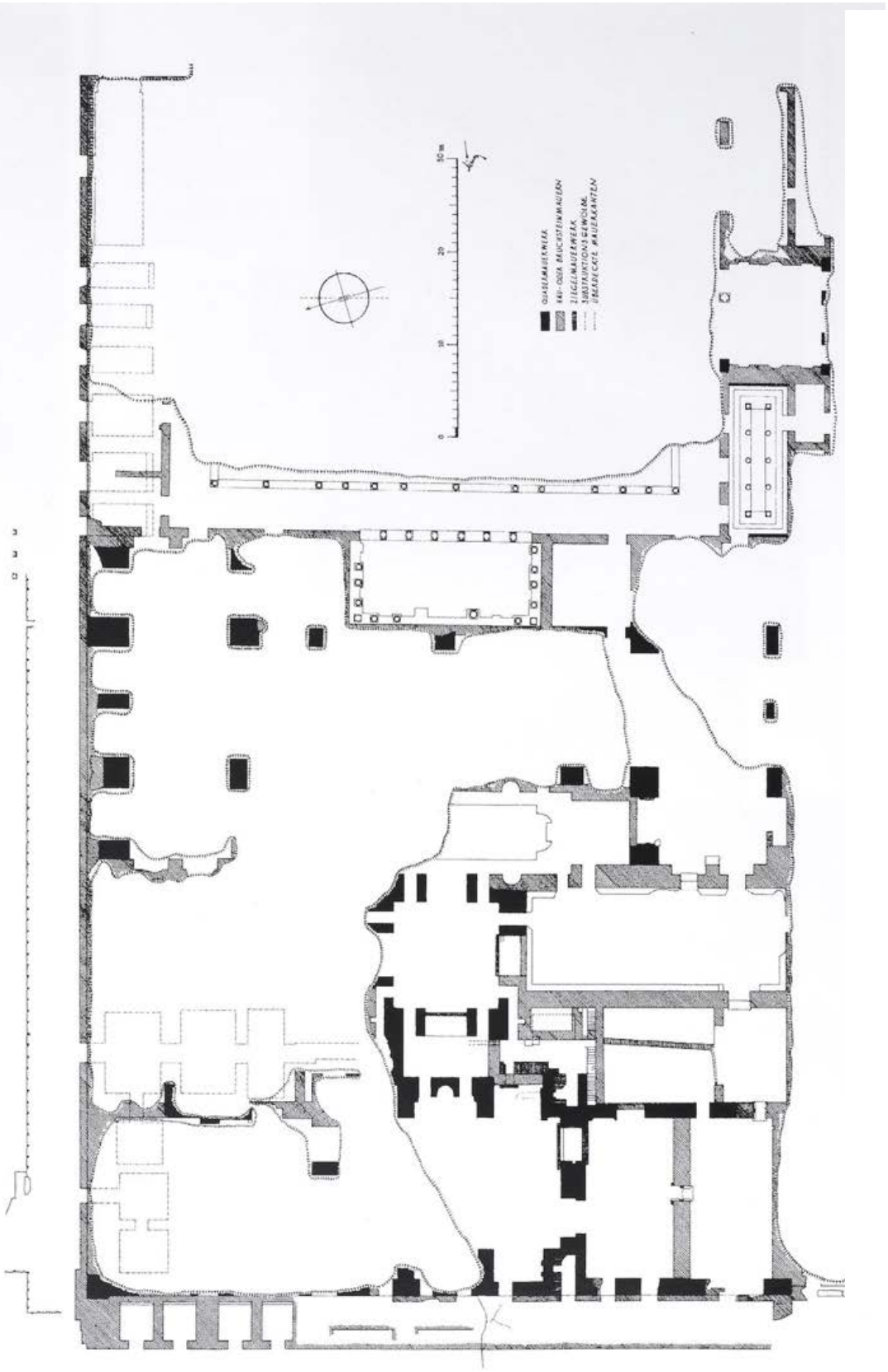


Figure 3.11: Plan of the Vedius Bath-Gymnasium showing the extent of the excavations under Miltner in the 1950's.

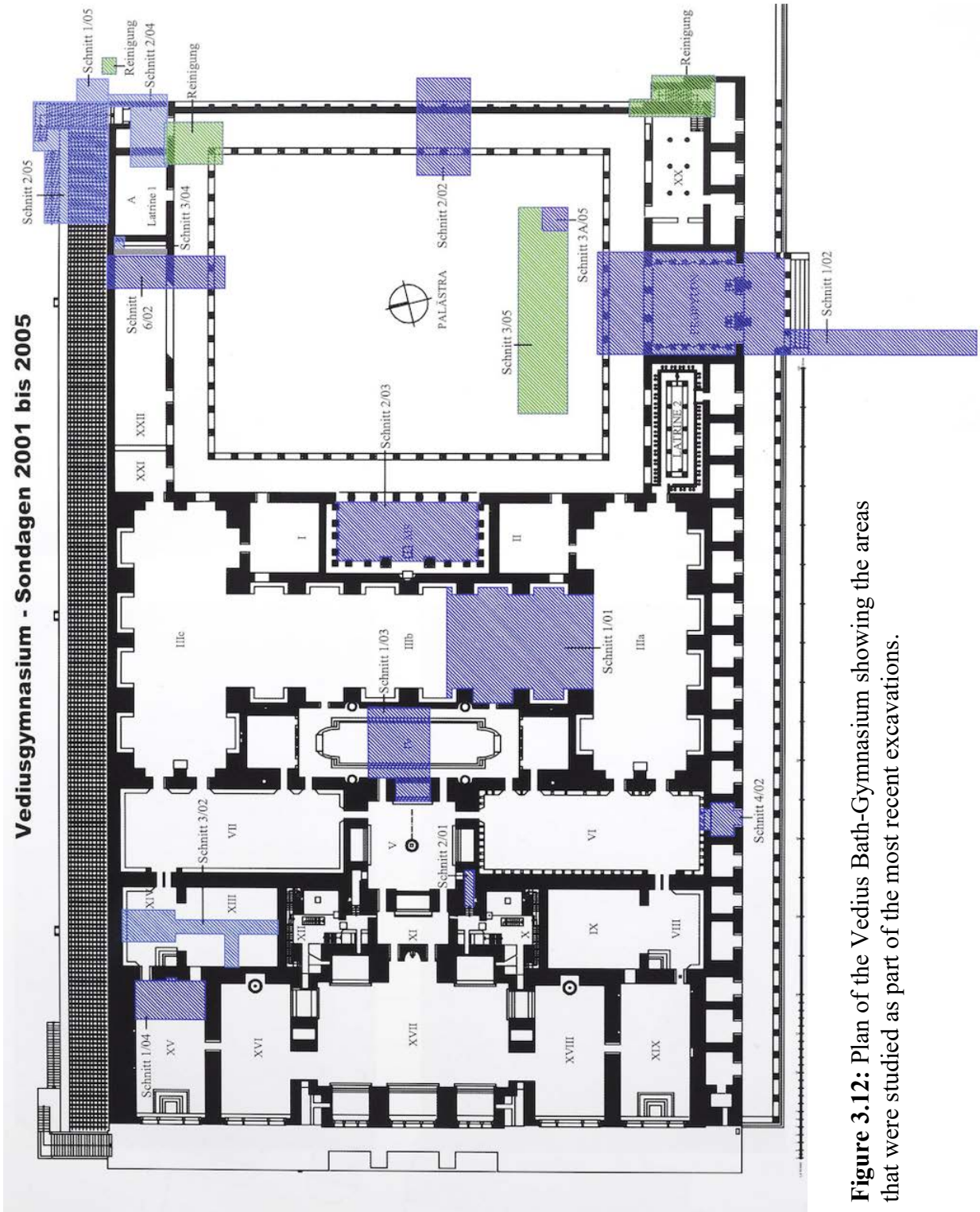


Figure 3.12: Plan of the Vedius Bath-Gymnasium showing the areas that were studied as part of the most recent excavations.

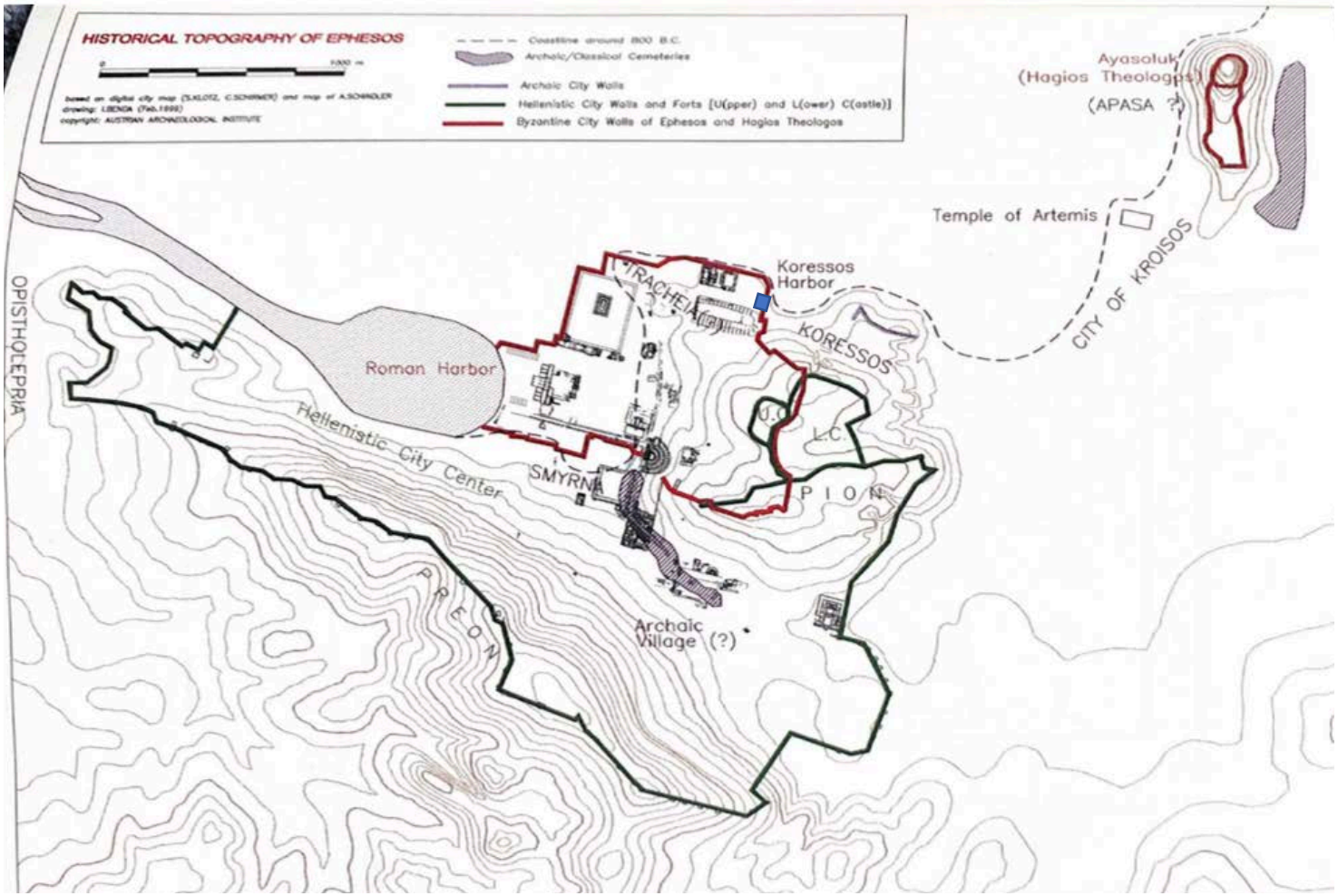


Figure 3.13: Plan of Ephesus including important sites outside the city limits, such as the Temple of Artemis and Ayasoluk Hill, where St. John's Basilica was built in the 6th century A.D. The green and red lines represent the Hellenistic and Byzantine fortification walls, respectively. The blue dot indicates the Koressian Gate.

Figure 3.14: Vedius Bath-Gymnasium (left) and the Stadium (right), with the colonnaded street that was one of the city's main processional routes between them. The modern highway is to the north (left) of the Vedius Bath-Gymnasium.

Figure 3.15: Vedius Bath-Gymnasium.

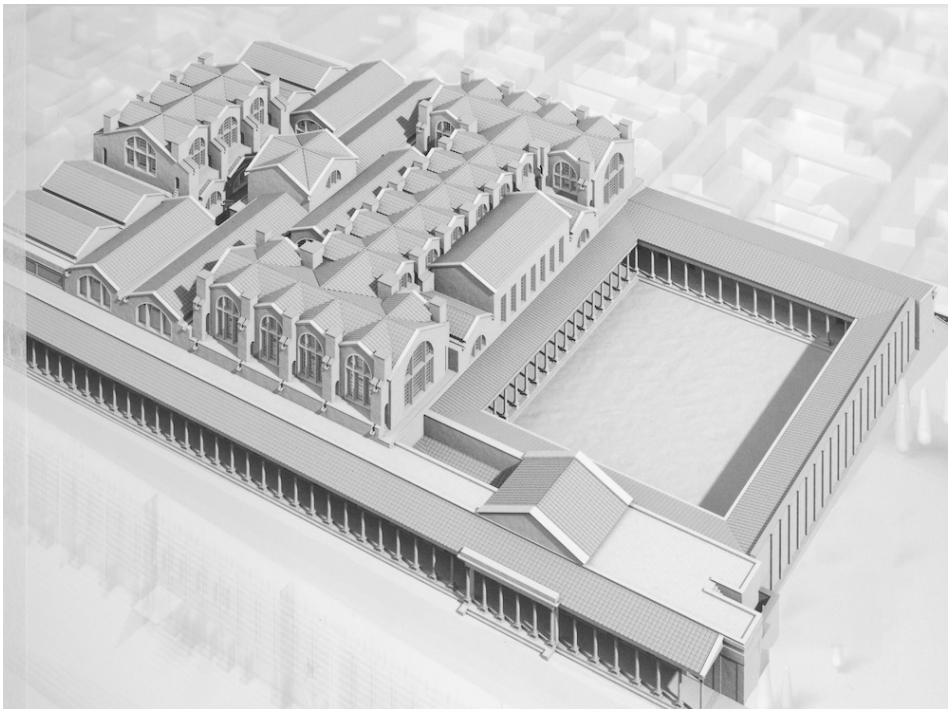


Figure 3.16: Closed model of the Vedius Bath-Gymnasium, from the southeast.

