Urban Trajectories and the Creation of a New Social Order in Late Roman Central Anatolia

by

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DEDICATION

Ad Alice e Giosué, per una vita piena di scoperte, avventure e ricerca.

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ABSTRACT

This dissertation considers the end of Antiquity through the lens of urban change in the Roman Province of Galatia in Central Anatolia. It is based in part on fieldwork carried out from 2011 to 2014 at Pessinus (150 km west of Ankara), which represents the main case study of this work. The dissertation examines the urban development of Pessinus in the Late Roman Period (4^{th} – 7^{th} centuries CE) and compares it with that of other cities in the same region (Ankara and Amorium), examining both the cities themselves and their rural environs. This regional investigation represents a new trend in scholarship, as traditional studies have tended to focus either on excavation of individual cities or on surveys of their hinterlands, but seldom on both. Additionally, my focus on the development of Late Roman Central Anatolia, a region that has often been neglected by modern studies despite the fact that it became the heartland of the post-7^{th} c. Byzantine Empire, is an important addition to the scholarship on the end of Antiquity. Contrary to the western and eastern coasts of Anatolia, cities in this region developed for the first time at the end of the 1^{st} c. BCE, and thus this study also examines Late Roman urban change in the light of its long-term regional tradition.

This research demonstrates that both cities and rural settlements in Galatia experienced their maximum expansion between the 4^{th}-5^{th} centuries and the 7^{th} c. CE; the cities thus represent some of the last flourishing examples of Classical urbanism. Contrary to what has been observed on the better known western and southern coasts of Asia Minor, the unraveling of the Roman settlement pattern in Central Anatolia was more sudden and later, ultimately precipitated by a

period of military, demographic, and economic crisis that peaked with Arab invasions after 650 CE. Although the Arabs did not destroy these cities, they destabilized the demographic and economic foundations on which they were based. By the later 7th century, only the central administration had the resources to support large settlements, such as provincial capitals (Amorium and Ankara); among rural communities, only those in the vicinity of important religious centers like Germia or in isolated, mountain sites in northern Pisidia proved capable of maintaining independent existence.

Crucial to the continuity of occupation in rural and urban communities into the 7th c. CE was the progressive regional economic independence that began in the 4th-5th centuries CE. This process is well-attested by the production and circulation of Red Slip ware, a common type of high quality tableware. During the Roman Period, Central Anatolia was part of a larger international commercial network, as shown by the presence of imports from the rest of Anatolia and the Mediterranean world. In the Late Roman Period, these commercial ties broke down, and a series of local production centers emerged in order to fill this market. The development of ceramic workshops went hand in hand with an increase in agricultural production, which is well-attested in regional palynological data. By the 6th c. CE, Central Anatolia was the most agriculturally stable and productive region in Anatolia, and was therefore exceptionally well-equipped to support substantial urban life. Eventually, however, even this unusually resilient local network unraveled in the face of continuing instability and repeated invasions in the mid-9th century CE.

CHAPTER 1: Introduction: the end of the Roman City in Galatia.

The disintegration of the Roman Empire between third and seventh centuries CE have been much-debated topics since the publication of the first volume in *The History of the Decline and Fall of the Roman Empire* by Edward Gibbon in 1776. In the study of this period, much attention has been paid to the disappearance of cities, quintessential elements of Graeco-Roman societies. In Antiquity, urban centers functioned as the main administrative and economic hubs, while they also provided a space for social interaction, religious activities, and self-display. Their abandonment has therefore been employed by modern scholars as direct evidence for the end of the Roman way of living and, consequently, the 'end of Antiquity'. For the Eastern Roman Empire, the causes and chronology of this phenomenon are not clear, and scholars have extensively discussed whether Roman cities faded out as result of the political changes of the 3rd and 4th centuries CE or the Persian and Arab invasions in the 7th c. CE.[1] Others, by contrast, argued that cities lasted until the Ottoman conquest of Constantinople (1453 CE), when the last 'Roman' city fell.

In this debate, Anatolia is of crucial importance, as it became the center of the Eastern Roman Empire after the foundation of Constantinople in the 4th c. CE, and it was also the only region that remained consistently in the hands of the Roman/Byzantine emperors until the 11th c. CE. Thus, it provides unique insights into the socio-economic, political, religious, and military

[1] See the following section "Decline and Fall or Change and Continuity."

changes that accompanied the transition from an urbanized and trans-Mediterranean empire to a ruralized and Constantinople-dependent one. This process probably began in 5th c. CE[1] and it ended in the course of the 7th c. CE, when the Eastern Roman Empire lost most of its provinces (Levant and Egypt) to the Arabs. The territorial losses resulted in a substantial reorganization of the Empire into themes, which no longer needed a network of cities for administration.[2] The later 7th c. Empire was no longer in control of the Mediterranean Sea, and most of its territory was based in the landlocked Central Anatolian Plateau and the Aegean coasts.

As recently pointed out by P. Niewöhner,[3] the contribution of archaeological evidence to the studies of these dynamics in Anatolia is heightened because literary and epigraphic testimonies decreased significantly in number over time, often leaving archaeological sources as the sole available data. Traditional archaeological research has mostly focused on large urban sites on western and eastern coasts, which have greatly enhanced our understanding of the disappearance of cities and the 'end of Antiquity' in these regions. Conversely, the cities of interior Anatolia, where urban dynamics and traditions were different, have been mostly overlooked by modern scholarship. My dissertation aims, therefore, to contribute to the discussion of 'end of Antiquity' through a detailed study of archaeological evidence for urban life in Galatia, a Roman Province in Central Anatolia; I specifically assess the 'life' of cities at an individual level, Pessinus, Ankara and Amorium, as well as reconstruct regional dynamics through a broader consideration of urbanism and the rural landscapes of this period. My work also develops a regional model; this suggests that progressive economic isolation (started in the 5th c. CE) enabled a cluster of

[1] Liebeschuetz (2001) and Niewöhner (2006), pp. 239-253.
[2] Haldon (1997) and (2016).
[3] Niewöhner (2017a), pp. 39-59.

cities with privileged administrative (Pessinus and Ankara) and military (Amorium) status to resist the crisis that affected urban centers in the rest of Anatolia. Only in the mid-7th c. CE, when Arabs had conquered most of the Levant and Egypt, a series of administrative reforms made all but a few of the remaining cities unnecessary. Pessinus, no longer a provincial capital, was abandoned, while Ankara and Amorium, which were selected as centers of the new administration, maintained part of their population and urban character until the 9th c. CE Arab Invasions. Thus, I argue that the end of Roman city in Galatia was not a single phenomenon, but rather a combination of factors that led to the death of Pessinus and the survival of Ankara and Amorium. Ankara and Amorium (together with Constantinople) could therefore be considered among the few sites where the Roman way of living continued after the 'end of Antiquity.'

Decline and Fall or Change and Continuity?

The debate on the disappearance of Roman cities in the Mediterranean World has been characterized by the development of two opposing factions, as briefly mentioned above; on the one hand, scholars have argued in favor of the decline and fall of urban centers at the end of Antiquity,[4] while on the other they have suggested that, while undergoing significant changes in urban character, cities continued to exist and thrive into the Middle Ages.[5] C. Foss suggested in two seminal works published in 1975 and 1977 that Roman cities on the western coast of Anatolia fell as result of the Persian sack in the early 7th c. CE. After having been destroyed by these invasions, cities and central governments lacked the resources necessary to repair their

[4] The literature on the topic is extensive: a review of literature can be found in Saradi (2006) and the review of her book by Lavan (2009), pp. 803-812.

[5] As above, the literature on the topic is vast: traditional views can be found in Momigliano (1980), Bowersock (1996), pp. 29-43, Ando (2009), pp. 59-83. Bowersock, in particular, argues that Roman cities continued until the fall of Constantinople in 1453.

urban infrastructure.[6] More recently, H.W.G. Liebeschuetz argued that the root of the decline and fall of the Roman city is to be found earlier, in the late 3rd c. CE, when the administrative reforms started by Diocletian led to the flight of the *curiales*, the elite groups that were responsible for the construction and maintenance of urban infrastructure and city life.[7] This model was reiterated by P. Niewöhner on the basis of the archaeological evidence collected at Aizanoi, where urban decline started at the beginning of the 5th c. CE, when urban elites redirected their investment to the rural countryside and cities were progressively abandoned.[8] This phenomenon was defined as "Late Late Antiquity," in opposition to Late Antiquity/Late Roman Period (3rd – 4th centuries CE), when urban vitality and investment in public infrastructure were still visible in the archaeological record. Further research in cities such as Aphrodisias[9] and Sagalassos,[10] however, have revealed that the changes of Late Late Antiquity did not happen everywhere in Anatolia; for example, in these places, both urban centers and rural hinterlands remained prosperous until the mid/late 6th c. CE, and there was no recognizable flow of population from the city into the rural countryside. At Aphrodisias, for example, city and rural countryside were significantly abandoned at the same time, in the late 6th c. - early 7th c. CE. The Galatian cities analyzed in this dissertation also seem to have a relatively late abandonment, counter to the models proposed by Liebeschuetz and Niewöhner. The case of Galatia, however, does not disprove the development of the phenomenon observed at Aizanoi and other cities such

[6] Foss (1975), pp. 721-747 and (1977), pp. 469-486.
[7] Liebeschuetz (2001).
[8] Niewöhner (2006), pp. 239-253.
[9] Ratté (2001), pp. 117-133, Ratté and DeStabler (2012), Dalgıç and Sokolicek (2017), pp. 260-280.
[10] Poblome, Talloen, and Kaptijn (2017), pp. 302-311.

as Miletus.[11] Rather, it suggests regional variation. As recently reiterated by Liebeschuetz in "Transformation and Decline: are the two really incompatible?",[12] the disintegration of the Roman Empire and the disappearance of cities occurred over a several centuries and developed differently from region to region. Thus, the building of regional models, like the one advanced in this dissertation, adds new details and shines new light on a complex subject such as the "end of Antiquity."

Urban trajectories in Roman Galatia:

I begin this study with a consideration of the archaeological data for Pessinus, a city in Roman Galatia (Central Anatolia), where I conducted fieldwork from 2011 to 2014. The study of urban history of Pessinus is then contextualized by the evidence collected in two other regional centers (Ankara and Amorium) as well as their rural surroundings. The goal is to study the rich archaeological record of this area comprehensively in order to reconstruct the processes that, starting from the 4th c. CE, led to the abandonment of Pessinus during the 7th c. CE. The case of Pessinus and its regional contextualization is not only relevant as it adds new archaeological evidence to the debate on the end of Antiquity, but also because it considers an area, Central Anatolia, that has been often overlooked in modern scholarship.

The study of the archaeology of Anatolia has traditionally been characterized by long-term excavations of large coastal cities, such as Ephesus, Miletus, and Pergamon, which have provided a wealth of information about their development over time.[13] In recent years, the

[11] Niewöhner (2016), pp. 63-77.
[12] Liebeschuetz (2015), pp. 29-53.
[13] For a more comprehensive study of the archaeology of Byzantine Anatolia, see Niewöhner (2017).

employment of field survey has also added new data on the changes in rural occupation, and has shed new light on patterns of land tenure and agricultural practices. Recent surveys conducted at Sagalassos[14] and Aphrodisias,[15] for example, have provided further information on rural communities located in the hinterlands of these cities. Recent studies on climate and pollen have also greatly increased our knowledge of agriculture in the Roman Period, which was characterized not only by cereals but also by extensive cultivation of vine, olives, and nuts among many other species.[16]

By contrast, Central Anatolia never experienced the level of urbanization that can be observed on the coasts, a fact that may explain why it has received less archaeological attention than the city-rich coastal regions. Here, intensive occupation seems to have been clustered around the largest arable lands, while the higher ground was most likely used for pasture.[17] The region was long organized around so-called temple-states, large estates connected to cult sites.[18] A prominent example of this type of institution was located at Pessinus, where the area was ruled by a priest-king, worshiper of the Anatolian goddess Cybele. Cities first appear in the region in the late 1st c. BCE when, especially under Augustus, numerous new urban centers were founded as a result of the establishment of the Roman rule. Archaeological research of the past decades has started filling gaps in knowledge, and centers such as Aizanoi, Gordion, Ankara, Pessinus, and Amorium are now better understood.[19] Field survey in this region has also increased our

[14] Vanhaverbeke and Waelkens (2003)
[15] Ratté and De Staebler (2012)
[16] Izdebski (2013), for a general overview and Roberts *et alii* (2018) for a more recent analysis of this phenomenon.
[17] Mitchell (1993), p. 144.
[18] For the definition of Temple States, see Virgilio (1981), Strobel (2007), pp. 207–228, and Boffo (2007), pp. 105–128, Boffo (2001), pp. 233–255 Boffo (1985).
[19] Bibliographic references for these excavations can be found in the next sections.

knowledge of rural communities on the Central Anatolian Plateau, as demonstrated by the diachronic survey in the Konya plain, which provides significant data on the long-term development this region.[20] The survey in the Konya plain is not the only recent project that aimed to gain further information about the development of rural communities on the Anatolian Plateau. The British Institute at Ankara, for example, has sponsored several regional research projects in the past decades, such as the Paphlagonia Survey[21] and the Göksu Archaeological Project.[22] J. Haldon, H. Elton, and J. Newhard surveyed the northeastern plateau, where the important Byzantine site of Euchäita was located.[23] P. Niewöhner recently collected information about Germia, a major Christian site located in Galatia.[24] B. Erciyas is currently studying the area around Komana Pontica in southern Pontus,[25] while H. Hürmüzlü and De Giorgi have examined the development of the communities south of the Taurus mountain chain.[26] In spite of this wave of recent archaeological work, the analysis of Central Anatolia in the Roman Period remains limited to the examination of a few individual urban centers and rural areas, while a comprehensive analysis of the evidence for this region has yet to be carried out.

The only major synthetic scholarly work on Central Anatolia was authored by S. Mitchell and published in 1993.[27] In his seminal study, Mitchell considers the epigraphic and literary sources on Galatia (northwestern area of the Central Anatolia) from the Hellenistic Period through the 7th c. CE in order to examine the socio-economic, political, and religious changes that occurred over

[20] Baird (2004).
[21] Matthews and Glatz (2009)
[22] Elton (2013), (2006) and (2006a).
[23] Haldon, Elton and Newhard (2017), pp. 375-388.
[24] Niewöhner *et alii* (2013).
[25] Erciyas and Sökmen (2010).
[26] De Giorgi (2014).
[27] Mitchell (1993).

time. Substantial archaeological evidence, however, were often not available for his analysis; for example, in his examination of the end of Antiquity in Galatia, Mitchell considers mainly the Life of Saint Theodore of Sykeon, the only Christian text that informs us about the life of the saint in this region between the late 6th and early 7th c. CE.[28] This Life, however, focuses almost exclusively on the development of Christianity in rural communities, and thus provides limited data on the socio-economic and political development that led to the disappearance of city. My work, therefore, aims to employ the more recent archaeological data that have been made available in recent decades in order to address the issues related to the end of Antiquity and abandonment of cities in this region.

In order to achieve this goal, I present, in Chapter 2, the archaeological evidence for Pessinus, a city located on the Central Anatolia Plateau, about 150 km west of Ankara (Figure 2.1). Pessinus had been a well-known pagan religious center since the Iron Age, but it received most of its urban structures only at the end of the 1st BCE, when the region was annexed to the Roman Empire. The core of my analysis derives from data collected during the excavations conducted between 2008 and 2014 under the aegis of the University of Melbourne and the direction of Prof. G. Tsetskhladze. During these years, investigations revealed the presence of a new city neighborhood established in the late 6th-early 7th c. CE as well as a section of the late Roman fortification (4th/5th c. CE). The excavation of the latter structure was supervised and published by myself,[29] providing crucial new information for Pessinus' urban history. Here, these data are also analyzed in the light of the evidence made available by the almost 40 years of excavation

[28] *Ibid.*, pp. 122-150.
[29] Maranzana (in press).

conducted by Belgian teams from Ghent University. Their work produced a wealth of information, which had never been examined synthetically before. The comprehensive analysis of such evidence in Chapter 2 demonstrates that the Roman city expanded further in the 3rd c. CE, became provincial capital and bishopric in the 4th c. CE, and did not contract until the mid-7th c. CE, when it was largely abandoned.

Chapters 3 and 4 are dedicated to the analysis of the archaeological evidence for urban habitation at Ankara and Amorium, two other Roman cities in Galatia. Ankara (Chapter 3) was the largest and most significant center in the region. Here, extensive archaeological excavations have taken place for almost a century, but the rapid urban growth of the modern city and the uneven quality of the data recorded by those excavations have resulted in interpretive difficulties; in particular, the available archaeological evidence is often incomplete, because collected through rescue excavations, and not always well published. Only in recent years have M. Kadıoğlu, K. Görkay, and S. Mitchell reviewed and published the data available for the Roman city, which has greatly advanced our understanding of its urban development. [30] In 2015, U. Peschlow re-studied the Late Roman and Byzantine phases of many of the urban structures known at Ankara.[31] On this basis, he has suggested that some of the city's infrastructure may have been in use until the siege of 838 CE. Thus, we can assume that the city retained part of its population and urban character until that date.

Chapter 4 examines the archaeological evidence collected at Amorium, one of the thematic capitals of Byzantine Anatolia. The city has been excavated since the 1980s by British and

[30] Kadıoğlu, Görkay, and Mitchell (2011).
[31] Peschlow (2015).

American teams,[32] and in 2011 a new project based at the Anadolu University in Eskişehir resumed the operations.[33] Amorium had been inhabited since the Bronze Age, but, just as at Pessinus and Ankara, it only attained urban form during the Roman Period. Amorium seems to have expanded in the late 5th-early 6th c. CE, when a new fortification wall, public baths, a large public building, and a large church were added to the fabric of the city in previously undeveloped areas. The position of Amorium, in the vicinity of a major highway halfway between Constantinople and Antioch on the Orontes, may have been a contributing factor to the city's development as major military center from the 6th c. CE onward. As for Ankara, Amorium seems to maintain part of its urban character until the siege of 838 CE, when the city was sacked and partially abandoned.

Chapter 5 compares the development of the three cities, while also contextualizing them with the rest of Anatolia. In contrast to the more urbanized coastal regions, Pessinus, Amorium and Ankara experienced a similar trend of development:

1) They reached their full urban form in the Early Roman Period.
2) They seem to maintain their urban population and city structures into the 7th c. CE, a time of major wars and territorial loss for the Eastern Empire.

In the later 7th c. CE, Pessinus was mostly abandoned as a byproduct of this crisis, while Ankara and especially Amorium seem to keep some of their population and urban character since they were selected as administrative centers (thematic capitals) after the 7th c. CE reorganization.

[32] For an overview, see Lightfoot (2017a).

[33] Demirel Gökalp *et alii* (2015), pp. 451-460. Demirel Gökalp *et alii* (2014), pp. 199-214, and Demirel Gökalp *et alii* (2013), pp. 349-364.

Urban continuity is, however, not uncommon in other centers of Anatolia, such as Aphrodisias[34] and Sagalassos,[35] where urban areas do not seem to contract until the mid-6th c. CE. This is, however, by no means the only pattern of urban change observed in this region; for example, at Miletus[36] and Aizanoi,[37] archaeological research has revealed that city abandonment started in the 5th c. CE due to socio-economic and administrative changes. Contrary to what was noted at Pessinus, the 7th c. CE at Miletus marked a time of some renewed urban vitality, as rural population moved into urban centers, seeking protection against the Persian and Arab invasions.

Chapter 6 considers the development of the countryside in this region. The aim of this chapter is to contextualize further the urban histories of Pessinus, Ankara, and Amorium, since ancient cities were deeply connected with their rural hinterlands. Indeed, rural communities contained the vast majority of the population and were responsible for most economic activity.[38] Since the evidence available for Galatia, where the three cities are located, is remarkably limited, my work considers the data collected on a larger part of the Central Anatolian Plateau. In particular, I selected the area roughly framed by the modern cities of Eskişehir, Ankara, Konya, and İsparta (Figure 1.1), which extends south and west of Galatia, but still presents comparable geographic and climatic conditions.[39] The evidence collected here seems to reveal a pattern of growth in rural occupation that started in the 4th c. CE and came to a halt during the 7th c. CE. The increase in agricultural production in the region occurred together with the development of a local

[34] Ratté (2001), pp. 117-133 and Dalgıç and Sokolicek (2017), pp. 269-280.
[35] Poblome, Talloen, and Kaptijn (2017), pp. 302-311.
[36] Niewöhner (2016a), pp. 63-77.
[37] Niewöhner (2006), pp. 239-253.
[38] Decker (2009), pp. 8-11.
[39] Stoops (1984), pp. 38-50. The climate of Pessinus is studied on the basis of cores carried out at Eskişehir, which is considered comparable of that of Pessinus.

industry of Red Slip tableware, which took over the market that was once dominated by imports. The local marble industry, based on the Docimian marble, seems also to parallel this development, pointing to a progressive regionalization of economic activities in this area during this period.[40] This data is then contextualized with the pollen collected in lakes at Konya and in Cappadocia; palynological evidence confirms that cultivation was intensified during this period but dropped substantially in the later 7th c. CE. The decrease in cultivation of cereals and other crops is particularly significant, as the amount of pollen for these species diminished by ca. 80%. Such a large number must relate to a reduction in the population living in the region, which no longer needed (or could sustain) more intense agricultural production.

In conclusion (Chapter 7), I argue that the progressive economic regionalization noted in Central Anatolia may have allowed a cluster of cities in Galatia to be more resistant to the changes that had caused the end of urban life, which had been happening since the 5th c. CE. In particular, isolation had led Central Anatolia to develop a regional economy that was able to support the cities of this region throughout the 5th and 6th centuries CE. Resilience and adaptation to change was not only the product of economic isolation, but also of the administrative status of the provincial capitals Pessinus and Ankara, or of location (Amorium was on a highway halfway between Constantinople and Antioch on the Orontes and therefore militarily strategic). Only in the later 7th c. CE, when the Arabs had conquered most of the Eastern Provinces, did the new reforms issued to counter the crisis by the Byzantine Emperors completely change the administration of Anatolia (introducing the thematic system); an extensive network of cities, at this point, was no longer needed nor sustainable, and thus Pessinus was quickly abandoned. By

[40] Niewöhner (2013), pp. 215-249.

contrast, Amorium and Ankara were selected as thematic capitals, and therefore maintained elements of the population and urban character.

Chronology, geography, and terminology:

A brief discussion of geography and chronology for the end of Antiquity is essential, as modern scholars have adopted different terms and definitions to consider this period. In what follows, I use "Anatolia" to define that peninsula bordered by the Aegean, Mediterranean, and Black Seas that is now modern Turkey. I often refer to Central Anatolia, which is the large plateau bounded by coastal river valleys in the west, the Pontic Mountains in the north, and the Taurus mountain chain to the south and east. My analysis is mostly focused on the western part of the Central Anatolian Plateau, in a region roughly bounded by the modern cities of Eskişehir, Ankara, Konya, and Isparta, as discussed above. Moving to chronology, "Late Antiquity," "Late Roman," and "Early Byzantine" have often been used in traditional scholarship to identify the same periods (roughly from the 4th and the 6th-7th centuries CE). The "Invasions Period" or "Byzantine Dark Ages" are employed to refer to dates from the mid-7th c. to the 9th centuries CE. Middle Byzantine is considered to be the following period, which goes from the 9th to the 11th c. CE, but is sometimes employed for the entire mid-7th to the 11th centuries CE. In my work, I use "Late Roman" to consider the period from the 4th c. CE, approximately starting from the reign of Constantine and the foundation of Constantinople, to the 7th c. CE, when the invasions from the East (Persians, then Arabs) led to a progressive loss of territory and a profound military and administrative reorganization. As suggested by J. Haldon, the most significant changes occurred in the middle of the 7th c. CE, when, right after Heraclius' reign, the

empire lost almost all of its Eastern Provinces and was completely reorganized.[41] The use of "Late Roman" instead of "Late Antique" or "Early Byzantine" follows the categorization suggested by J. Vroom for pottery (especially fine ware), which intended to underline continuity of production of a certain type of material culture throughout this period.[42]

Finally, in my dissertation, I argue in favor of continuity of occupation in some cities and some rural districts of Central Anatolia. As stated above, even in Central Anatolia (at Aizanoi, for example) different trends of urban development have been observed, and they may therefore require different terminology. The 7th-9th centuries CE is referred as the Invasions Period, as proposed by Niewöhner in his recent book *The Archaeology of Byzantine Anatolia*.[43] Invasions Period is a better characterization of these centuries than "Byzantine Dark Ages," which intended to underscore a period of decline and recession. The Middle Byzantine Period covers from 9th to 11th century CE, when the Empire experienced a time of territorial expansion.

[41] Haldon (1997) and (2016).
[42] Vroom (2005), pp. 17-20.
[43] Niewöhner (2017), pp. 1-8.

CHAPTER 2: The Archaeology of Pessinus.

Introduction:

In this section, I will discuss the development of Pessinus in the Late Roman Period. The city is located on the low hills of the Anatolian Plateau, about 150 km southwest of Ankara (Figure 2.1), beneath the modern village of Ballıhisar, in the Eskişęhir district. The site lies in the ancient region of Phrygia, and it was famous in Antiquity for being the seat of Cybele, the Phrygian goddess. Pessinus was first identified by European explorers who traveled through the area in the early 19th c., and it became the target of archaeological excavation in the 1960s under the aegis of the Belgian University of Ghent. In 2009, a new project was started by the University of Melbourne, which ended in 2014. These archaeological explorations have highlighted a long-lasting history of occupation, which extends from the Hittite Period through modern times. I will briefly synthesize the history of the development of Pessinus prior to the Late Roman Period before moving onto later phases. I will also consider the natural environment of the site as well as the history of research in order to provide further context for my analysis.

The site of Pessinus: the natural environment

Analysis of the environment, vegetation, and climate of Pessinus was conducted by Georges Stoops in the early 1970s and published in 1984.[1] In this section, I will mainly synthesize and discuss the results of his research. Pessinus lies at an altitude of about 950 m, and is located in the valley of a tributary stream of the Sakarya River (the ancient Sangarios) about 150 km southwest of Ankara. This stream, which runs close to the Sivrihisar Mountains, is a torrent that rises in the massif located 6 km north of Ballıhisar (Figure 2.2). The valley of the stream, which was identified by Marc Walkeans as the River Gallos, [2] cuts through the landscape and is flanked by smaller ravines created by tributary streams. Studies of the torrent's alluvial deposits have shown that it was and still is only seasonal, making its identification with the River Gallos problematic.[3] Downstream from Ballıhisar, the valley broadens into an alluvial plain, which joins the Sakarya River valley 17 km south of the village.

The ancient climate seems to have been consistent with that of today, but since there is very little evidence directly related to Ballıhisar, most of the studies carried out refer to Eskisehir,[4] located about 100 km north-west of the village. In this area, where modern climate is comparable to that of Ballıhisar, the temperature is mildly temperate (the mean is from 21.5 to 0.5 Celsius) with low precipitation, especially during the summer (368.5 mm/y), suggesting a semi-arid environment in the present as well as in antiquity.

[1] Stoops (1984), p. 38-50.
[2] Waelkens (1971), pp. 349-373).
[3] The identification of the torrent with the River Gallos is currently being revised by Emmanuel Mayer (forthcoming). I will discuss the matter further at the end of this section
[4] Stoops (1984), p. 38-50.

The morphology of the region shows the presence of three main geological units: a tectonic massif, the high plateaus, and the dry river valleys. The massif is situated north of Ballıhisar, overlooking the surrounding plateaus and the valley of the village. As mentioned by Stoops, the massif contains two particularly important features for the history of Pessinus: the peak of the massif, which was the ancient Mount Dindymos (about 17 km north of Pessinus), an important feature in the cult of Cybele,[5] and the quarry located at Istiklâlbağı (6 km north of Pessinus), which provided the city with most of the construction material (marble) used in its monumental buildings.

The soils of the plateaus (layers of clayey limestone) are reddish in color and fertile, and they can be successfully used for agriculture. The city, as mentioned, lay in the valley of a seasonal stream and was surrounded by these features, constraining the urban development within a limited space. The sides of the plateaus, which often marked the boundaries of the valley of the city, were heavily eroded, and are now thinly covered by sparse vegetation as well as a layer of soil. They are also quite steep (from 25/35% to 45%), and the shape of the contour lines "pied de vache" despite its name is most likely the result of constant movement of flocks of sheep and goats.

The flat bottom of the upper valley at Ballıhisar has been partially dug away over time, as a monumental main road lies on its course, and its construction required removing the sediment deposits. This phenomenon is also especially concentrated at the foot of the northern plateau (by Sector I, Figure 2.3), where many ancient structures were built. The archaeological excavations conducted on this section of the riverbed, however, still provided us with key information of the

[5] Claerhout and Devreker (2008), pp. 157-171.

deposits accumulated here over time; the results show a series of alluvial and colluvial materials mostly deposited by the intermittent flow of the seasonal stream. In particular, the excavations carried out on the Roman Arch (Sector D2, Figure 2.4), which stood in this area, brought to light more details on the geological development of the region. On the one hand, layers which predate the construction of the arch showed the presence of limestone pebbles within fine calcareous deposits (Figure 2.5). On the other hand, the pebbles found in the layers belonging to the construction of the arch are embedded in reddish soils, which originate from the top and side of the plateau located to the north of it. This discovery suggests a significant increase in the rate of erosion, which would explain the presence of the reddish soils at the bottom of the valley. This phenomenon was interpreted as resulting from intense exploitation of the sides of the hills as stone quarries, which seems to have affected the rate of erosion. In particular, the side of this hill (Sector I) yielded evidence of quarrying activities dated to the Hellenistic Period.[6] It is, therefore, possible that the two phenomena are indeed related.

The results of further investigations in the alluvial plain south of the riverbed, such as an undisturbed marble block found at a depth of over 2 m, attest a dramatic discrepancy between the ground level in antiquity and that of the present day. Stoops also suggests that erosion was particularly significant in the tributary ravines, which were formed relatively recently, and where the bedrock is now completely invisible due to the sediment fallen from the sides of the plateaus. The absence of more systematic research in the valley of Sakarya River, however, limits our understanding of the full impact of erosion on the general landscape of the region.

[6] De Dapper (2001), pp. 17-18.

Finally, the area around Ballıhisar was intensively cultivated in recent decades, mostly with sunflower and maize, both on the top of the plateaus and in the alluvial plain south of the riverbed. The vegetation of the greater region is that typical of the steppe, although Stoops has suggested that the original vegetation was different in Antiquity, and the current is the result of human activity. In particular, the author argues that the settlement and development of cities such as Pessinus may have dramatically accelerated the process of deforestation in the past 2500 years (mostly oaks), as trees were supposed to be present in great quantity at an altitude of 900 m (Pessinus lies at 950m).[7]

Recent studies, however, have challenged this interpretation, demonstrating that the transformations of the Mediterranean environment over time are the result of a more complex process of development, which involved multiple factors besides human impact.[8] In particular, more recent scholarship has grown skeptical about the effect or even existence of widespread deforestation, suggesting that the vegetation of the Mediterranean region may not have been very different from that of today.[9] Further analysis of palynological data has also shown that deforestation may have been a more modern phenomenon, which peaked after the 19th c. century. This is the case, for example, of the Taurus Mountains in southern Turkey, where deforestation was led by the activities of the Ottoman government.[10] The impact on the ancient environment of ancient human activity should therefore not be overemphasized, even though it is undeniable that the valley in which Pessinus sits was significantly modified by the growth of the city.

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7 Stoops (1984), p. 38-50.

8 Some of the models on deforestation in the Eastern Mediterranean World are summarized in Akkemik *et alii* (2012), pp. 397-398.

9 Squatriti (2014), pp. 26-42.

10 Akkemik *et alii* (2012), p. 398

With regard to the stone available in the area around Pessinus, investigations carried out in the 1970s and 1980s by the Belgian team brought to light interesting new details. Granite and marble have been detected in the massif as shown in photo 4.[11] Outcrops of granite also are particularly common in the area, giving to this region a more granular appearance, as in the case of Sivrihisar (Figure 2.3). This feature also endows the landscape with a certain "monumentality",[12] which was exploited by the Phrygians in the funerary sphere. In the case of Tekören, for example, large granite outcroppings were turned into rock-cut tombs (Figure 2.6).

Only one type of limestone was found in the area, but it varies in hardness. This particular feature made the limestone suitable for different purposes: the softer stone was used mostly for the production of binding agents, such as mortar and lime, while the harder type was adopted for the construction of most of the buildings in the city. Interestingly, there is no evidence of the use of any other stone in buildings at Pessinus prior to the Hellenistic/Early Roman Period, suggesting a limited catchment area for the quarrying of stone. The most visible quarries of local limestone are located on the sides of the northern plateau (Sector I), as said above, and their intensive exploitation seems to belong to the Hellenistic Period.[13]

The marble quarries at Istiklâlbağı were not intensively used until the Late Hellenistic/Early Roman Period. From this period onwards, this stone became the most common building material in monumental architecture. Further research conducted in the late 90s on this topic has also highlighted the presence of several imported pieces from other places in the Mediterranean World; most were finished goods – i.e. sarcophagi – rather than construction material. The most

[11] Brackman *et alii* (1995), p. 7
[12] *Ibidem*, p. 18
[13] Stoops (1984), p. 42.

common non-local stone is Docimian marble, a much higher quality marble whose quarries are located not too far from Pessinus (about 100 km south-west).[14]

To summarize, a detailed analysis of the surroundings of Pessinus has given insights into the relationship between the city and its environment. In particular, the alternation of narrow valleys and high plateaus had a dramatic impact on the development of the city, as the main urban structures were articulated on and around these features (urban structures in the valley and necropoleis on the plateaus). The analysis of the exploitation of natural resources also provides us with further information on the growth of the city. The excavations conducted in the riverbed have shown how the increase of monumental construction coincided with an acceleration of erosion on the top of the plateaus. This is specifically visible in the case of the Roman arch built to mark the northern boundary of the city. Here, archaeological investigations highlighted the presence of soils from the top of the plateaus within the foundations of the arch, which were absent from the previous phases. This phenomenon should not be overemphasized, as it may not have impacted the ancient environment as suggested by Stoop.[15] On the contrary, we should consider it evidence only for local trends, while awaiting more data to reconstruct the development of the whole region. In this respect, the intensive exploitation of the stone quarries located in the territory of Pessinus, which starts in the Late Hellenistic Period and was intensified in the Roman Period, shows a correlation between the growth of the city and its increasing reliance on the resources of the local countryside. It is in fact when the city was enlarged and received its first monumental structures that the quarries in Pessinuntian territory were first

[14] De Paepe, De Donder, Moens (2005), p. 168-171.
[15] Stoops (1984), p. 38-50.

opened and exploited. Also, during the Roman Period sarcophagi and other portable objects made out of Docimian marble emerge. Finally, the study of the environment can also inform us about the burial of the ancient city. Once the riverbed was no longer maintained the city structures were soon buried beneath large quantities of sediment. This trend was observed in the alluvial plain located south of the lower valley of the seasonal stream: marble pieces found *in situ* were recovered over 2 m below the present ground level, showing that the latter has risen dramatically. This phenomenon demonstrated that the plateaus upstream were still significantly affected by erosion, which deposited soils in the riverbed to be deposited downstream by the intermittent torrent.

Finally, it is worth discussing the possible identification of the seasonal torrent cutting through Ballıhisar as the Gallos River. Marc Waelkens reviews the evidence for the presence of the Gallos River at Pessinus in an article published in 1971;[16] his association is based on a few brief and vague mentions of the river Gallos in the literary sources,[17] a coin issue of a river-god (Figure 2.7),[18] and the identification of Sector D as a monumental canalization, which aimed to keep the main thoroughfare of the city clear from the water. In particular, Lambrachts, the first excavator at Pessinus (1960s), interpreted Sector D2 (the Roman Arch) as a bridge, which was flanked by a quay restored in the Byzantine Period.[19] If, for the coin issue, it has been suggested

[16] Waelkens (1971), pp. 349-373.

[17] The Life of Saint Theodore of Sykeon (101) from Strubble (2005), p. 258 "…there were streams of waters and the land to the west of the town was impassible owing to the flooding of the river". Herodian (*ab excess divi Marci*, I, 11, 2) reports that the Pessinuntians "…practice their orgiastic rites on the banks of the River Gallos". Firmicus Maternus (De Errore III, 1) says "…the Phrygians who live in Pessinus by (*circa*) the banks of the River Gallos…".

[18] Devreker (1984a), p. 176.

[19] Lambrechts (1969), pp. 273-274.

that the river was in fact the Sakaryas rather than the Gallos,[20] the complex, which consisted of bridge, monumental canalization, and quay, do not seem to appear in any source at our disposal. Recent archaeological investigations have challenged further this interpretation by disproving the presence of any bridge or quay,[21] while a revised study of the main thoroughfare is currently being carried out by E. Mayer.[22] We should assume, therefore, that the River Gallos most likely did not cross the city on the route of the main thoroughfare, but was perhaps located elsewhere in the Pessinuntian territory.

The travelers from the 19th century:

As mentioned above, Pessinus was famous through the literary sources due to the cult of Cybele. The ancient city was identified at the modern village of Ballıhisar, in the Eskisehir district, in Central Anatolia, and was often visited from the 1800s onward, when the first European explorers started to cross the region seeking ancient sites.[23] The first traveler to identify Pessinus was Charles Texier, a French explorer who visited Turkey at the beginning of the 19th century.[24] After Texier, a number of other visitors passed through Pessinus, recording the standing structures they could see.[25] These descriptions offer very important insights into the urban plan and the burial of the ancient site, as it seems that in central decades of the 19th c., local villagers extracted a remarkable amount of stone, dismantling of ancient buildings, in order to use the collected material for construction in the nearby centers (Sevrihisar, in particular).

[20] Waelkens (1971), pp. 353-354.
[21] Waelkens (1984a), pp. 77-97 reinterprets sector D2 as a Roman Arch.
[22] Mayer (in press).
[23] Texier and Hamilton among many.
[24] Texier (1862), pp. 473-479.
[25] Hamilton (1842), Texier (1862), Van Lennep (1870), Perrot (1872), Humann (1890)

Texier described in detail part of the structures visible in the city, such as the so-called acropolis (Sector I) (located on the northern side of the city), the temple of Asclepius (for which he records an inscription), and the theater (the latter two both positioned on the Eastern side of the city).[26] He also mentioned the presence of a hippodrome abutting the north side of theater. As far as we can tell from his report, he carried out no archaeological work besides a short topographical survey (Figure 2.8), which is published in his book. His representation of the city seems to be somewhat inaccurate: some of the structures drawn are not only off their actual positions, but have they never been identified archaeologically. Finally, the Roman Temple Complex turned out to be built on a very different design from that suggested by Texier's reconstruction.[27] He did, however, underline three crucial features of the city, which are helpful in order to understand better the development of the site: 1) the peculiar absence of any church at Pessinus, which was interpreted as evidence of the local population's resistance to Christianity;[28] 2) the presence of the Temple of Asclepius located east of the theater; 3) a hippodrome situated abutting against the theater.

The latter points are particularly important, as they provide almost all the information available about the south-eastern sector of the city. Besides the theater, which was settled in this area and is known archaeologically, this section of the city has not been intensively investigated, limiting greatly our understanding of it. Although the presence/absence of a hippodrome is yet to be established, Texier records the only evidence (an inscription) for the Temple of Asclepius,

[26] Texier (1862), pp. 479.
[27] Tsetskhladze (2013), p. 42.
[28] Texier (1862), pp. 481. I will discuss the Christianization of the city in a following section.

which can be roughly located near the hill facing the theater.[29] Regardless of the identification of the hippodrome, we should assume that some sort of monumental area stood in this sector of the city, given the presence of the theater and the temple of Asclepius.

Finally, Texier's inability to recognize the presence of Christianity was not due to the resistance of local people to the new religion, but to the extensive demolishment of ancient buildings which took place after its abandonment at the end of antiquity. This phenomenon is even better attested when Hamilton visited the city a few years later. Hamilton was an English geologist who traveled around Asia Minor, the Levant, and Armenia in the 1830s visiting a large number of sites, including Pessinus. His description of the site shows that the temple of Asclepius was already invisible (it is still unaccounted for today) by then, while there is no evidence for the hippodrome or any other similar structure. Hamilton records a few more details than Texier about the northern and southern sectors of the city: for the former, he talks about a monumental building near the Turkish cemetery. Such a structure could be identified as the Roman Arch (Sector D), excavated by the Belgians.[30] On the southern edge, where the river valley and the alluvial plain connect, Hamilton reports that a series of habitations are still visible.[31] This feature was also noted and sketched by Humann, who visited the site almost half a century after Texier (Figure 2.9).[32] Also, he gives a fuller account of the Roman Temple Complex, for which he describes the columns and its podium.[33] Humann was a German architect

[29] *Ibidem*, pp. 487.
[30] Hamilton (1842), pp. 438.
[31] *Ibid*., pp. 440. A domestic context located in this area (Sector R) was excavated by the Australian Team in 2010 (See Clark 2010, pp. 1-3).
[32] Humann (1890).
[33] *Ibid.*

who travelled extensively around the Eastern Mediterranean Sea, visiting several sites in this region in the 1860s.

Perrot's account gives further details about the site's modern fate. The French archaeologist reports that the seats of the theater were almost completely gone by the 1860s, [34] adding also that the site is not worth visiting, and that Texier must have been lying about the grandiosity of the remains. Similarly, Van Lennep, a Christian missionary active in Turkey between the 1830s and 1850s, in the same decade sadly describes the decadence of Pessinus: "It is curious that a place where perhaps the most extensive ruins can be found in all Asia Minor, should now be one of the most important spots where the great staple of the province, the *teftık* (a breed of goat), is produced".[35]

Van Lennep gives, however, a full account of the remains, underlining that Pessinus was certainly a great city in antiquity, but now lies in ruins under the Ottoman Empire. As all the other visitors, Van Lennep entered the city from the north, reaching the so-called acropolis first. He commented on the sturdiness of the construction as well as noticing a gate on the eastern side. From this vantage point, he is able to see the foundation of another structure, located at the north-eastern edge of the city, which he recognizes as a temple. Van Lennep could only see the foundations, but it is unclear to which building he referred. He then noticed that most of the public buildings were accommodated on higher ground. Unfortunately, he also failed to specify what the buildings were or the locations in which they stood, limiting our understanding of the urban plan. He descended to the theater through what he defines a main thoroughfare, reporting

[34] Perrot (1872), pp. 212-213.
[35] Van Lennep (1870), p. 207-212.

that the seats of the theater had been taken away and there was a lot of material loose on the ground in this sector of the city. He also mentioned a portico which must have been "…a handsome structure…"[36] It is unclear whether or not the author actually saw the portico as part of the structure of the theater or as a separate entity. If the latter was the case, one should wonder whether this portico was part of the construction that Texier recognized as hippodrome.

Finally, Van Lennep reached the Roman Temple Complex that he described as placed "…on a slight eminence nearest the village…" He identified this as a temple to the god Bacchus due to a number of architectural sculptures depicting "…boys supporting garlands…" Such pieces have been found in the Temple Complex and they are now in the museum garden at Ballıhisar.[37]

To conclude, the descriptions of the 19th c. explorers seem to underline a few important developments of the site, both in antiquity and in modern times. Pessinus certainly displayed several monumental areas which were still visible in the 19th c. CE. In particular, the so-called Acropolis, the Roman Temple Complex, and the theater attracted the attention of all the visitors. Besides these three features, there were other monumental structures that we can no longer identify, due to the robbing that happened after the abandonment. The explorers seem to confirm the presence of a main thoroughfare[38] that from the north (by the so called acropolis) leads to the south, where the Roman Temple and the theater stood. Additionally, the southern edge of the valley was most likely occupied by houses.

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[36] *Ibid.*, p. 212.

[37] Claerhout and Devreker (2008), p. 74.

[38] Although only Van Lennep (p. 212) mentions it, all the visitors seem to move in the same direction confirming the hypothesis.

The robbing of ancient structures seems to speed up dramatically in the central part of the 19th c., as in a small span of time the travelers report a drastic change in the preservation of ancient structures. The eastern fringes of the city seem to have suffered the most in this period, as demonstrated by the robbing of the theater and the disappearance of the temple of Asclepius. As we will see in the next section, the robbing of ancient constructions had a significant impact on the archaeological investigation as well as in the reconstruction of the urban development of Pessinus.

Finally, three other important elements are revealed in the accounts left to us by the 19th c. travelers. 1) Besides the so-called acropolis, no fortifications of any sort were noticed by the visitors, who also do not make any remark about their absence. Fortifications are extremely common in ancient sites, and they are often the most visible element of the urban infrastructure. 2) The absence of churches is underlined by Texier and Van Lennep, but it is quickly explained as the result of resistance to Christianization. 3) The Gallos River is not mentioned in any of the accounts, even though, according to the reconstruction of the Belgian team, an intermittent torrent crossed the site on the same path of the main thoroughfare. The Belgians believe that an imposing system of canalization cleared the waters of this stream, allowing safe passage on the road.

Archaeological sources:

As discussed above, the city of Pessinus developed in a tributary valley of the Sakarya River, which yielded traces of occupation since prehistory. At the site of Pessinus, the earliest available evidence, however, belong to the Hittite Period, but, unfortunately, it cannot be associated to any

structure, limiting out understanding of the Bronze Age settlement in the area.[39] The Iron Age at Pessinus is, on the other hand, better known archaeologically, as a series of pottery deposits were found in close connection to walls.[40] Although Pessinus was known to be the seat for the cult of the Phrygian goddess Cybele, the evidence of Phrygian occupation at the site of Pessinus is meager when compared to the archaeological data collected in the local countryside. In particular, the site of Tekören (Figure 2.2), which lies about 9 km north-east of Ballıhisar, has yielded a great deal of evidence, including monumental tombs as well as definitive proofs for the existence of a settlement (Figure 2.10). Such a large body of archaeological data coming from the Pessinuntian countryside has led G. Tsetskhladze to suggest that the main Phrygian settlement of the area was in fact located at Tekören rather than Ballıhisar, and that only in the Hellenistic Period the site known at Ballıhisar became the main regional center.[41] This hypothesis needs further validation through more archaeological investigations at both of the sites, as no evidence for a cult area of Cybele has ever been identified in spite of over 40 years of research in the area.

Hellenistic Pessinus:

It is only for the Hellenistic Period (Late 4th – Late 1st centuries BCE) that archaeological investigations have brought to light extensive traces of occupation at Pessinus. In particular, the area that was later taken by the Roman Temple complex was the center of monumental structures since the 4th c. BC (Figure 2.3, Sector B). The excavation results show a reorganization of this whole sector of the city during the Hellenistic Period, with two different structures built

[39] Claerhout and Devreker (2008), pp. 26-27.
[40] *Ibidem*, p. 75.
[41] Tsetskhladze (2009), pp. 707-708

respectively in the late 4th/early 3rd c. and in the 2nd c BC. The two complexes do not share the same orientation, but the 2nd c. phase is aligned with the later Roman Temple. A. Verlinde suggests that both of the structures (4th and 2nd c. BC) belonged to different phases of a citadel occupied by the Pessinuntian oligarchy during the Hellenistic Period (Figure 2.11 in green). [42] The second, larger phase is also associated with a colonnaded square located east of the citadel, and placed on the same axis of the new citadel (Figure 2.11 in blue). Both of the phases of constructions belong to a time of significant expansion of the whole site, as already noted above;[43] recent archaeological investigations have highlighted that the sides of the northern plateau (the so-called acropolis) were being systematically quarried for stone during this period, while it is also attested that the Eastern necropolis was in use during the 3rd c. BC.[44] This lends further confirmation to the hypothesis that the site of Pessinus was occupied more intensively during this century, and that also new burial ground was employed by the growing community of the site.

The City in the Roman Period:

The vast majority of the city (about 80 ha.) structures brought to light by archaeological excavations belong to the Roman Period. The Belgian team focused its work mainly on four areas of the city (Sectors A, B, D, and I), which allow us to understand better its general development during the Roman Period (Figure 2.12). The first sector targeted by the Belgians was the Eastern necropolis, which was excavated by Lambrechts in his first seasons (1960s), in order to acquire new data on burial practice at Pessinus as well as their development over time

[42] Verlinde (2015), pp. 30-113.
[43] For a discussion of the environment at Pessinus, see the section above.
[44] Claerhout and Devreker (2008), pp. 114-124.

(3rd c. BC to the Late Imperial Period).[45] Necropoleis at Pessinus are a very peculiar feature, as they occupy an extensive area around the city and they are mostly located on the plateaus surrounding it, while the city structures are situated in the valley below it. A recent survey of the burial grounds identified no less than 11 cemeteries scattered around the city (Figure 2.12), of which, however, only two (Sectors A and I) have been investigated archaeologically.[46]

The position of these necropoleis, overlooking the city from above, is also very telling for the development of cityscape at Pessinus. Tombs were often built with markers (tomb stones) on the ground, which were most likely well visible from both the valley below and the extra urban roads leading into the city. This arrangement created an impressive sight for both visitors and citizens, who could observe the grave markers from many places within the city, and, thus, commemorated the deceased Pessinuntians. In a recent article, D. Krsmanovic and W. Anderson suggest that the proximity between the inhabited area and the burial grounds, as well as the relationship between the living and dead, may be understood better with the idea of *heterotopia* - i.e. a space or place that presents different levels of meaning - as conceptualized by Foucault.[47] In the case of the cemeteries at Pessinus, the authors argue that grave markers not only showed the presence of a burial ground, but also they were purposely settled around the city with the aim of having an impact on the livings. Pessinuntians who, by living in the city, engaged with these spaces and entered in contact with "…repositories of biographical narratives and social memory, giving them highly affective potential in the overall landscape". The presence of visible graveyards surrounding Pessinus should be therefore considered to be a constant reminder, for

[45] The results are published in Devreker and Waelkens (1984).
[46] Krsmanovic and Anderson (2012), p. 63.
[47] *Ibid*., pp. 76-82.

the inhabitants of Pessinus, of the lives of past citizens as well as the values they embodied. Unfortunately, the poor preservation of the cemeteries and the limited archaeological investigations do not allow us to appreciate fully the impact that these spaces would have had on the cityscape of Pessinus.

Limited excavations of necropoleis (Sectors A and I, Figure 2.3) at Pessinus revealed a significant variety of architectural forms (pits, urns, *bustum* and *cista*)[48], tomb markers (the typical Phrygian door-stone is frequently used), and funerary practices, which are represented in the archaeological record of the Eastern Necropolis (Sector A). For example, both inhumation and cremation are present and, although the extensive use of *spolia* makes it difficult to establish accurate dates for the majority of the tombs, it seems that inhumation became more widespread at Pessinus in the late 1st c. CE.[49]

Archaeological investigations were also conducted by the Belgians in the 1980s on the so-called Acropolis, a plateau located on the northern side of the city, overlooking the modern road which connects Sivrihisar with Ballıhisar (Sector I) (Figure 2.3). The identification of this plateau as the acropolis was made by Texier, when he visited the city in the 1840s and noticed monumental marble structures located on the highest plateau. [50] The area was explored by opening two long perpendicular trenches, which cross each other on the western side of the plateau.[51] Less than 20% of the total surface was excavated, while no geophysical prospection was conducted on the rest of the plateau. The structures brought to light show a particularity, as

[48] Waelkens (1984), p. 55-75.
[49] Vermeulen (2003), pp.40-46. The author underlines the problems behind precise dating of the tombs. About 2/3 of the tombs have proven to be non-datable.
[50] Texier (1862), pp. 473-479.
[51] Vermeulen (2003), p. 29-338, presents the results of the excavation.

a necropolis dated from the Late Hellenistic to Late Roman was decomissioned and turned into a fortress probably in the 7th c. AD. The cemetery is one of the largest found at Pessinus, and it yielded a widely diverse array of evidence for funerary practice. As in the case of Necropolis in Sector A, both cremation and inhumation are present, although the latter is more intensively practiced from the Early Roman Empire. The excavators also suggested that a gap in cemetery use occurred between 100 and 250 CE, as very little evidence from this period was collected. It has, however, been proposed that tombs dated to this period could just lie elsewhere, outside the explored area.[52] In the mid-3rd c. CE, a second wave of burials occurred in the northern-eastern side of the plateau.[53] These tombs, as in the case of Sector A, were not only constructed by using a significant amount of *spolia*, but they also became multi-burial, marking a significant shift in funerary practice. F. Vermeulen suggests that the new line of tombs built on this side of the plateau meant to create a scene visible from the street, strengthening even further the connection between living and dead, as discussed above. It is unclear, at this stage, why this necropolis was abandoned and dismissed in the Late Roman Period, but it is likely that different burial grounds were selected for the later period, for which we have no evidence available. It is possible that the introduction of Christianity might have played a role in this development, as burials could have been moved to different locations in order to fit the new configuration of the religious landscape at Pessinus. For example, an extra-urban church was found near the western outskirts of the city, and placed in the vicinity of the so-called Western Necropolis 1, which has never been investigated archaeologically. It may therefore be plausible to assume that the necropoleis such as the Western Necropolis 1, which were situated near churches, slowly replaced pagan

[52] Krsmanovic (in press).
[53] Vermeulen (2003), p. 126-134.

cemeteries in Sectors A and I, where only meager traces of Christianity were found. As we will see below, the city remained extensively occupied until the 7th c. CE, and the abandonment of the cemeteries, therefore, cannot be the result of a reduction in population, but rather it must reflect a shift in the geography of the religious landscape at Pessinus. The presence of Christian burials is well-attested at Pessinus, as several sarcophagi were discovered by the villagers and brought to the excavation house.[54] Unfortunately, the provenience of these pieces was often unknown, hindering the gathering of information about this development.

Sector B is the urban area that contains the most impressive archaeological remains, and yielded also the deepest chronology of materials in the whole city (Hittite to Byzantine).[55] This area underwent a major rearrangement during the Early Imperial Period, which obliterated the Hellenistic citadel discussed above; massive terrace walls were built in order to support a new temple, which could be reached through a monumental staircase located to the east side.[56] The orchestra of this latter feature was most likely built on top of the eastern side of the Hellenistic colonnaded square mentioned above, which was also covered, to the east, by a new floor level during the Early Imperial Period (late 1st c. BC-1st c. CE).[57] The excavators stated that the staircase had another function besides giving access to the temple: the side rows may have been used as seats for performances in the space just west of it, creating therefore a temple-theater complex.[58] Such a structure is fairly unique in Asia Minor, and it seems to resemble the design

[54] Claerhout and Devreker (2008), pp. 132-145.
[55] Verlinde (2015), pp. 26-30.
[56] Claerhout and Devreker (2008), p. 70-82
[57] Devreker's interpretation (2007, p. 70-71) proposed instead that the colonnaded square was still in use during the Early Roman Period. Such an interpretation has been revised by recent scholarship (Verlinde 2015, pp. 66-113), and it is now clear that the colonnaded square was probably destroyed in the Late Hellenistic Period.
[58] Verlinde (2010), p. 128.

of the Late Hellenistic sanctuaries in Latium (Tivoli, Gabii etc.). As suggested by Verlinde, who has recently published the final study of the development of this complex,[59] the Imperial Temple at Stratonicea offers the only suitable comparison available in Asia Minor. The temple itself was extensively robbed, and only the foundations could be excavated by the Belgian team, who placed the construction of the temple in the early 1st c. CE.[60]

The Roman Temple complex received the most attention in the Belgian archaeological investigations. The temple is hexastyle in the front with eleven columns on the sides (35 x 21.7 m), and it is dated, through ceramic evidence, to the Augustan Period (Figure 2.13). The dedication of the temple, which has been associated to the Imperial cult, has been the center of a vibrant debate in recent years.[61] The presence of an Imperial Cult Temple is attested securely at Pessinus by several inscriptions dated from the reign of Augustus through that of Marcus Aurelius. [62] The inscriptions of the 1st c. CE (from years 8/9 CE and 12/13 CE) from the Imperial Temple at Ankara, mention the presence of religious celebrations at Pessinus, honoring the Emperor with gladiatorial combats[63] as well as sacrifices. It has, therefore, been suggested that the cult of the emperor was established at Pessinus during the Augustan Period, as it was at Ankara. The temple, which has now been securely dated to the Late Augustan Period, may have been a new foundation to host such a cult. Verlinde also argues that the coins of T. Helvius Basila, governor of the Province of Galatia since 12 CE, represented on one of their faces the

[59] Verlinde (2015), pp. 116-224.
[60] *Ibid*., pp. 134-136.
[61] Devreker, Theon, Vermeulen (1995), pp. 125-144 and Strubble (2006), pp. 106-121.
[62] For discussion of the inscriptions see Devreker, Theon, Vermeulen (1995), pp. 129. The inscription (IGR III. 230) is also published by Mitchell (1986), p. 32, n. 60.
[63] Mitchell and French (2012) p. 31 and Verlinde (2015), p. 247-248. Gladiatorial combats were a prerogative of the priests of the Imperial cult in the Roman East.

newly built temple of Pessinus, celebrating the establishment of the new cult of the emperor at Pessinus.[64] The author also adds that the rare design of stairway-theater in front of a temple is often associated to the creation of the imperial cult, hinting again at the possibility that the temple is Sector B was indeed that dedicated to the emperor. Verlinde goes as far as suggesting that the space before of the stairway-theater was the arena employed for gladiatorial games, which would periodically take place in order to celebrate the cult of the emperor. According to this reconstruction, which awaits further confirmation, spectators could attend spectacles while sitting on the stairway-theater, which was monumentalized, in its western section, with a marble high podium (Figure 2.14).

Both the temple and the staircase described above went through other major changes in the following centuries, [65] which dramatically reshaped the arrangement of the whole complex: in the Severan Period (early 3rd c. CE) a second, smaller marble theater was built on top of the westernmost section of the stairway (Figure 2.11, in purple), while the area in front of it was paved with marble (Figure 2.15). The Roman retaining wall on the western side of the temple was replaced by large marble walls, and a new monumental building was added in Sector L, about 50 m north of the temple (Figure 2.16).

The new theater was constructed in alignment with the temple, and it connected through steps with the new marble square, which extends westward, and was paved during the same period. The northwestern side of the square (Trench H3) was further monumentalized by the construction of a small marble platform (7.60 x 3.60 m) and supported by a barrel vault, which

[64] Verlinde (2015), pp. 246-267.

[65] Verlinde (2015), pp. 271-302 reviews and discusses the evidence for the Severan phase of Sectors B and H. My synthesis is greatly indebted to his work.

created a small crypt under it. It is still unclear the precise function of such a feature, although Verlinde suggests that it could be the platform for a statue or an altar. The new arrangement of marble retaining wall, theater, and square changed dramatically the western side of the temple complex, both creating a new monumental area in front of the temple, and obliterating access to the building there. In particular, since the new marble theater and retaining wall blocked the stairway leading into the temple from the west, we can assume that mobility around it was significantly rearranged, too.

Further evidence for a change in circulation patterns around the temple area was discovered from the excavation of Sector L, a small trench (16 x 6.5 m) opened only 50 m north of the Temple Area.[66] Here, a multi-layer complex was brought to light, showing the presence of a Roman house on top of a Late Hellenistic building oriented NW-SE, and dismantled probably in the late 2nd c. CE (Figure 2.17. Plans I-II). The edifice in this sector was replaced by a monumental building made out of marble *spolia*, probably also dated to the Severan Period, which presented a new orientation (NE-SW) and large foundations (1.55 m). On its western side, the foundation wall 94 seems to have been the base for a colonnade, which, perhaps, created a portico. The new building, interpreted by the excavators as a Roman Basilica, was then turned into a church during the Late Roman Period; it will be the subject of discussion in the following sections.

The 3rd c. CE reconstruction of the building in Sector L shows a design where the western border of the portico stands on the same line of the podium for the Roman Temple, which is

[66] Devreker and Vermeulen (1996), pp. 71-73.

located only 50 meters to the south.[67] It is, therefore, possible that the new rearrangement of the Temple Area complex was followed by the creation of a road passing by the west side of the building in Sector L, and giving access to the Temple from its west side (Figure 2.18). This road is not visible in the archaeological record, but this hypothesis could be further confirmed by the choice to reorient the building in Sector L to NE-SW from a NW-SE axis. NE-SW alignment seems to be common throughout the city structures at Pessinus, which may imply the presence of a shared street-orientation around the main thoroughfare. If this street organization existed, it was designed when the city was made a colony in the Augustan Period, as most buildings belong to his reign, and then maintained over time. The 3rd c. CE development of Sector L would therefore show the planning of an area left untouched during the Early Imperial Period, as the Roman houses destroyed in the 2nd c. CE were settled on a building from the Late Hellenistic Period (also oriented NW-SE), which predated the Roman city. It is unclear why the expansion of the Early Roman city did not involve this area, but it is certain that the reasons behind this choice did not stand two centuries after, when the new design of the city center was laid out.

The main monumental road (Sector D) was also explored by the Belgians through excavation over a number of seasons in the 1960s, highlighting a long and complicated development over time (Figure 2.19). The chronology is particularly complex, but, preliminarily, it is worth noticing that although the road was established in the Augustan Period with the rest of the city, it was renovated significantly in the following centuries. The Severan Period (early 3rd c. CE) was especially important for the development of the road, as the northern section was completely rearranged, just as observed for the Temple Area. The road was maintained and reshaped in the

[67] Devreker and Vermeulen (1996), pp. 71-73 contains the result of the excavation.

Late Roman Period, but a more detailed discussion of this development will be the subject of the following sections.

The road was 11-13 m wide, crossing the whole site from north-west to south-east for about 500 m. [68] Its route runs through one of the lowest points of the valley, bends in proximity of the Imperial Temple, and carries on towards the southeast. Given the fact that its course is lower than the rest of the city, steps were often used to connect the road to the city areas to its east and west. These steps were in marble and they were placed intermittently among the columns which flanked the road. A good example for this arrangement was uncovered by the excavation of a segment in the southeastern part of the road (DR 13), where about 30 m of a marble colonnade were placed in front of a paved area, which was connected to the street level by marble steps. On the western side, another stretch (37.5m) of the marble colonnade was also revealed by excavations in trench DL 8. In the case, however, the steps were not interrupted by columns, as they were not placed at the level of the street, but, instead, higher up, where the side of the road connected with the city blocks to west.[69] The different style of the colonnade lends further support to the hypothesis that the monumentalization of the road did not happen in one event, but rather it was the result of a long-term development. Unfortunately, excavations were not able to retrieve precise chronological indications about the construction of this section, which is only generically dated to the 1st-2nd c. CE.

[68] Waelkens (1984a), pp. 77-141.
[69] *Ibid*., p. 117.

Very little is also known about the city areas directly adjacent to the road, but we can assume, based on research carried out on other colonnaded roads,[70] that commercial buildings as well as other monumental areas were connected to the road. In this respect, S. Young has argued that the area occupied by the school building sits atop a terraced monumental structure, which was connected to the main road by the colonnade uncovered in DR 10.[71]

The excavation of the northern section of the road provided further details on its development over time. [72] An arch was built in the Severan period[73] at the northernmost end of the road as a demarcation of the entrance into Pessinus. Its marble construction consists of a series of columns supported by a base, for a length of about 28m (Figure 2.20). The upper part was dismantled after abandonment, and only the lower section was left in place (Figure 2.21). The structure was laid across the street and was supported by marble walls both on the eastern and western sides (Figure 2.22). The walls were at a higher level than the street, and they created a connector between the road and the areas to its east and west. The eastern and western marble walls were also renovated in the same period, and archaeological investigations revealed that the new walls were erected on the foundations of the previous Early Imperial ones, which were also made out of marble.

Sector G, which is situated in a gully about 250m southeast of the Roman Temple area, was also the target of Belgian excavations. The explorations uncovered a badly robbed theater, which

[70] Jacobs (2013), pp. 159-184.
[71] Young in press.
[72] Walkaens (1984a), pp. 77-97 contains the discussion of the excavation results.
[73] Given the extensive robbing, the arch is dated mostly on style. See footnote 93.

was completely stripped of his marble seats in the mid-19th c., as reported by Perrot.[74] Very little is published about the theater excavation besides the presence of an inscription dated to the time of Hadrian, which provides us with a *terminus ante quem* for its construction.[75]

Finally, smaller trenches were also opened in order to investigate sections of the city outside the monumental center (Sectors J, K, L, M, N, O, P, Q), showing a substantial continuity of occupation from the Late Hellenistic/Early Roman Period through the end of antiquity.[76] A more detailed discussion of the development of these city blocks will be the subject of the following section. Here it is worth noticing that most residential blocks are on a NE-SW alignment, which could confirm the presence of a common street orientation organized around the main monumental road.

To summarize, the excavations carried out by Ghent University underlined a long-term history of development which fits within to the Greco-Roman tradition in Asia Minor. [77] According to this, cities grew organized around an urban core, which was the center of political and religious activities. Both monumental centers and residential areas were often rearranged and renovated over time in order to fulfill specific needs, as visible in the case of Pessinus. The core of the city was located in the area of the Imperial Temple, where, since the Hellenistic Period, monumental structures were built. The time of Augustus marks a significant urban expansion, with the construction of the Temple, the main road, and most of the residential areas

[74] Perrot (1872), pp. 212-13.
[75] Lambrechts (1973) 107-115.
[76] Claerhout and Devreker (2008), pp. 107-112.
[77] Vermeulen, Devreker, Demulder (1998), p. 788-789. There are several key studies of Late Hellenistic/Roman urban development, especially with regard of the western coast of Asia Minor. One of the most comprehensive is Parrish (2001).

occurred. This new building frenzy is most likely related to the foundation of the Roman Province of Galatia, in which Pessinus played a key administrative role. The High Imperial Period is less known archaeologically, although there is evidence for building activities at the theater during the reign of Hadrian, suggesting that city structures were at least maintained during this period. Finally, a significant transformation of the monumental core occurs under the Severan dynasty, as both the main road and the temple area were renovated. If the central thoroughfare was simply monumentalized further with the addition of an arch, the temple area was significantly rearranged: the construction of a new small marble theater as well as a massive marble retaining wall completely change the mobility around this space, obliterating the stairway-theater complex which gave access to the temple from its west. The accessibility to temple was, however, probably guaranteed by the construction of a new road to the north of the temple, which also connected the temple area to a large new public building (a basilica perhaps) erected in Sector L. The excavation of this sector revealed that the structures prior to the new 3rd c. construction were oriented NW-SE, and sat on top of a Hellenistic building. Once the new public building was erected, the axis of this shifted to NE-SW, which is the orientation shared by the vast majority of the city blocks examined. The 3rd c. CE structure of Sector L was also provided with a portico, which was laid on the same line of the podium of the Temple, located about 50m south. These observations, therefore, suggest that the common urban design adopted in the Early Imperial Period was employed in the reorientation of Sector L.

<u>The extra-urban Roman Road</u>:

Archaeological research conducted in the past decades also collected new evidence for the extra-urban road system of the territory of Pessinus. The city was connected to Amorium

towards the south, and, most importantly, to the north with the main artery linking Ankara to Dorylaion (modern day Eskişehir).[78] From Pessinus, it was commonly assumed that the route of the modern road roughly overlay that of the Roman road (Figure 2.23).[79] Ancient visitors would have, therefore, arrived into Pessinus from the north, and they would have entered the city passing by Sector I (a necropolis before the 6th-7th c. CE and then a Byzantine Fortress). After crossing the arch located just south of the acropolis, they would have carried on the monumental street (Sector D).[80] Toward the end of the monumental road visitors would have accessed the Temple Area, where the stairway-theater and Temple of the Imperial Cult were.[81]

The Roman Road in the vicinity of Pessinus was resurveyed by the Australian team in 2009, showing new details about its route (Figure 2.24).[82] As visible in the illustration below, there is a significant discrepancy between the courses of the two routes. The Roman road seems also to come from the north but, at about 900 m from the city, it seems to bend significantly toward the west.[83] Its last archaeologically known bit lies over 400 meters west of the modern road on the ridge of a plateau. It is, therefore, more likely that the road continued down into the lower valley, south of the plateau, rather than bend sharply to reach the valley located north of the city.

This hypothesis finds a further element of support: as already argued by S. Young,[84] the southern segments of the monumental road in Sector D (DR 18 and DR 21) are clearly directed to the south-west, precisely towards the place where the new course of the extra-urban street is

[78] Anderson, Krsmanovic, and Negus-Cleary (in press).
[79] See page 4.
[80] Tsetskhladze (2013), p. 42
[81] Claerhout and Devreker (2008), pp. 71-80.
[82] Anderson, Krsmanovic, and Negus-Cleary (in press).
[83] *Ibid.*
[84] Young (in press).

supposed to enter into the city (Figure 2.25). If the road really led to town from the west, a visitor would not only arrive at the temple of the Imperial Cult as a first step, but also s/he would be able to access, on an east-west axis, the theater, the area identified as a hippodrome by Texier, and the Asklepeion. If this hypothesis were to be confirmed, we should therefore imagine that the monumental center of Pessinus was most likely much larger than previously thought, and it expanded towards the east of the temple, rather than just to its north. Few archaeological investigations, however, have been carried out in the sector between the temple area and the theater, limiting greatly our understanding of its plan. There is also practically no evidence for the viability in the valley of the Sakarya River, which must have affected circulation in the region. Strabo mentions that the Sakarya River was navigable and intensely used to connect the region of Nicaea with the Ankara area.[85] We should therefore assume that part of the traffic through Pessinus went south of the city, as well as north of it.

Pessinus in the Late Roman Period:

The city of Pessinus underwent a major development during the Late Roman Period (4^{th} – 7^{th} c. CE), which markedly reshaped the layout of the city. The process of change and abandonment of "Classical Cities" in terms of infrastructure, institutions, and population unfolds along a common trajectory: some urban features were renovated and maintained, some new structures were added, some were repurposed, and others were abandoned or used as quarries. The chronology of these transformations usually varies from city to city, and region to region. There are, however, some elements which are common to every city:

[85] Strabo XII, 3, 7. Further discussion can be found in Walkaens (1971), p. 354.

1) Churches marked the significant shift in religious practices started with the emperorship of Constantine. Temples lay abandoned by the end of the 4th c. CE, while churches dotted the extra-urban landscape in the 5th c. CE, entering cityscapes during the 6th c. CE.

2) Fortifications re-appeared after centuries of *Pax Romana* from the late 3rd c. CE onwards,[86] in order to face the fear of military threats, both from the Levant (Parthians) and the Central Europe. These structures also played a key role in the development of urban identities of this period: once they reappeared in the Late Roman urban landscapes, fortifications immediately became a fundamental feature in the iconography of cities, as visible, for example, in coins and mosaics.[87] They, therefore, represented more than just a defensive construction, but also they provided citizens with a powerful landmark on the urban landscape.

3) The changes in the administration, started from Diocletian and carried out by the following emperors, disrupted the fundamental values of the civic benefactors (*curiales*), who were responsible for the vast majority of the construction in Roman cities. [88] New construction and renovation of old city structures became the task of the imperial administration and the Christian Church.[89] The shift in patronage instigated also an increase in the renovation of "utilitarian constructions" such as baths, streets, and aqueducts, rather than large monumental buildings, which were almost all abandoned by the 6th or 7th centuries CE.[90] The chronology of abandonment changes significantly from city to city across the Eastern Mediterranean World; in

[86] Jacobs (2013), pp. 21.
[87] Jacobs (2013), pp. 20. Müth, Laufer, and Brasse (2016), pp. 126-159.
[88] Liebeschuetz (2001), pp. 104-136. Saradi 2006, 147-208.
[89] Jacobs (2013). 483-488. Whittow (190), pp. 3-29.
[90] Magdalino (2016), p. 58.

Anatolia, certain urban areas were already shrinking in the 5th c. CE (Miletus),[91] while others did not decline until the later 6th c. and early 7th c. CE (Aphrodisias).[92]

In the case of Pessinus, the late 4th c. CE religious and administrative reforms were also significant for Pessinus: 1) the emergence of Christianity and the ban on pagan ritual instituted by Theodosius, the cult of Cybele declined; Pessinus had become a bishopric in the late 4th c. CE.[93] The slow disappearance of paganism had a profound impact on the urban fabric of Pessinus, as the monumental center was partially occupied by the Temple Complex, which was no longer in use and thus repurposed. 2) The reorganization of the province of Galatia, which was divided into *Galatia Prima* and *Galatia Secunda*, made Pessinus the capital of the latter one. These changes played a key role in the re-shaping of the Pessinuntian society, as the pagan elite soon became Christian, and served in the newly reformed imperial/provincial administration.[94] 3) The city seems to continue into the later 7th c. CE, when most of its city structures were abandoned as a response to difficult military, political, and economic circumstances caused by the unraveling of the empire. By the later 7th c. CE, the Eastern Empire had lost most of its territory and undergone a significant crisis, facts that impacted urban life throughout Anatolia; as we will see, Pessinus was no exception to that.

For these reasons, the details of the development of Pessinus in the Late Roman Period contain new crucial information for the mechanics of urban change in Central Anatolia. In what follows, I will therefore review the available evidence for this transformation.

[91] Niewöhner (2016a), pp. 225-290.
[92] Dalgıç and Sokolicek (2017), pp. 269-280.
[93] John Chrysostom, Letter to Pope Innocentius (Migne, PG52.531)
[94] A discussion of this subject will take place in the last chapter.

Fortifications:

The existence of urban fortifications at Pessinus has been the subject of significant studies in recent years. Questions about the presence of urban defenses during the Late Roman Period emerge from the fact that the vast majority of cities in Asia Minor were in fact defended by a curtain wall in this period, contrary to what is observed for previous centuries. In particular, recent research in other provincial capitals, such as Aphrodisias, revealed that new appointed administrative centers, as both Pessinus and Aphrodisias were, often received fortification walls soon after their establishment.[95] The addition of this new feature was often the indirect result of Imperial sponsorship, which took the form of tax remission.[96] Walls became, therefore, more than simple defensive structures, but also represented a powerful statement in the landscape, which delimited the urban area and could be noted by visitors as well as citizens. The symbolic connotation of fortifications is also remarked by one further element: most cities walls are dated to the late 4th c. CE, a time of relative peace in Asia Minor,[97] which made urban defenses often unnecessary.

The absence of a visible city wall at Pessinus may, therefore, suggest the adoption of an alternative defensive system based on fortified hilltops which surrounded the city.[98] Similar designs are known at other sites such as Mylasa, which, however, belongs to the 4th c. BC (Figure 2.26).[99] A few watchtowers, which could serve this purpose, were probably identified on the southern-eastern plateaus in the vicinity of the cities (Figure 2.28), even though none of these

[95] De Staebler (2008), pp. 285-318.
[96] Jacobs (2013). 29-34.
[97] *Ibid*. 26-27.
[98] Tsetskhladze (2013), pp. 53-55.
[99] Rumscheid (1999), pp. 206-222.

constructions were excavated. This defensive system did not aim to withstand sieges, but rather to surveil the territory around the city. Although this design probably would not be of much use in case of extensive warfare, it would still fulfill the symbolic need of Late Roman fortifications, as stone watchtowers would be easily visible both to Pessinunitians and travelers approaching the city, creating powerful landmarks on the landscape.

In 2010 geophysical prospection showed the presence of a fortified hilltop (called Sector S) located on the eastern fringes of the city (Figure 2.28). This structure was excavated in 2011 and 2013, highlighting details important to understanding the fortification system of the city.[100] The investigated structure presents two walls (east-west and north-south) that connected on the north-east side of the plateau. The north and south corners are reinforced by two circular towers which stand 60 m apart, while the walls are supported by buttresses distanced 5 meters apart. Two trenches were opened to study the northern tower as well as the two walls. Another trench was also dug inside the structure, while 4 test pits were used to investigate specific features of both walls and plateau. The results provided with key insights into both history of the construction and the long-term development of this area.

The excavated tower shows signs of massive robbing, as visible in the illustration below. The structure was also completely buried, leaving also very few surface scatters visible, and making impossible any identification without further investigations. The free-standing part is almost completely gone (only about 60 cm is preserved) and the majority of the excavation concerned large foundation walls (over 2m in depth and 1.60m in width). The bottom of this feature was never reached, making difficult to assign a specific date to the structure. The finds collected

[100] Maranzana (in press).

suggest a possible time of occupation from the 4th/5th through the 7th c. CE,[101] although the tower was certainly added after its original construction in the 4th /5th c.[102] Despite the fact that the south and west walls were never found, Sector S was thought to be a square/rectangular fortress which protected the plateau. Similar examples are known throughout the whole Eastern Empire, although they are almost unknown as part of urban fortifications.[103] The heavy erosion may have washed away the southwestern edge, destroying these sides of the construction.

A series of considerations, however, led me to entertain the possibility that Pessinus had a curtain wall uniting the fortified hilltops. Obviously, I cannot offer any definitive proof, only some ground for future research at Pessinus. The extensive robbing both at Sector S and at the above mentioned (extra-urban) church shows how the archaeology of Pessinus needs different and more detailed research methods than those employed at other Anatolian sites. Since important features were invisible by traditional archaeological means, either robbed to the foundation level or deeply buried underground or both, they were only discovered through detailed geophysical prospection. In addition, the absence of distinctive surface remains makes even more difficult any determination of the presence or function of the buried structure. Pessinus is, therefore, a site where even a large feature as a defensive wall could get "lost" despite some 60 years of continuous archaeological research. The 2010 discovery of Sector S is quite conclusive evidence of this.

The Life of Saint Theodore also mentions extramural buildings, such as the church of the Holy Hosts of Angels *(Myriangeloi*) and, in particular, it describes a meeting between Theodore

[101] Mondin (in press)
[102] Maranzana (in press).
[103] Ćurčić (2010), p. 37-66. Gregory (1995), p. 79-100.

and a worshipper "…some three miles beyond the city walls..."[104] This implies the presence of a fortification which marked the boundary of the city. It is certainly possible that the watchtowers dotting the landscape had a similar function in the cityscape, and that the meaning of the word *teixos*, used by Greeks to indicate city walls, was simply stretched in this case.[105] Still, the literary evidence seems to contradict the current archaeological picture.

Finally, all the other cities in the area (and most cities in the rest of Asia Minor[106]) such as Ankara, Amorium, and Tavium, which are located roughly in the same region, were defended by city walls during the Late Roman Period.[107] In particular, Pessinus' building techniques, namely the use of cut stone bound with mortar and absence of *spolia*, resemble more closely the walls of Amorium built in the late 5th c.[108] Thus, if Late Roman Pessinus did not have a defensive wall it would represent an unusual case within the tradition of urban development of this region.

Turning to the archaeological evidence, there is very little information available besides the above cited Sector S. By looking at the illustration below (Figure 2.27), we can see that Sector S sits in front of the theater. The valley in between Sector S and the theater has been badly eroded, leaving practically no archaeological data behind.[109] Geophysical prospection carried out on the southern edge of the plateau behind the theater, however, yielded data which suggest the presence of a watchtower (labeled F047 in the map).[110] Unfortunately, besides the two large

[104] (ed. A-J Festugiere, 1970). Strubble (2005), p. 256. The translation is after Dawes and Baynes (1948).
[105] Strubble (2005), p. 258.
[106] For a full account of Late Roman Walls in Asia Minor see Jacobs (2013), pp. 12-35.
[107] Maranzana (in press)
[108] Crow (2001), p. 100.
[109] In this area Texier has recorded the presence of a hippodrome and the Asklepeion, which are still now unidentified.
[110] Tsetskhladze (2013), p. 52.

trenches opened by Lambrachts in the 1960s, which targeted a Roman necropolis, very few archaeological investigations have been conducted in the area between the theater and the watchtower, giving us almost no information about the vast majority of this sector (labeled as A in the map).[111] Moving south-west we encounter another feature identified as fortifications/watchtower by the Belgian team (labeled F040-041), which lies completely unexplored both through excavations and geophysical prospection.[112] Assuming that Vermeulen is correct, this construction lies only 185 m from F047 and 10 m below (from 1000 m to 990 m above the sea level). Thus, it would most likely allow the defenders to cover the sight of a similar stretch of terrain, becoming useless. But if we were to imagine a curtain wall coming down from Sector S and connecting the theater and F047 with F040-041, the position of the latter fortification would make more sense. In such a case, we could argue that F047 and F040-041 were not isolated watchtowers but simply towers which marked the southern boundary of the city wall. More and similar towers may just have been invisible as Sector S was before 2010.

On the southwestern side of the city a similar structure was also identified and labeled as F086.[113] This could represent one of the westernmost boundaries of city fortifications, which would be united to F040-041 by a curtain wall crossing the valley. The valley is quite shallow in this area as it drops of about 20 m over a stretch of about 600 m. As mentioned above, the topography of the site has changed dramatically over time, but excavations at Sector R, located at the slopes of the plateau on which F040-041 sits, show how in this section the ancient and

[111] Lambrechts in 1967 opened 2 trenches to excavate the necropolis labeled Sector A. The publication of this work is in Waelkens and Devreker (1984).
[112] However, there is no clear published explanation behind the choice of labeling this feature as a fortification.
[113] Tsetskhladze (2013), p. 52.

modern ground level are fairly consistent.[114] Further potential fortifications have been identified further west (F085) by a surface survey conducted in 2009 by the Melbourne team.[115] Unfortunately, no further investigations have been conducted here, so it is impossible to confirm this. If, however, the hypothesis of the Roman road entering into town from the west were correct, we should expect a city gate in this sector. Beside the Byzantine Fortress (discussed below), which most likely belongs to a later period,[116] the northern-western sides of the city yield practically no evidence for the presence of watchtowers dated to the Late Roman Period. Nevertheless, some earthwork belonging to some sort of defensive system has been identified on the northeastern slopes of the Byzantine Fortress (Sector C, Figure 2.3).[117] Preliminary analysis of the surface scatters seems to date this structure the Late Hellenistic/Early Roman Period.[118]

To conclude, the extent of urban fortifications at Pessinus remains a mystery even in the light of recent archaeological excavations. It is, however, clear that the city in the Late Roman Period received a fortification of some sort. As argued by W. Anderson, [119] the possible presence of watchtowers instead of a curtain wall could be the response to the particular nature of the landscape of Pessinus -i.e. the presence of a deeply cut valley surrounded by plateaus. The specific characteristics of the environment may have therefore affected the design of this important urban feature, suggesting that standard urban facilities could be manipulated by the local communities in order to fit specific needs. Regardless of the design of the fortifications at Pessinus (watchtowers or curtain wall), the structures erected on top of plateaus such as Sector S

[114] Tsetskhladze *et alii* (2012), pp. 294-327.
[115] Tsetskhladze (2013), p.53.
[116] Vermueluen (2003), pp. 383-386.
[117] *Ibid.*
[118] Anderson, Krsmanovi, and Negus-Cleary (in press), pp. 307-311.
[119] Anderson (2013), pp. 75-96.

maintained their impact on the city landscape, as they stood on high ground and would be certainly visible from the city and its surroundings. Thus, even though fortifications at Pessinus may have had a different design from most cities, they still created a powerful landmark on the urban landscape, which could be spotted by both visitors and locals.

Churches:

The emergence of Christianity at Pessinus has left very sparse evidence in the archaeological records. This was already noticeable in the chronicles of the 19th century travelers, who interpreted the absence of churches as the result of pagan resistance against Christianity.[120] Recent archaeological research has, however, brought to light new data on this topic.[121] Geophysical prospection carried out in 2013 identified an extra-urban church, situated to the west of the city (Figure 2.29).[122] The church was dismantled almost to its foundation post-abandonment, rendering it invisible on the surface. Artifacts were collected[123] in the attempt to acquire more secure information on its chronology and building techniques. These objects have not been analyzed yet, and a tentative chronology of the building is therefore, at this stage, only based on its design.