Figure 3.17: Open model of the Vedius Bath-Gymnasium, from the southeast.

Figure 3.18: View towards the southwest corner of Latrine 2 with columns *in situ*. 1927.

Figure 3.19: View of Latrine 2 from the east. The doorways in the west and south walls are clearly visible.

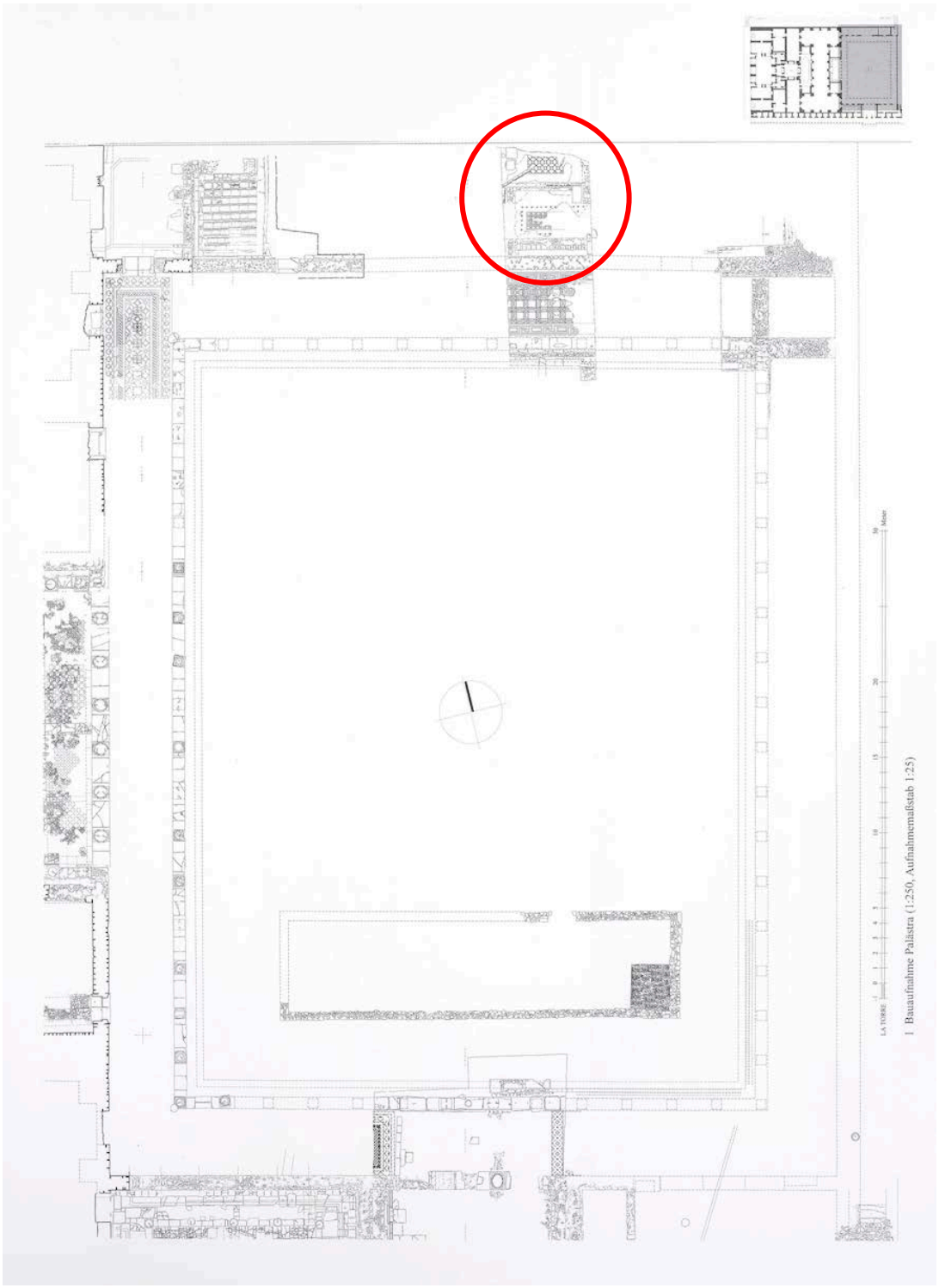
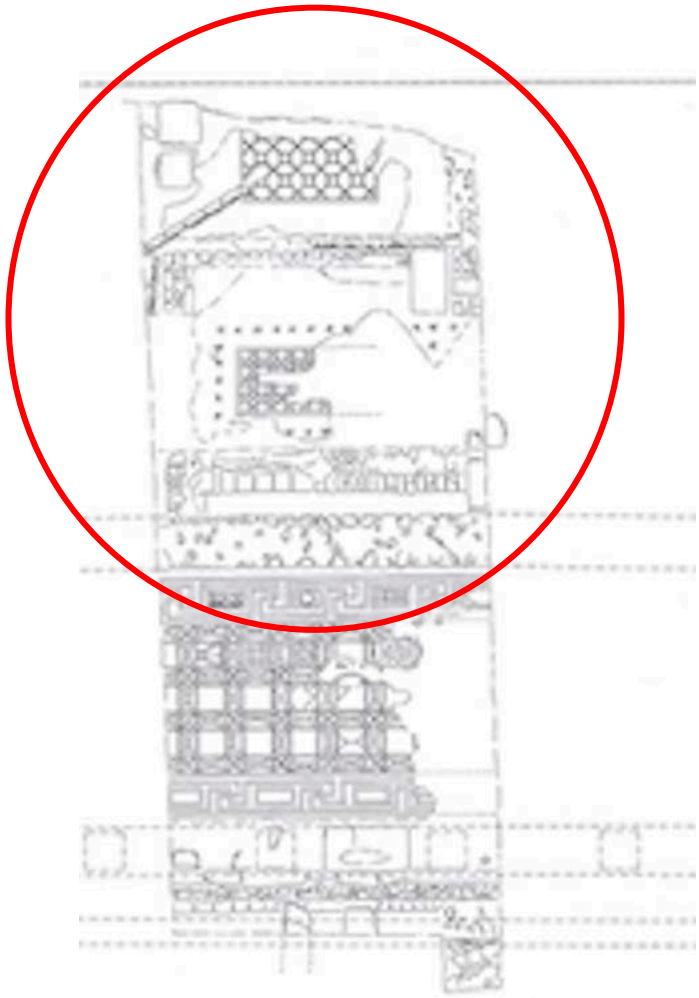


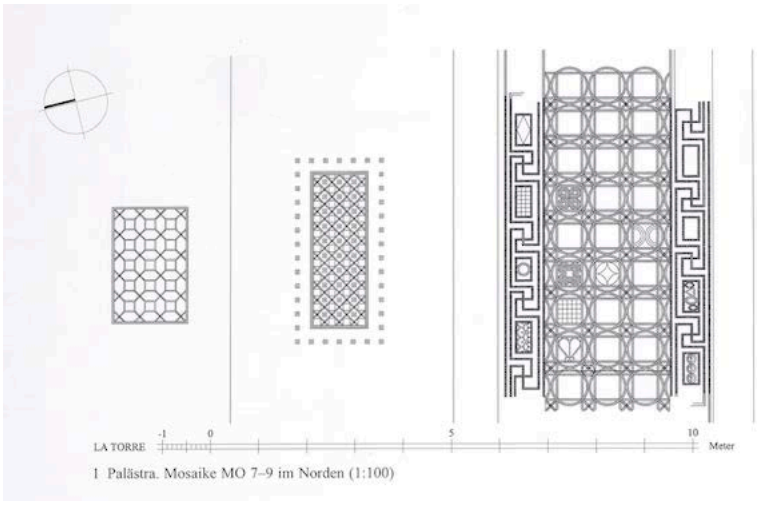
Figure 3.20: Drawing of the palaestra with the split-level room containing two mosaics and a late water pipe (the northern part of trench 6/02) circled in red. (Enlarged on the next page).



Left: Detail of Figure 20 enlarged.

Figure 3.21 (below left): Detail of the water pipe on top of Mosaic 7 in the northern part of the excavated room on the north side of the palaestra. Trench 6/02

Figure 3.22 (below right): Drawings of the mosaics from the excavated room on the north side of the palaestra. Trench 6/02.



1 Palästra. Mosaike MO 7–9 im Norden (1:100)

Figure 3.23: Wall segment east of the northeast corner of the Vedius Bath-Gymnasium that may have been part of the Byzantine Fortification circuit.

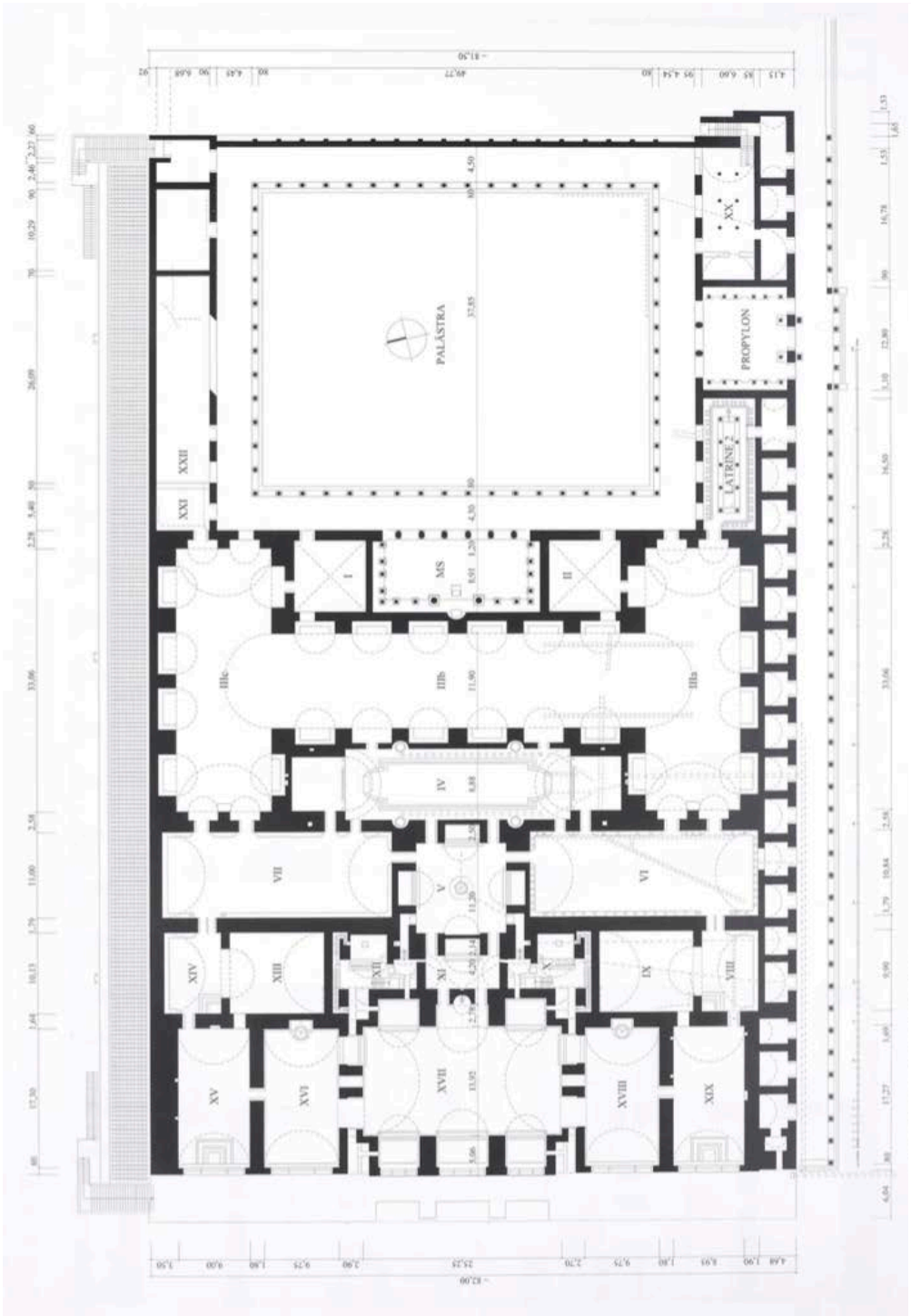


Figure 3.24: Plan of the Vedius Bath-Gymnasium with the water supply pipes marked. Pipes fed by the Kaystros / Aristion Aqueduct carried water from east to west underneath the stadium, and then turned north to connect with the southwest corner of the Vedius Bath-Gymnasium. At the southwest corner of the Vedius Bath-Gymnasium, the pipes ran parallel to the building underneath the colonnade (from west to east), and then branched north under the floors to supply all areas of the complex that needed water.

Figure 3.25: Room IIIb towards the north. The original mosaic floor with black, white, and yellow tesserae is visible beneath the secondary *opus sectile* floor made from grayish-white spoliated marble.

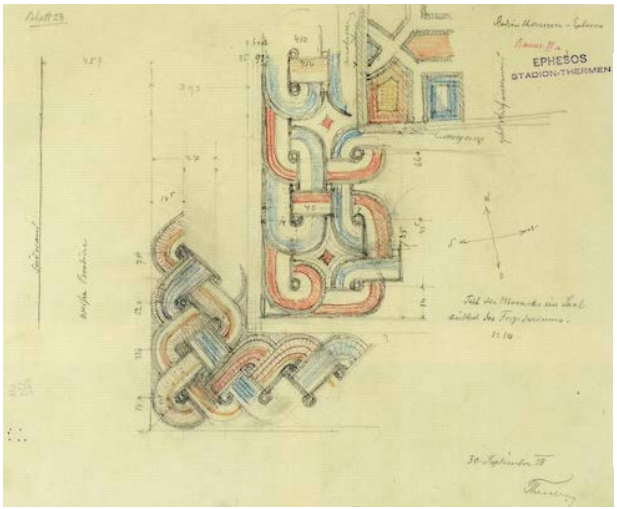


Figure 3.26: Detail of the secondary, polychrome mosaic in Room IIIb. Drawing by M. Theuer.