GPR surveys[124] revealed a three-aisle structure (42x20 m) at a depth of about 1m oriented NW-SE (Figure 2.30), and walls about 0.8-0.9 m wide. An apse was located on the short side

[120] Texier (1862), p. 478.
[121] Verlinde (2015), pp. 308-311, contains the evidence for Christian presence in the Temple Area, such as graffiti in a small room NW of the 3rd c. retaining wall as well as the carving of crosses on *spolia* in a building in H3-3, where the small 3rd c. crypt was.
[122] Schmidt (in press), pp. 96-97. For the position of the church and its relations with the extra-urban road, see pp. 31.
[123] Tsetskhladze *et alii* (2012), pp. 329-356.
[124] Schmidt (in press), pp. 96-97.

(SE), while there are two other constructions adjacent to the eastern long side. The west side seems to be occupied by a narthex bay, but the majority of this element lies outside of the investigated area. The northwestern addition was divided into two rooms (2.2 x 4.7m and 3.3 x 4.7). The north-eastern annex is instead shallower, and it is only noticeable at 0.4-1.0 m depth. It is possible that this feature was a later addition of unknown function. Three linear features (3x4 m long) are also visible in the center of the central nave, but they were only detected at a shallower level (0.6-0.8 m), and therefore are identified as interments in the floor. If this hypothesis were to be correct, it would imply that the walls stripped to a lower level (1m ca.) than the floor (0.6-0.8m), where the interments are detected.

As mentioned above, only very preliminary conclusions can be drawn about the date of the church's construction. The building was designed with the so-called simple aisled basilica, which implies the presence of a central nave, two aisles, a projecting apse, and a narthex.[125] Examples of this layout are known in large churches, such as Saint Mary at Ephesus, which hosted the Ecumenical Council in 431 C.[126] In Central Anatolia, simple aisled churches are well-known at the sites of Binbirkilise,[127] although the dates of these structures are not well-established.

Further research has also shown that this design is well-attested in Galatia;[128] the survey conducted by the German Archaeological Institute at Germia, a pilgrimage site located only 20

[125] Buckwald (1995), pp. 19-21.
[126] A list of the main simple aisled Basilicas in Asia Minor can be found in Buckwald (1995), pp. 28-29.
[127] Ramsey and Bell (2012).
[128] De Jerphanion (1928), pp. 113-143. Balance (1971), pp. 614.

km east of Pessinus, revealed a similar layout for the early Church of Saint Michael.[129] The town of Germia was known for its miraculous waters, which are praised in the Miracles of Saint Michael, and were taken all the way to Constantinople to cure the consul Stoudius, patron of the Monastery of Saint John in Constantinople.[130] Grateful for his restored health, the consul dedicated a church to Saint Michael at Germia. Further research on this building has indeed highlighted some stylistic comparison with the Monastery of Saint John in Stoudios at Constantinople, also built under the patronage of the consul.[131] In particular, the plans of the churches are comparable, since the Monastery of Saint John was built with the simple aisled Basilica layout as well (Figure 2.31). The masonry also presents strong similarities, as it consists of alternating courses of bricks and cut stone, while the so-called Theodosian capitals, common at the church in Constantinople, were also found at Germia (Figure 2.32).[132] These elements suggest that this church might have been the one reportedly built by the consul in the mid-5th century CE.[133] The church at Germia represents the strongest chronological comparison for the dating of the building at Pessinus: the two structures not only have a similar plan and layout, (i.e. simple aisled with an apse on the eastern side), but they also seem to share a comparable size (ca. 40x20). A tentative mid-5 c. CE (or shortly after) might, therefore, be suggested on the basis of the *comparandum* just discussed. Further support to a possible 5th century CE date could also be found in the recent excavations conducted in the wider region. At the village of Başara, in the district of Eskisehir about 60 km west of Pessinus, archaeological investigations have uncovered

[129] Giese (2013), pp. 128-129.
[130] Mango (1984), pp. 39-62. Mango (1986), pp. 117-132. Niewöhner *et al.* (2013), pp. 98-99.
[131] Mango (1978), pp. 115-122.
[132] Mango (1978), pp. 115-122.
[133] Giese (2013), pp. 128-129.

a multi-period complex with two churches and an octagonal baptistery (Figure 2.33). The first phase of the complex presents a simple aisled design, which the excavators have dated to the 5th century CE.[134] Two other churches with the same plan were also surveyed by the Tahiler Project at Kiliseler, located about 90 km north-east of Pessinus (Figure 2.34).[135] Unfortunately, the architectural survey failed to detect evidence of a precise date for the construction of the complex. The preliminary analysis of the pottery has, however, suggested a generic Late Roman date.[136]

The presence of another church at Pessinus was suggested during the excavation conducted north of the temple area during the campaigns of the early 1990s (Sector L) (Figure 2.35).[137] A trench of 15 x 6.5 m was opened adjacent to the east side of the Mosque, located only 50 m east of the Temple Area. Given the presence of the Mosque, only a small portion of the building underneath was uncovered. Investigations in this sector brought to light a monumental structure, which was built in the early 3rd century CE, and it was interpreted, as discussed above, as a possible basilica. This building, which is oriented NE-SW, was renovated in the Late Roman Period, when a staircase erected with *spolia* was added to the western side of the building (Figure 2.35, no. 21, Figure 2.36). As visible in the illustration, the structure was supported by 3 large foundation walls (Figure 2.35, V). Marble fragments were recovered in the destruction layer deposited on top of the staircase, along with coins and ceramics, which could provide us with further information about the construction of the building (Figure 2.35, no. 20). Among the

[134] Alp (2010), pp. 10-12. The author does not provide evidence to corroborate this date.
[135] Walker (2003), p. 103.
[136] Walker (2003), p. 103. The surveyors argued for a generic ca. 6th century AD.
[137] Devreker and Vermeulen (1992), pp. 67-73.

marble fragments of the destruction layer recovered on top of the stairway there were pieces such as a capital and slabs with a double cross and tendril decoration, fragment of pillars, and window-jambs, which are typical of churches, and they are now visible at the Museum in Ballıhisar.[138] The chronology of the construction is, however, not well-established: coins of Theodosius and Honorius were found at the bottom of the foundation trench (Figure 2.35, no. 25), while a coin of Justinian was found in the upper layer, on which the stairway lies (Figure 2.35, no. 23). This latter context (23), which also contains pottery from the 6th century, sits on top of the former layer (25). The Belgian Team suggests that Context 25 could represent a level associated with a possible previous phase of the church (or the civic basilica), built after the late 4th century, while context 23 would be the foundation of the stairway, erected after the time of Justinian. It is, however, uncertain from the excavation report whether this phase of Context 25 really belonged to an earlier church, prior to the 6th c., or still to the 3rd c. CE Basilica; thus, the exact date of the church is yet to be ascertained.

A possible identification of the churches discussed above can be attempted with the aid of the only Christian text referencing Pessinus. The development of Christian life at this site is the subject of a passage contained in the Life of Saint Theodore of Sykeon, a village located about 90 km north-west of Ankara. The text mentions a religious procession from a church situated outside the city wall (Church of Holy Hosts of Angels) to the main urban church, dedicated to the Holy Wisdom.

> When the morning came the whole town was gathered together in the principal Catholic church of the Holy Wisdom. After offering up prayer the blessed Theodore

[138] Madden (in press).

> and the metropolitan George with all the people marched in procession, singing a litany, to the venerable church of the Holy Hosts of Angels outside the walls. And there they read the Gospel and returned again in procession, singing a litany, to the church of the Holy Wisdom.[139]

The church uncovered in Sector L was, therefore, identified by the Belgian Team as the Church of Saint Sophia, mentioned in the Life of Saint Theodore as the main cathedral of the city, which was most likely the seat of the bishopric at Pessinus. This identification seems plausible, since the church in Sector L is an imposing one: the stairway is no less than 15 m wide and it is located in the heart of the city center of Pessinus. Could the church located outside the urban area of Pessinus be the Church of the Holy Hosts of Angels mentioned in the text? It is difficult to answer this question securely, but there are some elements that might support this identification: 1) as said above, new investigations have reinterpreted the route of extra-urban road, which has now been identified in the valley west of the city. The road ran along the extra-urban church, and it could have been used, therefore, by the procession witnessed by the saint. 2) The plan of the church at Germia, also dedicated to the Angels, shares the same design of the extra-urban church at Pessinus, which may suggest a possible connection between the two churches. The two buildings could be not only almost contemporary (later 5th century CE), but they could also be dedicated to the same saints. A similar building, also sponsored by the consul Stoudios and dedicated to the Angel Michael,[140] was located at Nakoleia, ca. 60 km west of Pessinus, which could have been used as model, together with the structure at Germia, for the construction of the church at Pessinus.

[139] *Vita sancti Theodori* 101 (ed. A-J Festugiere, 1970). Strubble (2005), p. 256. The translation is after Dawes and Baynes (1948).

[140] Mango (1984), p. 45.

Residential areas:

The excavations conducted by both the Belgian and Australian teams targeted several residential blocks located outside the city center, which aimed to gain further data on the extent of the settlement, its organization, and chronological development.[141] Clear evidence for domestic contexts was collected in various urban areas, such as F, J, K, N, O, P, Q, and R (Figure 2.3), yielding important results about the development of houses at Pessinus through time. No complete houses were ever excavated at Pessinus due to the presence of the modern village on top of ancient structures. In addition, as for many other sectors at Pessinus, all the features brought to light bore sign of extensive robbing, hindering our understanding of them.

Nevertheless, the analysis of the domestic spaces shed new light on the urban fabric of Pessinus, as a few common patterns of development could be detected. In particular, four main observations can be made which are worth further consideration:

1) Most of the blocks investigated through excavations underwent a very similar long term trajectory of changes: they were first established in the Late Hellenistic/Early Roman Period (F, K, N, O, P, Q), when the city structures were laid out.[142] Houses were most likely articulated around open spaces, which can be detected by the presence of wells, sewerage pipes, and marble floors, as visible in Sector Q (Figure 2.38).[143] They seem to reach a higher level of luxury during the 2nd c., as demonstrated by the traces of mosaics recovered in Sectors K and P, underlining an interest in investing in such elements for domestic spaces. The Late Roman Period marks a sign

[141] Tsetskhladze (2013), pp. 41-80, contains a review of the history of the excavation.
[142] See above pp. 18-27.
[143] Devreker *et alii* (2005), pp. 152-157.

of continuity with the previous periods, in which no structures were abandoned, but they were instead renovated with the employment of *spolia*. All the blocks cited above were also continuously inhabited throughout this period, until no earlier than the 7th century ca.

2) Two trenches (J and R) show that, during the Late Roman Period, underexploited areas (R) or burial grounds (J) were reclaimed for the construction of houses (Figure 2.39 and Figure 2.40 respectively). In particular, Sector R was located on the flank of a plateau at the southeastern fringes of the city, where archaeological excavation revealed the presence of a highly robbed structure, articulated around an open paved courtyard. Contrary to the other residential areas examined, the Late Roman phase did not sit on its Early-Mid Roman predecessor, but on an area abandoned most likely in the Late Hellenistic Period.[144] The construction of the Sector R has been dated to the late 6th and early 7th c. CE, through ceramic analysis.[145] Sector J was instead a cemetery of the Roman Period, which was turned into another residential area probably during the 4th c. CE. 3) All the blocks seem to be oriented on a general NE-SW axis, with minor variations in Sectors R and K, for example. Additionally, all the buildings seem to have been constructed with walls of standardized dimensions (0.7-0.8 m ca. in width). This may suggest that these city blocks were organized around the major thoroughfare, as side streets probably bore with a common NE-SW orientation. Given the irregular topography of the site, we should account for slight differences in the orientation of some of the streets, especially in close proximity of the plateaus. Such an irregularity may explain, therefore, the inconsistent orientation of Sectors R and K, which are both settled on the slope of a hill. The repurposing of

[144] Goldman (in press), pp. 117-118.
[145] Tsetskhladze *et alii* (2012), pp. 294-327.

Sectors J, also oriented NE-SW, which happened in the Late Roman Period, may be further confirmation of this trend, but also that it was still in use during the later period. Unfortunately, no streets besides the main thoroughfare are known at Pessinus, and more fieldwork is needed to test this hypothesis.

4) Finally, the examination of these trenches brought to light new information on the chronology of abandonment for most of the urban structures analyzed above. Although the dating is not secure due to the extensive robbing of many buildings as well as the scanty publication of the finds belonging to the later phases, we may conclude that the city remained extensively occupied into 7th century CE. Evidence from Sector R and, perhaps, K and Q shows, however, that certain areas of the city must have remained in use well into the 7th century CE or even the 8th century.

Monumental center:

The city center of Pessinus was significantly transformed during the Late Roman Period. In particular, the Imperial Temple Complex was no longer in use after the decline of paganism, and it was, therefore, substantially reshaped. Unfortunately, since a large part of the excavation of the later phases in this area (Sectors B and H) (Figure 2.3) was carried out in the 1960s, very little attention was paid to this study of these levels, making it impossible to establish a correct stratigraphic relationship among different features as well as their secure chronology. Archaeological evidence, however, points to the fact that the temple was abandoned and quarried, while the marble theater and paved square were occupied by the residential and

productive center (Sector H), explored through the excavation of an area of about 70x80m.[146] Further investigations also revealed that the new quarter in Sector H was constructed on three different levels, which were connected through stairs (L.8-L.9 Figure 2.41). The organization of the area in terraces had also a general north-south orientation, which was most likely adopted to follow the alignment of pre-existing structures. Verlinde, who published the final study for the development of the area,[147] suggests that the highest concentration of workshops and houses in the lowest terrace, where more open space was available. This identification, according to Verlinde, is further evidenced by the presence of *pithoi* sunk in the ground level and by a wine press in trench H3-34. The author also adds that the space marked as H1 and H2 in the illustration was a paved central square with cesspools which allowed circulation in the area.

Turning to the little archaeological evidence for the chronology of the repurposing of the temple area, we can notice that the temple was the first structure to be abandoned, in the late 4th c. early 5th c. CE, as demonstrated by numismatic and ceramic evidence. After this date, which corresponds to the ban of pagan rituals issued by Theodosius, the area was systematically dismantled in order to reuse the stone.[148] A late 4th/early 5th c. date for the abandonment of the temple is consistent with the date for the decommissioning of other temples in Asia Minor, such as the temple of Domitian at Ephesus among many, and most likely tied to the new legislation.[149] On the other hand, the analysis of the development of the 3rd c. marble theater and square suggests that these structures were in use until much later: a possible *terminus post quem* for the

[146] Verlinde (2015), pp. 311-319.
[147] *Ibid.*
[148] Verlinde (2015), p. 304-307, contains a review of the evidence for the abandonment of the temple. The late 4th c. date is given by the retrieval of a coin of Theodosius I as well as red slip ware and flask Ising 1957.
[149] Talloen and Vercauteren (2009), pp. 358-378.

dismissal of the theater could be a *follis* of Justinian, while the destruction layer under the quarter in Sector H yielded material dated to the early 7th c. CE. We should therefore assume that, although the temple was abandoned in the 4th/5th c. CE, the rest of the city center was maintained until, at least, 2 centuries later (7th c. CE). If this hypothesis were to be true, the development of the city center at Pessinus would fit the trend observed in other cities of the Late Roman East, such as Sagalassos among many. [150] In such sites, public areas were also maintained, and they did not lose their monumental character until the 7th c., when, just as for Pessinus, they were given up. The post-7th c. occupation witnesses the appearance of the new residential/productive quarter in Sectors H and B, which marked the definitive switch in function of the city center and its final loss of monumentality. The area seems to have been inhabited until the 11th c. CE,[151] but the presence of a wine press may suggest that the city underwent a process of ruralization, where most of the city structures were abandoned and the number of inhabitants may be low. Traces of production of olive oil and wine are common in almost abandoned Roman cities, and they are often dated to the Middle Byzantine Period (9th-13th c.).[152] It is therefore likely that the wine press in Sector H is further evidence that underscores this process. As we will see in the next section, evidence for occupation in the Middle Byzantine Period can also be found in the fortress erected on northern plateau, but they most likely belong to a time in which most city structures had been abandoned.

Other important information about the development of the city center at Pessinus was retrieved by the excavations of the colonnaded road (Sector D), which, as discussed above, was

[150] Lavan (2009), pp. 803-812.
[151] Verlinde 2015, pp. 311-319.
[152] Aphrodisias, for example, see Ahmet (2001), pp. 159-167.

established in the Augustan Period and renovated repeatedly over time. The section directly west of the Severan arch (DL3 in the illustration) reveals evidence for the reparation with *spolia* of the marble walls flanking the street. On the other hand, analysis of DL9/DR9 shows the transformation of other sections of the side walls (both east and west) into a staircase with columns (Figure 2.42). The section of the road between DL9/DR9 was also repaved with marble *spolia*, marking once again the renewed monumental character of this segment. Possible renovation or repair of the monumental road are also visible DL11 and DR 10-13, where the colonnade was blocked by slabs, which may suggest a change in the use of these spaces.[153]

Given the extensive robbing and the bad preservation of the road, the chronology of the Late Roman renovation just discussed is very hard to establish. Nevertheless, good evidence for the dating of some of these new additions can be obtained from the layers examined in segment DL3, situated west of the Roman arch. The finds of the reconstructed marble wall in this sector yielded pottery and coins from 2nd to 6th/early 7th c. CE, providing a possible *terminus post quem* for its edification. This discovery underscores once again a clear interest from the Pessinuntian community to maintain the monumental face of the main road of the city until the 7th c., just as for the temple area (B and H). Recent research on Late Roman urban network revealed that, in many cases, main thoroughfares were indeed maintained until the late 6th early 7th c.[154] In particular, the archaeological records of cities such as Hierapolis (Frontinus Street), Sagaloassos (north-south street), and Aphrodisias (Sebasteion Street) among many revealed that pavements

[153] Krsmanovic (in press).
[154] Jacobs (2013), pp. 111-159.

and side walls of colonnaded roads were often repaired with the use of *spolia*, as observed at Pessinus.

To conclude, the archaeological evidence for the development of the urban center at Pessinus illustrates a clear pattern of change, which is often similar to that noticed in other cities of Asia Minor: 1) the pagan temple was decommissioned and used as quarry after the ban of paganism issued by Theodosius I in the late 4th c. CE. 2) The abandonment of the temple did not correspond to a general decline of the city nor to a loss of monumentality in the city center. The colonnaded road, the marble theater, and paved square were maintained to their standard into 7th c., when a shift in function occurred. Unfortunately, given the little evidence at our disposal, it is unclear when in the 7th c. (or after it) the monumental center of Pessinus was abandoned and occupied by houses and workshop. Finally, the city center was occupied until the 11th c., but a process of ruralization was well underway at the point, as demonstrated by the discovery of a wine press, suggesting the presence of agricultural production in the middle of city. Such phenomenon often develops in the Middle Byzantine Period, as the majority of city structures are generally abandoned by this point. At Pessinus, as we will see in the next section, only the city center and fortress in the northern peripheries (Sector I) yielded evidence which can be dated post-7/8th c. CE.

<u>The Byzantine Fortress (Sector I)</u>:

As described above, the Byzantine Fortress was located on the northwestern fringes of the city on a steep plateau overlooking the valley. The investigation of this structure gives key information about the development of the city during the Late Roman Period as well as the post-

65antique settlement; since the latest evidence for occupation has been collected here, it sheds new light on the final phases of the city. Although urban citadels were a common feature of Late Roman cities, both in Central Anatolia and elsewhere,[155] the detailed excavations conducted by the Belgian team on the structure at Pessinus provide us with unique insights into this type of building.[156] Most of the citadels have not been extensively excavated, as in the case of Amorium, or they are occupied by modern buildings, as at Ankara.

The excavations of the Byzantine Fortress were published by Vermuelen and other specialists in 2003 with the aim of providing a comprehensive analysis of the fortress.[157] To this end, not only were the architecture and ceramics analyzed, but also some of the organic residues. In this section, I am reexamining briefly the evidence available for this structure, in order to provide a comprehensive analysis of the complex and to re-insert it within the general development of the city during this period.

The fortress rests on a plateau with an irregular, oblong shape (145x70 m) extending northwards, and with a surface of about 8000 m^2. It is positioned about 500 m north from the center of the modern village of Ballıhisar. The detailed descriptions of the structure left to us by the 19th c. travelers show that this complex has been the focus of intense robbing for the past 200 years. Texier, who erroneously identified this structure as an acropolis, mentions the presence of buildings made out of white marble, which were still visible on the surface.[158] Texier also recognized that the fortress was divided into two parts: an "irregular" one, with several

[155] For a general survey on urban citadels see Foss Winfield (1986). Also, Izdebski (2013), pp. 65-98 contains a review of the evidence for Early Medieval rural fortifications in Anatolia.

[156] Maranzana (in press) about citadels in Galatia.

[157] Thoen (2003a), pp. 364-369. Devos (2003), pp. 369-375. Ervynck *et alii* (2003). 375-382.

[158] Texier (1862), pp. 474.

unidentified constructions, and a "regular" one, in which fluted columns were visible. The latter part most likely contained some monumental construction. By the time the Belgian team started working on this site in 1986, the remains of the Byzantine Fortress were found in a very different state of preservation. The structures lay about 1-2 meters underground, and the plateau was covered by bushes and low vegetation.[159] Remains were visible on the surface only in the corners, while several pits had been excavated by local residents to extract stones.

As mentioned in the analysis of the necropolis above, the Belgian Team excavated 2 long trenches, which crossed the plateau east-west and north-south respectively (Figure 2.43). The trenches were placed on the widest and longest sections of the plateau, in order to investigate the maximum extent of the structure (Figure 2.44). The complex presented a road (2-3m wide) running around the curtain wall (*circumvallum*), which was situated on the perimeter of the plateau and extended for about 400 m around it (Figure 2.45). The defensive wall was mostly dismantled to the foundations, not leaving much data on the height of the construction. Further analysis of the structure suggests however that the foundations of the walls were between 2 and 2.3 m wide, and 6 to 8 meters high, based on a ratio 1:4 (width: height), as observed elsewhere (Figure 2.46).[160] The better preserved stretch of the wall reaches a height of 1.25 m, with the foundation built directly on top of the natural soil. The surface of the plateau, however, was altered in the lower parts in order to render it flat and make it suitable for construction; as noticed in Trench 3, an average of 0.2 m layer of compact soil was deposited to raise the ground.

[159] Vermeulen (2003), p 346.

[160] Based on Gregory (1995), p. 87-88, vol. 1.

The curtain wall was designed with a core of rubble and mortar with a facing of pseudo-isodomic ashlar masonry. This style consisted of stone cut into different shapes, which were organized in regular courses with the smooth surface facing outward. Marble s*polia* were often employed in the masonry, which was simply laid on top of each other without binding agents. The dimension of the stones varies significantly from 1.6 m to 0.1 m, suggesting that most of the construction material could have been moved by 1-2 men.

Several towers were built to reinforce the perimeter of the structure (Figure 2.47). Given the irregularity of the plateau, towers were not placed at a regular distance, and built near the edge of the plateau. As suggested by Vermeulen, towers may not have been more than 30-40 m apart, which allowed defenders stationed on these installations to drive away invaders with short-range weapons.[161] The intense robbing of these structures, however, limits significantly our understanding of these structures. The Belgian Team excavated one tower in the north-western section of the fortress, highlighting its main characteristics: the tower was a rectangular structure (4x1.7m) protruding 3.7 m out of the curtain wall. The building is badly robbed, leaving about 0.8 m as maximum height, although we have no indications of the overall height or the number of stories of each tower. The building techniques of wall show continuity with the rest of the fortress, and the lower pavement is still partially preserved. The remainder of the floor consists of a compact layer of marl, lime, and sand punctured in various sections: the holes made had two different ranges of diameters (between 0.25-1.10m and 0.1-0.03m). The first type was interpreted as alterations to accommodate storage vessels, which have been found in large

[161] 30-40 meters is also the average distance suggested by I. Jacobs in her review of Late Roman fortifications in Asia Minor

quantity in the fortress,[162] and the second series of smaller holes were meant to support upper structures in the interior of the tower.

Accessibility and internal organization:

Archaeological excavations failed to identify any traces of the access into the structure. Vermuelen suggests that the entrance was most likely located on the eastern side of the fortress, based on the proposed position of the extra-urban street descending from the north, which would have led into town passing by the fortress. He argues that the complex would be more exposed to attacks if the gate were to be placed in proximity of the road. The hypothesis of a gate somewhere on the eastern side of fortress seems plausible even with the alternate route of the extra-urban road I have suggested above, which would have entered the city from the eastern side, south of the fortress. In this case, the plateau of the castle would have been approached from the south, leaving space for a gate on the south-eastern side.[163] Finally, as noted above, archaeological investigations brought to light a segment of a road running around the fortress. This road, which was about 2 - 3 m wide and built with mortar, marl, and gravel, allowed movement around the fortress on the plateau.

Organization of the internal space:

The fortress was more than just a defensive structure, as evidence for domestic and perhaps public contexts was uncovered during the excavations. Houses were brought to light in the central area of the plateau as well as by the north-western section of the wall, providing us with more details about the general layout and building techniques employed (Figure 2.48). The

[162] Devos (2003), pp. 369-374.

[163] In the next section, I will also entertain the possibility that the gate was actually in the south-eastern corner.

structures had a simple rectangular layout, enclosing a space of between 30 and 37 m^2 (the long side is about 7.5 m long), comprising one or two rooms (Figure 2.49). The houses do not seem to have been built with any standardized design, but rather filled the space in an unplanned fashion. The walls were built with a core of earth and mortar faced by roughly cut stones laid in horizontal courses. The facing was irregular, with stones cut in small dimensions (about 0.4-0.1m x 0.2-0.08m), or with marble *spolia*. Further analysis of the masonry confirms the presence of a greyish plaster covering part of the walls, suggesting that some sort of facing was most likely applied to the walls.

As with the curtain wall of the fortress, the upper parts of the houses were fully removed post-abandonment, limiting our understanding of these structures. Walls seem to vary in width (0.6-0.8 m) even within the same house, and they were sometimes placed directly on the bedrock, as already noticed in the case of the defensive wall. The irregular surface of the plateau, which had to be flattened in order to accommodate the complex, forced the builders to adopt different strategies for the construction of these buildings. The limited evidence floors[164] and the lack of a more general understanding of the ground level of the whole complex, significantly hinders our understanding of how houses and external spaces relate to each other. Several of the domestic contexts investigated reveal the presence of storage vessels (*pithoi*) embedded in the floors, which generally consists of lime mortar.

Archaeological investigation uncovered other structures, which shed new light on the organization of the internal space. In particular, the southern side of the fortress seems to have

[164] Small traces of white mortar floors have been identified in House B. The floor was placed on a 0.15-0.2 m foundation of loose marl. House C contains traces of a floor made out of small tiles.

been equipped with an inner citadel (Figure 2.50), protected by a wall of comparable size (about 2 m wide) and construction technique (core of rubble and mortar faced with re-cut *spolia*). The inner citadel was about 900 m^2 in area, and it seems to have been occupied by houses resembling the ones considered above. Further investigation, however, has brought to light the development of one structure in the inner citadel, located on the southern edge of the plateau, which shows a very different history: the building is contemporary with the construction of the outer wall, and its walls are substantially wider than any other structure (1.85 m). The incomplete data did not allow Vermeulen to make any final conclusion on the function of this section, although he proposes to identify this construction as a possible commander's residence or arsenal. The structure was then repurposed at a later date, which remains unclear. Some of the walls were dismantled and replaced by smaller ones (0.8 m) constructed with well-cut marble *spolia,* and the interior was paved with a marble floor. Stylistic analysis of the marble suggest that the material mostly belonged to a mid-Roman building, as shown by some capitals and half columns recovered (Figure 2.51). The construction was not investigated further, leaving very limited information for its function. Vermuelen suggests nevertheless that a church or chapel could have been constructed in this area, as has been observed in other citadels, such as Amorium.[165] Inner towers and keeps are a well-known feature of 7th century CE citadels, and they are commonly placed at the highest points in order to strengthen the structure as well as to provide a vantage

[165] Harrison *et alii* (1990), pp. 215-219. Demirel Gökalp (2014), pp. 653-654. For the Middle Byzantine Church at Amorium. The structure is currently being excavated.

point for the defenders. Examples can be seen both at Ankara (9th century CE) and Amorium (still undated).[166]

The repurposing of such a feature, regardless of its function, is however a peculiar case, and it implies that, at a certain point after its construction, the citizens of Pessinus dismantled a Roman building in the lower city and repurposed a fortified section of the citadel. This rearrangement of the area sees the transformation of a military installation in order to assign a different, most likely non-military function. This interpretation may be entertained on account of the much thinner walls (0.8m) of the new structure which replaced much thicker ones (3m). Additionally, the construction of the marble pavement seems to suggest the presence of a much more monumental structure, which may have reflected a broader reorganization of the whole complex. On the identification proposed by Vermeulen, which recognized the new building as a church, we must point out that there is no evidence to confirm this hypothesis. Churches are known to be in citadels,[167] and it would be therefore plausible to have one at Pessinus. Vermeulen's argument is however mainly based on the presence of marble floors in the south-eastern section of the fortress, which shows no sign of belonging to a Christian building.[168] Other buildings with marble refinement have been found in the northwestern side of the citadel, opposite the monumental area just analyzed above (Figure 2.52). Two marble floors belonging to one building have been uncovered during the excavations. The building lay mostly beyond the limit of the excavation trenches, and therefore, it was not examined properly. Vermuelen suggests that, just as the one on the southern side of the citadel, it could have had some sort of public

[166] Harrison *et alii* (1990), pp. 215-219. Serin (1998), 953-956.

[167] Harrison *et alii* (1990), pp. 215-219. Amorium is a good example of it.

[168] On the relation between the fortress and the church, see the next section below.

function, given the striking differences in the quality of the materials. Finally, excavations have revealed the presence of some open spaces, which were used for circulation and other outdoor activities. Trenches 1 and 8 show evidence for post holes, which were meant to support light structures for stables or shops, hinting at the presence of commercial activities taking place in the structure.

Food and water supply:

Evidence for water and food supply was brought to light in a number of places. In particular, a large amount of storage vessels was recovered, showing a great effort put into the accumulation and preservation of food and water by the local community. *Pithoi*, large storage vessels, have been found in great quantity (107) in many different structures. These containers were generally used to store both dried (grain and produce) and wet food (olive oil and wine). They were normally fixed in pits underneath the floor level, and they could contain up to 1000 liters. The central rooms of Houses A, B, and C yielded evidence for such vessels, in conjunction with utensils, kitchenware, and central hearths for the preparation of food.

Food was not only stored in vessels, but also in silos excavated in the bedrock. A number of pits were excavated in the subsoil inside House B, and they probably were sealed with flat stones (Figure 2.53). Silos differed in size (1-2.5m in depth, 1.1-1.6 width), with two standardized shapes (conical and bell-shaped), with the latter type generally larger than the former.

Excavations under the southwestern corner of House B show the presence of a small cistern (2.3 m depth and 1 m average diameter) connected to a pipe (0.1 m), which, as suggested by Vermuelen, may have allowed the collection of rain water from the roof. This cistern was small

(about 8 liters) and would not alone be enough to supply the inhabitants of House B. We should thus assume that more water was available to the population of the castle in other locations. G. Devos, who studied the production and usage of *pithoi* at Pessinus, suggests that, by counting the numbers of storage vessels and silos in the 18% of the surface excavated, we can extrapolate the presence of about 600 *pithoi* and 70 silos for a total of ca. 300,000 liters. [169] Such a capacity certainly allowed the population of the castle to withstand sieges.

Further analysis of the layout of the castle failed to give more accurate information about the nature of the population living in the structure. As we will see in what follows, archaeological evidence excludes the possibility that the castle had replaced the lower city as a residential area, confirming that both areas were occupied at the same time. Excavations in the lower cities show that the occupied area was definitely smaller, but still substantial at least until the 7th c. CE. Vermuelen proposes that about 5000 m^2 of the total 8000 m^2 enclosed by the curtain wall could be occupied by houses.[170] The average floor plan of a house stretches over 30 m^2, leaving us with a number 167 houses. Vermuelen's estimates of about 3-5/6 people per house, following Russell's research on the topic,[171] suggests a number between 501 and 1000 people living in the castle. The latter figure could probably not be held in the citadel for very long. The difficulty in establishing a reliable chronology for the construction and development of the castle greatly limit our ability to draw more definite conclusions on this matter.

Chronology:

[169] Devos (2003), p. 369.
[170] Vermuelen (2003), p. 387.
[171] Russel (1958), p. 64.

Vermuelen argues that construction of the fortress should be assigned to the first half of the 6th c. CE. Although he recognizes that there is no secure evidence for this date, he suggests, based on ceramic analysis, that the cemetery underneath the structure was already underused after 400 CE and then abandoned completely in the late 5th c. CE, which would lead to the 6th c. CE as reasonable date of construction. The author also supports his hypothesis by comparing the castle at Pessinus with a large number of fortifications built by Justinian in the East, which present a similar internal organization. The greatness of such military installations is celebrated by Procopius in his work *Buildings*.

Although Vermuelen's 6th century CE date for the construction of the fortress is certainly reasonable, it may be useful to review the archaeological evidence at our disposal in order to reexamine the chronology of the complex as well as the interpretation proposed by the Belgian Team. Vermuelen, as summarized above, argues that, although underexploited after the 4th c. CE, the earlier cemetery on the site was abandoned in the 5th c. and repurposed in the 6th c. CE, thus creating a narrative for the development of the plateau. The material recovered through excavation was divided and analyzed into 4 different units: 1) disturbance of graves from the Late Hellenistic-Roman cemetery underneath the fortress, 2) the layer deposited to level the ground for the foundation of the structure, 3) the 107 *pithoi* recovered inside the castle, and 4) the finds inside these storage vessels. The archaeological data uncovered from the excavation of the *pithoi* (4) are mostly coins and pottery, which, being in the fill inside the vessels, do not provide reliable dates for the construction of the fortress. The coins recovered inside the *pithoi*

ranged from the 4th through mid-7th c. CE. Only one small non-identifiable bronze coin was found on a floor level, leaving practically no information about the construction of the fortress.[172]

The analysis of the *pithoi* (3) is equally of no use for the date of the structure. Further research on the fabric and decoration of the vessels has led to no conclusion on their date, besides a generic Late Roman/Early Byzantine Period.[173] As suggested by Devos, this type of vessels was very expensive, about 1000 *denarii* each according to Diocletian's Prices Edict, and they could therefore have been in use for a long time. The Byzantine *pithoi* showed a more sophisticated decoration, but there is no typo-chronology available that allows us to establish their date more precisely.

The pottery found in the leveling deposit (3) between the cemetery and the fortress should be the most telling about the date of the construction of the structure, since it could provide a *terminus post quem* for it. The analysis of such material was unfortunately never published. As stated above, the Belgian Team admitted the need for a Byzantine specialist who could examine the material and publish it. This work was never undertaken. Vermuelen, however, summarizes briefly the types of forms found in this layer as imitation of African Red slip and Late Roman C, Cypriot Red slip, and a large amount of grey ware of various forms, which all range from the 3rd c. to 6th/7th c. CE, suggesting this date as possible time for the construction of the citadel. Thus, the 6th c. CE date proposed by Vermuelen was simply based on the testimony of Procopius, who celebrated the deeds of Justinian, and on some similarities in the general layout of fortresses built on the Eastern frontiers, but not on specific archaeological evidence. Given the presence of Late

[172] Vermuelen (2003), p. 364. He suggests a 5th or 6th c. date for such coin, giving no further information on the reasons behind this date.

[173] Devos (2003), p. 372-373.

Roman C and D materials in the foundations of the citadel, which are dated to the late 6th and early 7th centuries CE, it is, however, unlikely that the complex was erected at the time of Justinian. By contrast, several citadels were constructed during the 7th c. CE as a reaction to the frequent invasions from the East (Persians and Arabs). It is therefore probable that also the citadel at Pessinus was part of this new wave of fortifications, a date that would explain the presence of 7th c. CE pottery in its foundation.[174] In particular, recent research has shown that the Arabs raided Galatia and besieged Amorium in 660s.[175] It is therefore possible that the citadel was erected because of these events.

The date of the abandonment of the fortress represents also a controversial issue; the material recovered in the structure confirms the presence of a substantial occupation during the 7th c CE at very least. Coins belonging to the 11th c., however, seem to suggest that the fortress was occupied until much later. As admitted by Vermuelen, the Belgian Team does not possess the knowledge to analyze Byzantine pottery between the 7th and 11th c. CE, besides the glazed red ware, which becomes more widespread in the later 9th c. CE. Although recent research has partially filled in this gap of knowledge, [176] the Belgian Team has not produced a detailed publication of the recovered Byzantine pottery, which severely hinders any possibility for the reanalysis of this material. Vermuelen suggests, however, that the evidence for 11th c. occupation belonged to a second phase, which is unrelated to the 7th c. one. In Vermuelen's view, the population of Pessinus abandoned the site around the 7th c. CE and a different group of people returned to it centuries later, which mirrors the model of development visible at other sites, such

[174] Niewöhner (2007a), pp. 119-157.
[175] Niewöhner (2017b), pp. 342-348.
[176] See in particular the seminal work by Vroom (2005), pp. 30-66.

as Miletus.[177] Although this possibility is certainly plausible, it is also possible that the citadel of Pessinus was never abandoned, and that the hiatus of occupation is either the result of our lack in knowledge of pottery or, simply, evidence for the reduction of the number of people living in the citadel.[178] This is the case, for example, with the citadels at Ankara and Amorium, which were most likely never abandoned in Antiquity.[179] It is therefore possible that the citadel at Pessinus underwent a similar development, and that some of the rearrangements and repairs of the citadel –i.e. the repurposing of the inner keep – belong to a later phase. In this connection it is worth noting that further evidence for continuity of occupation into the 11th c. CE has been uncovered in the Temple Area, which demonstrated that Pessinus was never completely abandoned during the Invasions Period.[180] This may suggest that activities were still taking place in the lower city, making it less probable that the citadel was abandoned at this time. Further research on the finds is however very much needed to clarify this point.

Summary and conclusion: the abandonment of Pessinus, an interpretation:

The analysis of archaeological records at Pessinus reveals new details about its urban development: the settlement experienced its first substantial growth during the Hellenistic Period (4th and 2nd c. BC), when a colonnaded square was laid out together with other monumental buildings. This complex arose midway in the valley of a seasonal torrent, and it was surrounded by small plateaus and narrow but deeply cut ravines. The surfaces of the plateaus were mainly used as burial grounds, which were well visible from the valley below, due to the stone markers

[177] Niewöhner (2016), pp. 63-69.
[178] Cormack (1990), pp. 88-90.
[179] Serin (1998), pp. 953-970. Lightfoot C and M (2007), pp. 81-144.
[180] Verlinde (2015), 250-278.

set on the graves. At the same time, evidence of stone quarrying in the northern periphery of the city underscores a growing occupation of the site. It is not until the Early Roman Empire, however, that Pessinus reached a much wider expansion, as the city spread over 80ha, and received the most common urban features of provincial Roman towns: the Hellenistic monumental center was expanded with addition of a temple, probably dedicated to the Imperial cult, and a stairway-theater complex. This design is uncommon in Asia Minor, but it finds most of its parallels in other regions of the Empire, such as Italy. Other monumental buildings were erected in the Roman Period, such as a theater on the eastern side and a monumental central road, which crossed the whole city from north to south. Residential areas were constructed on NE-SW orientation and they most likely connected to the main thoroughfare, which guaranteed access to the rest of the city. Houses were mostly settled in the Early Imperial Period, and, although excavation is limited, they seem to be articulated around courtyards, which are signaled by the presences of wells and marble pavements. The 2nd c. CE seemed to mark a time of renewed luxury in many domestic contexts, as evidenced by the addition of mosaics and marble floors in Sectors K and P.

The development of the city experienced another building impetus during the early 3rd c. CE, when a large construction program was undertaken: an arch was built to mark the northernmost border of the main thoroughfare, which was also renovated by the restoration and addition of side marble walls and colonnades. The temple complex was also redesigned: a substantial retaining marble wall, a new small theater, and a paved square were constructed on the western edge of the stairway-theater structure, obliterating the access to the temple, which was probably guaranteed by a new street laid out to the north of it. This road, which is unknown

archaeologically, may have passed by a new porticoed structure located 50m to the north, and interpreted by the Belgian Team as a new basilica.

The Late Roman Period marked a time of great change for Roman society, as the extensive administrative and religious reforms reshaped the socio-economic basis of the citizens of the Empire. For example, the ban of the pagan ritual led to abandonment and dismissal of the temple complex at Pessinus, which was used as quarry for other constructions from the late 4th c. onwards. Conversely, the introduction of Christianity also affected the urban landscape of Pessinus: the 3rd c. Roman basilica, built north of the temple, was converted in a church in 6th c. CE, and it has been identified by the Belgians as the cathedral of the city, named Saint Sophia. Another church, probably built in the later 5th/early 6th c. was located recently on a plateau west of the city, flanking the main extra-urban road leading into town. This church may have been that dedicated to the cult of the angels and mentioned in the Life of Saint Theodore.

Administrative reforms made Pessinus the capital of *Galatia Secunda*, but also significantly changed the community's structure (so called flight of the *curiales*).[181] Urban communities had traditionally been supported by benefactors who financed new public construction, the restoration of others, and financed public festivals. At Pessinus, for instance, the celebrations for the newly established cult of the emperor was celebrated through the generosity of T. Helvius Basila, as discussed above. The 4th c. administrative change led to a disengagement on part of the local elites to the renewal of public infrastructure, which became a prerogative of city administration. For these reasons, city administrations tended to focus more significantly on the reparation of "utilitarian" features of the infrastructure, resulting in the disappearance of the

[181] Saradi (2006), pp. 148-186.

number of new monumental building projects. This trend is well visible at Pessinus, where the city infrastructure was often restored or renewed, but hardly ever enlarged: the square and marble theater in front of the temple were maintained until the 7th c., while marble stairs were added to the colonnaded road, just west of the arch. Evidence for repaving of the main thoroughfare can be found and are dated up to the 7th c.

The increase sense of insecurity led many cities to build a new circuit of fortifications, which would protect urban areas against possible attacks. The extent of the urban defenses at Pessinus is still unknown, but the scanty archaeological evidence may suggest a possible design which did not imply a curtain wall, but only a number of watchtowers and strongholds scattered around the landscape. This arrangement did not aim to withstand sieges, but mostly to surveil the circulation of people in the landscape. The presence of these structures in the urban environment of Pessinus, however, fulfilled another function of Late Roman fortifications, as they provided powerful landmarks, which could be spotted by visitors as well as citizens. Fortifications quickly became an essential part of urban self-representation in the Late Roman Period, as it is demonstrated by imagines on coins and mosaics.

The analysis of the residential blocks reveals that the city most likely grew during the Late Roman Period. At least two blocks (R and J), located in the northern and southern peripheries of the city were newly built during this period, reclaiming areas which had been unexploited since the Hellenistic Period (R), or occupied by a cemetery (J). Since, all the other blocks excavated confirm a continuous occupation into the 7th c. CE, this discovery suggests that the city may have reached its maximum extent during this period.

Finally, in the 7th c., a citadel was erected on a plateau in the northern periphery of the city, which represents the last evidence for a large building program at Pessinus. The structure was more than just a fortified outpost, but it contained houses, workshops, and a keep, confirming that people would reside within it. The archaeological record suggests that the citadel was not the only feature of Pessinus occupied after the 7th c. CE, but that also the city center was inhabited until the 11th c., while most of the other urban areas had been abandoned. A process of ruralization, however, had occurred after the 7th c. CE, as the monumental center had been slowly occupied by houses and workshops, while the discovery of a wine press confirms the presence of agricultural activities, which are suitable for a rural area. The abandonment of the city seems to mirror a decline of the countryside, which will be discussed in greater detail in the next chapters. Here, the analysis of the rural communities around Pessinus, confirms a substantial decline in terms of population.

The decline of Pessinus is not easy to explain: it is clear, from the data at our disposal, that its abandonment was non-violent, as there is no evidence for external attacks or natural disasters that may have led citizens to leave the city. It is therefore probable that its decline should be explained as an internal development, which could be based on multiple factors:

1) A new administrative reform was issued in the 7th c., in response to the military crisis, which deprived the Empire of large territories in the east and North Africa. This new organization (thematic system) was based on a network of small villages administrated by a major center, where the field army was also based.[182] When the reform was put in place, the status of provincial capital for Pessinus was revoked, while, as we will see in the next chapter,

[182] Haldon (1997), pp. 208-254.

both Amorium (only 50 km to the southwest) and Ankara (150 km east) were elevated to such a role. In addition, the site of Germia, located only 35 km from Pessinus, and famous for its pilgrimage site and spring water, became an archbishopric, challenging Pessinus' religious prominence in the area. It is therefore possible that some citizens moved to one of these locations, attracted by the possibilities offered by the new administrative and religious centers. In regard to this, recent archaeological investigations carried out,[183] which will be discussed in the next chapter, revealed that occupation of these area does not seem to undergo the same demographic contraction observed everywhere else in Anatolia.

2) In addition to a possible relocation of people, recent multidisciplinary research carried out in the Byzantine East and Cyprus reveals that 18 waves of Justinianic Plague over 200 years from 543 had a great impact on population levels.[184] The disease peaked in the 7th c., as evidenced by the examination of mass graves, which increased by 4 times from the 5th c. throughout the whole Eastern Empire. As argued by McCormick, the effect of the disease can only be detected by scientific testing on the skeletal remains, which have hardly ever been carried out in Central Anatolia. It is, however, probable that the plague also had an impact on this region, even though the scanty data available do not allow us to quantify it. In particular, as already discussed by Campbell for the 14th c. plague in England, the slow but steady loss of population led to the dissolution of the socio-economic foundation on which the English society was based, resulting in significant change.[185]

[183] The development of Ankara, Amorium, and Germia will be discussed in the next chapters.
[184] McCormick (2015), pp. 325-357.
[185] Campbell (2016), pp. 328-332.

3) The reformed military draft may have had a similar effect: studies on recruitment clearly show that the Early Byzantine armies, which were based and administrated within their themes, relied increasingly on their territories for both supply, equipment, and new recruits.[186] The Anatolikon army was most likely located in the southeastern region of the theme, which is situated closer to the border, where most battles took place. It is, therefore, possible that some Pessinuntians had moved to join the army and they had been relocated in the southern part of the province. Unfortunately, the decline in the number of inscriptions and the scanty archaeological knowledge of the southeastern region does not allow us to confirm this hypothesis.

To conclude, the decline of Pessinus cannot be seen as the result of a single event, but needs to be read as the sum of the multiple factors at play during this period. Administrative reforms, wars, military draft, and reforms did not singlehandedly lead to the decline of Pessinus and its hinterland, but they each contributed to the dissolution of the socio-economic and demographic basis on which the city was based. Pessinus, after the 7th c., was no longer needed by the post-crisis Byzantine state as much as it could no longer be supported by its economy and population.

[186] Haldon (1997), pp. 208-254 and (2016), pp. 35-70. Brown (1984), pp. 39-61.

CHAPTER 3: Ankara, a capital city through the ages.

The city of Ankara is situated at the center of modern Turkey (Figure 3.1), in an area rich of monuments from the past. The city played a key role in the development of the region, where it was a major settlement since its foundation in the Late Bronze/Early Iron Age.[1] Despite much evidence made available by the tireless work of the Museum of Anatolian Civilization and local universities, comprehensive studies of the city and its regional setting have not been frequent. Synthetic works on the long-term change of the city and its hinterland are particularly uncommon, often excluding Ankara from scholarly analysis of the socio-cultural and historical development of Turkey.

In the past decade, however, several new projects have tried to fill this gap in scholarship, by considering comprehensively the great deal of data available. For example, new research has recently revealed crucial information on the pre-Roman regional powers, as well as on the creation of the Roman provincial capital at Ankara and its development over time.[2] In this chapter, I will offer a brief synthesis of some of these studies, which will be followed by examination of evidence for Late Roman and Byzantine Ankara

[1] Roller (2011), 562-563. Matthews (2011), pp. 35-62, for a general overview of the archaeological evidence.
[2] Strobel (1996) and (2002), Kadıoğlu, Görkay, and Mitchell (2011), Peschlow (2015)

The geographical setting:

Ankara is situated on two small hills and a valley in the modern province of Ankara (Ankara *vilayet*), located in the center of the Anatolia plateau (Figure 3.2). The province is characterized by rolling hills of volcanic origin between 800 and 1300 m high, which are interrupted by small alluvial plains.[1] It is bordered on the northern side by the Pontic Mountains, a range that reaches over 2000 m above sea level and it is highly forested. At present, the area has a dry, steppe-like climate (280 mm of yearly rainfall) with low vegetation and isolated trees. The ancient environment, according to recent research, seems to have been similar to that of today, making the Ankara *vilayet* an apparently barren and arid area.[2] In spite of this, the region was suitable for intensive cultivation of cereals as well as animal raising thanks to many small streams and rivers fed by the snow melted on the mountains.[3] In particular, two substantial rivers cross the Ankara province, the Sakarya and Kızılırmak (the Red River), which run respectively north-west and east of Ankara. A smaller river (Ankara River) crosses the city east-west and flows into the Sakarya south-west of Ankara. The region was also dotted by numerous lakes, created by the flow of these watercourses. Such lakes silted up over time, generating several highly fertile plains (*ova*), which were intensively used for agricultural activities.[4] An example of this is the Çubuk Ova, a large plain in which the Ankara International Airport is now located. A salt lake (Tuz Gölü) is also present in the region and it situated south west of the city.

[1] French (1973), p. 6.
[2] Cross and Leiser (2000), pp. 9-12. Squatriti (2014), pp. 26-42, on a general analysis of the ancient environment.
[3] French (1973), p. 6.
[4] French (1973), p. 7.

Pre-Roman Ankara:

The Ankara region has consistently been occupied for the last 60000 years, as demonstrated by recent archaeological research. It is, however, only in the Iron Age that this site was extensively inhabited, when it became part of Phrygian territory.[5] The size of this settlement is still uncertain, but ceramic finds have recently suggested that it probably extended into the lower valley (the neighborhood now called Ulus) (Figure 3.3), beyond the promontory occupied by the later Byzantine citadel.[6] Limited excavation has also been carried out on the tumuli located west of the city, which have revealed the presence of prosperous elite buried in these structures.[7] The region became part of the Achaemenid Empire after the great territorial conquests of Cyrus and his successors, but there is little evidence for Achaemenid presence in the archaeological record.[8] Further information about the integration of Ankara into the Empire comes from Herodotus' work,[9] in which he states that the Royal Road crossed Phrygia on its route from Susa to Sardis, connecting the region to the rest of the Empire (Figure 3.4). Although the text does not mention the stations in Central Anatolia, modern interpretations suggest that the Royal Road may have passed north of the salt lake (Tuz Gölü), where Ankara is located.[10]

The city was also a key center for the Galatians, who settled in the Central Anatolia in the 3rd c. BCE. The Galatian migration has been the subject of a vivid debate for many decades, but

[5] Cross and Leiser (2000), pp. 53-55.
[6] Strobel (2002), pp. 9.
[7] Tuna (2007), pp. 99-113.
[8] Dusinberre (2013), pp. 19-22.
[9] Herodotus V. 52.1.
[10] This interpretation is based on Ramsey (1962), pp. 35-38. and his reading of the historical topography of the area. French (1998), pp 15-43 suggests instead the Royal Road crossed southern Phrygia, without passing by Ankara. His argument is mainly based on the assumption that Roman Roads were running on top of earlier, unpaved routes.

only recently scholars such as K. Strobel have reinterpreted the literary and archaeological evidence available.[11] Until then, Galatians had been seen almost exclusively through the lens of ancient Greek writers, who depicted them as plunderers largely led by land hunger. On the contrary, Strobel's research has revealed that the movement of people from the central/northern Europe to Central Turkey was a complex phenomenon, which led to the creation of sophisticated and sedentary tribal societies. Three tribes settled in Central Anatolia (Tectosages, the Trocmii, and the Tolistobogii), and Ankara was part of the territory of the Tectosages (Figure 4.5). The size and design of Galatian Ankara is unfortunately unknown, as mostly covered by modern structures. According to Strabo,[12] Galatian Ankara was a fortress (*phrourion*), which led S. Mitchell to suggest that the city was most likely never a sizable settlement before the Roman Period.[13] Further archaeological research has also brought to light important new information about the organization of the region around Ankara, which was also occupied by a large number of fortified hill top settlements.[14] The positions of many of these sites have recently been recorded (Figure 3.6), but the lack of excavation hinders our understanding of them. Rather than a large site, it is therefore possible that Galatian Ankara was simply another one of these hill top settlements placed in a strategic location.

Finally, when this region was annexed to the Roman state, Ankara was selected by Augustus in 25 BCE as the capital of the newly created Province of Galatia. To fulfil the new function of provincial capital, the city was expanded significantly and underwent major urban development. The analysis of this will be the subject of the following section.

[11] Strobel (1996) and (2002).
[12] XII.5.566-568.
[13] Mitchell and French (2012), p. 17.
[14] Darbyshire Mitchell Vardar (1999), pp. 81-83. Strobel (2002), 29-38. Vardar L and N (1997), pp. 245-279.

Ankara in the Roman Period:

As mentioned above, Ankara developed significantly during the Early Roman Period, after the new provincial capital was established here (Figure 3.7).[15] Annexation to the Roman State did not only bring to Ankara the new provincial administration and the seat of the newly established cult of the Roman emperor, but also made the city the center of a larger road network, linking the eastern provinces to the Aegean coast.[16] Infrastructural development in this region peaked particularly with the Flavian dynasty which intended to integrate further Galatia with neighboring areas;[17] Ankara, therefore, became part of a substantial street web that linked it with the northern provinces on the Black Sea (Bithynia and Pontus), South (Iconium and Cappadocia), East (through Tavium to Zela and Sebasteipolis), and West (Dorylaeum and Nicaea) (Figure 4.8).

Examination of the urban development for the Roman city is no easy task. Ankara grew remarkably after it was selected as capital of the Republic of Turkey in the early 20th c., and new structures obliterated the vast majority of the earlier ones. In spite of this, several excavations conducted from 1920s onwards have revealed the traces of a large and highly developed Roman city. These archaeological explorations took place mostly in the Ulus area (Figure 3.3), located near the modern downtown, between the 1930s and the 1960s.[18] These operations revealed new key information about the core of the Roman city, but the results collected were not properly

[15] Bennett (2003), pp. 1-12. Bennett (2006), pp. 189-227 review the literary and archaeological evidence available on the foundation of the Provincial Capital.

[16] Dabrowa (2013), pp. 357-359.

[17] Mitchell and French (2012), pp. 136-141.

[18] Kadıoğlu, Görkay, and Mitchell (2011), pp. 79-217 reviews all the evidence available for the archaeological research at Ankara in the 20th century.

recorded and published, while the structures brought to light did not survive the passing of time. In the 1980s and 1990s, a second wave of excavations was carried out in this area as well as other neighborhoods, where a major colonnaded street and theater were discovered. A more comprehensive approach to the study of the city, however, was not applied until the beginning of a new project started in 2002, titled "Archaeological Research on Ancient Ankara". This research enterprise reviewed all the available published evidence for Roman Ankara, while re-surveying and recording all the structures still standing. This study aimed to create the first digital map of the ancient city (Figure 3.9), and to produce a more coherent treatment of the data relevant to Roman Ancyra. The results of this work were synthetized in a recent volume published by Kadıoğlu, Görkay, and Mitchell[19] and the following sections of my chapter are greatly indebted to their results.

Urban layout and spatial organization:

At the outset it is worth noting that, given the fragmentation of the archaeological data available, our understanding of the general layout and urban development of Roman Ankara is still limited. For example, besides a few short stretches of three roads concentrated in the northwestern part of Ankara, there is very little evidence for streets. Particularly, the urban layout is completely unknown when moving toward the southeastern section of the city, where only the Byzantine fortress and the church of Saint Clement have been partially investigated. There is also practically no information on domestic spaces, while only highly superficial evidence is available for shops and other commercial spaces. Generally, excavations have mostly

targeted large public buildings such as temples, a theater, fountains, bathhouses, which seem to be concentrated in the north-western part of Ankara.

The recent reanalysis of the evidence available for three stone-paved streets has however shed new light on the general urban development of the city.[20] The streets uncovered reveal that the city was not planned on a strict orthogonal grid, but the roads followed different orientations in order to fit the uneven topography (Figure 3.9, no. 22-23-24). This is further confirmed by the inconsistent positioning of the main public buildings known archaeologically, which are often set on different axes (Figure 3.9, no. 1-4-20). A major street oriented NE-SW was discovered in the north-western section of the city (Figure 3.9, no. 22); its route linked the bath-gymnasium complex, the Temple of Augustus and Rome, and perhaps the theater, while it was intersected by another street (SE-NW) which ran immediately south of the bath-gymnasium complex. The latter road, partially investigated in the early 1900s and barely mentioned in the publications,[21] connected a small bathhouse located to the south-east of the bath-gymnasium with the major NE-SW road just mentioned. These two roads most likely served a large public area located in the north-western part of the city; this section of the city was not only characterized by the presence of two baths and the main Temple of the Imperial cult, but also by the stadium, which was probably situated south of the bath-gymnasium complex.[22]

22 m of the NE-SW road were excavated in 2007 revealing the presence of a stone pavement in local purple andesite framed by a colonnade (Figure 3.10).[23] This stretch of the street passes

[20] *Ibid*. pp. 243-252.
[21] Akok (1955), p. 313.
[22] See a discussion of the stadium below.
[23] Kadıoğlu, Görkay, and Mitchell (2011), pp. 159-177.

by the northeastern side of the bath-gymnasium and it abuts the eastern wall of the *palaistra*. Further investigations brought to light another section of the colonnade about 70 m east of it, immediately north of the intersection with the above cited SE-NW road (Figure 3.9, no. 22-23); here, the colonnaded street bends 20° north-east, pointing toward the direction of the Temple of the Imperial cult. The street is ca. 6 m wide and flanked by porched structures (Figure 3.11) most likely occupied by shops and other commercial spaces. The archaeological investigations of these features revealed that the porch is also ca. 6 m wide and it was supported by Corinthian columns 6 m in height and 0.6 m in diameter (Figure 3.12). The colonnade was dated to the Severan Period on the basis of voids and four-lobed leaflet capitals, a common molding pattern developed at Aphrodisias but reproduced by a local workshop during this period (Figure 13).[24] Given its physical connection with the bath-gymansium complex, which is also dated to the time of the Severan Dynasty, it is possible that the construction of the colonnade was part of a larger project of urban development in the northern part of the city. However, the road most likely predates the Severans as it connects major structures from the Early Empire, such as the Temple of the Imperial cult and the theater. Since these two edifices are from the time of Augustus, it is likely that this road too was planned between the late 1st c. BCE and the early 1st c. CE and it was further monumentalized during the Severan Period.[25]

Excavations conducted in 1995 brought to light another large road on a N-S axis (Figure 3.9, no. 9).[26] These explorations were carried out during the construction of the modern city bazaar,

[24] Kadıoğlu, Görkay, and Mitchell (2011), pp. 179-190.
[25] *Ibid*.
[26] *Ibid*, pp. 143-157 contains a full discussion of the evidence available on this structure.

which unfortunately obliterated a large amount of the evidence available.[27] As we will see in greater detail below, the erection of the city bazaar had a particularly negative impact on our understanding of the Late Roman phases of the city.[28] In 2006, a revaluation of this structure was allowed by a limited rescue excavation (June 17th- July 7th) conducted during the installation of a new boiler room (Figure 3.14). The street, uncovered for a total length of about 55 m, intersects the colonnaded road just discussed ca. 75 m south-east of the bath gymnasium and it is the largest found at Ankara so far (6.70 m wide) (Figure 3.15). Given its size and the N-S orientation, it was labeled *Cardo Maximus* by modern scholars. The stretch excavated is characterized by paving stones of local andesite as well as a portico on the western side of the street (Figure 3.16). The portico was 6.20 m wide and paved with *opus sectile*, which belongs however to the Late Roman period (Figure 3.17).[29] Ceramic finds recovered below the street level seems to suggest that the road was also constructed during the end of the 1st BCE or early 1st CE, and it probably belongs to the original Augustan urban design.

Public Buildings:

The earliest and most studied Roman building still standing in Ankara is the temple dedicated to the cult of the Emperor and Rome, which was established here by in 4 or 5 BCE and played a pivotal role in the development of his imperial propaganda (Figure 3.18).[30] The new cult functioned as connector between the emperor and local populations, and it created a direct bond between provincials and their ruler. At Ankara, as at many other places, citizens gathered around

[27] *Ibid*., p. 143.
[28] See discussion below in the next section.
[29] See below for the discussion of the Late Roman mosaics.
[30] Kadıoğlu, Görkay, and Mitchell (2011), p. 28.

this temple to celebrate annual festivals, while local elites often took the religious offices available in order to acquire political prominence and influence.[31] This custom is recorded with an inscription on the temple walls which lists the names of the high priests together with their benefactions.[32]

The temple itself was the embodiment of the political agenda just described; it was located in the center of the ancient city, in the Ulus area, near the Hacı Bayram Veli (Figure 3.9, no. 2), where one of tallest hills is situated.[33] The top of the hill is flat and it represented the perfect setting for this building; indeed, the temple towered over the city center, underlining the power of the Emperor and Rome over the city. The building is 33x55 m and it rests on a stepped basis[34] most likely surrounded by a *temenos* wall which encompassed a large open space. The size and measures of the *temenos* wall are still poorly known as the structure was covered by a defensive wall from the Middle-Byzantine Period (Figure 3.19). Archaeological investigations carried out in 1941 on a 50 m stretch of the Byzantine fortification, however, revealed the presence of a Roman wall associated to a stone pavement underneath the Byzantine enclosure; this suggests that the Byzantine defenses may have rested on top of the Roman *temenos* wall.[35] The data available for the Byzantine fortification are equally scanty, and the only known segment (the above mentioned 50 m stretch) lies ca. 70 m north-east of the temple, providing very little information about its overall layout.

[31] *Ibid*., p. 25-26.
[32] Mitchell and French (2012).
[33] Kadıoğlu, Görkay, and Mitchell (2011), pp. 204-205.
[34] Botteri and Fangi (Ankara Article), pp. 84.
[35] Kadıoğlu, Görkay, and Mitchell (2011), pp. 96-98.

The temple, dedicated to Augustus and Rome, was set on a northeast-southwest axis, with its entrance on the western side, perhaps in resemblance of the Temple of Mars Ultor in the Augustan Forum in Rome as suggested in modern scholarship.[36] The general design of the building is pseudo-dipteral with 8x15 Corinthian columns; four columns were then placed in front of the *cella* while two more were set between the *cella* walls (*in antis*) (Figure 3.20). The colonnade has almost entirely been robbed away, leaving us with very little information about the upper part of the temple. The only indication about the height of the building comes from the *cella* itself, which survives up to ca. 12 m (Figure 3.21).[37] The *cella* walls were inscribed with a bilingual (Greek and Latin) version of the *Res Gestae* (Figure 3.22), which celebrate the deeds of Augustus, and with the above cited list of local high priests and their benefactions. The analysis of the latter text was particularly instrumental to establish the date of the temple; a recent study carried out by S. Mitchell and D. French,[38] based on A. Coşkun's new interpretation of this inscription,[39] demonstrated that the first high priests took office in the year 4 or 5 BCE. Further epigraphic investigations also show that the land where sanctuary sits was made available by a local benefactor in 2 or 1 BCE. Assuming that the construction of the temple started shortly after the cult was established (4-5 BCE) and the right location for the temple was available (2-1 BCE), Mitchell and French propose a probable date between 1 and 10 CE for the erection of the building.

The temple of Augustus and Rome is not the only structure dated to the Early Imperial Period; a theater, a stadium, and a nymphaeum may also have been erected in the same period, as

[36] *Ibid*. p. 210.
[37] Botteri and Fangi (2002), pp. 84.
[38] Mitchell and French (2012), pp. 111-112.
[39] Coşkun (2009), pp. 173-211.

demonstrated by recent research (Figure 3.9, no. 4 and 12).[40] The theater, which had been extensively dismantled after its abandonment, was first recognized by the 19th c. travelers and excavated in the 1980s and again in the 2000s (Figure 3.23).[41] The building (Figure 3.24) is located southwest of the Temple of Augustus and Rome, on a natural slope descending toward north-east,[42] but is only partially resting on the side of hill; indeed, the north-eastern section of the structure is supported by a wall built in rubble and mortar. The theater is 59 x 46.50 m, constructed in *pseudo-isodomic* masonry (local andesite) and set on NE-SW axis (Figure 3.25). Very little information is available about the seats (Figure 3.26), which have almost entirely been robbed away (only preserved in the north-eastern side of the building) and often reused in the Late Roman defensive wall. The scanty remains available for the substructures below the seats suggest that the probably existence of 30 lines (11 in lower part and 19 in the upper one), for a total height of 17 m (Figure 3.27). The date of the building has not been securely established given the extensive robbing that took place post-abandonment, but a generic early 1st CE has been suggested based on the similarities between the north-eastern *analemma* wall and the masonry of the temple of Augustus and Rome (Figure 3.25).

The stadium and the nymphaeum are no longer identifiable, and there is very little information at our disposal about these two complexes. Further scanty evidence about the stadium, however, has been recovered in the late 1990s and early 2000s. Several seats made with local purple andesite blocks (l. 1.78-1.88 m, h. 0.41-0.43 m, d. 0.92-0.95 m) have been noted in later structures, with a higher density within the masonry of the Late Roman fortification and the

[40] Görkay (2006), pp. 241-271 Kadıoğlu, Görkay, and Mitchell (2011), pp. 109-142.
[41] Perrot (1872), p. 156.
[42] Kadıoğlu, Görkay, and Mitchell (2011), pp. 117-140.

palaistra of the bath-gymnasium complex (Figures 3.28-29-30). Some of the seats retrieved have stairs (ca. 0.2 m in height) carved directly into the blocks, which seems to be a usual feature in Roman Stadia in Asia Minor and to be more common in theaters of the same region (Prusias ad Hypium and Termessos, among many).[43]

The location and date of this building are particularly difficult to establish, given that the seats were retrieved outside their original context. However, the high number of seats found in the north-western stretch of Late Roman city wall, bath-gymansium complex, and within the masonry of modern buildings led K. Görkay to propose that the stadium was situated to the south of the bath-gymansium (Figure 31).[44] Topographically, this location is plausible for two main reasons: there is a flat area where a stadium could have been accommodated, and it seems to be connected with the N-S street dated discussed above, which would allow easy access to this facility.

A very tentative date for the stadium was suggested on the basis of a highly fragmentary inscription "…ΠΟΚΛΑΥ…", which was noted on one seat in the *palaistra* (Figure 3.32). According to further epigraphic analysis on the dimensions and forms of the letters (height 0.13-0.14 m and 0.07-8 m in between letters), a generic 1st c. CE date was proposed for the carving of the inscription. This element therefore provides a *terminus post quem* for the construction or restoration of this building.[45]

[43] Görkay (2006) p. 251.
[44] *Ibid*. pp. 261-263.
[45] Görkay (2006), pp. 252. Kadıoğlu, Görkay, and Mitchell (2011), pp. 109-115.

Traces of an Early Roman nymphaeum may have also been uncovered underneath the Turkish Iş Bank in Ulus, during the excavation conducted by Akok in 1954 (Figure 3.9, no. 12).[46] The remains discovered, located between 2 and 7.5 m below the modern street level, present two phases of a building oriented east-west. The upper level was designed on top of the earlier structure, but the data published are too scanty for a full analysis of its development (Figure 3.33). The lower level is a rectangular building (15 x 23 m) constructed in local andesite (ashlar masonry) with a stepped shaft in the middle of it (Figure 3.34). The shaft gave access to a well and it was covered by a ribbed vault (Figure 3.35). The building is located directly east of the original position of so-called column of Julian (Figure 3.9, no. 12-13a) and it may have been part of a public space;[47] celebratory columns were usually placed within public squares and its proximity to the nymphaeum suggests that both structures were part of the same public area. Excavations conducted under the site of the column of Julian revealed the presence of molded *anta* capital decorated with a victory (Figure 3.36), which may be the only surviving element for the upper part of the nymphaeum. This building was firstly dated to the 4th c. CE, given its relation to the column of Julian. However, recent investigations on the masonry underlined close similarities between the nymphaeum (Figure 3.36) and the *analemma* wall in the theater (Figure 3.37); based on this element, a tentative 1st c. CE date has been suggested for its construction.

The bath-gymnasium complex:

The bath-gymnasium complex is located in the north-western corner of the city and it was first investigated during the modern development of this urban area in 1930-40s (Figure 3.9, no.

[46] Kadıoğlu, Görkay, and Mitchell (2011), pp. 135-142 contains the publication of the evidence for this structure.
[47] Peschlow (2015), pp. 131-138 suggests that the original position of the column of Julian was another one.

20).[48] The complex consists of two main parts (bath building and the *palaistra*) and it extends over ca. 180 x 140 m area, which make it one of the largest examples of its kind (Figure 3.38).[49] The construction of the complex was dated to the reign of Caracalla on the basis of the coins recovered during the excavation, as well as on five inscriptions mentioning Tiberius Iulius Iustus Iunianus (lived during Caracalla's time), a benefactor who was most likely responsible for the construction the bath-gymnasium.[50]

The *palaistra* is a square (95 x 95 m) structure that occupies the southeastern side of the complex, and it was surrounded by a colonnaded portico that consists of 32 unfluted columns with Corinthian capitals. The entrance to the *palaistra* was most likely situated on the east side, where the building flanks the colonnaded road discussed above; here, archaeological investigations have uncovered traces of blocks that belonged to an architrave, which may have connected the the *palaistra* and the bath structure. Another entrance into the *palaistra* was probably located on the south-eastern side of the complex, linking it to the SE-NW road mentioned in the previous section. Excavations in the 1950s have brought to light scanty traces of a staircase which most likely functioned as connector between the road and the building.[51]

The northwestern part of the complex was the bath itself, with the typical series of rooms (*frigidarium*, *tepidarium*, and *calidarium*) placed on its south-western section, while the *apodyterium* and the other service spaces were located on the northern part. The three rooms are situated in the southern part of the building (marked C, T, and F in Figure 3.38), while the

[48] A full review of the evidence for this structure can be found in Kadıoğlu, Görkay, and Mitchell (2011), pp. 179-190.
[49] Yegül (1992), pp. 279.
[50] Bosch (1967), pp. 317-322. Inscriptions numbers 255-258.
[51] Akok (1955), pp. 313.

changing room (*apodyterium*, B in the illustration) was directly north of the *frigidarium* and was unusually heated (Figure 3.39). Given the vast heated spaces within the building, archaeological explorations have detected traces of no less than 14 furnaces (*praefurnium*), which were necessary to guarantee a warm environment (Figure 3.40). The size of the bath and its extensive heating facilities are impressive, and they may suggest the presence of a wealthy community which could pay for its construction and maintenance, as well as the supply of the materials (timber and olive oil) needed for the bath to function.[52]

The planning of a Roman city in Central Anatolia: final remarks:

In spite of the scanty evidence available for the Roman city, a few general characteristics of its urban layout can be underlined: 1) the city was situated in a valley surrounded by hills and, therefore, it may not have been planned with a strict orthogonal grid; instead, the buildings constructed followed the uneven topography. This is further proven by the diverse orientations of the main public buildings known archaeologically as well as by the few stretches of urban roads excavated so far. 2) Most of its main public structures (theater, stadium, nymphaeum, and temple of the Imperial Cult) and roads were designed at the time of Augustus, probably when the city was being developed as the new provincial capital. 3) A further wave of monumentalization of such public structures and spaces most likely happened during the Severan Dynasty, when some structures were embellished and others were added to the urban fabric of the city. The most important building project of this period is certainly the bath-gymnasium complex, which is a large structure in the northwestern side of the city. The bath-gymnasium at Ankara is one of the largest known examples of its kind, and it featured an unusually large heated area. The

[52] Delaine (1997), pp. 29-50.

construction of this complex was part of a wider project of monumentalization of the northern part of city, as visible in the erection of a colonnade on the main road flanking the eastern side of the *palaistra*. These elements most likely imply that 3rd c. Ankara was inhabited by a wealthy community, which can afford the construction of such structures as well as it maintenance.

The city in the Late Roman Period:

Ankara maintained its privileged status as provincial capital and regional crossroads during the Late Roman Period, even after Diocletian and his successors profoundly transformed the administration of the Empire at the end of the 3rd c. CE.[53] Once the capital was moved to Constantinople in the 4th c. CE, Ankara benefitted from proximity of the new imperial administration as the city was situated in the vicinity of the main road that linked Constantinople to Antioch, one of the other main cities in the Roman East (Figure 3.41).[54] Ankara soon became a key stop for imperial officials as well as military chiefs who traveled from the capital toward east. Emperors such as Julian and Arcadius are also known to have visited Ankara while crossing this important highway.[55] The emergence of Christianity also affected mobility in the region; since one of the main routes to the Holy Land passed through it (Figure 3.42),[56] Ankara became also a major step on the road walked by pilgrims on the way to Palestine.

Christianity generally plays a particular role in the history of Late Roman Ankara; the city became a bishopric in 314,[57] and two church councils were held here in the 4th c. when the

[53] Mitchell (1993), pp. 36-58. Foss (1977), pp. 34.
[54] Foss (1977), pp. 30-31.
[55] Claudian *In Eutropium*, XI.97-102 and Sozomen V.11. Also, see Foss (1977), pp. 49-53.
[56] Belke (1984), pp. 29-57.
[57] Foss (1977), p. 36-39.

Roman Church was dealing with the Arian heresy.[58] Martyrs are also known in the ecclesiastic history of Ankara, such as the saints Plato and Clemens,[59] and churches were erected here in order to celebrate their martyrdoms as well as to the memories of other important religious figures. Evidence for the construction of several churches is recorded in the literary sources as reported in a seminal article published in 1977 by C. Foss; in his work, he identifies 12 structures (both churches and monasteries) built between 4th-6th centuries CE.[60]

In the later 7th c. CE, Ankara was appointed as one of the capitals of the themes, the new territorial units that replaced the Roman provincial organization (Figure 3.43).[61] This new system was put in place after the Empire underwent a profound political and military crisis as a result of Arab attacks. Each theme had a capital, seat of a military and administrative chief, which controlled a network of villages and hamlets.[62] Ankara was first selected as the capital of the Opsician Theme and, in the 8th c., following a further revision of the thematic borders, it became the capital of the Bucellarian Theme (Figure 4.44).[63]

When we turn to the archaeological evidence, in spite of the important history of the city, traces of Late Roman Ankara are scanty. Particularly striking is the total absence of any physical evidence for churches or monasteries constructed in the Late Roman Period despite the abundant evidence in the literary accounts. The limited archaeological data at our disposal are often hidden in the masonry of later structures, which were built out of *spolia*, but rarely provide a complete

[58] Serin (2011), pp. 1257-1259.
[59] *Vita Platonis* PG 115 and *Vita Clementis* PG 114
[60] Foss (1977), p. 61.
[61] Haldon (1997), pp. 34-55.
[62] *Ibid*.
[63] Belke (1984), pp. 59-62.

picture of the urban development of this period. Below, I offer a synthesis of the evidence available for Late Roman Ankara. This section is particularly indebted to two influential studies of the city: the above cited article published by Foss and the recent book written by U. Peschlow.[64] The latter has substantially revised our understanding of the Late Roman/Byzantine city not only by offering a new interpretation of the data at our disposal, but also by presenting original evidence for the construction of the church of Saint Clemens. Peschlow's contribution is particularly key in the analysis of the abandonment of many urban structures, which provides a new reading of the development of the city in this period. As noted for the Roman city, the archaeology of Late Roman Ankara is only known through the history of its public structures and spaces, such as the Temple of Augustus and Rome, the theater, and the bath-gymnasium complex among many examples. The following discussions are organized in 2 main sections, which consider the different parts of the urban fabric of Ankara. First, I focus on the Late Roman (4^{th}-7^{th} c. CE) development of Ankara, beginning with the construction of the city wall and moving to the renovations of the structures discussed above. Second, I will analyze the post-7^{th} c. CE building activities, which are mostly concentrated in the 9^{th} c. CE.

Fortifications:

Ankara, as many other cities, was fortified in the Late Roman Period (Figure 3.9, no. 18).[65] The wall was dismantled almost completely post-abandonment, but two short stretches were uncovered directly south-west of the bath-gymnasium complex in the mid-20th century.[66] The structure is between 2.60 and 3.70 m thick and constructed with *spolia* (from the stadium and

[64] Peschlow (2015).
[65] See Jacobs (2013), pp. 12-46 for a full discussion for the reappearance of fortifications in Late Roman cities.
[66] Kadıoğlu, Görkay, and Mitchell (2011), pp. 179-190.

other buildings) in the outer face and mortared rubble in the inner one (Figure 3.45). Archaeological explorations in Fuat Börekçi Street also revealed evidence for a probable rectangular tower (Figure 3.46), which is highly damaged. The preservation of the upper courses is too low to give reliable information about its height, but comparative analysis with other Late Roman fortifications suggests a ratio 1:3/4 between thickness and height,[67] leading to the conclusion that the wall at Ankara should have been no less than 11 m high. There is also very little evidence for the perimeter of the structure, which is almost entirely unknown in the south-western part of the city. The two stretches of the wall excavated in the north-western side of the city seem to suggest that the city wall circled around the bath-gymnasium complex, marking the northernmost limit of the urban area (Figure 3.9, no. 18).

The wall of Ankara has been dated to the second half of the 3rd century AD through one inscription collected by Bosch (290)[68] and recently restudied by Mitchell and French (120).[69] The inscription is unfortunately lost, but the text was recorded before its disappearance. The date of the wall was inferred through the analysis of one line of the text: "during a food-shortage and barbarian attacks" "…ἐν σιτοδείᾳ κὲ Βαρβαρικα[ῖς] ἐφόδοις…" The mention of "food-shortage and barbarian attacks" was associated to the Gothic invasions, which occurred in Anatolia in the middle of the 3rd century CE. Mitchell and French also underline that the end of the text "τοῦ ἔθνους σωτῆρα" (the province's saviour) matches another fragmentary text (50), which is now in the bath-gymnasium complex, and it could perhaps be assigned to the mid-3rd century CE. The

[67] Vermeulen (2003), pp. 351. Such ratio is used at Pessinus, but it is based on well preserved walls in North Africa.
[68] Bosch (1967), pp. 351.
[69] Mitchell and French (2012), pp. 287-288.

inscription (50) in the bath-gymnasium is dated on account of the name of the benefactor, Aurelius, to a time after 212 CE, year in which the *Constitutio Antoniniana* was issued.[70]

Ankara was, however, most likely not touched by the Gothic raids in the 3rd century CE, as already noted by Mitchell and French. The extent of the destruction brought by the Gothic attacks to Central Anatolia also awaits further confirmation; Pessinus, for example, which was reportedly destroyed by the Goths,[71] shows no evidence for it, indicating that the literary sources may have exaggerated the impact of this event. This, as already suggested by Mitchell and French, potentially demonstrates that the construction of the fortification wall may have been the result of simple fear and alarm, rather than real necessity. It is therefore possible that the reference to "barbarian attacks" does not necessarily imply a specific, impending threat, but rather a general fear of potential attacks. If this holds true, this would position the Gothic invasions as a simple *terminus post quem* for the dating of the wall, instead of marking the time of its construction.

City walls securely dated to 3rd c. CE are also extremely rare in Anatolia; among the few examples available are the fortifications of Nikaia and Nicomedia, which are directly connected to the patronage of emperors (Gallienus and Diocletian).[72] Miletus has also been dated to the 3rd c. CE through numismatic evidence,[73] which, however, offers a *terminus post quem* rather than an exact date of its construction. Pergamon and Sardis, which are often used as instances of 3rd c. walls, cannot be firmly assigned to this century. The wall of Pergamon is simply dated through

[70] Mitchell and French (2012), p. 205.
[71] Zosimus I. 28. 1.
[72] Foss and Winfield (1986), p. 80
[73] Von Gerkan (1935), pp. 83-84.

historical circumstance;[74] M. Klinkott places the construction of the wall between the earthquake in 263 CE, which would provide the *spolia* employed to build it, and the Gothic invasions in 269 CE, the earliest reported attack to the city. This hypothesis is however not confirmed by any archaeological or epigraphic data and the remains of the walls lie largely unexplored. As far as the wall at Sardis is concerned, M. Rautman has recently argued that the archaeological evidence available is inconclusive and that the date of the structure remains "unsettled".[75] In addition, the cities cited above are located in western Asia Minor, but there is no evidence for the construction of walls in Central Anatolia during the 3rd c. CE. Given, therefore, the only generic association between the Gothic invasions and the defensive wall at Ankara, as well as the rarity of 3rd c. fortifications away from the western coast of Asia Minor, we should account for the possibility that this fortification may not belong to this period, as suggested by the inscription no. 290, but to a different date. Recent studies have highlighted that most Late Roman walls in Anatolia belong to the 4th-5th centuries CE, which could represent a plausible alternative to the 3rd c. CE.[76] In particular, the walls of Pessinus and Amorium,[77] located in the same region as Ankara, are dated to 4th-5th centuries, lending further validation to this date for construction of the defensive at Ankara.

The process of abandonment and dismantlement of this structure has recently been restudied by U. Peschlow in his work on Late Roman/Byzantine Ankara.[78] Peschlow argues that the Late Roman wall was still in use into the 9th c. CE, when it was destroyed by external attacks (the

[74] Klinkott (2001), pp. 8-12.
[75] Rautman (2011), pp. 9-10.
[76] Jacobs (2013), pp. 26-27.
[77] Discussions of the dates for these walls are chapters 2 and 4.
[78] Peschlow (2015), pp. 105-115.

Arab sack in 838 CE) and then robbed in order to construct the fortress located on the south-eastern fringes of the city (Figure 3.47). This citadel (see below) was erected with the employment of *spolia* on a large promontory in the periphery of the city under the aegis of the Emperor Michael III (842-867), who is praised as the benefactor in 2 inscriptions built over the main gate.[79] Its construction had traditionally been dated to the mid-7th c. CE, following the destruction caused by the Persian incursions, while the 9th c. phase celebrated in the inscriptions was simply considered a renovation sponsored by Michael III. The erection of the citadel in 7th c. CE was interpreted as the response of the local community to meet the need of further security, as well as a further proof that most of the Roman city no longer necessitate to be protected as it had been significantly abandoned.[80] As we will see in the next section, there is however neither evidence for a 7th c. phase of the citadel nor are there data that could confirm a substantial reduction of the urban area in this century.[81] Ankara, as argued by Peschlow, remained a sizable settlement through the 7th-8th centuries, which was most likely defended by the Late Roman wall until the 9th c. CE, when it was probably destroyed by the Arab invasion of 838 CE. Only after this date, were the ruins of the wall fully dismantled and used to construct the citadel.