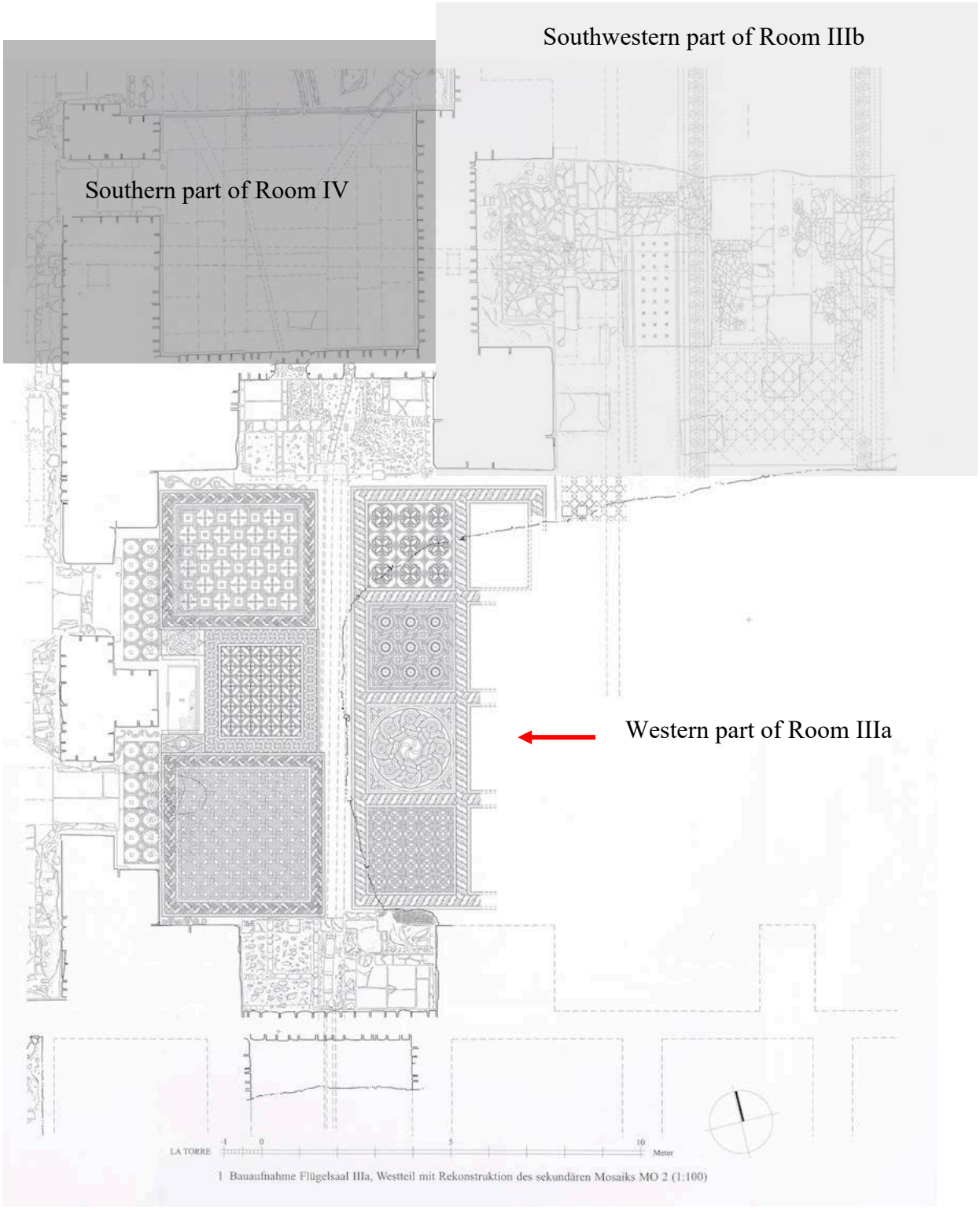


Figure 3.27: Reconstruction drawing of the polychrome mosaics that were installed on top of the original black and white floor mosaic in the western part of Room IIIb.

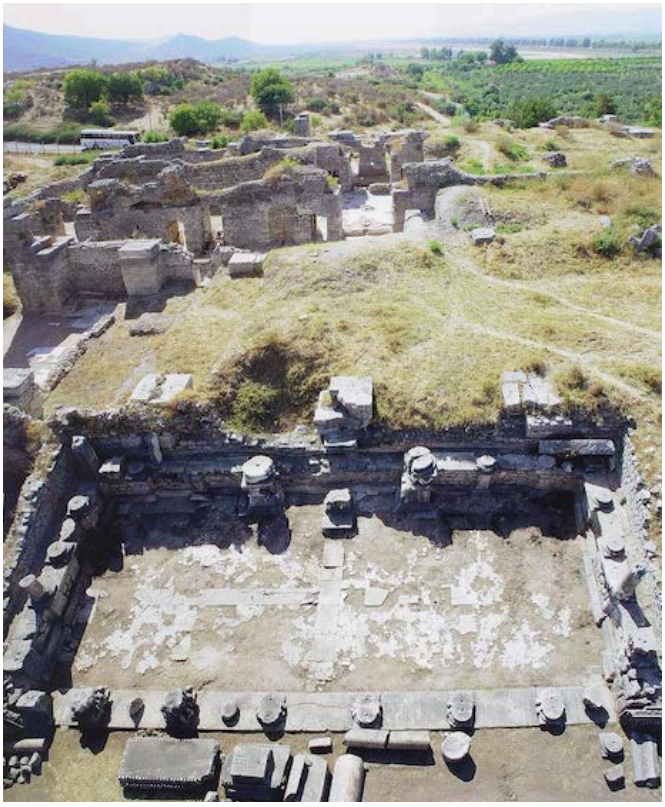


Figure 3.28: View of the Marble Hall from crane.

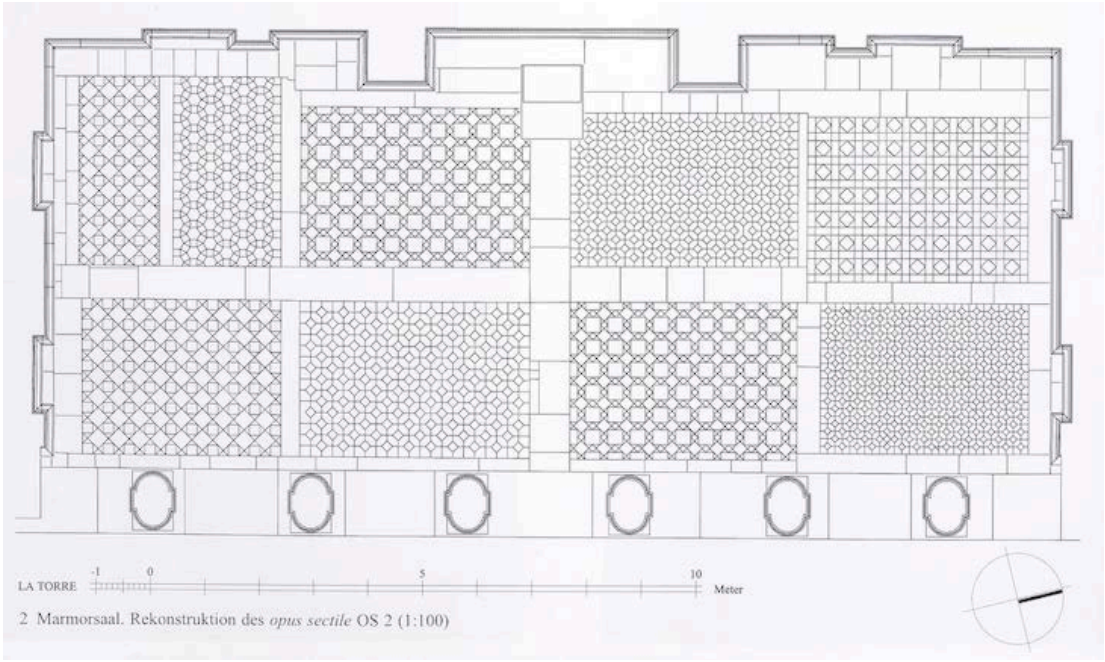


Figure 3.29: Marble Hall. Reconstruction of the *opus sectile* floor (OS 2) (1:100).

Figure 3.30: Marble Hall. *Opus sectile* floor (OS 2).

Figure 3.31: Marble Hall. Detail of *opus sectile* floor (OS 2).

Figure 3.32 a (left) and b (right): Drawing and photograph of late antique mosaic in the north corridor of the peristyle of the palaestra

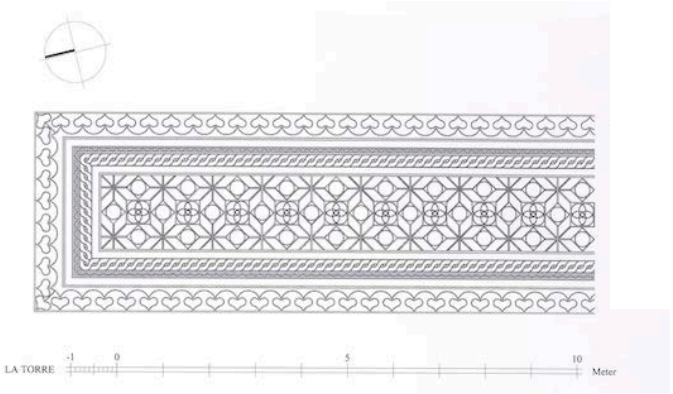


Figure 3.33 a (left) and b (right): Photo and drawing of late antique mosaic in the northwest corner of the peristyle of the palaestra.

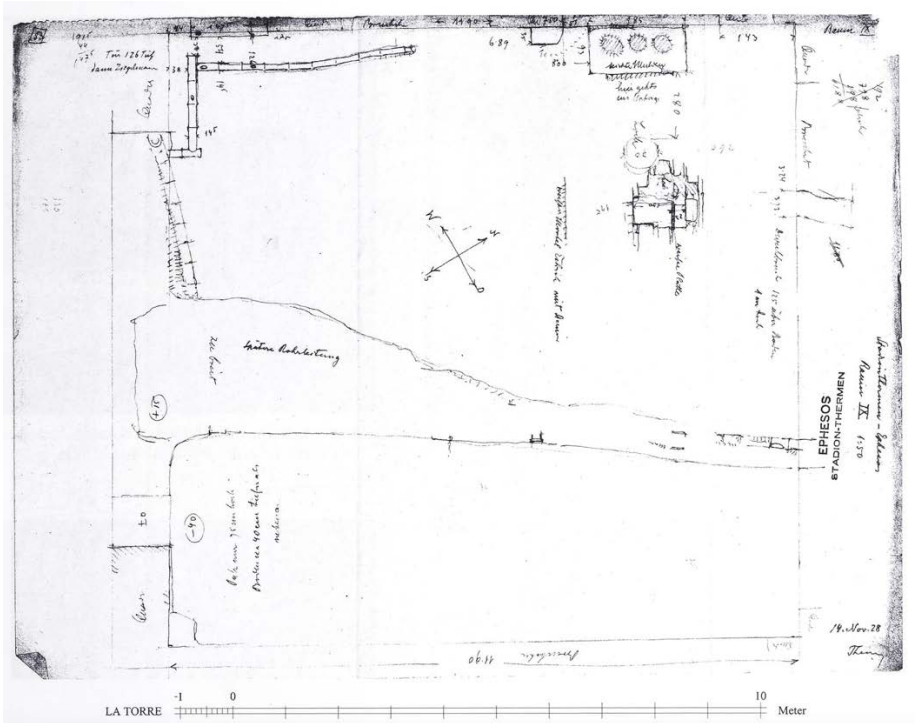


Figure 3.34: Plan drawn by M. Theuer showing the situation of the water pipes in Room VIII. 1928 (1:100).

Figure 3.35: Exposed water supply pipes approximately 60 cm beneath the floors in Rooms VIII and IX in the Vedius Bath-Gymnasium.

Figure 3.36: View of Apodyterium (Room VI) ledge with storage cubbies in northwest corner.

Figure 3.37: View of Tepidarium (Room XV) towards the southeast with blocked doorway and exposed hypocaust pillars.

a

b

Figure 3.38: Over-life-size statues of river gods from the north and south sides of the natatio in Room IV of the Vedius Bath-Gymnasium.

Figure 3.39: Over-life-size statue of a river god being lifted from the north side of the natatio in Room IV of the Vedius Bath-Gymnasium in 1928.

Figure 3.40: Natatio in Room IV of the Vedius Bath-Gymnasium towards the south. The base for one of the reclining river gods is still visible (red arrow).

Figure 3.41: (Below) Assembled photographs of all the statues that continued to be displayed in the Marble Hall after the renovation in the first quarter of the fifth century A.D. They are in order from left to right according to the positions in Manderscheid's diagram below (fig. 3.42).

A
Male portrait statue
(family member of Vedius?)

B
Philosopher?
Vedius?

C
Discus thrower hand fragment.

D
Hygia

E
Vesta Giustiniani
(Hestia)

F
Aspasia

G
Asklepios
*this is a statuette, not a full size statue

H
Athlete, foot fragment

I
Androklos
(hunter)

J
Female portrait
statue
(family member of
Vedius?)

Figure 3.42: (Below) Reconstruction of the statue locations in the Marble Hall of the Vedius Bath-Gymnasium by H. Manderscheid. My annotations are in color.

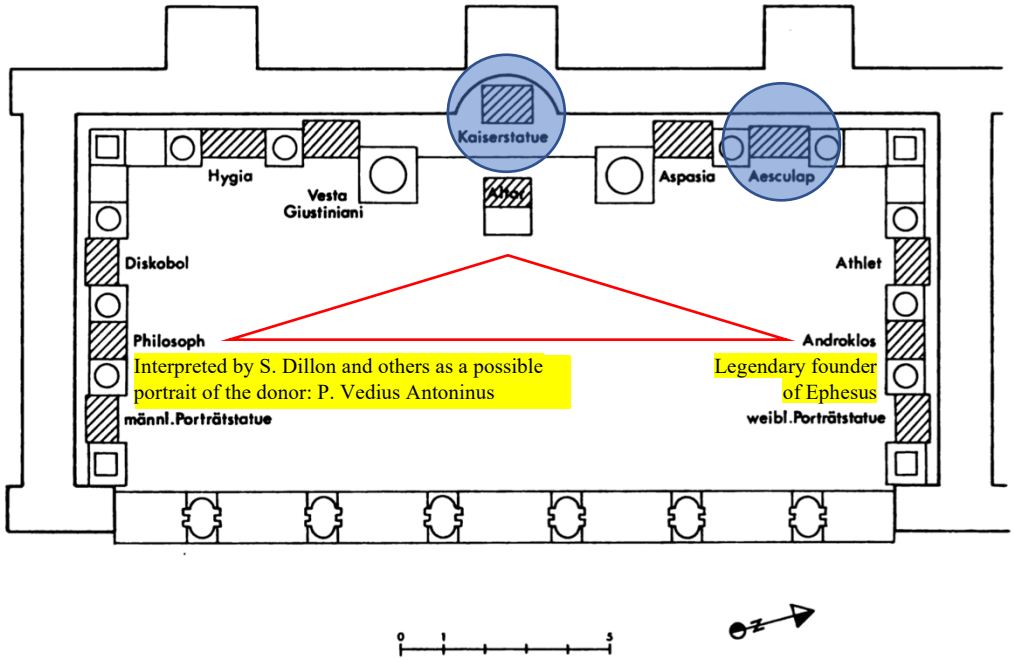


Abb. 15. Ephesus, Thermen des Vedius, Kaisersaal: Rekonstruktion der Standorte männl. Porträtstatue: *Kat. 186*; Philosoph: *Kat. 185*; Diskobol: *Kat. 189*; Hygia: *Kat. 176*; Vesta Giustiniani: *Kat. 182*; Aspasia: *Kat. 183*; Aesculap: *Kat. 175*; Athlet: *Kat. 190*; Androklos: *Kat. 191*; weibl. Porträtstatue: *Kat. 187*

Unlike the other statues that are attested by fragments that were found in the Marble Hall, these statues are hypothetical. A statuette of Asklepios was found in the Marble Hall, but it would not have filled the niche.

The statues indicated by the vertices of the triangle represented important figures in the political life of Ephesus.

Androclos was the legendary founder of Ephesus. Antoninus Pius and Vedius were also honored as *Ktistes* (honorary founders of the city). See Kalinowski 2002, 128.

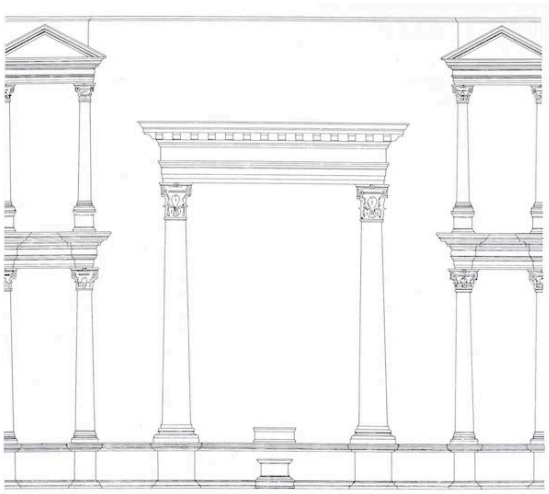


Figure 3.43: Reconstruction of the central niche in the Marble Hall of the Vedius Bath-Gymnasium.

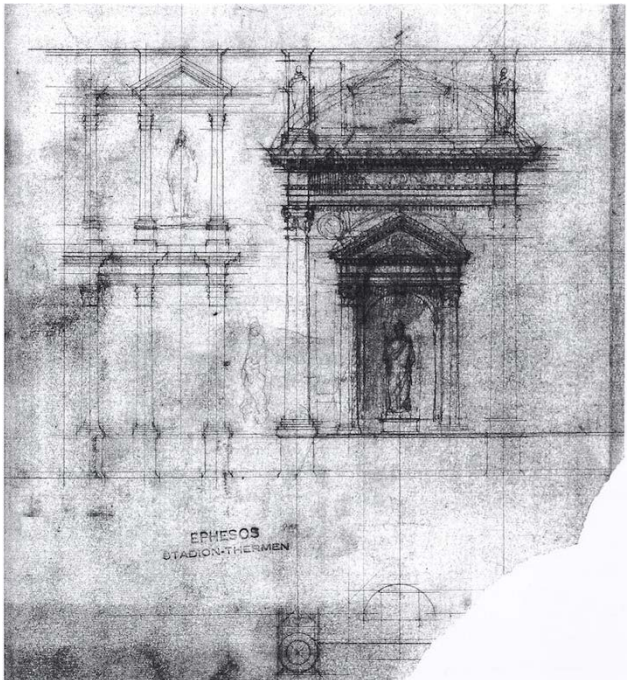


Figure 3.44: Reconstruction drawing by M. Theuer of the central statue niche in the Marble Hall of the Vedius Bath-Gymnasaium.

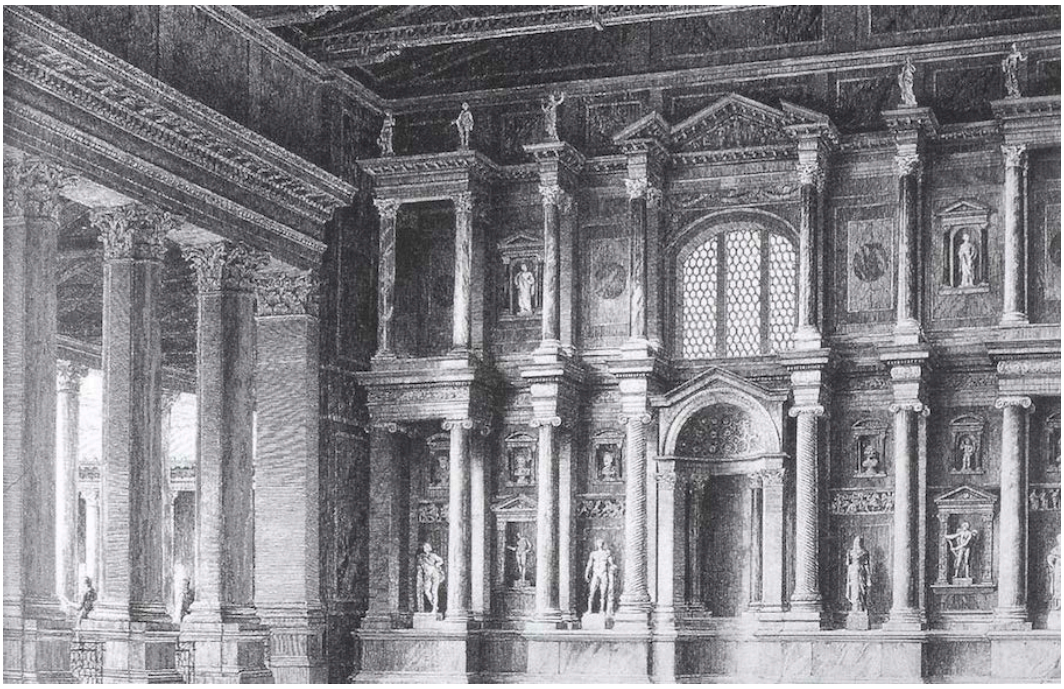
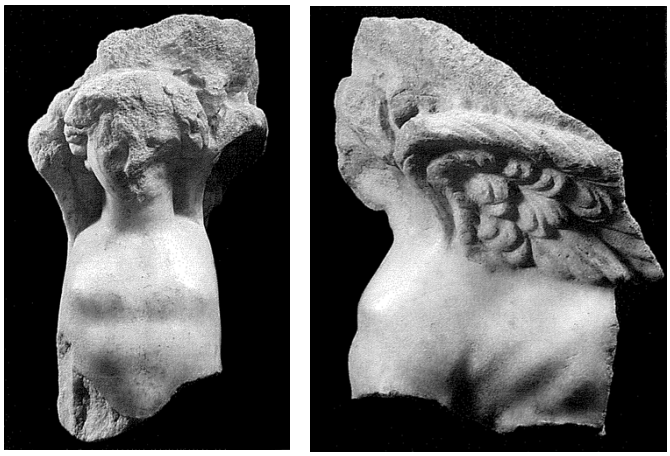


Figure 3.45: Hypothetical reconstruction of the Marble Hall of the Harbor Bath-Gymnasium.

Figure 3.46: Marble Hall of the Vedius Bath-Gymnasium 1927.

Figure 3.47: Marble Hall of the Vedius Bath-Gymnasium with altar *in situ* in front of the central niche.

Figure 3.48 (left): Reassembled Athena statue from the Vedius Bath-Gymnasium.



a b

Figure 3.49 (above): Details of the sphinx from Athena's helmet (a. front and b. left profile).

Figure 3.50: Room IIIa, basin in northwest bay.

Figure 3.51: Room IIIa, basin in southwest bay.

Figure 3.52: Room IIIb, southwest bay showing the benches that replaced the catch-basin for the original fountain.

Figure 3.53: Graffito of donkey with rider etched into the secondary *opus sectile* floor of the Marble Hall in the Vedius Bath-Gymnasium.

Figure 3.54: Room IIIb, secondary structure / house (?) built on top of the collapsed vault.

Figure 3.55: Room IIIb, southeast bay with doorway (?) and robber's hole (?) into Room II.

Figure 3.56: Palaestra, secondary structure / grain warehouse (?) toward the west.

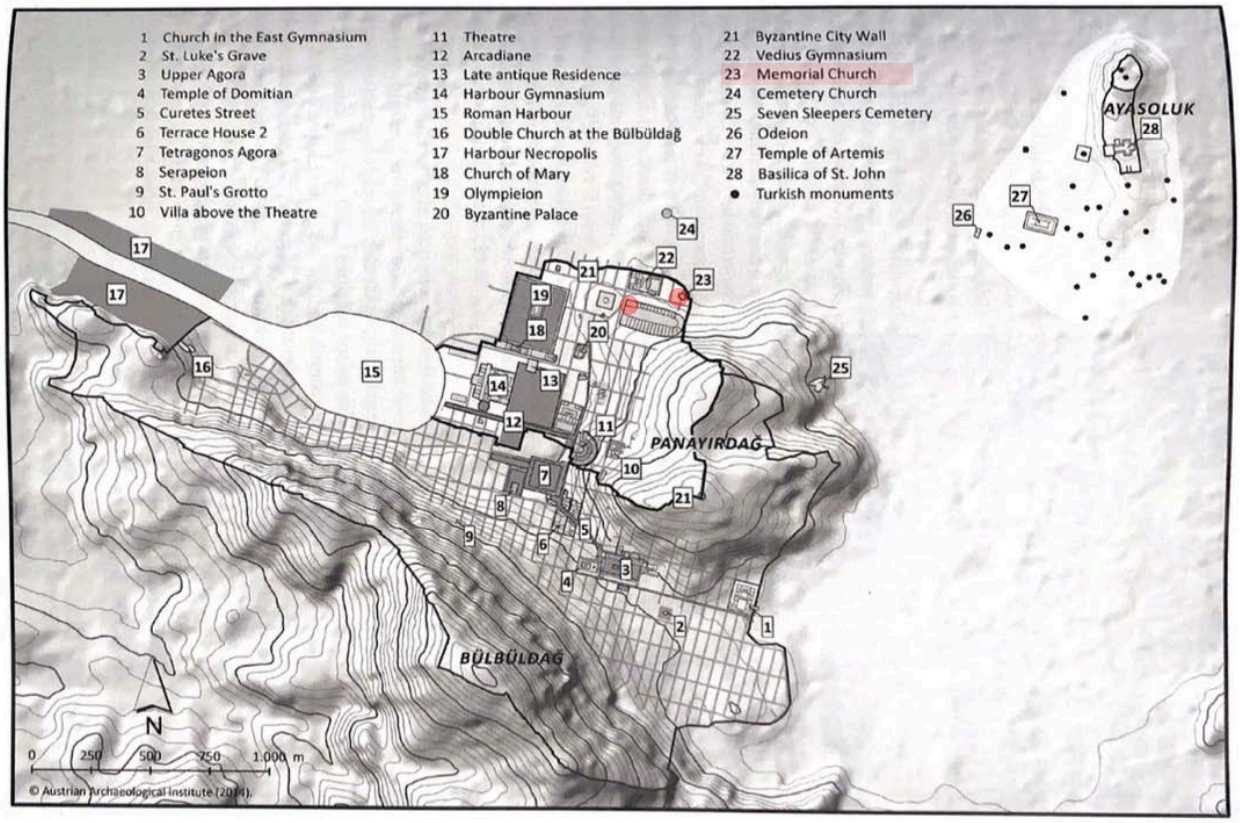


Figure 3.57: Byzantine and Turkish Ephesus/Ayasoluk with the churches near the Vedius Bath-Gymnasium marked.

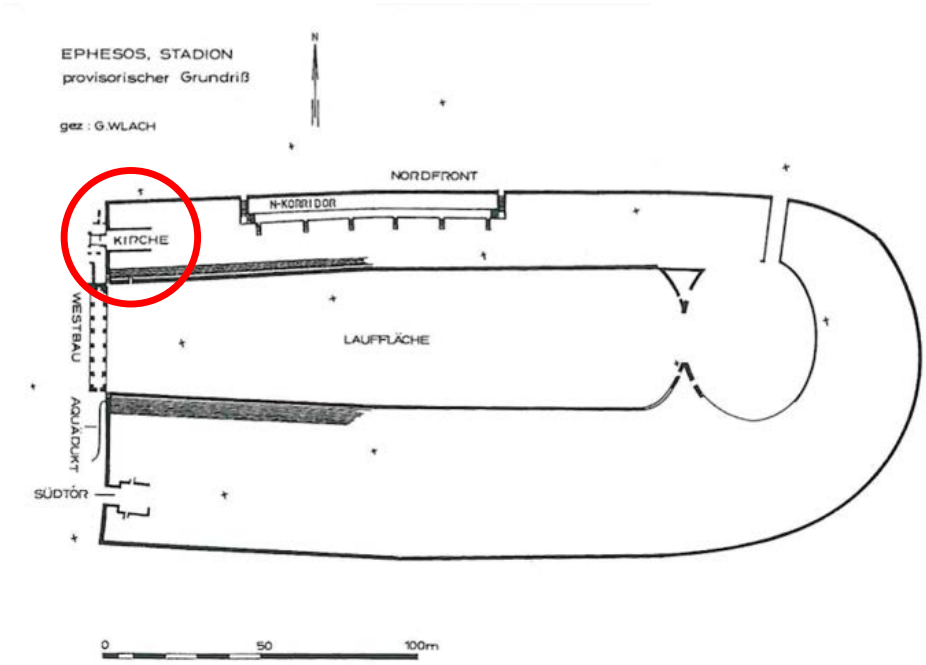


Figure 3.58: Plan of the stadium with Late Antique alterations, including the church (circled) and the arena.