Other Public Spaces and Buildings:

Archaeological explorations have revealed very little information about the later developments of the street network at Ankara.[82] The NE-SW colonnaded road (Figure 3.9, no. 22) do not seem

[79] Peschlow (2015), pp. 263. Jerphanion (1928), p. 210.
[80] Foss (1977), pp. 68-77.
[81] See the following discussion on the city structure
[82] Kadıoğlu, Görkay, and Mitchell (2011), pp. 243-252.

to yield traces of substantial change after the Severan Period.[83] The western colonnade built against the eastern wall of the bath-gymnasium in the 3rd c. CE was significantly modified during the restorations carried out in the 1930s, and the current state of the structure provides almost no information about its original arrangement.[84] The excavations conducted in the early 2000s have brought to light ceramic evidence, which has recently been examined by C. Küncü as part of his master thesis at Gazi University.[85] His study focuses mainly on fine ware from the Roman Period, but a few Late Roman diagnostic fragments have been considered in order to provide a fuller treatment of the topic. His analysis shows the presence of several pieces of Late Roman fine ware (Late Roman C, Red Pontic Slip, as well as local imitations), which date from the 4th through 6th-7th centuries CE. However, the Late Roman/Early Byzantine Period (4th c. onward) was outside the scope of this research, and it provides only incomplete information on the later phases of the colonnade road. Specifically, there is no definitive evidence for the abandonment of the street, which was definitely occupied at least through the 7th c. CE. The 7th c. CE, however, can only be considered as a generic *terminus post quem* rather than a secure date for the abandonment of the structure. For example, an Early Medieval bronze cross was located in one of the shops excavated in 2009[86] and, even though its retrieval underlines the presence of occupation in the area, it does not clarify the extent to which this urban area was still in use during this period. Thus, more research is needed in order to clarify the chronology and mechanics of the post-Roman occupation as well as the abandonment of this street.

[83] Kadıoğlu, Görkay, and Mitchell (2011), pp. 159-177
[84] Peschlow (2015), pp. 63-77.
[85] Küncü, pp. 120-157.
[86] Peschlow (2015), p. 112.

The so-called *cardo maximus* was severely damaged by the 20th c. development of the modern urban infrastructure (Figures 3.48-3.49).[87] In particular, a substantial section of the pavement in *opus sectile* as well as the structures above it were completely removed in order to construct the modern city bazaar, which resulted in a full obliteration of the post-Roman phases. The above mentioned 20 day rescue excavation conducted in 2006 was instrumental in order to document fully the stratigraphy related to the *opus sectile* pavement, but the archaeological phases located above it were no longer available for further analysis. The segment of the road restudied in 2006 was also completely destroyed by the erection of the new boiler room (Figures 50-51) and the ancient structures were removed down to the foundations.[88] The 1995 and 2006 explorations, however, brought to light new data on the Late Roman phase of the road. In particular, the finds collected demonstrated that the pavement in *opus sectile* was most likely laid out after the late 5th-early 6th centuries CE.[89] 200 coins were recovered under the segments of the road analyzed, revealing a continuous sequence until the regency of Anastasius (491-518), which represents the *terminus post quem* for the construction of the pavement.[90] The *opus sectile* was designed with various motifs that can be only appreciated in the northern part of the excavation trench (Figures 3.17-3.52). The pavement was set in a layer of mortar and constructed with different types of stones (marble, local andesite, and limestone) of different sizes, thickness, and color. As just argued for the colonnade road, the *opus sectile* pavement is simply the last archaeologically verifiable trace of occupation, but it offers no information about the later phases and abandonment of this street, which could be only explored through new archaeological research.

[87] Kadıoğlu, Görkay, and Mitchell (2011), p. 143
[88] Kadıoğlu, Görkay, and Mitchell (2011), pp. 145-150.
[89] *Ibid*., p. 156-157.
[90] Arslan (1997), pp. 111-136.

The data collected at the theater and the bath-gymnasium complex provided further information about the Late Roman/Byzantine development of Ankara. The theater, which was plundered post-abandonment, underwent two major renovations that are probably dated to the 3rd c. [91] CE, and after late 5th early 6th CE, respectively.[92] In the latter case, the orchestra was rearranged into a closed space by means of orthostats positioned to block the lateral entrances (Figure 3.53). The stage building was also reconstructed with a mix of bricks and mortared courses of limestone (Figure 3.54).[93] I. Bayburtlouğlu[94] and M. Kadıoğlu[95] suggested that the new design formed a pool for the display of water games and shows but, if this reading were true, it would be unclear how the water could flow in and out of the structure; indeed, there is a no evidence for pipes that would allow the circulation of water in the *orchestra*.[96] The dating of this phase is very tentative and mainly based on the building techniques employed – i.e. mortared courses of limestone and bricks – which suggests a Late Roman date.[97]

In the late 5th early 6th c. CE the orchestra was redesigned; a pavement in *opus sectile* (Figure 3.55) was laid out on top of an earlier marble floor, which is only fragmentarily known.[98] The orthostasts blocking the side corridors were also removed while a drain was probably installed or restored during this reconstruction. The new drain is marked by a marble manhole uncovered in the middle of the structure during the 2006 explorations (Figure 3.56). The date of this phase was established through the retrieval of several coins dated from the 4th (Licinus) to the emperorship

[91] Bayburtlouğlu (1987), pp. 9-23.
[92] Kadıoğlu, Görkay, and Mitchell (2011), pp. 132-133. Peschlow (2015), pp. 55-56.
[93] Peschlow (2015), p. 55.
[94] Bayburtlouğlu (1987), pp. 9-23.
[95] Kadıoğlu (2004), p. 127 and (2011), p. 117-133.
[96] Peschlow (2015), p. 55.
[97] Bayburtlouğlu (1987), pp. 16, Kadıoğlu (2004), p. 127, Peschlow (2015), p. 54-55.
[98] Kadıoğlu, Görkay, and Mitchell (2011), p. 127.

of Anastasius (491-518) that offers a *terminus post quem* for the time of the renovation. As suggested for the road above, the *opus sectile* pavement in the theater also represents the last archaeologically verifiable phase of the building, and provides no information on the process and chronology for the abandonment of this structure. The only data on the dismantling of the theater can be found in the masonry of the citadel, where the seats of the *cavea* have been employed in high concentration for the construction of the outer wall.[99] This observation does not, however, clarify whether the theater was still in use at least partially until the 9th (date for the erection of the citadel),[100] but it suggests that some parts of this structure may have still available for plundering at the time of the construction of the citadel.

The bath-gymnasium complex also underwent several restorations in the Late Roman Period, which are mostly dated through the numismatic evidence collected during the excavations conducted in the 1930s and 40s[101]. Coins, which are abundant in the archaeological record of this structure, were among the few finds kept during these explorations of the complex, and they have been recently reanalyzed by Foss[102] and Arslan,[103] and republished by Peschlow.[104] In spite of this, many of the repairs detected by the archaeologists are often difficult to date; for example, traces of plaster in the pool area (Figure 3.38, F), which was used to patch and replace marble revetments and mosaics, cannot be dated securely.[105] A major archaeologically verifiable reconstruction was undertaken in the 360s, when the shops of the colonnaded road and the

[99] Peschlow (2015), pp. 53-56.
[100] See the next section on the citadel.
[101] The dating is based on coin evidence: Akalın, Arslan, and Talaakar (2003) p. 343 and Akalın, Arslan, and Talaakar, (2010) pp. 213-222.
[102] Foss (1977), p. 87.
[103] Arslan, (1997) pp. 111-136, Akalın, Arslan, and Talaakar, (2010) pp. 213-222.
[104] Peschlow (2015), p. 80.
[105] Foss (1977), pp. 63-64.

eastern porticos in the *palaistra* were destroyed and a series of new column capitals (Figure 3.57) were added to the structure.[106] In addition, a sudden drop in coins can be noted in the early 5th c. CE, followed by a recovery during the mid-5th c. CE; this discontinuity has been interpreted as the result of another destruction that cannot, however, be securely evaluated archaeologically.

The final destruction and abandonment of the complex has been dated by Foss to the mid-7th c. CE as result of an ultimate break in the numismatic evidence available.[107] The end of the reign of Heraclius, emperor between 610 and 641 CE, often marks a sharp decline in the coin emission due to a widespread military and political crisis.[108] In Foss' argument, the obliteration of the bath-gymnasium complex was part of the overall destruction of city, which led to the abandonment of most of its urban areas, as mentioned in the previous section on fortifications.[109] However, Peschlow's reanalysis of the archaeological data available revealed that the mid-7th c. CE most likely does not represent the date for the abandonment of this structure; besides the apparent lack of coins, there is no other evidence to suggest that a destructive episode took place in the 7th c. CE. On the contrary, a further review of excavations revealed that coins from the 8th c. CE are still present in the pipes of the bathing facilities, hinting that the structure was probably still in use during this period.[110] A full list of the coins discovered in the structure contains a sequence dated up to 9th c. CE. The evidence at our disposal is too scanty to discern whether the bath-gymnasium complex was fully operational after the 7th c., and it is probable that parts of it had been already left in disrepair before its final abandonment. The possible reduction in use

[106] Peschlow (2015), pp. 63-77.
[107] Foss (1977), pp. 63-64.
[108] Day (2002), pp. 967-972.
[109] Foss (1977), pp. 68-77 and Foss (1975), 721-747.
[110] Peschlow (2015), pp. 63-77.

post mid-7th c. crisis, however, cannot be associated to any violent destruction on the basis of the data available and, if it happened, it was most likely the result of a change in the socio-economic conditions of the citizens at Ankara,[111] rather than a direct consequence of external invasions at Ankara. The building went most likely fully out of use in 9th c. CE, when the city was attacked by the Arabs (838 CE) and the bath-gymnasium was probably never reconstructed. As proposed by Peschlow, a possible reoccupation of the bath-gymnasium was also hindered by the destruction of its water supply during the Arab invasions, which most likely happened through the cutting of one of the aqueducts that fed the city.[112] The study of the water supply at Ankara is a particularly complicated matter due to a dearth of archaeological and epigraphic evidence. An inscription honoring a benefactor (Theodotos) involved in the construction of an aqueduct has been studied by Bosch and dated to the reign of Constantine, while pierced stones from the aqueduct have been retrieved at the bath-gymnasium (Figure 3.58).[113] Recent studies have also demonstrated that the city was fed by the waters collected from the natural springs of Elmadağ, an area located 15 km east of Ankara, as well as by a water infiltration channel from Kayaş, situated south-east of the city (Figure 3.59).[114] Once again, the analysis of the masonry of the citadel may offer further information on the destruction of the Late Roman water supply; the south-east side of the interior wall of the fortress has a high concentration of these pierced blocks (Figure 3.60), which has led scholars such as J. Bennett[115] and Foss[116] to suggest that the aqueduct passed by this location. If this holds true, we can conclude that the water supply was

[111] The literature of social and economic changes during the Late Roman Period is vast; .
[112] Peschlow (2015), p. 63-77.
[113] Bosch (1967), no. 306, p. 369.
[114] Fıratlı (1951), pp. 349-359 and Özand (1967), pp. 1-3.
[115] Bennett (2003), p. 8.
[116] Foss (1977), p. 64.

still functioning through the 8th c. CE, as demonstrated by the coins found in the structure, but it must have been in disrepair by the time of the construction of the citadel, since the pierced blocks of the aqueduct were reused as *spolia* in the masonry of the inner wall.

Finally, a Late Roman/Early Byzantine honorific column is still visible today on the eastern corner of the pool in Government Square (Figure 3.61). The column has been traditionally associated to the Emperor Julian as suggested by H. Dernschwam, a German traveler who visited Ankara in 1555. The name of Julian is, however, never mentioned on the column and more recent research assigns it to the 6th c. CE, on the basis of style.[117] In 1934, the monument was moved to its current position from a previous location (about 100 m east), which was recorded in one photo taken before this time (Figure 3.9, no. 113a).[118] The column consists of 15 tapering drums of limestone, one of which did not survive the change of location in 1934 (Figure 3.62).[119] The column was set on a molded pedestal and a base carved in a single limestone block (Figure 3.63). The top of the column was occupied by a capital decorated with four round disks (Figure 3.64), probably covered by bronze medallions, and tendrils heart-shaped leaves.[120] The dating of the monument is based on the style of this capital, which can be matched with those in the Church of Saint Polyeuctus at Constantinople (6th c. CE).[121] If this interpretation were true, this column would be the only example of its kind surviving outside Constantinople.[122]

<u>Ankara after the 7th c. CE</u>:

[117] Peschlow (2015), pp. 131-138.
[118] Kadıoğlu, Görkay, and Mitchell (2011), pp. 225-226.
[119] Peschlow (2015), pp. 131-138.
[120] Kautzsch (1936), p. 202
[121] Peschlow (2015), p. 131-138.
[122] *Ibid.*

The examination of post-7th c. CE Ankara is crucial to understand the development of the Late Roman city (4th-7th c. CE), given that the evidence for the urban structures of this period are often hidden in the fabric of later buildings such as the Byzantine fortress. The reading of the city in the 7th-9th c. CE also requires further consideration; indeed, the urban development of this period has been traditionally influenced by Foss' argument, which proposed a general decline in occupation of the urban area caused by the Persian invasions (620s).[123] In his view, the city, as many others in Anatolia,[124] shrank significantly because of these external attacks and functioned as military outpost organized around a citadel and a few churches. In the mid-7th c. CE, Ankara was selected as thematic capital, a new administrative unit that was ruled by a military chief. According to Foss, the construction of the citadel was indeed the result of this change, and the new fortress was supposed to house the newly established military administration. As already seen briefly in the analysis of the bath-gymnasium complex and the fortification, Foss' observations about the urban development at Ankara may not stand a close scrutiny of the limited archaeological evidence at our disposal; on the contrary, the data available seem to point to some degree of urban continuity into the 9th c. CE. Below, I offer a review of the evidence for the Byzantine Citadel, the church of Saint Clemens, and that of the Temple of Augustus, which represent the main archaeologically known building projects of the 9th c. CE.

<u>The Byzantine Citadel</u>:

[123] Foss (1977), pp. 132-135.
[124] Foss (1975), pp. 242-275.

The citadel was built on a large andesite rock promontory (roughly 300 x 450 m, 13.5 ha) situated on the south-eastern edge of the Roman city (Figure 3.9, no. 5-6).[125] The structure, restored and enlarged several times over time, was severely damaged by a fire in 1916 and underwent three invasive restorations in the 1960s.[126] It was also never explored archaeologically in the modern era, and all the evidence available come from architectural surveys conducted in 1928 by de Jerphanion and in 1933 by Mamboury.[127] There are therefore substantial gaps in our knowledge of this important structure; for example, we have no data regarding its internal organization nor is there any information on the original design of the northern part, which was destroyed and fully reconstructed in the Ottoman Period. The complex consists of 2 parts: the upper citadel (Figure 3.9, no. 5) and the lower outer wall (Figure 3.9, no. 6), which runs southwest of the citadel. The upper citadel walls, which encompasses a 250x150 m area, are about 5 m thick, and were erected by means of large *spolia* from the Roman city (theatre, Late Roman fortification wall, and aqueduct among many)[128] (Figures 3.65-3.66-3.67) in the lower courses (mostly the outer face), while bricks and smaller re-cut *spolia* are employed for the upper courses (Figure 3.68). The total height of the structure has been calculated to be about 8-10m, with a 1:2 ratio (width: height).[129] The citadel was reinforced with 40 pentagonal towers (1 every 10 m), which had tapering sides and were about 12 m high (Figure 3.69). [130] The main entrance to the fortress was located in the southern side and it consists of a double gate with a court in between (Figure 3.70, C). The entrance to the court, however, was not placed in between the two

[125] Foss (1977), pp. 132-135. Serin (2011) contains a more up-to-date review of the evidence. Most of observations are, however, still based on De Jerphanion (1928) and Mamboury (1933).
[126] Peschlow (2017), pp. 358.
[127] De Jerphanion (1928) and Mamboury (1933)
[128] Peschlow (2015), pp. 139-184, for a full account of the *spolia* found in the masonry
[129] Serin (1998), p. 954.
[130] Foss and Winfield (1986), p. 134.

towers, but on the eastern side, between the eastern tower and the curtain wall, so that the second entrance to the fortress was located to the north, inside a courtyard protected on all sides (Figure 3.71). With this design, enemies who succeeded in forcing their way into the courtyard would find themselves not only completely surrounded, but also with the necessity of turning to the left in order to force the second gate. The southern side was not the only entrance into the fortress, as one postern was located on the western side and three other were on the eastern side (Figure 3.70, in between T2 and 13).[131]

The lower fortress wall is about 3.5 m thick, with mortared courses of bricks sitting on top of large stone blocks (*spolia*) (Figure 3.72). Towers are square (Figure 3.73) and they stand about 30 meters away from each other, while the main gate was erected on the southern side with a design similar to that of the upper citadel; two round towers flanked a small zwinger and an inner gate (Figure 3.70, D). A badly damaged second gate, located on the western section of the outer wall, was probably constructed in a similar fashion (Figure 3.70, E). The wall of the citadel and outer defence are connected in the south-eastern corner (Figure 3.70, B), where a polygonal bastion stands. This section of the fortress is poorly preserved, hindering a full understanding of the structure.[132] The bastion was also renovated a number of times, both in the Byzantine and Ottoman Period; for example, an open walkway (Figure 3.70, grey dash line area) was constructed in the Byzantine Period in order to connect the outer wall, bastion, and eastern wall, while a new outer face was added to reinforce the entire section of the wall (Figure 74, F and G). The date of this renovation is uncertain, but the consistency in style between the outer face just mentioned and the masonry of the citadel led Peschlow to suggest that this addition may have

[131] Serin (1998), p. 956.
[132] Peschlow (2015), pp. 144-145.

happened shortly after the erection of the inner citadel.[133] Regardless of whether Peschlow's argument holds true, the analysis of the bastion confirms that the inner citadel and the outer wall do not belong to the same phase of construction and that the outer wall was added to the complex later; the addition of the open walkway connecting the outer wall and the bastion as well as a further outer face show an attempt to link the two structures. The chronological discrepancies between the outer wall and inner citadel can also be confirmed by their differences in heights (3.5m vs. 5m) and in shape and spacing of the towers (square vs. pentagonal and 30m vs. 10m apart). Thus, we can conclude that the polygonal bastion (B), which belongs to the original design of the inner citadel, was later modified in order to link the outer wall and the inner citadel, but the absolute chronology of this renovation cannot be securely established.

By contrast, the date of the inner citadel is well understood on the basis of five marble inscriptions found in the masonry of the inner citadel; they celebrate the Emperor Michael III (842-867) as the founder of the city and *spatharokandidatos* Basileios, who was the *strategon* of the *Bucellarian* Theme. The inscriptions are now fragmentary, but texts and exact positions were recorded by Jerphanion during his architectural survey.[134] Three inscriptions were placed above the southern gate of the inner citadel (Figure 3.75) while the other two were situated near the corner tower in the southwestern part of the citadel (Figure 3.70, WT1), in a very prominent location for visitors approaching the citadel. The southwestern section of the citadel was mostly erected with marble *spolia* (Figures 3.76-3.77-3.78) most likely in order to dazzle the viewers entering from the main gate.[135] The inscription n. 2 (Figure 3.75), located above the southern

[133] *Ibid*., p. 144.
[134] De Jerphanion (1928), pp. 209, 282-284, 300-301. Peschlow (2015), pp. 139-186.
[135] Foss and Winfield (1986), pp. 186-187. Peschlow (2015), pp. 142-175.

gate and recorded by de Jerphanion, states that the city was (re)founded by the Emperor Michael III after having been destroyed by the Arabs.[136] The reconstruction of Ankara and Nikaia by the hand of Michael III are celebrated in tenth homily pronounced by the Patriarch Photios who praised the emperor for rebuilding the cities after the Arab sack in 838 CE.[137] Thus, the citadel appears to be constructed in the 9th c. CE by Michael III as part of a large rebuilding program that followed the Arabs invasions. [138]

A 9th c. date for the construction of the citadel challenges the chronology proposed by Foss, who suggested that the 9th c. CE structure was simply a restoration sponsored by Michael III, but that the first phase of the fortress was erected in the 7th c. as part of a large military reform issued by Constans II (641-668). According to Foss, the citadel functioned as headquarter of the newly established military administration and hosted a garrison of the field army.[139] Foss also adds that the fortress at Ankara is part of a group of 4 citadels (Sardis, Pergamon, and Ephesus) constructed under the aegis of Constans II after the Persian invasions. Although the citadels of Sardis and Pergamon are not securely dated, that of Ephesus has also been assigned to the 9th c. CE.[140] Additionally, in the group of four fortresses discussed by Foss, those of Ankara and Ephesus share the peculiar pentagonal design of the towers, an uncommon feature in the development of Byzantine fortifications, which most likely suggests chronological proximity.[141] More importantly, Foss' analysis was once again mostly based on historical circumstance -i.e. urban decline after the Persian invasions- rather than on archaeological and epigraphic evidence,

[136] De Jerphanion (1928), pp. 282-284.
[137] Jenkins and Mango, pp. 129-133 and Peschlow (2015), pp. 169-173.
[138] Peschlow 2015, pp. 185-186.
[139] Foss and Winfield (1986), pp. 89-92.
[140] Peschlow (2015), pp. 179-180.
[141] *Ibid*., pp. 179- 182.

which, by contrast, point to the 9th c. CE for the construction of the citadel. The absence of an archaeologically verifiable phase dated to the 7th c. and lack of suitable *comparanda* make therefore the chronology proposed by Foss unlikely. On the contrary, these elements lend further validation to the 9th c. CE as the date for the construction of the first phase of the inner citadel at Ankara.

The so-called church of Saint Clement, probably dedicated to Ankara's patron saint and local martyr (258-312 CE), was erected in the southern part of the city (Figure 3.9, no. 15), west of the Byzantine Citadel just discussed. The dedication of the church, suggested by Texier in the 1800s,[142] is currently under discussion and is not securely established; for example, Peschlow has recently underlined that there is no evidence that could suggest any connection between Saint Clemens and this church.[143] More importantly, the building stands inside the perimeter of the Roman city, and it was therefore not associated to the tomb of the martyr. Saint Clement, killed in the early 4th c. CE, was most definitely buried outside the city wall, according to Roman law, and his tomb cannot be located anywhere near the church. The building was also restored and reshaped several times, making the analysis of this structure particularly difficult to carry out. Currently, only the walls of the bema are still standing, and most of the information available was collected in the 1920s by Jerphanion and Zorer, a German architect employed by the Turkish administration.[144] By this time, the church had already become a mosque, but it was partially reconverted into an orthodox church by a community of Greeks living in Ankara during the late 19th c. CE. The structure was also burnt substantially in 1916 and left in disrepair after the war

[142] Texier (1862), pp. 195-200.
[143] Peschlow (2015), 191-192.
[144] De Jerphanion (1928), pp. 113–227.

between Greece and Turkey in the 1920s, when the local orthodox communities were forcefully resettled. The analysis of the building was carried out by several scholars in the past decades,[145] and has recently been updated with unpublished material from Zorer's rescue excavation in 1927 found by Peschlow at the Archaeological German Institute in Berlin.[146]

The church, constructed with mortared rubble and courses of bricks (Figure 3.79), was designed on a Greek cross plan (Figure 3.80) with a square central nave framed by four corner piers supporting a hemispherical dome with ribbed vaults (the so-called "pumpkin type") (Figures 3.81-3.82). The eastern section of the church was occupied by a barrel-vaulted bema and a semi-circular apse, while triple arcades each side connected the central nave with the side rooms located to the north, south, and west, where the entrance was situated. Other rooms were added to each corner of the church, but their function is yet to be determined.[147] The building did not have any galleries and lighting in the structure was provided by windows located on top of the triple arcades as well as four openings pierced into the dome. The church is only dated on the basis of style and there are no independent epigraphic or archaeological evidence to corroborate the chronology proposed in modern scholarship. The overall plan resembles the design of a group of churches in Nicaea and Dereağzi dated to the 9th and 10th centuries CE.[148] The "pumpkin dome" of the Church of Saint Clemens suggests a later 9th c. date due to its clear

[145] Serin (2014), pp. 65-92.
[146] Peschlow (2015), pp. 187-244.
[147] Serin (2014), pp. 65-92, and Peschlow (2015), pp. 187-244.
[148] Serin (2014), pp. 65-92, Serin (2011), pp. 1279-1280, and Peschlow (2015), pp. 240-244.

connection with the Pharos Church in the Great Palace of Constantinople, assigned to the year 864 CE.[149]

Finally, the Temple of Augustus and Rome was also converted into a church in the course of the 9th c. CE (Figure 3.9, no. 2), even though the building had probably been abandoned since the late 4th c., when paganism was banned by the Emperor Theodosius. The church occupied the *cella* of the pagan building and was constructed on a single aisle plan by lowering the original temple floor and carving windows into the long sides of the temple (Figure 3.83).[150] The eastern section of the temple was dismantled and replaced by an elevated structure covered by a barrel vault and a crypt underneath it (Figure 3.84). This annex, erected with an alternation of white and red ashlar masonry, could be accessed by two staircases located against the side walls of the nave (north and south), while the crypt was entered through another staircase in the middle of the church (Figure 3.85). The arrangement of this section of the church represents a unique design in Byzantine architecture without parallel. The only chronological indication on the construction of the church can be inferred from two inscriptions found inside the church; here, an abbot and a local governor, who may be the sponsor of this building, were commemorated. Both the inscriptions celebrating these notable citizens are dated to the 9th c., suggesting that the church may have also been erected in this period. After the Seljuk conquest in the 11th c. CE, the church was turned into a mosque, still functioning nowadays.

[149] Peschlow (2015), pp. 240-244.
[150] Serin (2014), pp. 70-80.

About 40 m north of the Temple of Augustus and Rome (Figure 3.9, no. 2a) a 50 m stretch of a wall was found through archaeological investigations.[151] The wall (4 m tall and 3 m wide), which runs approximately parallel to the northern side of the temple (Figure 3.86), is constructed with bands of bricks alternated by large ashlar blocks in the outer wall and small cut stones in the inner face. This technique resembles closely that of the Byzantine citadel discussed above, and it may therefore suggest a similar chronology -i.e. the 9th c. CE- for its construction.[152] The function of this structure is unclear, but its size and masonry seem to resemble a fortification that probably only surrounded the plateau on which the church sits (Figure 3.87).[153] *Comparanda* for this type of defensive wall are not common in Byzantine Anatolia and a full understanding of its development is hindered by the highly fragmentary evidence available at Ankara. The so-called Enclosure at Amorium (Figure 3.88), which is dated to the late 10th-early 11th CE, may however provide a suitable example for comparison. As we will see in the next section, the Enclosure was a large productive and residential part of the lower city at Amorium, which was reconstructed and fortified after the city wall had been destroyed in 838 CE.[154] Just as for the wall around the Temple of Augustus and Rome, the Enclosure at Amorium showed evidence for occupation of the lower city after the 9th c. military crisis. Ankara, thus, seems to fit a similar pattern of development; since the Late Roman fortifications had been destroyed in 838 CE, certain areas of the Roman city were restored and defended by individual walls in the later 9th c. CE, such as the Byzantine citadel discussed above and the plateau of the Temple of Augustus and Rome. The

[151] Peschlow (2015), pp. 36-46.
[152] Peschlow (2015), pp. 36-46.
[153] Iverson (2012), pp. 66-75.
[154] Böhlendorf-Arslan (2012), pp. 153-179. The date of the abandonment is well-established through the analysis of the destruction layer.

community settled at Ankara after 838 CE must however have been smaller than prior to the Arab invasions, as only a few sections of the city were still worth defending in this period.

Summary and conclusions:

The archaeological, epigraphic, and literary evidence available for Roman Ankara offer an incomplete picture of its urban development that leaves many open questions when looking at this important site. The data at our disposal, however, suggest that Ankara must have maintained a prominent role within Central Anatolia throughout most of its history; the site was first a major settlement of the Phrygians and Galatians, but it is with the creation of the Roman province of Galatia in late 1st c. BCE that Ankara became the center of a large and highly connected territory. The integration into the Roman World is well-visible in the development of Ankara's urban fabric; the most important Early Roman structure is certainly the Temple of Augustus and Roma, dedicated to the celebration of the emperor (re-)founder of the city. The Temple occupied a prominent topographic position –i.e. one of the highest hilltops-, towering over the rest of the city. Early Roman Ankara was also provided with other buildings typical of Roman provincial cities, such as a theater, a stadium, and a nymphaeum. The Severan Period seems to represent a second wave of substantial urban expansion at Ankara, since the bath-gymnasium complex, one of the largest of its kind, was erected in the north-western part of the city, reshaping a large section of its urban layout. The archaeological evidence available, however, only informs us about the development of some of the main public buildings and spaces, but it leaves us with very little knowledge about the street network and the overall urban organization. Only three small fragments of urban roads are known archaeologically; they were most likely planned at the time of Augustus and further monumentalized over time through the addition of colonnades and

marble pavements. The overall orientation of the streets, which is maintained throughout the centuries, suggests that the urban layout was not orthogonal but it followed the uneven topography of the site.

The later 3rd and early 4th CE centuries reforms radically transformed the society and organization of the Empire, which, by this time, had become Christian and more centrally administered. In this period, Ankara retained its privileged administrative and religious prominence, and the city was important in the region's church and political history. Ankara was not only confirmed the capital of the *Galatia Prima* Province, but it also became an important bishopric host of two major church councils. When we turn to archaeology, however, very little is known about the Late Roman city, and there is practically no evidence for the presence of churches despite the abundant data in the literary accounts. Urban fortifications were added to the city fabric (perhaps in 3rd c. CE), as well as several public buildings and streets were redesigned and restored during this period. As often happens during the Late Roman Period, major urban structures of the Roman city were decommissioned and dismantled to build new ones or repair others considered more important. For example, the stadium was taken apart and the materials retrieved were used to erect the Late Roman fortification and to renovate the bath-gymnasium complex.

Rapid urban development occurred in the early 20th c. at Ankara. It obliterated much of the evidence available for the Late Roman/Early Byzantine city; recent archaeological work, however, seems to suggest that both theater and the main monumental road were restored during or after the reign of Anastasius, as suggested by numismatic evidence. The lack of clear archaeological and epigraphic data after the late 5th/early 6th c. CE led modern scholarship to

suggest that the later 6th/mid-7th centuries CE marked a time of widespread urban decline at Ankara. In particular, Clive Foss argued that the Persian invasions into Anatolia were responsible for the destruction and abandonment of several Late Roman cities, including Ankara. Recent archaeological research throughout Asia Minor shows that Foss' argument often does not stand a close analysis of the available data, and Late Roman cities were often not affected dramatically by the Persian invasions, especially in Central Anatolia. Ankara seems to be no exception to this, but its post-7th c. CE development is often hidden in the fabric of later structures and they seldom offer a full picture of the city structures at Ankara. Urs Peschlow's recent book has suggested that post-7th c. CE Ankara may have remained a sizable settlement into the 9th c. CE. The reexamination of the Byzantine citadel, which has now been securely dated to the reign of Michael III, shows that the city was still defended by the Late Roman wall until the 9th c. CE, when it was destroyed by the Arabs and reused to erect the citadel. Other large public buildings, such as the bath-gymnasium, were still functioning through the 8th c. CE, even though it is not clear to what extent they were still in use. The use of the Late Roman wall in the 9th c. CE siege is particularly crucial in this argument, as the absence of a smaller circuit of defenses may imply that Ankara was populous enough to need a larger fortified area. Urban continuity in thematic capitals, such as Ankara, and their hinterlands is not uncommon in the archaeological record. As we will see in the next chapter, a prime example is Amorium, which maintained its Late Roman urban structures until it was destroyed in the 9th c. CE. In Cilicia, where Seleucia ad Calycadnum is located, the hinterlands surrounding the city were intensely occupied from the Late Roman Period until the 9th -10th c. CE.[155] The limited archaeological

[155] Varinlioğlu (2013), pp. 199-209.

explorations carried out at Nicaea also show that the Late Roman walls and (perhaps) the two main streets were still in use during this period.[156] This does not intend to suggest that post-7th c. CE Ankara was as populous as in the Late Roman Period, but that we may account for the possibility to the urban community residing here in the 9th c. CE was sizeable enough to need the Late Roman wall for protection. After the destruction brought by the Arab siege in 838 CE, Ankara was mostly abandoned, and the community that remained was most likely located around fortified hilltops (the newly built Citadel and the Temple of Augustus and Rome, for example).

[156] Peschlow (2017a), pp. 203-216.

CHAPTER 4: **Amorium: the planning of a Late Roman city**.

Introduction:

The city of Amorium lies beneath modern Hisarköy, a small village in the Province of Afyon, situated about 170 km south-west of Ankara (Figure 4.1). Hisarköy, which literally means "castle village", has been known to antiquarians since the 18th c. CE because of the large number of *spolia* scattered around the area.[1] The city was identified as ancient Amorium in the 1830s, when W. Hamilton visited the site during his journey in Central Anatolia.[2] As is noticeable from his writing, Hamilton's experience at Amorium was underwhelming, and the city was often neglected by later visitors traveling through the region in the following decades. Scholarly interest in the site was therefore limited until the 1980s, when C. Mango, a Byzantine historian from the University of Oxford, revisited Amorium and understood its great potential for the study of Byzantium.[3] The city, named capital of the largest administrative unit (*Anatolikon* theme) in the Byzantine Empire in the mid-7th c. CE, was one of the empire's most important urban centers as well as the birthplace of a new dynasty of Emperors in the 9th c. CE. Since the 1980s, Hisarköy has been the target of continuous fieldwork by two British teams led first by M. Harrison (1988-1992) and later by C. Lightfoot (1993-2009). Since 2013, a Turkish team, under the direction of Z. Demirel Gökalp, has resumed the archaeological exploration of the city. The examination of Amorium has provided fundamental (and often the only) information for the

[1] Lightfoot (2017), pp. 1-3.
[2] Hamilton (1842), pp. 454-455.
[3] Lightfoot C. and M. (2007), p. 66.

Invasions Period (7th-9th c. CE) as well as for the Middle Byzantine Period (9th-11thCE), two particularly understudied historical epochs. In this chapter, however, I will focus my analysis mainly on the evidence for the Late Roman Period (4th-7th CE) while considering the post-7th c. CE urban development at Amorium as well. First, I will provide brief discussions of the natural environment, the progress of the excavations, and the pre-Roman settlement history.

Geographical settings:

Amorium sits in the central part of the Anatolian Plateau at about 925-945 m above sea level, on a plain limited to the north by the Sivrihisar Mountains (50 km) and to the south by the Emirdağ mountain range (Figure 4.2).[1] The plain consists of low hills cut by the shallow valleys of numerous seasonal streams, which flow from the Emirdağ mountain to the north into the Sakarya river. The city of Amorium benefitted particularly from the waters of two streams, which ran respectively to the north and east of it (Figure 4.3). The city was not only supplied by their waters, but also by several wells, which tapped directly into the water table situated only 8.5 m under the ground level. The climate, typical of the high plateau, was characterized by cold and wet winters with heavy snowfalls, followed by hot and dry summers with frequent thunderstorms.[2] The geological conformation is predominately volcanic in origin, with a high concentration of basalt and andesite stones intensively employed for construction. Limestone, however, is also readily available, as well as good quality marble, which can be found in the vicinity of Amorium (Docimium, located only 40 km south).

[1] Lightfoot and Ivison (2002), p. 1-3.

[2] Stoops (1984), p. 38-50. For a fuller information on the environment in the region, see Chapter 2. Most of the studies are based on the surroundings of Eskişehir, located about 100 km north-west.

The fertile volcanic soil and the abundance of water allowed intensive cultivation of cereals, vegetables, and viticulture, as proven by specialized research conducted in the 1990s.[3] In addition, the vicinity to the Emirdağ mountain range guaranteed access to forested areas, which provided timber from trees such as pine, oak, and cedar.[4] Pastoralism and animal husbandry were also widespread in the area, as underlined by the study of the bones collected during the excavations; in particular, cattle, sheep, and goat seem to have been the most common species available, both in Antiquity and Medieval times.[5]

The city was also located in the vicinity of a major crossroads, which connected the Aegean Coast to the Anatolia inland (Figure 4.4). Two important extra urban streets linked Amorium to significant settlements such as Dorylaeum, Pessinus, and Ankara to the north and Apamea and Iconium to the south.[6] In particular, the road running NE-SW through Anatolia connects the northern Aegean Coast to the Cilician Gates, the main passageway from the Anatolian highlands (through the Taurus Mountains) into the southern-eastern plains toward Syria. For many centuries, this road was one of the main arteries across the region, and Amorium was therefore an important stop from travelers along it.

History of the excavations at Amorium**:**

As mentioned above, although the city of Amorium was known to antiquarians since the 18th c. CE, explorations of the site did not start until the late 1980s, when a project from the

[3] Harrison and Christie (1993), pp. 152-153. Also Lightfoot and Ivison (1995), pp. 91-110.
[4] Lightfoot and Iverson (2002), p. 1-3 and Ivison (2007), pp. 33-35.
[5] Lightfoot and Ivison (2002), p. 1-3.
[6] Ivison (2007), pp. 33-35.

University of Oxford began the survey and excavation of the visible city structures.[7] The first director, Martin Harrison, intended to gain more information about the Invasions Period (7th-9th centuries CE),[8] with the specific aim of investigating the extent and impact of the Arab invasions of the 9th c. CE. Harrison wanted to explore further the evidence available for the siege that occurred in 838 CE, which was lengthily described in the literary sources,[9] as well as to investigate to what extent the city survived in the following centuries. The site presented perfect conditions to achieve what planned by Harrison; Amorium not only lived its heydays during the Byzantine Period, but also never experienced extensive habitation after the Middle Ages. Archaeological explorations therefore focused almost entirely on large urban structures (Figure 4.3) resting below the surface, such the city wall, churches, and public buildings that belonged to the Byzantine Period.[10] The following campaigns directed by C. Lightfoot and Z. Demirel Gökalp did not change the research agenda of the project, and continued to provide significant information about the Byzantine Period.

Given the specific aim of this project, our knowledge of certain cultural development at Amorium prior to the Late Roman phases (4th-7th c.) is severely limited. For example, there is very little understanding of the Roman city (prior to the 4th c.), which is almost entirely known through numismatic evidence and some inscriptions reused as *spolia* in later structures (see below). Traces of pre-Roman occupation are even less clear, as we will also see in the next section. The absence of pre-Roman material is due to the limited explorations of the Upper City (Figure 4.3), which rests on a stratified *höyük*. The Byzantine remains in this part of the city,

[7] Lightfoot C. and M. (2007), pp. 13-21.
[8] Harrison (1991), pp. 215-229.
[9] Belke (1984), pp. 123-125.
[10] Lightfoot and Ivison (2002), pp. 5-7.

only superficially investigated, obliterated most of the earlier structures, leaving us with practically no evidence for them. Ground survey conducted in the Upper City, however, yielded some Iron Age material, suggesting that the *höyük* may have been occupied well before the Roman Period. In the following section, I offer a brief review of the evidence for the pre-Roman and Early/Middle Roman settlements.

Amorium before the Romans:

Archaeological explorations in the area revealed the presence of extensive human occupation since the 3rd millennium BCE,[11] but the first recognizable settlement at Amorium is most likely dated to the Hittite period (2nd millennium). The Bronze Age site here has been identified as Aura, an outpost located west of the Hittite heartland. Hittite presence in this area is also well-known through the investigations of nearby settlements such as Tezköy Höyük on Emirdağ mountains as well as Dorylaeum, located 130 km north-west of Amorium. The extent of Amorium/Aura is, however, completely unknown, and its recognition is mostly based on historical topography rather than archaeological evidence.[12] As discussed above, the site most likely rested on the *höyük* (Upper City), but the scant archaeological investigations have left us with no evidence for Hittite presence at Amorium.[13] The Iron Age is better documented than the Bronze Age, but it is still known only through occasional ceramic finds. In particular, surface survey on the sides of the Upper City yielded traces of Middle Phrygian painted pottery (Figure 4.5),[14] dated to the 7th/6th centuries BCE. Evidence for the Classical and Hellenistic Periods is

[11] Lightfoot C. and M. (2007), pp. 28-29.
[12] Lightfoot and Ivison (2002), p. 5.
[13] Lightfoot C. and M. (2007), pp. 28-29.
[14] Harrison (1989), pp. 206-207.

equally limited in both archaeological record and literary sources, suggesting that the site may not have been a major urban center in this period. Strabo simply named Amorium as a "Phrygian city",[15] while the earliest mention of the Amorium belongs to the Hellenistic Period, and it was recently found at Pessinus. This text, which is now securely dated to the 159 BC, records a letter exchange between the Attalids, their officials, and the Priest-King Attis from Pessinus.[16] The recent reexamination of this inscription suggested that Hellenistic Amorium may have been a settlement of mercenaries founded under the auspices of the Attalid dynasty during the 2nd c. BCE. According to literary evidence, the Pergamene kingdom relied extensively on mercenary forces to fight against the Gauls during the 3rd and 2nd centuries CE,[17] and new settlements, such as Amorium, were created in order to host these soldiers in times of peace.[18] Moving to the archaeology of Hellenistic Amorium, the evidence is extremely meager: while no urban structures from the Hellenistic Period have been uncovered, most of our information comes from a few fragments of terracotta figurines (Figure 4.6) and 4 coins (Figure 4.7) out of over 700 coins retrieved since the 1980s.[19] The largest find of the Hellenistic Period is a monumental tomb built with dry ashlar masonry and dated to the 2nd-1st centuries BCE; [20] the grave, recently discovered in the West Necropolis (Figure 4.3), was designed with large a chamber and a *dromos* (Figure 4.8). Thus, the information collected so far is too scanty to draw any further conclusion about the extent of the Hellenistic occupation at this site.[21]

[15] Strabo XII. 8. 13.
[16] Avram (2014), pp. 151-167.
[17] Diodorus 18.61.4–5.
[18] Polybius 5.78.5.
[19] Lightfoot (2016), p. 188.
[20] Lightfoot, Ivison, Şen, and Yaman (2009), pp. 208-210 and Lightfoot (2016), p. 188.
[21] Lightfoot (2016), p. 188

Roman Amorium:

The development of the Roman city is also mostly unknown, and large part of the evidence available is retrieved from coins as well as inscriptions reused in later buildings. The city was incorporated in the Province of Asia in 129 BC, and, during the reign of Augustus (27 BC), Amorium was granted permission to mint its own coins.[22] However, it is only during the early 3rd c. CE (reign of Caracalla) that emissions at Amorium became abundant (Figure 4.9).[23] The coins are mostly bronze (Figure 4.10), and they portrayed the emperor Caracalla on the *reverse* and a reclining river on the *obverse*. The river depicted is most likely the Sakarya (Sangarius), which ran part of its course in the territory of Amorium (Figure 4.2). The Sakarya/Sangarius was the largest river in the region and was heavily exploited for fishing; indeed, the analysis carried out on bones has recently demonstrated that fish remained an important part of the diet at Amorium well through the Byzantine Period.[24] In addition, depictions of fish hanging on a line appear often in tombstones from the Roman Period, suggesting that this activity was an important part of the economy of Roman Amorium.[25] Another coin emission also represented the emperor Caracalla (*reverse*) and a temple with an unidentified cult statue (*obverse*)[26] (Figure 4.11); the structure portraited on the coin may celebrate a temple at Amorium, which is unfortunately unknown.[27]

[22] Lightfoot C. and M. (2007), pp. 14-21.
[23] Katsari, Lightfoot, and Özme (2012), pp. 110-120.
[24] Harrison (1993), pp. 152-153 and Harrison (1995), pp. 124-127 and Lightfoot C. and M. (2007), p. 40.
[25] Lightfoot C. and M. (2007), pp. 40-42.
[26] Katsari, Lightfoot, and Özme (2012), pp. 110-120.
[27] *Ibid*., pp. 86, R13.

The examination of the inscriptions retrieved in Late Roman and Byzantine structures also gives us more information about the development of the Roman city. Although most epigraphic evidence consists of funerary inscriptions (in Greek) or tax collection records (6 in Latin), a long, inscribed marble architrave was reused in the narthex of a Late Roman church (Figure 4.12). The analysis of the text points to a Julio-Claudian date (either the Emperor Tiberius or Claudius)[28] and suggests the existence of a public building constructed in the 1st c. CE (T1661).[29] Unfortunately, in the absence of any other information about this structure, the size and function of such a building remain a mystery. In addition, a fragment of a possible small theater or *odeion* seat and a sundial were recovered within the masonry of the Byzantine citadel, located on the Upper City. The two elements may suggest the presence of further public structures, such as a small theater/*odeion* and a public square; indeed, sundials were often placed in open public spaces,[30] and that of Amorium may have shared the same location.

Other incomplete information about Roman Amorium comes from the investigation of the cemetery located to the SW of the urban area.[31] Here, tombs have different forms, ranging from rock cut *cists* to temple-like structures (Figure 4.13). The vast majority of the graves at Roman Amorium were, however, simply marked by tombstones, which have been retrieved in the fabric of later buildings where they served as *spolia*. Numerous doorstones (Figure 4.14), very popular within Phrygia, have been noticed and recorded in the masonry of the defensive wall of the upper

[28] The text reads …]ίομ καίσαρος Σεβάστου [… …]όνι Φρέψαντι καὶ[… The καίσαρος Σεβάστου (Caesar Augustus) has been tied to Claudius or Tiberius.
[29] Lightfoot (2017), p. 25.
[30] Talbert (2017), pp. 12-34.
[31] Lightfoot (2016), pp. 188-195.

city. Doorstones are a particularly distinctive feature of Roman-Phrygian identity,[32] and they seem to symbolize the door into the deceased's tomb.[33] The presence of several of these markers therefore suggests that the population of Amorium embraced this distinctive identity during the Roman Period.

The extension of Amorium's territory in the Roman Period is also partially known through inscriptions and milestones found around the city (Figure 4.15).[34] The *chora* seemed to have been bordered by the Emirdağ Mountains to the south and Sakarya River to the north, where inscriptions mentioning the city were recovered. This oblong, rectangular area is the passage from Dorylaion to Iconium, which are situated respectively north-west and south-east of Amorium.

To conclude, the evidence available for Roman Amorium does not provide any precise information about its urban fabric or development over time, but simply offers some fragmentary data for the overall identity of its citizens (Phrygian doorsteps), as well as for their economic activities (fishing and local coin emission). The presence of an inscribed marble architrave, the temple depicted on 3rd c. coins, a sundial, and a possible small theater/*odeion* seat, nevertheless, suggests that the city may have been provided with some of the urban structures typical of Roman provincial towns. However, the absence of visible traces for an aqueduct, bath, or a theater may also point out that this public infrastructure was not particularly extensive. In particular, large structures such as recognizable theaters and aqueducts can hardly be missed at a site that has been investigated archaeologically for about 30 years and has no major modern

[32] Kelp (2013), pp. 70-94.
[33] Waelkans (1977), pp. 277-315, and (1986), pp. 118-130.
[34] Lightfoot (2017), pp. 11-12.

settlement on top of it. For example, at Pessinus, where the extensive robbing has almost completely annihilated most public structures,[35] the theater, stripped of all its seats, is still a very distinctive feature in the landscape (Figure 4.16).[36] Here, the underground aqueduct was also spotted, and its route was partially traced during a very limited survey (3 weeks) of the Pessinunitan countryside.[37] Moreover, epigraphic records collected at Pessinus often speak of buildings that are no longer visible, such as a marble fountain along the main monumental road.[38] Facilities built in the Early/Middle Roman Period, such as public squares and amenities (baths and theaters), were still in use during the Late Roman Period,[39] and their absence at Amorium seems to be more than just a coincidence. Thus, the lack of visible structures or epigraphic testimonies for these large buildings reinforces the hypothesis that Amorium did not have extensive public infrastructure during the Roman Period.

Finally, the possible re-founding of the city that occurred at the end of the 5th c. CE,[40] discussed below in greater detail, may lend further support to this proposition. Cities were often founded and re-founded in the Late Roman Period[41] either through imperial sponsorship (primarily) or (rarely) initiative of the local communities (Orkistos in Phrygia and Tymandos in Pisidia).[42] The re-foundation of cities by the central administration almost always came with an expansion of the urban infrastructure; urban centers in Illyricum or in the Mesopotamian and Danube frontiers witnessed a substantial increase of their areas, which were sometimes almost

[35] See Chapter 2 for a fuller treatment of the urban development at Pessinus.
[36] Claerhout and Devreker (2007), pp. 74.
[37] Anderson Krsmanovic Negus-Cleary (in press).
[38] Strubbe (2005), p. 184.
[39] Mango (2011), pp. 239-262.
[40] Crow (2001), pp. 99-100.
[41] Rizos (2017), pp. 19-38.
[42] For Orkistos, see Thonemann (2013), pp. 35-37 and Rizos (2017), pp. 32-36.

doubled.[43] Even the re-founding of large sites such as Palmyra, a highly developed urban center already in the Roman Period, was accompanied by the planning of a new quarter sponsored by the Emperor Diocletian.[44] The meager evidence collected at Amorium seems therefore to suggest a scenario wherein the Roman city was both re-founded and enlarged considerably in the late 5th c. CE; as we will see in the next section, the analysis of the Late Roman structures demonstrated that they often do not rest on earlier buildings, and that certain urban areas were most likely developed for the first time from the 5th c. CE onward.[45] Thus, Roman Amorium does not appear to share the pattern of urban development observed in many cities of Anatolia,[46] where large public amenities had been erected since the Late Hellenistic Period. On the contrary, Amorium was most likely a smaller urban center that developed into its full form in the Late Roman Period.

The Late Roman City:

The archaeological investigations at Amorium provide a better understanding of the Late Roman phases (4th-7th centuries CE), as some of the city structures, such as fortifications, public buildings, and churches have been excavated in the past decades. As we will see, there is, however, still very little evidence for the overall development of the city, and important features such as the street layout and houses are almost entirely unknown. As mentioned above, the analysis of the data available suggests that the city underwent a major development in the late 5th

[43] Rizos (2017), pp. 19-38.
[44] Intagliata (2017), pp. 71-84.
[45] See, for example, the construction of the Lower City Church, Lightfoot C. and M. (2007), pp. 82-98 or the Late Roman/Early Byzantine unpaved road discovered in the Enclosure, Ivison (2007), pp. 41-45.
[46] Parrish (2001) contains the review of several cities situated on the Western and Southern Coasts of Asia Minor (Ephesus, Pergamon, Aphrodisias, Hierapolis, Perge, Xanthos).

c. CE, which may be directly connected with the imperial sponsorship.[47] Later literary accounts indeed present the Emperor Zeno (475-491 CE)[48] as the mythical founder (or re-founder) of the city in the late 5th c. CE, and it is possible that the new public structures appeared at Amorium in this period may be connected with this development.[49] Given the chronological distance between the literary sources (Cedrenus, 11th c. CE) and the time of Zeno, it is also possible that the 're-foundation' was due to the intervention of the provincial administration and local elites, and that the contribution of the emperor was simply a later and celebratory addition.

As noted above, re-foundation of cities (regardless of Imperial intervention) is not uncommon in the Late Roman Period, and the event was often marked by the planning of new public facilities as well as the maintenance and restoration of others.[50] The process of re-foundation was particularly embodied by the erection or enlargement of a city wall, which represents one of the most distinctive urban features of the Late Roman Period.[51] This development is well-attested in cities on the North-Eastern frontiers,[52] as recently reiterated by J. Crow in his analysis of new cities in Armenia.[53] In what follows, therefore, I will review the evidence available for Late Roman Amorium, in order to shed new light on the urban development of the site.

[47] Crow (2001), pp. 101 and Belke (1984), pp. 123-125.
[48] A review of the literary sources can be found in Belke (1984), pp. 123-125.
[49] Crow (2001), pp. 101. In particular, the later Byzantine writer Cedrenus (11th c. CE) mentions this story. See footnote 51, above.
[50] Recent research has shed new light on the general traits of urban development in the Late Roman Period. The literature is vast, but helpful synthesis can be found in Zanini (2003), pp. 196-223, Saradi (2006), pp. 147-352 Mango (2011), pp. 239-263, and Jacobs (2013).
[51] Jacobs (2013), pp. 19-110.
[52] Rizos (2017), pp. 19-38.
[53] Crow (2017), pp. 101-103.

Fortifications:

The city wall at Amorium was revealed by the archaeological investigations (Figure 4.3) conducted in the late 1980s in the south-western section of the city.[54] Here, severely disturbed remains of a gate and a triangular tower (Figure 4.17) were brought to light, showing evidence for large destruction and extensive robbing post-abandonment.[55] The data available point to a wall constructed with newly quarried larger ashlar blocks in the lower courses supporting smaller cut blocks facing a mortared rubble core (Figure 4.18). The wall was about 3.3 m thick but the upper courses are too poorly preserved to give any indication on the overall height. The wall of Amorium should therefore range between 10 and 13 m according to the 1:3 to 1:4 ratio mentioned in the previous chapters.[56] This structure encompassed the entire urban area of the Late Roman city, which was approximately 78 ha. The date of the fortification is well-established by three separate categories of evidence: 1) the pottery excavated in the court adjacent to the tower,[57] 2) the dendrochronological analysis of the timber recovered in the destruction layers within the complex,[58] 3) and the testimony of the Byzantine writer Cedrenus, who, as said above, mentions the Emperor Zeno as the founder of the city.[59] These data all

[54] Harrison (1991), pp. 220-222.
[55] Harrison (1991), pp. 220-222 and Crow (2001), pp. 99-100.
[56] See Chapter 2.
[57] Böhlendorf-Arlsan (2007), pp. 275-278.
[58] Lightfoot (1988), pp. 60-61.
[59] Belke (1984), pp. 123-125.

suggest the late 5th c. CE for the construction of the city wall, confirming that the fortification is most likely the central part of a re-foundation of city that happened in this period.

Further support for this date can also be found in the triangular design of the tower (Gate 1, called Trench AB) (no. 1 in Figure 4.3), which differs from the general development of the region; in Anatolia, Late Roman towers were mostly square or semi-circular,[60] and that of Amorium represents a significant variation. Triangular or pentagonal towers were mostly located in warzones, such as the Balkans (Dyrrachium) or Syria (Resafa), or in other Imperial re-foundations outside Anatolia, such as Thessaloniki (Figure 4.19). These walls were all constructed in the later 5th/early 6th c. CE,[61] and the new fortification of Amorium, therefore, seems to adhere to this pattern. It is, however, unclear why Amorium was chosen to become a new imperial foundation and, thus, to receive a "state of the art" fortification. 5th c. CE defensive walls are common in Anatolia,[62] but they never involve sophisticated designs as that of Amorium, especially in the relatively peaceful Central Anatolian Plateau. There is no clear answer to this question, but it is possible that the enhancement of the major highway connecting Constantinople to the Syrian border, which ran close to Amorium and was often crossed by

[60] Jacobs (2013), pp. 71-72.
[61] Crow (2001), pp. 99-100.
[62] Jacobs (2013), pp. 26-27. (Table 1.1).

various emperors, played a key role in this choice, leading Amorium to become a major fortified center of the Eastern Empire.[63]

The destruction of the wall is also well-attested through the excavation of the triangular tower, where evident traces of fire and debris, as well as weapons have been retrieved.[64] Recent reanalysis of the pottery found in the excavation, the numismatic evidence,[65] and the C-14 samples examined[66] all seem to point to a violent event that happened in the first of half of 9th c. CE, which could be associated with the siege laid by the Arabs in 838 CE. The final assessment of these data shows therefore that the Late Roman defensive wall at Amorium was in use through the Invasions Period, and it protected the entire urban area until this date.

Churches:

Churches at Amorium are a very distinctive element of the urban infrastructure in the Late Roman Period investigated extensively in recent decades. The surface survey of the visible remains in both the Upper and the Lower Cities identified no fewer than 4 churches, which were built and restored between the 6th and 10-11th centuries CE.[67] The so-called Lower City Church (Basilica A), the biggest Christian Basilica in the city, is located in the southern part of the city (Figure 4.3), and is most definitely one of the largest building projects undertaken in the Late

[63] Lightfoot (2017), pp. 333-334.
[64] Lightfoot and Ivison (2002), pp. 12-13.
[65] Böhlendorf-Arlsan (2007), pp. 275-278.
[66] Lightfoot and Ivison (2002), p. 13.
[67] Lightfoot C. and M. (2007), p. 45.

Roman Period.[68] This church was renovated substantially over time, but archaeological research conducted recently suggests that the original structure was a three-aisled basilica (ca. 20 x 35 m)[69] (Figure 4.20) oriented SE-NW with a tripartite narthex bay (western side) and a semi hexagonal apse[70] (eastern side). The church was built with large limestone ashlar blocks revetted with marble on the inside (Figure 4.21). The floors, reconstructed numerous times over the centuries, were *opus sectile*, designed with many colourful marbles (Figure 4.22).

Even though the final publication is still in progress, preliminary analysis of the building techniques and finds seems to suggest the late 5th early 6th centuries CE as the date for its erection.[71] It would be therefore tempting to associate the construction of this church with (or shortly after) the planning of the fortification wall. In particular, the absence a clear Roman phase of occupation in the southern part of Amorium may suggest that the city was expanded in this direction at the time of the construction of the fortifications; the planning of the church may therefore belong to the earliest development of this urban area. Recent research on new Late Roman urban foundations also confirms that churches were certainly a central element in the designing of new cities, as detailed in the study of Dara/Anastasiopolis in 505 CE, and Basilica A may be part of the new urban design.[72]

[68] Ivison (2002), pp. 37-38.

[69] Lightfoot and Ivison (1998), pp. 372-373, Ivison mentions "an aisled" design for the Phase 1 of the church.

[70] Harrison (1991), pp. 222-223, the excavators mention the presence of an earlier, circular structure, under the apse. It is unclear from the description whether it is an earlier phase of the apse or simply part of the foundation.

[71] Lightfoot C. and M. (2007), pp. 84-85.

[72] Keser-Kayaalp and Erdoğan (2017), pp. 153-175.

The church was severely damaged by fire and partially destroyed sometime before the late 9th- early 10th c. CE, when the building was substantially reconstructed.[73] Although the destruction layers were mostly cleared away during the late 9th- early 10th c. CE renovation, and the exact date of the destruction is therefore difficult to determine, the *terminus ante quem* – of the late 9th- early 10th centuries CE- may offer some further information about its downfall. As seen above for the city wall, the siege laid by the Arabs in 838 CE left extensive evidence for destruction in the fortification, as well as in the "Enclosure," a large commercial and residential compound that will be analysed in greater detail in the next section (Figure 4.3).[74] It is therefore probable that Basilica A was also damaged in this event and left in disrepair for a couple of generations (from 838 CE to the late 9th c.), until the reconstruction took place. Further confirmation of this reading comes from the analysis of the Enclosure, where damage was not repaired until the late 10th-early 11th c. CE. The gap in occupation clearly underlines the significant impact of the Arab destruction, which negatively affected the city life of Amorium.[75] The 9th-10th centuries CE, however, seem mark a phase of reconstruction, as both the Lower City and the Enclosure were re-occupied extensively.

Archaeological investigations also revealed the presence of another church (Basilica B) (Figure 4.23), located in the north-eastern corner of the Upper City (Figure 4.3), an area of the city that had been only superficially explored until recently. Here, fieldwork was only conducted briefly in the late 1980s early 1990s, but was resumed in 2013 and is currently ongoing. The results available at present are therefore preliminary, but they show the existence of a three-

[73] Lightfoot C. and M. (2007), pp. 84-85.
[74] Ivison (2007), pp. 5-151.
[75] Ivison (2002), pp. 49-54. and Lightfoot (2017), pp. 333-341.

aisled church oriented E-W (Figure 4.24).[76] The focus of the excavation was the eastern side of structure, where a semi-circular apse is located, and its stratigraphic relationship with the fortification of the Upper City, which is discussed below.[77] The analysis of the structure underlined traces of robbing post-abandonment, as well as the presence of 4 graves located east of the apse. Deep soundings were carried out to clarify the relation between the wall and the church, but the examination of the materials is still underway and no date is available at this point.[78] As we will see below, the construction of the citadel is most likely dated to the 7th c. CE,[79] which provides a probable *terminus post quem* for the erection of the church.

Public Buildings:

Late Roman Amorium does not offer significant information about the development of public spaces. For example, the street layout is almost completely unknown, and only two roads have been roughly understood through excavation. As we will see in next sections, the first known road is an unpaved one within the Enclosure (Figure 4.25), while the second street is a small section of a path leading from the Lower City to the manmade hill (Upper one) (Figure 4.26). Evidence for Late Roman public buildings is, however, available at Amorium, and I will focus particularly on the development of three structures: the so-called Large Late Roman Building, the bath, and the Enclosure.

The Large Late Roman Building:

[76] Demirel, Erel, Tsivikis, Yaşar (2014), pp. 199-214 and Demirel, Erel, Tsivikis, Uygun (2015), pp. 451-460.
[77] Demirel, Erel, Tsivikis, Yaşar (2014), pp. 202.
[78] *Ibid.*
[79] See Section on the citadel below.

This structure, situated about 200 m south-west of the main gate (Figure 4.3), was excavated in an area of about 50 x 50 m for two seasons in the late 1990s, revealing a large building of unknown function whose plan is still largely unclear (Figure 4.27).[80] It was constructed with sub-ashlar blocks and bricks facing a core of rubble (Figure 4.28), but it was frequently renovated. The excavators were not able to recognize clear signs of floor levels, but they identified foundation trenches for the side walls, which are preserved up to a height of 4 m. The edifice was dated to the late 5th-early 6th c. CE, but the discussion of the finds is limited to unpublished pottery sherds analyzed through photographs by J. Hayes.[81] The building techniques just described, however, seem to confirm this date, which remains, nonetheless, tentative.

Since 2014, the new project directed by Z. Demirel Gökalp has resumed the excavation of the structure north of the previous trench, highlighting a new section of the building (Figure 4.29).[82] The excavations showed the presence of a vaulted rectangular room flanked by 8 narrow niches, which were full of the debris from the collapse of the structure. No examination of the finds is yet available, but the size and design of the building may suggest a public function. Such a hypothesis is reinforced by its location, which is in relative proximity of the main gate (Figure 4.3). If this were to hold true, it is possible that the Late Roman public and religious structures were situated in the southern part of the city, as not only the "Large Late Roman Building" but also the major Basilica and the bath were located in this general area (Figure 4.3).

The Bath:

[80] Harrison (1989), pp. 171-173 and (1990), pp. 209-213.
[81] Harrison (1989), pp. 172.
[82] Demirel, Erel, Tsivikis, Yaşar (2014), pp. 199-214 and Demirel, Erel, Tsivikis, Uygun Yazıcı (2015), pp. 451-460.

This structure (Figure 4.3, no. 8) was discovered and almost entirely excavated in the late 1990s-early 2000s (Figure 4.30). The bathhouse, renovated substantially over time, was built with mortared cut stone and bricks, and it consists of a rectangular space (ca. 20x8m) (Structure 1) divided into 6 rooms oriented NE-SW, as well as water circulation and heating systems. Additionally, a circular annex[83] (ca. 10 m in diameter) (Structure 3) was planned on the north-western side of Structure 1, where a door connected the two buildings.[84] This complex was accessed from the south-eastern side, and it functioned as an entrance hall for the bathing facility located in Structure 1. The internal space in Structure 3 was circular, and it was occupied by a round stone stylobate which supported 6 marble columns; 6 niches were also opened into the side walls, which were erected entirely out of bricks revetted with marble (Figure 4.31). The side walls and the columns provided a base for arches across the whole structure, which was covered by a vaulted roof. Similar designs are common in Late Roman architecture[85] and they are also employed in buildings with different purposes, such as martyria or baptisteries.[86]

As said above, Structure 1 contained a series of 6 rooms oriented SE-NW (Figure 4.30). Visitors would enter the complex from Structure 3 into a rectangular room (F1) and proceed south into the *frigidarium* (F1) or north into the latrines (La); room V, which is situated in the north-east corner of the structure, was a rectangular vestibule that provided a second access into the complex. Moving westward from the *frigidarium*, there were the heated rooms T and C

[83] Walls of the Structure 3 are not a fully circular, but it is designed as a polygon of 18 sides inscribed in a 10 m diameter circle.
[84] Lightfoot, Arbel, Ivison, Roberts, Ioannidou (2005), pp. 233-241.
[85] Sanders (1999), pp. 441-480
[86] Lightfoot C and M (2007), pp. 130-131.

(*tepidarium* and *calidarium*), which were revetted with beautiful marble slabs from Docimion and Greece.[87]

Ceramic and numismatic evidence suggests that the complex (Structures 1 and 3) was erected in the first half of the 6th c. CE on the ruins of a previous building,[88] while a major renovation was undertaken in the mid-8th c. CE.[89] The earlier structure can no longer be identified or dated properly, but archaeological excavations demonstrated that it was levelled to make way to the foundations of the bathhouse. In the mid-8th c. CE Structure 3 was spoliated, its entrances blocked, and the building abandoned (Figure 4.30). Structure 1, one the other hand, was significantly renovated with the aid of *spolia*, and the entrance to the building was moved to the north-eastern vestibule mentioned above (Figure 4.30, room V). The reasons behind the abandonment of Structure 1 are still unknown, but it is clear that external causes (violent destruction by fire or natural disasters) did not play a role in this development. The hall was probably decommissioned owing to socio-economic motives, which made this section of the building no longer necessary.[90]

Structure 1 was violently destroyed in the 9th c. CE, as extensive traces of fire have been uncovered in context with early 9th c. CE pottery and coins (Michael II, 820-829 CE). Just as the fortifications and the Basilica A, it is possible that also the bathhouse was destroyed during the siege laid in 838 CE by the Arabs.[91] The building was partially reoccupied in the second half of

[87] *Ibid*. pp. 138-139.
[88] Ivison (2007), pp. 19.
[89] *Ibid*., pp. 239-241. The date has been suggested on the basis of pottery and coins found in the robbers' trench in Structure 3.
[90] Lightfoot C and M (2007), pp. 130-131.
[91] *Ibid*. pp. 138-139.

the 10th c. CE, but the bathing facilities were never restored and building was used for different purposes.[92]

The Enclosure:

The so-called Enclosure is a polygonal fortified compound (Figure 4.3) located in the heart of the Lower City. This structure was the target of extensive excavations between the 1990s and 2000s, and they have revealed key information about the Middle Byzantine phase of the city. Archaeological investigations revealed that the complex was erected in the late 10th/early 11th (Figure 4.32), after large portions of the Lower City had been given up.[93] Further examinations have also brought to light evidence for long term occupation of this urban area, which dated well before the late 10th-early 11th c. CE (including the bathhouse discussed above). For example, traces of two severely damaged structures (Structures 2 and 4),[94] located respectively south and east of the bathhouse (Figure 4.33), were uncovered in the early 2000s. Additionally, both bathhouse and Structure 2 were erected over even earlier buildings, which can no longer be identified or dated securely (Figure 4.34).[95] The finds collected from the foundation layers of the bathhouse and Structure 2 point to the 6th c. CE as a *terminus ante quem* for the destruction of the earlier buildings, for which only a few walls are known.

The poor preservation of Structures 2 and 4 severely limits our understanding not only of these buildings, but also of the overall Late Roman occupation of this area. Structure 4 (oriented SW-NE) is rectangular in shape and erected with cut limestone facing a mortar core, but the remains

[92] Lightfoot, Arbel, Ivison, Roberts, Ioannidou (2005), p. 241.
[93] Ivison (2007), pp. 15-98.
[94] *Ibid*., pp. 24-26, contains the discussion of the excavations conducted in this area.
[95] Ivison (2007), pp. 19-20 dates these buildings to the 4th- early 6th c. CE only on basis of the chronology of the bathhouse. Since the bathhouse was built in the 6th, the previous structures must belong to an earlier period.

are too badly robbed to offer an interpretation of its function. Structure 2 was constructed with similar techniques and also oriented SW-NE. This building is designed with a series of three rooms (I-II-III) constructed with mortared limestone blocks and paved with stone slabs. Sondages carried out north of rooms I-III revealed the presence of two tile water channels running parallel to the structure. The channels are downhill from the bathhouse, and it is possible that they were part of the sewerage system that cleared waters from the bathhouse.[96] It is, however, unclear what function the rest of the complex had, given the scanty evidence available.

The area underwent a significant renovation during the Invasions Period (7th-9th c. CE).[97] In general, this urban quarter seems to have become more densely occupied in this period (Figure 4.35), with the erection of new structures as well as a possible productive center for the production of wine in Structure 2. A street, running east of Structure 4, was also identified through excavation in this area. Structure 2 was reshaped extensively, with the construction of new rooms in the eastern part of the complex, as well as the laying of a new mortar pavement. The building was also equipped with several tanks (Installations A, B, C, D, G, and H) of about 2.50 x 1.34 m, located in the eastern rooms (Figure 4.36). The excavation of the pavement shows the presence of numerous surfaces, which have been laid out since the mid-7th c. CE according to ceramic finds.

[96] Ivison (2002), pp. 40-48.
[97] Ivison (2007), pp. 30-60, contains the discussion of the evidence for this phase (7th-9th CE) of the Enclosure.

The space south of the Bathhouse (Trench XB, rooms 5-11) was redeveloped entirely in the 7th c. CE (Figure 4.35);[98] the complex presents a series of rooms forming an L-shape design around a courtyard (no. 31), which was paved with hard cobblestones. The walls of the structure were constructed with courses of rubble and *spolia* bound together with mud and leveled with brick fragments; the upper parts of the walls were instead erected with mud bricks. The function of this complex is unclear, and most of the finds recovered belong to the roof (charred wooden beams and broken tiles) found in a large destruction layer dated to the 9th c. CE.

An 18 m stretch of the road, oriented NE-SW, was also excavated in the early 2000s (Figure 4.37). The street is located in the middle of the complex, and it is tapering slightly in the southern part of the Enclosure, which makes its width inconsistent (3.5-5 m ca.). Archaeological explorations mostly targeted the Middle Byzantine phase of the street, but a 9th c. CE destruction level was uncovered in some sections of the excavation. Further but limited investigations of the pre-destruction phase of the street suggest that it was not paved with large stones, but was covered by small size stones and crushed bricks and tiles (Figure 4.38).

The area east of the road (Figure 4.35) was also occupied by a series of structures (19-20-42-43-44) arranged around some courtyards (40-41) and alleyways (18). In particular, two tanks (Installations E and F) constructed with water-proof mortar signaled the presence of production activities (Figure 4.39). E. A. Ivison suggests that this sector could be part of a large winemaking facility, where the installations in the southeastern part of compound (A, C, D, G) functioned as presses, while Installations E and F have been identified as grape treading floors, where the grape must was collected. The identification of Installations A, C, D, G as presses was

[98] Ivison (2007), pp. 34-39.

also confirmed by the discovery of massive stones, which may have been used as press weights. A similar facility has been uncovered at Hierapolis in Phrygia, and it is dated to the 11th- 12th centuries CE.[99] If this interpretation held true, the structure at Amorium would be a rare example of wine production within an urban center. Winemaking facilities were almost entirely located in the countryside,[100] where the productive activities were not constricted by the limited space available in a city. Additionally, the progressive appearance of agricultural production within a city often corresponded to the widespread abandonment of the urban area, which does not seem to be case for 7th c. Amorium.[101] The reasons behind this choice, therefore, remain a mystery, but it is possible that the newly acquired status of capital as well as the stationing of a garrison within the city may have played a key role in this development. The new imperial and military administrations residing at Amorium may have indeed represented a further economic driver that allowed the establishment and success of this productive activity within the city limit.

The complex was heavily damaged in the early 9th c. CE by a large fire, as demonstrated by the ash layer found throughout the entire complex (bathhouse, street, and production center). Just as for the other structures at Amorium, this destruction has been associated to the siege laid by the Arabs in 838 CE. The area was then left in disrepair for over a century, and only in the late 10th/early 11th these structures were re-erected and the compound fortified.

Citadel:

[99] Arthur (2006), pp. 134-136.
[100] For wine presses in Anatolia, see Sivas (2003), pp. 1-16.
[101] Ivison (2007), pp. 40-49.

The fortress was erected on the north-western side of the city, on the Upper City mound (Figure 4.3). The citadel was designed with an irregular shape, and it covers an approximate area of 300 x 200 m. As mentioned above, the complex has only been superficially explored through archaeological excavations, and most of the information at our disposal come from Trench L, a 25 x 13 m area located on the southern part of the citadel (Figure 4.40). Here, a stretch of the fortification wall, a rectangular tower, a gateway, and a street were uncovered between late 1980s and early 1990s.[102] These features underwent a significant development over time, and only the last phase (so-called *Phase 3*) can be properly understood and dated securely. *Phase* 3 has been certainly associated with the reconstruction that happened in the second half of the 9th c. CE, when the complex was probably renovated after the Arab siege (838 CE).[103]

The street may represent the oldest known feature of the Upper City (*Phase 1*) (Figure 4.41);[104] archaeological examination revealed a 2.10 m wide street paved with grey limestone, which can be only dated (*terminus post quem*) through a *follis* of Julian found under its paving. The road leads from the Lower City into the Upper one, and it seems to run toward south along the slope of the mound.[105] The stretch of the street explored archaeologically is, however, too limited to provide a more complete picture of the street grid in this urban area.

[102] Harrison (1991), pp. 219-221.
[103] Ivison (2000), p. 14-18 and Lightfoot and Ivison (2002), pp. 16.
[104] Lightfoot and Ivison (2002), pp. 15-17.
[105] Harrison (1991), pp. 219-221.

The fortification wall was also renovated substantially over time, and the original structure is not fully understood and securely dated.[106] Excavations in Trench L demonstrated that a wall was built with large Roman *spolia* facing a core of rubble and mortar. The upper part of the wall was completely looted, leaving us with very little information about the overall structure.[107] A later renovation (*Phase 2*) of this complex was undertaken sometimes before the 9th c., but no certain date for this has been established so far. The examination of this construction phase showed evidence for the erection of two rooms (Figure 4.42) inside the defensive wall, as well as to planning of a small alley in between them.[108]

Phase 3 is, by contrast, better known archaeologically, as mentioned above.[109] The new structures were constructed on top of a compact levelling layer of Hellenistic and Roman materials mixed with rubble; the complex was almost completely re-designed, as a rectangular tower oriented N-S was erected on the southern side of the complex, while a courtyard was laid out over the two rooms in *Phase* 2 (Figure 4.43). The fortification wall was also re-erected; it was about 2 m thick and strengthened with buttresses placed 3 m apart as well as 24 small rectangular towers located at intervals of about 25 m (Figure 44). Two smaller forts were placed in the south-west (30x50m) and north-east[110] corners in order to reinforce the joints between the

[106] Ivison (2000), p. 14-18.
[107] Harrison (1991), pp. 219-221 and Lightfoot and Ivison (2002), pp. 15-16.
[108] Lightfoot and Ivison (2002), pp. 15-16.
[109] *Ibid.*
[110] Measurements for this construction are not provided.

lower and upper walls. 4 gates gave access into the structure, and they were located mostly on the eastern side, which overlooks the lower city. The inside of the citadel is almost entirely unexplored, and the Basilica B is the only feature known archaeologically through archaeological excavations.

As discussed above, the dating of the complex is still largely unknown, and only the chronology of *Phase* 3 can be securely associated to the second half of the 9th c. CE. This renovation is most likely part of a large reconstruction project that took place after the Arab siege in 838 CE. By this time, the Late Roman fortification wall had been given up, and only small portions of the urban area, such as the citadel and the enclosure, were fortified. The chronology of *Phases* 1 and 2 is uncertain, and only a *terminus post quem*, the *follis* of Julian recovered under the street level, and a *terminus ante quem*, the mid-9th c. for the erection of *Phase* 3, are secure. Citadels, however, are a common feature in the Late Roman East, and they seem to represent the answer from local communities to the need of further security. Analysis conducted on similar structures in the Roman East seem to suggest that most citadels belong to the 7th c. CE,[111] and it is therefore possible that also that of Amorium was erected during this century. In

[111] Niewöhner (2007), pp. 135-138.

particular, the excavators assigned the fortress to the 640s, when Amorium became the thematic capital of *Anatolikon* Theme and housed the field-army of this theme.[112]

Summary and Conclusions: the post-Roman development of a Roman City:

The examination of Amorium provides us with crucial information about the long-term development of urbanism in Central Anatolia. Archaeological investigations failed to uncover substantial evidence for a large urban settlement in the Hellenistic and Roman Periods. If the Hellenistic Period only yielded sporadic ceramic finds and a monumental tomb in the city hinterland, the Roman Period showed evidence for the presence of some urban structures, such as a small *odeion* and other public buildings. However, the absence of visible large public structures such a substantial theater, an aqueduct, and a temple suggests that the urban infrastructure of Roman Amorium may not have been particularly extensive. By contrast, the Late Roman Period marked a time of great urban expansion at Amorium; in the late 5th-early 6th c. CE, a large Christian Basilica, a massive fortification wall, a bathhouse, and a large public building (*Large Late Roman Building*) were added to the fabric of the city. They are mostly located in the southern part of Amorium, suggesting that this area may have been underdeveloped during the previous period. This expansion might be tied to the Imperial sponsorship, as underlined by the literary sources as well as by the size and shape of the fortification wall. In particular, the erection of a triangular tower, an uncommon feature in the regional architectural tradition, resembles that of Imperial foundations in the eastern frontiers. It is unclear why a small, provincial town in peaceful Central Anatolia would have been selected to

[112] Harrison (1991), pp. 215-216 and Lightfoot and Ivison (2002), pp. 15-16.

receive such a type of defenses, but it is probable that the location of Amorium, situated off a major highway that connects Constantinople to the Antioch on the Orontes, played a key role in this choice.

The late 6th and 7th centuries CE marked a period of general decline of urban life in Anatolia, as many cities were abandoned or reduced dramatically in size. As we have seen in the previous chapter, Pessinus was extensively abandoned in the mid-7th c. CE, and its urban size went from 80 ha ca. to a few blocks located in the Roman city center and a fortified citadel. Amorium, by contrast, did not seem to experience a similar contraction in urban population; the fortification wall was still defending the city during the siege laid by the Arabs in 838 CE, as well as the Basilica, the bathhouse, and the Large Late Roman Building were still in use until the 9th c. CE. Probably in the 7th c. CE, a fortified citadel was constructed on top of a manmade hill (the Upper City); citadels were often built by local communities in search of further security, but, for the case of Amorium, its erection seems to correspond to the stationing of a military garrison as well as the establishment of the thematic capital here. Further archaeological investigations also underlined the development of a winemaking facility just south of the Upper City (in the so-called Enclosure area) in the same period. Productive centers of this kind are very rare within city limits, and they often mark a progressive ruralization of the urban area. This, however, does not seem to be the case at Amorium, and it is possible that the presence of a new military and administrative center played a role in the development and success of this productive center.

The rest of the city structures seem to be occupied during the Invasions Period (7th – 9th c. CE), and only the monumental entrance of the bathhouse was blocked off and abandoned. This alone, however, cannot be taken as a sign of decline of public structures, but most likely reflects

a cultural change. The bathing facility was in fact renovated in 8th c. CE and it was still well in used until the early 9th c. CE, suggesting continuity of occupation.

The year 838 CE marked a sudden change in the urban fabric of Amorium, as the city was besieged and sacked by the Arabs. The archaeological record shows incontrovertible evidence for a widespread destruction, mostly signaled by large burnt layers and architectural collapse. The triangular tower, the citadel, the Christian Basilica, and the bathhouse were all extensively destroyed in this event. After the Arab siege, parts of the urban structures were reconstructed in the later 9th c. CE, but several areas were abandoned and quarried for material. Just as seen for Ankara, only a few urban areas were fortified and re-inhabited; this is the case of the citadel, which was re-erected in the later 9th c. CE, and of the so-called Enclosure (late 10th – early 11th c. CE), a fortified compound located just south of the citadel. The Late Roman fortification wall and bathhouse were never repaired, and large portions of the Late Roman city were never re-occupied. In the later 9th c. CE, the population of Amorium was much smaller, while most of the public structures constructed in the Late Roman Period were no longer in use.

Amorium reached its peak of urban extension in the Late Roman Period, when a new set of large public structures were added to the urban fabric. In the 7th c. CE, when most nearby cities declined as result of a generalized crisis, Amorium remained occupied, most likely as a result of the establishment of the new thematic administration (mid-7th c. CE). This event may also have led to the development of a productive center within the city limit, a rare occurrence in ancient cities. Thus, the Invasions Period do not represent a time of urban decline at Amorium, as noticeable at other nearby sites such as Pessinus, but a period of continuity, where the city maintained its population and infrastructure. The city declined significantly only in the mid-9th

c. CE, as result of the Arab siege; indeed, this effectively marked the end of the Late Roman city and urban life at Amorium, which, by that time, was inhabited by a significant smaller community living in fortified compounds

CHAPTER 5: **Concluding remarks: The Late Roman cities in Galatia**

In the previous sections, we have examined the evidence for the development of three Central Anatolian cities, Pessinus, Ankara, and Amorium, between the Bronze Age and Middle Byzantine Period. This analysis has underlined the long-term settlement history in this region, a topic often neglected by modern scholarship, which has mostly focused on the southern and western coasts.[1] To summarize, we have concluded that all the sites examined show clear signs of occupation from the Bronze Age onward, but the limited data available do not provide enough information to reconstruct the size and organization of the settlements before the Late Hellenistic and Roman Periods. For example, considering the Bronze Age, the most significant traces of occupation can definitely be found at Amorium, where a stratified *höyük* has been located under the so-called Byzantine Upper City. Unfortunately, the Upper City was never the target of extensive excavations, and all our evidence comes from occasional ceramic finds and textual sources. According to the latter, Amorium could be identified as the Hittite site of Aura, an outpost situated on a major road leading from the Central Plateau, where the heartland of the Empire was located, to the Aegean Coast. Archaeological explorations at Pessinus also yielded traces of Hittite material culture, but the finds recovered could not be associated with any structure. Traces of Bronze Age occupation at Ankara, on the other hand, are mostly located in

[1] The number of works on the topic is extensive. For an overview, see Parrish (2001).

the region around the city, leaving us with practically no information about the presence of any settlement in this period.

The Iron Age represents a period of significant change in Central Anatolia. After the collapse of Bronze Age societies,[1] this region seems to fall under the control of the Phrygians, who had their capital at Gordion, a fortified settlement located ca. 90 km west of Ankara.[2] Phrygian material culture is only slightly better documented than previous periods in the archaeological record of the cities considered; explorations at Pessinus, for example, yielded a small amount of Phrygian material, and most of the finds from this period were retrieved from surface surveys conducted in the countryside. This seems to be in opposition to later literary accounts, in which Pessinus was reported to be a major Phrygian center, known mostly for being the main seat of the goddess Cybele.[3] However, a larger settlement of this period was located 13 km north of Pessinus, in a mountain site called Tekören.[4] The considerable amount of Phrygian material collected here as well as the extensive architectural remains noted on the ground led Prof. G. Tsetskhladze to suggest that Tekören was indeed the main Phrygian center of this area. The site of Hellenistic/Roman Pessinus, situated in the valley just below Tekören, may have therefore been a secondary site during the Phrygian Period whose size and extent remain unclear.

Ankara and Amorium also showed little evidence for Phyrgian settlements; if, at Amorium, only a few sherds of painted Phrygian pottery were retrieved during the surface survey of the city, at Ankara the data for this period comes almost entirely from excavated *tumuli*. It is

[1] The literature on this topic is extensive, but a discussion for the specific case of Central Anatolia can be found in Marek (2016), pp. 68-99.
[2] For an overview of the site of Gordion, see Kealhofer (2005) and Rose (2012).
[3] Claerhout and Devreker (2008), pp. 26-27
[4] Tsetskhladze (2009), pp. 707-708

therefore impossible, at this state, to make any further consideration on the settlement history of the Phrygian Period in these locations.

Equally elusive is the evidence for the integration of this region into the Achaemenid Empire (mid-6th c. BCE), mostly a short passage in Herodotus' *Histories*; the Greek author reports that the Royal Road, leading from Susa to Sardis, crossed Phrygia in the vicinity of Ankara. Better archaeological evidence for Achaemenid presence in Central Anatolia has been found at Godion, where the Achaemenid local administration was most likely located.[5] Clearer data on settlement development in Central Anatolia belong to the 3rd c. BCE, a period characterized by a movement of Gallic tribes into the region. Recent studies on the topic seem to suggest that the Galatian migration led to the re-settlement of three tribes in Central Anatolia (Tectosages, Trocmii, and Tolistobogii), which were based in Ankara, Tavium, and Pessinus respectively. Unfortunately, Galatian settlements have not been extensively studied or excavated, but they seem to be located on fortified hilltops. L. and A. Vardar have documented the position of some of these hilltops, which were placed in strategic places around the entire Central Anatolian Plateau.[6] Ankara seemed to have been one of the key centers for the Galatians, but its size and design is unfortunately unknown, as mostly covered by modern structures. Based on Strabo's account,[7] which described Galatian Ankara as a fortress (*phrourion*), we could assume that Ankara was indeed one of the hilltop settlements just discussed. This hypothesis has therefore led scholars such as S. Mitchell to suggest that the city was most likely never a sizable settlement before the

[5] Dusinberre, (2013), 19-22.
[6] See next chapter for a fuller treatment of the topic.
[7] XII.5.566-568.

Roman Period.[8] The topography of Ankara, which presents several high hills overlooking a central valley, would represent an ideal location for this kind of settlement.

The excavations at Pessinus yielded more substantial evidence for late 4th-3rd c. BCE occupation; here, there is no trace of hilltop settlement, but archaeological explorations have revealed the presence of a monumental complex situated on an artificial hill. This complex, identified as a citadel by the excavators, was erected in the late 4th-early 3rd c. BCE, and it overlooked the main passage NE-SW through the valley of a seasonal stream.[9] The road into the valley, monumentalized in the Roman Period, was connected with the main extra urban street in front of the Roman Temple. The Hellenistic Complex, predecessor of the Temple, may have therefore been constructed in this position in order to control this local street hub.

The Hellenistic complex has two recognizable construction phases: the first one, dated to the late 4th/early 3rd centuries BCE, was severely damaged by later restorations and it is therefore impossible to provide any certain reconstruction. The second phase (2nd c. BCE) is not only larger than the previous one, but also further monumentalized by the addition of a monumental square east of the citadel. The development of this complex belongs to a time of significant expansion in the whole site; for example, the sides of the northern plateau (the so-called acropolis) were being systematically quarried for stone during this period, while new cemeteries were opened during the 3rd c. BCE.[10] However, archaeological investigations failed to detect the presence of any other urban structure at this site, as all residential blocks as well as monumental structures (Roman Arch, Theater, and colonnaded road) belong to the Augustan Period or later.

[8] Mitchell and French (2012), p. 17.
[9] Verlinde (2015), pp. 30-113.
[10] Claerhout and Devreker (2008), pp. 114-124.

The Hellenistic settlement, therefore, must have been considerably smaller than the Roman one, and most likely centered around the artificial hill discussed above.

Archaeological and textual evidence for settlement at Amorium in the Hellenistic Period is also limited. Just as for Ankara, literary sources provide almost all of the information at our disposal: Strabo, for example, simply named Amorium as a "Phrygian city".[11] The earliest mention of Hellenistic Amorium occurs in an exchange of letters between the Attalids, their officials, and the Priest-King Attis from Pessinus. This text, dated to 159 BC, was recently reexamined, suggesting that Amorium may have been a settlement of mercenaries founded under the auspices of the Attalid dynasty during the 2nd c. BCE. According to literary evidence, the Pergamene kingdom relied extensively on mercenary forces to fight the Gauls during the 3rd and 2nd centuries CE,[12] and new settlements, such as Amorium, were created in order to host these soldiers in times of peace.[13] The archaeological evidence is remarkably limited for Hellenistic Amorium,: no urban structures from the Hellenistic Period have been uncovered, and most of our information comes from a few fragments of terracotta figurines[14] and 4 coins out of over 700 coins retrieved since the 1980s. The largest find of the Hellenistic Period is a monumental tomb dated to the 2nd-1st centuries BCE, which provides no information about the size and organization of this settlement. As in the cases of Ankara and Pessinus, the absence of substantial evidence for urban structures dated to the Hellenistic Period may therefore suggest that Amorium was probably not an extensive settlement in this period.

[11] Strabo XII. 8. 13.
[12] Diodorus 18.61.4–5
[13] Polybius 5.78.5
[14] Lightfoot (2016), p. 188.

By contrast, the Early Roman Period marked a time of extensive urban expansion in Central Anatolia. The best archaeological evidence for this development was collected at Ankara and Pessinus, which have been extensively excavated. In the case Ankara, the data available for the Roman city are abundant, even though the modern infrastructure has obliterated most of the evidence for street system and residential areas. The city was selected to be the capital of the newly established province of Galatia (25 BCE), an event that dramatically affected its urban development. For example, the main public structures (theater, stadium, nymphaeum, and the Temple of Augustus and Rome) as well as the main roads were designed at the time, or shortly after, the reign of Augustus. A further wave of monumentalization at Ankara occurred under the Severan Dynasty, through the restoration of some urban structures and the addition of others. The most significant building project of this period was certainly the bath-gymnasium complex, a massive structure located in the northwestern side of the city. The bath-gymnasium at Ankara is one of the largest known examples of its kind, and it featured an unusually large heated area. The construction of this complex was also inserted into a wider project of monumentalization of the northern part of city, as demonstrated by the erection of a colonnade along the nearby main road.

Similarly, Pessinus experienced a significant urban expansion during the reign of Augustus, when the city received the most common urban features of provincial Roman towns: in particular, the Hellenistic monumental center was expanded with addition of a temple, probably dedicated to the Imperial cult, and a stairway-theater complex. This frontal design, uncommon in Asia Minor, resembles examples in other regions of the Empire, such as Central Italy. Other monumental buildings were erected in the Roman Period, such as a theater on the eastern side

and a monumental central road, which crossed the whole city from north to south, as mentioned above. Residential areas were constructed also in the Early Roman Period, and they most likely connected to the main thoroughfare, which guaranteed access to the rest of the city. However, there is very little information to suggest any extensive development of public structures during this period, which seem to be limited to a possible restoration of the theater. As for Ankara, the development of the city underwent another significant phase of expansion during the early 3rd c. CE, when a large construction program was undertaken; an arch was built to mark the northernmost border of the main thoroughfare, which was also renovated by the restoration and addition of side marble walls and colonnades. The temple complex was also redesigned with the erection of a new, small theater, and a paved square on top of the Early Roman monumental stairway. This obliterated the access to the temple, which was probably guaranteed by a new street laid out to the north of it. This road, unknown archaeologically, may have passed by a new porticoed structure identified as a new civic basilica also built in the early 3rd c. CE.

We lack precise information about Amorium's urban development. Our only data come from inscriptions, coins, and architectural *spolia* found in later buildings; for example, an inscribed marble architrave from a public structure, a temple depicted on 3rd c. coins, a sundial, and a possible small theater/*odeion* seat suggest that the city may have been provided with some of the urban structures found at Pessinus and Ankara. The absence of visible traces of an aqueduct, bathhouse, and a main theater may, however, indicate that this public infrastructure was not particularly extensive. In particular, it seems unlikely that large structures such as theaters and aqueducts have been missed at a site that has been investigated archaeologically for about 30 years, and has no major modern settlement on top of it. Moreover, epigraphic records, reused as

spolia in later structures, often speak for other buildings that are no longer visible; their absence at Amorium seems to be more than just a coincidence. Thus, the lack of visible buildings or epigraphic evidence reinforces the hypothesis that Amorium did not have extensive public infrastructure during the Roman Period. Additionally, the re-founding of the city that occurred at the end of the 5th c. CE may lend further support to this proposition; the analysis of the Late Roman structures demonstrated that they usually were not built on earlier buildings, and that certain urban areas were most likely developed for the first time from the 5th c. CE onward.[15] It is, however, worth noting that the numismatic evidence collected at Amorium underlines a dramatic increase in coin emission at the beginning of the 3rd c. CE (almost half of the total recovered);[16] some of these coins, as discussed above, bear the image of a temple, which was probably (re-)dedicated during this period. It is, therefore, possible that also at Amorium the 3rd c. CE represented a time of some infrastructural expansion, just as observed at Pessinus and Ankara.

To conclude, comparison of the archaeological evidence for this region demonstrated a clear path of development: 1) even though occupation of these three sites can easily be noted since the Bronze Age, it is only in the Hellenistic Period that we have clear evidence for settlement development in Central Anatolia. At Pessinus, for example, the construction of a citadel goes hand in hand with the exploitation of stone quarries and the development of new burial grounds. Similarly, the large Hellenistic tomb chamber found at Amorium could suggest a similar trend, as burial grounds in the city hinterland may have been occupied more extensively in this period.

[15] See, for example, the construction of the Lower City Church, Lightfoot C. and M. (2007), pp. 82-98 or the Late Roman/Early Byzantine unpaved road discovered in the Enclosure, Ivison (2007), pp. 41-45.
[16] Kasari (2012), p. 98.

Conversely, the archaeological explorations failed to detect the presence of more extensive urban infrastructure; for example, none of the residential blocks and public buildings investigated at Pessinus can be dated before the late 1st c. BCE, and the Hellenistic citadel just discussed may have been the only major feature of the built environment. The failure to identify any evidence for urban structures also at Amorium and Ankara may therefore suggest that the settlements of the Hellenistic period were not particularly extensive, just as noted at Pessinus.

The absence of clear urban infrastructure in the Hellenistic Period at these sites is not unique in this region; for example, the Temple States[17] of Zela and Comana, located in southern Pontus, seem to underline a similar trend of development. They were important agrarian centers tied to the cults of Anaitis and Ma respectively,[18] but recent archaeological research conducted at Comana failed to detect the presence of any urban settlement.[19] According to the evidence at our disposal, the establishment of a *polis*, as administrative center, at Comana is dated to the Roman Period, but,[20] contrary to what has been observed at Pessinus, Ankara, and Amorium, the site did not acquire an urban form in this period. The intensive survey conducted in the territory of ancient Comana did not find any trace of a large settlement in the area, which was instead occupied by small sites. It is therefore possible that the Temple States of southern Pontus never developed into urban centers, contrary to the sites observed in Galatia. By contrast, the extensive excavations conducted at Aizanoi, situated on the western part of the Central Anatolian Plateau, revealed the presence of more extensive structures, such as a theater and an agora, as well as

[17] For the definition of Temple States, see Virgilio (1981), Strobel (2007), pp. 207–228, and Boffo (2007), pp. 105–128, Boffo (2001), pp. 233–255 Boffo (1985).
[18] Erciyas (2009), pp. 289-312.
[19] Erciyas and Sökmen (2010), pp. 118-141.
[20] Erciyas (2009), pp. 289-312.

houses dated to the Hellenistic Period; this demonstrates that the settlement pattern in the Central plateau did not experience a consistent development, and that the communities in this region adopted different strategies to occupy their territories.[21]

In marked contrast with the case of Central Anatolia are the coastal areas of Asia Minor, where cities had been widespread from the Archaic Period onward.[22] For example, in Western Asia Minor, cities such as Old Smyrna and Miletus were established in the Iron Age and developed in the Archaic Period.[23] Western Asia Minor underwent a second wave of significant urban expansion during the Late Classical and Hellenistic Periods, as new cities were founded, re-founded, and substantially enlarged often due to the intervention of local rulers and Hellenistic kings.[24] Such a trend was most likely already ongoing in the 4th c. BCE, when Mausolos re-founded his capital city, Halicarnassus, on a grid plan designed around his monumental tomb.[25] For the Hellenistic period, kings were responsible for the development of capital cities, such as Pergamon, or other large centers, such as Ephesus.[26] Local communities were equally active in the foundations or re-foundations of cities; the establishment of a new *polis* allowed communities to acquire a higher legal status, so that they could interact directly with the central power.[27] Research on 2nd c. BCE cities in Western Asia Minor, for example, demonstrated that newly established urban centers were often recipients of donations from the Seleucids, while settlements without a *polis* status could often be overlooked by the central power. Such a

[21] Rheidt (2008), pp. 107-122.
[22] For an overview, see Cobet (2007), pp. 729–743, Greaves (2011), pp. 501-511, and Marek (2016), pp. 150-179.
[23] For Old Smyrna, see Nicholls (1958-1959), pp. 35-137.For Miletus, see Weber (2007), pp. 327-362.
[24] Ma (1999), pp. 199-204 and Cohen (2010).
[25] Pedersen (1988), pp. 98-103.
[26] For a brief overview, see Scherrer (2001), pp. 54-87 (Ephesus) and Radt (2001), pp. 44-53 (Pergamon).
[27] Ma (1999), pp. 199-204.

phenomenon may have already been in place in the 4th c. BCE, and the re-planning of Priene may be an early example of this.[28] In the Hellenistic Period, a similar trend can be observed at Aphrodisias, where the local community seems to have self-elevated to *polis*-status during the power vacuum that followed the peace of Apamea in 188 BC.[29]

The significant difference in urban development between Hellenistic Central Anatolia and the coast of Asia Minor may therefore be the result of the diverse historical circumstances. In particular, the Archaic wave of urbanization on the coast seems to be led by the interaction between Greek and local communities.[30] These cities were often independent states that competed and collaborated in order to exploit their surroundings. Such cities were often planned in the vicinity of natural harbors (Miletus and Old Smyrna) and in wide river valleys in order to access the trade networks that connected them to the Aegean and the larger Mediterranean World. They controlled the rural countryside that surrounded the city, where both urban and rural residents benefitted from the same rights, and they acted as full members of these city-states. In contrast, central settlement development in Central Anatolia was often focused on fortified hilltops that controlled major roads or rivers, such as Gordion, while the rest population was spread in rural villages. Rural settlements are largely unexplored archaeologically in Central Anatolia and their location is hard to establish. The Archaic Period is also extremely poorly documented in the three sites analyzed here, but the limited data available seem to exclude the presence of large urban centers such as those at Old Smyrna or Miletus. At Pessinus, for

[28] Koenigs (2015).
[29] Ratte' (2008), pp. 29-30.
[30] Cobet (2007), pp. 729–743, Greaves (2011), pp. 501-511, and Marek (2016), pp. 150-179.

example, Archaic material can only be found under the Roman Temple area, while at Amorium seems to be only localized on the side of the *höyük*.

The following wave of urbanization, in the Late Classical and Hellenistic Periods, was often supported by local or Hellenistic kings in Western Asia Minor. As mentioned above, from the 4th c. BCE onward, rulers such as Mausolos had (re-)founded their capitals in order to celebrate their power. Similarly, the Attalids planned a new capital, Pergamon, as means to establish their control over the region.[31] In addition, we have seen how Hellenistic kings would encourage, both directly and indirectly, the creation of *poleis*, in order to encourage a straightforward connection with the central authority. In this respect, Central Anatolia does not seem to be deeply involved in the power struggle that takes place on the coasts; besides the famous wars between Galatians and Pergamon,[32] the region was often overlooked by the various kings who fought over the control Asia Minor. If we look at the epigraphic evidence available for the cities examined, we can note a close connection between Pergamon and Pessinus. This is demonstrated by the discovery of 8 letters inscribed in marble that record the correspondence between the two states in the 2nd c. BCE.[33] The contents of these letters show the extent of these diplomatic relationships, which seem to underline friendly contacts between two foreign powers. By contrast, the above cited letter n.8, mentioned Amorium as a possible Attalid foundation, but the archaeological research discussed in the previous section clearly shows that no data can point to the existence of any urban structure. Thus, whatever the Attalid contribution in the foundation of Amorium was, we can exclude they invested considerable resources into the creation of a city.

[31] See footnote 27, above.
[32] Marek (2016), pp. 202-207.
[33] Strubble (2005), pp. 1-17. and Tsetskhladze and Avram (2014), pp. 151-181.

Central Anatolia, therefore, seems to develop along the lines established in the Archaic Period, where smaller, and sometimes fortified settlements controlled a network of rural villages. This is also employed by the Galatian tribes, which favored fortified hilltops over larger settlements, as discussed in the chapter on Ankara. For example, at Pessinus, an artificial hill and a citadel were erected to control the main road through the valley in the late 4th c. BC, but its construction was not followed by the planning of any other urban structures. The builders of the citadel at Pessinus most likely controlled a network of rural villages, similar to those at Zela and Comana, as discussed above.

2) Central Anatolia experienced significant urban development in the late 1st c. BCE, most likely as a result of the establishment of the Roman Province of Galatia, and the evidence from Pessinus and Ankara confirms this trend. In both cities new streets were laid out during this period, while temples, buildings of entertainment (stadium and theater), and residential blocks were also constructed. The recent topographic research conducted at Pessinus, for example, concluded that the Roman city reached an extension of about 88 ha.[34] Amorium does not show evidence for significant urban development in the Roman Period, and it is possible that its city structures were not particularly extensive, as discussed in the previous section. As for the Hellenistic Period, foundations and re-foundations of cities became very common in late 1st c. BCE, as urban centers were the preferred tool for the Roman central government to administrate the provinces of the empire.[35] This phenomenon is well-documented throughout the entire Central Plateau, such as in northern Pisidia, where several cities were founded or re-founded in

[34] Tsetskhladze (2013), pp. 53.

[35] The literature on the topic is extensive: for an overview on Anatolia, see Marek (2016), pp. 180-308.

the early 1st c. CE.[36] Roman Galatia, therefore, does not seem to be an exception to this, and the development of Pessinus and Ankara provide clear insights into the creation of Early Roman cities in this region.

Pessinus and Ankara show also definitive evidence for urban expansion in the early 3rd c. CE, which is marked by the erection of an arch (Pessinus), colonnaded roads (both Pessinus and Ankara), and new porticoed public structures (a civic basilica at Pessinus and the bath-gymnasium complex at Ankara). These new urban features not only increased the size of the built environment in these cities,[37] but also further monumentalized the public spaces throughout the cities. If we look at Pessinus, for example, the 3rd c. CE arch marked the northernmost limit of the city, and it was followed by a newly colonnaded road that led into the Temple Area, located on the southern part of the city. Here, a new access road to the Temple Area was also built in the 3rd c., and it was flanked by a new porticoed basilica. These elements seem to be final additions to the establishment of the so-called *urban armature*, a term introduced by William MacDonald to describe the articulation of urban space that became general in Roman cities during the High Imperial Period. This consists of "*...streets, squares and essential public buildings linked together across cities...with junctions and entranceways prominently articulated*"[38] which made cities look like a "*…unified monumental environment*."[39] Urban armatures are a very common feature of Roman Imperial cities, and they aimed to guide visitors and citizens through major urban spaces; such spaces had utilitarian functions (baths and

[36] De Giorgi (2011), pp. 135-149.

[37] The construction of the bath-gymnasium in Ankara and the Arch at Pessinus redefined the northern limits of the cities, adding further monumental areas to these urban centers.

[38] MacDonald (1982), p. 4.

[39] *Ibidem*, p. 5

markets) and provided the suitable environment for the display of prominent citizens, provincial governors, and emperors.

The evidence for Ankara is not as straightforward as for the case of Pessinus, given our limited knowledge on its urban street network in the Roman Period. However, the construction of the bath-gymnasium in the northern part of the city was followed by the erection of a colonnaded street, which monumentalized further the area east of the complex. Colonnaded streets were one of the main elements for the formation of an urban armature,[40] and the erection of a new one in the northern part of the city may suggest that also Ankara underwent a development similar to that noted at Pessinus.

The appearance and enlargement of urban armatures in Roman cities of this period certainly cannot come as a surprise. However, the monumentalization of urban structures often began in the 2nd c. CE in Anatolia, as is demonstrated by recent archaeological research. For example, at Antioch in Pisidia and Hierapolis, located respectively in Western and Southern Anatolia, new colonnaded roads were added to the urban fabric.[41] Aphrodisias was equipped with a second agora in this period,[42] while Ephesus and Pergamon received new temples, streets, baths, etc.[43] The 2nd c. CE seems, therefore, to be uncharacteristically absent in the archaeological records of the cities examined here, and the development observed in the 2nd c. CE seems to take place in the early 3rd c. CE. The reasons behind this chronological difference are complex and go beyond the scope of this work. However, as already argued by S. Mitchell, the 2nd c. CE marked the

[40] MacDonald (1982), p. 9.
[41] Ossi and Harrington (2011), pp. 20-22.
[42] Ratté (2001), pp. 117-133.
[43] See Scherrer (2001), pp. 54-87 (Ephesus) and Radt (2001), pp. 44-53 (Pergamon).

beginning of a series of imperial journeys toward the East, where the emperors of this period were conducting military campaigns more and more frequently. These imperial visits seem to peak in the late 2nd c. CE early 3rd c. CE, when firstly Septimus Severus and then Caracalla traveled through Central Anatolia and stopped at Ankara. Caracalla set up his winter quarters at Nicomedia in 214/215 CE and visited Ankara in 215, where he established new festivals dedicated to Asclepius.[44] The reign of Caracalla also marked a significant intensification of coin emission at Amorium, Ankara, and Pessinus,[45] while also an increase in the number of inscriptions at Ankara can be noted.[46] It is therefore possible that the 3rd c. CE wave of urban monumentalization documented above was also sparked by these events. The evidence at our disposal allow no direct connection of these cities' development to the visits of Severans, but it is possible that the renewed interest in this region by the 3rd c. CE emperors encouraged local benefactors to invest more significantly into urban renovation.

Urbanism in Late Roman Central Anatolia:

The Late Roman Period (4th-7th c. CE) marked a time of great transition, where changes in the administration, the introduction of a new religion, and threats of external attacks profoundly transformed society.[47] As seen in the previous chapters, in Central Anatolia, the later 3rd and early 4th CE centuries reforms also significantly transformed the organization of this region: the Province of Galatia was divided into two territorial units, *Galatia Prima* and *Galatia Secunda*,

[44] Mitchell and French (2012), pp. 31-33.
[45] Dandrow (in press) and Katsari (2012), pp. 98 and Arslan (2004), pp. 58-69 and (2009), pp. 50-60.
[46] Mitchell and French (2012), pp. 8-10.
[47] The literature on the topic is extensive and

with capitals at Ankara and Pessinus respectively.[48] Both cities were also selected to be the seats of bishoprics in the late 4th c. CE, and they functioned as administrative and religious centers of their provinces. Amorium was located in the territory of Galatia *Secunda*. When we turn to the archaeological evidence, we can notice that the Late Roman Period represents a time of urban change for the cities examined here. For example, the introduction of Christianity affected the urban landscape of Pessinus: the 3rd c. Roman basilica, built north of the temple, was converted in a church in 6th c. CE, and it has been identified by the excavators as the cathedral of the city, named Saint Sophia. Another church, probably built in the late 5th/early 6th c. was located recently on a plateau west of the city, flanking the main extra-urban road leading into town. This church may have been that dedicated to the cult of the angels and mentioned in the Life of Saint Theodore, the only text available on Late Roman Pessinus. Much of the material used in order to carry out these building projects was taken from the Roman Temple, which was presumably decommissioned after the Emperor Theodosius banned paganism in 393 CE. By contrast, the rest of the monumental center was still maintained and restored in the 7th c. CE, as shown by archaeological investigations conducted on the northern part of the colonnaded road as well as the square located in front of the Roman Temple. The analysis of the residential blocks also reveals that the city most likely maintained its size into the 7th c. CE; in addition, one more residential block, situated in southern peripheries of the city, was newly built in the late 6th/early 7th c. CE, and it reclaimed areas that had been unexploited since the Hellenistic Period.

Need for further security, caused by the intensification of wars in the East, led to construction of a new set of urban defenses at Pessinus in the late 4th/early 5th c. CE; its full extent is still

[48] For a synthesis of the history of this period, see Mitchell (1993), pp. 73-84 and Belke (1984), pp. 48-58.

unknown, but the scanty archaeological evidence collected may suggest the presence of a number of watchtowers and strongholds scattered around the landscape. This design, which was preferred over the erection of a curtain wall around the city, took advantage of the natural environment that consists of high plateaus located around the narrow valley, where the city was situated. Such an arrangement most likely did not aim to withstand sieges, but rather intended to surveil the circulation of people in the landscape. This suggests that Pessinus was never in real danger until the 7th c. CE, when a new citadel was probably erected on a plateau in the northern periphery of the city. This fortress represents the last evidence for a large building project at Pessinus, and it was most likely erected when the area was threatened by the Arab invasions in the mid-7th c. CE.[49] This complex was much larger, with thicker walls, and more monumental than the watchtowers from the 4th-5th c. CE; indeed, archaeological investigations revealed the presence of houses, workshops, and a keep, which were absent in the previous defensive structures at Pessinus. By the later 7th c. CE, thus, the urban community residing here may have been much smaller than that of the late 6th – early 7th c. CE, since it could be defended in this fortified plateau.

The 7th c. CE marked indeed a significant decline of the urban areas at Pessinus, where most of the residential blocks were abandoned and the monumental center was left in disrepair. For example, the colonnaded road was no longer maintained after the early/mid-7th c. CE, while the main square east of the Roman Temple was covered by houses made out of *spolia*. The archaeological record suggests that the 7th c. CE citadel was one of the only urban features

[49] Niewöhner (2017b), pp. 342-348. See the evidence for the Arab attacks at Germia in 660s, located less than 20 km from Pessinus.

occupied after the 7th c. CE, together with the Roman Temple area, which, by this time, had been turned into a small residential and industrial center with workshops and a wine press.

The examination of Late Roman Ankara did not provide clear data for the city development; urban growth in the early 20th c. obliterated much of the evidence available for the Late Roman/Early Byzantine city. The information at our disposal is therefore often hidden in the fabric of later buildings, which were erected with the material of dismantled structures. For example, there is no physical trace of Late Roman churches at Ankara, even though many are known through the literary sources. Archaeological investigations conducted in the past decades have revealed the presence of a city wall, which was added to the city fabric (perhaps) in 3rd c. CE, as well as the restoration and reconstruction of several buildings. As discussed above, major public buildings of Roman cities were also decommissioned and dismantled to construct new structures or repair others considered more important; for example, the stadium was taken apart and the materials retrieved were used to erect the Late Roman fortification and to renovate the bath-gymnasium complex. Recent archaeological work also suggests that the bath-gymnasium was restored again in the later 4th c. CE, while both theater and the main road were renovated during or after the reign of Anastasius, in the early 6th c. CE. The late 6th/ 7th c. CE often represents the last archaeologically verifiable phase at Ankara, as the later (often more ephemeral) development has often been destroyed by modern construction projects. Urs Peschlow's recent book, however, has suggested that the 7th c. CE may not have been a time of urban decline at Ankara, and that some of the city infrastructure survived until the 9th c. CE. He has revealed, in particular, that the bath-gymnasium, the aqueduct, and the fortifications were still in use until the Arabs sacked the city in 838 CE, and it may be possible that Ankara had

remained a sizable settlement through the Invasions Period (7th-9th centuries CE). The use of the Late Roman fortification wall during the 9th c. CE siege is especially crucial in this reading, as the urban community had to be large enough to need a wide, protected urban area. Continuity of occupation is also not uncommon in thematic capitals, such as Ankara, as we have seen at Amorium and other sites;[50] thus, a sizable urban population at Ankara in this period would not be an exception. This is not to suggest that 9th c. Ankara was as populous as in the Late Roman Period, but simply to assume that the urban community here had to be large enough to use a substantial defense wall. Only after 838 CE, Ankara lost most of its urban population, while a large number of its city structures were dismantled and reused. This is illustrated in the analysis of the fabric of the Byzantine Citadel (later 9th c. CE), which employed material from the aqueduct and several other structures destroyed during the siege. In the later 9th c. CE, Ankara was a much smaller community, probably located around fortified promontories, such as the just mentioned Byzantine Citadel and the terrace of the Temple of Augustus and Rome.

At Amorium, the administrative and social changes discussed above led to a significant urban transformation; a large Christian Basilica, a massive fortification wall, a bathhouse, and a large public building (*Large Late Roman Building*) were added to the fabric of the city in the late 5th-early 6th c. CE. They were mostly located in the southern part of the city, and they mainly rest on previously underdeveloped areas. This lends further confirmation to the hypothesis that the Roman city may have been much smaller, and that Amorium experienced a considerable growth in the Late Roman Period. As discussed above, the literary sources suggest that Amorium was (re-)founded by the Emperor Zeno in the late 5th c. CE; although it is tempting to associate the

[50] See Chapter 3 and 4 for this discussion.

urban growth at Amorium with Imperial sponsorship, there is no direct evidence to confirm it. Nevertheless, the size and shape of the triangular tower, an uncommon feature in the regional architectural tradition, resemble that of Imperial foundations in the eastern frontiers. It is not fully clear why a small, provincial town in peaceful Central Anatolia would have been selected to receive such a type of defenses, but it is probable that the location of Amorium, situated near a major highway that connects Constantinople to Antioch on the Orontes, played a key role in this choice.

The late 6th and early 7th centuries CE do not seem to mark a period of substantial change at Amorium, and the structures just mentioned were in use continuously until the 9th c. CE. Probably in the 7th c. CE, a fortified citadel was constructed on top of the manmade *höyük* (the Upper City); citadels were often built by local communities in search of further security, but, for the case of Amorium, its erection may be the result of the stationing of a military garrison as part of the establishment of the thematic capital here in the mid-7th c. CE. Just as for Ankara, the year 838 CE underscored a sudden change in the urban fabric of Amorium, as the city was besieged and sacked by the Arabs. The archaeological record shows clear evidence for widespread destruction, mostly marked by large burnt layers and architecture collapse. The triangular tower, the citadel, the Christian basilica, and the bathhouse were all severely damaged during the attack. After the Arab siege, parts of the urban structures were reconstructed in the later 9th c. CE, but most areas were abandoned and quarried for material. A few neighborhoods were fortified and re-inhabited; this is the case of the citadel, which was re-erected in the later 9th c. CE, and of the so-called Enclosure (late 10th – early 11th c. CE), a walled compound with houses and workshops located just south of the citadel. The Late Roman fortification wall and bathhouse were never

repaired, and large portions of the Late Roman city were never re-occupied. In the later 9th c. CE, the population of Amorium was much smaller, while most of the public structures constructed in the Late Roman Period were no longer in use.

The trend highlighted here presents some similarities with the general development of Late Roman cities in Anatolia. Cities experienced a time of urban growth between the late 4th and mid- 5th centuries CE;[51] for example, urban walls were mostly erected in the last decades of the 4th c. CE,[52] while several other building projects, both private and public, were carried out with the aid of *spolia* during this period. At Sagalassos, streets and other section of the urban infrastructure were maintained and reshaped during this period,[53] while at Aizanoi a new colonnaded road was erected with the material from a dismantled temple.[54] At Aphrodisias, the Tetrastoon and Tetrapylon were substantially renovated in the late 4th- early 5th c. CE, and one of the main roads (Tetrapylon Street) was further monumentalized by the addition of a two-story colonnade.[55]

The 5th c. CE is period of marked changes in Anatolian urbanism, and, according to recent archaeological research, several cities were progressively abandoned in the course of this century. The contraction of the urban area was, however, countered by intensification in the occupation of the rural countryside, as well-documented at Aizanoi and Miletus.[56] The development of this phenomenon was the result of the above discussed socio-administrative

[51] For an overview of this phenomenon, see Niewöhner (2017a), pp. 40-43 and Jacobs (2014), pp. 1-24.
[52] Jacobs (2013), pp. 26-27.
[53] Martens (2007), pp. 346-351.
[54] Rheidt (2010), pp. 15-17
[55] Ratté (2001), pp. 117-133. Ratté and De Stabler (2012). Dalgıç and Sokolicek (2017), pp. 269-273.
[56] Niewöhner (2006) and (2016). The case of Aizanoi is discussed further in the next chapter.

changes, which led local elites to disengage from urban communities and invest in the rural countryside. In the hinterlands of Aizanoi, which is discussed more fully in the next chapter, 25 new churches were built in the course of the 5th – 6th centuries CE, while the city structures were progressively abandoned. This pattern of development, however, does not seem to occur everywhere in Anatolia; for example, at Aphrodisias, which was a provincial capital, abandonment of urban structures does not seem to occur until the mid-6th c. CE, and it is not followed by an increase of prosperity in the countryside.[57] Equally, also at Sagalassos, an important center of Pisidia, both urban structures and rural countryside decline beginning the mid-6th c. CE.[58] Pessinus, Amorium, and (perhaps) Ankara seem to follow the latter model, where abandonment of urban centers occurred hand in hand with the decline of the countryside (Chapter 6).

The 6th c. CE was a time of extensive construction of churches in most Anatolian cities; churches were often planned in public squares and spaces, as for the case of Pergamon (Lower Agora).[59] Christian Basilicas were also designed in replacement of previously existing buildings, as for Aphrodisias, where the Temple of Aphrodite was converted into a church.[60] As discussed above, the main church at Pessinus (Saint Sophia) was also erected in the 3rd c. CE civil basilica, while at Amorium the Basilica A was built on a previously underdeveloped area. In general, the 6th c. CE seems to be a period of decline for cities in Anatolia, where centers slowly lost part of their urban character and population. Streets and public spaces were encroached and partially left

[57] Dalgıç and Sokolicek (2017), pp. 269-273.
[58] Poblome, Talloen and Kaptijn (2017), pp. 302-311.
[59] Rheidt (1991), pp. 228, Radt (2011), pp. 203-204.
[60] Cormack (1990), pp. 75–88.

in disrepair,[61] while agricultural and productive centers were relocated in large public facilities, such as baths and squares. At Ephesus, for example, the Vedius Gymnasium was filled in and abandoned in the 5th c. CE, the West Street has been built over and the Tetragonos Agora housed a glass making facility in the late 6th c. CE.[62] By the late 6th-early 7th c. CE, many Anatolian cities had witnessed a significant reduction in population, as recently demonstrated by the excavations at Miletus, Sardis, Priene, Aphrodisias, Sagalassos among many.[63] The mechanics and chronology of this decline are not always clear, and they often occurred over the course of several generations.[64]

This trend, however, is in contrast with what we observe in Galatia; at Amorium public buildings such as a bathhouse and the so-called Large Late Roman Building were constructed in the late 5th – early 6th centuries CE, and they were maintained and used until the 9th c. CE, while no reduction of population can be documented in the archaeological record. At Ankara, unfortunately, there is no secure evidence for urban growth in the late 6th-early 7th centuries CE, but we can now confirm that the Late Roman fortifications, the aqueduct, and bath-gymnasium were still active until the 9th c. CE. At Pessinus a new neighborhood was still planned in the late 6th/early 7th centuries CE, expanding the city to the south, and possibly marking the time of its largest urban expansion. The main, marble square in front of the temple was maintained into the 7th c. CE, while also the main thoroughfare and all the residential blocks investigated were still restored in this period.

[61] Lavan (2008), pp. 201-214. demonstrates that secondary streets were no longer maintained during this period.
[62] See Steskal and La Torre (2008), pp. 310-312 for the Vedius Gymnasium and Scherrer and Trinkl (2006), pp. 51-52 for the Tetragonos Agora.
[63] Niewöhner (2017), pp. 40-43.
[64] Magdalino (2016), pp. 45-62.

In the 7th c. CE, the Eastern Empire had to face invasions from Persians and Arabs, which threated its very existence. Clive Foss argued that the Persian raids in the early 7th c. CE were responsible for the end of urban life in Anatolia, but his analysis, based mostly on numismatic emissions, was partially contradicted by the archaeological evidence just discussed.[65] The Arab invasions occurred throughout most of the second half of the 7th c. CE, and they led to loss of much of the eastern territories. The fear of more attacks led to erection of more fortifications in Anatolian cities, which mostly encircled smaller portions of the Roman urban areas.[66] This is visible in cities located on the western and southern coasts, such as Ephesus, Pergamon, Miletus, and Side which were more exposed to sudden raids from the sea, and they therefore needed further protection. The renewed financial investments in defenses did not bring extensive urban life back into the cities of the Empire, which, by the later 7th c. CE, were largely abandoned. Churches were still constructed in this period, as visible at Sardis and Side,[67] but the cities were never extensively reoccupied.

In Galatia, however, the 7th c. CE marks a time of decline only for Pessinus, as most of its residential blocks were abandoned, the main marble square was taken over by houses and workshops, and the colonnaded road was no longer maintained. As discussed above, Ankara and Amorium did not experience contraction in size during this period, and they continued until the Arab siege of 838 CE. The process of abandonment at Pessinus seems to take place in the course of 7th c. CE and to be rather sudden, since the city was still occupied the late 6th-early 7th c. CE but it was mostly in disuse by the later 7th c. CE. As discussed in detailed in Chapter 2, there is

[65] Foss (1977), pp. 469-486.
[66] Niewöhner (2007), pp. 119-157.
[67] For an overview, see Buchwald and Savage (2017), pp. 142-145.

no direct data that connects the contraction of Pessinus with the Persian and Arab invasions in Central Anatolia, as the archaeological investigations have failed to detect any evidence for violent destruction. Thus, I argued that the city was abandoned as a response to the military, political, and economic crisis caused that occurred in the course of the 7th c. CE. In particular, by the later 7th c. CE, the new thematic system, introduced after the dramatic loss of territory in the Levant, deprived Pessinus of its administrative status, which was given to Amorium and Ankara, while its religious prominence was transferred to the sites around Germia, a newly established archbishopric. The military reforms and the last waves of the Justinianic Plague most likely impacted population levels in the region, which had probably decreased by the later 7th c. CE. Ankara and Amorium, by contrast, maintained their urban infrastructure and population until the 9th c. CE, when they were destroyed by the Arabs. Their new status was most likely the key for such continuity, as people may have moved here in order to take advantage of the privileged administrative position within the region.

Post-7th c. crisis Ankara and Amorium became the centers of a new political and administrative order, which no longer relied on a heavily urbanized territory, and thus did not need provincial cities such as Pessinus. Ankara had been a regional capital since the Early Roman Period, and it was therefore an obvious choice to be one of the main centers for the reformed Byzantine administration, while Amorium was probably selected due to its highly sophisticated fortification in a time in which security was a primary concern.[68] This would also explain why Amorium was preferred over Pessinus, the previous capital, where the defensive system, watchtowers that overlooked the landscape, were not meant to withstand sieges. In

[68] Crow (2001), p. 100.

general, the longevity of these cities through the Late Roman Period may have played a role in the selection of two of the seven new thematic capitals in a region, such as Central Anatolia, which has often been considered by modern scholars the "backwater"[69] of the Eastern Empire.

[69] Krautheimer (1986), p. 162.

CHAPTER 6: The rural evidence in Central Anatolia.

Introduction:

This section discusses the development of rural communities in Late Roman Central Anatolia. The examination of the countryside represents a relatively new field of research in this region, as recent studies have significantly increased the amount of data at our disposal.[1] Renewed interest in the ancient countryside has been spurred particularly by new studies on Late Roman pottery that have refined our understanding of the rural chronology, production, and circulation of this material in central Anatolia.[2] In the past decades several survey projects have mapped increasingly large portions of the Anatolian countryside, shedding new light on the development of the regional settlement patterns.[3] Knowledge of rural communities has also been improved by considering the archaeological survey data in the context of environmental studies. This has provided a fuller picture of the life in the countryside, presented in what follows. Crucially, scholarly attention has moved away from the analysis of individual cities, focusing instead on the integration of urban communities within rural hinterlands.[4] The countryside contained the vast majority of the population (80/85%), and produced most of the total economic

[1] Izdebski (2013), pp. 3-9.

[2] Most of the dating is based on new studies of Late Roman fine ware: see Hayes (1972), pp. 323-286, Bonifay (2005), pp. 565-581, Jackson *et alii* (2012), pp. 89-114, Ladstätter and Sauer (2005), pp. 143-201, Pobleme and Fırat (2011), pp. 49-55.

[3] Izdebski (2013), pp. 11-46, for a survey for the new archaeological evidence for Late Roman Central Anatolia.

[4] Veikou (2009), pp. 43-54 and (2010), pp. 171-193.

output.[1] Cities, by contrast, provided an administrative, social, and economic hub that linked rural communities to a larger world. Thus, this chapter aims to contextualize the analysis of Amorium, Ankara, and Pessinus within their wider first millennium regions.

Evidence for Late Roman countryside in Anatolia:

The study of the Late Roman countryside requires an interdisciplinary approach, as the relevant evidence needs to be retrieved among many different sources. For example, the quantity and quality of literary and epigraphic data were profoundly affected by the administrative and religious changes that occurred from the 3rd c. CE onward. Inscriptions dropped dramatically in number during this period, while the surviving texts often aimed to underline the connection between the dedicator and the Christian god.[2] Thus, the amount of information available to us about individual citizens and their life's achievements drastically diminishes for the period after about 200 CE. However, the newly constructed literary genre, the biographies of saints, intended for the celebration of holy people, provides often insights into life in villages, where many saints spent their lives. This is the case of the already cited Life of Saint Theodore of Sykeon, which gives us evidence for rural communities and their organization in Galatia at the end of the 6th c. CE.[3] The *Tabula Imperii Byzantini*, compiled by the Austrian Academy of Science, synthesized most of these literary and epigraphic data in order to create a comprehensive historical geography of the Late Roman and Byzantine Empire. The first volumes of this collection are based on the data from Galatia and Lycaonia,[4] and Phrygia and Pisidia,[5] which provide key data

[1] Decker (2001), pp. 69-86 and (2009), pp. 36-58.
[2] Ward Perkins (2013), p. 315-319.
[3] Mitchell (1993a), pp. 122-144.
[4] Belke (1984).

on the historical topography of the regions. Such work is essential to study areas which have never been extensively examined through archaeological survey, such as the hinterland of Eskişehir/Dorylaion.

As far as archaeological sources are concerned, recent explorations have increased substantially the quantity of data at our disposal. Studies of Late Roman ceramic types have played a significant role in the identification and examination of land occupation. For example, further research on Late Roman fine ware has improved our understanding of its chronology, which is key in the dating of many of the rural sites identified.[6] Recent studies on Late Roman Amphorae have also revealed the presence of several centers of production throughout the entire Roman East, while their wide circulation has demonstrated significant connectivity among the different regions of the Empire.[7] Late Roman occupation has also left permanent traces (standing architecture) which has not been obliterated by later development. In particular, more and more studies have focused on rural churches,[8] which have been constructed in the Late Roman countryside as early as the 4th c. CE. This has documented more fully the Christianization of the rural landscape during this period. Fortifications have also been studied more frequently, resulting in a more complete understanding of how people inhabited the countryside.[9] Unfortunately, the lack of extensive excavation of villages, rural churches and fortifications significantly hinders our understanding of their chronology and development. Rural fortifications

[5] Belke and Mersich (1990)
[6] See footnote 2, *supra*.
[7] Pieri (2007), pp. 611-626
[8] For a review of the evidence, see Izdebski (2013), pp. 87-98.
[9] Foss and Winfield (1986) and Izdebski (2013), pp. 47-86.

are particularly hard to date on the basis of style, and typochronological studies of these structures have often been unsuccessful.[10]

Most importantly, archaeological expeditions in Anatolia have finally included field surveys in their routinely work, which have greatly enhanced our understanding of ancient rural land use. The wealth of data that emerged from this new wave of research is, however, not always easy to incorporate in the study of the Late Roman countryside; survey methodology among different projects is not always consistent, and often comparative analysis on site distribution and density cannot be carried out. This is certainly the case for Central Anatolia, where survey projects and investigations of rural communities have been conducted with very different aims and methods.[11] For example, over the last two decades a large regional project, the Archaeological General Survey in Central Anatolia (CAS) investigated more than 1000 sites in the area south east of Ankara.[12] However, there is no clear consistency in the methods of artifact collection or land coverage, which hinders comparison of the results among different years. Similarly, the short survey of the Pessinuntian countryside conducted by both Belgian and Australian teams have adopted different methods and objectives.[13]

Other survey projects, such as the Konya Plain Regional Survey[14] and the Isparta Archaeological Sparta,[15] provide, by contrast, an intensive and consistent coverage of the Konya plain and northern Pisidia respectively. On a smaller scale, the survey of the hinterlands of

[10] Bonde (1989), pp. 309-311 and Ousterhout (1989), pp. 182-183.
[11] For a discussion on survey methods and comparative analysis, see Alcock and Cherry (2004).
[12] Anderson (2008), pp. 233-240.
[13] Devreker and Vermeleum (1994), pp. 79-82. Anderson, Krsmanovic, and Negus Cleary (forthcoming).
[14] Baird (2004), pp. 219-246.
[15] De Giorgi (2014), pp. 55-70.

Aizanoi gives a clear understanding of the local countryside through the study of the architectural remains.[16] Other recent research projects have also aimed to study the impact of Christianity on the development of rural communities. The survey at Germia (northern Galatia), for example, has investigated the reorganization of the area in response of the establishment of an important pilgrimage site.[17] Another project in northern Galatia[18] surveyed further Sykeon, the village of Saint Theodore, in order to learn more about the relation between the local church and rural communities.

With the archaeological evidence at our disposal, any analysis of the Central Anatolian countryside will lack detailed regional scale accounting of site density and distribution. The projects above cited, however, inform us about the general pattern of occupation through the Late Roman Period in this region as well as its changes over time. In the next section, I will therefore juxtapose the trends these archaeological projects underscored, highlighting similarities and differences among them. My integrated, contextual analysis does not aim to provide a definitive reading of the settlement patterns of this period; rather, I reconstruct the overall macroscopic changes in the occupation of the Central Anatolian countryside.

Archaeological survey data can also be integrated by palynological and climatic evidence. Pollen analysis gives insights into the different species cultivated and grown in antiquity at specific places, as well as changes in production over time. In spite of Anatolia's apparent aridity, about 20 lakes sites have been cored to collect environmental data, beyond pollens.[19]

[16] Niewöhner (2007) and (2006), pp. 239-253.
[17] Niewöhner (2013), pp. 97-136.
[18] Barchard (2003), pp. 175-179.
[19] Izdebski (2013), pp. 107-202 a review of the environmental and climatic evidence.

The coring sites are scattered across Anatolia (Figure 6.1), and if collected and compared they provide insight into the overall environment, its regional variations, as well as changes in climate over time, which have a significant impact in the development of agriculture and land exploitation. In what follows, I will therefore try to synthesize all this evidence in order to gain a more complete understanding of Late Roman countryside in Central Anatolia.

Rural occupation in Late Roman Central Anatolia:

The evidence suggests expanding occupation of the Central Anatolian countryside during the Late Roman Period.[20] The best data at our disposal come from the systematic intensive survey conducted in the Konya flood plain by the University of Liverpool and directed by D. Baird. Here, about 1000 km^2 south of Konya have been surveyed (Figure 6.2), and the data collected documented a significant increase in the number of settlements dated from the 5^{th} to 7^{th} centuries CE, securely identified by the collection of well-known Late Roman fine ware.[21] In particular, the survey project registered a growth of ca. 30% (65 to 85) in the number of sites as well as a significant change in the settlement pattern; Baird reports that the new Late Roman occupation is mostly located on hill-slopes, flat lands by mounds, and at the edge of soft lime soils, considered marginal for agriculture. The survey also revealed evidence for manuring and drainage operations, both necessary to extensive cultivation of marginal lands. By contrast, the alluvial soils and sand ridges, occupied since the 1^{st} c. CE, continued to be occupied through the 7^{th} c. CE. When added to the new occupation of less easily farmed lands it emerges that the region became more intensively inhabited during the Late Roman Period.

[20] Izdebski (2013), pp. 11-46 a review of the archaeological survey evidence in Anatolia.
[21] Baird (2004), pp. 219-246.

The total area that yielded traces of Late Roman artifacts corroborates this reading; indeed, Late Roman scatter was noted in a territory that is about 30% larger (530 ha vs. 400 ha) than the previous Roman occupation (Figure 6.3). This led Baird to suggest that the exploitation of marginal lands must be the result of a significant increase of population, which led to more intensive cultivation of this area. Several sites located in proximity of the mounds also yielded traces of architectural details, which have been mostly identified as remains of small rural churches. The 7th c. CE seems to mark a time of discontinuity, when many of these marginal sites were abandoned; the total area of occupation dropped from 530 ha to 100 ha. This apparent significant decrease in rural habitation may be exacerbated by our limited knowledge of the pottery of this period, which hinders our full understanding of the settlement pattern. In particular, the almost complete disappearance of the well-dated Late Roman Red Slip Ware (see below), and the extensive use of local coarse and burnish wares, which have only been partially studied,[22] may have led Baird to overstate the process of abandonment in the Konya plain. Nevertheless, even with probable inaccuracies in the quantification of the post-7th c. CE sites, the evidence at our disposal seems to point to an extensive depopulation of the countryside, though perhaps less dire than the ca. 80% decrease proposed by the Konya Plain Survey team.

The Archaeological General Survey in Central Anatolia (CAS), run by the Japanese Institute of Anatolia Archaeology and directed by S. Omura, underlines a similar trend of development. The results of CAS are, however, still preliminary, as the Roman and post-Roman ceramics have been only partially analyzed and a more in-depth study is currently underway.[23] In particular, no

[22] Vroom (2005), pp. 37-50.
[23] A new study is currently being conducted by C. Mondin and the writer.

significant examination of the finds from the Roman Period is available, limiting our understanding of the settlement pattern of this period. CAS investigated the Ankara, Kırşehir, and Kırıkkale Provinces (Figure 6.4), and it therefore offers the widest territorial coverage in Central Anatolia, even though the artifact collection was often carried out at low intensity.[24] The surveyed area also presents several different natural environments, such as small flood plains, river valleys, as well as the high plateaus, permitting the further investigation of how Late Roman communities responded to diverse natural conditions. In 2008, W. Anderson sampled 200 sites from different geographical areas and studied the finds collected.[25] He was able to identify 93 sites that bear traces of Late Roman and Byzantine pottery, where 58 belonged to the Late Roman period (4^{th}-7^{th} c. CE), while 35 were dated 650-1100 CE, a period Anderson labels as Middle Byzantine. The drop between the two periods is significant (-43%), and the difference in site number is even more remarkable if we consider that Anderson collapses the Invasions/Dark Ages (7^{th}- 9^{th} c. CE) and the Middle Byzantine Periods (9^{th} - 11^{th} c. CE), which is often better represented in the archaeological record. The 7^{th}-9^{th} c. Period is indeed very difficult to recognize, and the Glaze Ware I, the most common fine ware type of this period, seems to be barely present (3 fragments) in the pottery collected.[26] Anderson also notices that the location of the sites seems to resemble the pattern of development underscored in the above discussed Konya Plain Survey; indeed, 37 of the 93 sites identified are situated in the Konya Province north-west of the area surveyed in the Konya Plain Survey (Figure 6.5), close to where Baird

[24] Anderson (2008), pp. 234-239.
[25] *Ibid*.
[26] Vroom (2006), pp. 164-165.

also noticed a significant increase in occupation of the countryside in the Late Roman.[27] Thus, the intensification of land exploitation in this part of the Central Plateau seems to corroborate the evidence collected by the Liverpool team. The drop in the number of sites (-43%) observed after the 7th c. CE also parallels the results from the Konya Plain Survey, which documented a dramatic decrease in occupation. Thus, the phenomenon of intense habitation of the Late Roman countryside followed by extensive abandonment post-7th c. CE seems to have been widespread across this region.

A similar trend of development was also noticed in the survey around Aizanoi, located on western part of the Anatolian Plateau, in a river valley at about 1000 m above sea level, surrounded by mountains (Figure 6.6). The territory of Aizanoi was surveyed by P. Niewöhner[28] with the aim of investigating further the relationship between the city and its territory. Niewöhner noticed that the valley had been inhabited from the Early Roman Period onwards, but the sites in the mountains first appeared in the Late Roman Period (Figure 6.7). Niewöhner's analysis is not based on the systematic collection of pottery, but mostly on the recognition of churches that are dated on the basis of style to the 5th and 6th centuries CE. These 25 churches were often located in the vicinity of clusters of tiles and ceramics, which allowed the combined artifacts to be interpreted as rural settlements. Just as for the sites on the flood plain at Konya, the mountain settlements around Aizanoi were in lands marginal for agriculture, and their emergence underlines a clear trend of growth of land exploitation and, perhaps, rural population. The presence of stone churches in the Late Roman countryside at Aizanoi also underscores a

[27] See the section above.
[28] Niewöhner (2007), and Niewöhner (2006), pp. 239-253.

significant investment in the rural sites, which was not noticeable for the previous periods. Niewöhner calculated that the stonemasonry found in the Late Roman countryside at Aizanoi is about 4 times the amount retrieved in the city during the same period, and he argues that local elites had redirected their benefactions from urban public structures to rural churches. The investment in churches in rural communities around Aizanoi seems, however, to come to an end in the late 6th c. CE, and no new constructions seem to appear after this date.[29]

The increase in number of rural churches was also noted in several other areas of Central Anatolia in the Late Roman Period;[30] besides the above cited case of the Konya Plain Survey, recent research has shown the presence of rural Christian buildings at Başana, which is located about 90 km south-west of Eskişehir/Dorylaion (Figure 6.8). The site, excavated by A. O. Alp, revealed the presence of two churches in a rural village; their main phases are dated to the Middle Byzantine Period, but further archaeological work has revealed the presence of earlier structures that belonged to the late 5th – early 6th centuries CE.[31] At Kiliseler (possibly the ancient village of Sykeon), located about 100 km west of Ankara (Figure 6.9), a survey project conducted between the late 1990s and early 2000s brought to light the presence of at least two Late Roman churches. The *Tabula Imperii Byzantini* (TIB) also recorded the location of several dozens of churches in the region, built mostly in the Late Roman Period (often in the 5th and 6th centuries CE) and sometimes abandoned after the 7th c. CE, paralleling what seen at Aizanoi.[32] This is, for example, common in the area around Eskişehir/Dorylaion, while at Aksaray (90 km

[29] Niewöhner (2006), pp. 249-253.
[30] For a review of the evidence, see Izdebski (2013), pp. 87-98.
[31] Alp (2010), pp. 10-12.
[32] Belke (1984), pp. 118-253, Belke and Mersich (1990), pp. 238-242.

north-east of Konya) the TIB seems to document a continuity in the occupation of churches. As already noted by Izdebski,[33] the development revealed at Aizanoi can be observed in several other parts of Anatolia, such as the hinterlands of Komana Pontika in southern Pontus,[34] Sagalassos,[35] and the Bonda massif in Lycia among many.[36] In certain cases, such as Başana, Komana Pontika, and Aksaray new churches were built during the Invasions Period (7th-9th c. CE) and Middle Byzantine Periods (10th-11th c. CE), but the overall number of sites in Central Anatolia seems to decrease after the 7th c. CE, as observed at Aizanoi and in the Konya Plain.[37]

Further scanty information about city hinterlands in Central Anatolia can also be gained from the 2 year-survey conducted around Pessinus. The investigations of the Pessinuntian countryside were done in 1992 by the Belgian team[38] and in 2010 by the Australian team.[39] If the latter was a simply preliminary topographic study of the plateaus around the city, the former identified 51 sites. The chronology proposed by the Belgians, however, does not allow definitive conclusions about settlement history; indeed, 3 sites were recognized as Hellenistic, 41 as Roman, 5 as Byzantine, and 2 were Ottoman. Since the Roman sites were collapsed in one chronological category, and the Byzantine ones were mostly identified on the basis of *spolia* and thus not precisely dated, it is not impossible to detect whether the occupation of the countryside had changed over the Late Roman Period. Nevertheless, the presence of only 5 Byzantine sites suggests a possible drop in the exploitation of the countryside after the "Roman" Period, which,

[33] Izdebski (2013), pp. 93-95.
[34] Erciyas and Sökmen (2010), pp. 118-141.
[35] Vanhaverbeke *et alii* (2003), pp. 271-290.
[36] Marksteiner (2004), pp. 271-290 and Harrison (2001), pp. 10-12.
[37] Izdebski (2013), pp. 93-95.
[38] Devreker and Vermeleum (1994), pp. 79-82.
[39] Anderson, Krsmanovic, and Negus Cleary (forthcoming).

in spite of the lack of secure evidence, we would be tempted to associate to the generalized 7th c. CE depopulation of rural areas. This would parallel also what observed in the city of Pessinus, which was abandoned in the course of the 7th c. CE, as argued in chapter 2.[40]

The trend of growth and abandonment of Late Roman rural sites is not only documented in the archaeological record, but also confirmed by the analysis of the literary and epigraphic evidence. As just discussed, in the western part of the Central Anatolian Plateau, the data collected in the *Tabula Imperii Byzantini* on the regional historical geography suggests a time of significant land use expansion in the Late Roman Period, which was followed by extensive abandonment after the 7th c. CE. The contraction was particularly evident south-east of Dorylaion (modern Eskişehir) in the TIB, where almost all the rural sites (both churches and settlements) dated to Late Roman Period seem to disappear in the 7th-8th centuries CE (Figure 6.10). Here, without extensive archaeological fieldwork at a regional scale, the TIB relies mostly on inscriptions, textual information, architectural surveys, and some occasional archaeological finds. Even though the conclusions drawn can be often influenced by the specific biases of the individual evidence[41] and, as mentioned above, inscriptions and coins dramatically decrease in number already during the Late Roman Period, the TIB seems to confirm the trend observed archaeologically in the Konya plain and at Aizanoi. Thus, although the biases of the evidence collected in the TIB may lead to exaggerate the depopulation of certain parts of the Anatolian countryside, the pattern of Late Roman intensification in occupation followed by a significant

[40] See chapter 1 on the topic.
[41] Izdebski (2013), pp. 41-43.

drop in the number of sites in the 7th c. CE seems common to many parts of the Anatolian Plateau.

By contrast, the Isparta Archaeological Survey (IAS) provides an alternative image of the Late Roman countryside. This project has been investigating the area around Konane (modern Gönen), located just north of Isparta, in the northern part of ancient Pisidia. This mountainous and isolated part of Pisidia on the rugged southern slopes of the Taurus mountains never experienced extensive urbanization (Figure 6.11). IAS has been active since 2008 and has mapped through intensive survey the region that interfaces the southern part of the Anatolian Plateau with the alluvial plains located on the southern coast of modern Turkey.[42] In particular, IAS focused on an area of 49 km^2 located between the southern slopes of Kale Tepe, the valley below it, as well as on the highlands north of the Tepe, which reached about 1600 m a.s.l. The ecology of the area surveyed is therefore very diverse, ranging from small plains in narrow valleys to rolling hills, a massif, and high plateaus. IAS, therefore, provides a unique opportunity to investigate the long-term development of rural occupation in different environments, and the response of local communities to socio-economic and political changes over time. Although the study of the ceramic evidence is currently underway, and the dating and exact locations of all individual sites are not available yet, preliminary observations confirm a general trend of intensification in the occupation of the countryside. This phenomenon starts in the Late Hellenistic and peaks in the Late Roman Period, when both marginal lands and the low, fertile valleys are occupied. But unlike other Anatolian regions discussed above, the survey recognized continuity of occupation from the Hellenistic Period to the Middle Ages on the massif east and

[42] De Giorgi (2014), pp. 55-71.

west of Konane, where some sites yielded ceramic evidence from the Late Roman through the 11th c. CE. This is the case, for example, of Eski Gümüşgün (Figure 6.12, IAS 019), where the pottery sequence confirms continuous habitation from the 4th through the 13th c. CE. This is in sharp contrast, for example, with what observed in the survey around Sagalassos,[43] located only 60 km south of Konane, where occupation seems to start diminishing in the late 6th c. CE.

The massif around Konane is not the only geographically isolated area where occupation remained more or less stable after the 7th c. CE, as discussed above. In particular, recent research conducted in the upper Göksu river valley, in central-eastern Isauria (the Göksu Archaeological Project),[44] has documented the development of extensive cultivation of olive and vine as well as intensification of occupation during the Late Roman Period (Figure 6.13). Just as at Konane, survey of the upper Göksu valley recorded continuity of habitation through the 13th c. CE in the more remote locations of the upper valley, while the low lands, which had been extensively exploited during the Late Roman Period, were overwhelmingly abandoned after the 7th c. CE. As recently argued by H. Elton, the rural expansion recorded in Late Roman Isauria may have been the result of the development of the supply line for Constantinople and the army, which needed a great quantity of olive oil and wine. The 7th c. CE crisis, which deprived the empire of the eastern provinces and led to a significant administrative reorganization,[45] also resulted in a sharp decrease in state demand for produce, resulting in less cultivation in Isauria.[46] Consequently, many of the areas that were intensively exploited for agriculture in the Late Roman Period were

[43] Vanhaverbeke *et alii* (2003), pp. 635– 640 and Vanhaverbeke (2003), pp. 303-328.
[44] Elton (2006), pp. 19-21 and (2006a), pp. 59-66.
[45] Haldon (2016), pp. 242-282.
[46] Elton (2006), pp. 19-21 and (2006a), pp. 59-66.

abandoned in the later 7th c. CE, while the more isolated sites, less involved in the state supply line, survived this crisis. Similarly, it is possible that the small, isolated communities documented by the Isparta Archaeological Survey, which were better insulated from geo-political shifts, were protected from the general decline that occurred in the region in the late 6th - 7th c. CE. The survey conducted around Balboura in Lycia (Figure 6.14) by J. Coulton[47] shows, for example, rural continuity also in sites on the massif, which were agriculturally marginal but also easily defensible. By contrast, larger Pisidian centers, such as Sagalassos, were dramatically affected by the 7th c. CE crisis and experienced the extensive abandonment discussed.

A clear case of occupation continuity into the Middle Byzantine Period can be observed in the area around Germia, a famous Christian pilgrimage site well-known for its thermal waters and its church of Saint Michael. Germia was located ca. 20 km east of Pessinus, just off the main road that led from Constantinople to Ankara. In recent years, an archaeological survey conducted by P. Niewöhner under the aegis of the German Archaeological Institute has documented the long-term development of the site and its surroundings.[48] Examination of the settlement pattern was undertaken through the collection of pottery (intensive survey) and documentation of the standing remains (topographic survey), which both seem to confirm a similar trend of development. The data collected revealed that Bronze and Iron Age sites were located on the high plateaus (Figure 6.15), and occupation moved into the lower valleys only during the Roman Period, where it remained into the Seljuk Period.[49] Germia itself was founded in the Late Roman Period, but it was never extensively inhabited, as it only functioned as religious and healing

[47] Coulton (2012), pp. 163-184.
[48] Niewöhner (2013), pp. 97-136.
[49] *Ibid*., pp. 102-104.

center, given its thermal waters. The local population instead resided in two towns, Mantalos/Eudoxias and Goeloen, situated respectively ca. 5 km north and south of Germia (Figure 6.15). As pointed out by Niewöhner,[50] the favorable natural environment, with abundant spring water and arable land, played a key role in the successful occupation of the site, which had been consistently inhabited since the Roman Period. The natural environment and the presence of a prominent pilgrimage site must have therefore made Germia an attractive place for settlement in the Late Roman Period and after.

In addition, in the mid-7th c. CE the site was detached from the Pessinuntian dioceses and promoted to the status of autocephalous archbishopric, one of the most prestigious offices within the Christian community. The new status most definitely increased the significance of the site within the region in the later 7th c. CE, and Germia replaced Pessinus as the main local Christian center. Investments into development of the site from Late Roman Period onward are visible in the archaeological record; besides the main church of Saint Michael, which was probably built in the 5th and then renovated at least twice in the Late Roman and Middle Byzantine Periods, a new church dedicated to Saint Sergius and the monastery of Saint Mary were built sometimes before later 8th and early 7th centuries CE respectively.

To summarize, as a whole the archaeological and epigraphic evidence reveals a clear pattern of development in rural Central Anatolia during the Late Roman Period: from the 4th-5th c. CE, the countryside became significantly more intensively exploited. Archaeological surveys across the region have documented an increase in rural sites that no longer only occupied the fertile areas, but also exploited marginal lands located on hill slopes and soft lime soils. The Konya

[50] Niewöhner (2017), pp. 342.

Plain survey, for example, quantifies this growth in ca. 30% of new Late Roman sites. The new occupation was often marked by the construction of rural churches, which underlined a significant investment in these communities. At Aizanoi, the Late Roman stonemasonry in the countryside seems to represent four times the amount of new stone construction in the city, which signals a shift in financial investment from urban to rural infrastructure. The central plateau is, however, not the only region of Anatolia that underwent this development; archaeological surveys in Isauria (south-east Anatolia),[51] Miletus (west coast),[52] Troad (northwestern coast),[53] Kyaneai (south-west Anatolia),[54] and Sinop (Black Sea Coast),[55] for example, collected evidence for significant rural expansion in the Late Roman Period. The examples just mentioned, located in several different parts of Anatolia, demonstrate that the 4th – 6th centuries CE intensification in rural occupation was a common phenomenon throughout the entire region (and most likely in the whole Eastern Empire).[56] Just as for Central Anatolia, rural churches were common in the rest of Anatolian countryside, as recently shown by architectural surveys in southern Pontus,[57] Sagalassos,[58] and Lycia[59] among many examples.

Archaeological and epigraphic evidence points to the 7th c. CE as a time of widespread abandonment of the Central Anatolian countryside. The Konya Plain survey suggests that about 80% of the sites were abandoned, even though our limited knowledge of 7th – 8th c. CE pottery

[51] Elton (2006), pp. 19-21 and (2006a), pp. 59-66.
[52] Niewöhner (2016a), pp. 225-290.
[53] Cook (1973), pp. 368-374, Rose (2012), pp. 151-171
[54] Kolb (2008), pp. 322-357.
[55] Doonan (2015), pp. 43-60.
[56] Kinglsey and Decker (2001), pp. 1-27.
[57] Erciyas and Sökmen (2010), pp. 118-141.
[58] Vanhaverbeke *et alii* (2003), pp. 635– 640 and Vanhaverbeke (2003), pp. 303-328.
[59] Kolb (2008), pp. 322-357.

may have led to inflation of this number. However, the archaeological evidence from the CAS (Konya Province, as well) and the hinterlands of Pessinus, Aizanoi, and Dorylaion also suggest a dramatic decrease in the number of rural communities during this period, even though the evidence at our disposal cannot be quantified with any certainty.

Abandonment in other regions of Anatolia seems to vary significantly; if habitation in the hinterland of Sinop mostly contracted in 7th c. CE, with some areas that were already in decline in the 6th c. CE, archaeological research in the Troad revealed that widespread depopulation began in the 6th c. CE. At Balboura, in Lycia, occupation on the massif seems to last until the 8th c. CE, while at Kyaneai, in the same region, 40 of the 67 Late Roman settlements seem to survive into the Middle Byzantine Period. Similarly, in the upper Göksu valley, settlements continued until the 11th c. CE, while the larger sites located in the valley disappeared in 7th c. CE.

Continuity of occupation is, however, also visible on the Central Plateau, as demonstrated by the recent surveys near Isparta (northern Pisidia) and at Germia (Galatia). The former case reveals occupation continued in isolated communities on the massif near Konane until the 13th c. CE. At Germia, the settlement pattern established in the Roman Period seems to survive into the modern era. The presence of thermal waters as well as of an important Christian pilgrimage center, which attracted financial investments from the 4th c. CE onward, may explain this exceptional case of resilience. However, we can conclude that the Late Roman rural boom of occupation in Central Anatolia comes to an end in the course of the 7th c. CE in most areas; by the mid-7th c. CE many fewer sites were inhabited, and they were mostly located in geographically secluded locations, favorable natural environments, and sites of political and religious prominence.

Cultivation and the environment in Late Roman Anatolia:

The analysis of rural remains in Late Roman Anatolia is complemented by the pollen analyses and climate research conducted in recent years. In particular, the examination of pollen informs us about the different species cultivated in antiquity, and fluctuations in production over time. The recent studies on climate history, offer unique insights in order to examine agriculture in its environmental contexts. For the specific case of Anatolia, research on the environment was undertaken through the coring of about 20 lakes and other sites (Figure 6.1) in two different periods: first, a series of coring was carried out by Dutch teams from the University of Groningen in the 1960s,[60] which was followed by further research conducted by the Belgians in area of Sagalassos in the 1990s.[61] While the evidence collected by this second group of researchers is more or less in line with more modern scientific standards, the set of data collected by the Dutch, although very useful, presents several interpretative difficulties due to the less sophisticated analytical techniques adopted.[62] The rarity of radiocarbon testing in the 1960s (due to costs) as well as the incomplete development of age-depth model and calibration curves also dramatically reduces the value of this data. Since the earlier the research project focused on the changes in the vegetation during periods prior to the last two millennia, it offers less for reconstructing Late Roman environments. Only in recent years, attempts have been made to reanalyze the data collected in the 1960s in order to acquire more information about the historical development of the vegetation in the Late Roman Period. A. Izdebski has constructed

[60] Fyfe *et alii* (2009), pp. 417-422

[61] The most complete treatment of the evidence about the palynological evidence acquired through caring at Sagalassos can be found in Vermeore (2004).

[62] Izbedeski (2013), p. 113.

age-depth models in order to recalibrate the ^{14}C dates obtained by the Dutch[63] with the latest ^{14}C curve for the Northern Hemisphere.[64] The small number of radiocarbon tests conducted on these samples (between 1 and 3 samples per core), however, hampers accurate quantification of agricultural production in Late Roman Anatolia. Nevertheless, general observations on the individual amounts of pollen collected can be attempted in order to evaluate the fluctuation over time in the production of crops -e.g. cereals produced in the Late Roman Period vs. cereals produced in the 8th-9th c. CE-.[65] As already noted by Izdebski, this evidence therefore offers qualitative insights into the interaction between people and the environment over time.[66] Finally, the confidence intervals for the age-depth model are normally between 100 and 150 years earlier or later than the given date - e.g. 500 AD date has a confidence interval between 350 and 650 AD. Thus, the data outlines only long-term trends which cannot be assigned or connected to any specific event or date.

Late Roman Central Anatolia:

The sites cored in Anatolia provide a relatively homogenous coverage around the central plateau. This circumstance allows the agricultural production and distribution in this region to emerge in broad terms (Figure 6.16). The central part of the plateau is unfortunately poorly represented, but the cores collected in the Lakes Nar (Cappadocia) and Beyşehir (Konya Province), located on the central-southern plateau, still offer unique insights into the development of agriculture in Central Anatolia. Three categories of crops have been identified

[63] *Ibid.* (2013), pp. 115-143.
[64] Blaauw (2010), pp. 512-518
[65] Roberts *et alii* (2018).
[66] Izbedeski (2013), p. 117

in the palynological record extracted from the cores:[67] cereals, which represented the most common element, tree crops (olive, vine, chestnut, and walnut), and indicators for grazing activities (grasses, such as *Plantago lanceolata, Rumex acetosa,* and *Sanguisorba*). The data collected throughout Anatolia revealed a clear trend of agricultural development (Figure 6.17); 1) the cultivation of cereals increased during the Late Roman Period, dropped in the 7th-8th c. CE, and recovered towards the end of the 1st millennium CE. 2). Pollen of grazing indicators in Anatolia also shows a pattern that broadly parallels the cultivation of cereals; after a period of growth in the Late Roman Period, traces of these grasses decreased until the 9th c. CE, when they grew again significantly. 3) By contrast, even though tree crops (vine, olive, and walnuts) also increased in production between the 4th and 7th c. CE and dropped dramatically in 7th – 8th c. CE, they were only replanted extensively in the lowlands of Bithynia, in northwestern Anatolia, in the 9th c. CE. 4) The decrease in agricultural production at the end of Antiquity (ca. 650 CE) seems to be dramatic; even though, as said above, there were significant regional differences and we cannot quantify accurately the agricultural output of Late Roman Anatolia, comparative analysis on pollen from individual species show that cultivation of cereals decreased by ca. 80% from its Late Roman high point, tree crops by 85%, and grazing indicators by about 30%.[68] Thus, it is tempting to conclude that the later 7th c. CE witnessed a reduction in population, which is suggested by a significant reorganization of the agricultural production. This observation is further supported by the comparatively soft reduction in indicators for animal grazing; it seems communities that survived became more reliant on animal husbandry, which is less labor intensive than arable farming. This trend continued until the 10th c. CE, when intensive

[67] Roberts *et alii* (2018).
[68] Roberts *et alii* (2018).

cultivation of cereals and other plants was resumed. The drop of 85% in cereal production should not, however, be taken as a direct indicator to quantify depopulation- i.e. only 15% survived the 7th c. CE crisis; however, this figure is too large not to underscore a decrease in population that cannot be determined yet.

Our understanding of the agricultural development in Anatolia can be refined by means of the climatic data collected in the Nar Lake (Cappadocia) and in the Sofular cave (Black Sea coast), which provide the best evidence to investigate long-term changes in climate in Anatolia. The analysis of this data reveals that Anatolia experienced a dry and warm environment until the 6th c. CE (ca. 536 CE), when the climate became wetter and cooler until ca. 660 CE. In the late 7th c. CE, temperature seems to have risen slightly while remaining wet until ca. 750 CE, when the environment turned drier again. The last dry period ended at about 900 CE, when it became wetter. Thus, the currently known changes in climate do not seem to correlate with what is known about land exploitation in the Late Roman Period. The dry and warm period (up to 536 CE) accompanied a phase of agricultural expansion where cereals and tree crops were progressively more intensively grown. The wetter and cooler period (536-660 CE) likewise seems to have been favorable to Anatolian farmers: it may have eased the cultivation of marginal lands,[69] as water was more readily available and fields formerly too dry for market-oriented farming could support extensive cultivation of cereals. However, the significant drop in production of the mid-7th c. CE is clearly unrelated to any "worsening" of climatic conditions in Anatolia, which remain ideal for extensive agriculture until the 8th c. CE. Additionally, the cooling of the environment on the central plateau does not seem to affect the cultivation of

[69] Roberts *et alii* (2018) and Haldon (2014), pp. 113–161.

olives, which are more sensitive to cold climates and seldom grow higher than 1000 m a.s.l. The readings from Lakes Nar and Beyşehir, both located on the high plateau, do not seem to show any decrease in this cultivation during the colder periods.

If we consider the specific case of Central Anatolia (Figure 6.17), while cultivation of cereals seems to grow steadily until the 7th c. CE, the growth of tree crops and grazing weeds seems to be rather stable throughout the Late Roman Period, with a slight drop in the weeds around the middle of the 5th c. CE. If we also compare the total quantity of each category (cereals, tree crops, and grasses) among different regions, we notice not only that the agricultural output increased in Central Anatolia during the Late Roman Period, but also that the region remained a stable producer into the 7th c. CE. In particular, by the 6th c. CE, the central plateau seems to become the most productive area in Anatolia in all the palynological categories. These data, however, do not show further significant increases in production; but this region's agricultural output did not decline meaningfully until the later 7th c. CE.

The palynological and climate evidence in sum roughly corroborate the archaeological and epigraphic data examined in the previous section; after a period of extensive demographic and agricultural expansion in the Late Roman Period, the Anatolian countryside seems to decline dramatically after the 7th c. CE to then resurge in the 10th c. CE. Fluctuations in Anatolia's climate do not seem to affect the region's agricultural production, which grew or declined regardless of environmental conditions. In particular, the seventh century's steep decrease in agricultural output seems unconnected to the warmer, wetter climate of that time, which instead was favorable to intensive agriculture until the mid-8th c. CE. Central Anatolia seems to partake in the generalized agricultural growth of the eastern empire, as all the categories of plants

analyzed became steadily expanded their presence in the Late Roman Period. By the 6th c. CE, the Central Plateau is a top producer of all different crops and grasses for Anatolia, and the overall agricultural output do not seem to decline until the mid-7th c. CE. Then it dropped markedly.

Manufacturing of goods: Late Roman ceramics in Anatolia:

The uptick of agricultural production in Late Roman Anatolia was connected to an intensification in the manufacturing of ceramics, especially of containers for transportation (amphorae), as well as of tableware.[70] The production and distribution of these goods, therefore, offer the best evidence at our disposal in order to examine trade and economic connectivity in this period. Late Roman Amphora 1 (LR1), for example, was a type of vessel produced in the region, and it was specifically manufactured for the transportation of olive oil and wine, the two most common "tree crops" analyzed above.[71] In the past 30 years, over 20 kiln sites in Lycia, Pamphylia, and Cilicia have been discovered, while further archaeological research has revealed the presence of Anatolian LR1 not only in this region, but also as far west as Gaul and Spain.[72] Circulation of LR1 was also affected by the re-development of the state supply line, which was put in place in order to support the newly founded capital (Constantinople) as well as the armies stationed on both northern and eastern frontiers.[73] LR1 (mostly from Cilicia) became especially widely distributed after North Africa, which was the largest supplier of the state-driven market

[70] Pieri (2012), pp. 27-50 and Bonifay (2005), pp. 565-581.
[71] Pieri (2012), pp. 27-50.
[72] Elton (2005), pp. 691-695.
[73] Pieri (2012), pp. 27-50.

until that point, was conquered by Vandals in the 440s.[74] This is shown by recent analysis conducted on ceramic assemblages in the Balkans, where the late 5th c. CE occupation layers revealed that LR1 had become predominant only in local military settlements, replacing most of the products from Africa.[75] LR1 was, however, not the only type of amphorae manufactured in Anatolia and distributed widely across the Empire; for example, the amphorae from Sinop, on the Black Sea, have been retrieved not only on the northwestern coast of Anatolia, but also excavated in cities such as Beirut, Tyre, and Aqaba, on the Levantine coast.[76] Analysis of the finds collected at Beirut, an important maritime center of Late Roman Syria, shows the extent of the commercial connectivity of the period (Figure 6.18); examination of amphora remains revealed the presence of significant numbers of Isauria-Cilician, Cypriote, and Black Sea types, underscoring minor commercial ties with the Aegean Sea, Western Asia Minor, and Egypt.[77]

Red slip ware, the most common type of high-quality ceramic tableware, was also produced extensively in Late Roman Anatolia and circulated widely in the Roman East.[78] This type of fine ware was firstly developed in Tunisia (African Red Slip) and it quickly replaced the *sigillata* type that was very common in the Roman Period.[79] The two main types of RSW manufactured in Anatolia were the Late Roman C and D (also called Phocaean and Cypriote), whose centers of production were located in various sites on the southern and western coasts. In particular, LRC (in circulation between 4th-7th c. CE) was made mostly at Phocea, Gryneion, and Çandarlı (near

[74] Pieri (2007), pp. 611-626 and Elton (2005), pp. 691-695.
[75] Elton (2005), pp. 691-695. However, contacts between the Roman Empire and Vandalic Africa continued after North Africa was lost by the Romans: Bonifay (2005), pp. 565-581.
[76] Pieri (2007a), pp. 611-626.
[77] Pieri (2012), pp. 27-50.
[78] See footnote 589, p. 195.
[79] Hayes (1997), pp. 58-61.

Pergamon), while contemporary imitations were produced throughout all of western Anatolia.[80] LRD, also in circulation between the 4th and 7th c. CE, was originally thought to have been produced at Cyprus, but recent research has revealed that the main centers of manufacture may have been located in southern Anatolia (in the vicinity of Perge and Sagalassos).[81] Both types of Late Roman red slip circulated widely in the Eastern Mediterranean (Syria, Palestine, Egypt, Cyprus), and, alongside the above cited African Red Slip, represent the most common and most recognizable element in the archaeological record.[82] Just as for the amphorae, African Red Slip was much less common after the loss of the province to the Vandals, and it was mostly replaced by LRC; this phenomenon is well expressed in the archaeological record of Ephesus (Figure 6.19), but also is visible elsewhere in Anatolia.[83]

In the 6th c. CE, several new wares seem to emerge in many regions of Anatolia; recent research at Ephesus and Hierapolis, for example, show the development of new local red-slipped types that occupied part of the pottery market.[84] At Hierapolis, local imitations and new wares represent about 68% of the total assemblage in a 6th c. CE house block located west of the Temple of Apollo.[85] At Ephesus, where more contexts have been investigated, Ephesian Red Slip Ware (ERSW) is present in a much smaller quantity, as shown at Gymnasium of Vedius, where imported fine ware is about three times more abundant than the ERSW fragments.[86] The causes that led to development of local wares in Anatolia are still unclear and they need further

[80] Bonifay (2005), pp. 565-581.
[81] Jackson *et alii* (2012), pp. 89-114, Pobleme and Fırat (2011), pp. 49-55.
[82] Hayes (1997), pp. 58-61.
[83] Ladstätter and Sauer (2005), pp. 143-201.
[84] Waldner and Ladstätter (2014), pp. 49-53 and Cottica (2000), pp. 49-56.
[85] Cottica (2000), pp. 49-56.
[86] Waldner and Ladstätter (2014), pp. 49-53.

investigations. It is, however, possible that local productions emerged as a result of a reduction in long-distant trade, which may be connected to an increase in taxation[87] as well as wider socio-economic changes that are still poorly understood. This would also explain why Ephesus, the largest and most economically integrated harbor in Western Anatolia, was still well supplied by fine ware imports, while at Hierapolis, located inland on the Meander river valley and therefore less connected, the production of local red slip took the majority of the market.

If we turn to Central Anatolia, we notice that pottery imports (ARS, LRC, and LRD) are practically invisible in the archaeological record throughout the entire Late Roman Period. Even though the sample is admittedly small, the Germia survey[88] and the CAS,[89] and the excavations at Pessinus,[90] Aizanoi[91] and Amorium[92] failed to detect any imported Late Roman Red Slip. The Central Anatolian fine ware market seems therefore to have been occupied by local imitations of the supra-regional types (mostly LRC and LRD), which replaced almost completely their original models. Additionally, some new wares may have emerged, as suggested for Amorium and, perhaps, Pessinus. These new wares seem to appear from the 5th c. CE onward, but they remain poorly understood. A new project conducted by C. Mondin and myself, launched in 2017, aims to study this development. So far, no centers of production are known in Central Anatolia,

[87] Pieri (2012), pp. 27-50.
[88] Waldner (2013), pp. 104-105.
[89] Anderson (2008), pp. 233-240.
[90] Mondin (forthcoming) and Harrison *et alii* (1990), pp. 213-214.
[91] Ates (2015).
[92] Harrison *et alii* (1990), pp. 213-214.

but a preliminary investigation on some assemblages from the CAS and the Komana Survey has revealed the presence of at least three different fabrics that circulated on the plateau.[93]

The economic isolation of Central Anatolia shown by the ceramic remains is particularly striking, as imported fine ware, especially from the Pontic region, was common prior to the 4th c. CE. The survey at Germia and the excavation at Gordion, for example, revealed that the presence of both Pontic Red Slip and local imitations of this type.[94] The excavation at Pessinus, a much bigger Roman center than Roman Gordion and Germia, yielded traces of the most widespread Roman *sigillata* types.[95] At this stage, it is still unclear why a region, such as Central Anatolia, which had been economically integrated for centuries, became isolated during the Late Roman Period. New investigations are certainly needed, but it is possible that the progressive loss of territory in the west, which had moved the focus of economic production to the Eastern Empire and Anatolia itself, played a key role in this development. As discussed above, the shift of production from Africa to Anatolia is well documented in the trade of fine ware, where African Red Slip was replaced by LRC and LRD as main imported ceramic types. Since most of the new kilns sites of LRC and LRC were located on the Anatolian coasts, the regions that were most connected with the rest of the Roman East, it is possible that the new demand for Anatolian fine ware that developed in the later 5th c. CE broke the commercial ties from the Roman Period between coasts and inland plateaus as the coastal production centers turned to supplying markets outside the plateau. This phenomenon may have therefore led Central Anatolia to become progressively more self-sufficient. As argued above for the production of Cilician LRA 1,

[93] This study is just preliminary, and it is based on macroscopic observations of fabrics and inclusions.
[94] Waldner (2013), p. 104 and Goldman (forthcoming).
[95] Thoen (2003), pp. 59-116.