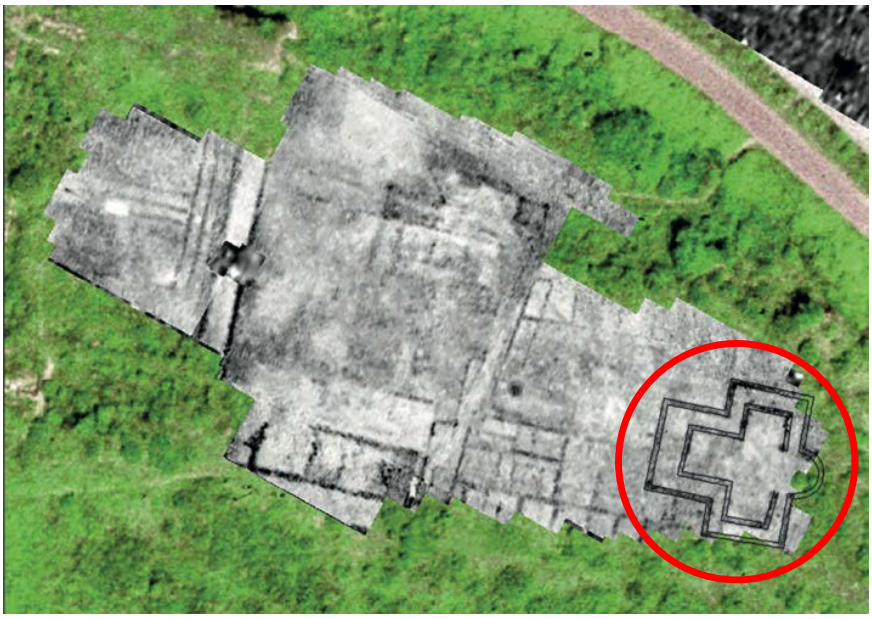


Figure 3.59: Cross shaped church east of the Vedius Bath-Gymnasium.

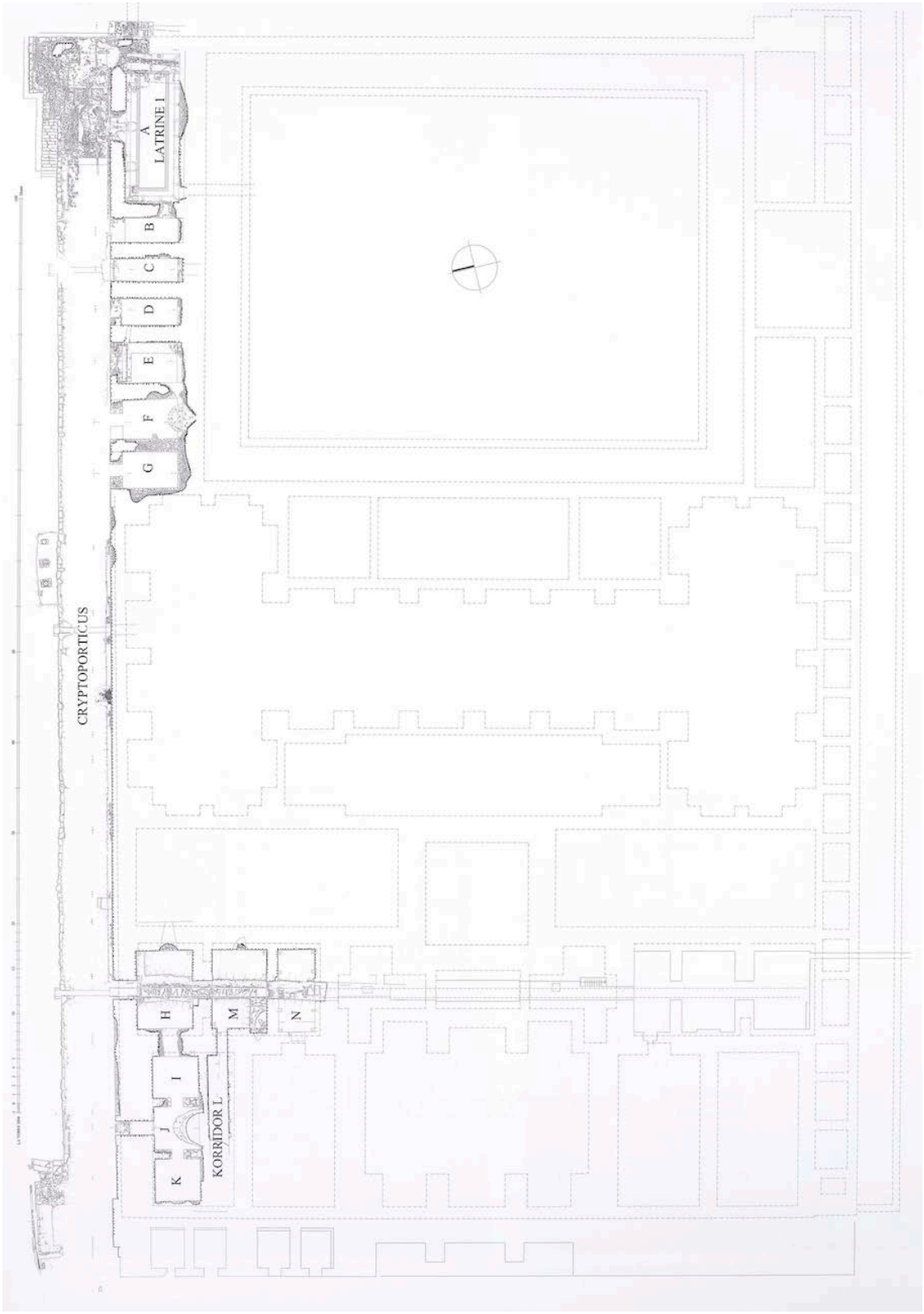


Figure 3.60: Plan of the substructures of the Vedius Bath-Gymnasium.

Figure: 3.61: Roof consisting of terracotta tiles and opus signinum constructed on the floor of burnt-out Room XXII to protect the basement rooms – mostly Room E – from water penetration.

Figure 3.62: Terracotta tiles and opus signinum on the floor of Room XXII.

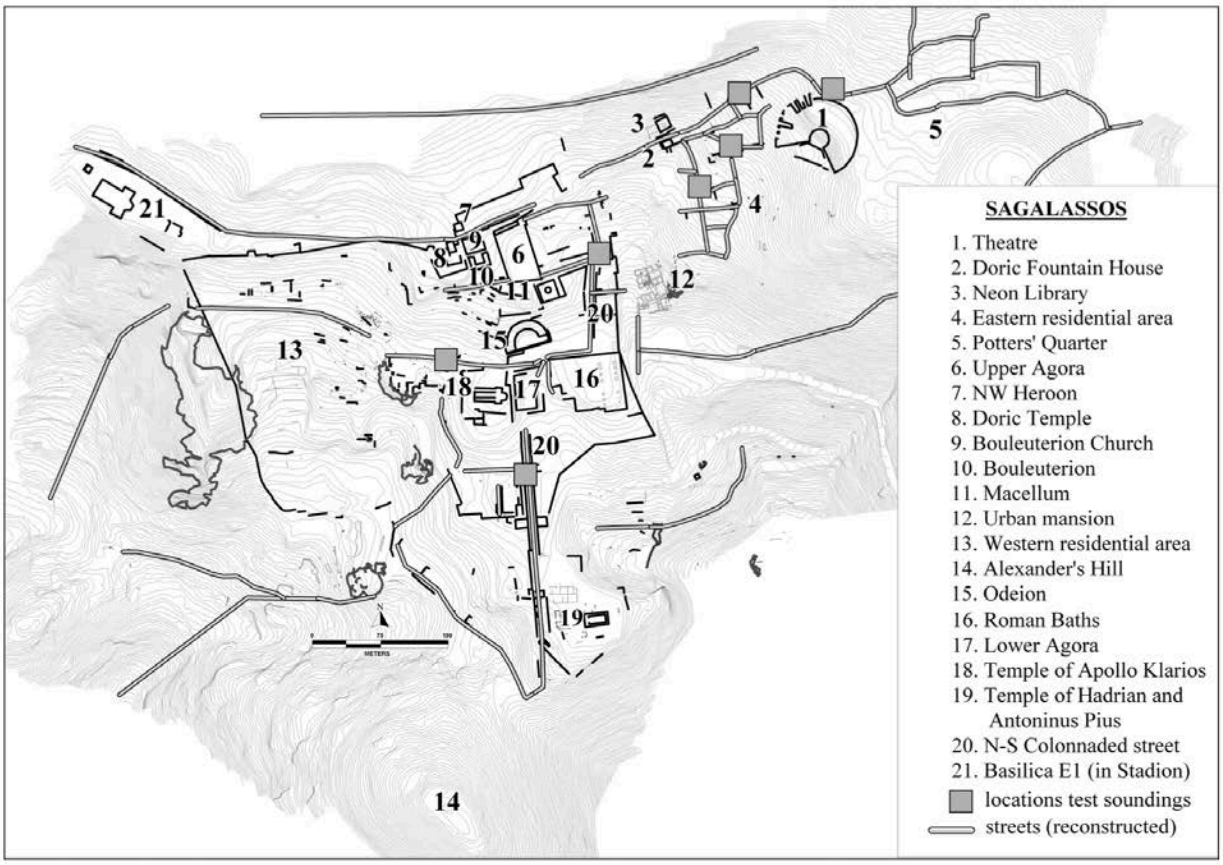


Figure 4.1: Urban plan of Sagalassos.

Figure 4.2: Plan showing the Imperial Bath-Gymnasium Complex (grey) on top of the Old Baths (red) at Sagalassos.

Figure 4.3: Part of the Old Baths that remain visible underneath the newer construction of the Imperial Bath-Gymnasium Complex.

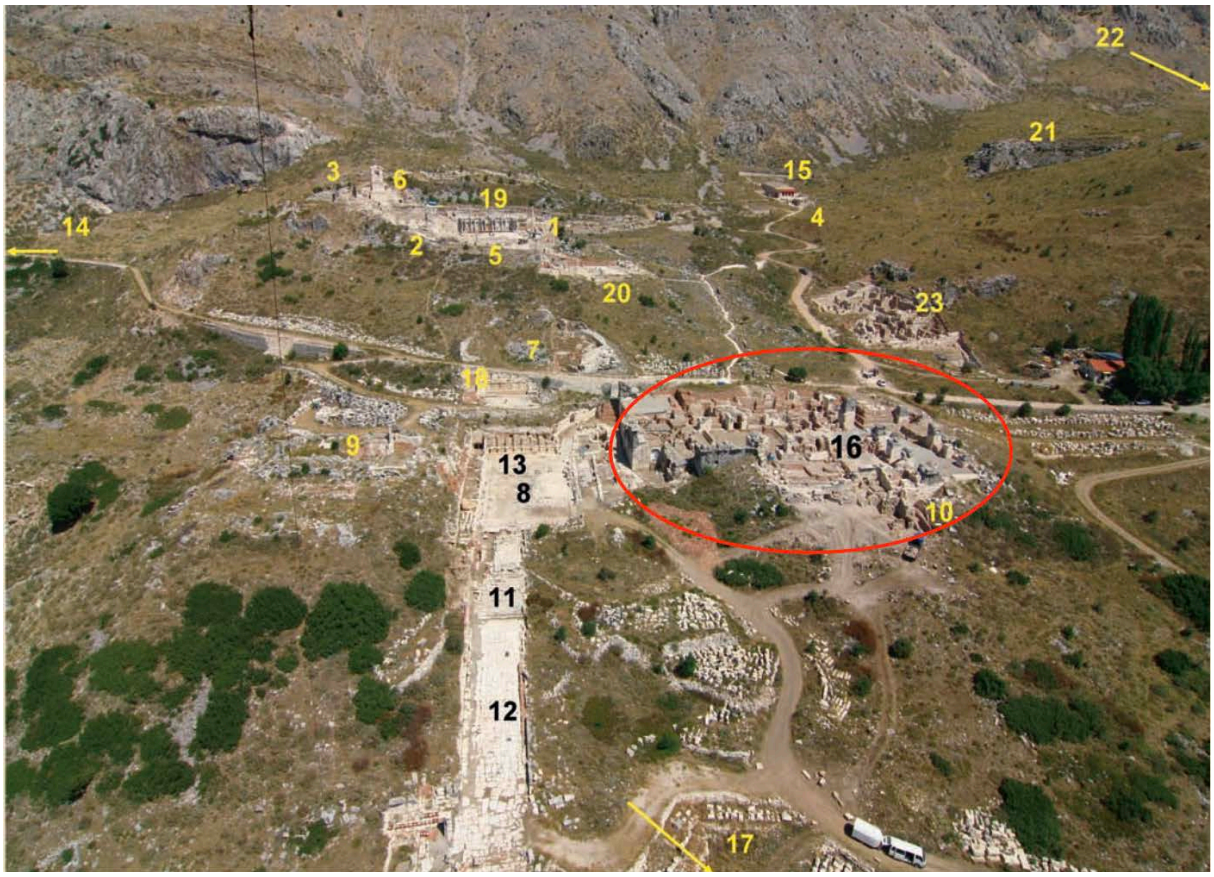


Figure 4.4: Aerial View of Sagalassos' city center from the south with landmarks labeled. (1) Early Hellenistic Terrace; (2) Middle Hellenistic Bouleuterion; (3) Late Hellenistic Doric Temple of Zeus; (4) Late Hellenistic Fountain House; (5) Upper Agora; (6) Northwest Heroon; (7) Odeon; (8) Lower Agora; (9) Augustan Sanctuary for Apollo Klarios and since Vespasian, also for the local Imperial Cult; (10) apsidal south room of the early Roman Baths; (11) monumental stairs between the agora and the colonnaded street; (12) early Imperial colonnaded street; (13) Trajanic and Severan Nymphaeum; (14) The direction of Trajan's Fountain; (15) Early Hadrianic Neon Library; (16) The Bath-Gymnasium Complex; (17) The direction of the Sanctuary for the Pisidian Imperial Cult; (18) Late Hadrianic Nymphaeum; (19) Mid-Antonine Nymphaeum; (20) Macellum; (21) Theater; (22) The direction of the Potter's Quarter; (23) Byzantine Palace (4^{th} – 5^{th} c. A.D.)."

Figure 4.5: 3D Model of The Lower Agora and Roman Baths of Sagalassos.

Figure 4.6: Aerial view of the Imperial Baths at Sagalassos. The dotted lines indicate parts of the building that were revealed with GPR: the palaestra and another courtyard located further to the north.

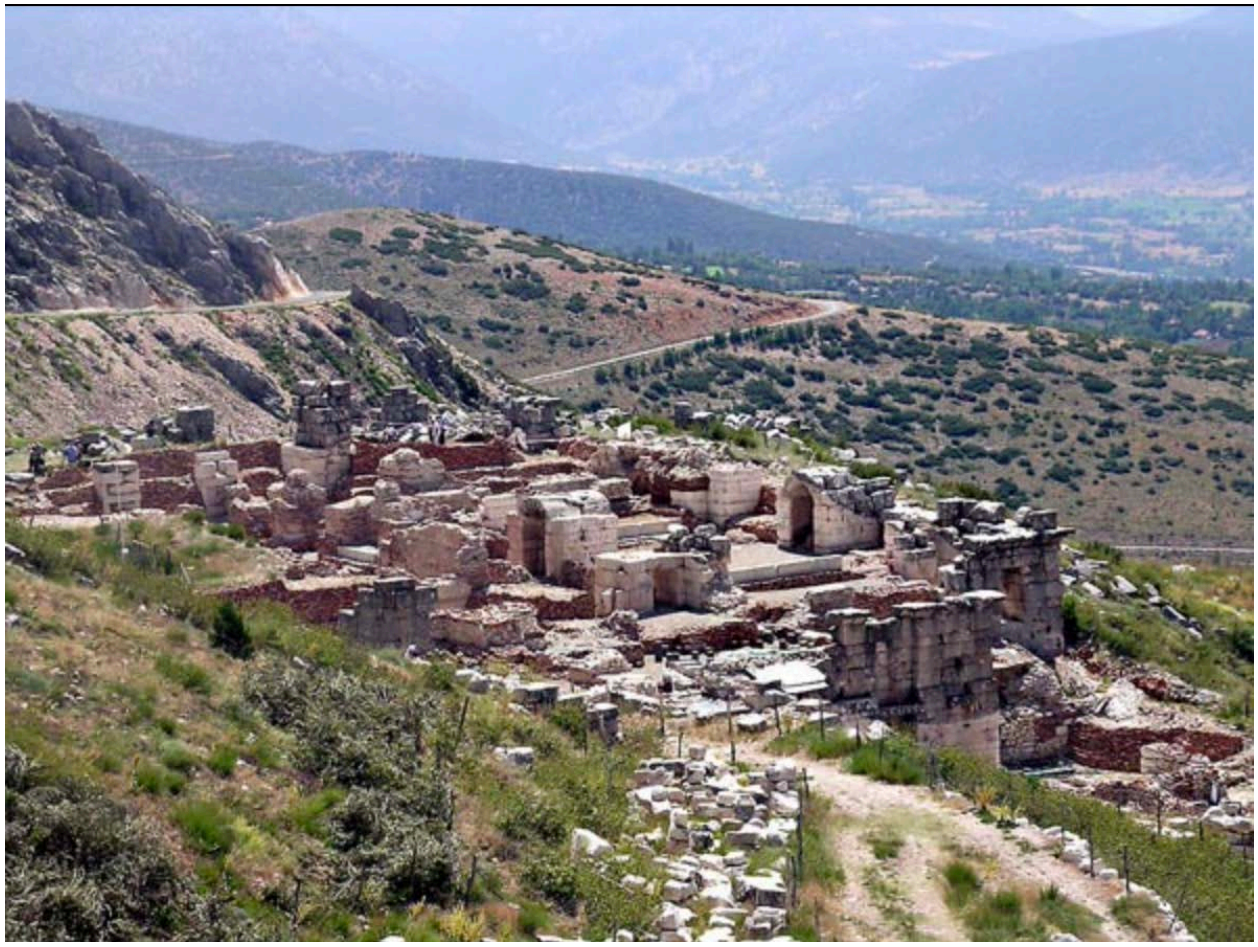


Figure 4.7: View of the Bath-Gymnasium Complex from the northwest.

Figure 4.8: Plans of four bath-gymnasium complexes with long, vaulted chambers flanking a central, high vaulted space: a) Harbor Bath-Gymnasium, Ephesus; b) Bath-Gymnasium, Sardis; c) Vedius Bath-Gymnasium, Ephesus; d) Bath-Gymnasium, Sagalassos. The first three plans are drawn to the same scale, but the Sagalassos plan is intentionally made larger for visibility since it is approximately five times smaller than the Vedius Bath-Gymnasium.

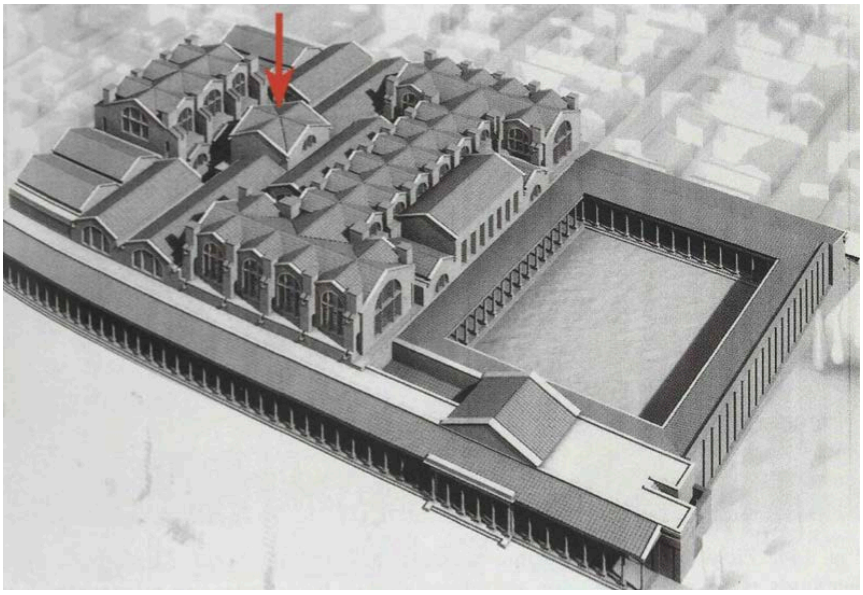


Figure 4.9: Isometric reconstruction of the Vedius Bath-Gymnasium, Ephesus. The red arrow is pointing to the central chamber with a high, cross-vaulted roof. The roof over the central part of the cruciform in the Sagalassos Bath-Gymnasium may have been similar.

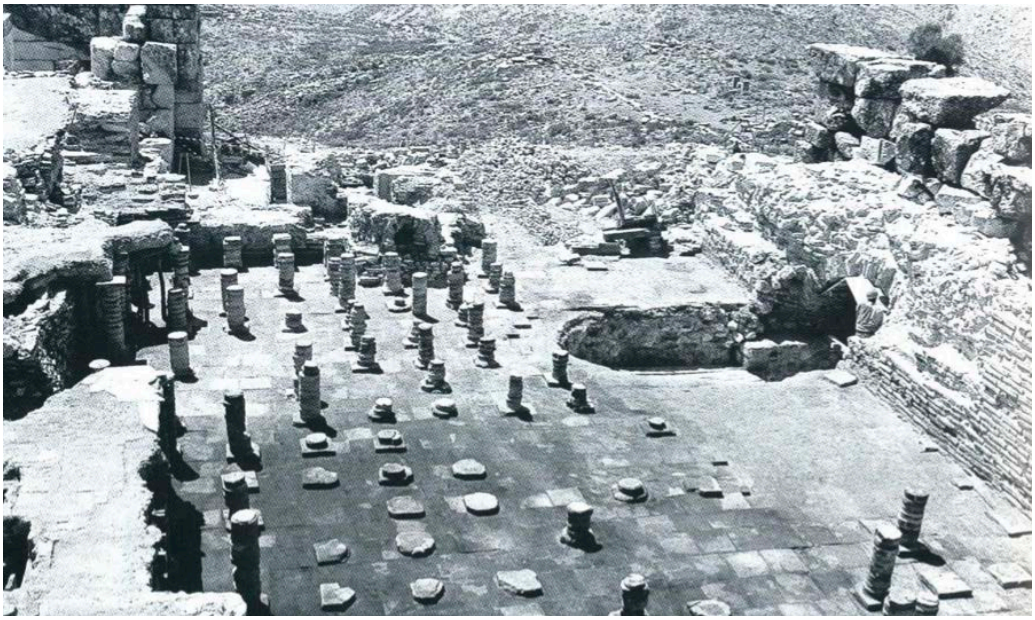


Figure 4.10: View of Caldarium I from the north with exposed hypocaust pillars under the floor. Notice that most of the hypocaust pillars are round, but there are some square ones towards the back. The square hypocaust pillars are thought to be contemporaneous with the transformation of the Marble Hall to Caldarium III, when square hypocaust pillars were also installed underneath the floor in C III.

Figure 4.11: View of Caldarium I from the southeast.

Figure 4.12: The preserved caldarium floor against the east wall of Caldarium I.

Figure 4.13: Preserved hypocaust pillars in the southeast corner of Caldarium I.

Figure 4.14: View of the double mortar layer between the caldarium floor and the supporting pillars [in Caldarium I].

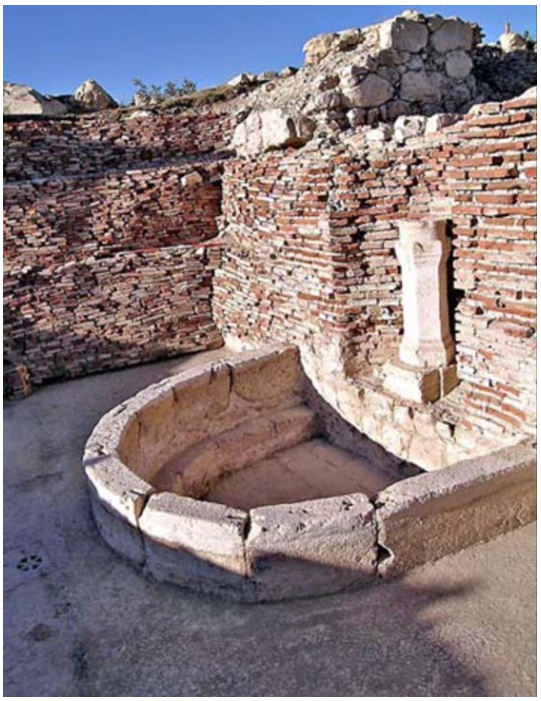


Figure 4.15: View of the horseshoe-shaped water feature in the west arm of the cruciform.

Figure 4.16: View of the horseshoe-shaped water feature in the west arm of the cruciform with people for scale.

Figure 4.17: Excavations in the west arm of the cruciform after the horseshoe-shaped water feature (right) was exposed. The photograph gives a sense of how much architectural debris had to be removed before reaching floor level.

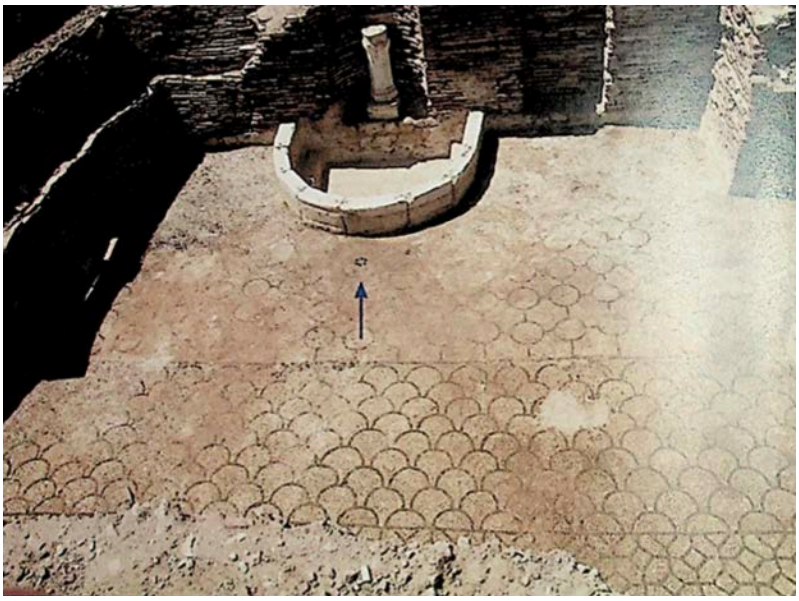


Figure 4.18: Horseshoe-shaped fountain with arrow pointing to drainage feature in mosaic floor in front of it.

Figure 4.19: Colossal portrait head of Hadrian.

Figure 4.20: Colossal portrait head of Faustina Major.

Figure 4.21: Colossal portrait head of Marcus Aurelius.

Figure 4.22: Colossal head of Hadrian prior to being lifted by crane.