Anatolian coastal sites were involved in the state-supply line, which provided a stable demand as well as a higher connectivity among certain areas of the Eastern Empire (Figure 6.18 on Beirut). By contrast, long distance trade via land was difficult and expensive in Antiquity, and it had become even harder during the Late Roman Period, as demonstrated by the downsizing of the extra-urban streets discussed in the previous chapter.[96] Thus, it is possible that new potters emerged on the Central Plateau during the Late Roman Period in order to feed the markets left vacant by the Roman imports, which were no longer commonly available. A similar trend of development can be seen also in the commerce of marble, where the large trade network established in Roman Period was entirely by local marble (from Docimium) from the late 4th c. CE onward.[97]

Summary and Conclusions:

The analysis of the archaeological, epigraphic, and environmental evidence has revealed an economic pattern for the Anatolian countryside in the Late Roman Period. From 4th-5th c. CE onward the rural areas enjoyed a period of growth in both occupation and economic production. In the case of Central Anatolia, field surveys conducted in the Konya Plain, Phrygia, and northern Pisidia show a significant increase in the number of Late Roman sites, including in more marginal lands, such as hill-slopes and flat lands at the edge of soft lime soils. These zones were most likely cultivated in order to support a larger population. The Konya Plain Survey offers the best data on Central Anatolian rural expansion, and it reveals that the number of sites and total inhabited area increased by ca. 30% in the 5th c. CE. The same trend seems to occur

[96] See Chapter 5.
[97] Niewöhner (2013), pp. 215-248.

also in other portions of the Konya Province (CAS), in Phrygia at Aizanoi and Dorylaion, and near Konane in the isolated pre-mountain communities of Pisidia. Growth in occupation is, however, not unique to Central Anatolian; it has been recorded by many other survey projects throughout the entire Roman East. In the previous sections, we have mentioned the surveys on the Black Sea (Sinop), northwestern (Troad), western (Miletus), southwestern (Kyaneai), and southeastern (Isauria) coasts of Anatolia for the sake of comparative analysis; these examples, selected among many, showed that the phenomenon of growth in rural occupation was widespread throughout Anatolia.

The increase in occupation of the Late Roman countryside is paralleled by a growth in financial investment in rural communities, where many small churches were erected in the late 5th – early 6th c. CE. The phenomenon is particularly well documented in Central Anatolia at Aizanoi, in western Phrygia, where 25 new churches from this period were discovered and analyzed. The investment in rural religious infrastructure seems to outweigh that in urban centers, which at Aizanoi is calculated to be a ratio of ca. 4 to 1. The pattern observed at Aizanoi was also noticed in other Central Anatolian areas, such as the Konya Plain, Sykeon in northern Galatia, and Komana in southern Pontus. The appearance of rural churches dated to Late Roman Period is also not uncommon outside of the central plateau, as demonstrated by recent research in Lycia and in southern Pontus to mention a few examples.

Intensification in occupation and growth in the agricultural output are also confirmed by the recent palynological investigations, which show that cereals, "tree crops" (vine, olive, and walnuts), and plants suitable for gazing increased in the Anatolian countryside from the 4th c. CE onward. In Central Anatolia, agricultural production grew steadily from the 4th through the mid-

7th c. CE without significant fluctuations, contrary to what can be observed on the coasts, where production changes significantly over time (Figure 6.17). By the mid-6th c. CE, this region was the most stable and productive agricultural area in Anatolia, irrespective of fluctuations in temperature and availability of water.

Total agricultural output, however, is not the only measure of economic productivity in Late Roman Anatolia. The manufacturing of ceramics, especially amphorae and fine ware, which circulated widely throughout the Roman Empire, offer unique insights into the economic integration and connectivity of the different regions of the Empire. The ceramic evidence suggests that Late Roman Anatolia acquired economic prominence as a result of the loss territory in the west (especially western Africa); for example, Cilician Late Roman Amphorae 1, a vessel manufactured for the transportation of olive oil and wine, became predominant in the Balkans in the later 5th c. CE, when the more popular western African products were no longer available. Similarly, Red Slip Ware from Tunisia (ARS), by far the most common type until the mid-5th c. CE, was widely replaced by LRC, which was produced mostly in southern and western Anatolia. Connectivity among different areas of the Eastern Empire was in part supported by the state, which needed a substantial amount of grain, olive oil, and wine in order to feed the large population of Constantinople, as well as the army.[98] The above cited example of Cilician LR1 shows just this, as the presence of this vessel in the Balkan areas is located only in military sites. However, coastal production in Anatolia was not limited to the supply of state enterprises, but it circulated widely in other coastal markets, as well explained in the archaeological record of

[98] For the establishment of the annona, see Casson (1980), pp. 21–29, Erdkamp (2005), pp. 206-209, Heather (2006), p. 262, Hopkins (1983), pp. 84-109 and Sirks (1991), pp. 162-164,

Beirut, where imported ceramics showed commercial ties with most of the Eastern Mediterranean World.

While Coastal Anatolia seems to become more connected to the rest of the Empire in the later 5th c. CE, Central Anatolia turned on itself; Red Slip ware and marble were no longer imported, contrary to what observed in the Early and Middle Roman Periods, but were instead produced and quarried at a regional level. This economic isolation of the central plateau may have been the result of the increased connectivity between the various coastal areas of the Empire; since transportation through the sea was more efficient and less costly than via land, coastal sites were already more prone to trade more extensively among themselves, rather than to adopt less profitable commercial routes that led to the plateau. Additionally, the stimulus given by state-line of supply to Anatolian coastal sites as well as the downsizing of roads in inland Anatolia may have resulted in the exacerbation of this phenomenon, rendering extensive trade between coasts and central plateau economically unappealing. Thus, the Central Anatolian market that used to be occupied by imported fine ware in the Roman Period, was filled by local production of RSW in the Late Roman Period. Similarly, in the later 6th c. CE, locally produced RSW seems to appear outside the Central Anatolian Plateau, in sites such as Ephesus and Hierapolis. As suggested by D. Pieri on the basis of the number of shipwrecks in the Late Roman Period,[99] this may be the result of a progressive increase of taxation, which may have slowly reduced the economic gain from long distance trade of manufactured goods even via sea. Hence Ephesus, the largest harbor on the western coast Anatolia, probably still well connected with the supra-regional markets, so Ephesian RSW represented only ca. 1/3 of the assemblages examined. By

[99] Pieri (2012), pp. 27-50.

contrast, at Hierapolis, situated more inland, in the valley of the Meander River, the locally made RSW reached almost 70% of the total.

By the mid-7th c. CE, intensive occupation and cultivation of the countryside had come to a halt; many sites were abandoned, with a consequent reduction in agricultural production, and manufacturing of amphorae and fine ware almost disappeared.[100] But if economic activity and occupation of the Anatolian countryside declined from the 6th c. CE onward, it is important to keep in mind the many different regional and local variations discussed above. For instance, the case study of Central Anatolia at the center of this analysis, shows a significant drop in production around the middle of the 7th c. CE; the palynological evidence marks 650 CE as the time of a substantial contraction in agricultural activity (about 70-80% of cereal production); these figures (70-80%) are too large not too imply also a reduction in population. The data collected by the Konya Plain survey seems confirm this theorized decrease in agricultural output: the inhabited area for the Late Roman Period (about 530 ha) contracted to ca. 100 ha., or about 80%, while fine ware, widely replaced by a lower quality burnished ware, as shown by the excavations conducted at Amorium also was no longer manufactured extensively.[101] A type of Glaze Ware was developed on the west coast of Anatolia, but it is extremely rare on the Central Plateau away from cities such as Amorium, where only loose economic connections between the two areas were sustained.[102] For example, the analysis carried out on the pottery collected by the CAS only identified three Glaze Ware fragments in 43 sites. Only certain sites survive in the

[100] New studies by Armstrong (2009), pp. 157-178 show that LRD was produced in the southern Anatolia until the 8th c. CE.
[101] Böhlendorf-Arlsan (2007), pp. 273-294 and (2012), pp. 153-179.
[102] Koder (2012), pp. 147-176.

archaeological record, such as the isolated communities on the massif near Konane (northern Pisidia) or important religious hubs such as Germia (northern Galatia). In the rest of Anatolia, rural occupation after about 650 CE seems to resemble what was observed for Central Anatolia; small communities located in isolated areas (on the massif near Balboura and upper Göksu valley in Isauria) survived into the Middle Ages, while small religious sites, such as Euchaïta (ca. 230 km north-west of Ankara), survived when they became centers of the post 7th c. CE administration.

The crucial question remains unanswered: why did Central Anatolian population and economic production contract in the middle of 7th c. CE? The obvious culprit would be the Arab attacks, frequent in Anatolia between the 7th and 9th c. CE. In particular, in 668 CE the Arabs penetrated deep into the Central Plateau, where they besieged and entered Amorium.[103] The city was not the only place in the area deeply affected by the Arab invasions; for example, a hoard of 47 gold coins dated to the kingdom of Constans II (641-668) was found buried at Germia which, Niewöhner hypothesizes, was left behind by a Byzantine soldier deployed and probably killed nearby.[104] However, the Arab invasions cannot be considered the sole cause of the decrease in rural occupation after the mid-7th c. CE; on the contrary, as already discussed in the previous chapters, these attacks may have simply further destabilized an already precarious equilibrium. Central Anatolia after all had long been under remarkable stress due to plague, migration and relocation of people, and military recruitment of able bodied males, all of which contributed to reducing the population.[105] As argued by Baird, the abandonment of the marginal lands in the

[103] Belke (1984), pp. 122-125.
[104] Niewöhner (2017), pp. 348.
[105] See chapter 5 and 7 for a fuller treatment of this topic.

Konya Plain was most likely set off by the crumbling of the fragile balance of factors that made the exploitation of these areas possible: in other words, marginal lands could only be cultivated when both the right amount of labor and demand existed. Thus, the abandonment of so many sites in Late Roman Central Anatolia is best explained multicausally; indeed, it may have been the result of the worsening of these conditions, when the availability of workers as well as stable markets to supply outside the region failed, intense cultivation of the rural countryside ceased to be feasible. The Arabs, thus, merely brought out a latent situation.

CHAPTER 7: Conclusion: Continuity and Resilience.

The disintegration of the Roman Empire and the end of Antiquity have traditionally been connected to the abandonment of cities, quintessential elements of the Roman way of life. In the study of the disappearance of urban centers, the case of Anatolia is particularly significant, as this region remained in the hands of Roman/Byzantine Emperors until the 11th c. CE, and it is thus a unique case through which to consider the internal socio-economic, political, and military changes that led to the abandonment of cities. The contribution of archaeology is even more crucial for the study of this phenomenon, as the number of other sources (epigraphic, literary, and numismatic) decreased significantly during this period and archaeological evidence is often the only data available. Thus, in the six chapters above, I analyze the processes that led to the disappearance of Pessinus, a Roman city located in the Province of Galatia (Central Anatolia), using this as a case study for the more general phenomenon of "the end of Antiquity." My study, however, is not only based on the rich archaeological record collected in 40 years of excavations at this city, is also contextualized within the archaeological, palynological, and climatic evidence recovered at two other urban centers (Ankara and Amorium) in the same region (Galatia, in Central Anatolia), as well as their rural countryside.

The choice to focus on the archaeology of Pessinus was further dictated by three main factors: 1) the availability of new archaeological evidence that I collected between 2011 and 2014 as excavation supervisor and 2) the possibility of considering a region such as Central

Anatolia, which has often been neglected by modern scholarship. Traditional studies have focused on the examination of large urban centers located on the western and southern coasts of Anatolia, which has created a significant imbalance in our knowledge of internal sites compared to coastal ones. 3) I also aimed to create a synthetic analysis of urban and rural communities in a region of Central Anatolia (Galatia), an approach that has not been widely adopted in modern scholarship. Studies in the past century have mostly analyzed individual cities or their regional hinterlands, and only recently, at cities such as Aphrodisias, Sagalassos, and Balboura, has research considered urban centers together with their rural environs. My dissertation intends to take this approach a step further, where the archaeological records of clusters of cities are examined contextually with their regional settings; this enables the creation of models that underline the interconnected nature of urban and rural communities as well as the measuring of their responses to socio-economic, administrative, and environment change.

The cities:

This contextual approach has illuminated a clear pattern of urban development for three cities (Pessinus, Ankara, and Amorium) located in the northwestern part of the Anatolian Plateau, roughly where the Province of Roman Galatia was situated. Pessinus, Ankara, and Amorium all show clear signs of settlement from the Bronze Age onward, but they do not reach full urban form until the Roman Period, when the integration of the region into the Roman Empire stimulated the creation of cities for a combination of administrative, commercial, and ideological reasons. The lack of urbanization during the Archaic, Classical, and Hellenistic Periods, contrary to patterns on the western and eastern coasts of Anatolia, has its roots in the different historical development of these two regions; Archaic and Classical cities on the west coast of

Anatolia appeared often as a result of the interactions between the Greek communities scattered around the Aegean, contacts that were only sporadic in Central Anatolia. An alternative to the city-state that emerged in Central Anatolia was the so-called temple-state, often consisting of large territories controlled by religious institutions; at Pessinus, for example, the temple-state was dedicated to Cybele, and the territory was administrated by a priest-king named after Attis, the mythical consort of the goddess. This organization was known throughout Central Anatolia, such as at the temple-states in southern Pontus (Zela and Comana) as well as that of Men in northern Pisidia. In the Hellenistic Period, the significant impetus to urban foundation was often the result of the intervention of Hellenistic rulers, who encouraged local communities to urbanize. Just as for the Archaic Period, Central Anatolia was only marginally connected to this world, and the region most likely did not undergo the same development noted in the rest in coastal Anatolia. Temple-states in the central plateau continued into the Hellenistic Period, when they were further monumentalized; at Pessinus, two phases of a citadel were erected at a major crossroad in the 4th and 3rd centuries BCE.

In the late 1st c. CE, Central Anatolia was annexed to the Roman Empire, and the new administration employed cities to control provincial territories. Several new cities were, therefore, founded during the reign of Augustus throughout all of Anatolia, and Pessinus and Ankara were most definitely part of this wave of foundations, and urban centers appeared for the first time in these sites. Ankara was selected as the capital of the newly established province of Galatia, and received the typical infrastructure of the Roman Period, such as a theater, a stadium, paved roads, and other public buildings. The temple of Augustus and Rome was also erected on the tallest hill of the city, and it symbolized the presence of a new order in this region. Early

Roman Pessinus also received a temple that may have celebrated the emperor and Rome, but its identification is not fully secure. In addition to this structure, a new monumental road, a theater, and extensive residential areas were built for the first time during the reign of Augustus at Pessinus, when the city reached an extension of about 80 ha. The evidence for Amorium is not as conclusive, as the archaeological explorations have not reached the Early Roman phases; however, a substantial architrave of a probable public structure dated to time of Claudius was found in the fabric of a later building. It is possible that Amorium had not reached the level of urban development observed at Pessinus and Ankara in the Early Roman Period; indeed, the absence of a theater and an aqueduct, key elements of Roman public infrastructure that have never been found at Amorium, are consistent with this hypothesis.

A new wave of public construction can be dated to the 3rd c. CE, probably during the reigns of Septimus Severus and Caracalla. These emperors were known to have crossed the area several times and stopped at Ankara (Caracalla) on their way to the Eastern frontiers, where the Empire was often engaged in war with the Parthians. Imperial visits may have indirectly stimulated further investment in public infrastructure, as also visible in the significant increase in the carving of inscriptions and dedications during this period. At Ankara one of the largest examples of a bath-gymnasium building in the Roman East was constructed during this period, while also a colonnaded road was added to the northern part of the city. The northern section of Pessinus was also further monumentalized in the early 3rd c. CE through the construction of an arch. In addition, a new paved road and civic Basilica were erected just north of the temple mentioned above. The archaeological investigations at Amorium do not seem to underline any comparable

development of its urban fabric in the early 3rd c. CE, and it is possible that the city did not undergo any substantial expansion.

The Late Roman Period brought a wave of significant change to Anatolia, legible in the building fabric of the cities of the region. Among other factors, the administrative reforms issued at the end of the 3rd c. CE by Diocletian and his successors led to the disappearance of the traditional Roman urban elites, while the introduction of Christianity in the 4th c. CE resulted in the erection of churches, the symbol of the new religion. These social changes also led to the abandonment of temples, as paganism was banned officially at the end of the 4th c. CE. The decommissioning and dismantling of these buildings provided spaces and materials that were often reused for new construction. The intensification of wars and threats of external invasions into Roman territories resulted in the reappearance of fortifications, an urban feature that had been widely absent for centuries. Cities located away from the frontiers were not often subjected to a real danger in the Late Roman Period, but urban walls soon became central elements of city infrastructure. City walls created a powerful landmark on the landscape, which became key for the development of urban identities of this time.

Central Anatolia exhibits all these developments; the Province of Galatia was divided into two territorial units, *Galatia Prima* and *Galatia Secunda*, with capitals at Ankara and Pessinus respectively. As such, both cities also became the seats of bishops in the late 4th c. CE, and functioned as administrative and religious centers of their provinces. Amorium did not become a capital, and it was assigned to the territory of Galatia *Secunda*. The introduction of Christianity transformed the urban landscapes of these cities. At Pessinus, for example, the above-cited 3rd c. CE civic Basilica was turned in the main cathedral dedicated to saint Sophia during the 6th c. CE.

An extra urban church, most likely erected in the late 5th/early 6th c. and dedicated to the cult of the angels, was recently discovered north of the city, in the proximity of the extra urban road. Much of the material used in order to carry out these building projects was taken from the Roman Temple, which was abandoned and dismantled after the Emperor Theodosius banned paganism in 393 CE. The need for greater security resulted in the erection of a set of urban defenses in the late 4th/early 5th c. CE, a feature that had never appeared before in the urban fabric of Pessinus. This design of these fortifications, which were excavated and studied by the writer, took advantage of the natural environment, which consists of high plateaus located around the narrow valley, where the city was situated. Plateaus were, therefore, fortified individually, and there was most likely no curtain wall that surrounded the city.[1] Such an arrangement most likely did not aim to withstand sieges, but rather intended to surveil the circulation of people in the landscape. Thus, it is probable that Late Roman Pessinus was hardly ever under any real military threat, and this building project aimed to create a powerful landmark on the landscape.

The monumental center of Pessinus (marble paved square and colonnaded road) was maintained and restored until 7th c. CE, as shown by archaeological investigations conducted in this area. If we turn to the residential blocks investigated archaeologically, we observe that all of them are continuously occupied from the late 1st c. BCE to the 7th c. CE. In addition, at least two new residential blocks, situated in the northern and southern peripheries of the city, were newly built in the late 6th/early 7th c. CE, reclaiming areas that had been unexploited for centuries. It is, therefore, very likely that Pessinus maintained its urban character and population into the 7th c.

[1] In chapter 2, I speculate that a curtain wall did exist and linked the fortified plateaus. However, no evidence for this available.

CE. Only then was the city extensively abandoned, and habitation was concentrated around the marble square located in the near the Roman Temple Area. Probably in the course of 7th c. CE, a fortified citadel was erected on a plateau in the northern periphery of the city, which represents the last evidence for a large building project at Pessinus. This complex was much larger and more monumental than the fortified hilltops mentioned above; the archaeological investigations have revealed the presence of houses, workshops, and a keep, which were absent in the watchtowers erected in the late 4th/5th c. CE.

The examination of Late Roman Ankara did not provide clear data for the city development, given the fast-urban growth since the 1920s. The information at our disposal is therefore often hidden in the fabric of later buildings, which were erected with the material of dismantled structures. Remarkably, there is no physical trace of Late Roman churches at Ankara, even though many are known through the literary sources. Archaeological investigations conducted in the past decades have revealed the presence of a city wall built with reused materials from the stadium and other buildings, dated perhaps to the 3rd c. CE. Recent research has also documented the presence of repairs of the bath-gymnasium in the later 4th c. CE, while both the theater and one of the main monumental roads were renovated during the reign of Anastasius, in the early 6th c. CE. The late 6th/ 7th c. CE often represents the last archaeologically verifiable phase at Ankara, as the later (often more ephemeral) development has often been destroyed by modern construction projects. U. Peschlow's recent study, however, has convincingly demonstrated that the 7th c. CE was not necessarily a time of significant urban decline at Ankara, and some of the city structures survived until the 9th c. CE. Peschlow has shown that the bath-gymnasium, the aqueduct, and the fortifications were still in use until the Arabs sacked the city

in 838 CE, and that Ankara may have therefore remained a sizable settlement through the Invasions Period (7th-9th centuries CE). In particular, the use of the Late Roman fortification in the 9th c. CE siege, a defense wall that encircled the entire Roman city, may imply that the 9th c. urban community was still populous enough to need (and be able to man) a fortified urban area. Ankara was, at this time, the capital of a theme (Opsikion first, and Bucellarian second), the new territorial unit introduced in the middle of the 7th c. CE; it may, therefore, be possible that this privileged status allowed Ankara to retain some of its population and urban character for some time into the Invasions Period (7th – 9th centuries CE). Continuity of occupation in and around thematic capitals is indeed not uncommon during this period; besides the case of Amorium, which is discussed below, recent research on the rural hinterlands of Seleucia ad Calycadnum (in Cilicia) show that settlements established in the Late Roman Period continued into the 9th – 10th c. CE.[2] Also at Nicaea, the limited archaeological research shows the Late Roman wall and (perhaps) the main urban roads were in use into the Middle Byzantine Period.[3] This is not to say that post-7th c. CE Ankara was as populous as in the Late Roman Period, but simply to account for the possibility that a sizeable community still resided here between the 7th and 9th centuries CE. Only after 838 CE, when Ankara was sieged and destroyed by the Arabs, did the city lose most of its urban population; the defensive wall from the Roman Period was not restored, and it was replaced by much smaller fortresses that protected hilltops.

A confirmation of this development can be seen at Amorium, a city that was also selected as thematic capital in the middle of the 7th c. CE and shared the same fate in the 838 CE, when it was destroyed by the Arabs. As argued above, Amorium may not have been a prominent Roman

[2] Varinlioğlu (2013), pp. 199-209.
[3] Peschlow (2017a), pp. 203-216.

center, given the absence of many of the typical urban features from the Roman Period. In the late 5th and early 6th centuries CE, Amorium seems to develop as a major military site. The reasons behind the selection of Amorium for this role are still unclear, but it is possible that the location of the city, which was situated off a major highway in an arable and well-watered plain, may have played a key role. In the late 5th-early 6th c. CE, a large Christian Basilica, a massive fortification wall, a bathhouse, and a large public building (*Large Late Roman Building*) were added to the fabric of the city. They were mostly located in the southern part of the city, and they mainly rest on previously underdeveloped areas. Thus, we can assume that the city was substantially expanded during this period.

Archaeological investigations do not seem to underline marked changes in the urban fabric of Amorium until the Arab siege in 838 CE. Probably in the 7th c. CE, a fortified citadel was constructed on top of the manmade *höyük* (the Upper City); citadels were often built by local communities in search of further security, but, for the case of Amorium, its erection may be the result of the stationing of a military garrison as part of the establishment of the thematic capital here in the mid-7th c. CE. The Arab invasion of the 9th c. CE, by contrast, led to destruction and abandonment of many of the urban features mentioned above: the defensive wall, the citadel, the Christian basilica, and the bathhouse were all severely damaged during the attack. After 838 CE, only parts of the urban structures were reconstructed, but most areas were abandoned and quarried for material. Just as for Ankara, a few neighborhoods were fortified and re-inhabited; this is the case of the citadel, which was re-erected in the later 9th c. CE, and of the so-called Enclosure (late 10th – early 11th c. CE), a walled compound with houses and workshops located just south of the citadel. The Late Roman fortification wall and bathhouse were never repaired,

and large portions of the Late Roman city were never re-occupied. In the later 9th c. CE, the population of Amorium was much smaller, while most of the public structures constructed in the Late Roman Period were no longer in use.

The three cities analyzed here did not develop until the 1st c. BCE, when the Roman Province of Galatia was established. Extensive urbanization did not exist in the region before the annexation into the Roman Empire, and the area was often controlled by large estates tied to religious institutions, such as temple-states. During the Early and Middle Roman Periods, Ankara and Pessinus received all the structures common in Roman cities, such as temples, theaters, stadia, and civic buildings. At Amorium, by contrast, the urban development of this period seems to be less extensive, as many of these structures were never found. In the Late Roman Period, significant socio-economic, religious, and military change led to substantial transformations in the urban fabrics of these cities. Ankara and Pessinus were selected as provincial capitals, and their Roman urban structures were renovated and restored several times until the 7th c. CE. These cities also became major Christian centers, and churches appeared both within and outside the urban areas. The increased need of security also led to the reappearance of fortifications, which, however, were to a significant degree of symbolic importance, as Central Anatolian cities were hardly ever in real danger. Most of these building projects were carried out at the expenses of decommissioned structures, such as temples, which no longer had a purpose in this period. Amorium underwent fast growth in the late 5th-early 6th centuries CE, when it became an important military site, given its advantageous location. In this period, a substantial fortification wall was erected together with a Christian Basilica, a bathhouse, and a large public

building. The structures were built in the southern part of the city, an area that was underdeveloped until then.

In the course of the 7th c. CE, the empire underwent a period of significant crisis, where the frequent invasions (Persians and Arabs) deprived the Empire of the majority of its Eastern provinces. To face this crisis, the Empire was re-organized into military districts called themes, which housed the field armies. With this administrative change, Pessinus lost its privileged status, which was transferred to Amorium, while Ankara was confirmed as a thematic capital. If we turn to the archaeological evidence, we notice that Pessinus did not survive this crisis, and the 7th c. CE was most definitely the time in which most of its urban area was abandoned. The city was not directly touched by the invasions, as there is no evidence that any of its urban structures were destroyed violently. It is, therefore, possible that the urban population moved away from the city once it lost its status as a capital. Amorium and Ankara, by contrast, seem to develop differently; the archaeological evidence collected at Amorium clear shows that the urban structures built in the late 5th-early 6th c. CE continued to be used into the 9th c. CE, when the city was besieged and destroyed by the Arabs. It is, thus, probable that the city maintained its urban population and character until 838 CE, the date of the siege. The results from Ankara are not as conclusive, as most of the ancient city is still buried under the modern structures. However, the use of the Late Roman fortification until the 9th c. CE siege may imply that the city was sizeable enough to necessitate and man a wall that encircled a large urban area. Thus, Ankara might have also retained a significant part of its population. After the Arab siege of 838 CE, neither Ankara nor Amorium completely recovered in size or population. The communities still residing here

were mostly located inside hilltop fortifications, such as citadels, and in walled compounds, such as the so-called Enclosure at Amorium.

The Countryside:

The analysis of the archaeological, epigraphic, and environmental evidence for rural occupation in central Anatolia has revealed that this region underwent a period of intensification in both occupation and economic production. Field surveys conducted in the Konya Plain, Phrygia, and northern Pisidia show a significant increase in the number of Late Roman sites, which were no longer only located in fertile lands, but also in more marginal areas. The phenomenon has been interpreted as evidence for an increase in population, which needed to be supported by a larger agricultural output. The data at our disposal are not always easy to examine, as they often come from surveys conducted with very different methodologies, coverages, and objectives. The Konya Plain Survey offers the best data on the Central Anatolian rural expansion, and it shows that the number of sites and total inhabited area increased by ca. 30% in the 5th c. CE. A similar trend was also observed in other parts of the Konya Province (CAS), in Phrygia at Aizanoi and Dorylaion, and near Konane in the isolated pre-mountain communities of Pisidia. The surveys conducted in these areas do not allow for precise quantification, but they nonetheless confirm an increase in land exploitation throughout the Central Anatolian Plateau. The intensification in occupation of the Late Roman countryside in Central Anatolia goes hand in hand with an increase in the financial investment in rural communities, where many small churches were erected in the late 5th – early 6th c. CE. The phenomenon is known in Central Anatolia at Aizanoi, in western Phrygia, where 25 new churches from this period were discovered and analyzed. Expenditure on rural religious

construction seems to significantly outweigh the investment in urban centers, which at Aizanoi has been quantified as ca. 4 to 1. The pattern observed at Aizanoi was also noticed in other areas of the Central Anatolian countryside, such as the Konya Plain, Sykeon in northern Galatia, and Komana in southern Pontus.

Recent palynological investigations also seem to confirm an increase in land exploitation in Late Roman Anatolia; here, cereals, "tree crops" (vine, olive, and walnuts), and plants suitable for gazing grew in number in the Anatolian countryside from the 4th c. CE onward. In Central Anatolia, agricultural production increased progressively in the period between the 4th and the mid-7th centuries CE without significant change, contrary to what can be observed on the coasts, where production varies significantly over time (Figure 6.17). By the mid-6th c. CE, this region was the most stable and productive agricultural area in Anatolia, independent of fluctuations in temperature and availability of water.

Political changes in the Late Roman Period also led to an uptick in the manufacturing of ceramics in Anatolia, especially amphorae and fine ware, which circulated widely throughout the Roman Empire. Recent investigations revealed that Anatolia acquired economic prominence as a result of the loss territory in the west (especially western Africa); indeed, coastal areas in Anatolia replaced the western provinces in the supply of the *annona*, the state-controlled enterprise that provided Constantinople and the army with grain, olive oil, and wine. This phenomenon increased the connectivity between maritime cities and productive centers throughout the Eastern Mediterranean Sea, but led to a progressive isolation of the Central Anatolian regions; transportation via land was costly in the ancient world, and it is possible that the state incentive given by the *annona* stimulated further trade between coastal sites at the

expenses of those located inland, where exchanges were less profitable. A distinctive example for this phenomenon can be seen in the production of Late Roman Red Slip ware, a common high-quality type of tableware. In the Early and Middle Roman Periods, Central Anatolia was part of a large trade network, in which fine ware was imported from the Pontic region as well as the rest of Anatolia. In Late Roman Period, this connection seems to be severed, and imported fine ware was completely replaced by the emergence of local production. This development can also be observed in the trade of marble, as Late Roman Central Anatolia relied exclusively on the local quarries (mostly from Docimium), while more variety was available in the previous centuries.

By the mid-7th c. CE, intensive occupation and cultivation of the Anatolian countryside seems to have come to a stop; the production of amphorae and fine ware almost disappeared, while agricultural production also dropped significantly. However, economic activity did not decrease uniformly in the Anatolian countryside; rural communities on coastal areas declined from the 6th c. CE onward, while Central Anatolia shows a drop in production around the middle of the 7th c. CE. The pollen evidence suggests that 650 CE was time of a significant decrease in agricultural activity (about 70-80% of cereal production), a date that may be confirmed by the pottery collected in the Konya Plain, where settlements seem to contract remarkably during the 7th c. CE; here, occupation of countryside goes from an area of ca. 530 ha to one of ca. 100 ha., a decline of about 80%, as documented in the pollen record. As argued in Chapter 6, the evidence at our disposal does not allow us to quantify the decrease in production securely, and, therefore, the ca. 80% drop in production should not be taken at face value. However, the remarkable decrease in all the indicators for productive activities cannot be overlooked, and it is safe to assume that the

agricultural output of the later 7th c. CE was definitely smaller than before. By the same token, also the significant contraction in the occupation of the rural countryside in Central Anatolia (from 530 to 100 ha.) must mirror a substantial decrease in population. Thus, we can conclude that Central Anatolia was less populated and productive in the second half of the 7th c. CE. Only certain sites survive in the archaeological record, such as the isolated communities on the massif near Konane (northern Pisidia) or the rural areas tied to important religious hubs such as Germia (northern Galatia). In the rest of Anatolia, occupation in the countryside after 650 CE resembles what was observed for Central Anatolia; small communities located in isolated areas (on the massif near Balboura and upper Göksu valley in Isauria) continued into the Middle Byzantine Period, while small religious sites, such as Euchaïta (ca. 230 km north-west of Ankara), survived as centers of post 7th c. CE administration.

Concluding remarks:

The contextual examination of the archaeological record collected in Galatia, located in the Central Anatolian Plateau, has underlined the different responses of the communities in three sites (Pessinus, Ankara, and Amorium) to regional and supra-regional change. Two main elements marked their macro-development: the integration in the Roman Empire in the late 1st BCE and the unraveling of its socio-economic and military infrastructure in the Late Roman Period. The Roman conquest led to the development of urbanism in Galatia, an element that was not part of the local tradition until then. The decline and change of the Imperial institutions at the end of Antiquity, by contrast, resulted in a substantial transformation of the settlement pattern in the area, as well as the disappearance of Roman Pessinus.

When analyzing the urban history of these three sites in the Late Roman Period, we notice a similar development for Pessinus and Ankara; they both enjoy the status of provincial capitals and bishoprics, and they seem to maintain most of their urban character and populations throughout this period. This is not an uncommon phenomenon in provincial capitals, such as Aphrodisias, as demonstrated by recent archaeological research. However, the above-discussed socio-economic changes were often unfavorable to urban life, and it has been shown archaeologically that several cities were progressively abandoned from the 5th c. CE onwards. This is, for example, the case of both Aizanoi and Miletus, where the steady abandonment of the cities was countered by an intensification in rural occupation. Amorium, by contrast, became a prominent military site in the late 5th c. - early 6th c. CE., and it was quickly expanded in a few decades along the lines detailed above.

The archaeological record examined, therefore, suggests that urban life continued at these three cities into the 7th c. CE; their urban areas were still significantly occupied until then, while their key city structures, such as baths, monumental roads, and squares, were still repaired periodically and in use into the 7th c. CE. This continuity may have been enabled by the progressive economic isolation that occurred in Central Anatolia from the 5th c. CE onward. The loss of the western provinces (Africa, in particular) drew the productive coastal areas of Anatolia to more profitable markets, which were supported by a re-organization of the state-line of supply (*annona*). Long and medium distance trade in the Ancient World relied heavily on sea travel, and the new *annona* must have lowered even further the transaction costs between coastal sites, as sea trade was sponsored by the state. This may have stimulated further the economic connectivity among the coasts of the Empire, which could profit even more substantially from

maritime trade. Archaeological evidence suggests that the breakdown of long and medium distant trade via sea may have started in the 6th c. CE, when especially pottery assemblages seem to underline a decrease in imports and an intensification in local production. Coastal areas that relied significantly on maritime markets suffered particularly, and they were already extensively abandoned in the 7th c. CE, as shown by recent research conducted in Cilicia, located along the state-line of supply.

By contrast, Central Anatolia had turned in on itself from the 5th c. CE onward; this is shown by the emergence of local workshops of Red Slip fine ware and marble carving that completely replaced the imports. The manufacturing of ceramics was not the only activity that benefitted from economic isolation, but also the agricultural production in Central Anatolia increased steadily until 7th c. CE, when the Central Plateau had become the most stable food producer in Anatolia. It is, therefore, possible that Pessinus, Ankara, and Amorium, which already enjoyed a privileged administrative, religious, and military status, also benefitted from their reliance on local and stable markets. Thus, it is not unreasonable to assume that the crisis that affected highly connected coastal cities was less severe here and enabled these cities to continue into the 7th c. CE. Only after 650 CE, when the Empire had lost its eastern provinces and its very survival had been threatened, even the stable economic and demographic equilibrium of Central Anatolia was destructed. Manufacturing of products and agricultural output dropped too significantly not to imply also a substantial decrease of population. The administrative re-organization that occurred to counter this crisis radically changed the way of living in the Eastern Empire; themes, the new territorial units, were now administrated by military chiefs, and they housed and supplied their individual field armies. The new military leaders were located in a handful of highly defended

sites that controlled a network of villages. In this reform, Pessinus was no longer chosen as a capital, and it, thus, ceased to exist, since the later 7th c. CE world no longer needed an urbanized society. By contrast, Amorium and Ankara were elevated to this status, and archaeological evidence suggest that at Amorium (and perhaps Ankara) urban life continued into the 9th c. CE. The rural communities in Central Anatolia had also been significantly abandoned by the later 7th c. CE, and only sites in the vicinity of important religious centers (Germia) and isolated communities (northern Pisidia) continued into the post-Roman world.

Figures:

Figure 1.1. Google Earth View of the region considered in this work.

Figure 2.1. Map of Asia Minor. (After Dally and Ratte´ 2011, p. 1, fig. 1).

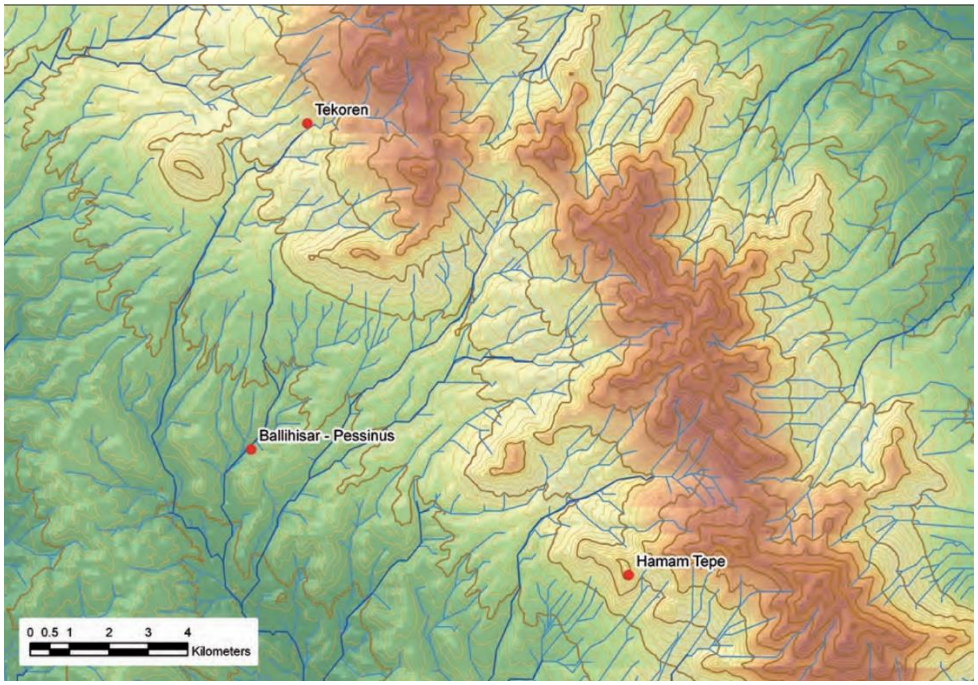


Figure 2.2. Map of the territory around Pessinus. (After Tsetskhladze 2013, p. 41, fig. 1).

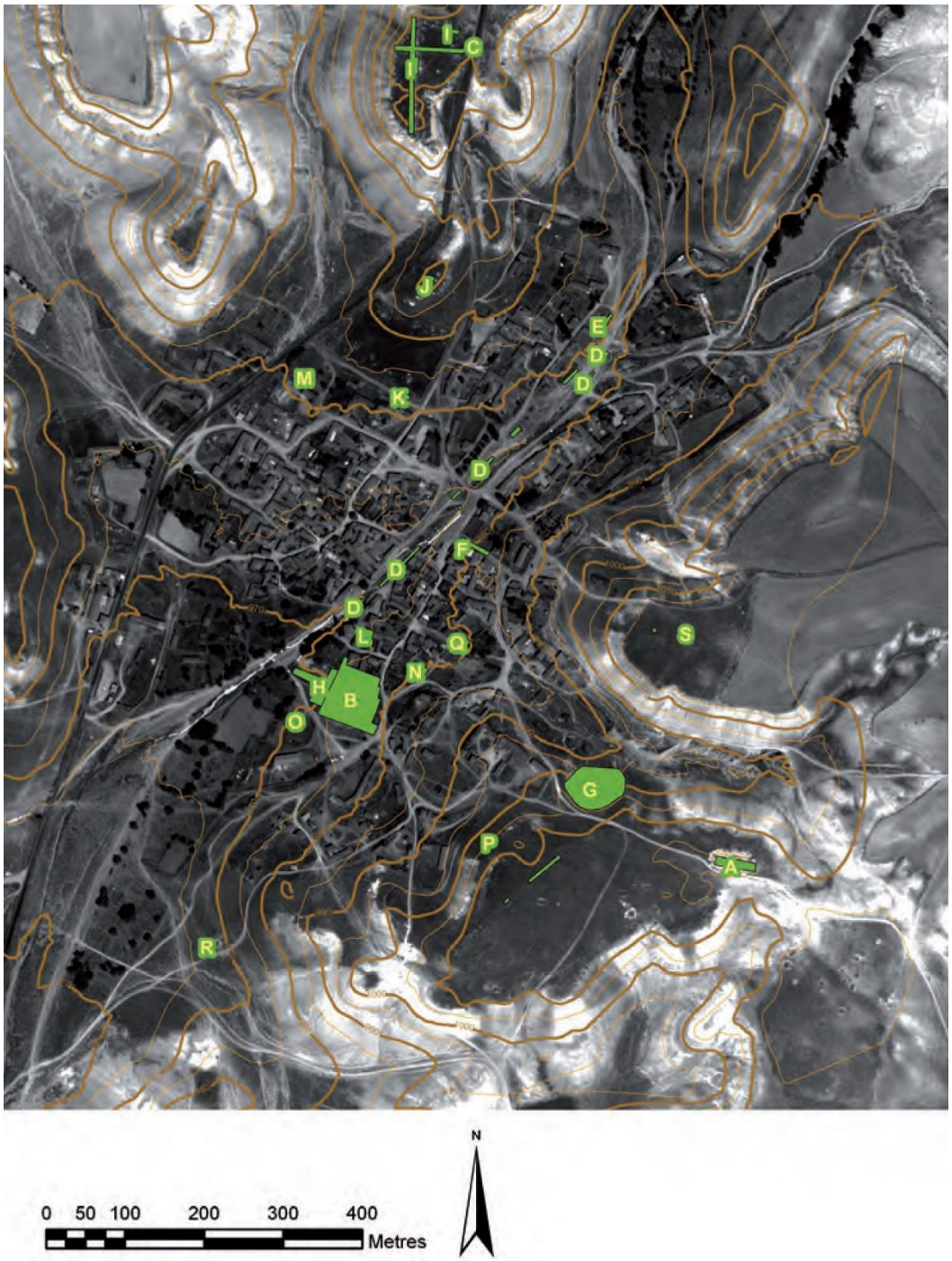


Figure 2.3. Map of excavated sectors at Pessinus. (After Tsetskhladze 2013, p. 44, fig. 4).

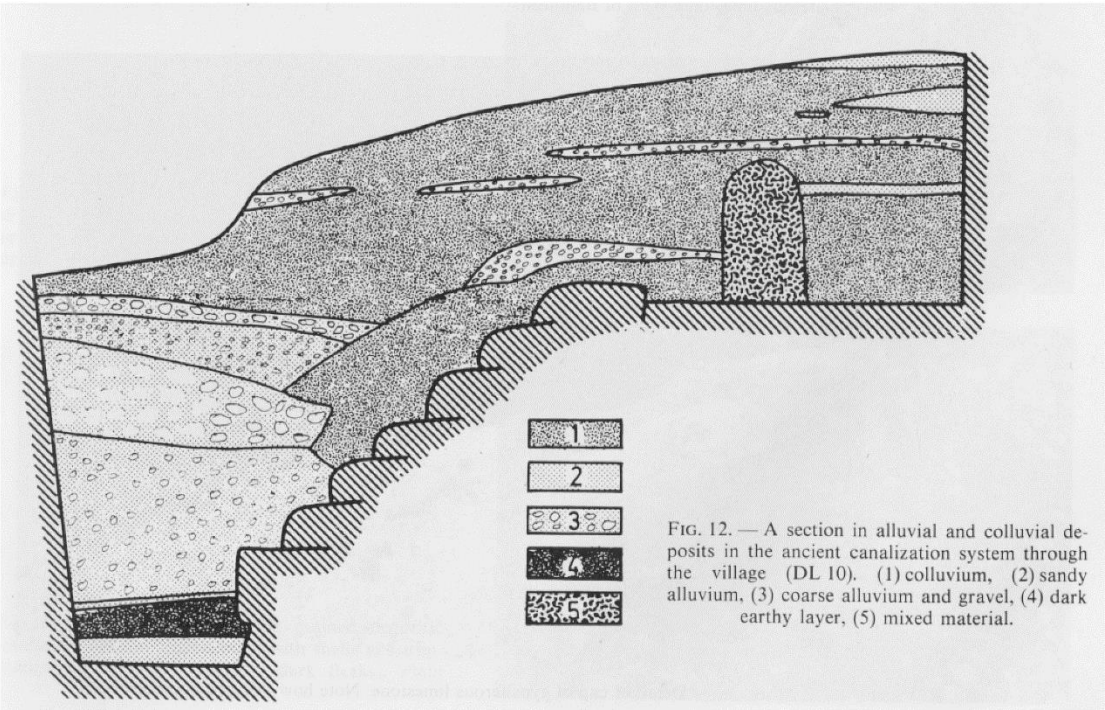


FIG. 12. — A section in alluvial and colluvial deposits in the ancient canalization system through the village (DL 10). (1) colluvium, (2) sandy alluvium, (3) coarse alluvium and gravel, (4) dark earthy layer, (5) mixed material.

Figure 2.4. Section of the geological deposit by the Roman Arch in Sector D2. (After Stoop 1984, p. 13, fig. 12).

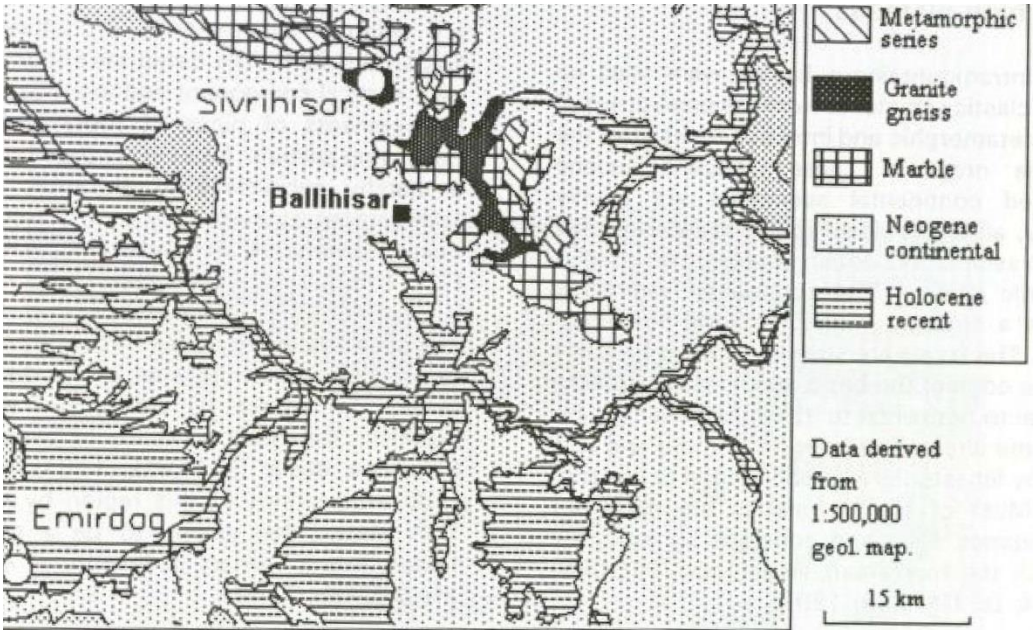


Figure 2.5. Distribution of stone in the landscape (After Stoops 1984, p. 14, fig. 13).

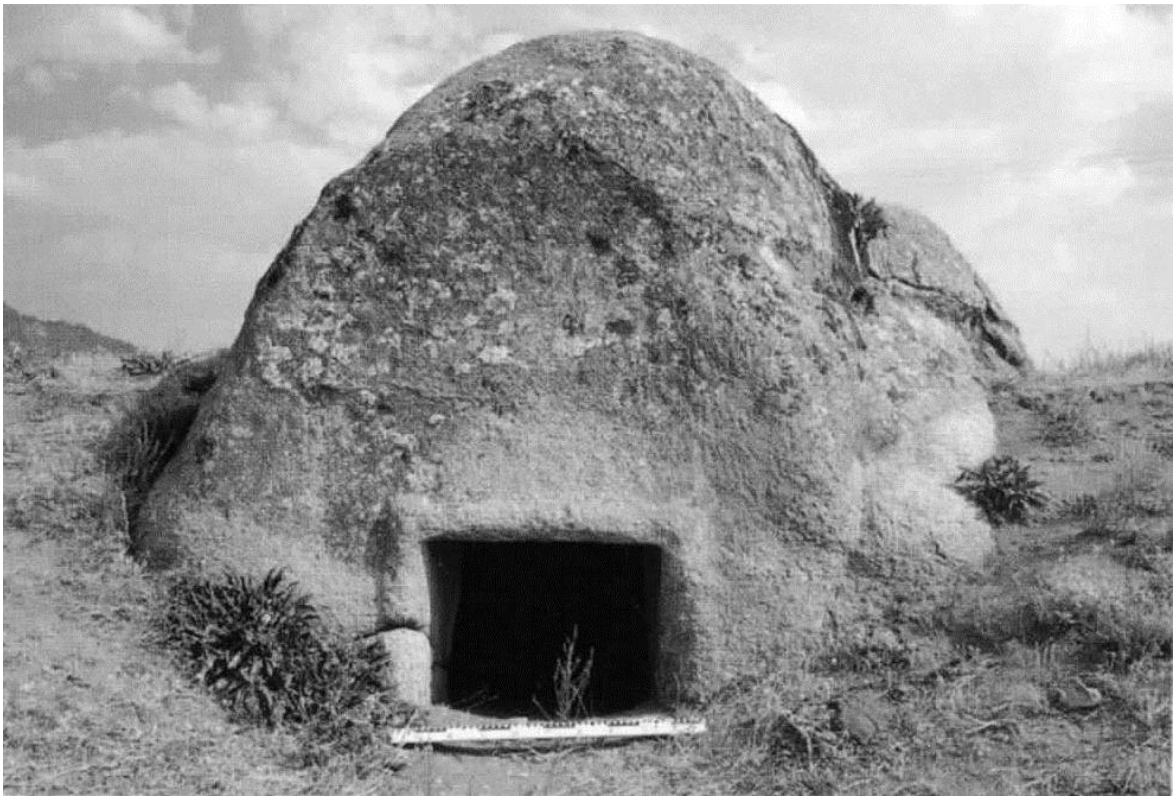


Figure 2.6. Rock-cut tomb. (After Tsetskhladze 2009, p. 716, fig. 8).

Figure 2.7. Coin with a river-god. (After Devreker 1984, p. 143, fig. 27).

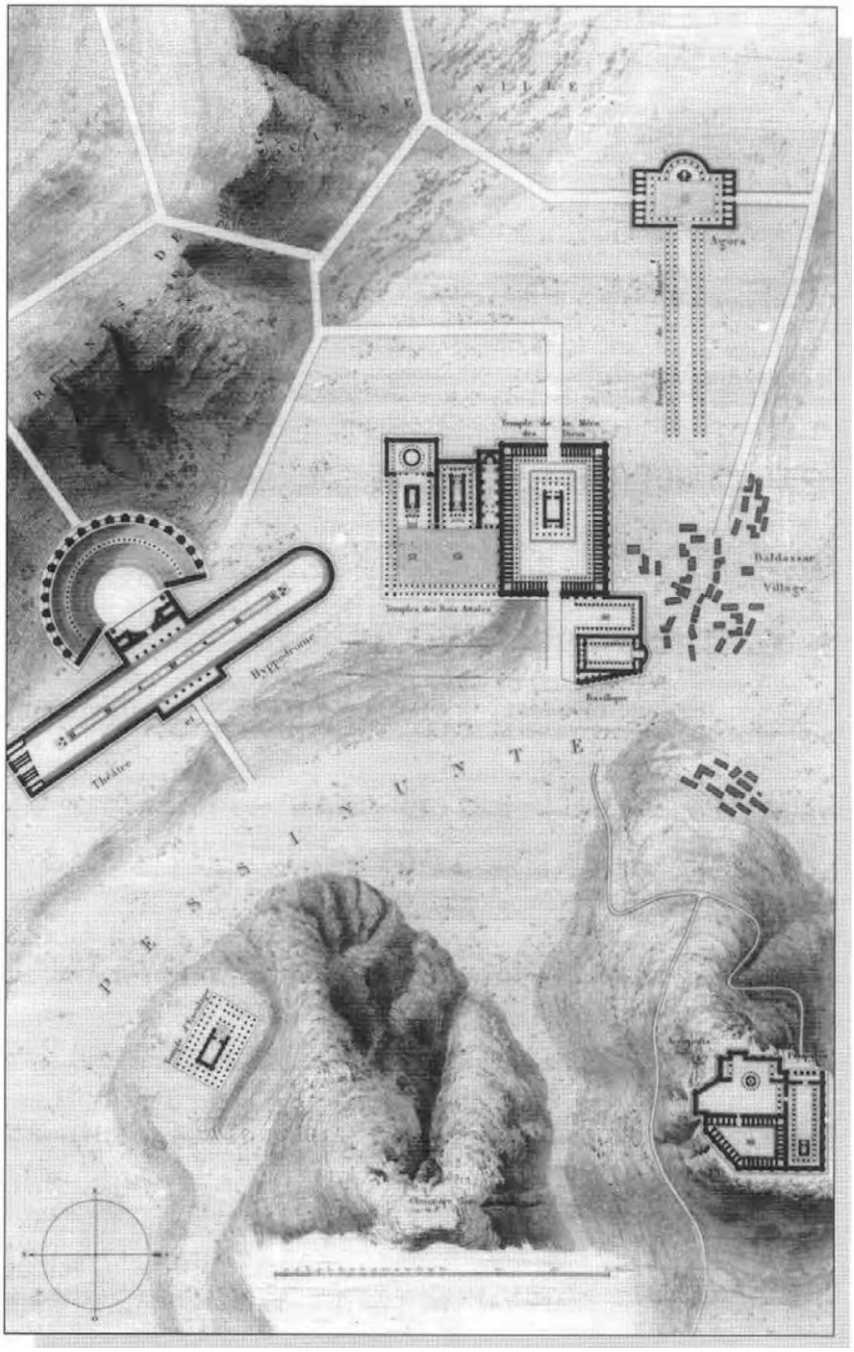


Figure 2.8. Pessinus in the eyes of Texier. (After Texier 1839).

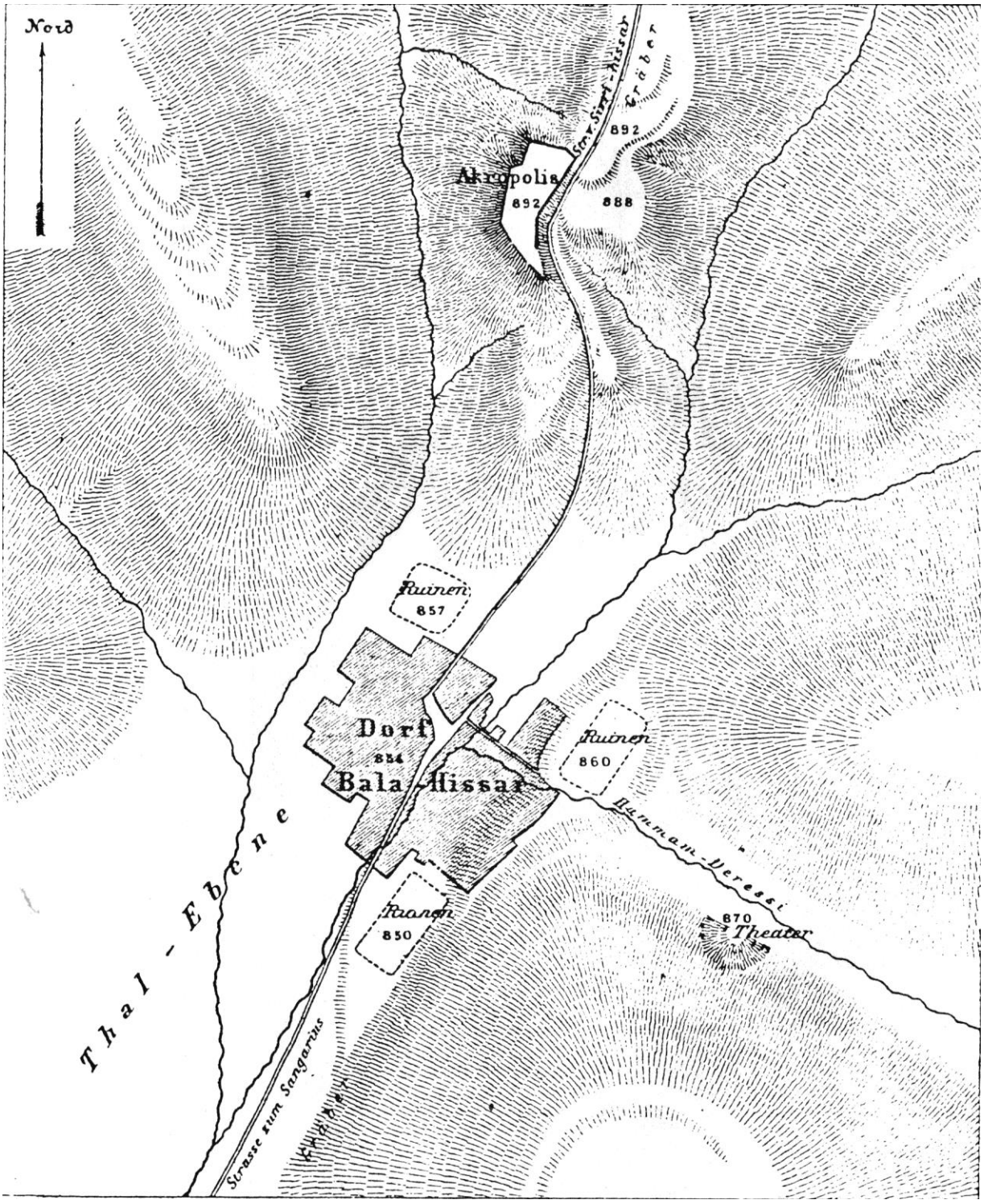


Figure 2.9. Plan of Pessinus drawn by Humann. (After Humann 1890).

Figure 2.10. Traces of Phrygian occupation in Tekören. (After Tsetskhladze 2009, p. 716, fig. 9).

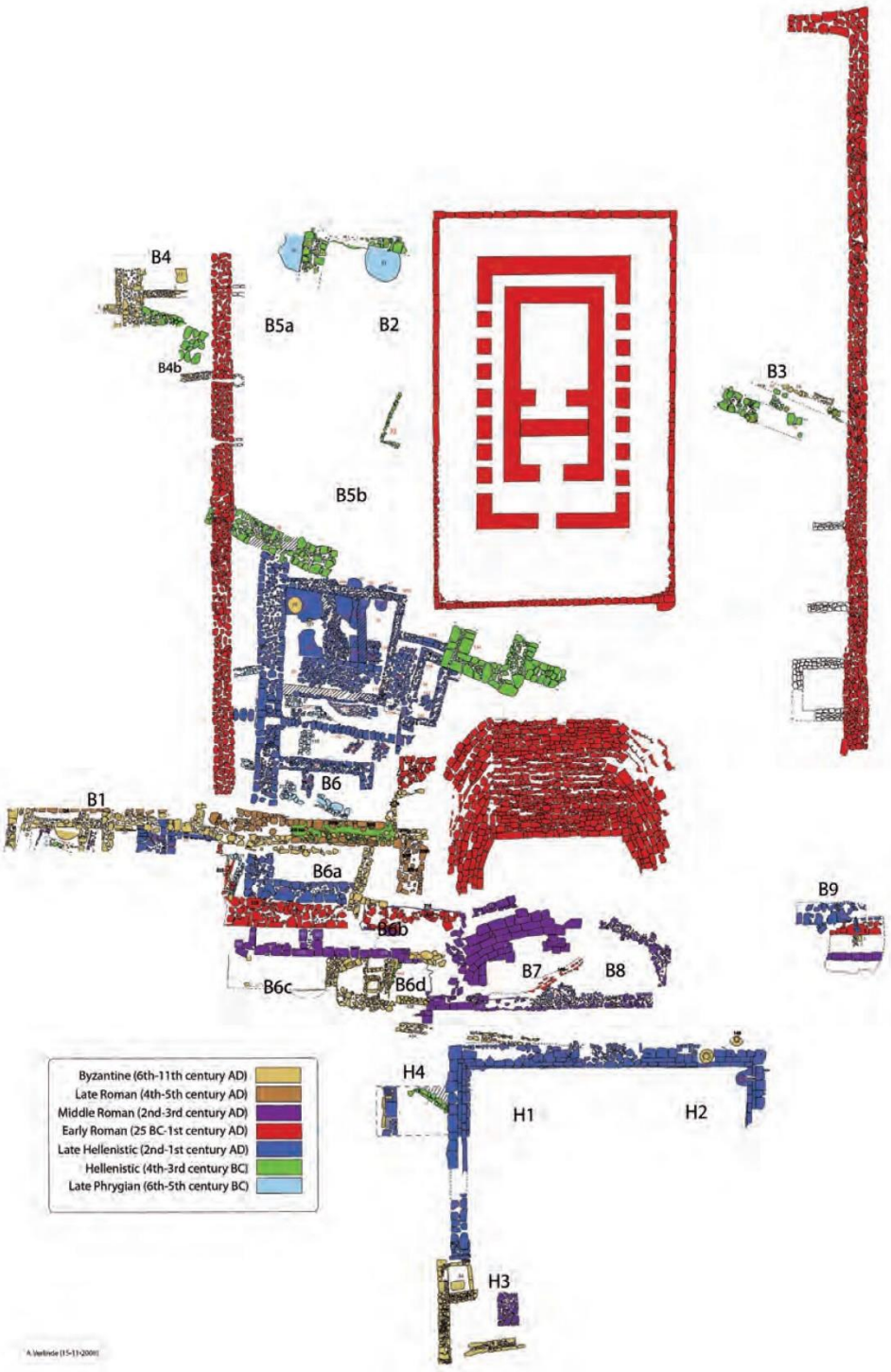


Figure 2.11. Plan of the citadel. (After Verlinde 2015, Plate 4).

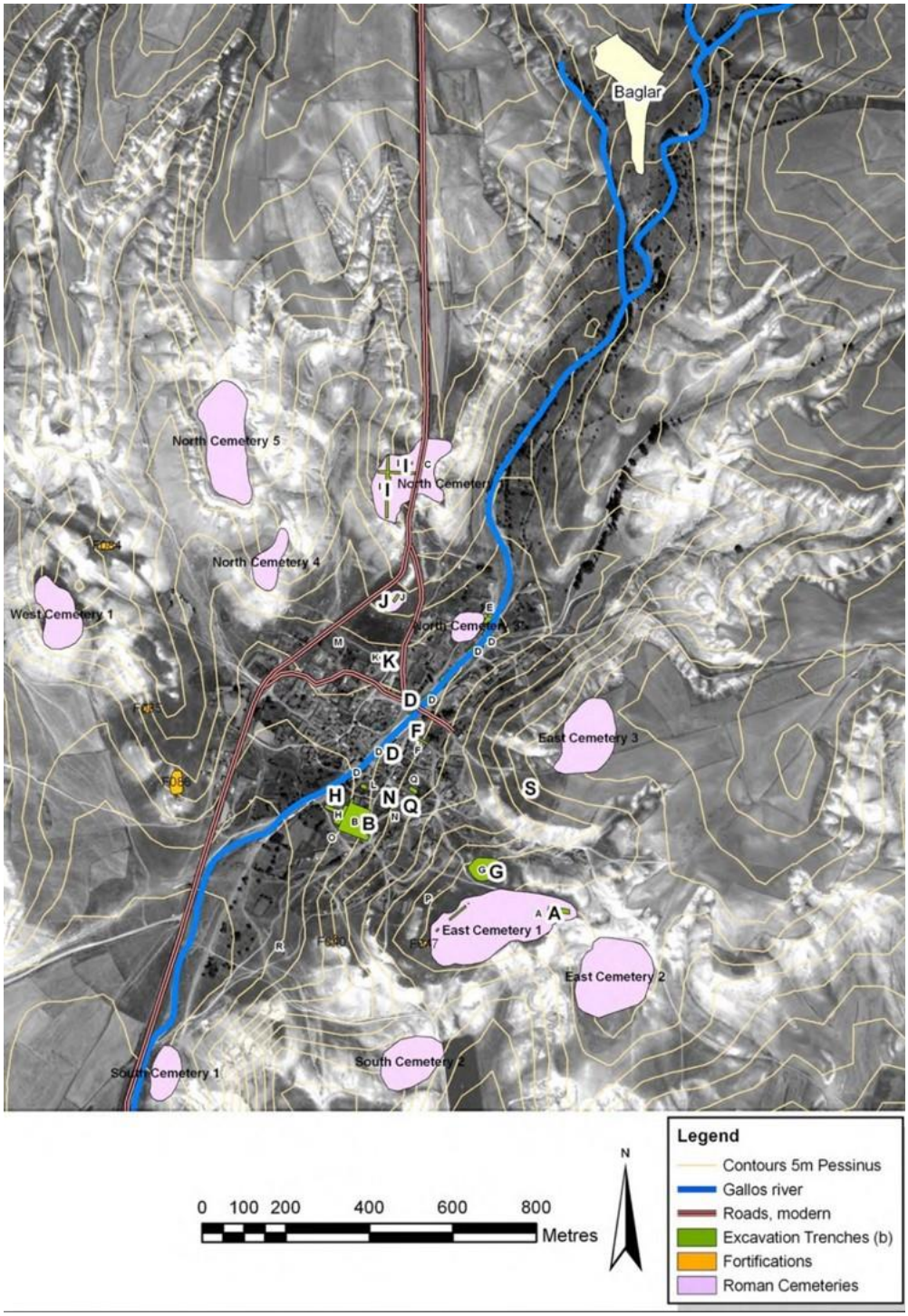


Figure 2.12. Plan of the city with location of necropoleis. (After Tsetskhladze forthcoming, p. 65, fig. 78).

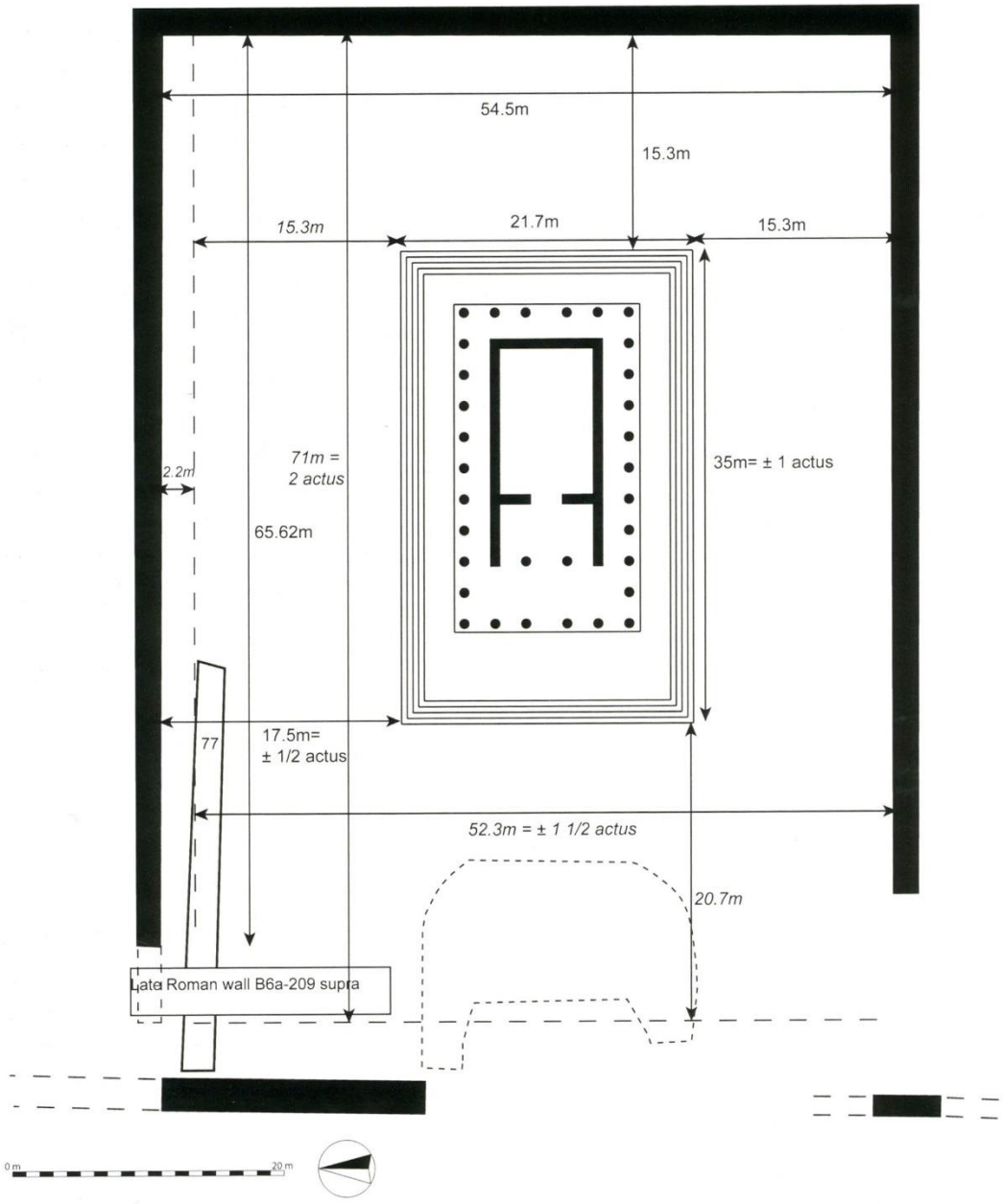


Figure 2.13. Plan of the temple. (After Verlinde 2015, p. 152, fig. 83).

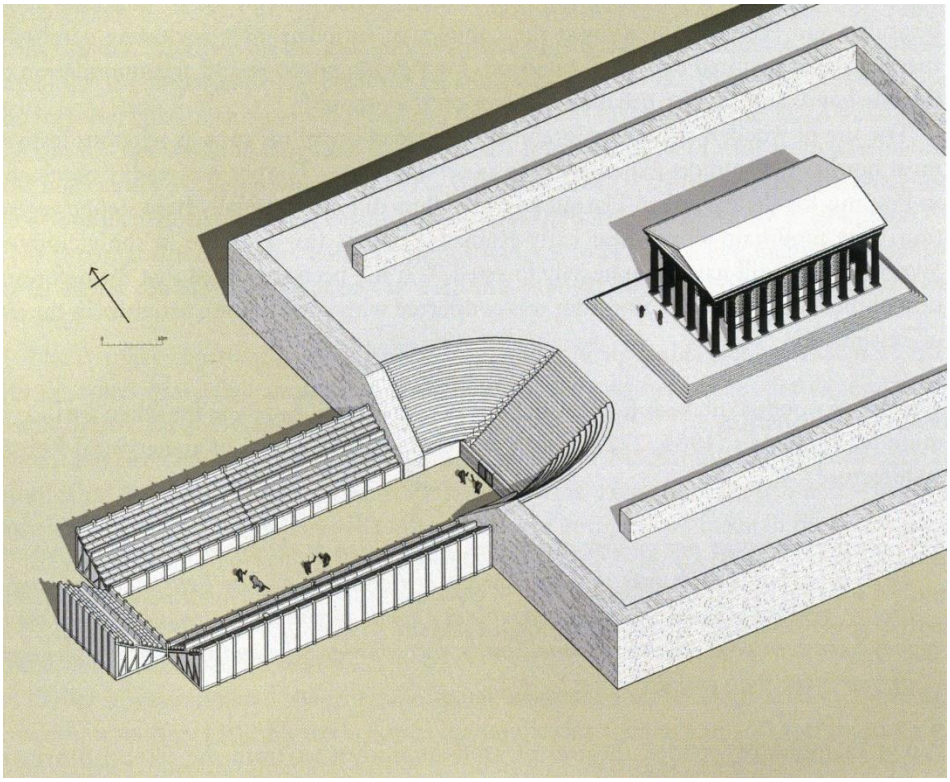


Figure 2.14. Possible reconstruction of the temple complex. (After Verlinde 2015, p. 239, fig. 112.).

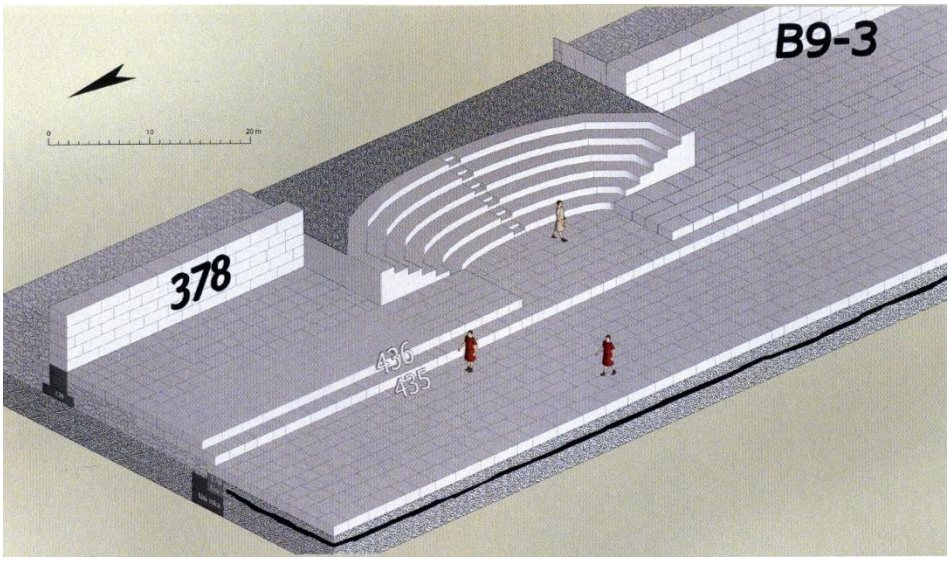


Figure 2.15. Conjectural reconstruction of the Severan renovation of the stairway-theater complex. (After Verlinde 2015, p. 285, fig. 127).

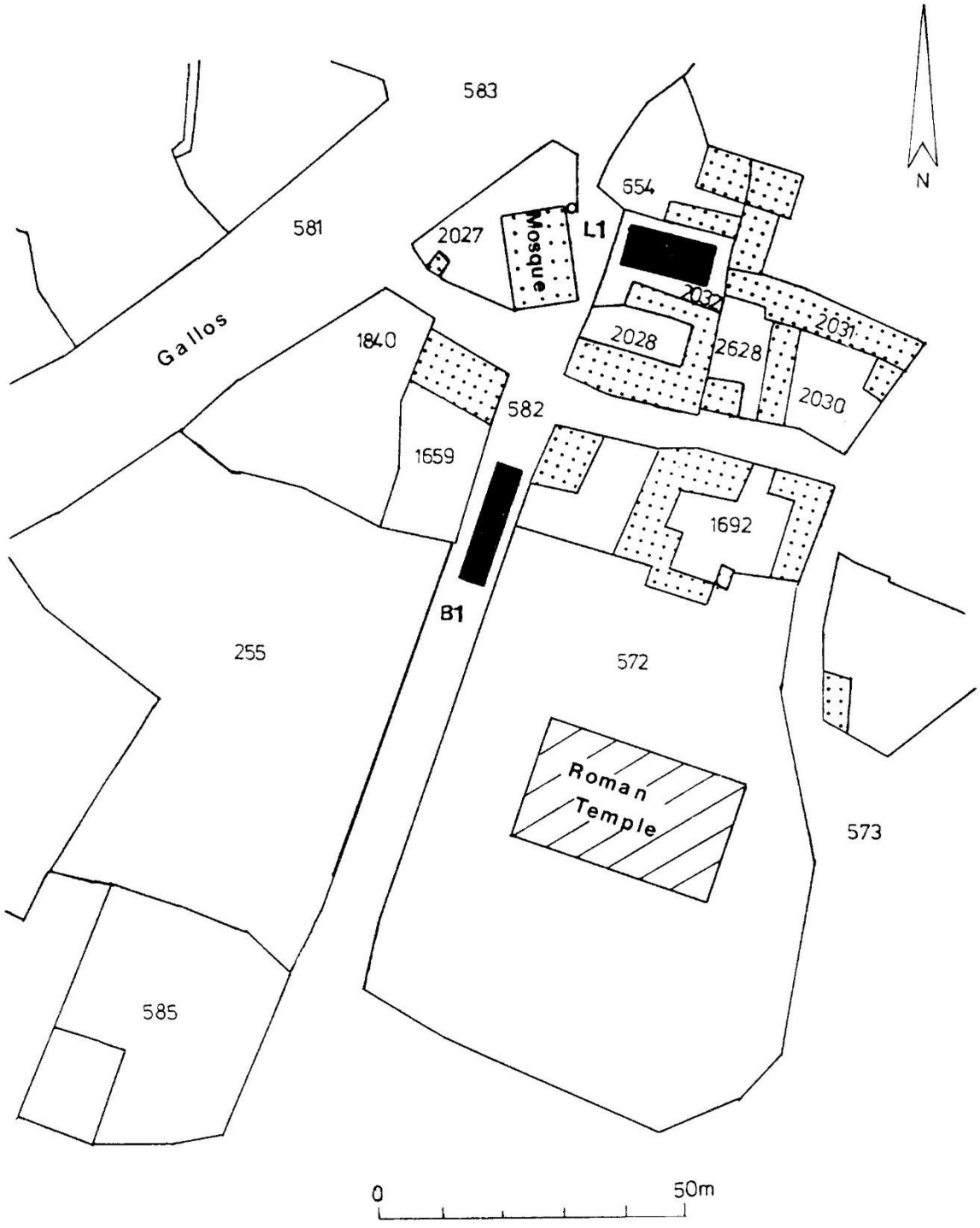


Figure 2.16. Position of Sector L in relation to the temple area. (After Devreker and Vermeulen 1996, p. 69, fig. 2).

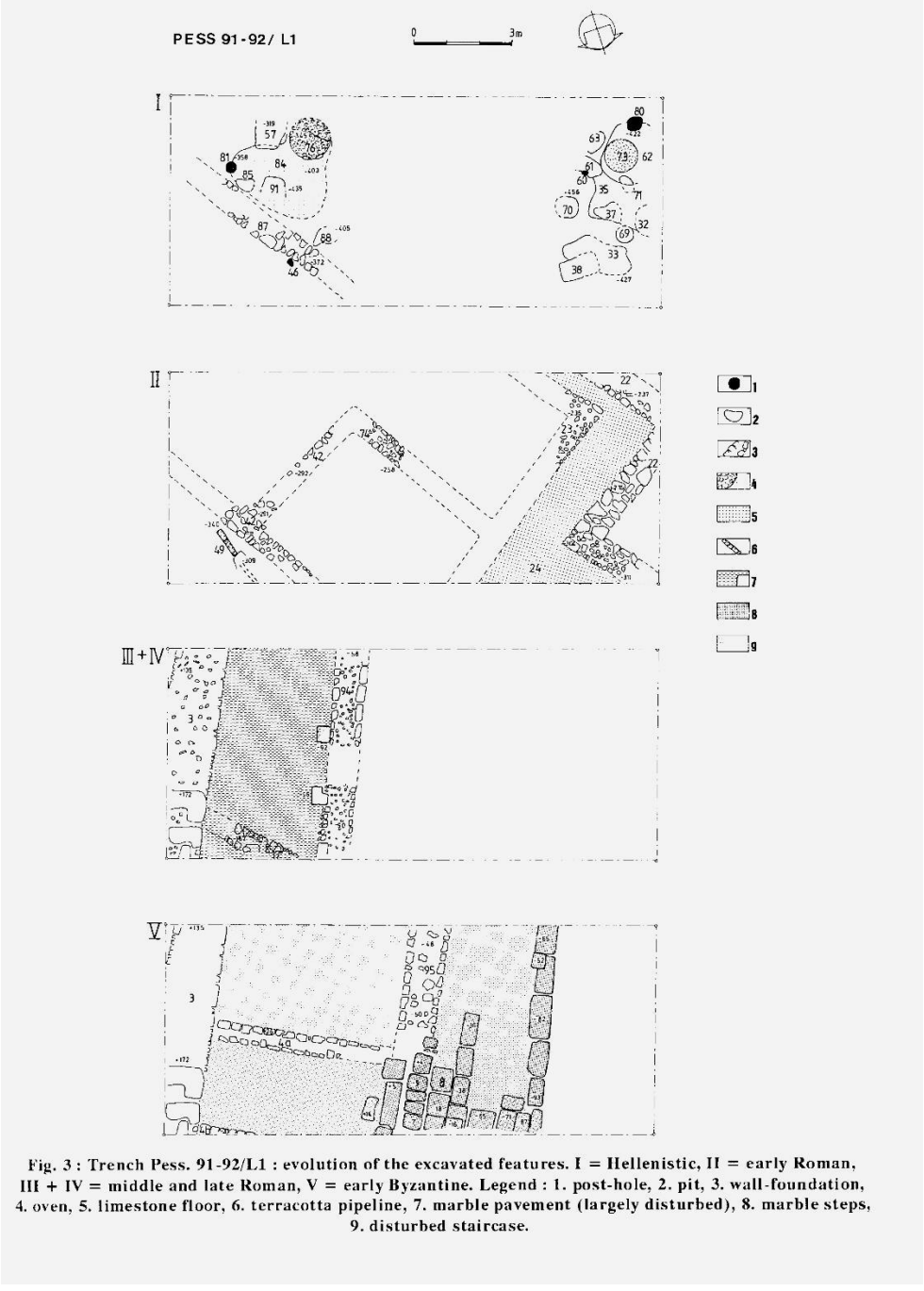


Fig. 3 : Trench Pess. 91-92/L1 : evolution of the excavated features. I = Hellenistic, II = early Roman, III + IV = middle and late Roman, V = early Byzantine. Legend : 1. post-hole, 2. pit, 3. wall-foundation, 4. oven, 5. limestone floor, 6. terracotta pipeline, 7. marble pavement (largely disturbed), 8. marble steps, 9. disturbed staircase.

Figure 2.17. Plan of the excavation in Sector L (Phase III-IV is the Severan). (After Devreker and Vermeulen 1996, p. 71, fig. 3).