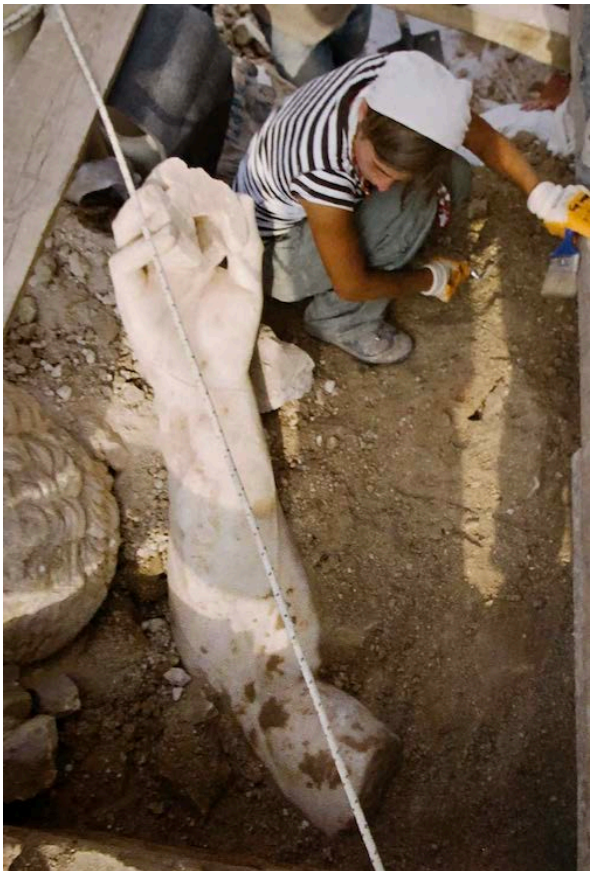
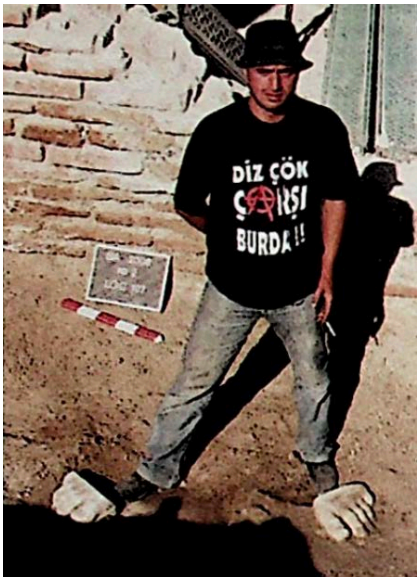


Figure 4.23: Right arm of 'Marcus Aurelius.'

Figure 4.24: Head, right leg, and foot of Hadrian.

Figure 4.25: a (top): leg of Hadrian being lifted by crane; b (bottom left): head of Hadrian being lifted by crane; c (lower right): head of Hadrian with people for scale.



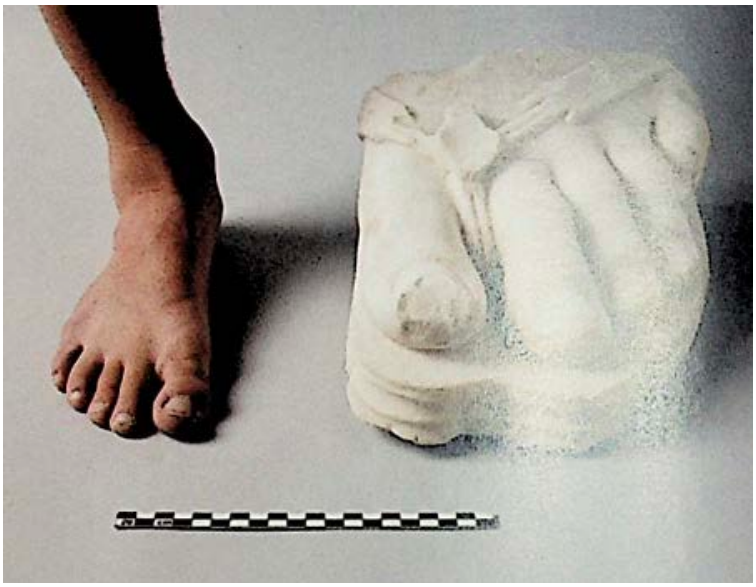


Figure 4.26: (a) (top left): feet belonging to one of the colossal Roman empresses *in situ* with person for scale; (b) (top right): foot belonging to one of the Roman empresses with human foot for scale; (c) (left): the remains of all three pairs of partially preserved feet from the Roman empresses; (d) (bottom right): right leg and foot of Hadrian.

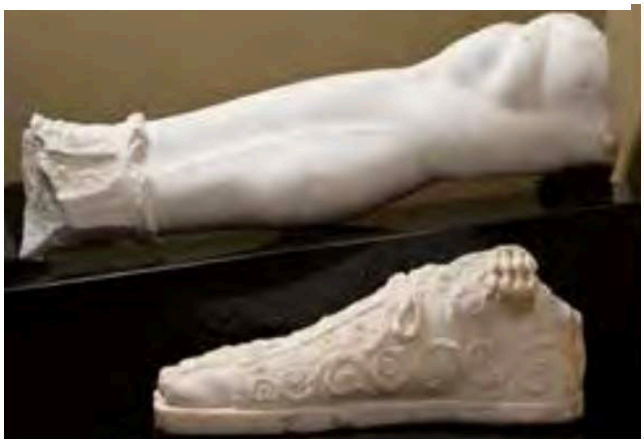


Figure 4.27: Reconstruction of the statue of 'Marcus Aurelius' (areas in grey are preserved).

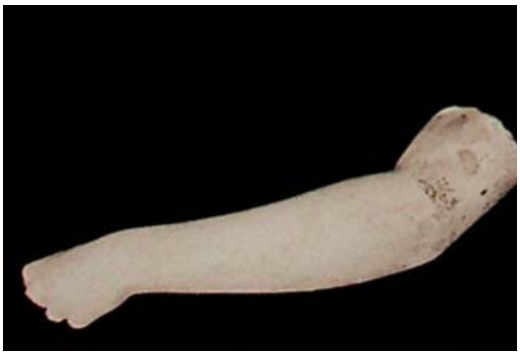


Figure 4.28: Left arm of Faustina Major.

Figure 4.29: Right leg and foot of 'Marcus Aurelius.'

Figure 4.30: The legs of 'Marcus Aurelius' *in situ* with Prof. Waelkens for scale.

Figure 4.31: The right foot of 'Marcus Aurelius.'

Figure 4.32: *Demosion* emblema from the mosaic floor in the center of the cruciform. The words 'ΚΑΙ [ΑΝΑ]ΝΕΩΣΑΝ ΤΟΣ ΤΟ ΔΗ[ΜΟ]ΣΙΟΝ ΠΟΛΛΑ' are visible in the bottom two lines.

Figure 4.33: Aerial view of the Sagalassos Bath-Gymnasium Complex. The red arrow is pointing to the location of the *demosion* emblema in the center of the cruciform.

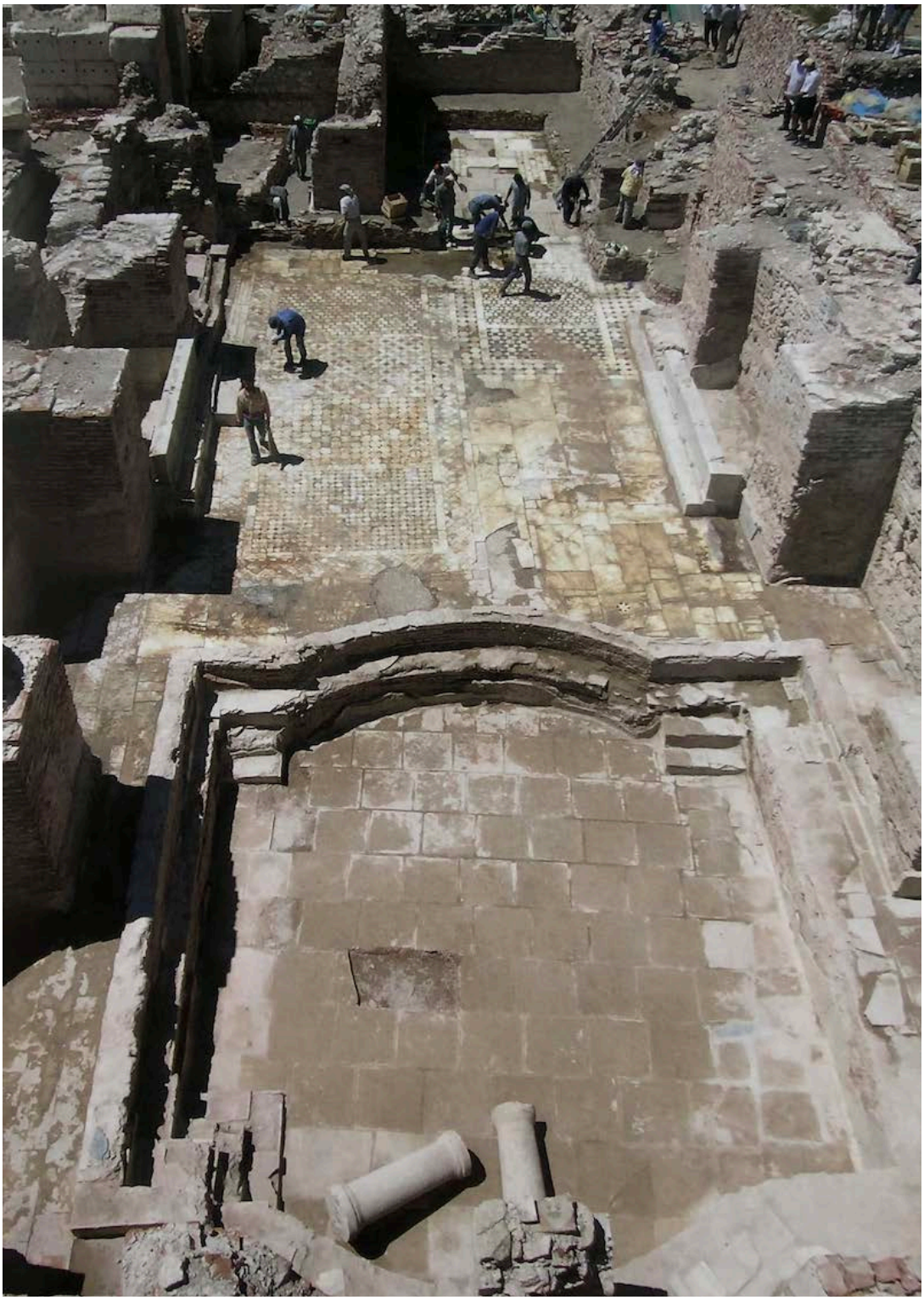


Figure 4.34: View of Frigidarium III with fallen pedestals for statues inside the pool.

Figure 4.35: Pilaster capitals from the Sagalassos Bath-Gymnasium Complex. The pilaster capitals in the top row were re-used from the Antonine period; the pilaster capitals in the bottom row were carved in the 4th century A.D. All are carved from Dokimian marble. The top right pilaster capital with the Medusa head was recovered from Frigidarium III in 2004, the others may not be from the same room.

Figure 4.36: One of the *opus sectile* panels in Frigidarium III.

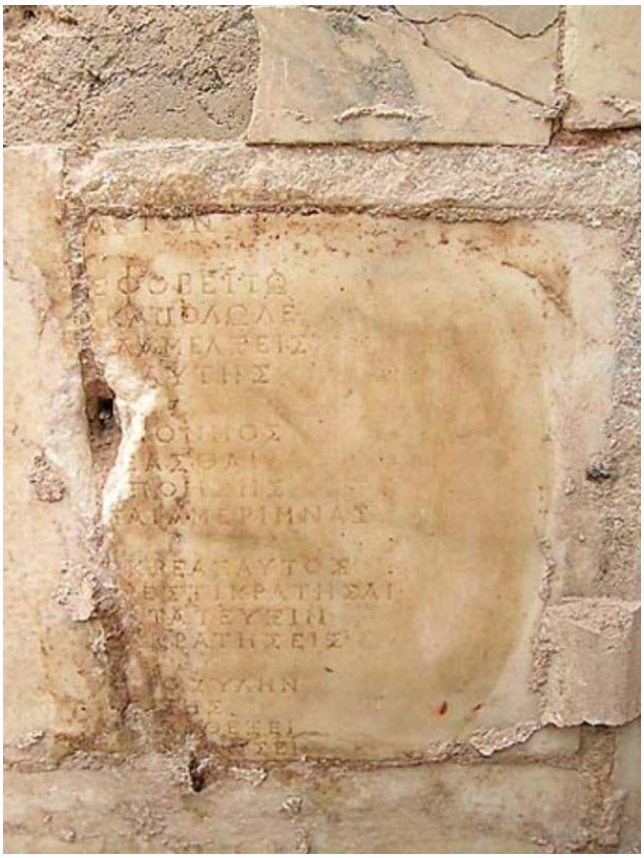


Figure 4.37: A poetic inscription, possibly from the gymnasium, re-used in the back wall of one of the pools in Frigidarium III.

Figure 4.38: Egyptianizing drawing on a marble veneer slab from Frigidarium III.

Figure 4.39: Pool in the central rectangular niche in the south wall of Frigidarium III in mid excavation, before it was fully exposed. The top of the pool's parapet is just emerging.

Figure 4.40: Pool in the western-most niche in the south wall of Frigidarium III. The parapet was not preserved, but its absence enables an unobstructed view of the benches and preserved wall veneer inside.

Figure 4.41: Pool in the central niche in the north wall of Frigidarium III.

Figure 4.42: View of Caldarium III towards the north-east, with the arched doorway leading into Tepidarium III, the preserved pool in the north-eastern niche, and the long pool in the eastern bay where the re-used marble slabs containing the broken dedicatory inscription were found.

Figure 4.43: Interior view of the pool in the eastern bay of Caldarium III with the negative imprint of the testudo alvei.