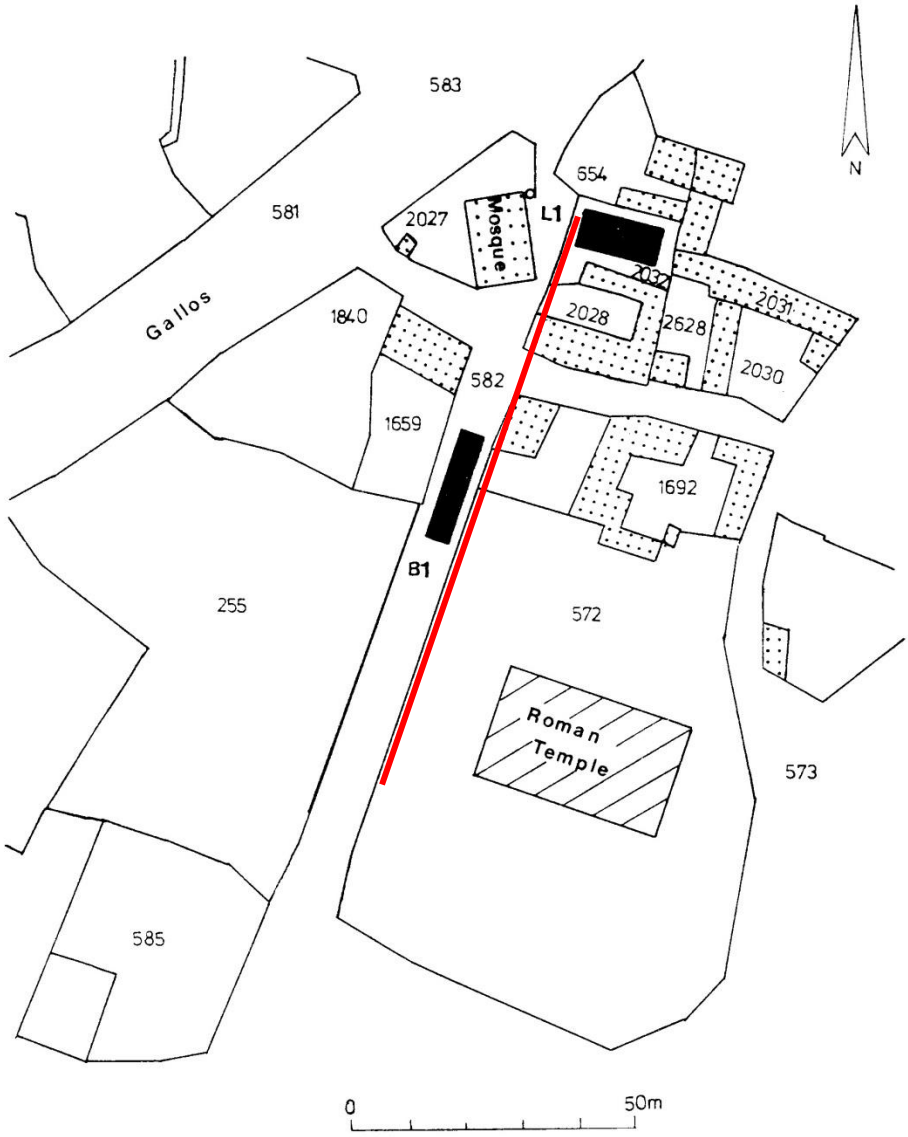


Figure 2.18. Possible route of the road in front of Sector L and temple complex. (After Devreker and Vermeulen 1996, p. 75, fig. 6).

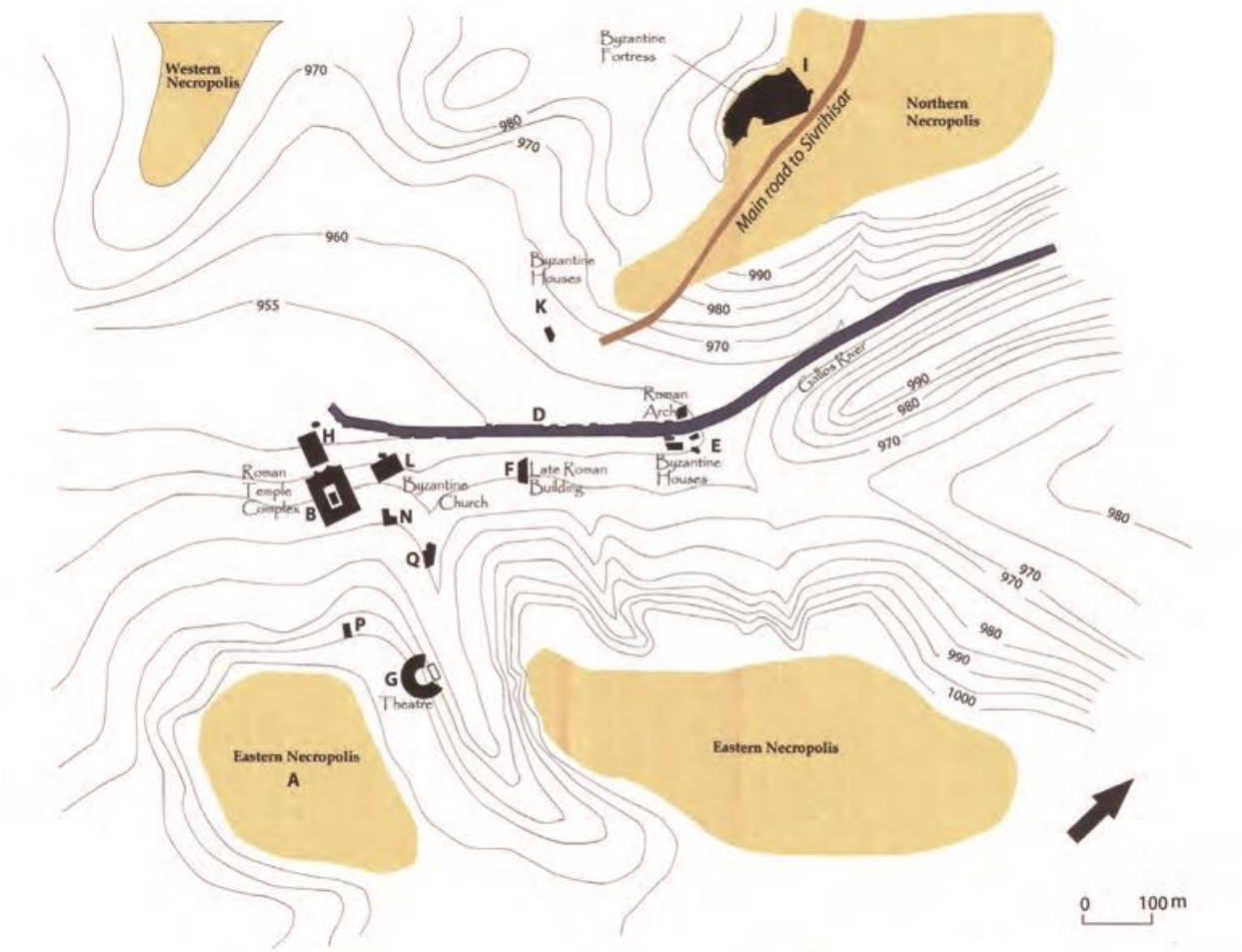


Figure 2.19. Sector D (Colonnade Road, marked in blue). (After After Claerhout and Devreker 2008, map. 1).

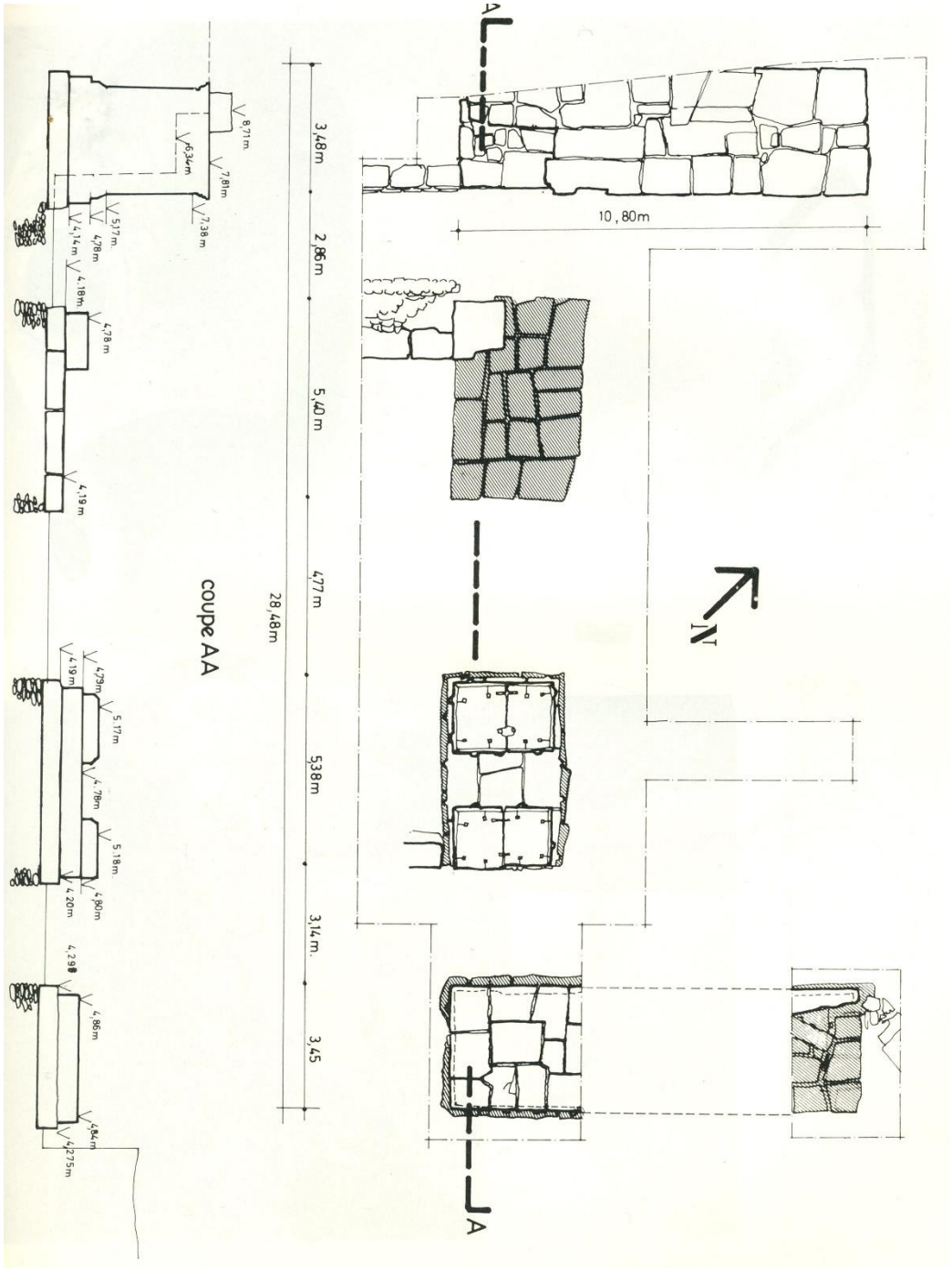


Figure 2.20. Plan of the Roman Arch. (After Devreker and Waelkens 1984, p. 52, fig. 96).

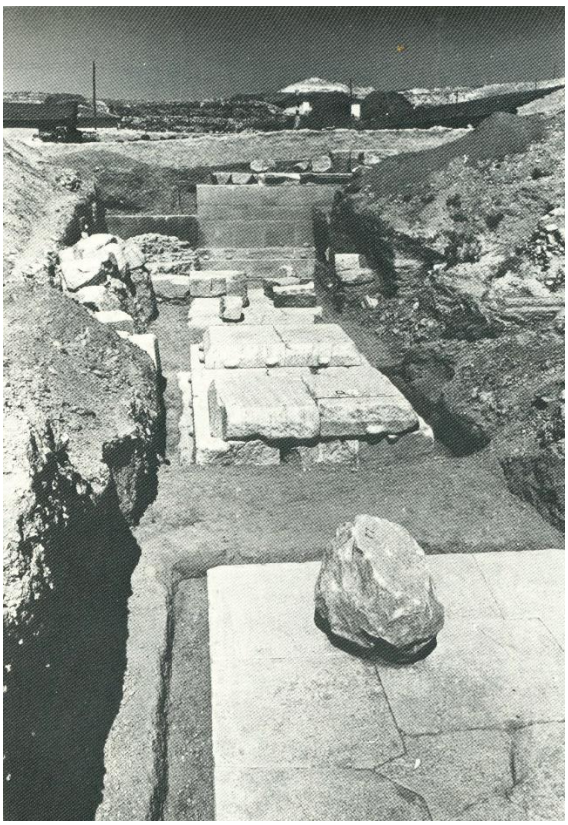


Figure 2.21. Remains of the Roman Arch. (After Devreker and Waelkens 1984, p. 51, fig. 95).

Figure 2.22. Marble wall built in support of the arch. (After Devreker and Waelkens, p. 53, fig. 97).

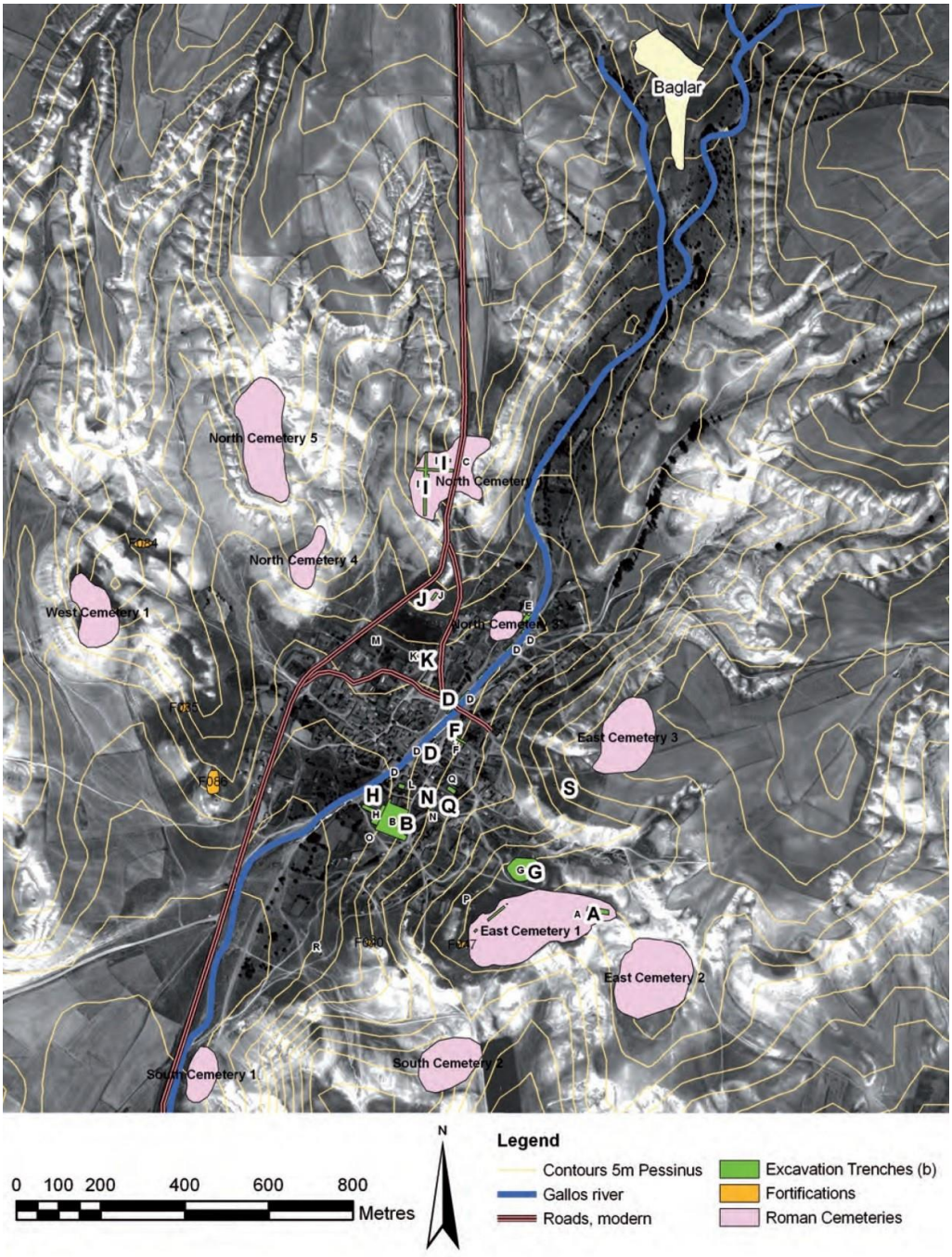


Figure 2.23. Map of Pessinus (notice the route of the modern road). (After Tsetskhladze 2013, p. 45, fig. 5).

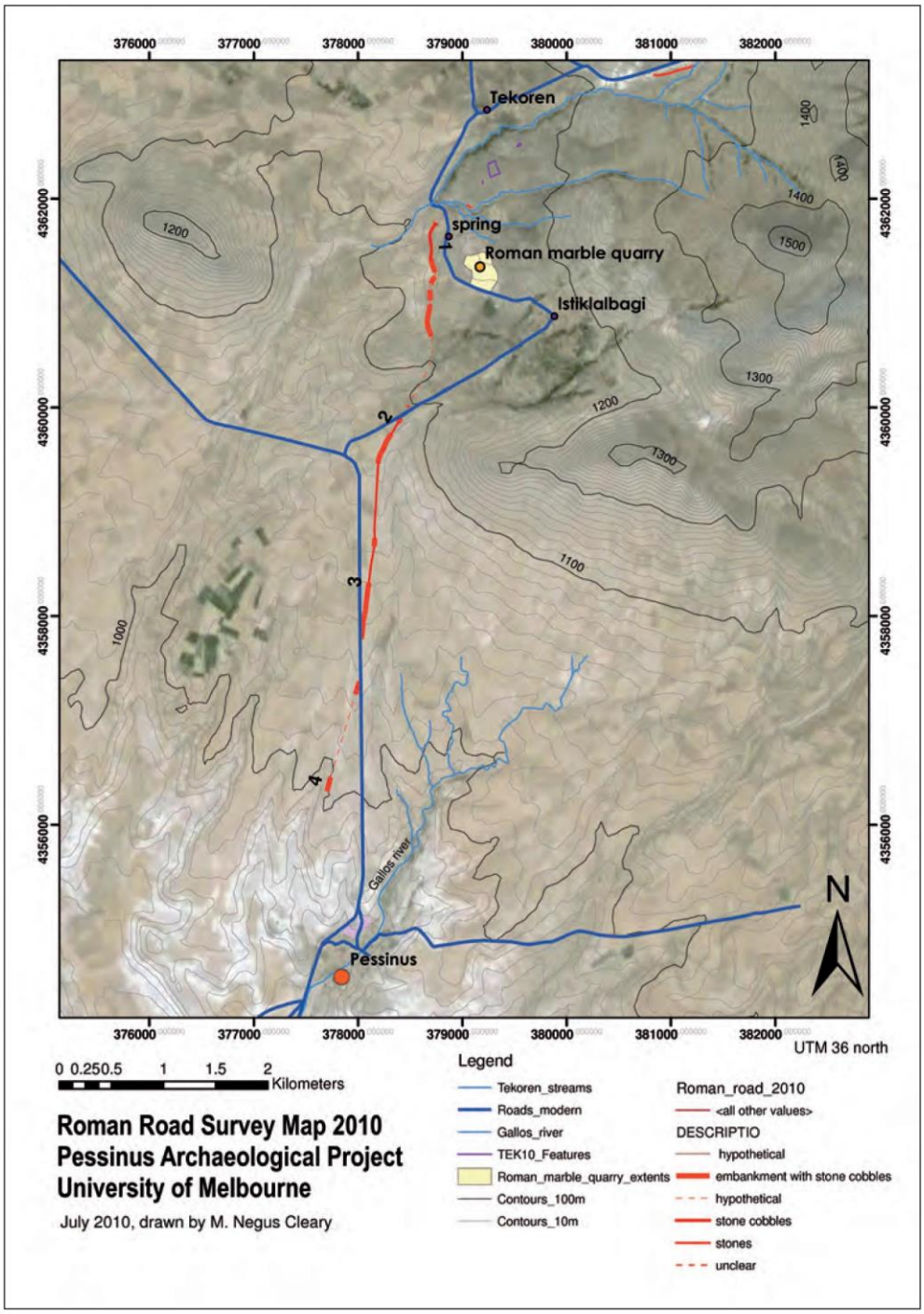


Figure 2.24. Roman Road. (After Tsetskhladze 2012, p. 308, fig. 22).

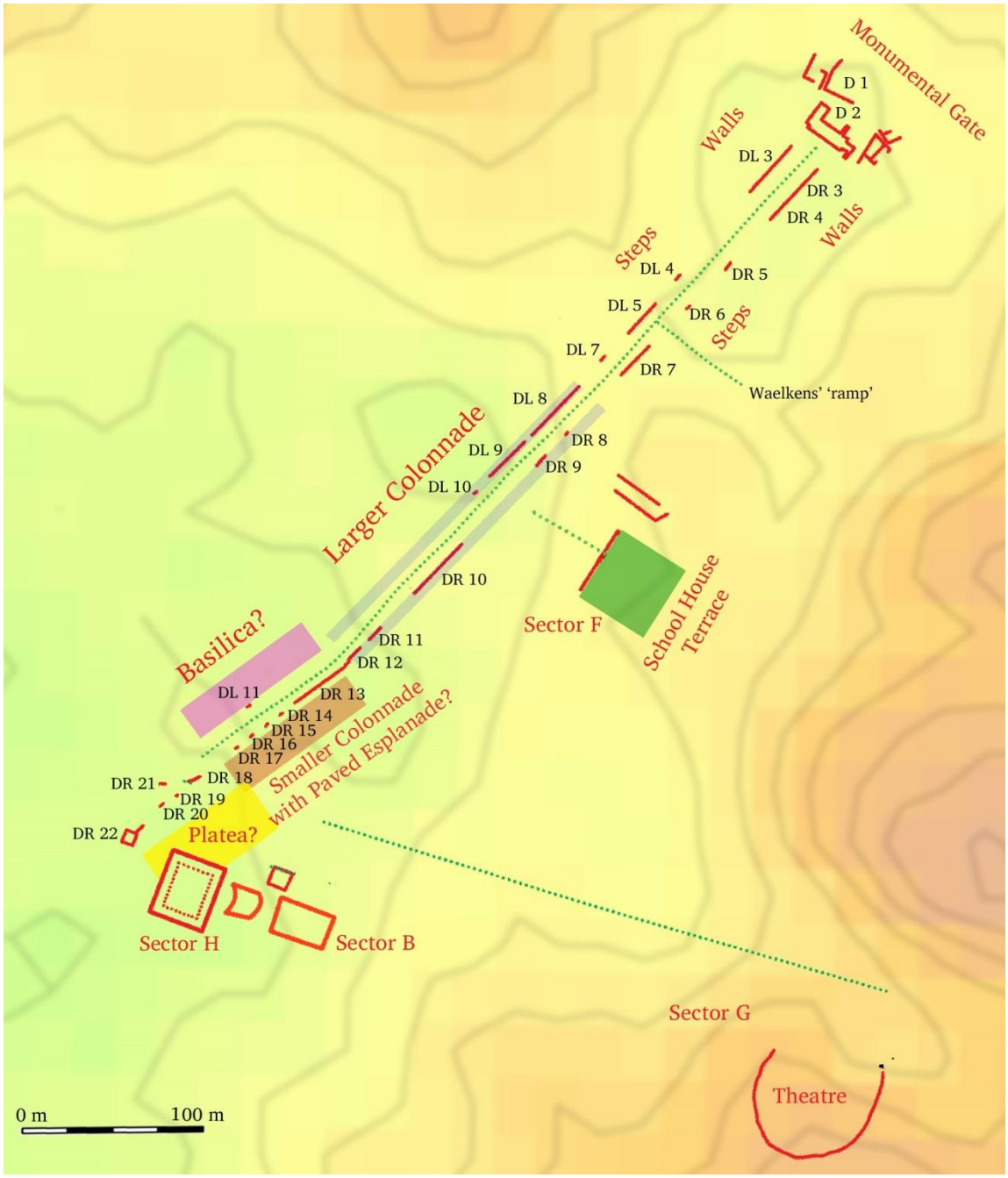


Figure 2.25. Colonnade road. (After Young in press).

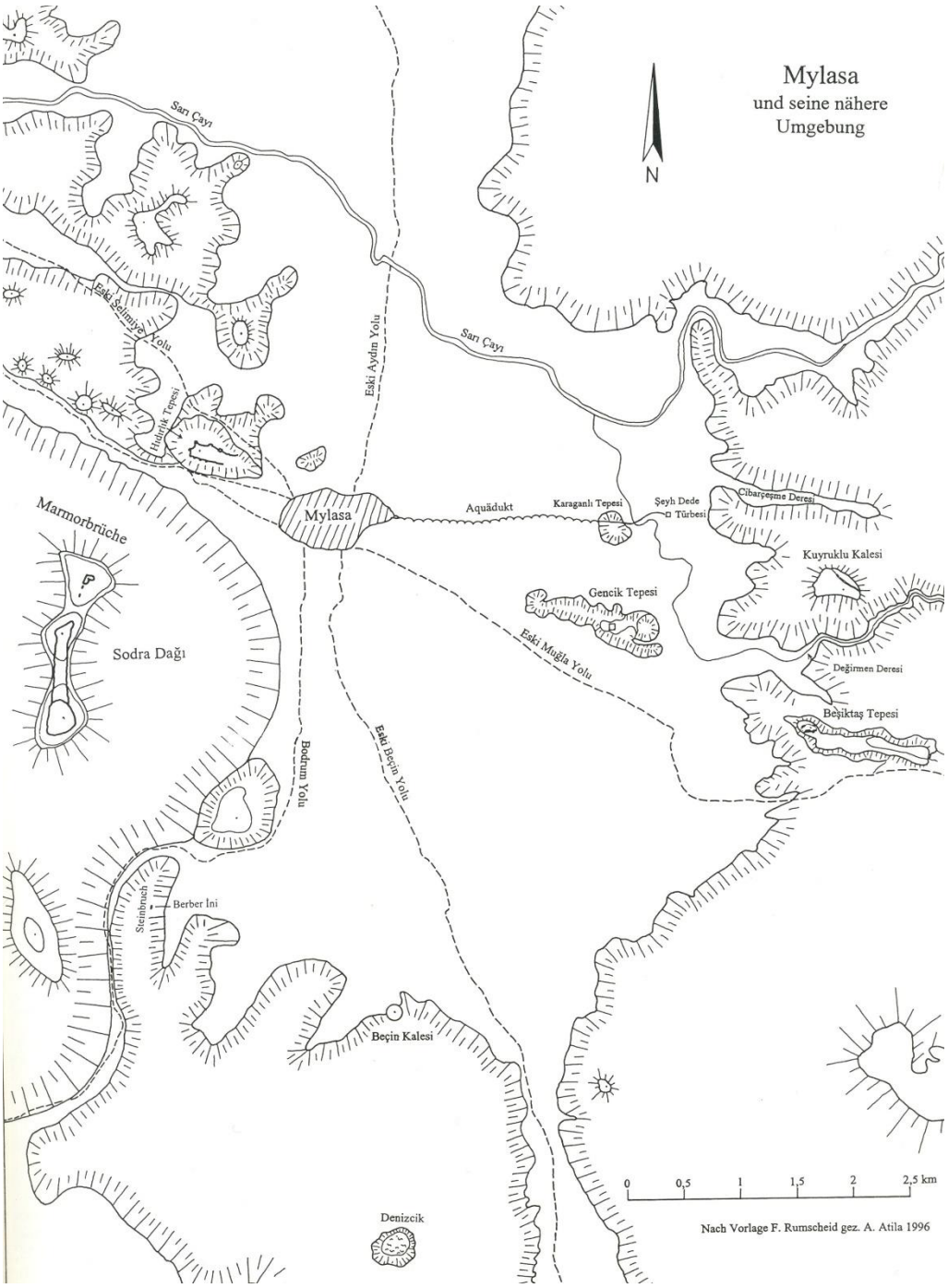


Figure 2.26. Fortifications at Mylasa. (After Rumscheid 1999, p. 209, fig. 3).

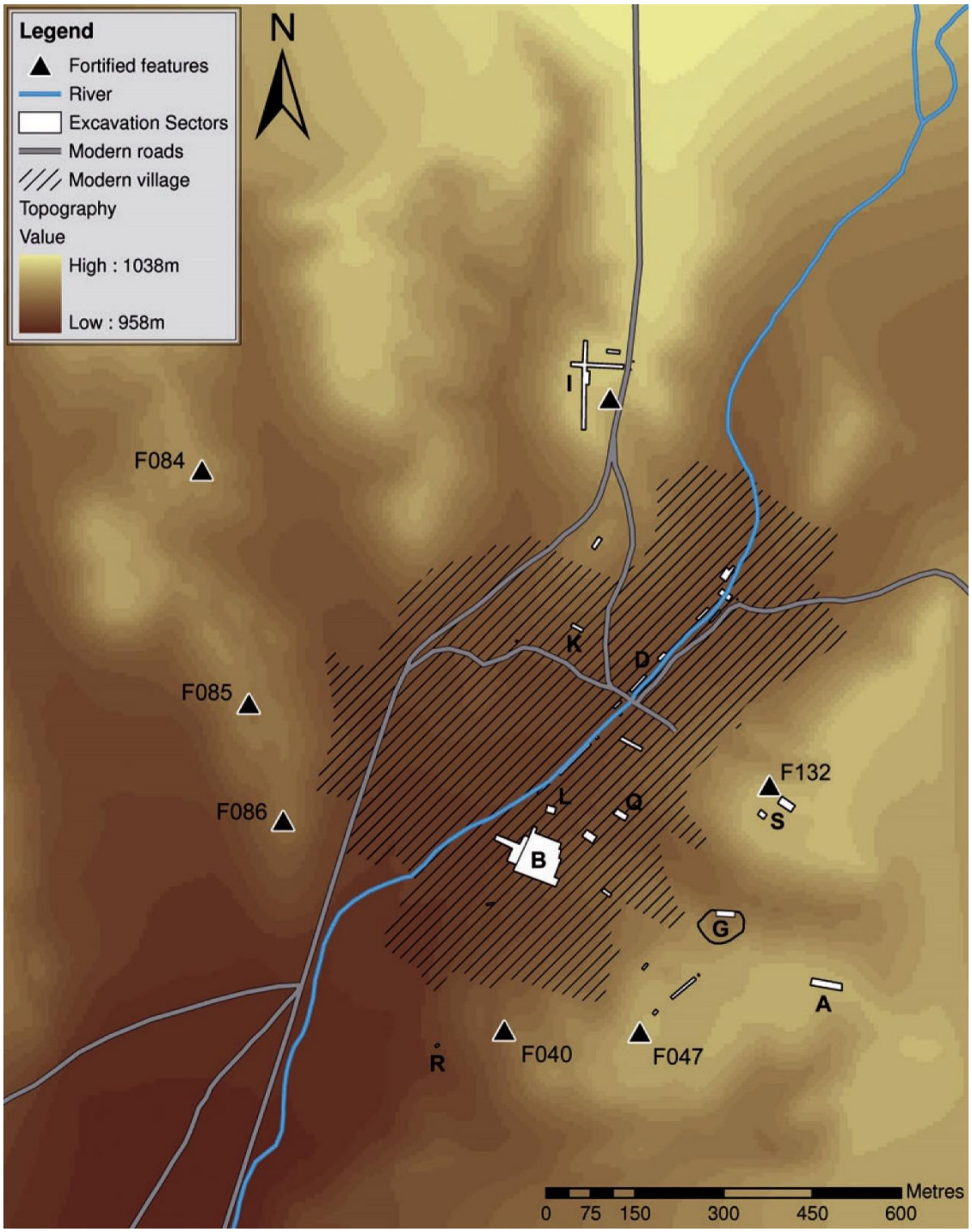


Figure 2.27. Map of possible watchtowers. (After Anderson 2013, p. 82, fig. 3).

Figure 2.28. Sector S. Excavated trenches. (After Tsetskhladze in press, p. 68, fig. 82).

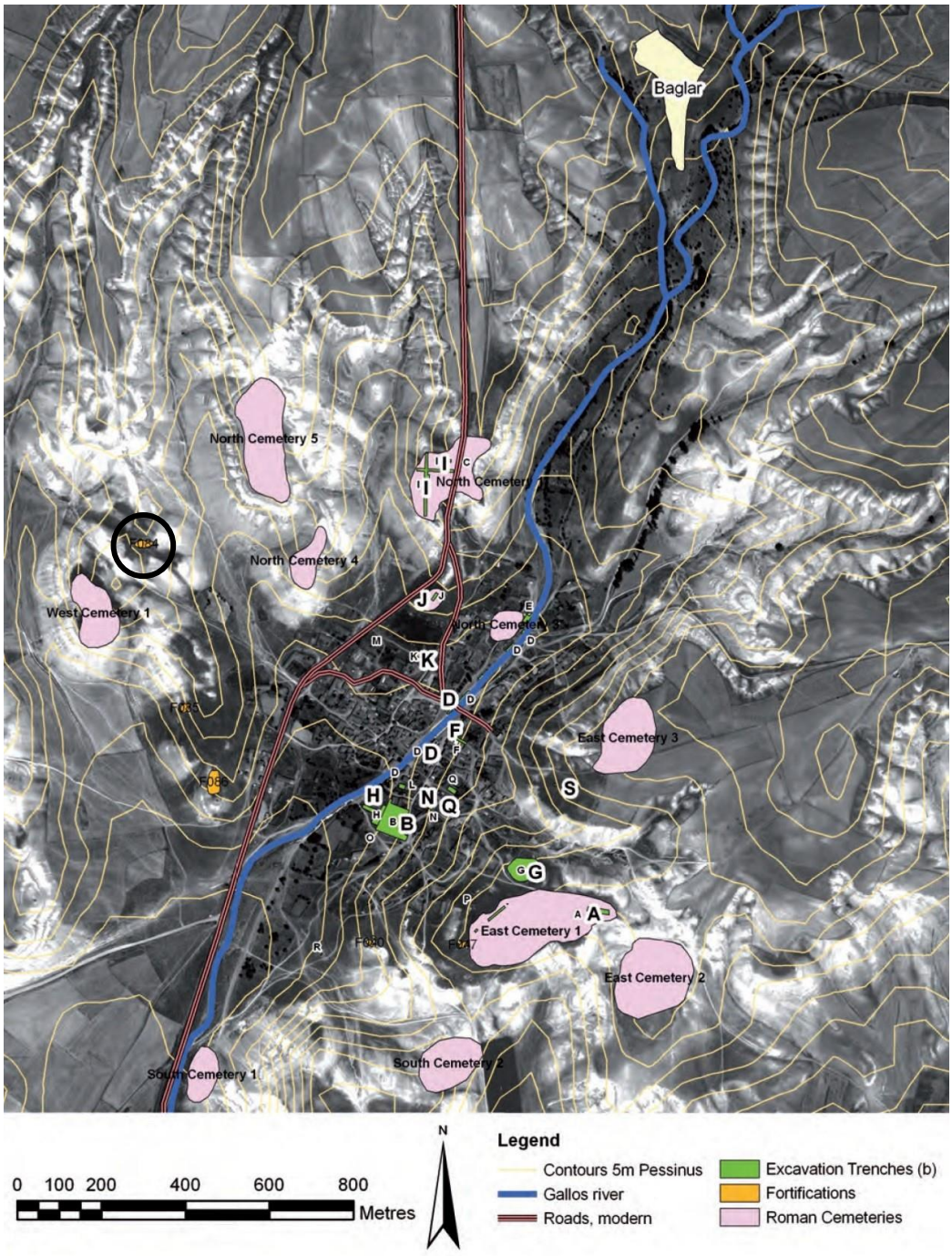


Figure 2.29. The church is located in F084, on the western fringes of the city. (After Tsetskhladze 2013, p. 52 fig. 8).

Figure 2.30. Plan of the extra-urban church at Pessinus. (After Schmidt in press, fig. 348, p. 184)

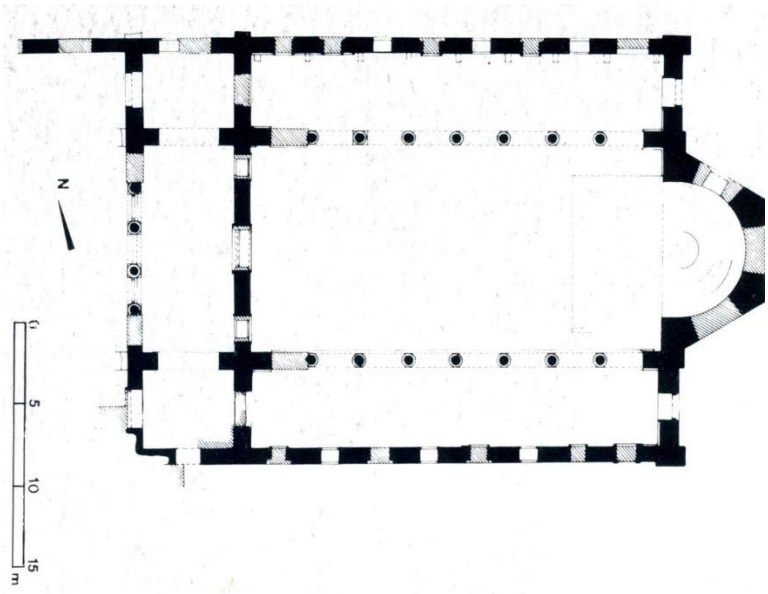


Figure 2.31. Plan of the church Saint John in Stoudios. (After Mango 1985, fig. 43, p. 36.)

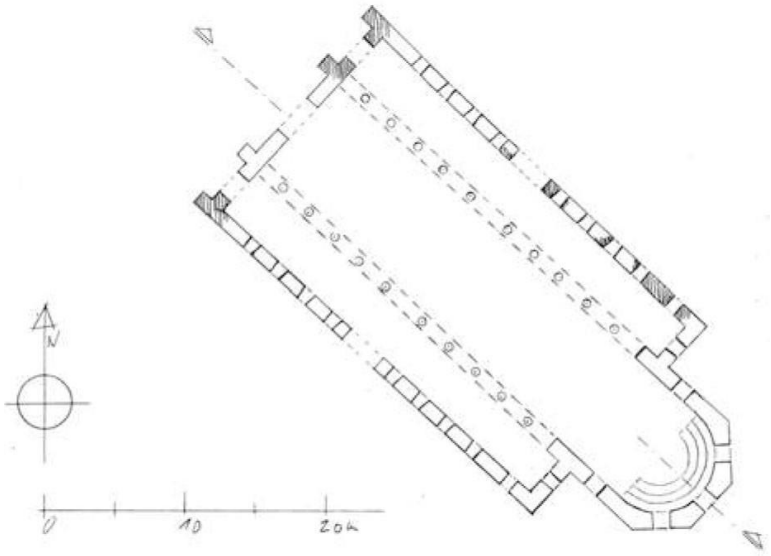


Figure 2.32. Plan of the Church of Saint Michael at Germia. (After Niewöhner 2013, no. 55, p. 124).

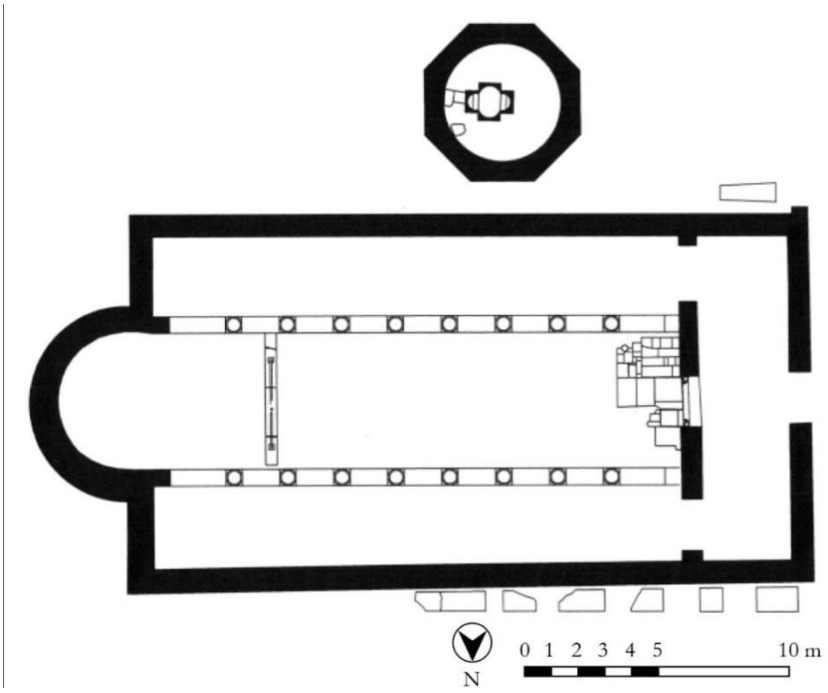


Figure 2.33. Plan of the church at Başara. (After Alp 2010, fig. 7, p. 11).

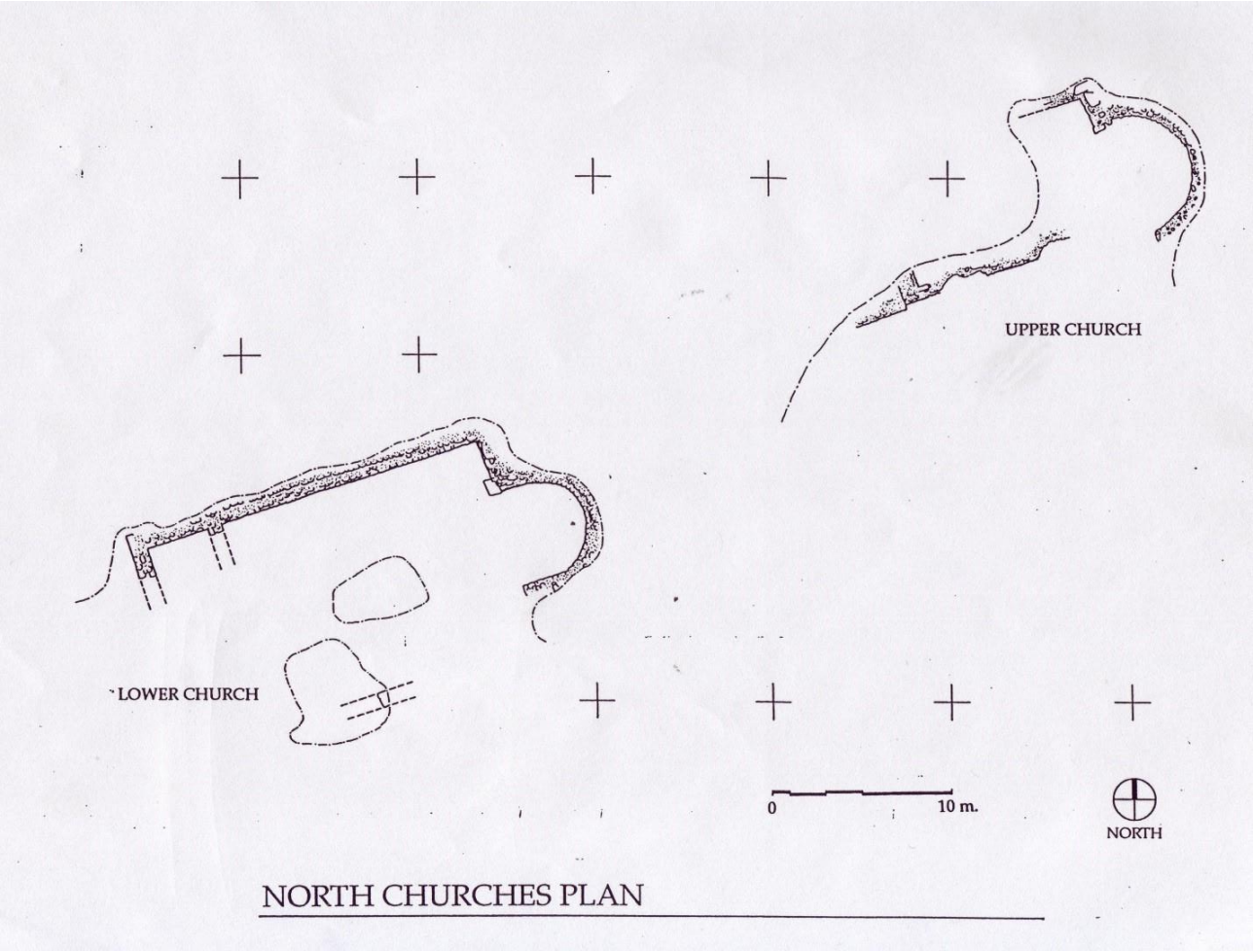


Figure 2.34. Plan of the churches at Kilisiler. (After Walker http://courses.washington.edu/tahirler/maps.html).

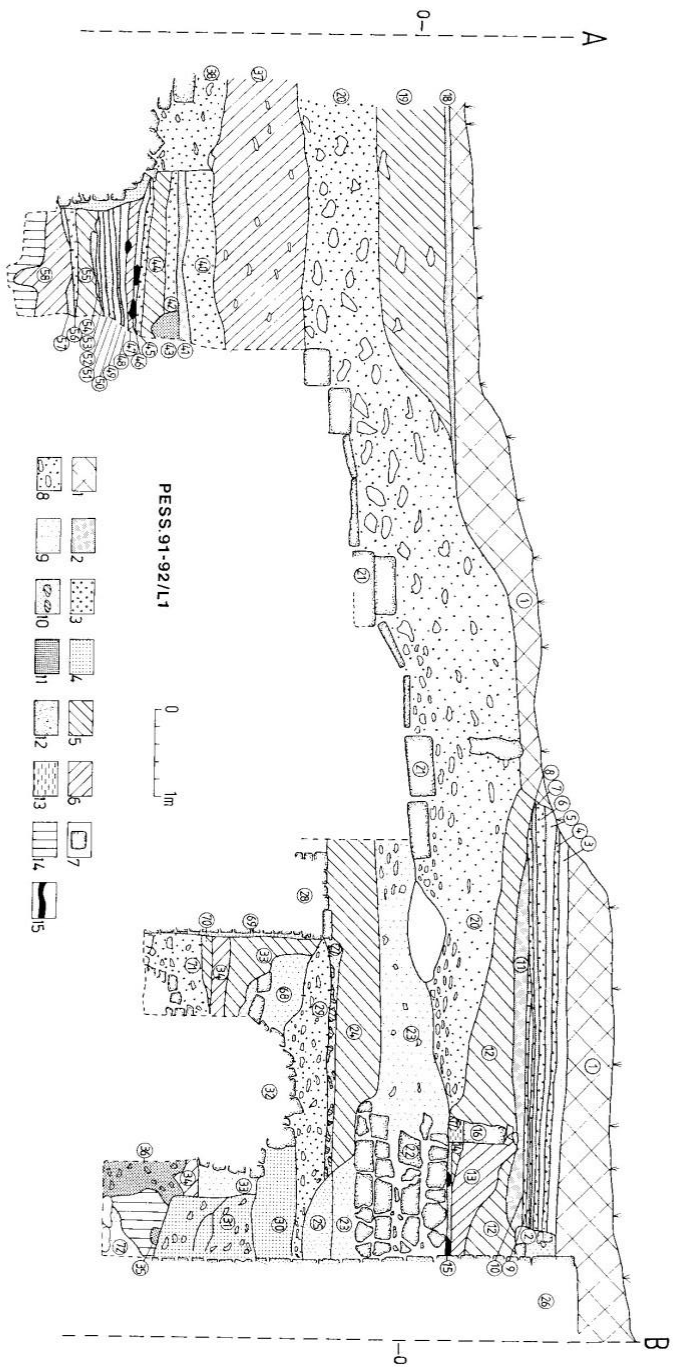


Fig. 4 : Northern section of trench Pess. 91-92/L1. Legend : 1. top soil, 2. floor level, 3. occupation and demolition layer, 4. foundation trench, 5. raising level, 6. raising level, 7. stone, 8. demolished wall, 9. foundation trench (?), 10. demolished marble floor, 11. pit, 12. pebble layer, 13. earthen wall foundation (Turkish), 14. natural soil.

Figure 2.35. Section drawing Sector L. (After Devreker and Vermeulen 1996, fig. 4, p. 72).

Figure 2.36. Photo of the monumental staircase in Sector L (after Devreker and Vermeulen 1996, fig. 4, p. 72).

Figure 2.37. Possible Theodosian Capital, locally made. (After Madden in press, fig. 444, p. 217).

Figure 2.38. Sector Q. Plan of the house. (After Devreker *et alii* 2005, p. 153, fig. 10).

Figure 2.39. Sector R. Plan of the excavation. (After Tsetskhladze *et alii* 2012, p. 303, fig. 11).

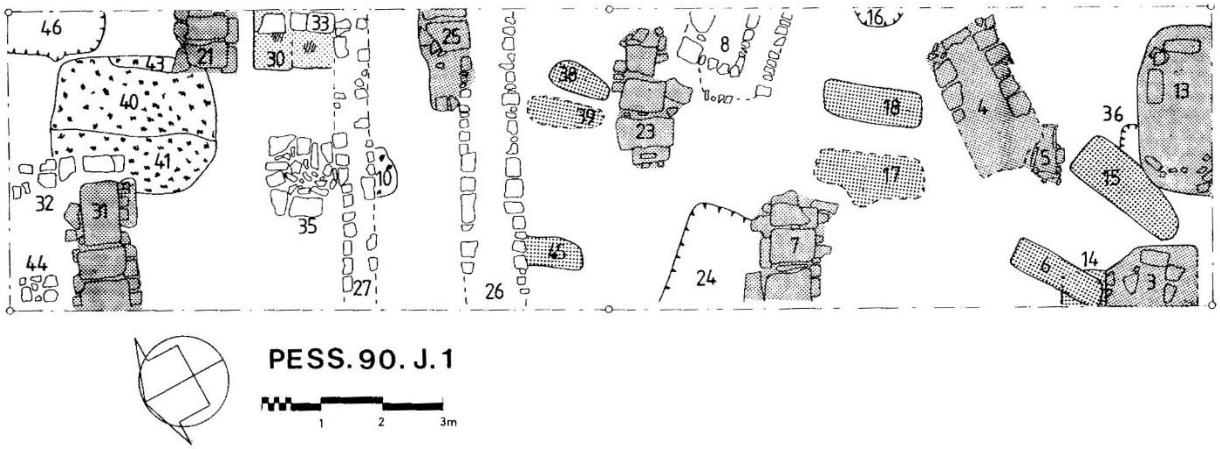


Figure 2.40. Sector J. Plan of the excavation. (After Devreker and Vermeulen 1998, p. 155, fig. 11).

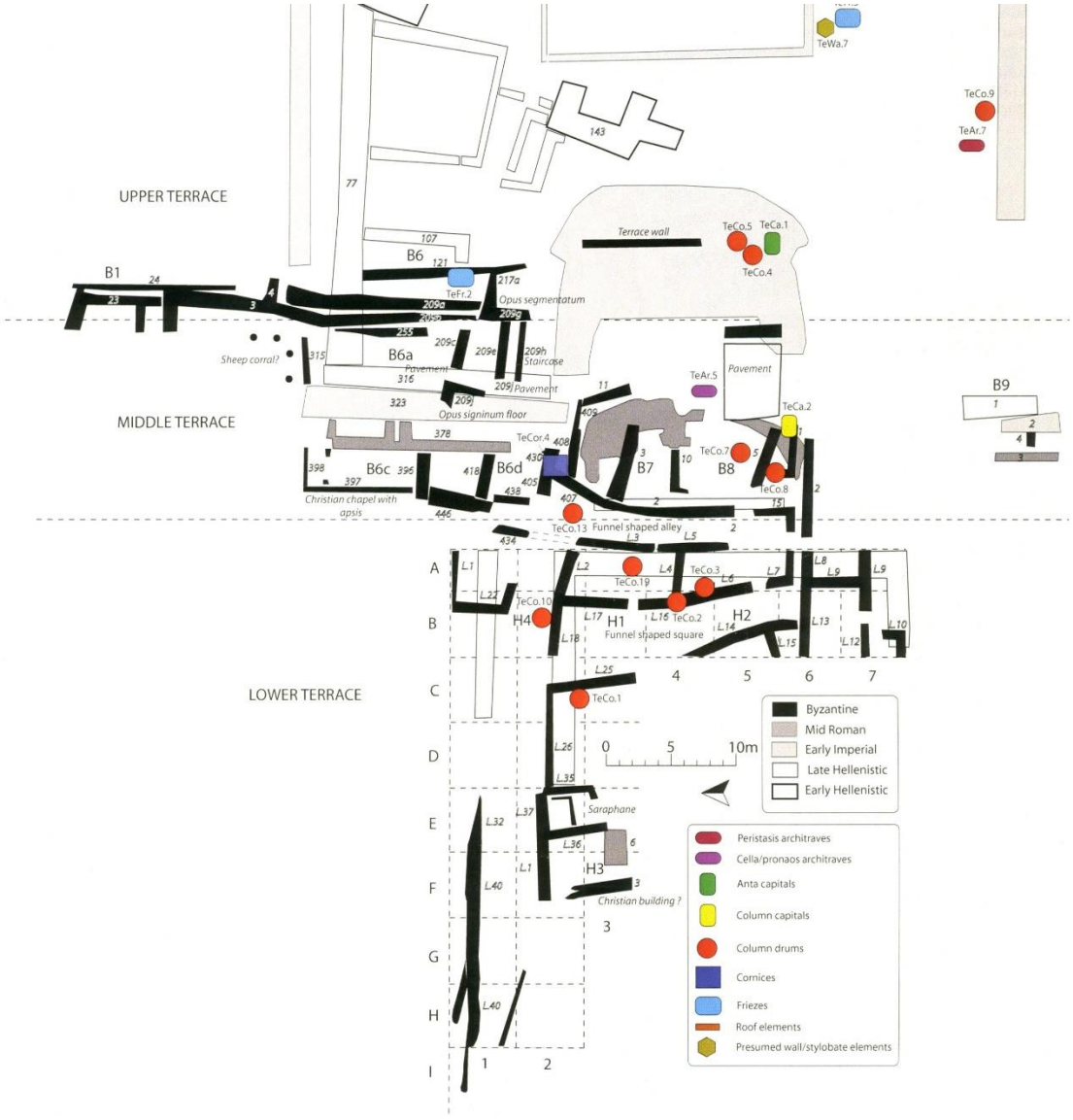
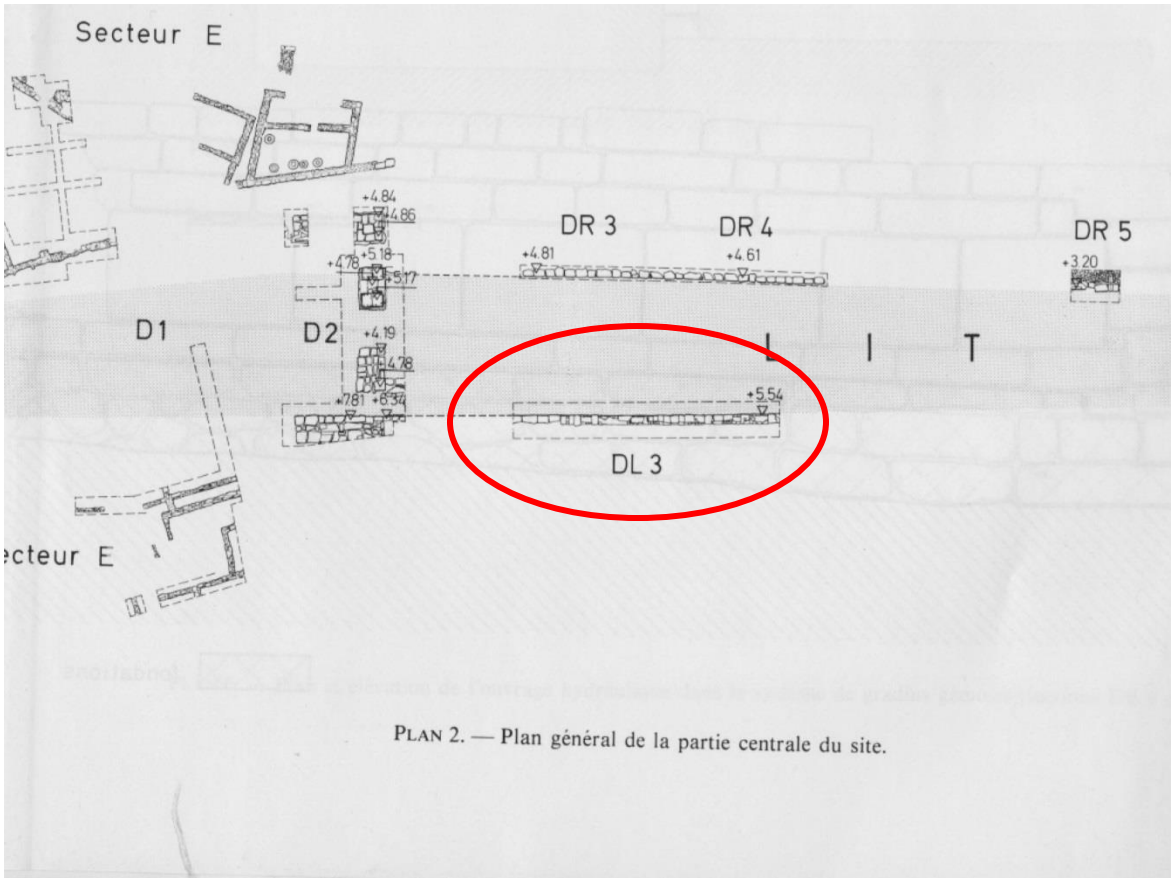


Figure 2.41. 7th c. construction in Sectors B and H. (After Verlinde 2015, plate 3).



PLAN 2. — Plan général de la partie centrale du site.

Figure 1. Repairs of the main thoroughfare dated to the 7th c. CE (circled in red). (After Devreker Waelkens 1984, plan 2).

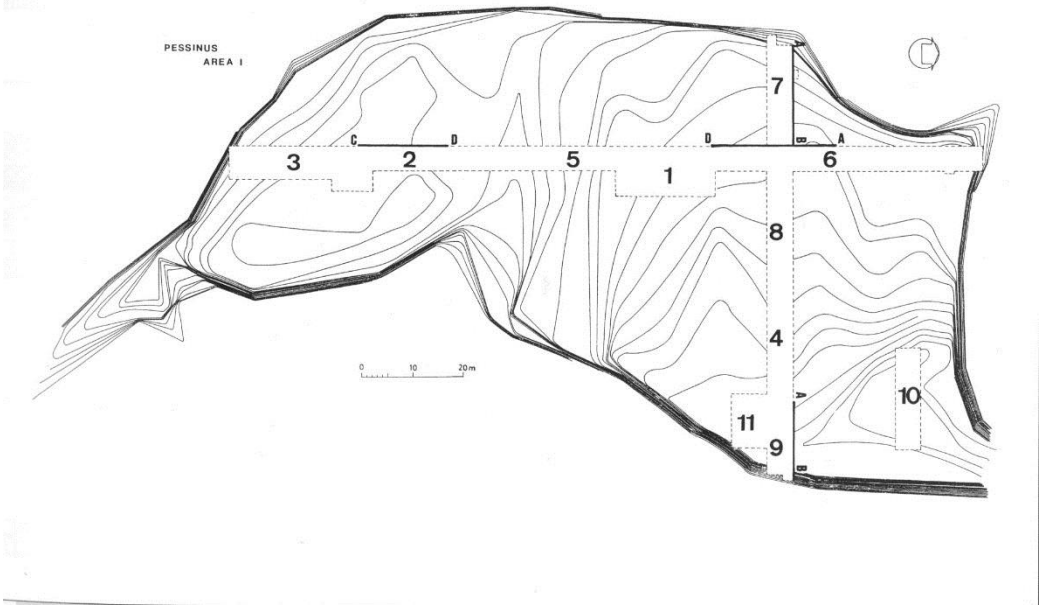


Figure 2.43. Plan of the Trenches (Sector I). (After Vermeulen 2003a, fig. 20, p. 21).

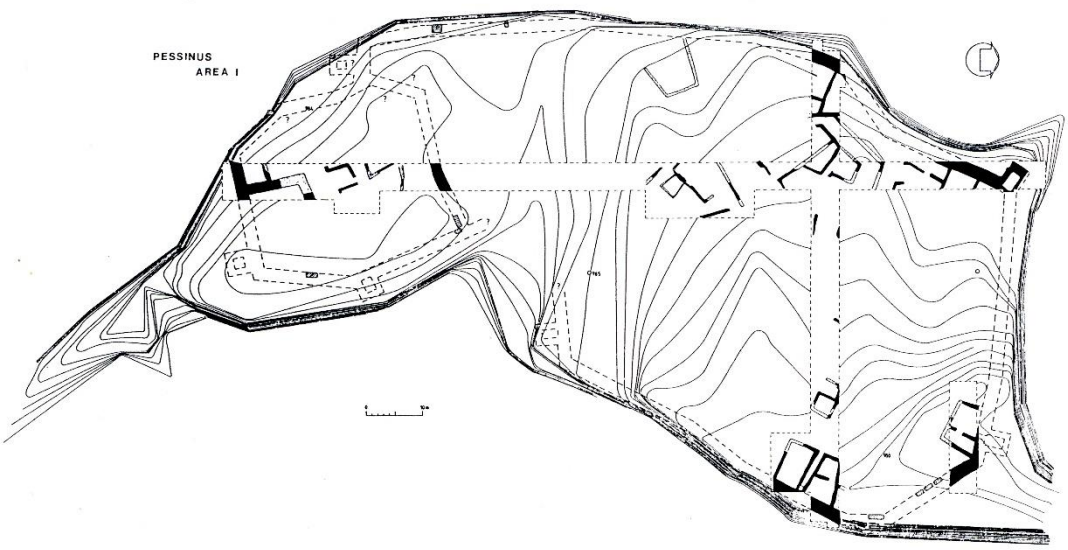


Figure 2.44. Plan of the citadel (Sector I). (After Vermeulen 2003a, fig. 193, p. 348).

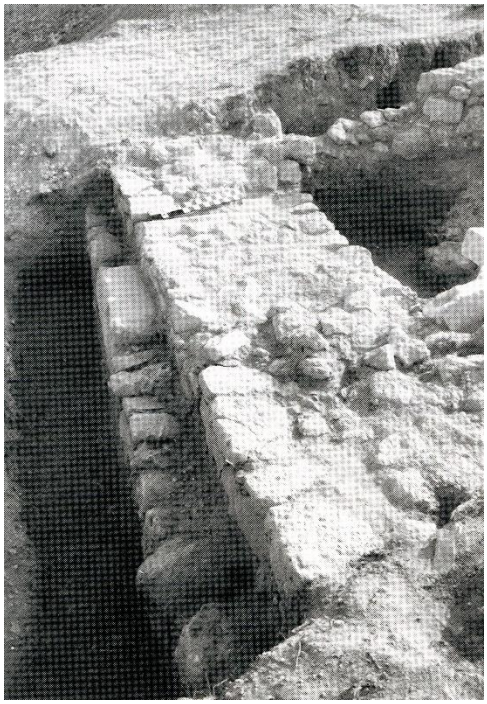


Figure 2.45. Defensive wall (Sector I). (After Vermeulen 2003a, fig. 198, p. 351).

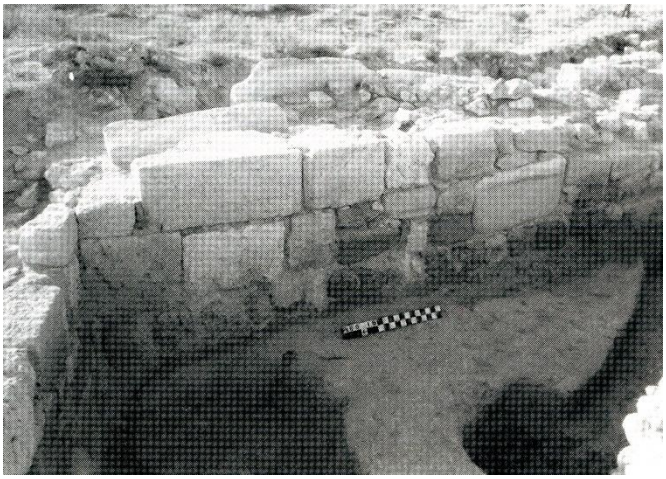


Figure 2.46. Photo of the masonry (Sector I). (After Vermeulen 2003a, fig. 196, p. 350).

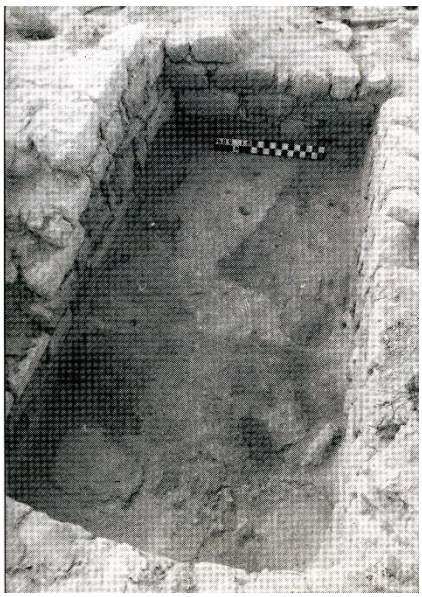


Figure 2.47. Tower (Sector I). (After Vermeulen 2003a, fig. 201, p. 352).

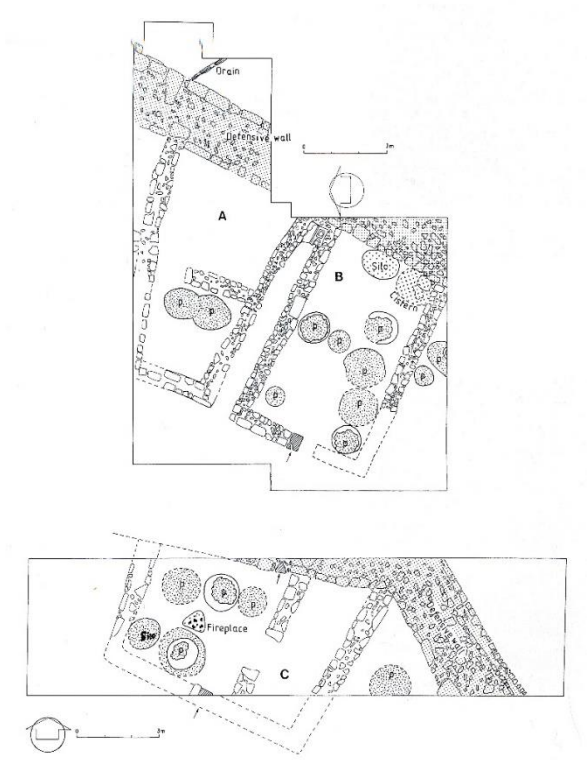


Figure 2.48. Houses B (Sector I). (After Vermeulen 2003a, fig. 206, p. 357).

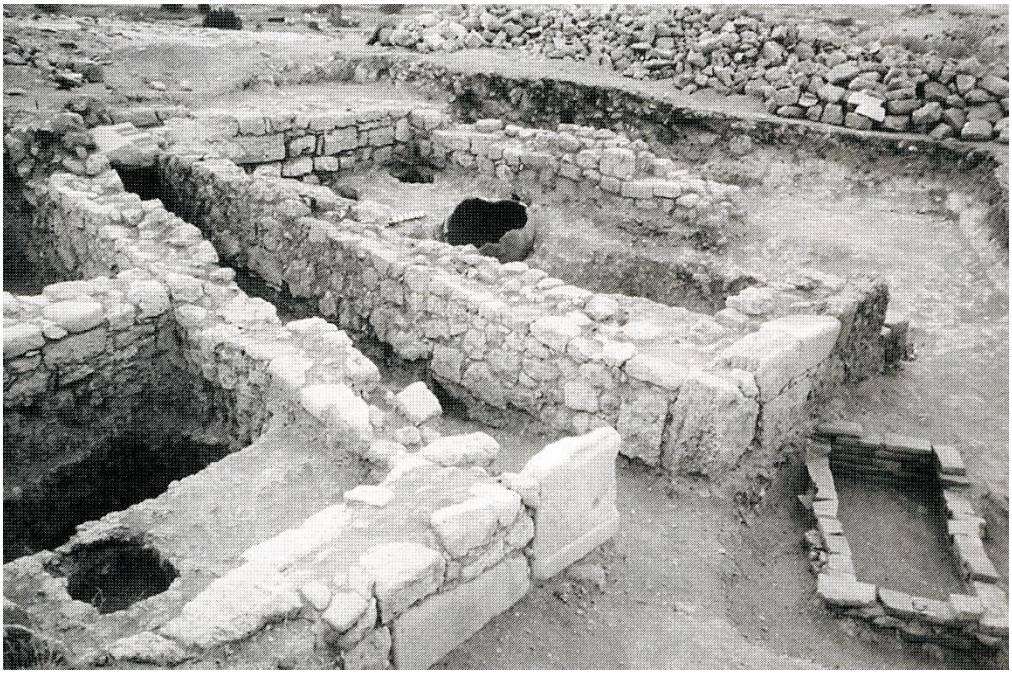


Figure 2.49. Plan of Houses A and B (Sector I). (After Vermeulen 2003a, fig. 204, p. 355).

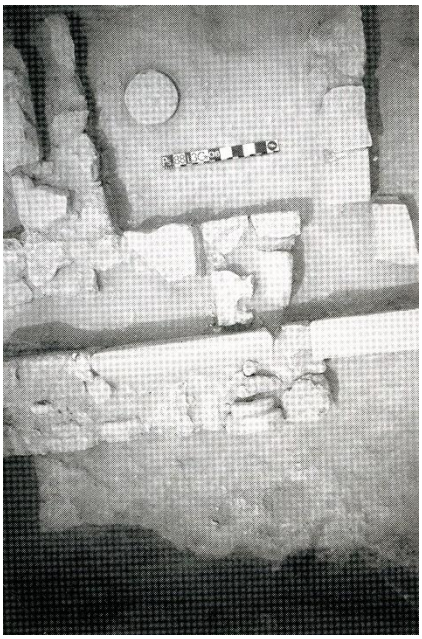


Figure 2.50. Plan of the excavated section of the inner citadel (Sector I). (After Vermeulen 2003a, fig. 28, p. 34).

Figure 2.51. Walls of the inner citadel (Sector I). (After Vermeulen 2003a, fig. 203, p. 354).

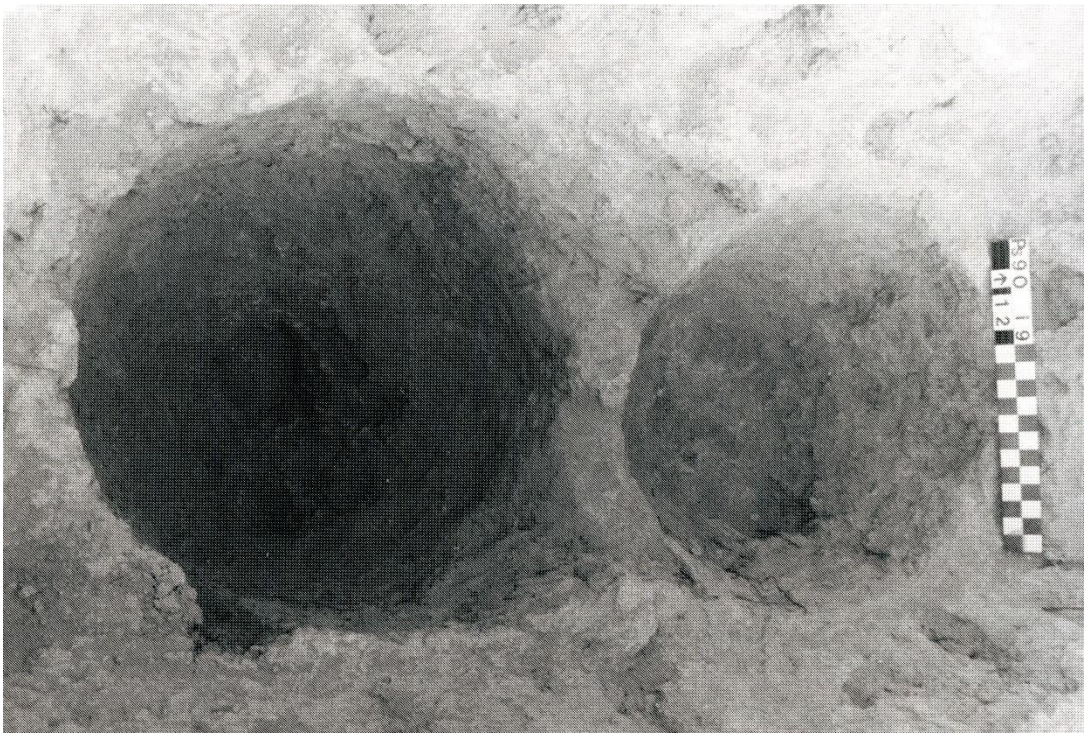


Figure 2.52. Marble pavement (Sector I). (After Vermeulen 2003a, fig. 212, p. 361).

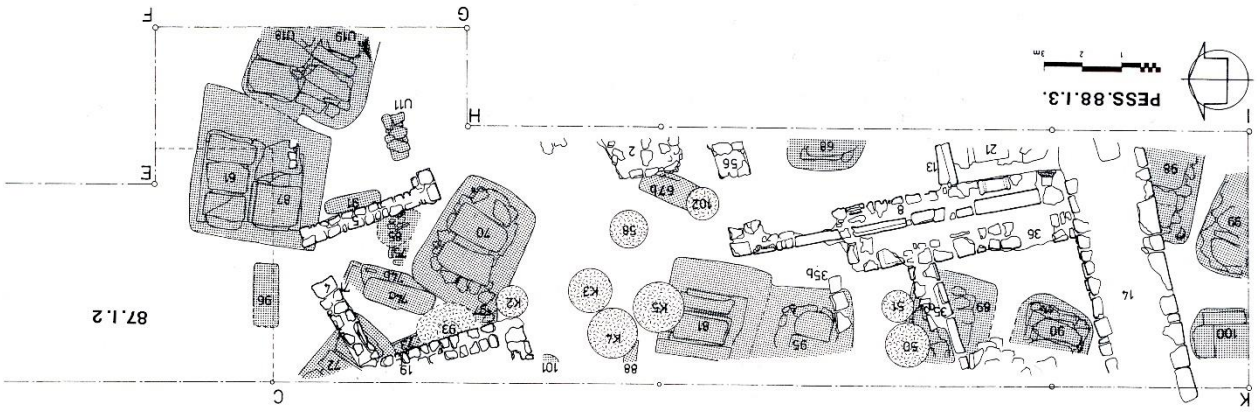


Figure 2.53. Storage units excavated in the bedrock (Sector I). (after Vermeulen 2003a, fig. 220, p. 363).

Figure 3.1. Map of Anatolia. (After Dally and Ratte 2011. P. 1, fig. 1).

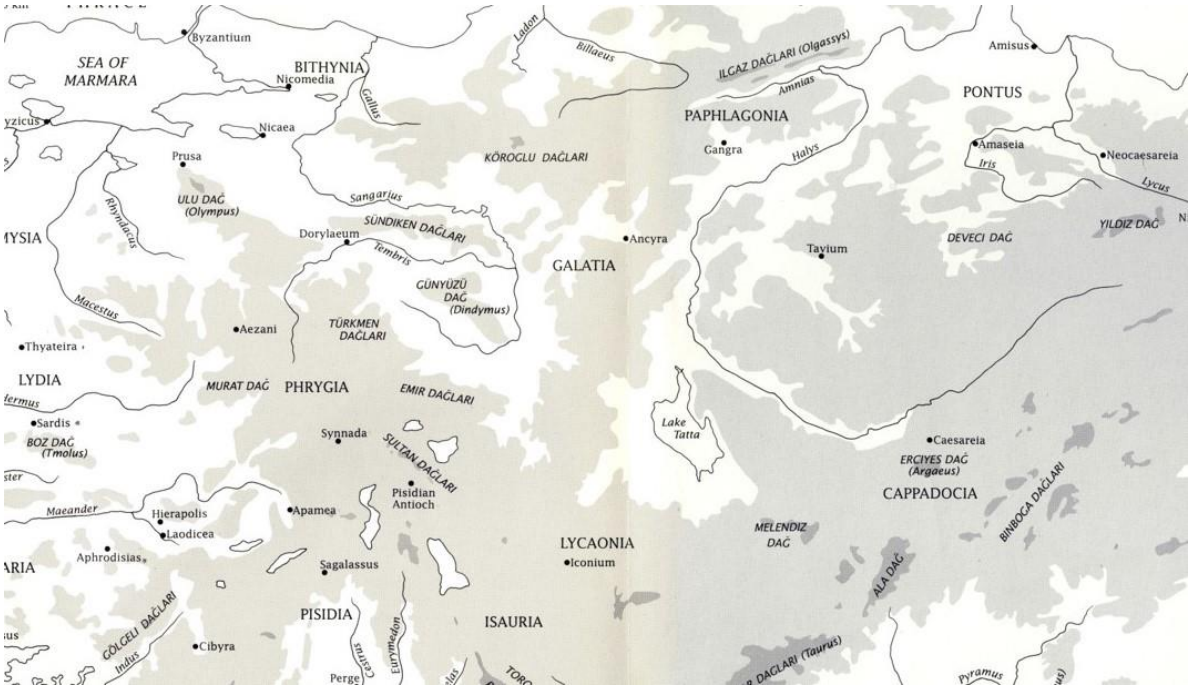


Figure 3.2. Geography of the Ankara Region. (Mitchell 1993, map 2).

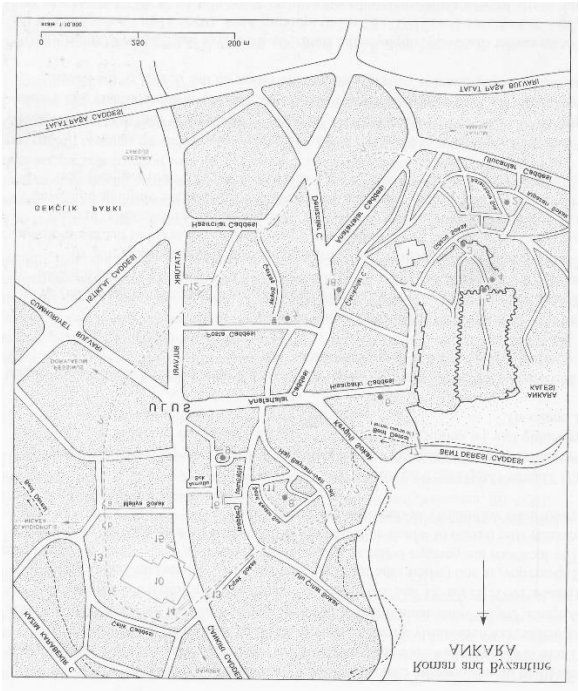


Figure 3.3. Map of modern Ankara. (After French 2003, p. 40, fig. 3).

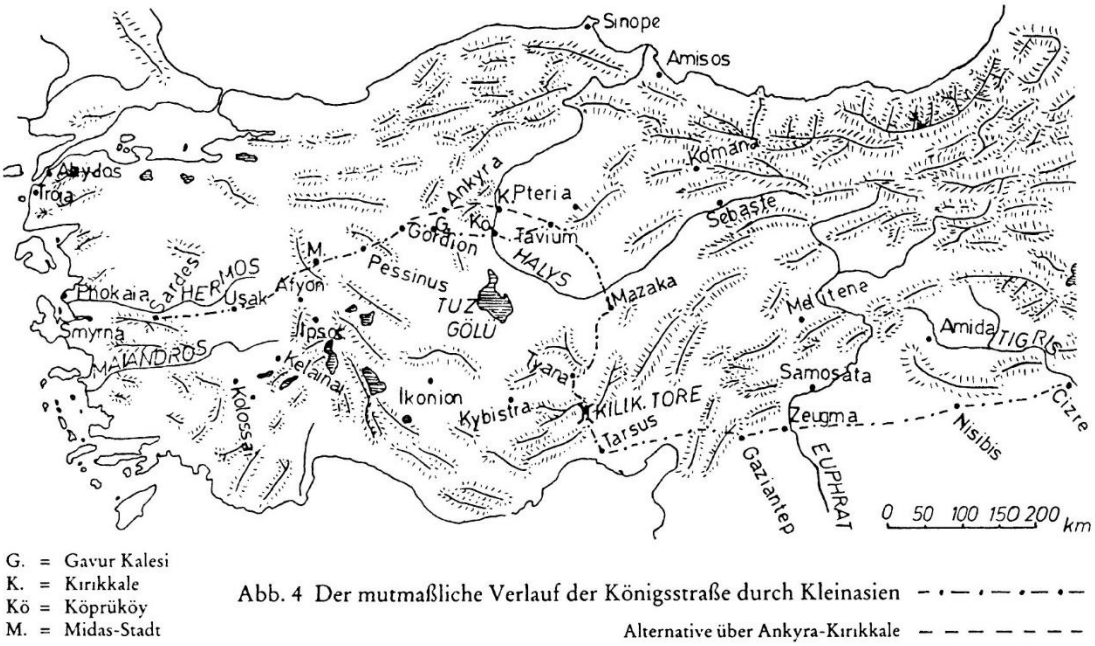


Figure 3.4. Route of the Royal Road. (After Müller 1994, p. 21, fig. 4).

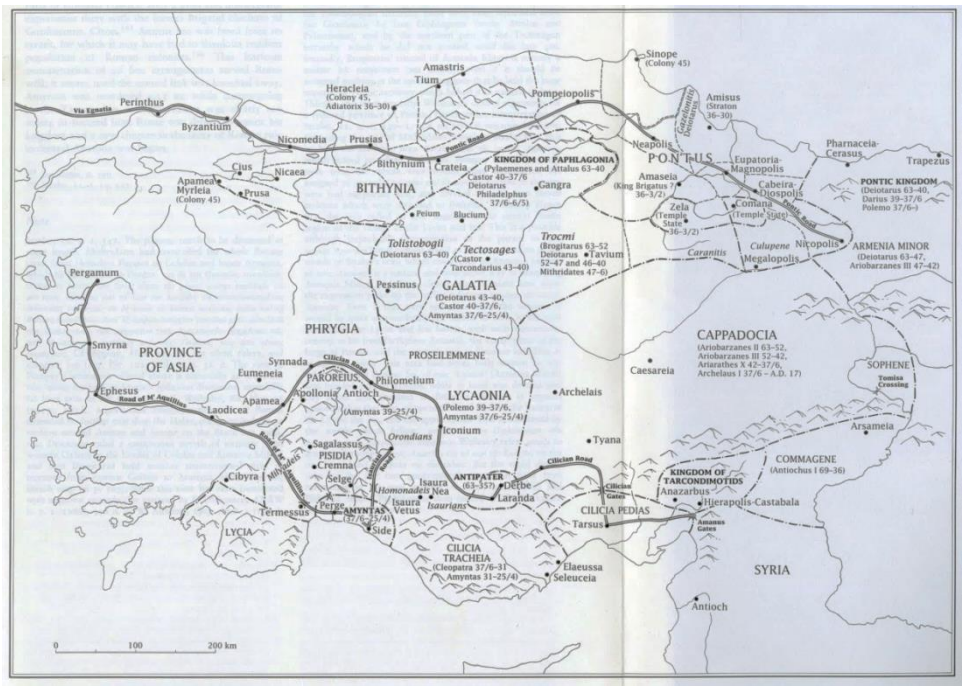


Figure 3.5. Locations of Galatian Tribal territories. (After Mitchell 1993, map 3).

Figure 3.6. Map of Galatian forts around Ankara (After Vardar and Vardar 1997, p. 127, fig. 8).

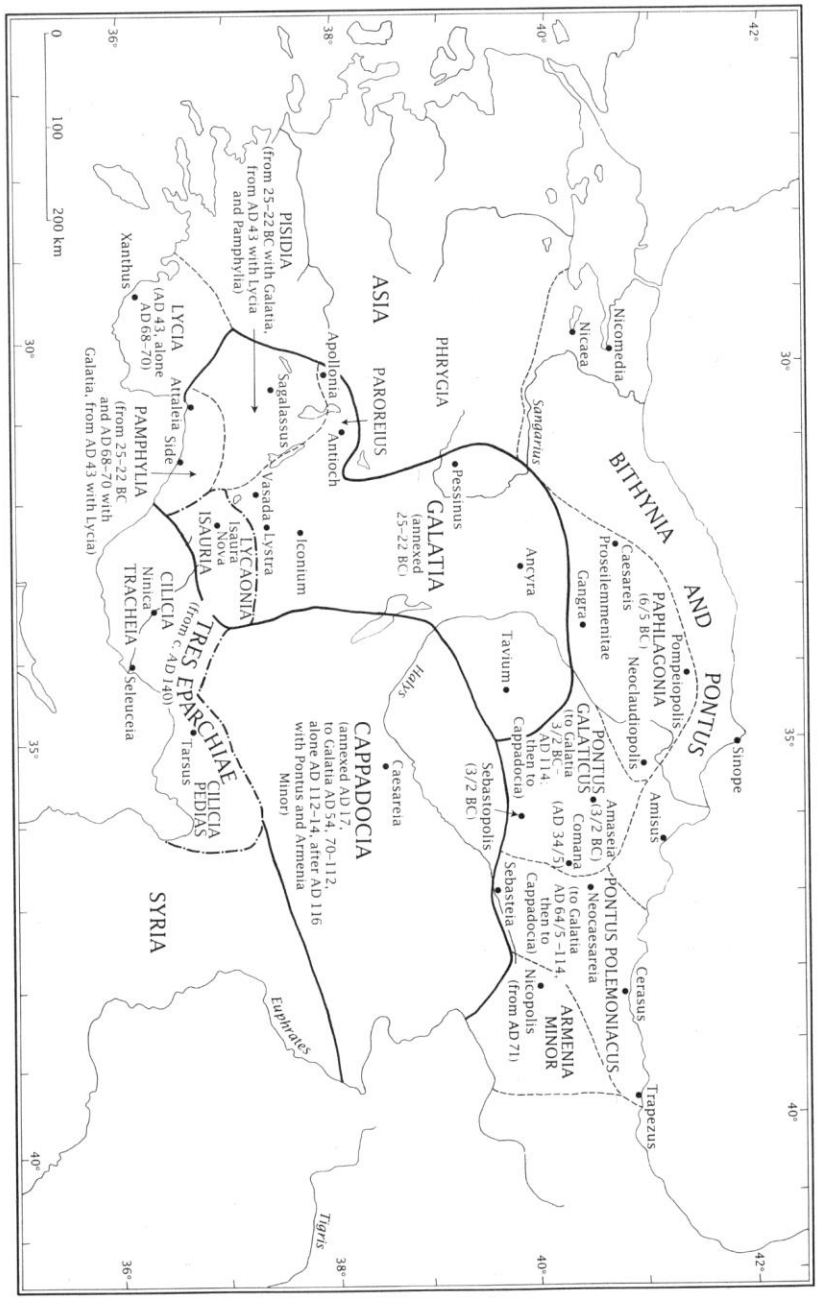


Figure 3.7. Roman Provinces in Asia Minor during the reign of Augustus (After Mitchell 1993, p. 156, map. 6)

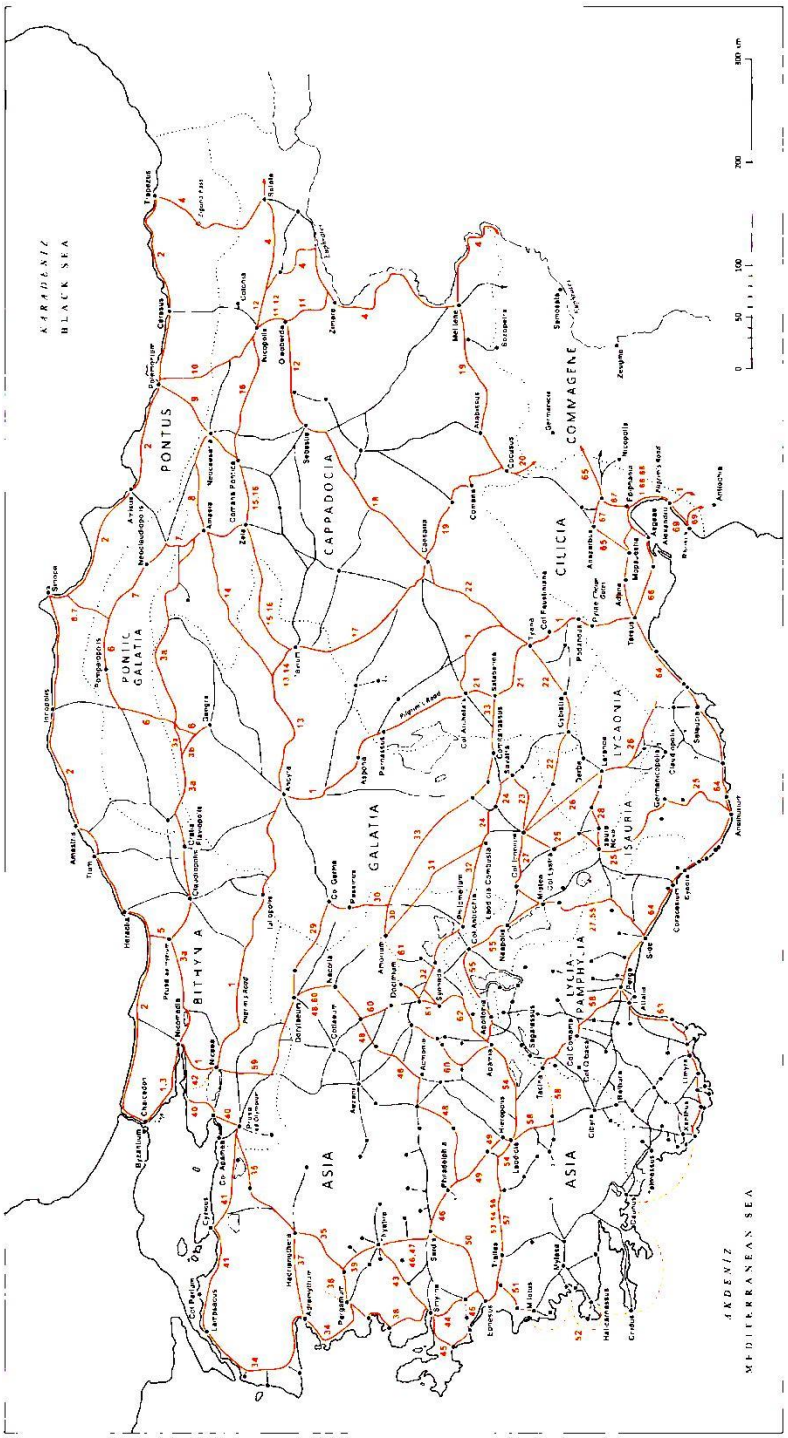


Figure 3.8. Major roads in Central Anatolia. (After French 2003, p. 1, map 1).

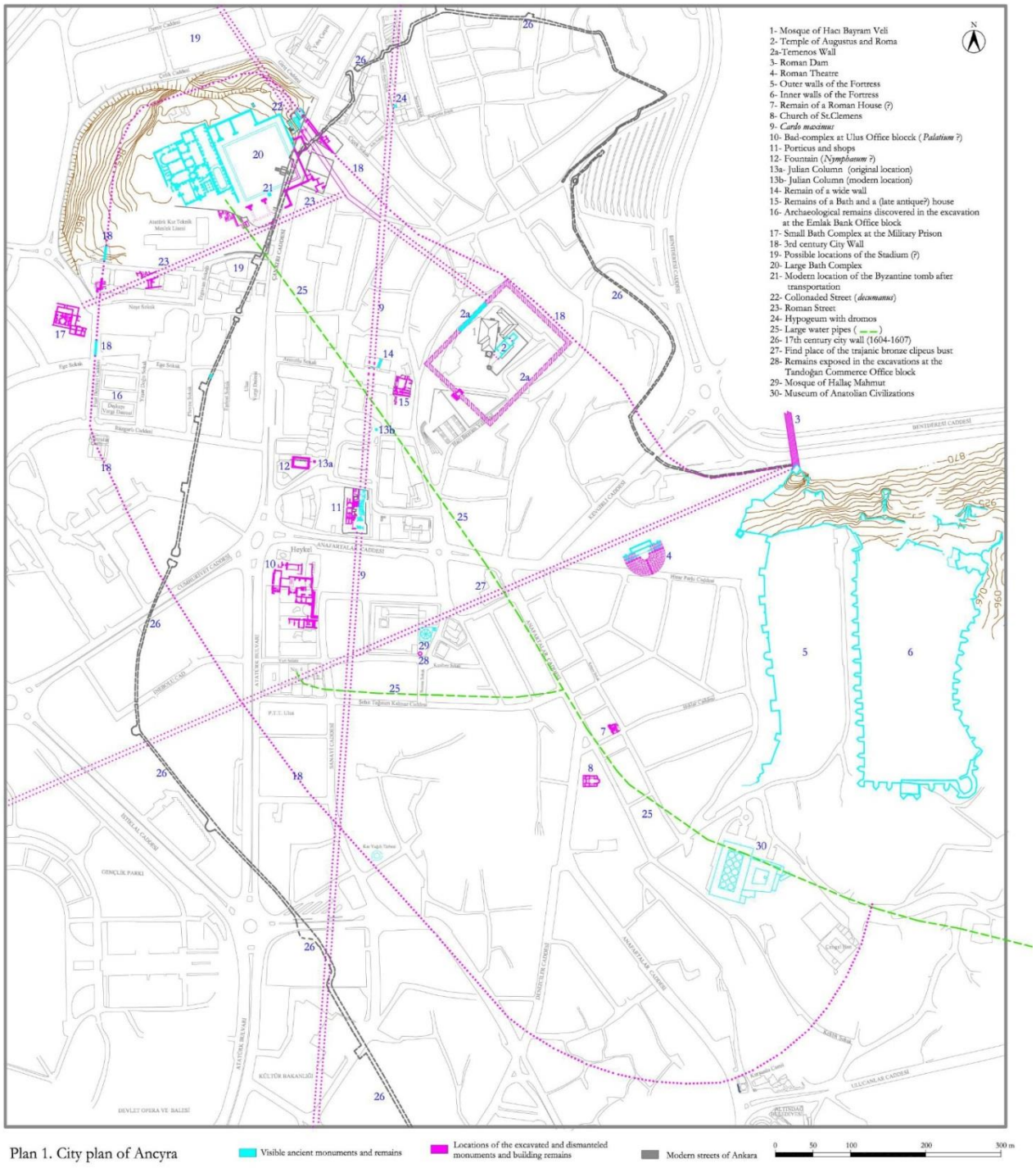


Figure 3.9. Map of Roman Ancyra. (after Kadıoğlu Görkay Mitchell 2011, Plan 1).

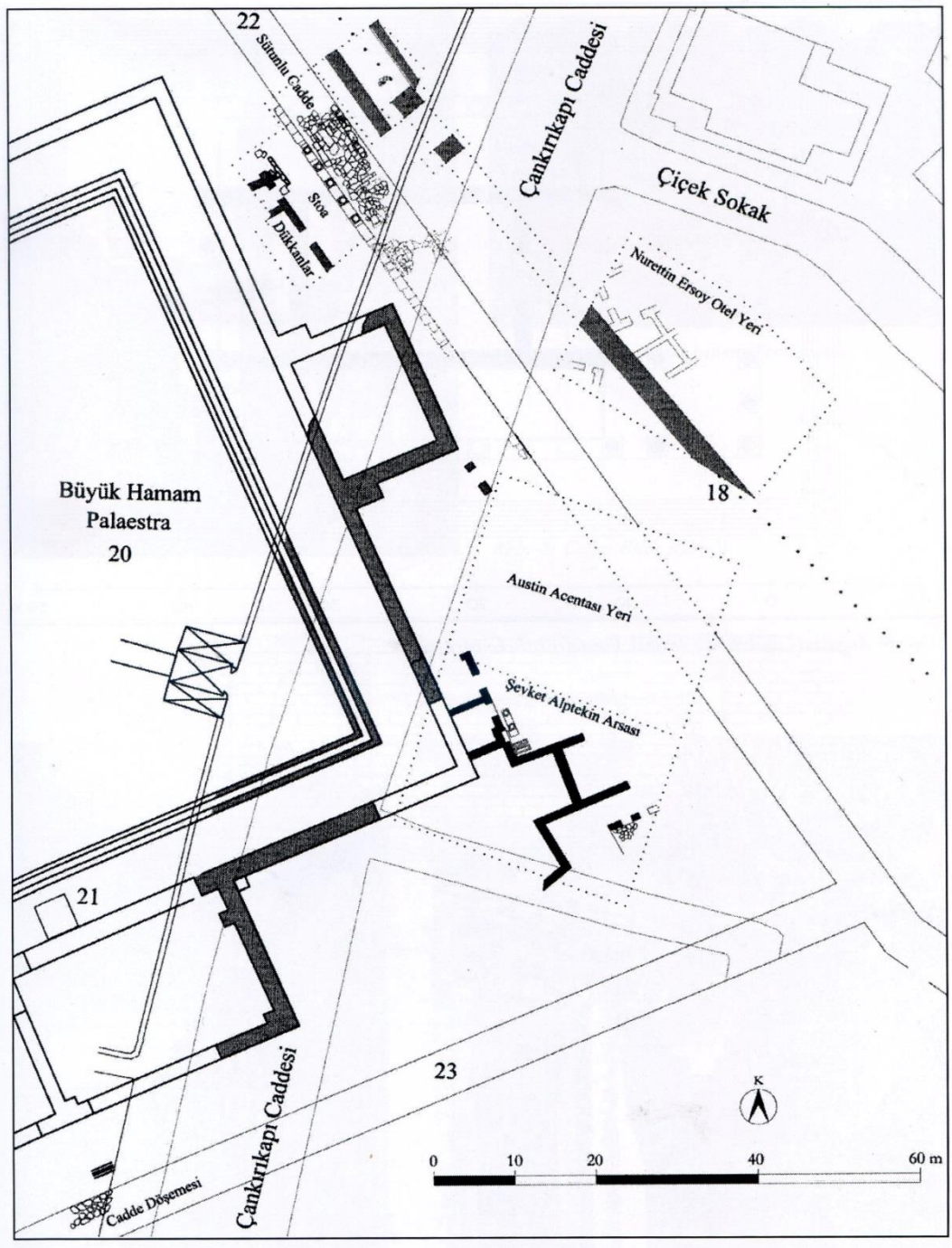


Figure 3.10. Plan of the colonnaded road. (After Kadıoğlu Görkay Mitchell 2011, p. 158, fig. 159).

Figure 3.11. Photo of the current remains of the colonnaded road. (After Kadıoğlu Görkay Mitchell 2011, p. 164, fig. 98).

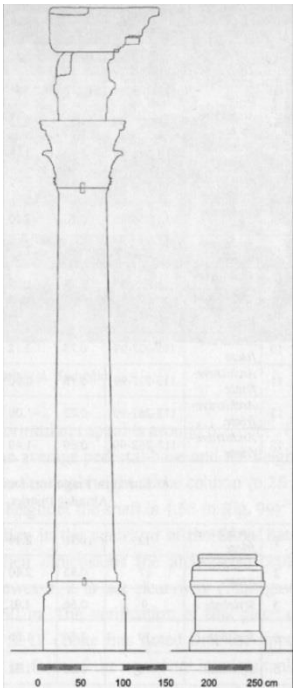


Figure 3.12. Reconstruction of the colonnade. (After Kadıoğlu Görkay Mitchell 2011, p. 165, fig. 99).

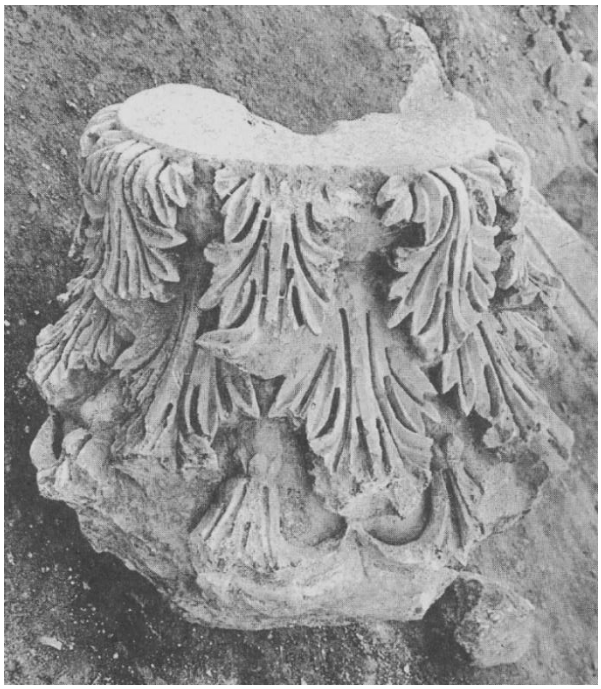


Figure 3.13. Corinthian capital from the colonnaded road. (After Kadıoğlu Görkay Mitchell 2011, p. 171, fig. 104).

Figure 3.14. New boiler room, constructed on top of the *Cardo Maximus*. (After Kadıoğlu Görkay Mitchell 2011, p. 150, fig. 81).

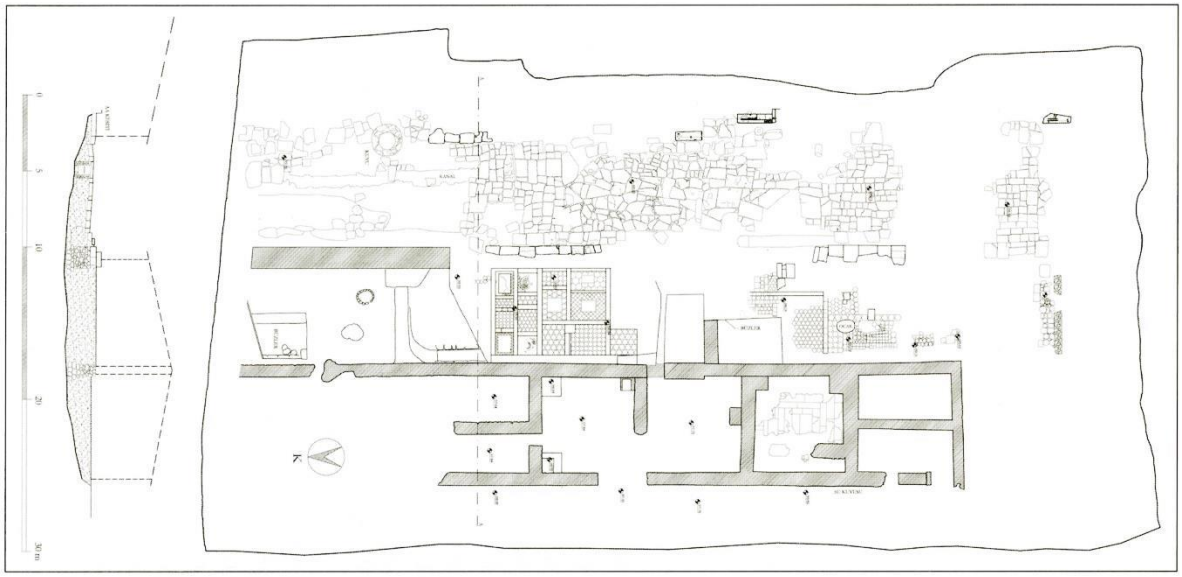


Figure 3.15. Plan of the *Cardo Maximus*. (After Kadıoğlu Görkay Mitchell 2011, p. 144, fig. 70).

Figure 3.16. Aerial view of the *Cardo Maximus*. (After Kadıoğlu Görkay Mitchell 2011, p. 148, fig. 78).

Figure 3.17. Pavement of the *stoa* flanking the *Cardo Maximus*. (After Kadıoğlu Görkay Mitchell 2011, p. 154, fig. 87).

Figure 3.18. View of the Temple of Augustus and Roma. (After Kadıoğlu Görkay Mitchell 2011, p. 97, fig. 35).

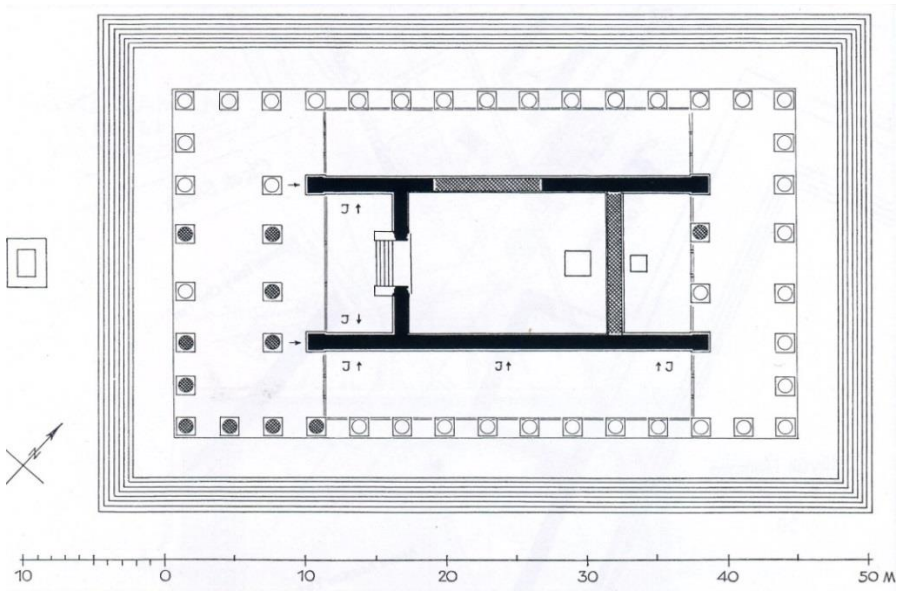


Figure 3.19. Plan of the Temple of Augustus and Roma. (After Peschlow 2015, Taf. 6, abb. 6).

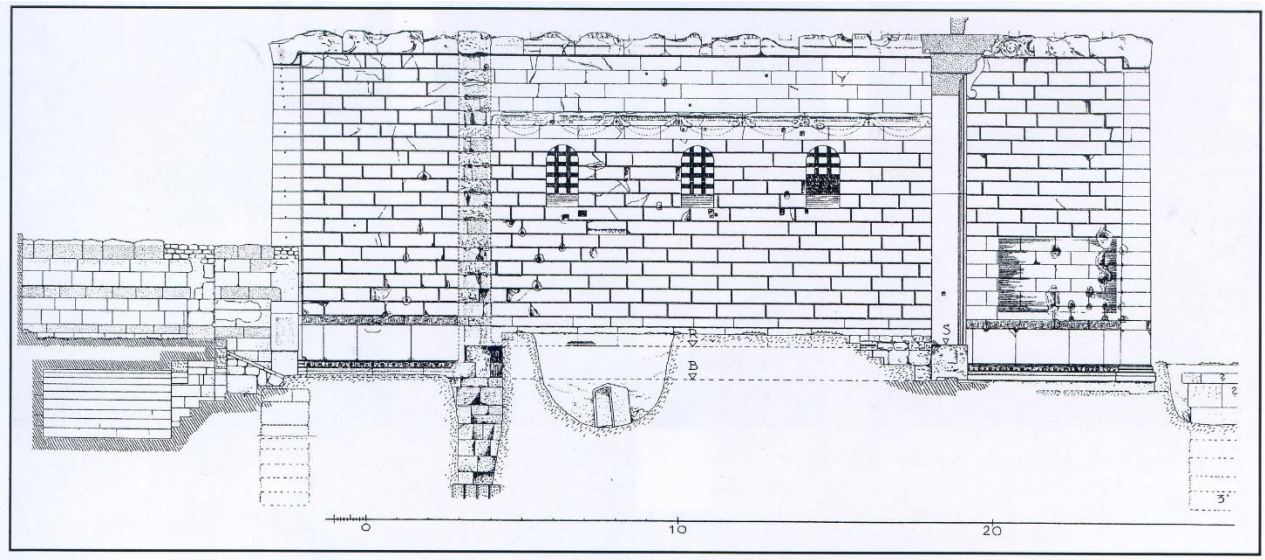


Figure 3.20. Reconstruction of the upper part of the Temple of Augustus and Roma. (After Peschlow 2015, Taf. 15, abb. 47).

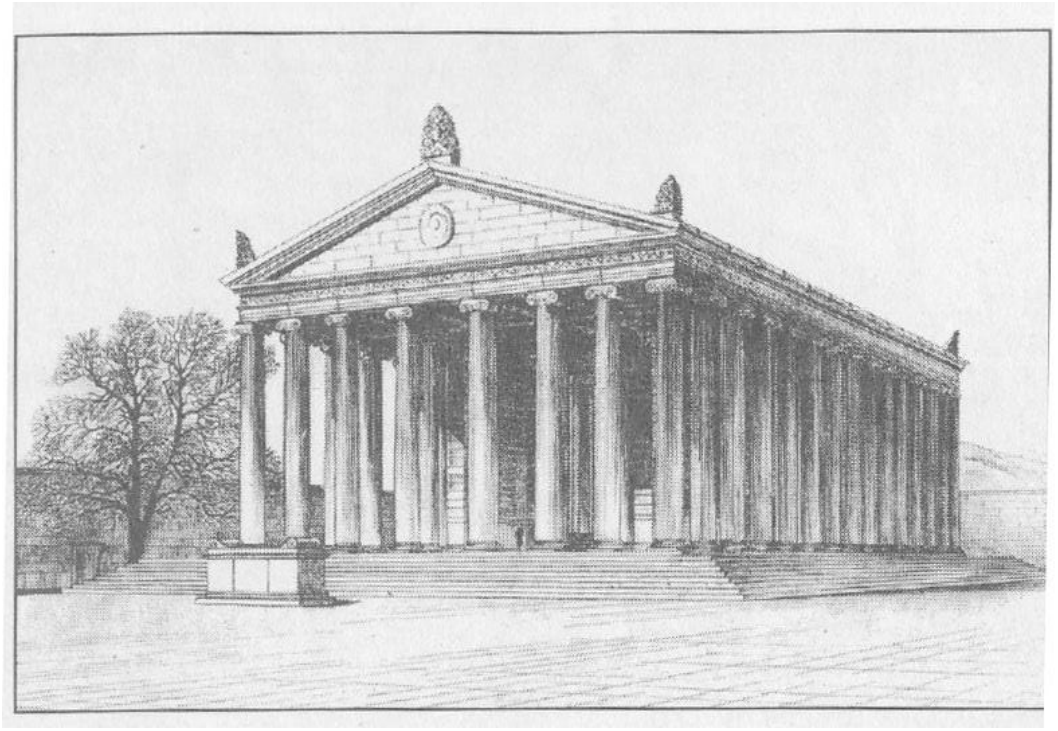


Figure 3.21. Axonometric reconstruction of the Temple of Augustus and Roma. (After Kadıoğlu Görkay Mitchell 2011, p. 87, fig. 31).

Figure 3.22. View of the *Res Gestae*, inscribed in the Temple of Augustus and Roma. (After Kadıoğlu Görkay Mitchell 2011, p. 100, fig. 37).

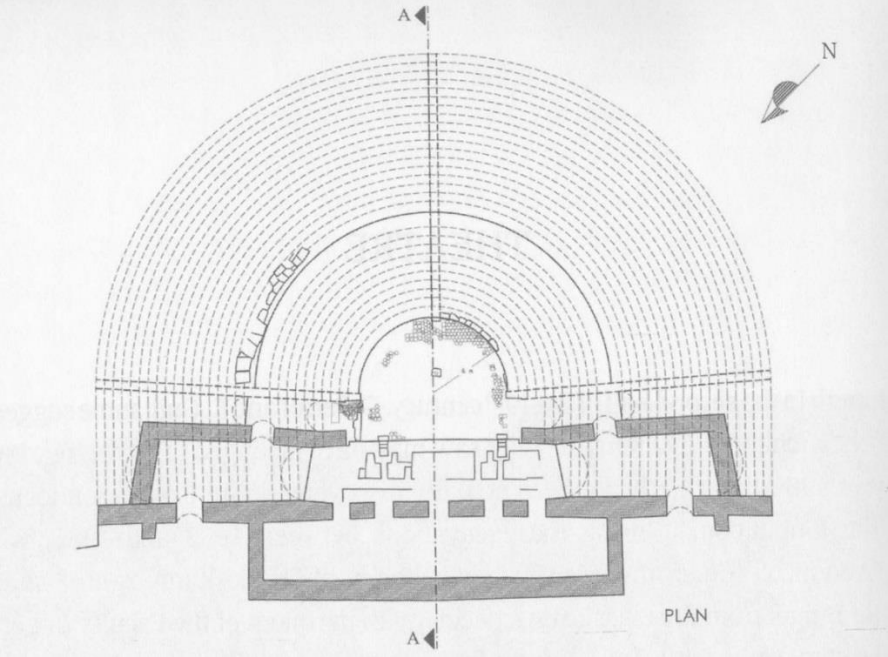


Figure 3.23. Plan of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 118, fig. 43).

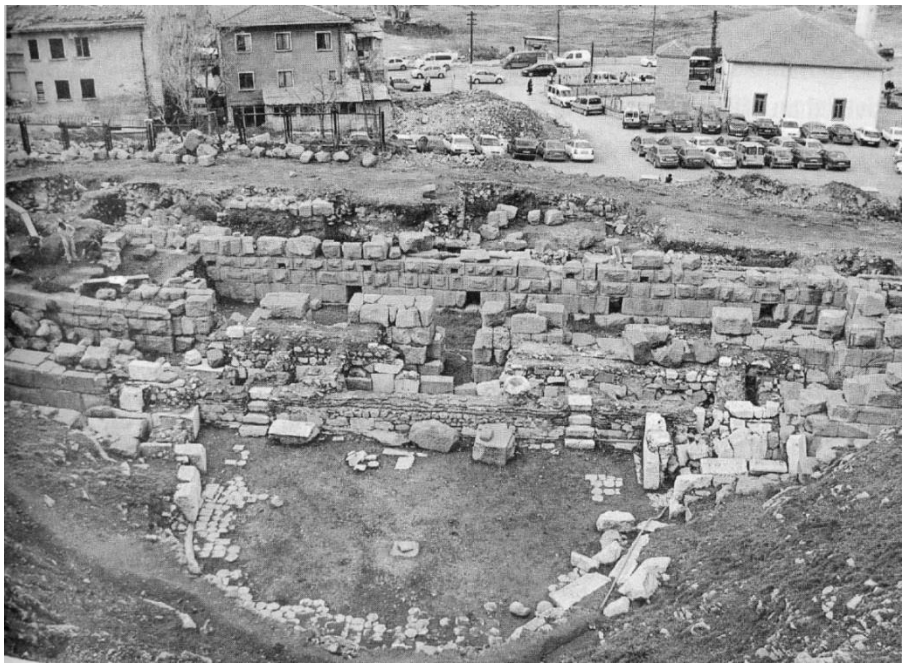


Figure 3.24. View of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 129, fig. 52).

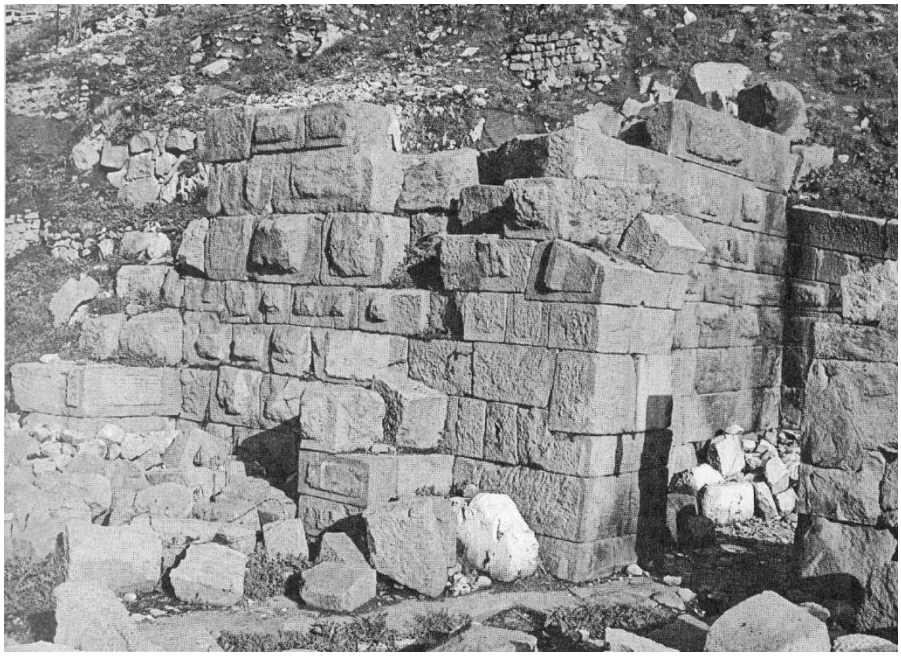


Figure 3.25. Detail of the masonry of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 123, fig. 47).

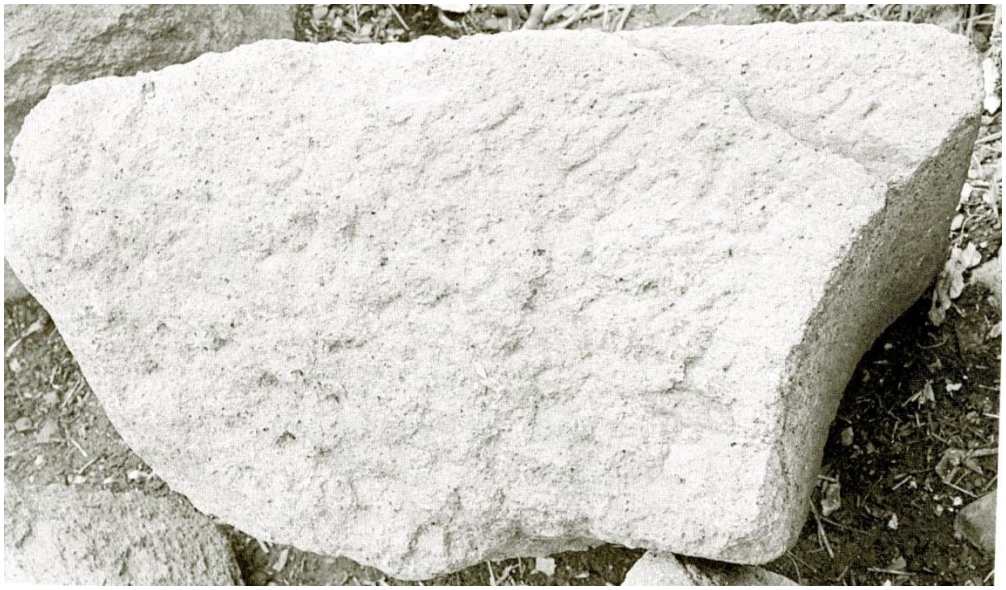


Figure 3.26. Seat of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 125, fig. 49b).

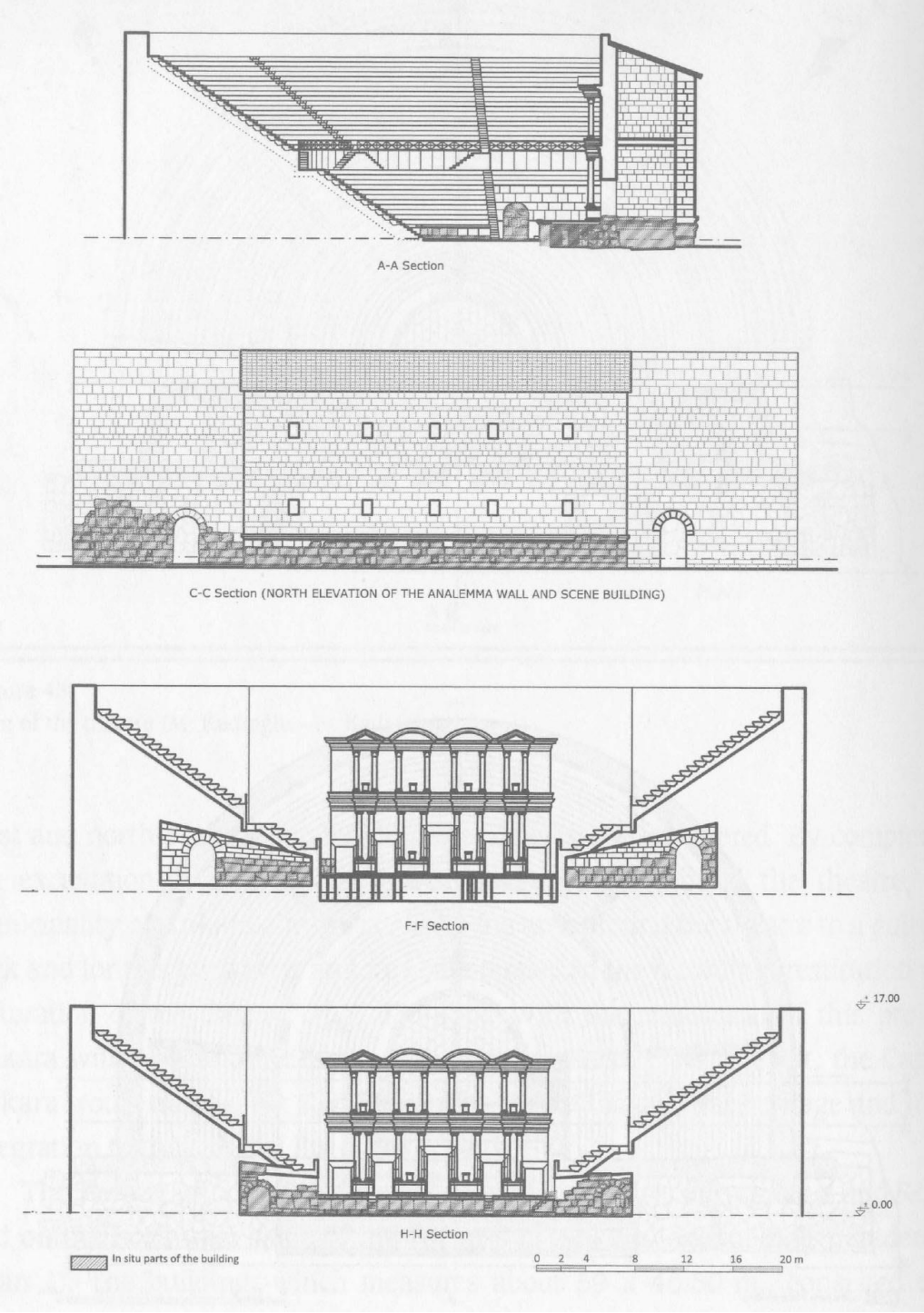


Figure 3.27. Reconstruction of the upper of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 120, fig. 43b).

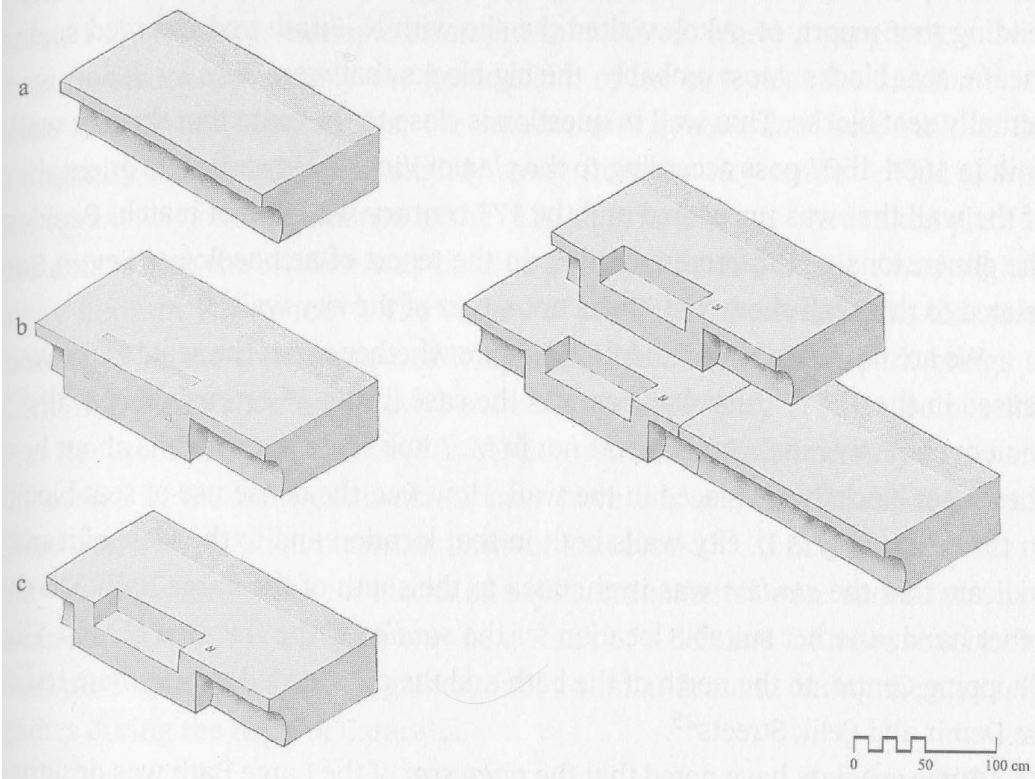


Figure 3.28. Drawing of the seats of the stadium. (After Kadıoğlu Görkay Mitchell 2011, p. 113, fig. 41).

Figure 3.29. Seats of the stadium. (After Kadıoğlu Görkay Mitchell 2011, p. 112, fig. 40).

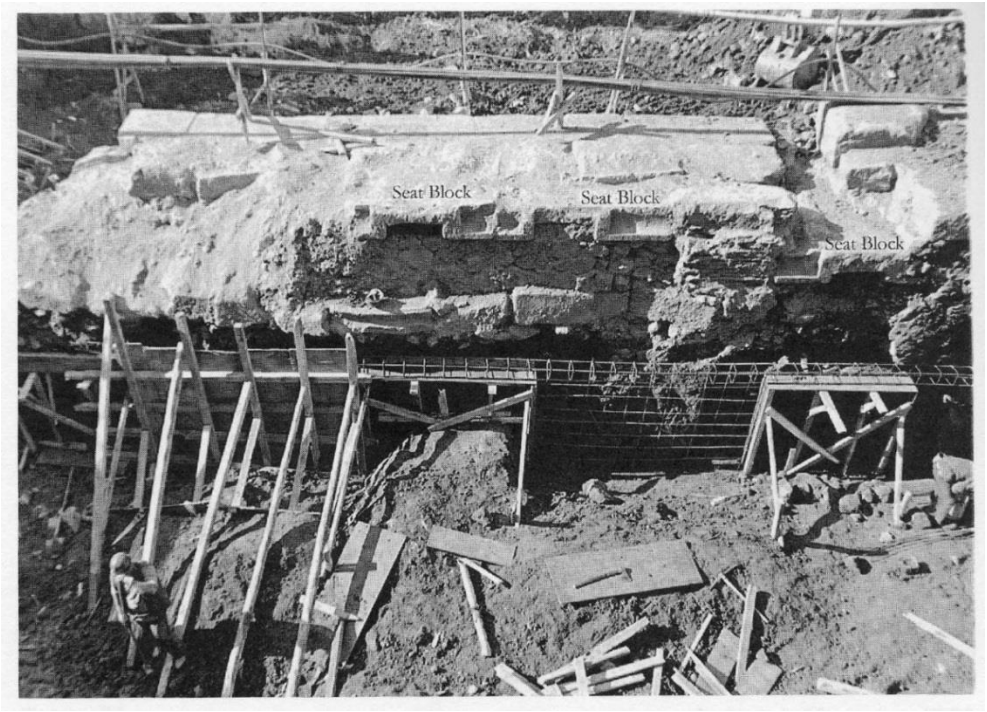


Figure 3.30. Seats of the stadium in the Late Roman wall. (After Kadıoğlu Görkay Mitchell 2011, p. 212, fig. 127).

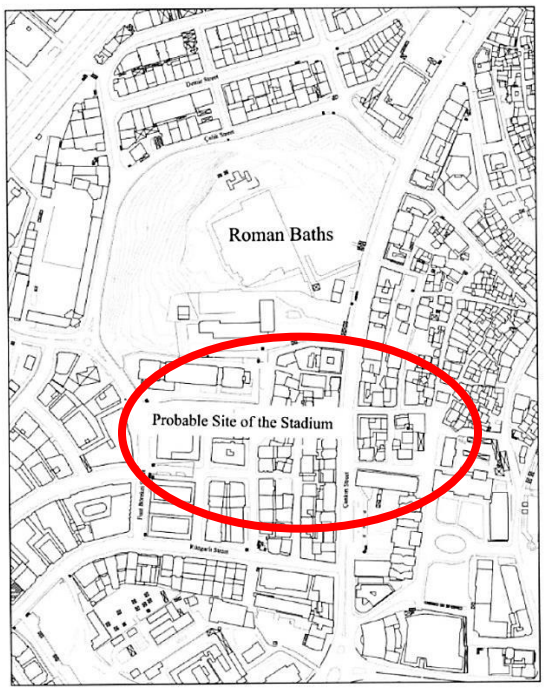


Figure 3.31. Position of the stadium. (After Görkay 2006, p. 262, fig. 15).

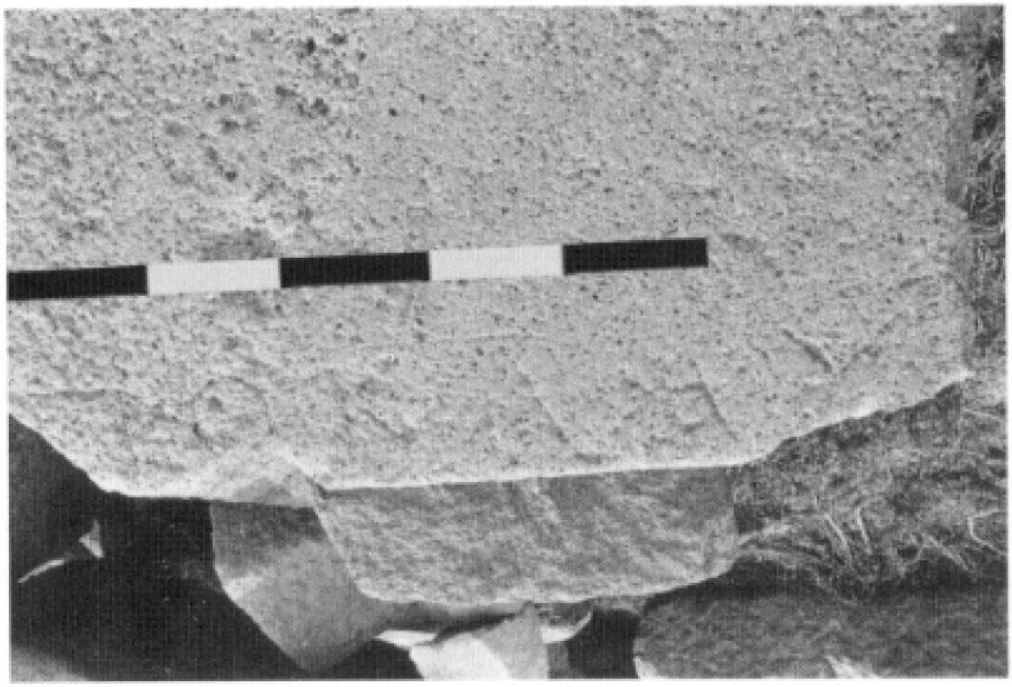


Figure 3.32. Inscription on the seat of the stadium. (After Görkay 2006, p. 252, fig. 13).

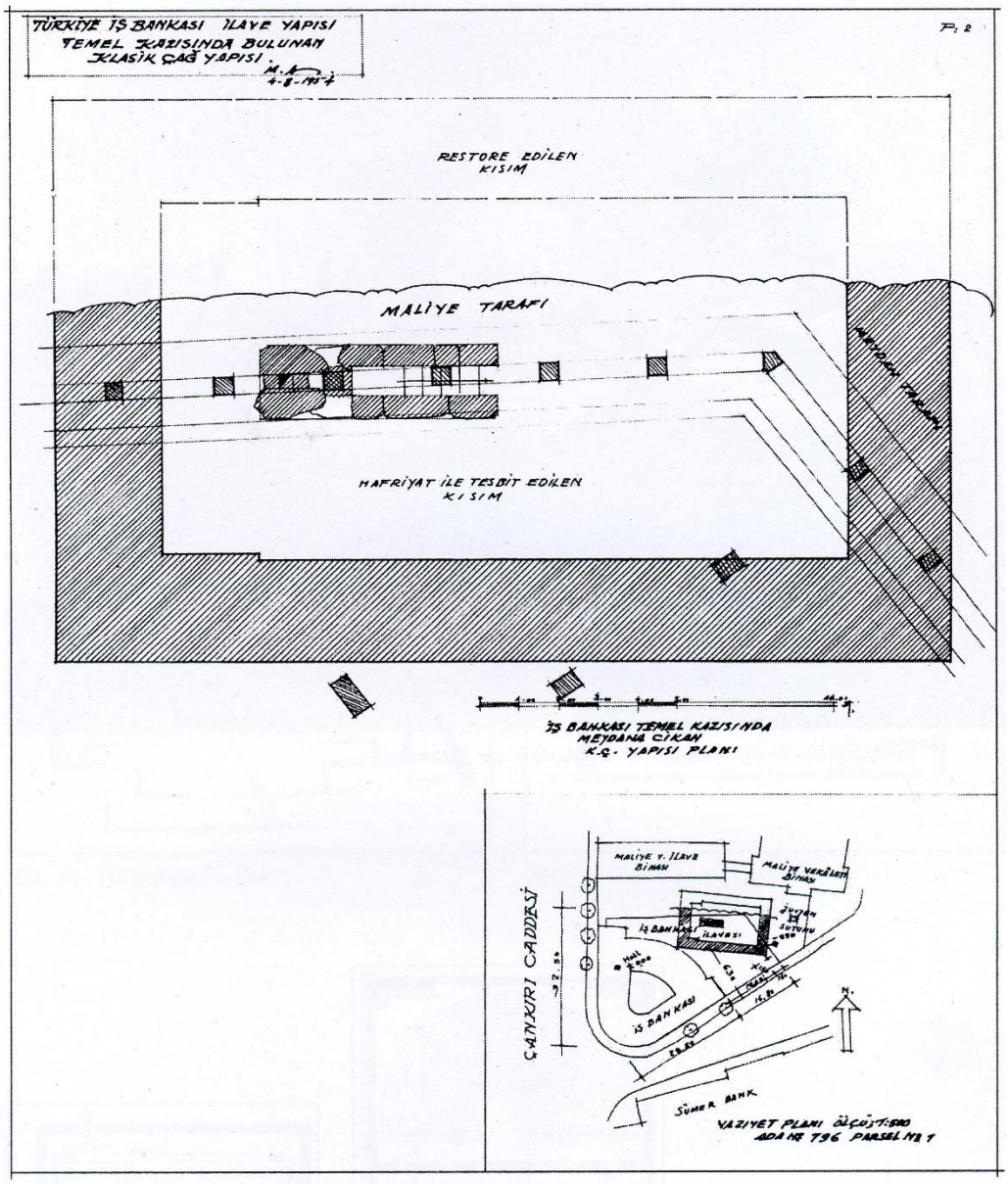


Figure 3.33. Plan of the nymphaeum. (After Kadıoğlu Görkay Mitchell 2011, p. 136, fig. 59).

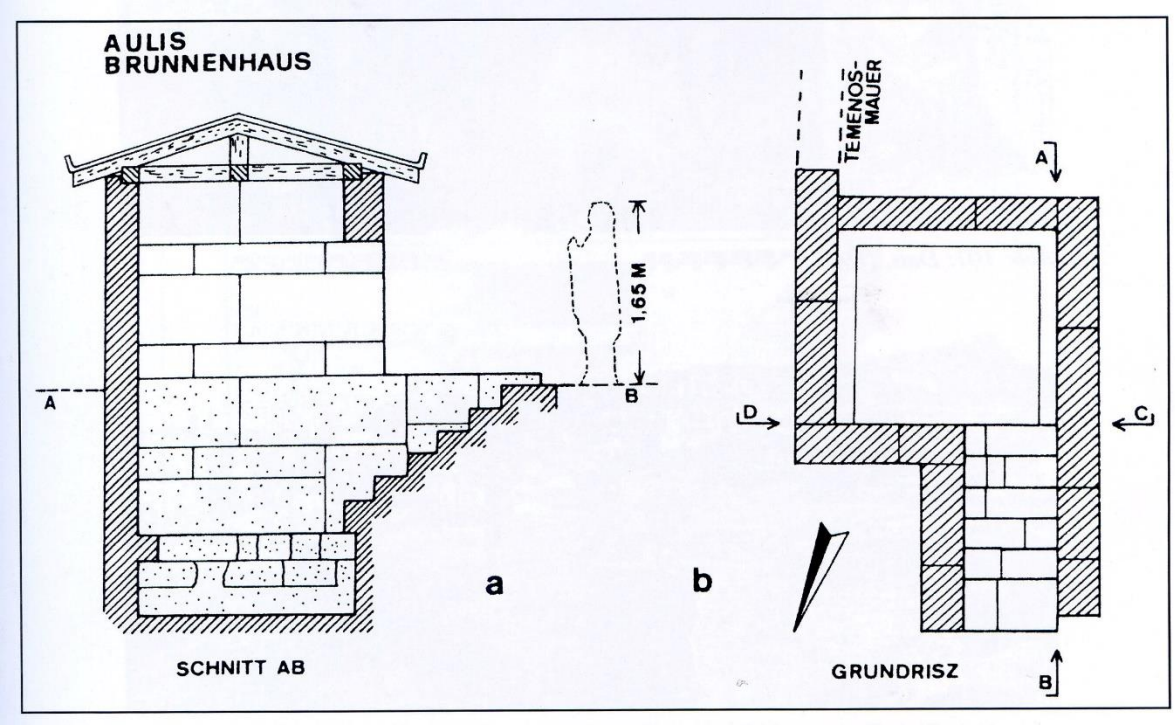


Figure 3.34. Reconstruction of the stepped shaft in the nymphaeum. (After Peschlow 2015, Taf. 31, abb. 99).

Figure 3.35. View of the vault in the nymphaeum. (After Kadıoğlu Görkay Mitchell 2011, p. 138, fig. 64).

Figure 3.36. Anta capital from the nymphaeum. (After Kadıoğlu Görkay Mitchell 2011, p. 141, fig. 68).

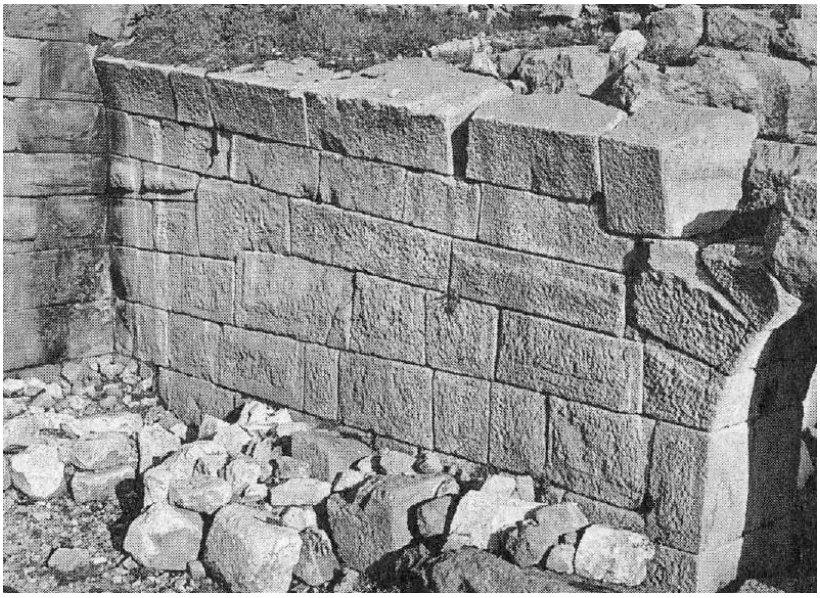


Figure 3.37. North-east analemma of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 122, fig. 46).

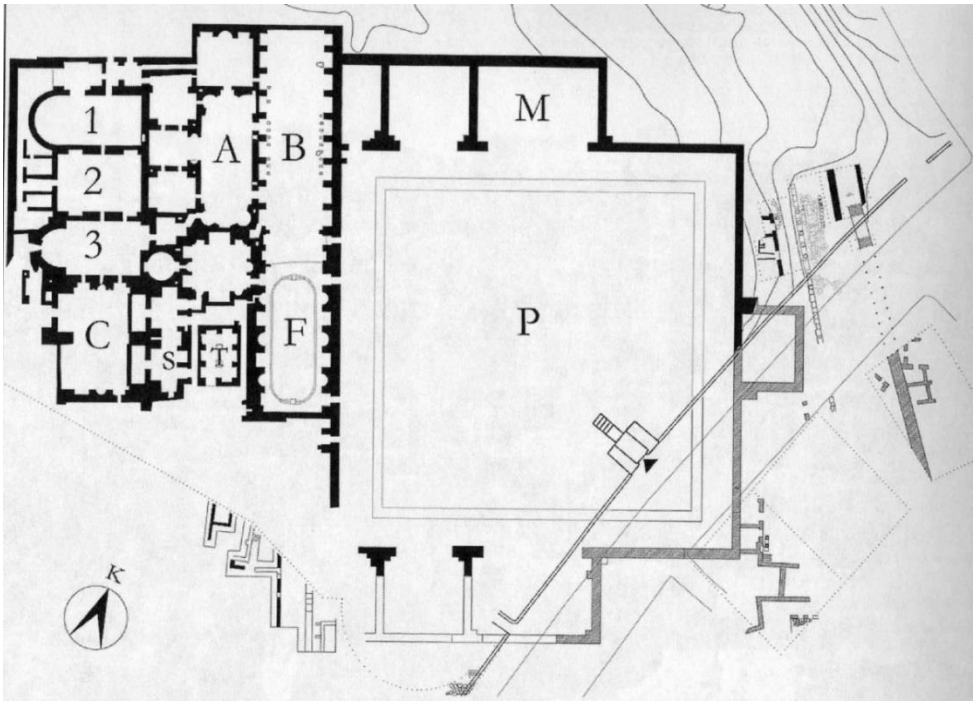


Figure 3.38. Plan of the bath-gymnasium. (After Kadıoğlu Görkay Mitchell 2011, p. 184, fig. 110).

Figure 3.39. View of the *apodyterium*. (After Kadıoğlu Görkay Mitchell 2011, p. 187, fig. 112).

Figure 3.40. View of the hypocaust system. (After Kadıoğlu Görkay Mitchell 2011, p. 188, fig. 113).

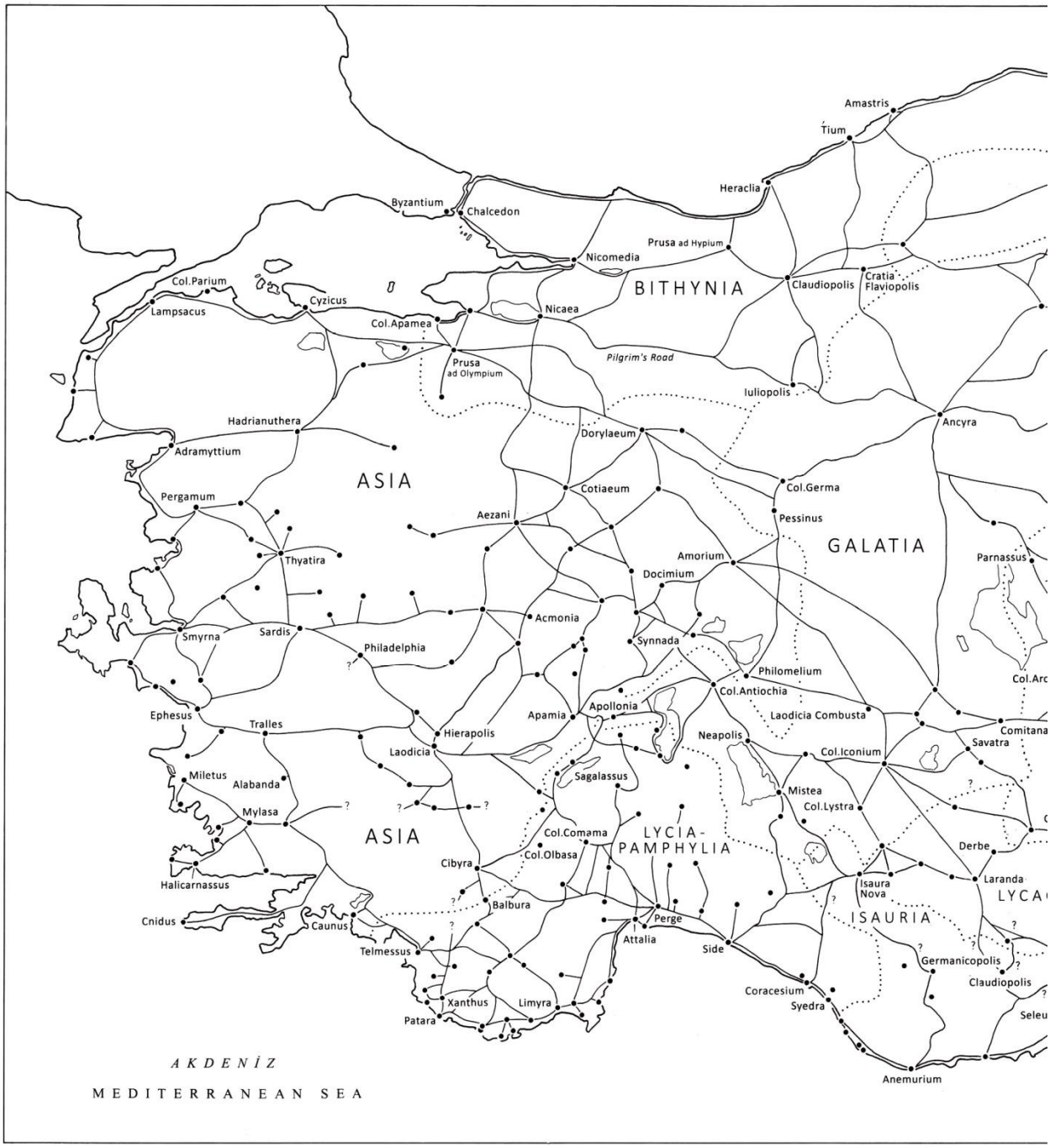


Figure 3.41. Route of Roman Roads in Central Anatolia. (After French 2003, p. 12, map 2).

Figure 3.42. Route of the Pilgrimage Road (marked in red) in Anatolia. (After French 2003, p. 16, map 3).

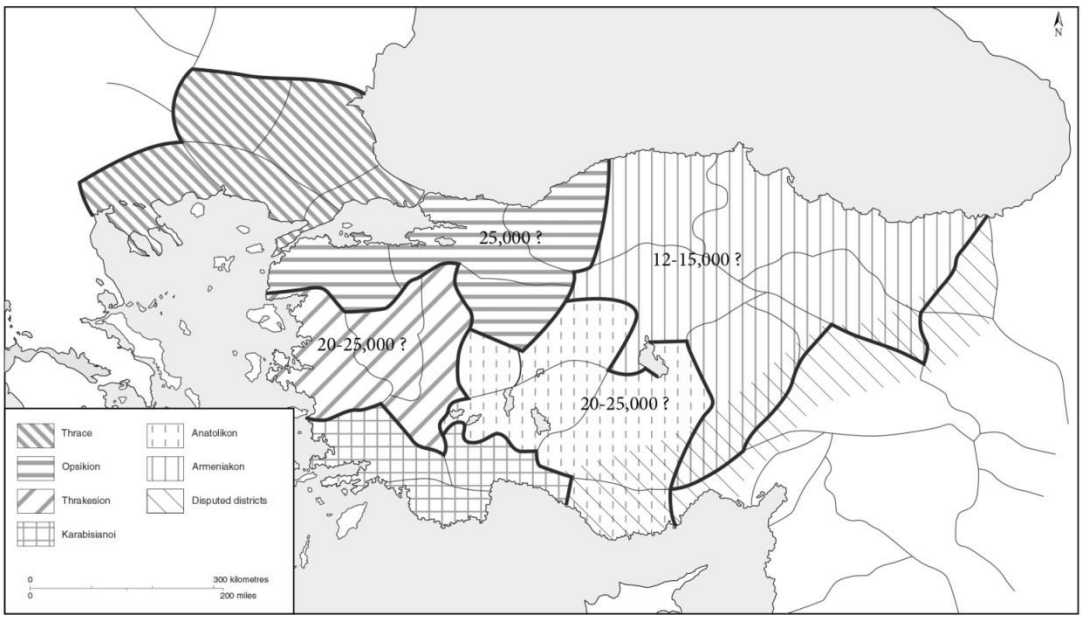


Figure 3.43. Map of thematic borders (7th c. CE). (After Haldon 2016, p. 270, map. 7.1).

Figure 3.44. Map of thematic borders (8th c. CE). (Haldon 2008, p. 250, map. 5).

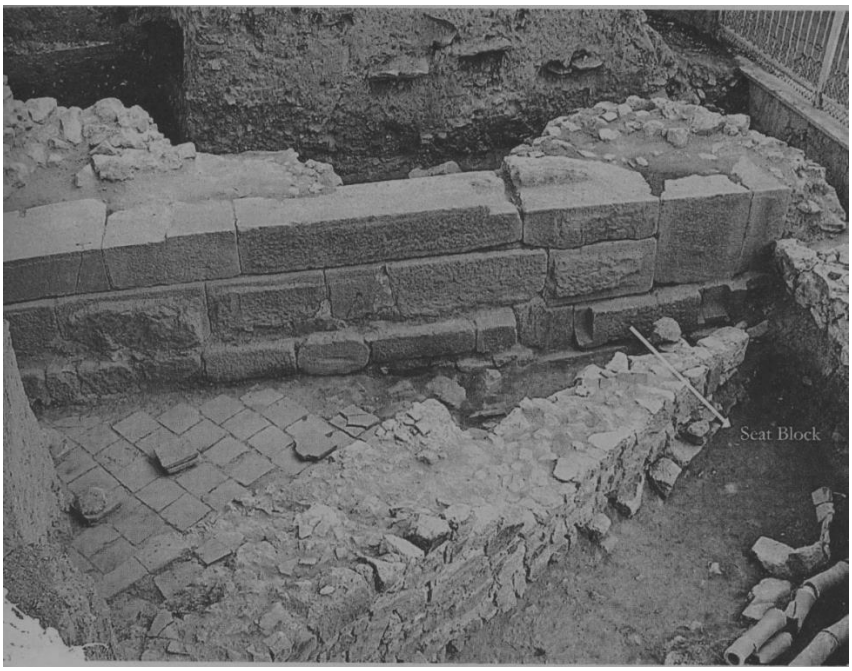


Figure 3.45. View of the remains of the Late Roman Wall. (After Kadıoğlu Görkay Mitchell 2011, p. 215, fig. 129).

Figure 3.46. Remains of the Late Roman tower. (After Kadıoğlu Görkay Mitchell 2011, p. 211, fig. 124).

Figure 3.47. View of the reused *spolia* in the Byzantine Citadel. (After Peschlow 2015, Taf. 112, abb. 378).

Figure 3.48. View of the *Cardo* at the time of discovery. (After Kadıoğlu Görkay Mitchell 2011, p. 146, fig. 73).

Figure 3.49. View of the *Cardo* after the construction of the Bazaar. (After Kadıoğlu Görkay Mitchell 2011., p. 146, fig. 75).

Figure 3.50. Remains of the *Cardo* during the excavation of the boiler room. (After Kadıoğlu Görkay Mitchell 2011., p. 150, fig. 81).

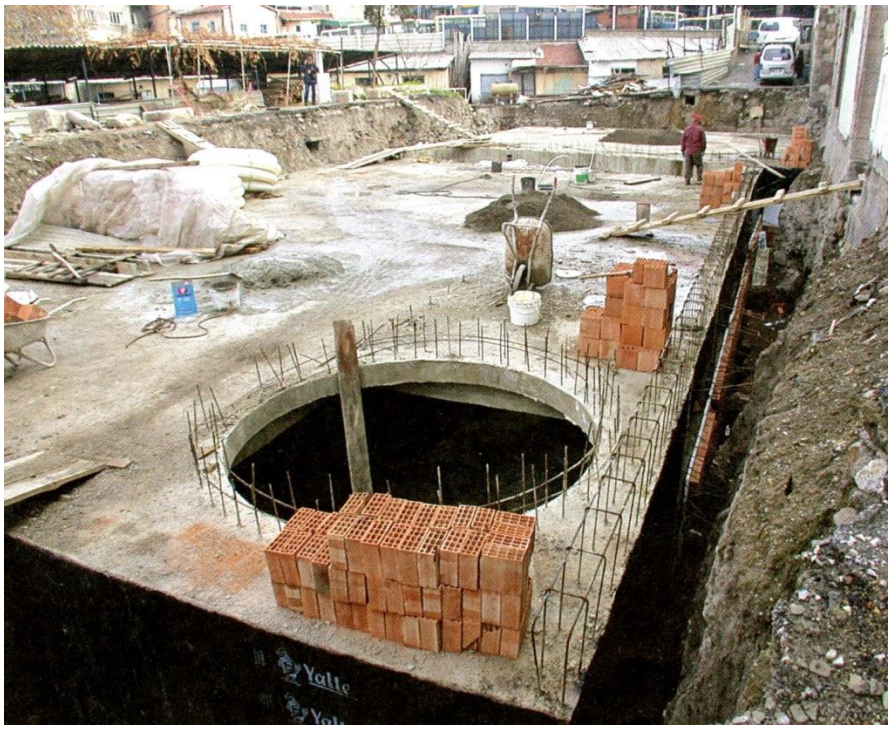


Figure 3.51. View of the boiler room. (After Kadıoğlu Görkay Mitchell 2011, p. 149, fig. 80).

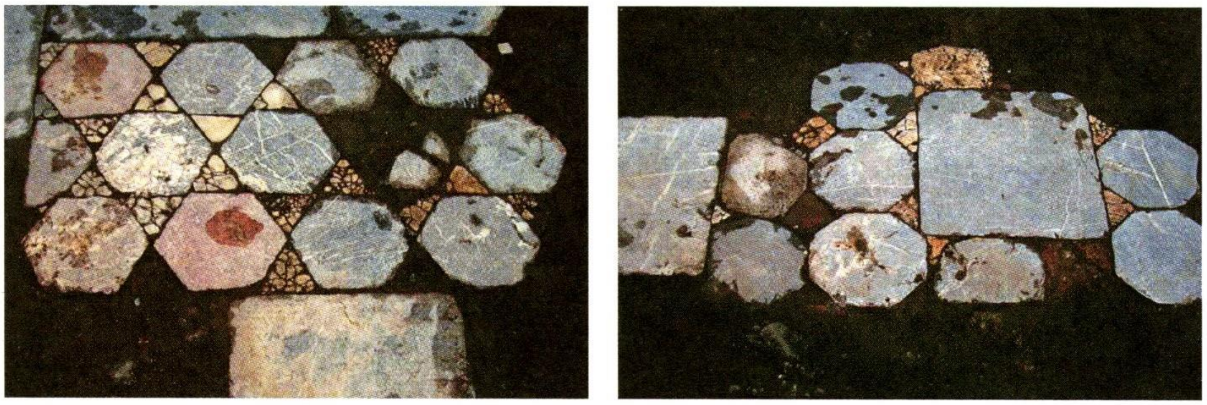


Figure 3.52. View of the *opus sectile* pavement. (After Kadıoğlu Görkay Mitchell 2011, p. 154, fig. 88).

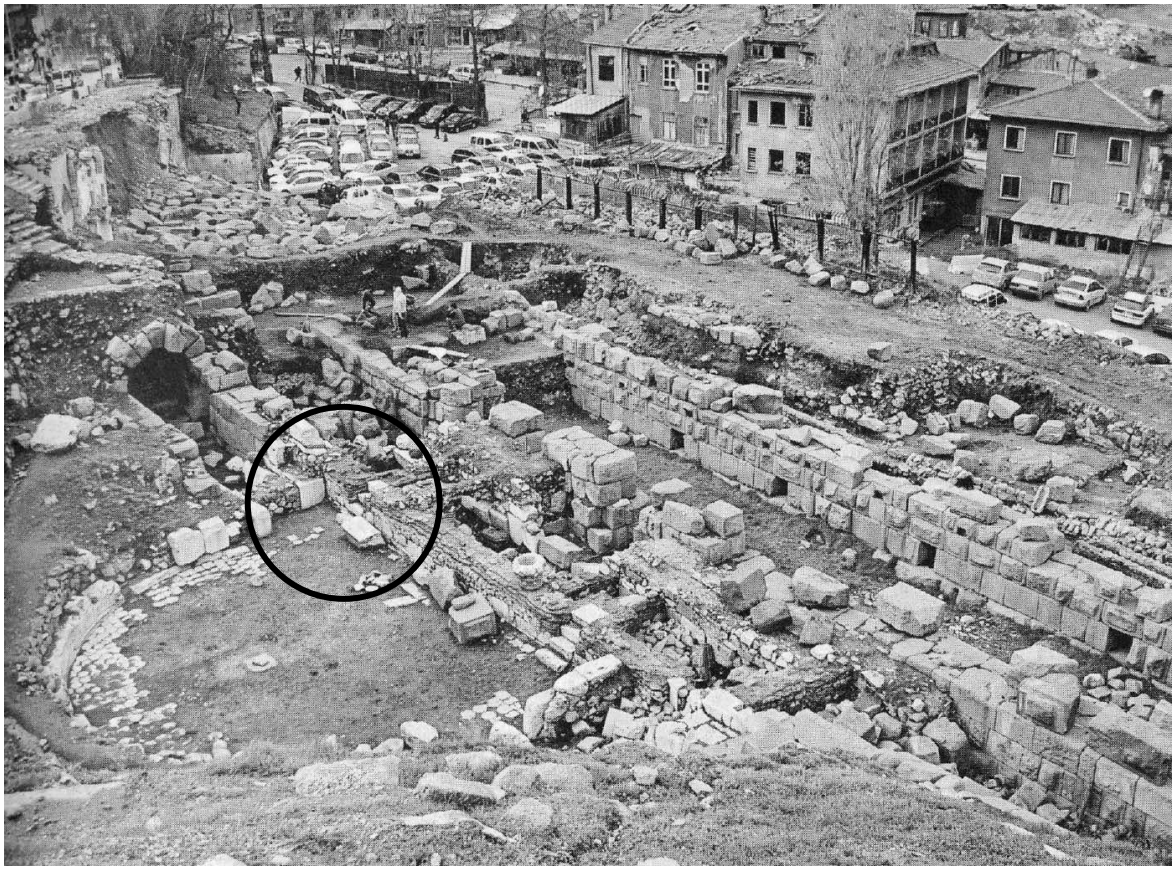


Figure 3.53. Orthostat in the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 129, fig. 52).

Figure 3.54. Masonry of the theater. (After Peschlow 2015, Taf. 24, abb. 76).

Figure 3.55. Pavement of the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 128, fig. 51).

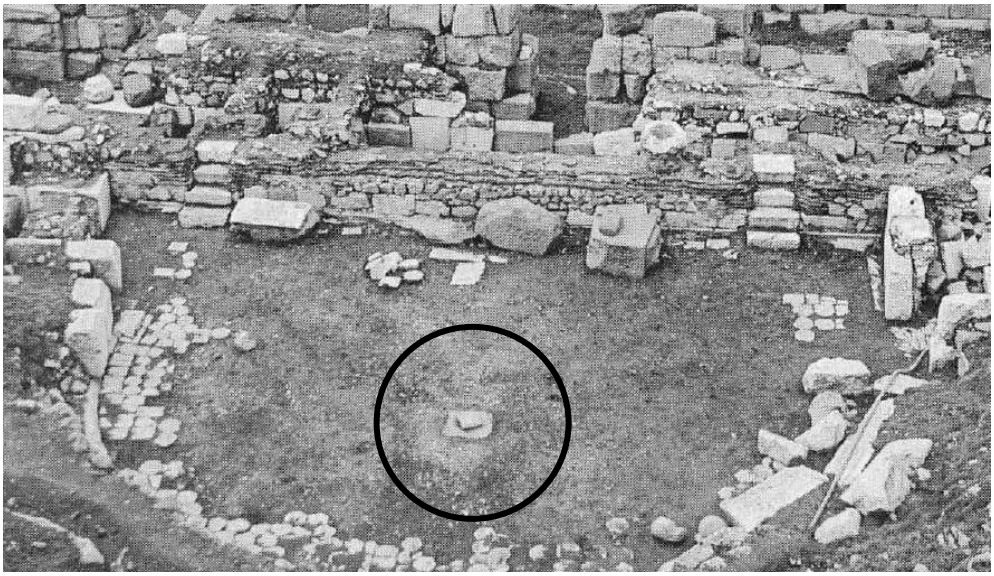


Figure 3.56. Manhole in the theater. (After Kadıoğlu Görkay Mitchell 2011, p. 129, fig. 52).

Figure 3.57. 4th c. capital in the bath-gymnasium. (After Peschlow 2015, Taf. 40, abb. 124).

Figure 3.58. Pierced stones from the aqueduct. (After Peschlow 2015, Taf. 83, abb. 297).

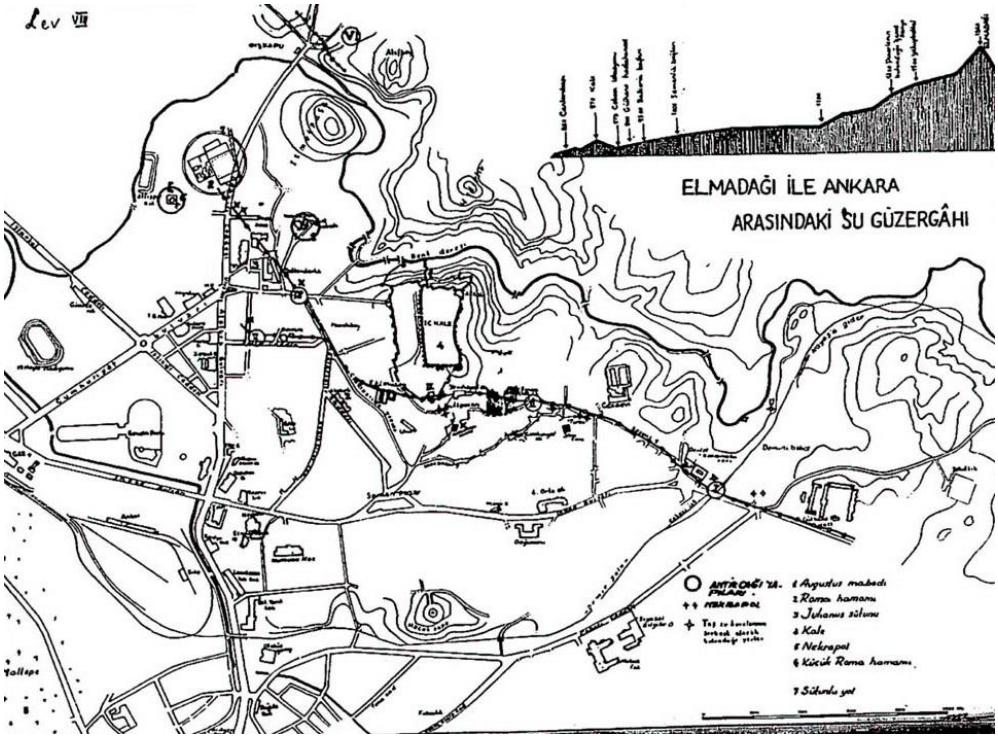


Figure 3.59. Route of the aqueduct (marked in black). (After Fıratlı 1951, p.354, fig. 3).

Figure 3.60. Pierced stones from the aqueduct reused in the Byzantine Citadel. (Peschlow 2015, Taf. 83, abb. 297).

Figure 3.61. View of the so-called column of Julian. (After Peschlow 2017, p. 353, fig. 33.2).

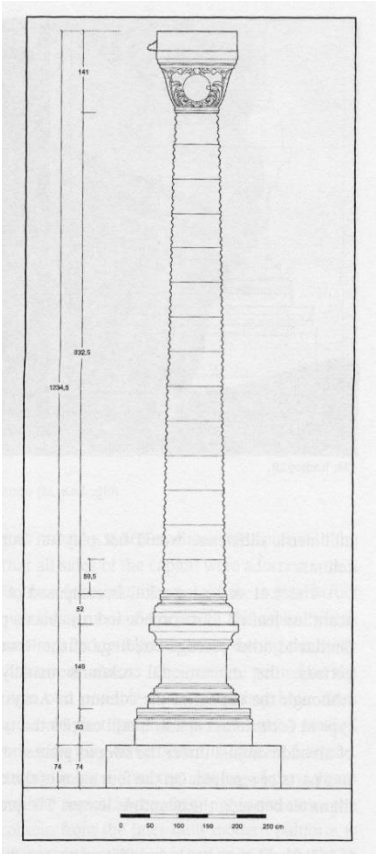


Figure 3.62. Reconstruction of the column of Julian. (After Kadıoğlu Görkay Mitchell 2011, p. 231, fig. 143).

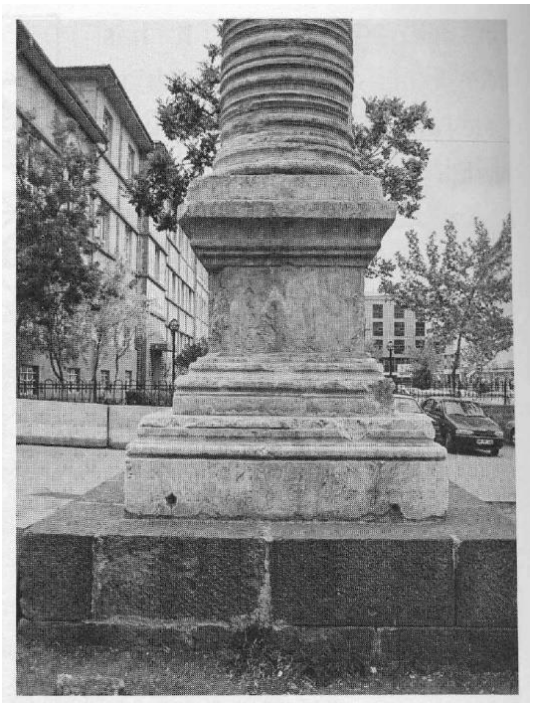


Figure 3.63. Base of the column of Julian. (After Kadıoğlu Görkay Mitchell 2011, p. 232, fig. 145).

Figure 3.64. Capital of the column of Julian. (After Kadıoğlu Görkay Mitchell 2011, p. 234, fig. 144).

Figure 3.65. Detail of *spolia* used in the upper citadel. (Peschlow 2015, Taf. 111 abb. 373).

Figure 3.66. Detail of *spolia* used in the upper citadel. (Peschlow 2015, Taf. 83 abb. 297).

Figure 3.67. Detail of *spolia* used in the upper citadel. (Peschlow 2015, Taf. 112 abb. 378).

Figure 3.68. View of the lower citadel. (Peschlow 2015, Taf. 73 abb. 264).

Figure 3.69. View of the pentagonal towers. (Peschlow 2015, Taf. 73 abb. 265).