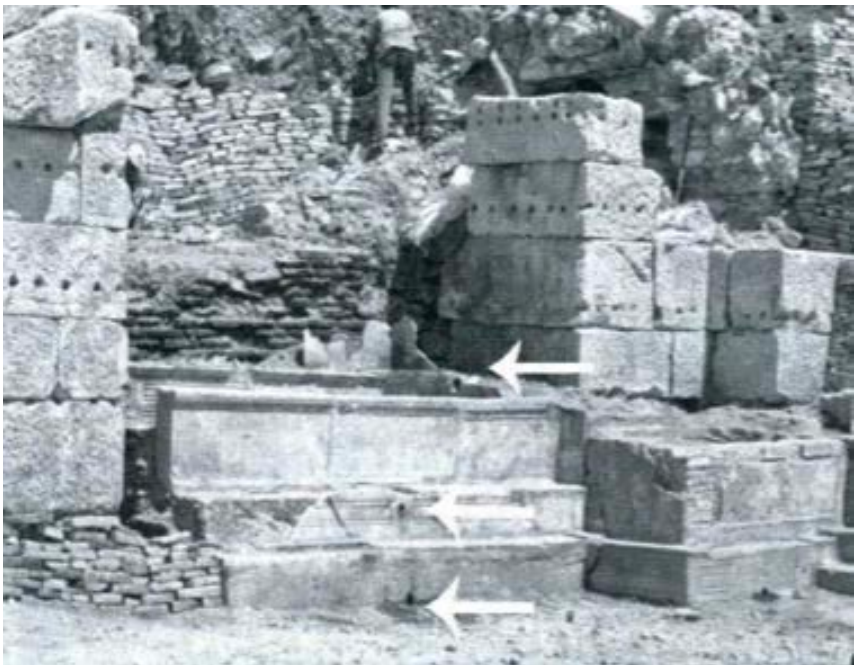


Figure 4.44: Pool in the northeastern niche in Caldarium III. The arrows are pointing to the water supply pipe and drainage outlets.

Figure 4.45: View of square pillars belonging to the hypocaust system below Caldarium III.

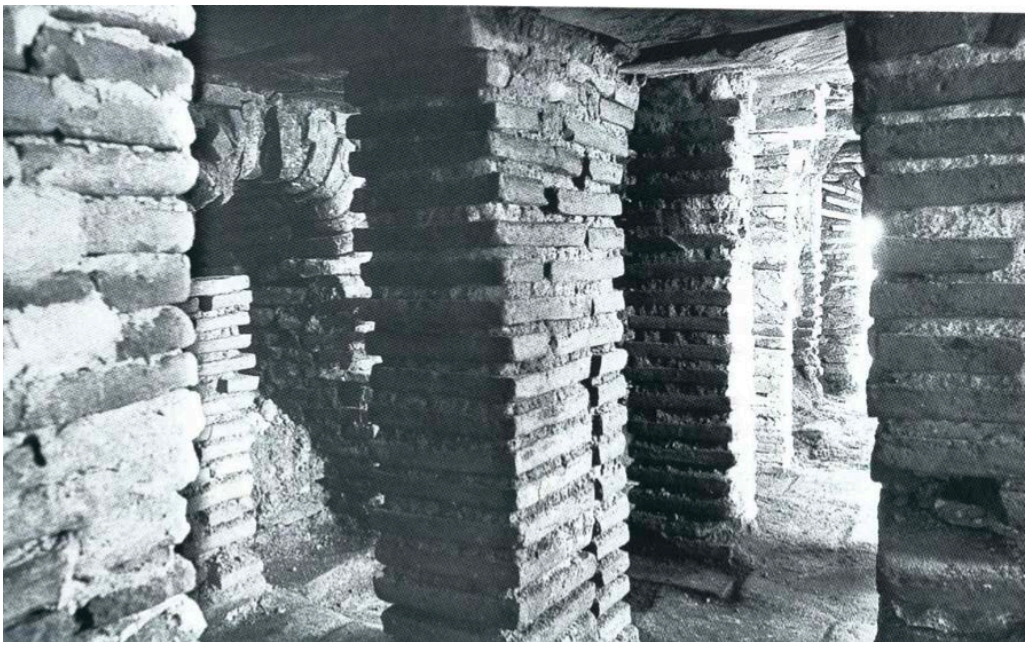


Figure 4.46: View inside the hypocaust system below Caldarium III.

Figure 4.47: Aerial view of the east arm of the cruciform. The red arrows are pointing to the corners of the infilled pool.

Figure 4.48: View of the east arm of the cruciform towards the southeast. The red arrows are pointing towards the remains of the mortar and rubble supports for the wooden planks of the auditorium style seating that was installed in the 5th century A.D.

Figure 4.49: View of the 'kitchen' in the east arm of the cruciform. The arrows indicate stone slabs that were once part of tables or work surfaces for the preparation of food.

Figure 4.50: 3D Model of The Lower Agora and Roman Baths of Sagalassos. The red arrow indicates the location of the latrine on the lower level. The arched opening here is a window, the doorway (not visible here) was on the side closest to the Lower Agora.

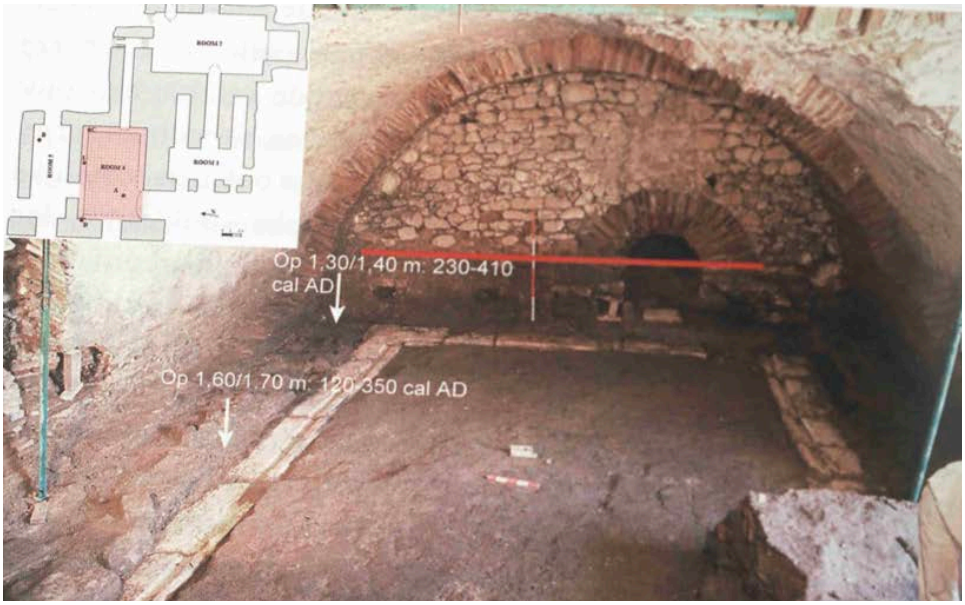


Figure 4.51: View of the latrine on the lower level of the Sagalassos Bath-Gymnasium Complex.

Figure 4.52: The gap from the missing five courses of ashlars in the foundation trench of the original second-century structure.

Figure 4.53: View of the crack in the foundations with sixth century A.D. repairs.

Figure 4.54: View of the imperial portrait gallery towards the south with the 6th century A.D. bichrome mosaics, after the statues had been removed.

Figure 4.55: Detail of the 6th century A.D. bichrome mosaic floor of the imperial portrait gallery.

Figure 4.56: Early sixth century A.D. mosaics in the former Apodyterium II North area.

Figure 4.57: View of the feet of 'Sabina' *in situ* with the 6th century A.D. mosaics neatly following their contours.

Figure 4.58: Base of the colossal statue of 'Marcus Aurelius' with the 6th century A.D. mosaics around it, confirming that the statue was already in place when the mosaics were installed.

Figure 4.59: Graffiti incised into the plaster on one of the piers in the north arm of the cruciform.

Figure 4.60: The two large circles in the center of the east arm of the cruciform are the remains of the lime kilns.

Figure 4.61: Aerial view of the Sagalassos Bath-Gymnasium Complex towards the northwest after the 2011 excavation season. The east arm of the cruciform is in the red square.

Figure 4.62: Torso of Apollo Kitharodos from the fountain in the west arm of the cruciform a: front view; b: back view; c: left profile; d: right profile.

Figure 4.63: Lower legs and draped hydria of an Aphrodite statuette from the eastern part of Frigidarium III.

Figure 4.64: Fragments of an Aphrodite Pudica statuette found inside the pool in Frigidarium III.

Figure 4.65: Headless statue of a youth with a hydria (probably Eros), found inside the pool in Frigidarium III.

Figure 4.66: Colossal, 4-meter-tall, 4.5 ton, Apollo Klarios from the Hadrianic Nymphaeum at Sagalassos after most of the restorations have been carried out towards the end of the 2011 campaign.

Figure 4.67: The colossal statue of Apollo Klarios from the Hadrianic Nymphaeum being restored at the Burdur Museum by Erik Risser.

Figure 4.68: (above middle): The colossal statue of Apollo Klarios from the Hadrianic Nymphaeum after restoration.

Figure 4.69: (above right): Detail of the head of the statue of Apollo Klarios from the Hadrianic Nymphaeum.

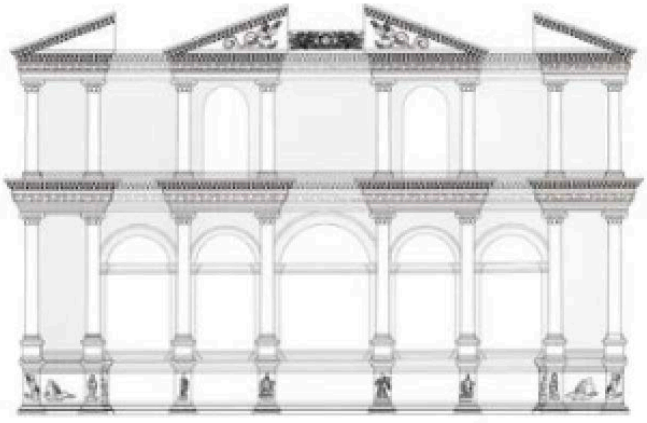


Figure 4.70: Reconstruction drawing of the Hadrianic Nymphaeum of Sagalassos by Julian Richard.

Figure 4.71: View of the Hadrianic Nymphaeum.

Figure 4.72: View from the west of the Hadrianic Nymphaeum with reliefs of the muses on the projecting podium pillars.

Figure 4.73: The muse reliefs from the Hadrianic Nymphaeum.

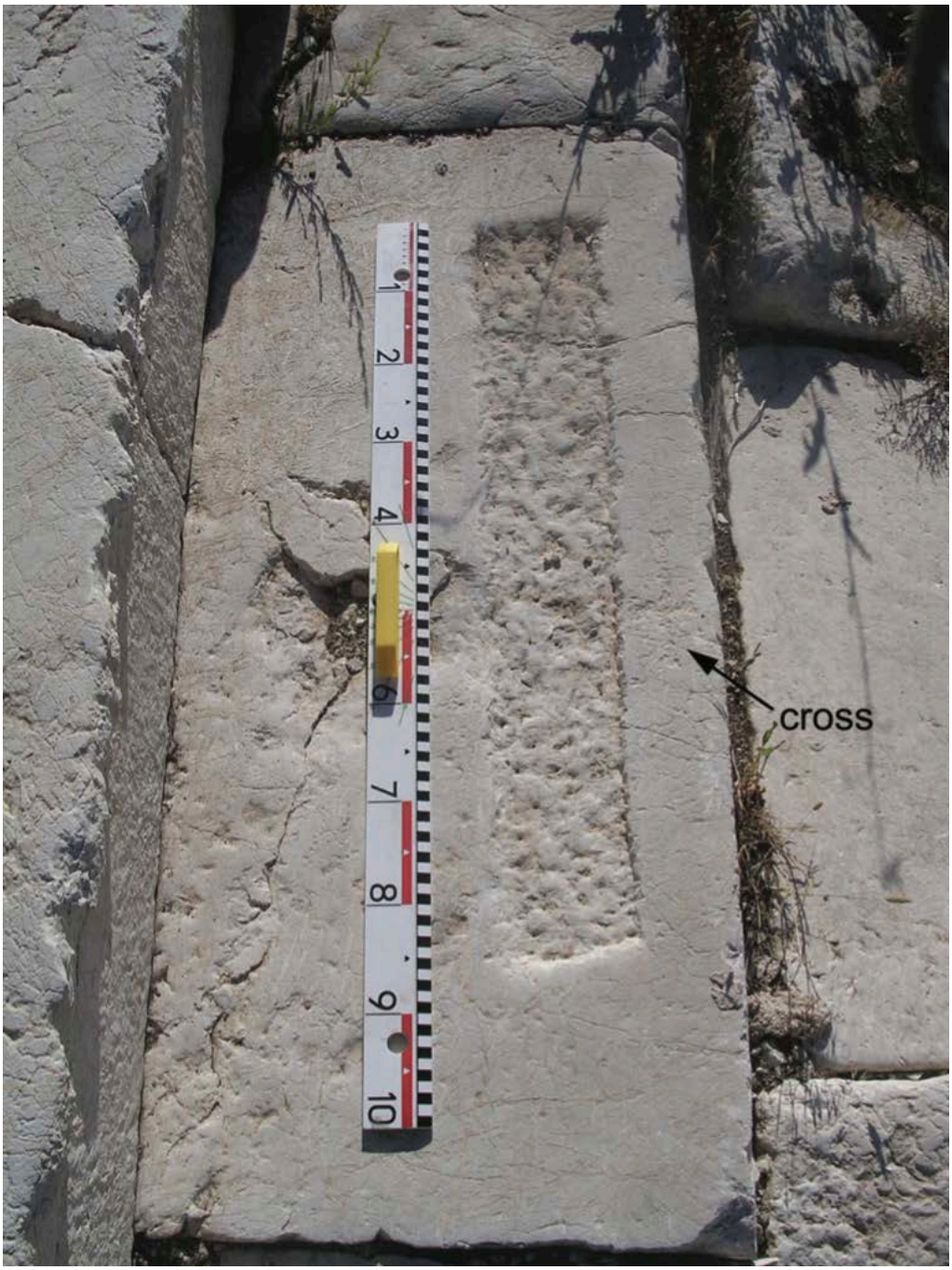


Figure 4.74: Cross picked into the exact center of front step of Hadrianic Nymphaeum.

Figure 4.75: Statuette of Apollo that was displayed on the colonnaded street after the street was repaired during the 6th century A.D.

Figure 4.76: The colonnaded street of Sagalassos, view towards the north.

1. Lower Agora
2. East Portico
3. West Portico
4. Severan Nymphaeum
5. Hadrianic Nymphaeum

Figure 4.77: Aerial view of the Lower Agora and associated monuments. The Bath-Gymnasium Complex is located to the right (east) of the East Portico, just outside the frame, and the Temple of Apollo Klarios that was converted into a Christian church in the second half of the 5th century A.D. is located to the left (west) of the West Portico, with the apse just barely visible.

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