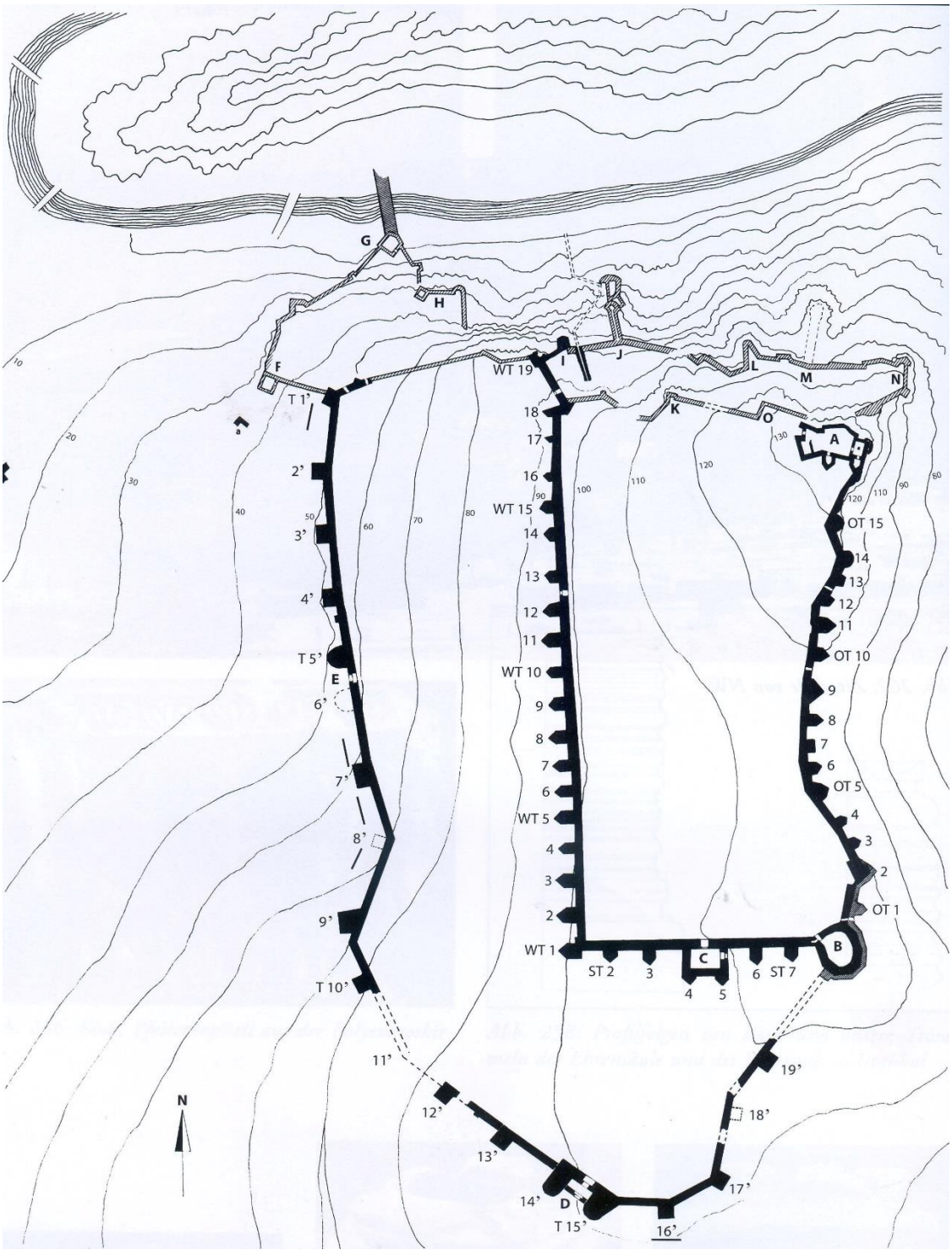


Figure 3.70. Plan of the Citadel. (After de Jerphanion 1928, pl. LXXXII).

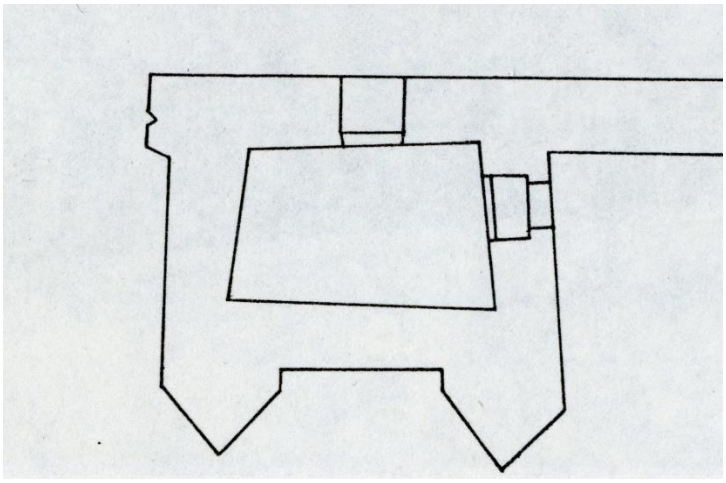


Figure 3.71. Plan of the southern gate in the upper citadel. (After Peschlow 2015, Taf. 75, abb. 269).

Figure 3.72. View of the gate into the lower wall of the citadel. (Author's archive).

Figure 3.73. View of the square towers in the lower wall. (After Peschlow 2015, Taf. 86, abb. 304).

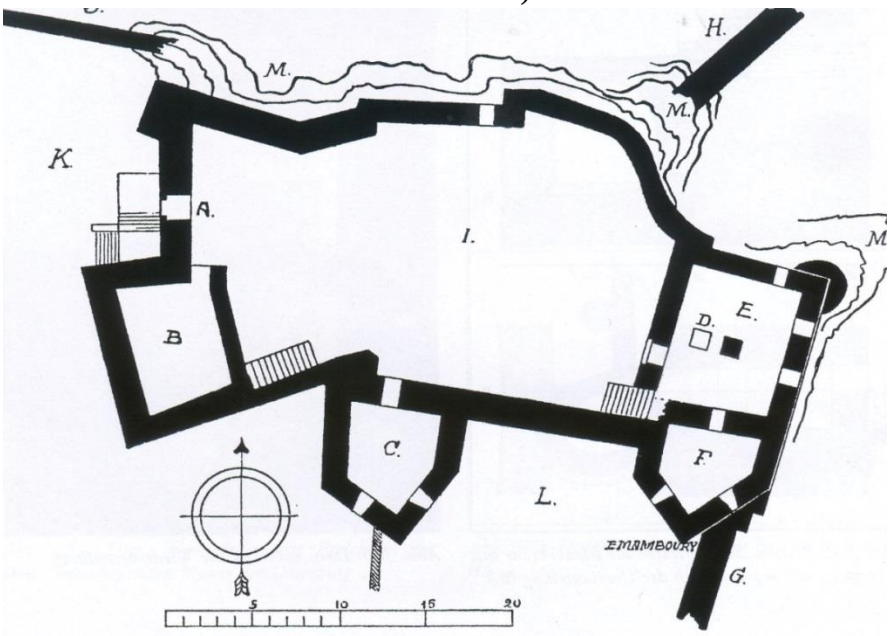


Figure 3.74. Plan of the polygonal bastion (see F and G). (After Peschlow 2015, Taf. 86, abb. 305).

Figure 3.75. Inscriptions near the gate in the upper citadel. (After Peschlow 2015, Taf. 111, abb. 372).

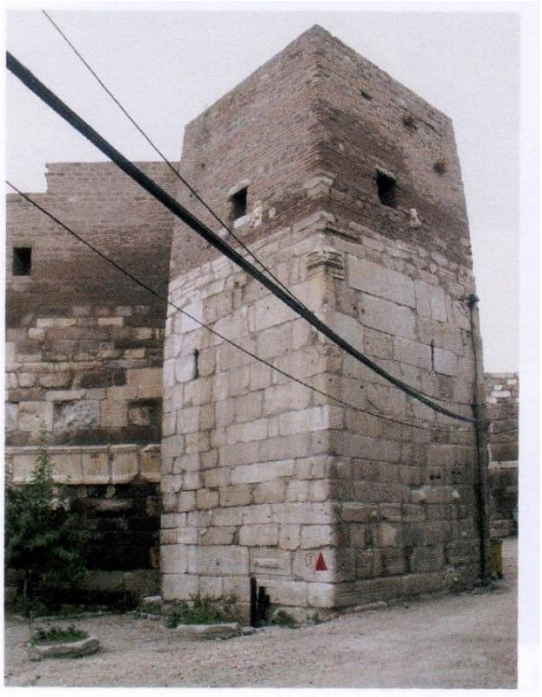


Figure 3.76. Detail of the southern section of the inner citadel. (After Peschlow 2015, Taf. 112, abb. 377).

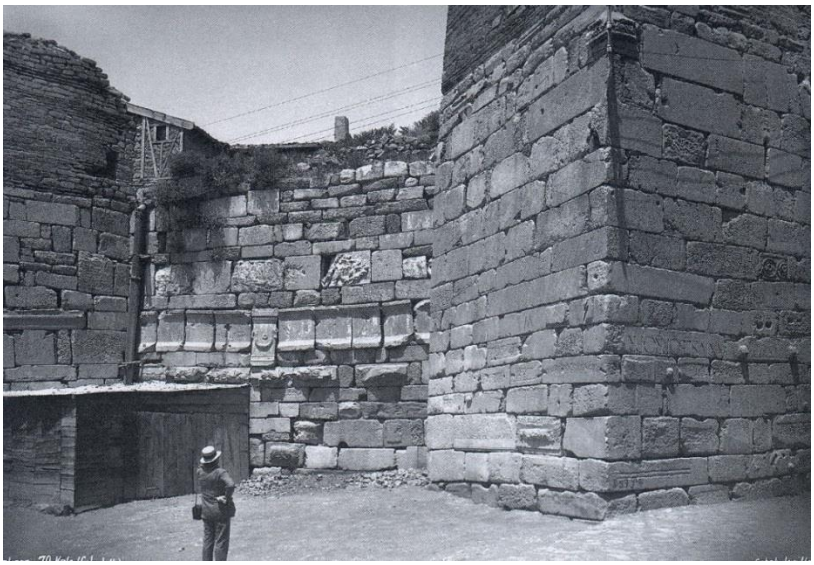


Figure 3.77. Detail of the southern section of the inner citadel. (After Peschlow 2015, Taf. 112, abb. 378).

Figure 3.78. Detail of the southern section of the inner citadel. 12 Altars. (After Serin 2014, p. 81, fig. 16).

Figure 3.79. View of the Church of Saint Clemens at the end of the 19th c. (After Peschlow 2015, Taf. 131, fig. 441).

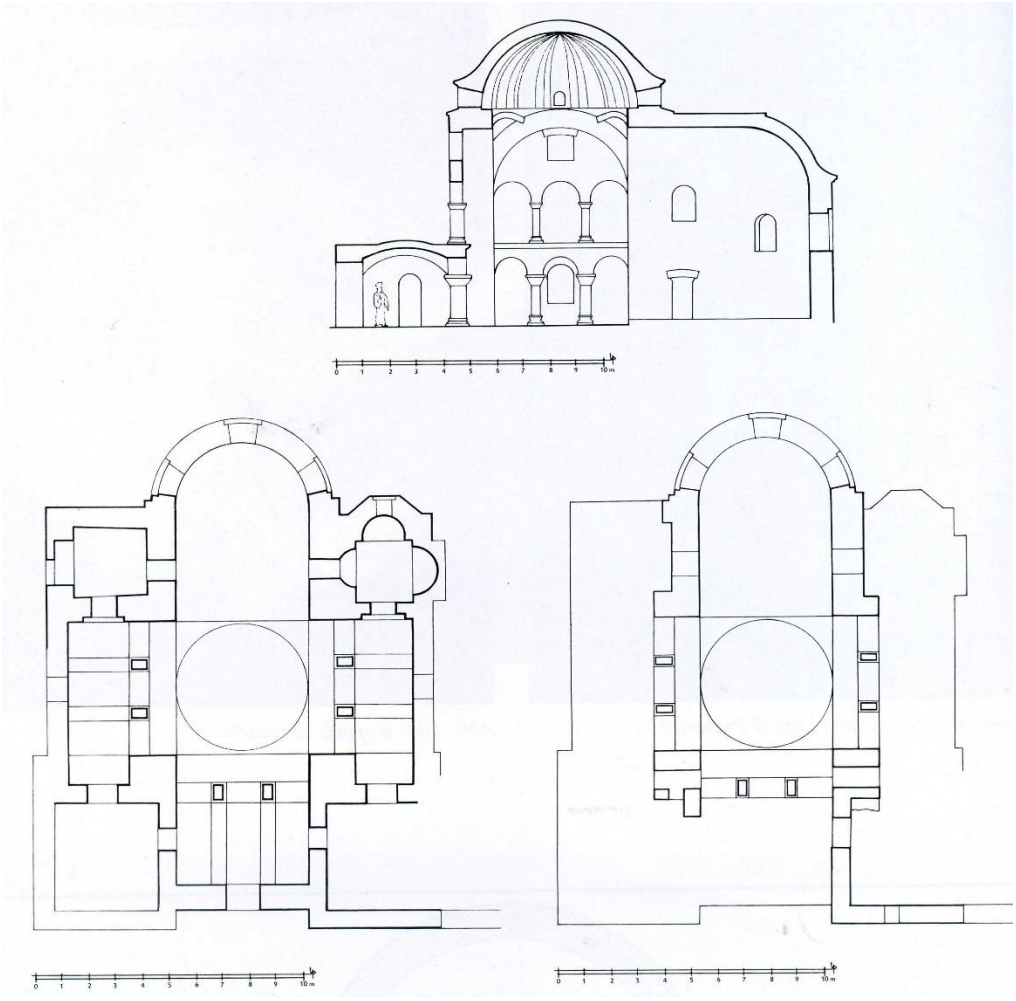


Figure 3.80. Plan of the Church of Saint Clemens. (After Peschlow 2015, Taf. 154, abb. 506).

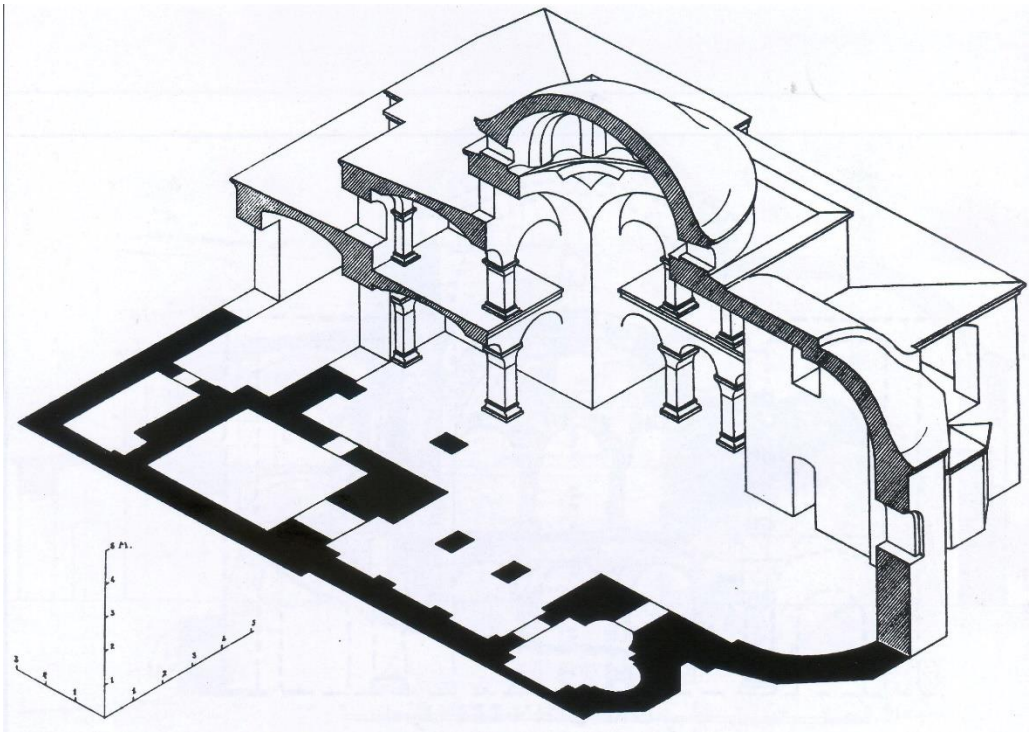


Figure 3.81. Axonometric reconstruction of the Church of Saint Clemens. (After Peschlow 2015, Taf. 130, abb. 439).

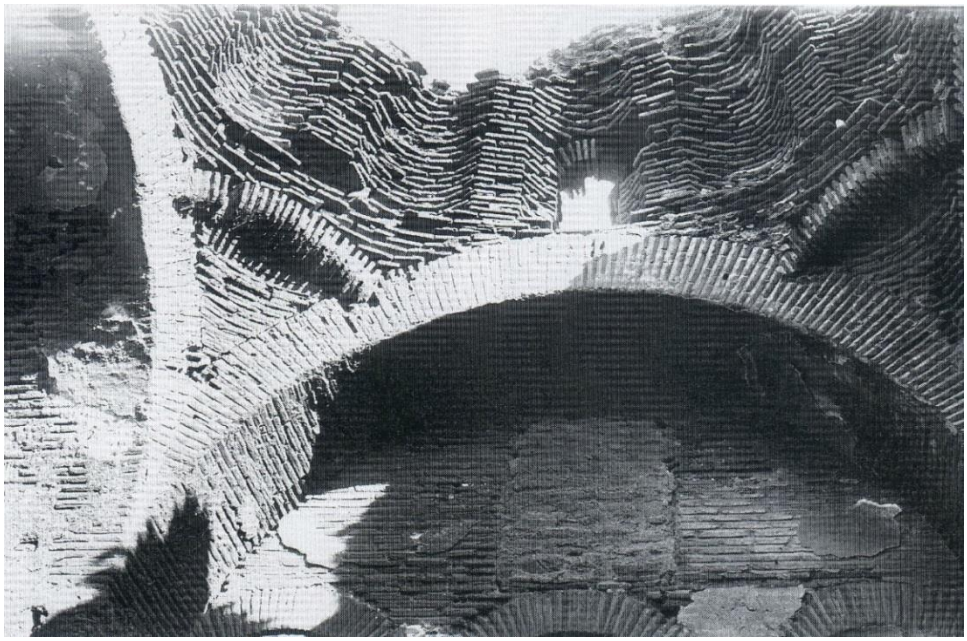


Figure 3.82. Remains of the dome of the Church of Saint Clemens. (After Peschlow 2015, Taf. 153, abb. 503-504).

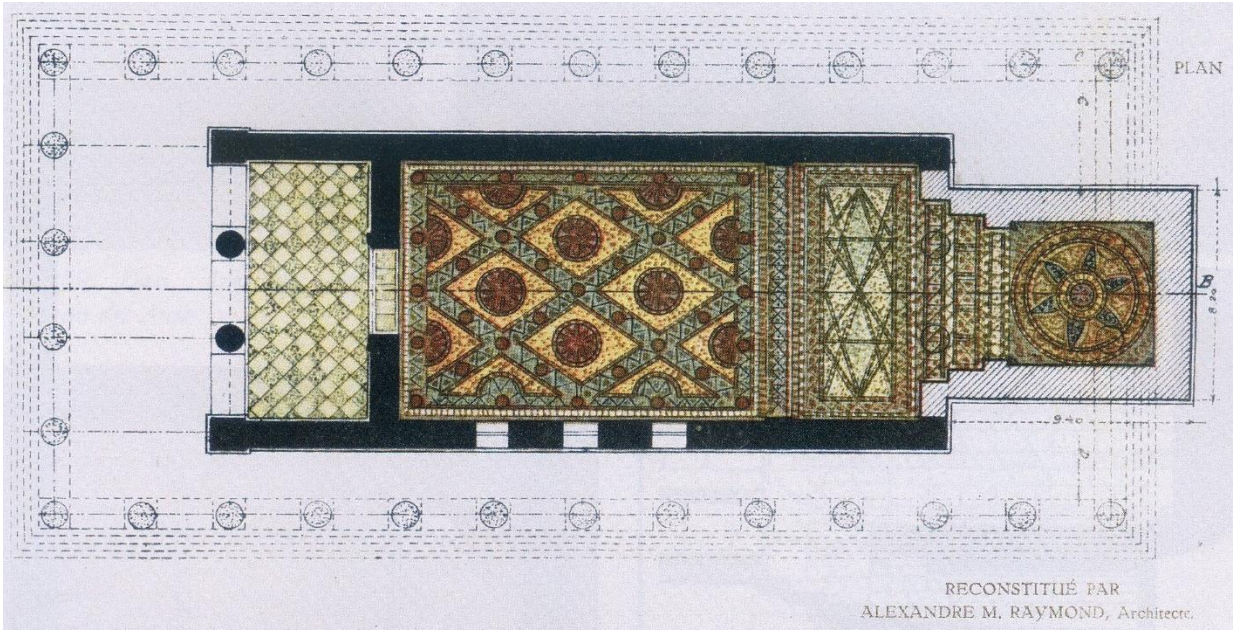


Figure 3.83. Plan of the Church in the Temple of Augustus and Roma (made by Alexander Raymond). (After Peschlow 2015, Taf. 20, abb. 67).

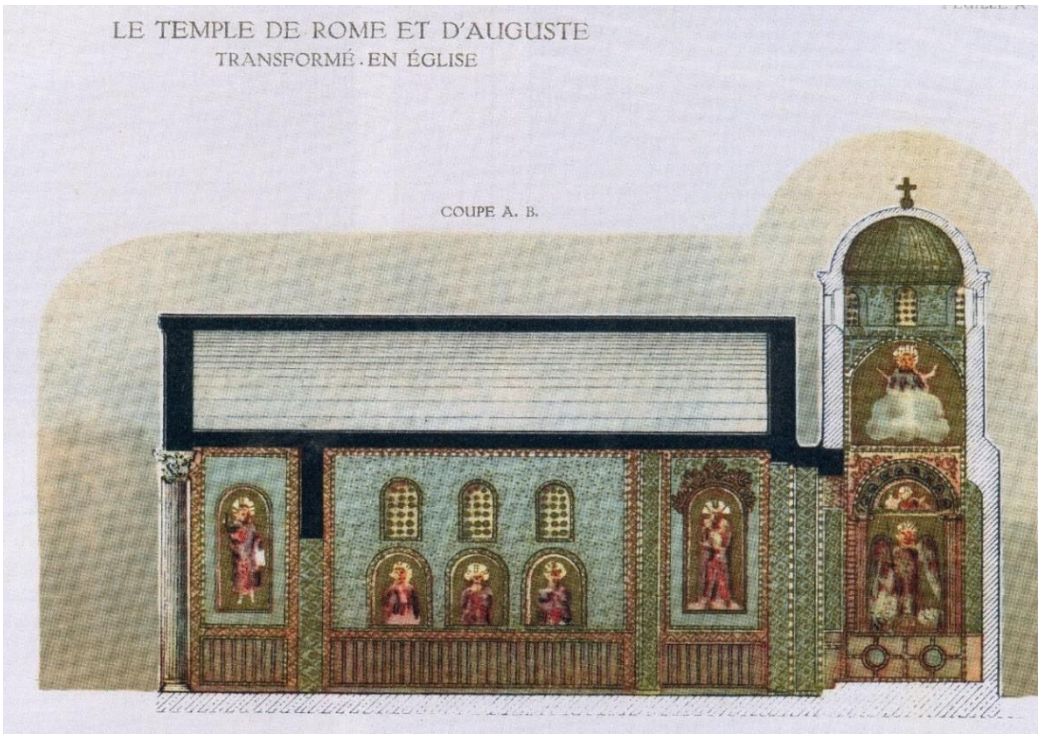


Figure 3.84. Reconstruction of the upper part of the Church in the Temple of Augustus and Roma (made by Alexander Raymond). (After Peschlow 2015, Taf. 20, abb. 67).

Figure 3.85. View of the central nave of the Church in the Temple of Augustus and Roma. (After Peschlow 2017, p. 354, fig. 33.3).

Figure 3.86. View of the Byzantine Fortification by the Temple of Augustus and Roma. (After Peschlow 2015, Taf. 173, abb. 580).

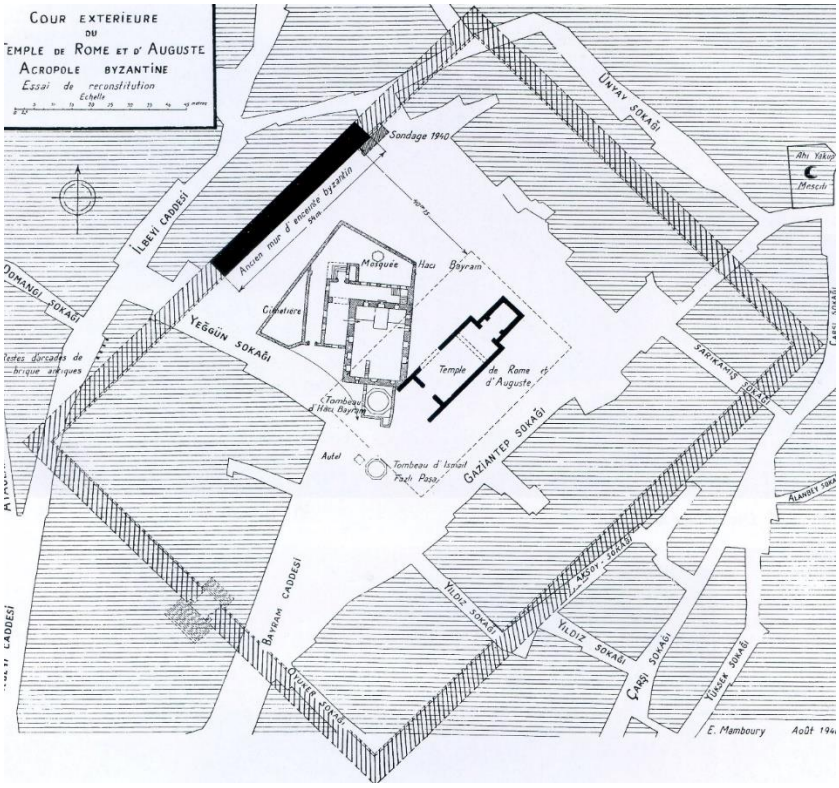
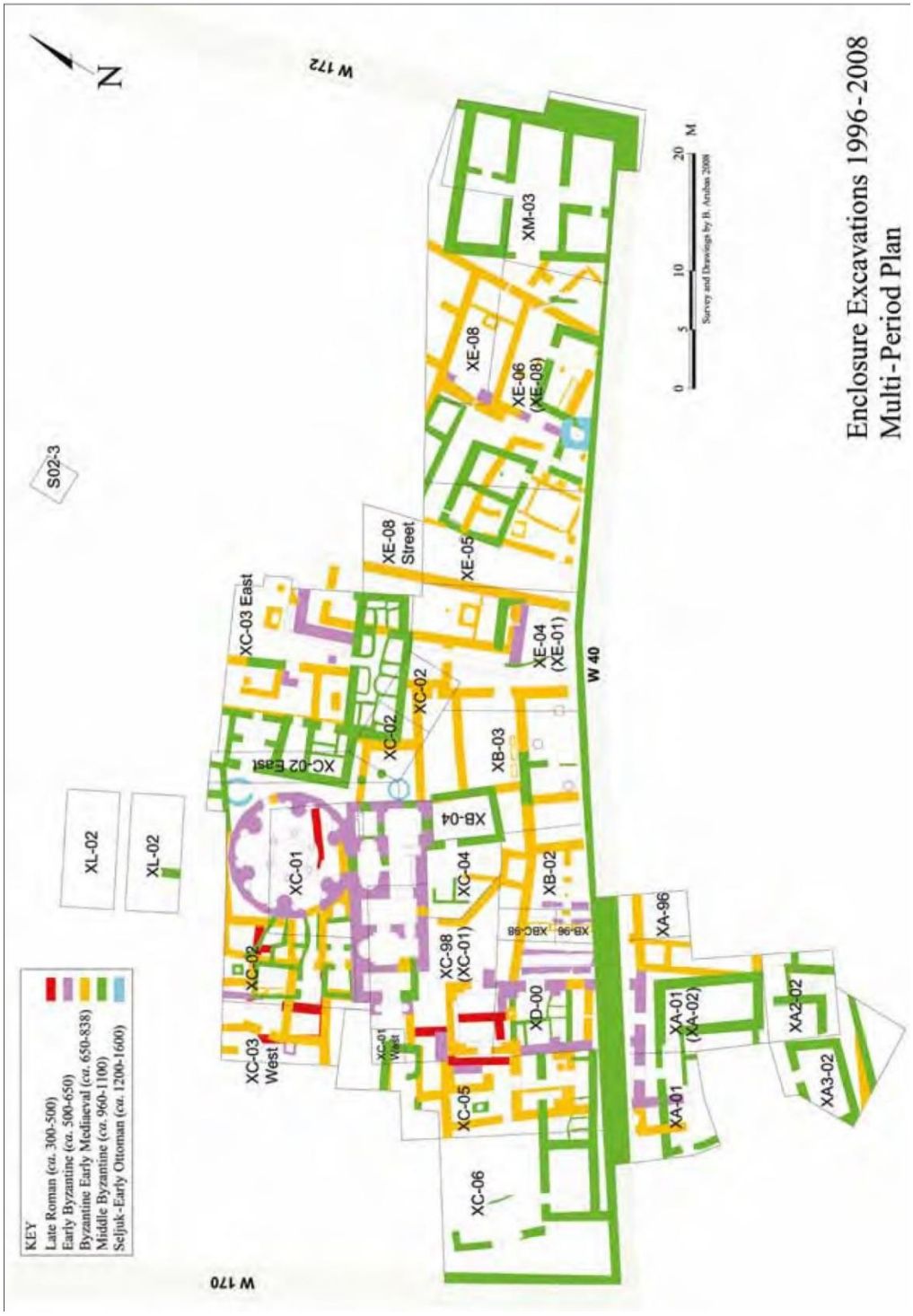


Figure 3.87. Plan of the Byzantine Fortification surrounding the Temple/Church. (After Peschlow 2015, Taf. 151, abb. 573).



Plan of the Enclosure at Amorium. (After Iverson 2007, p. 100, fig. 1/3).

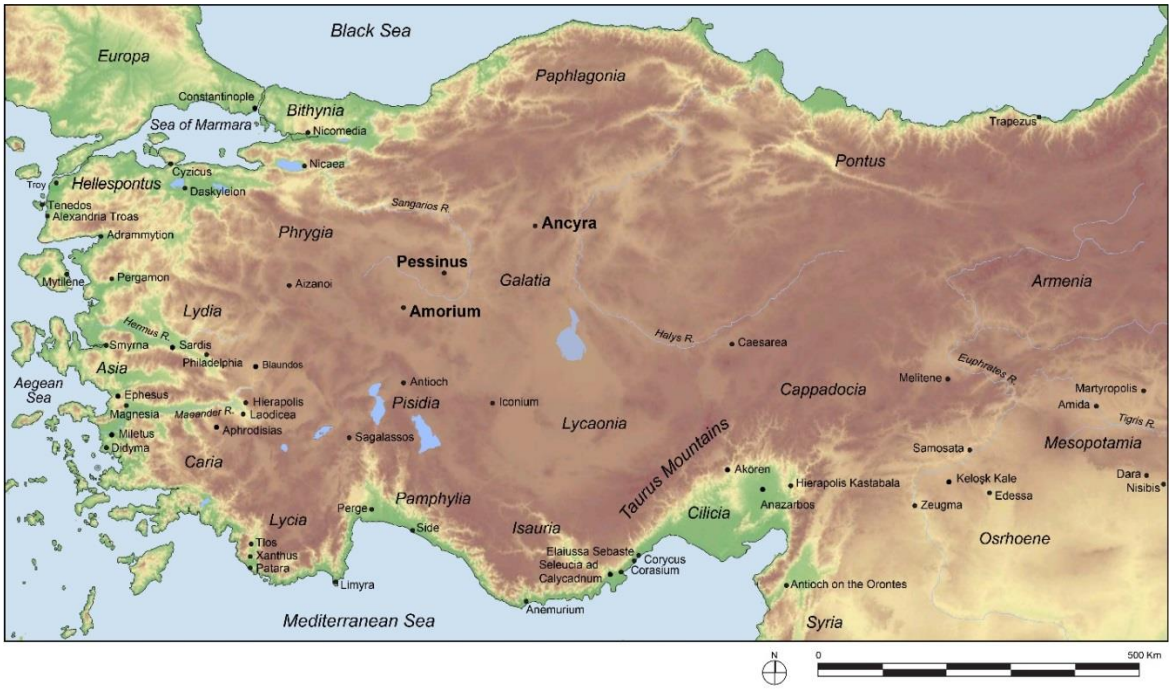


Figure 4.1. Map of Anatolia. (After Ratte and Dally 2011, p. 1, fig. 1).

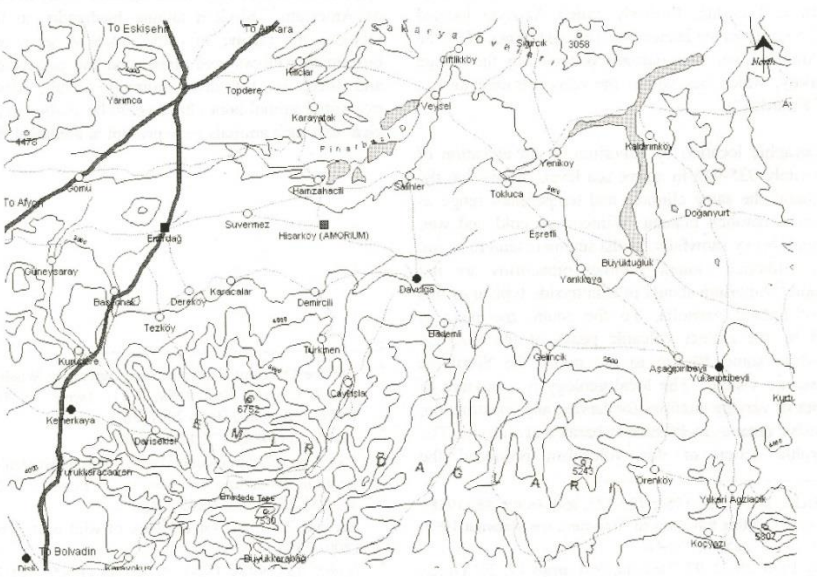


Fig. B. Map of the Emirdağ Region

Figure 4.2. Map of the Emirdağ Region. (After Gill 2002, p. 2, fig. B).

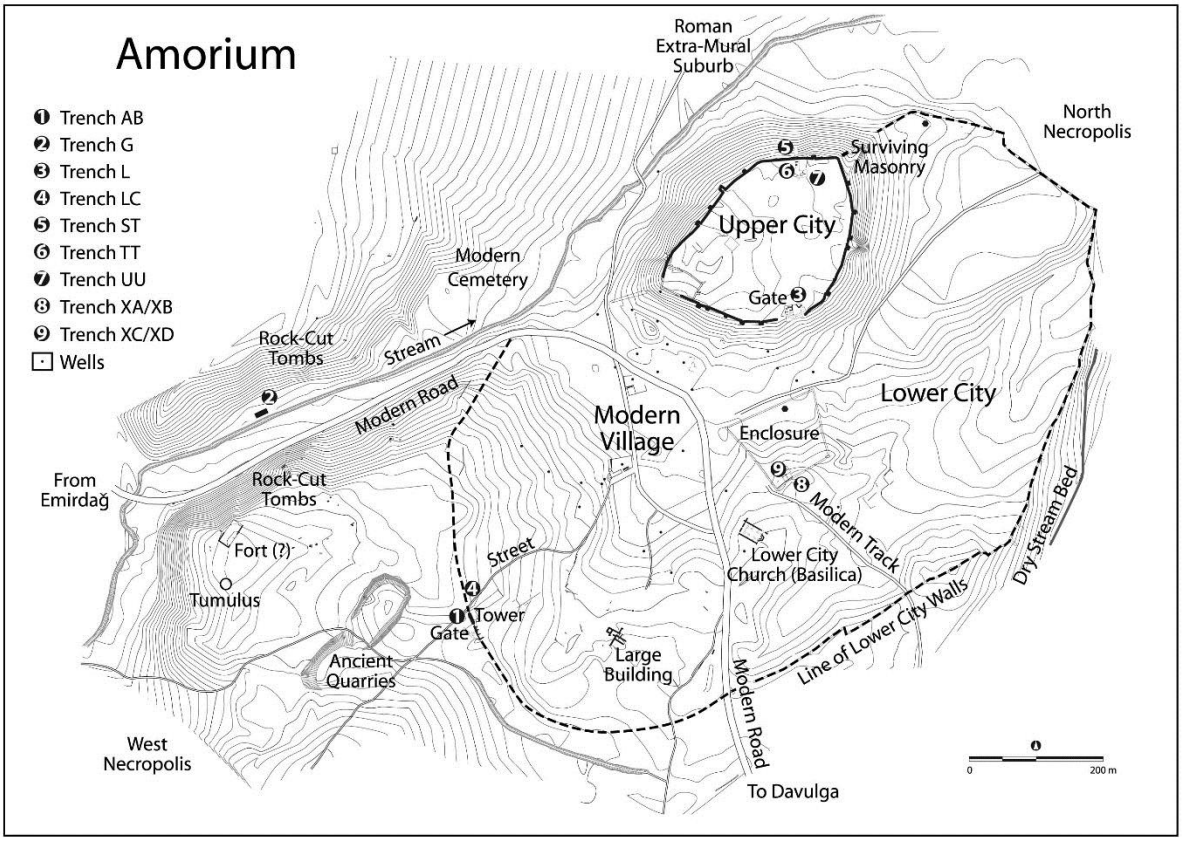


Figure 4.3. Map of Amorium. (After Lightfoot and Ivison 2002, p. 4, fig. C).

Figure 4.4. Road system in Anatolia. (After Young in press).

Figure 4.5. Middle Phrygian Painted pottery. (After Lightfoot C. and M. 2007, p. 30).

Figure 4.6. Hellenistic Terracotta Figurines. (After Lightfoot C and M 2007 p. 239, Pl. 6/3).

Cat. no. A3, Afyonkarahisar.

Figure 4.7. Hellenistic coins from Amorium. (After Katsari, Lightfoot, and Özme 2012, Cat. no. A3, Plate 1).

Figure 4.8. Photo of the Hellenistic Tomb (After Lightfoot 2017, p. 19, fig. 3).

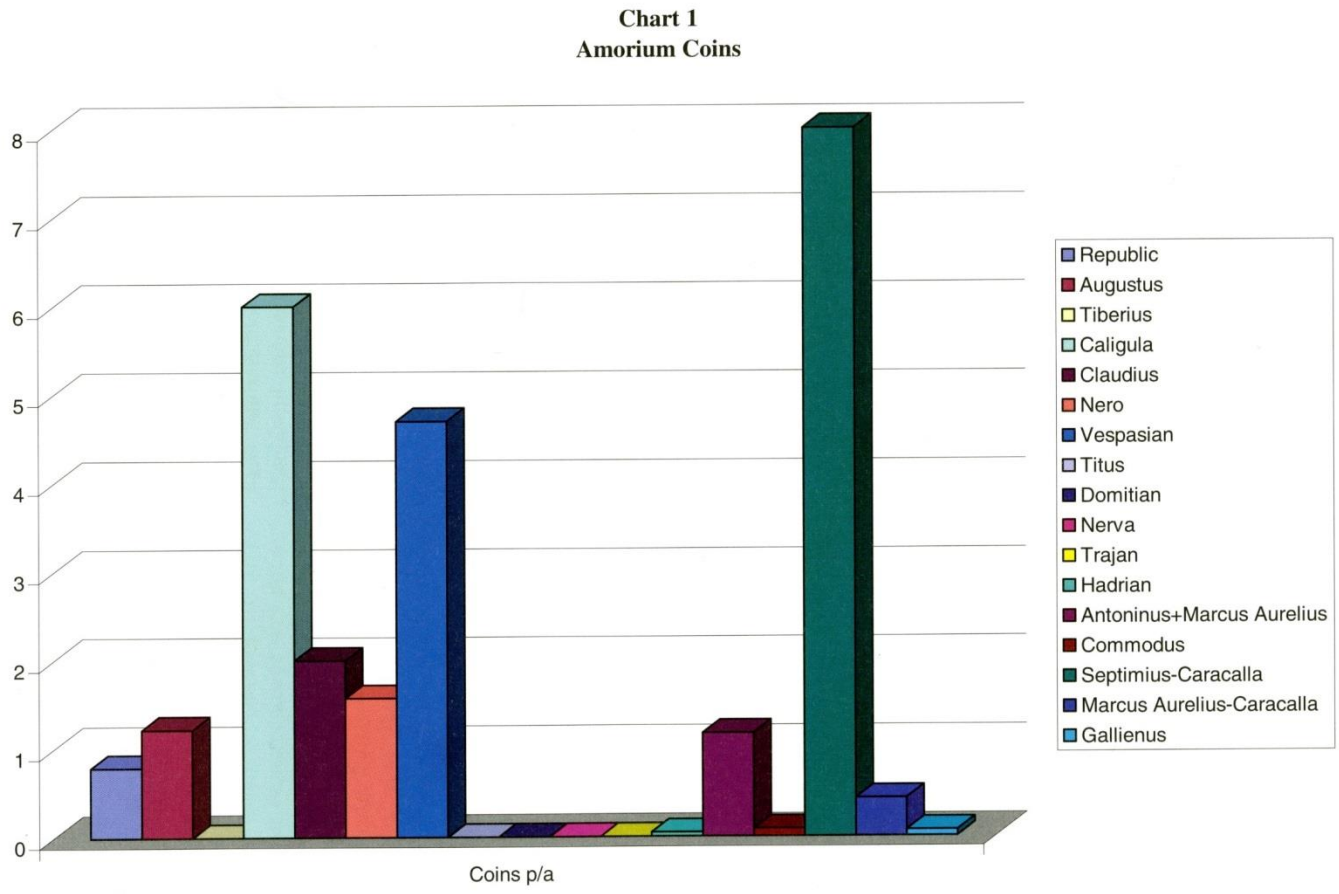


Figure 4.9. Table of the numismatic finds at Amorium). (After Katsari, Lightfoot, and Özme 2012, p. 56, chart 1).

Figure 4.10. 3rd c. Roman Coin (Caracalla and river). (After Lightfoot C. and M 2007, p. 35).

Figure 4.11. 3rd c. Roman Coin (Caracalla and Temple at Amorium). (After Katsari, Lightfoot, and Özme 2012 Cat. no. N5, Plate 10).

Figure 4.12. Julio-Claudian Architectural Detail. (After Lightfoot C. and M. 2007, p. 37).

Figure 4.13. *Cista* Tomb. (After Lightfoot C. and M. 2007, p. 40).

Figure 4.14. Phrygian Tombstone. (After Lightfoot C. and M. 2007, p. 41).

Figure 4.15. Map of the inscriptions found in the *Chora* of Amorium. (After Lightfoot 2017, p. 21).

Figure 4.16. Photo of the Theater at Pessinus. (Author's archive).

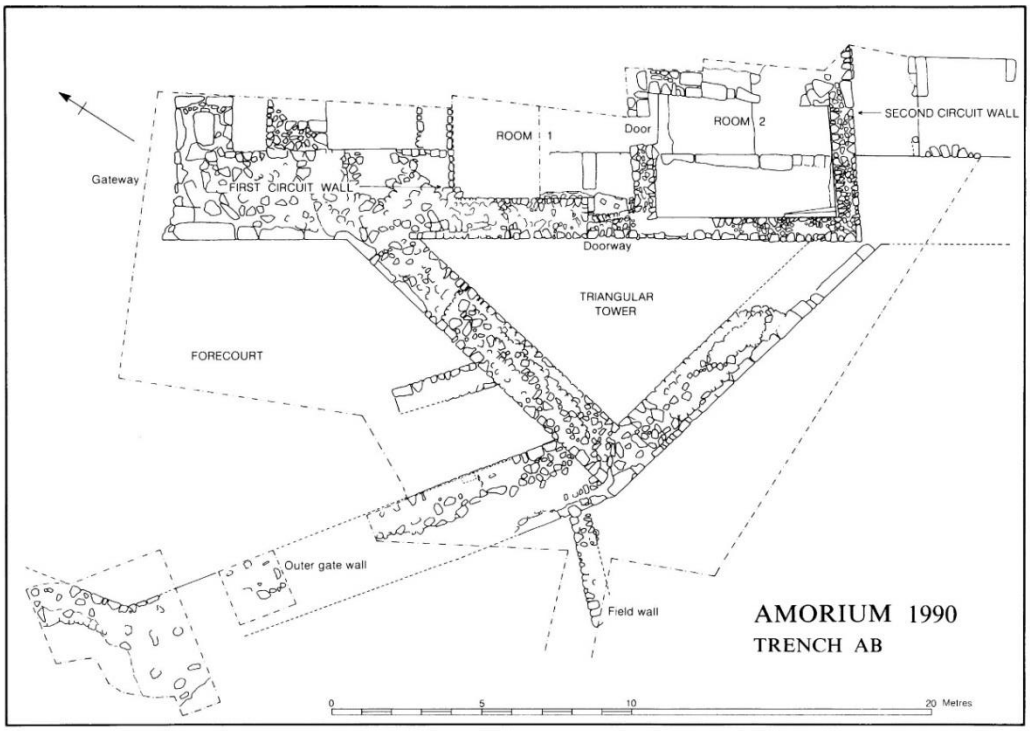


Figure 4.17. Plan of the triangular tower at Amorium. (After Harrison 1991, p. 228, fig. 4).

Figure 4.18. Detail of the fortification at Amorium. (After Lightfoot C. and M. 2007, p. 105).

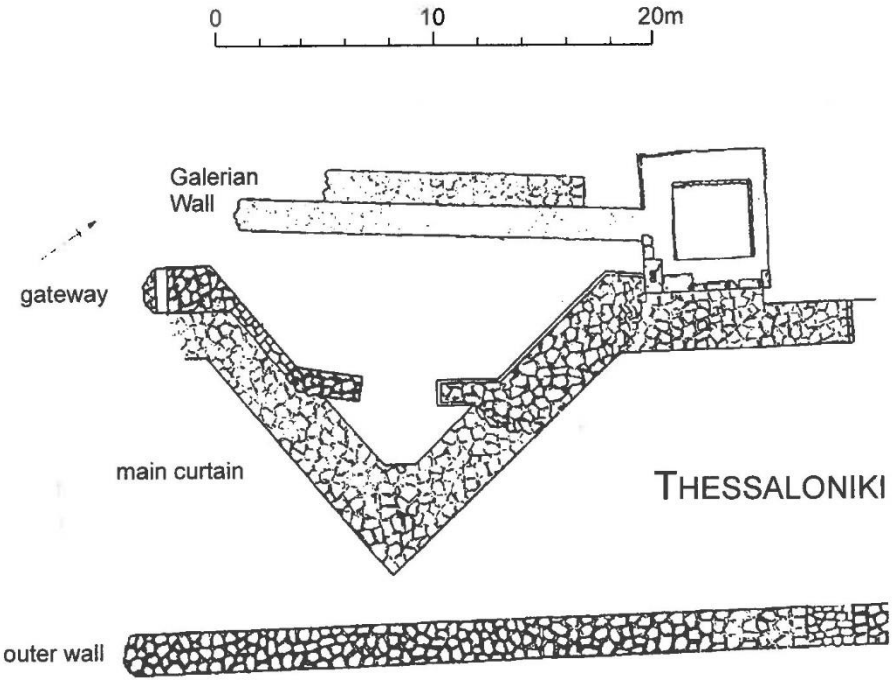


Figure 4.19. Plan of the defensive tower at Thessaloniki. (After Crow 2001, p. 99, fig. 6).

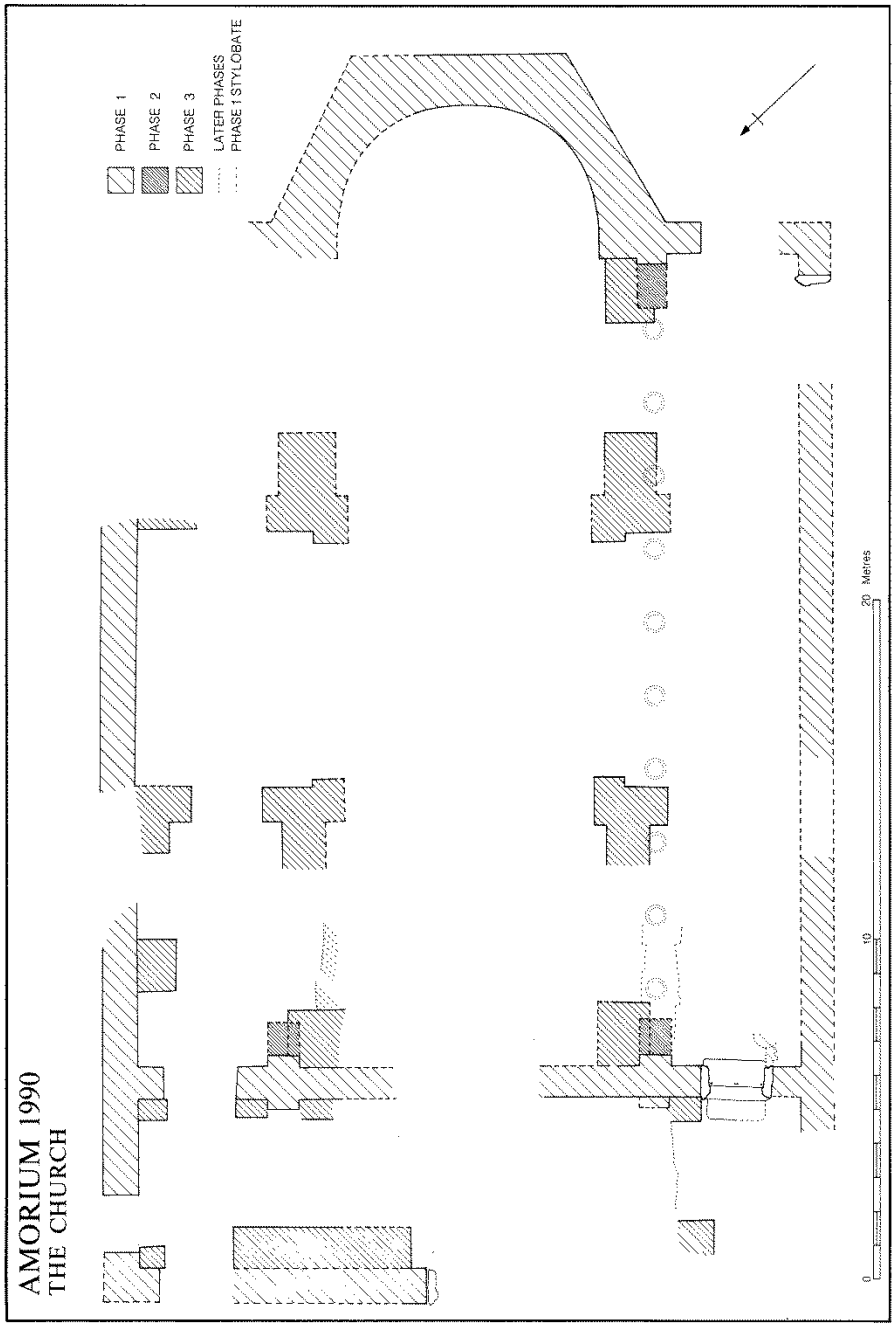


Figure 4.20. Plan of the Basilica A. (After Harrison 1991, p. 225, fig. 5).

Figure 4.21. Detail of the marble revetment in the Basilica A. (After Ivison 2010 Abb. 5, p. 315).

Figure 4.22. Detail of the floor inside Basilica A. (After Ivison 2010 Abb. 6, p. 315).

Figure 4.23. Photo of the Basilica B. (After Demirel Gökalp, Erel, Tsivikis, and Uygun 2015, p. 458, fig. 1).

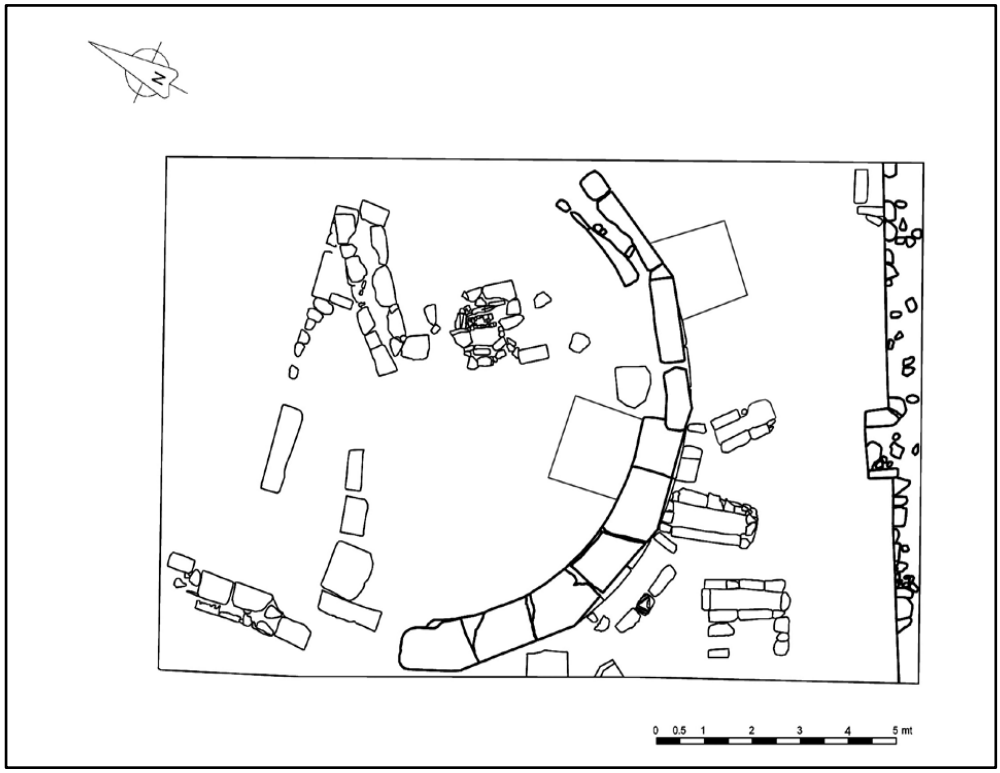


Figure 4.24. Plan of the Apse in the Basilica B. (After Demirel Gökalp, Erel, Tsivikis, and Yaşar 2014, p. 209, fig. 2).

Figure 4.25. Photo of the unpaved street within the Enclosure (Lower City). (After Ivison 2007, p. 146, Fig. 1/32).

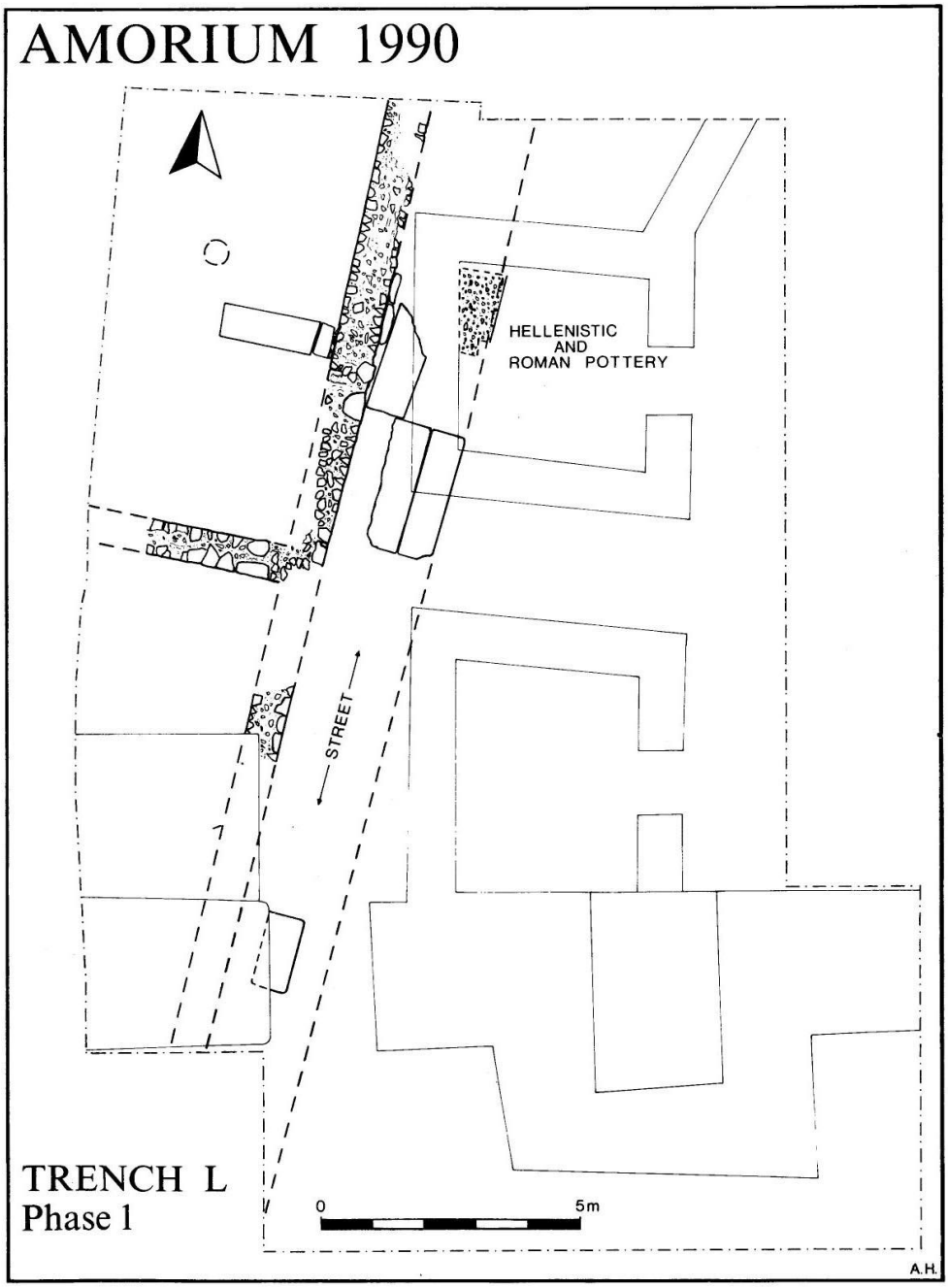


Figure 4.26. Plan of the road leading to the Upper City. (After Harrison 1991, p. 218, fig. 2).

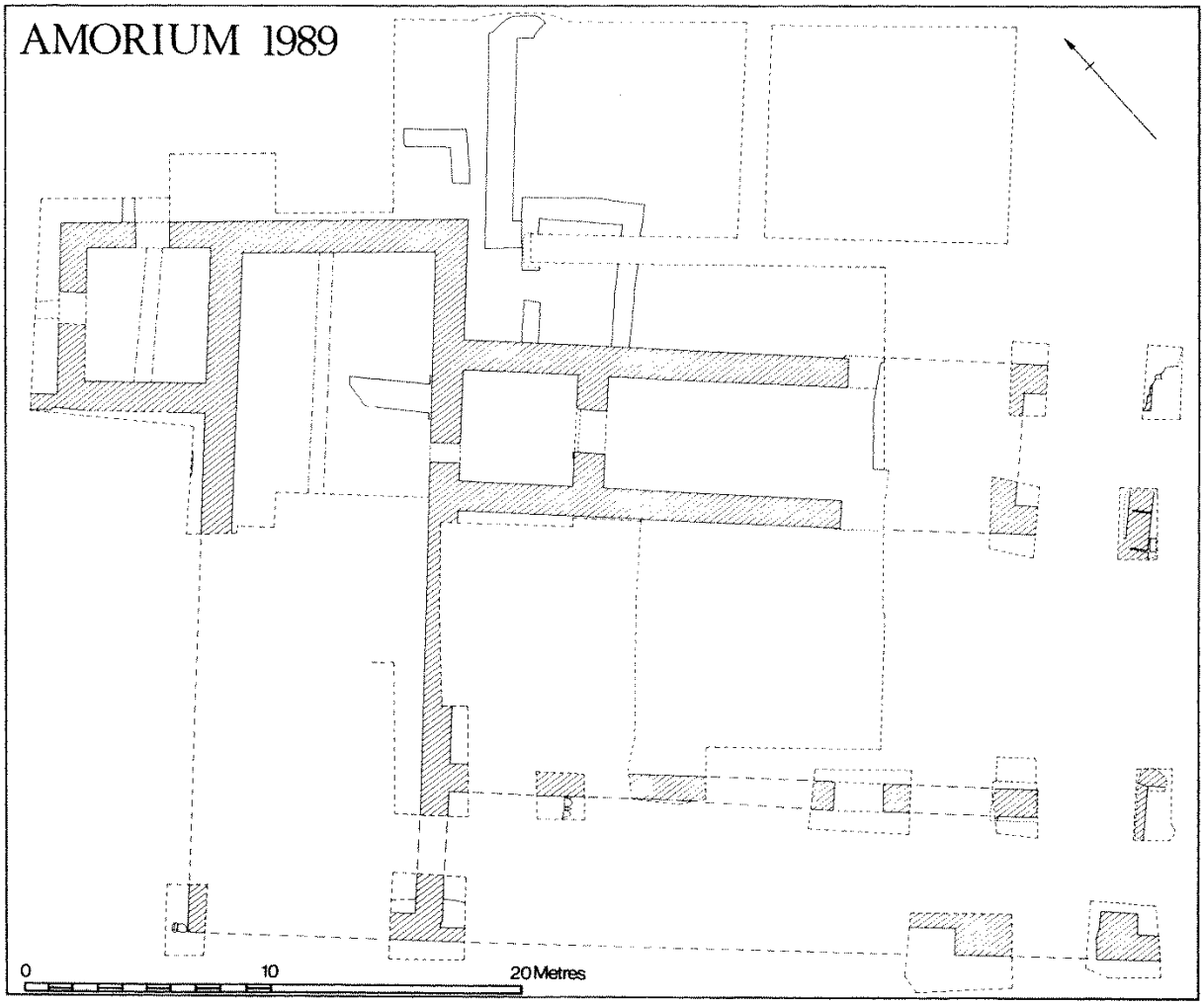


Figure 4.27. Plan of one of the excavation trenches. Large Late Roman Building. (After Harrison 1990, p. 210, fig. 3).

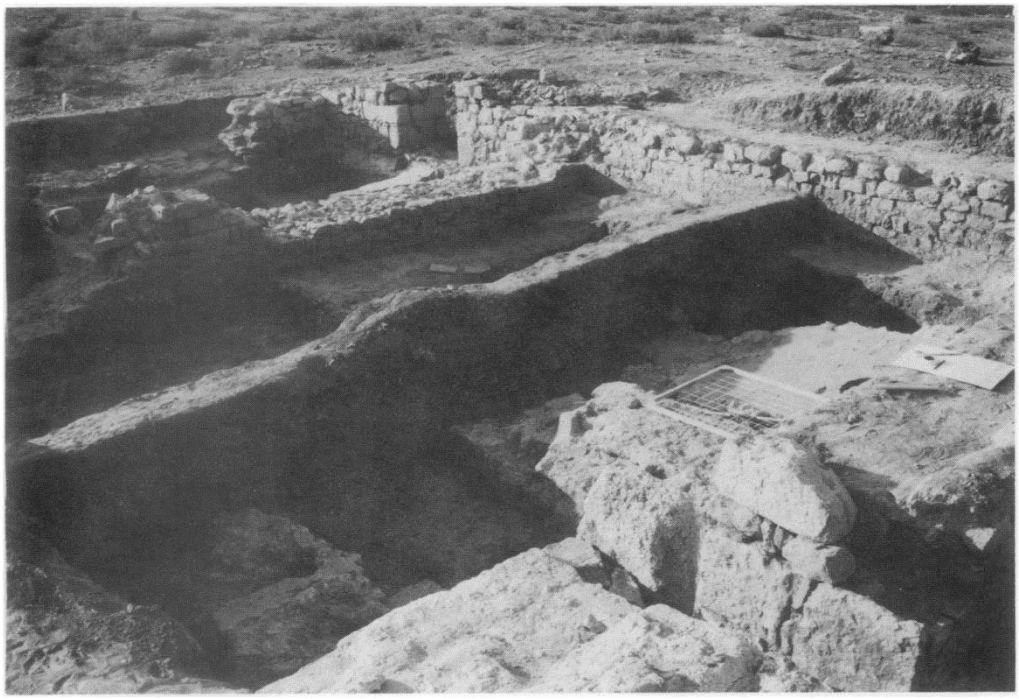


Figure 4.28. Detail of the Large Late Roman Building (After Harrison 1990, plate XXXIII, fig. A).

Figure 4.29. Photo of recent excavation of the Large Late Roman Building. (After Demirel Gökalp, Erel, Tsivikis, and Yaşar 2014, p. 209, fig. 6).

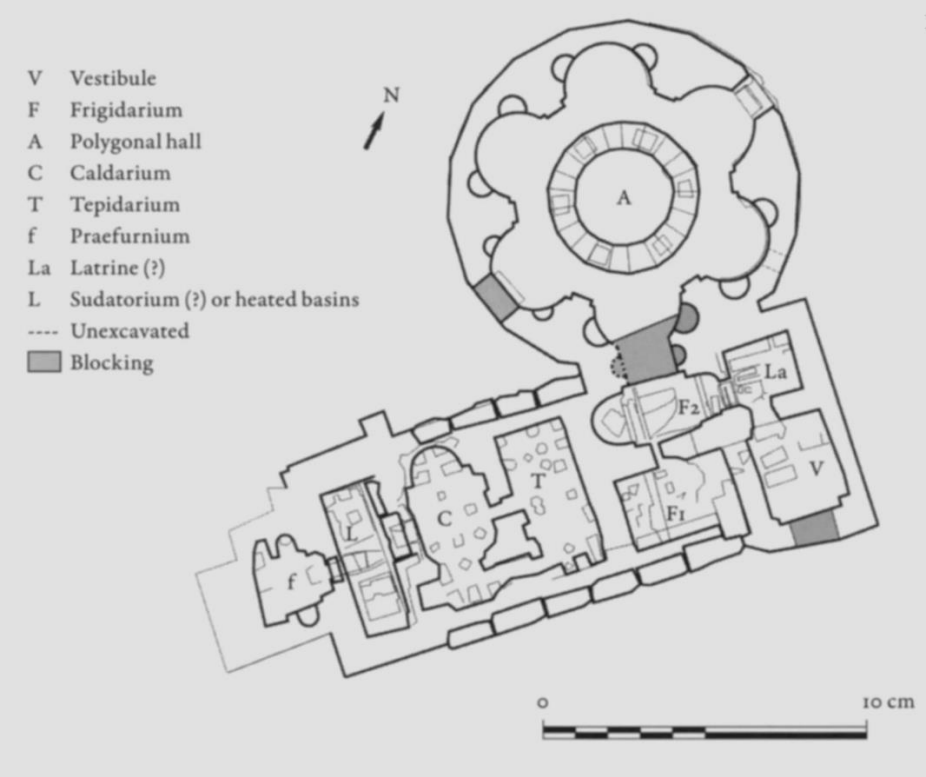


Figure 4.30. Plan of the Bathhouse. (After Lightfoot C and M. 2007, p.129).

Figure 4.31. Photo of Structure 3. (After Lightfoot C and M, p. 99).

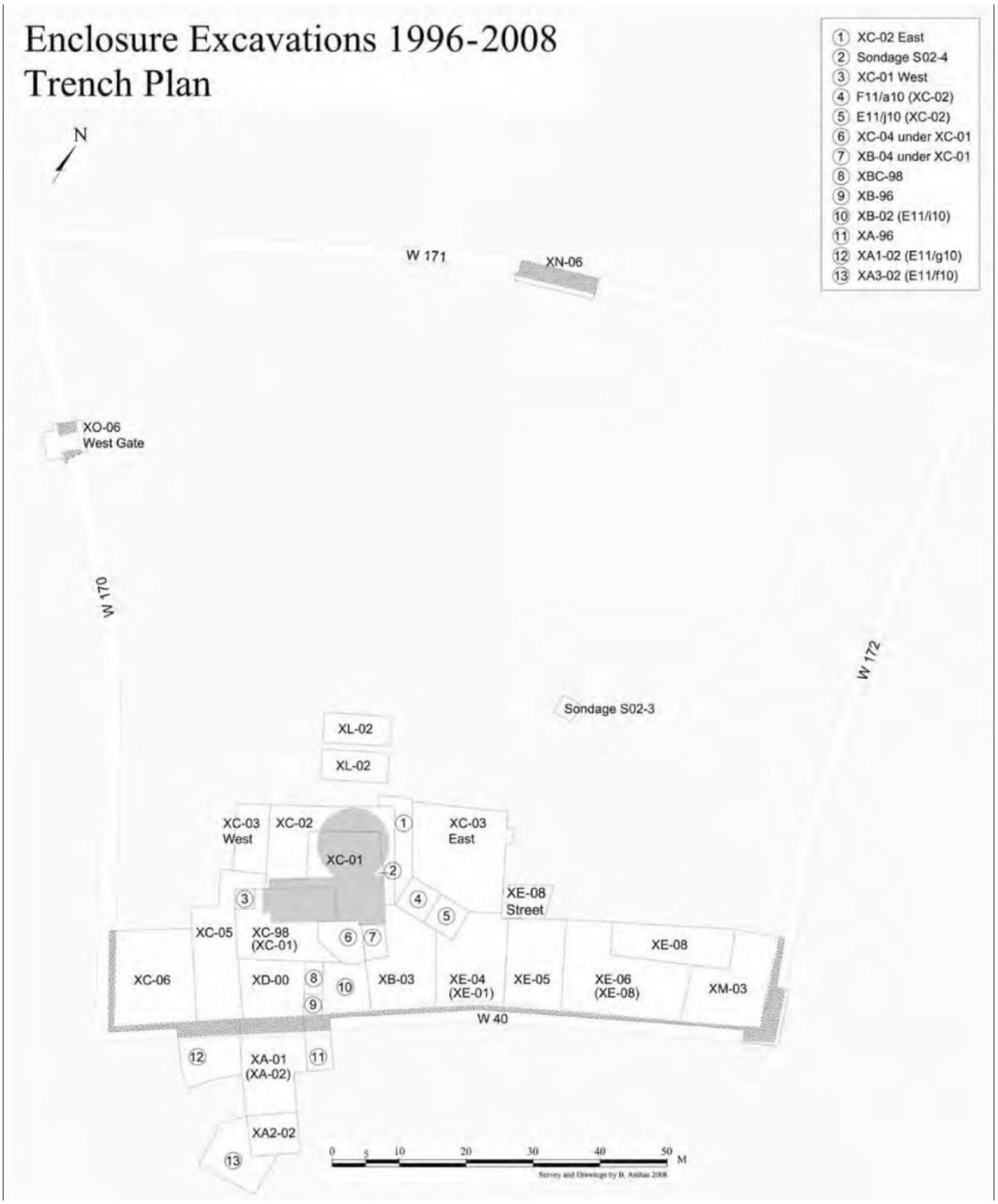


Figure 4.32. Plan of the excavated area in the Enclosure. (After Ivison 2007, p. 99, Fig. 1/2).

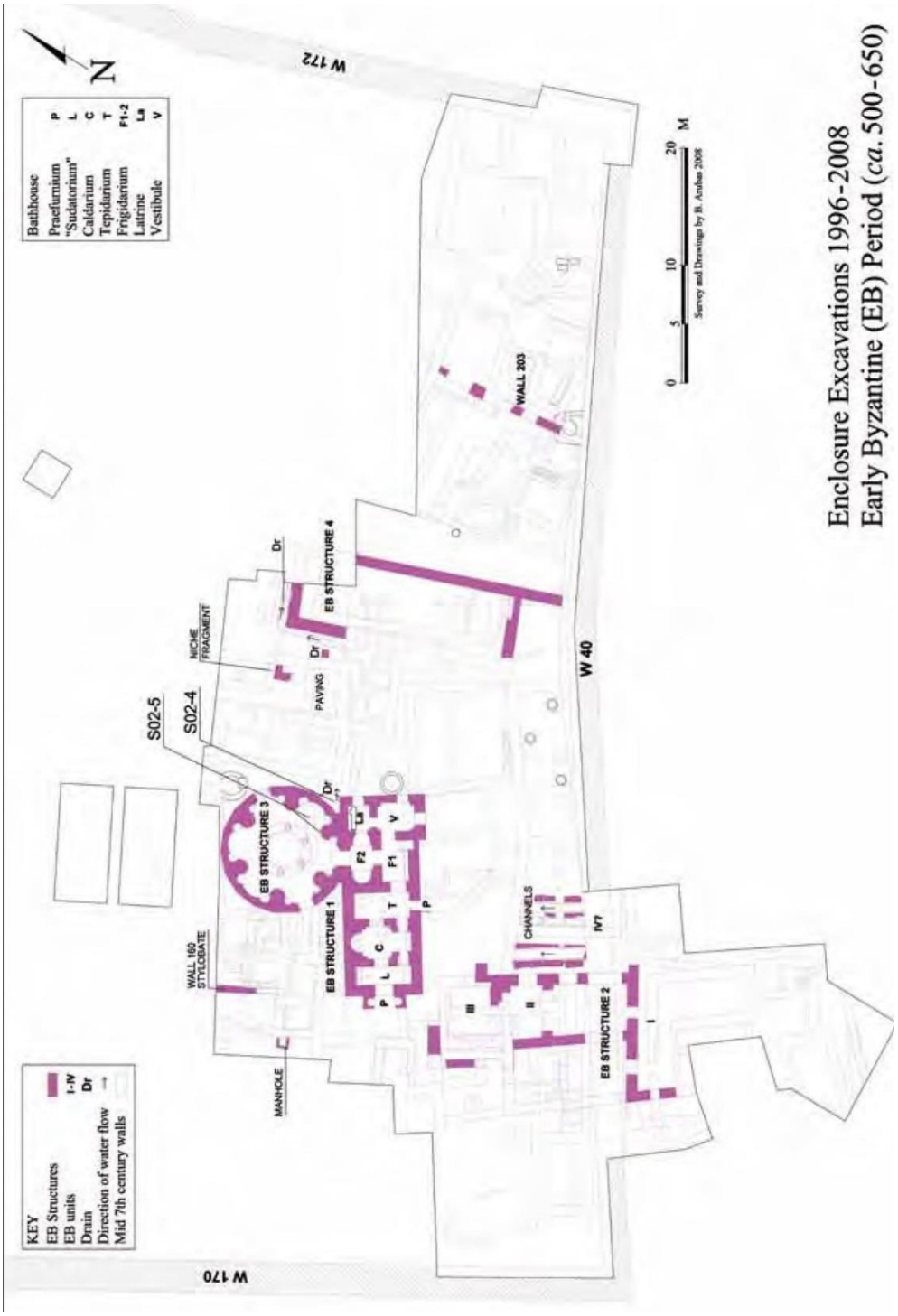


Figure 4.33. Plan of the Enclosure during ca. 500-650. (After Ivison 2007, p. 102, Fig. 1/5).

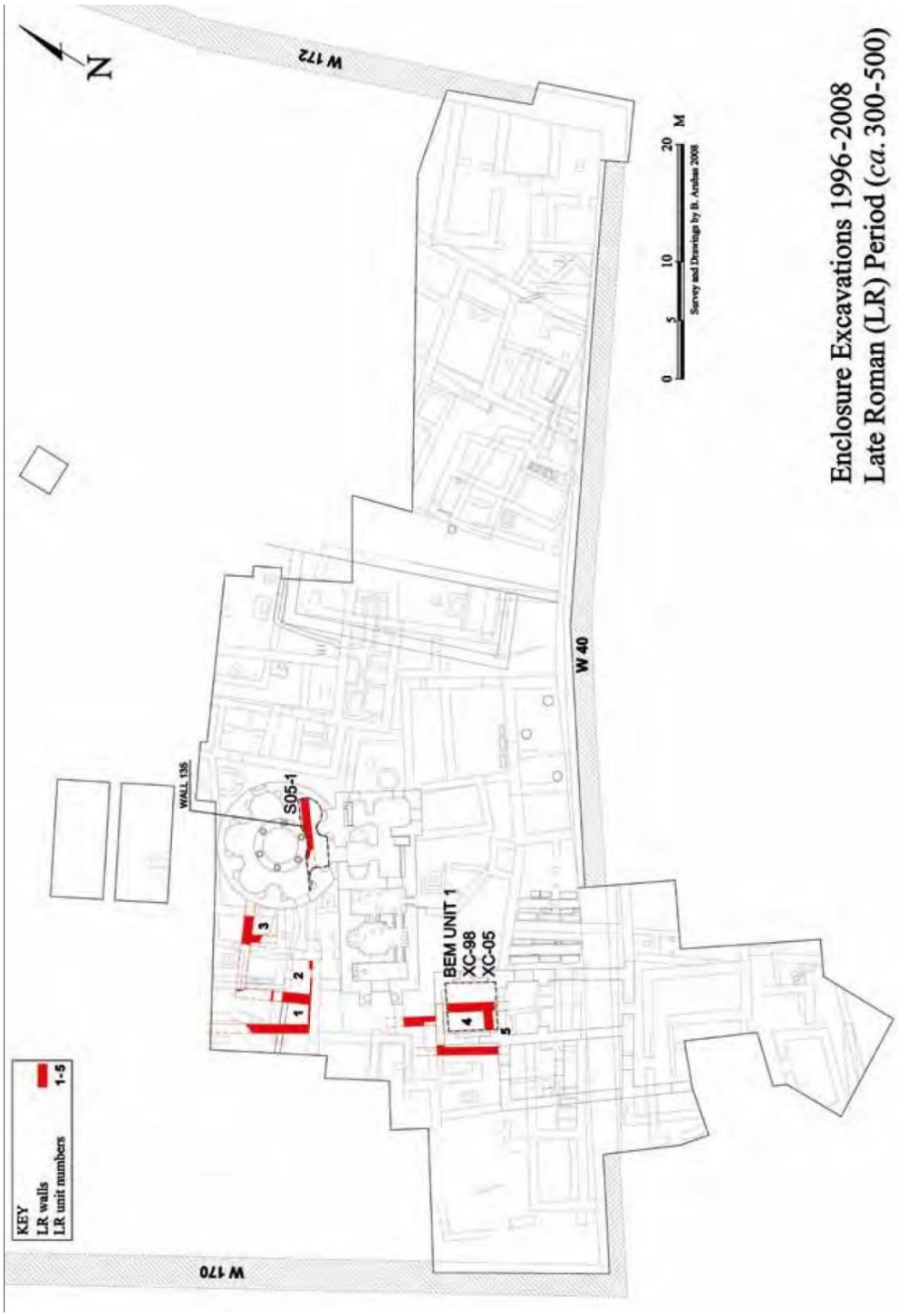


Figure 4.34. Plan of the Enclosure during ca. 300-500. (After Ivison 2007, p. 101, Fig. 1/4).

Figure 4.35. Plan of the Enclosure during ca. 650-838. (After Ivison 2007, p. 103, Fig. 1/6).

Figure 4.36. Photo of Installation B. (After Ivison 2007, p. 111, Fig. 1/14).

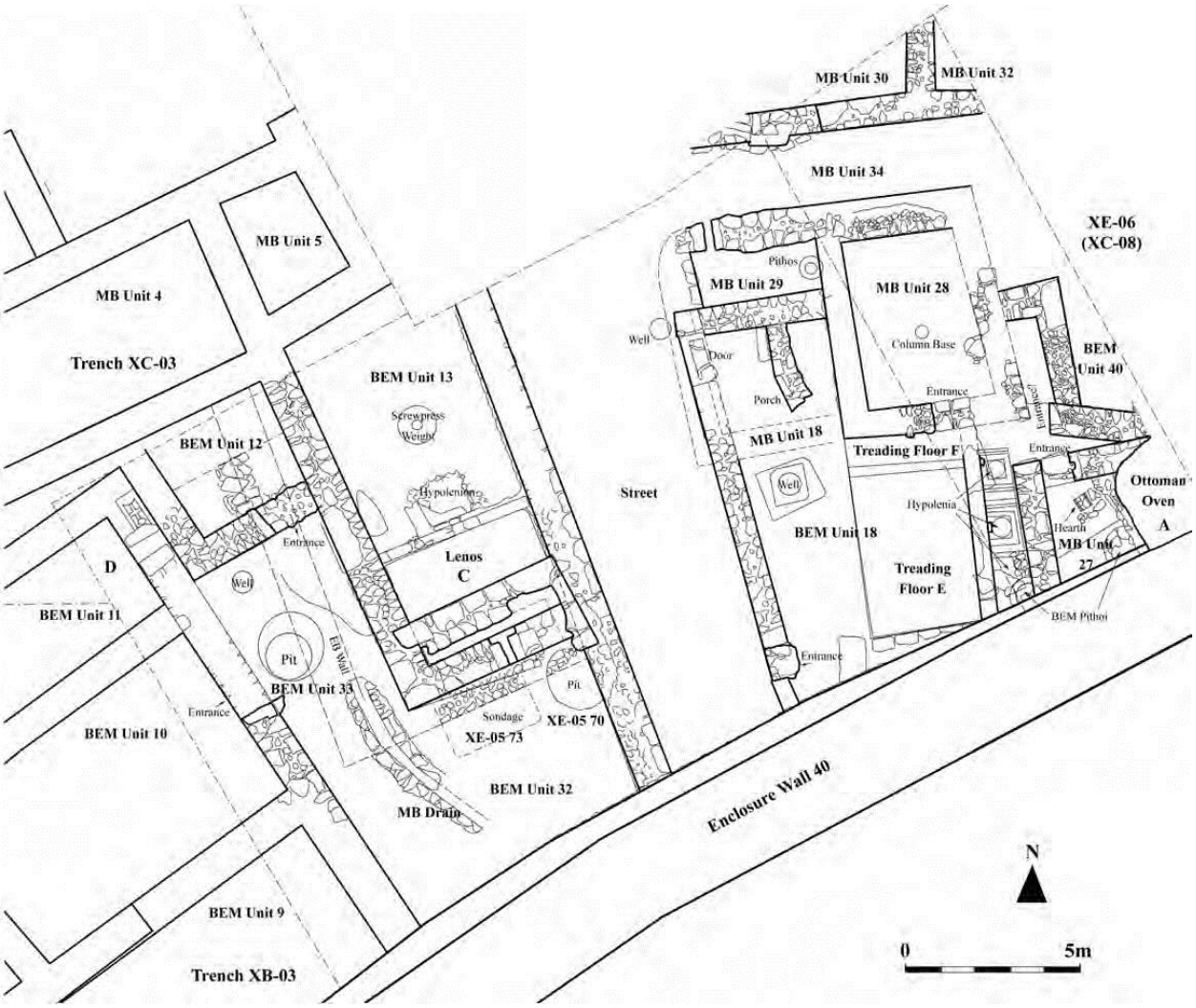


Figure 4.37. Plan of the Street in the Enclosure. (After Ivison 2007, p. 111, Fig. 1/14).

Figure 4.38. Photo of the unpaved street. (After Lightfoot C. and M. 2007, p. 125).

Figure 4.39. Installation E. (After Ivison 2007, p. 140, Fig. 1/17).

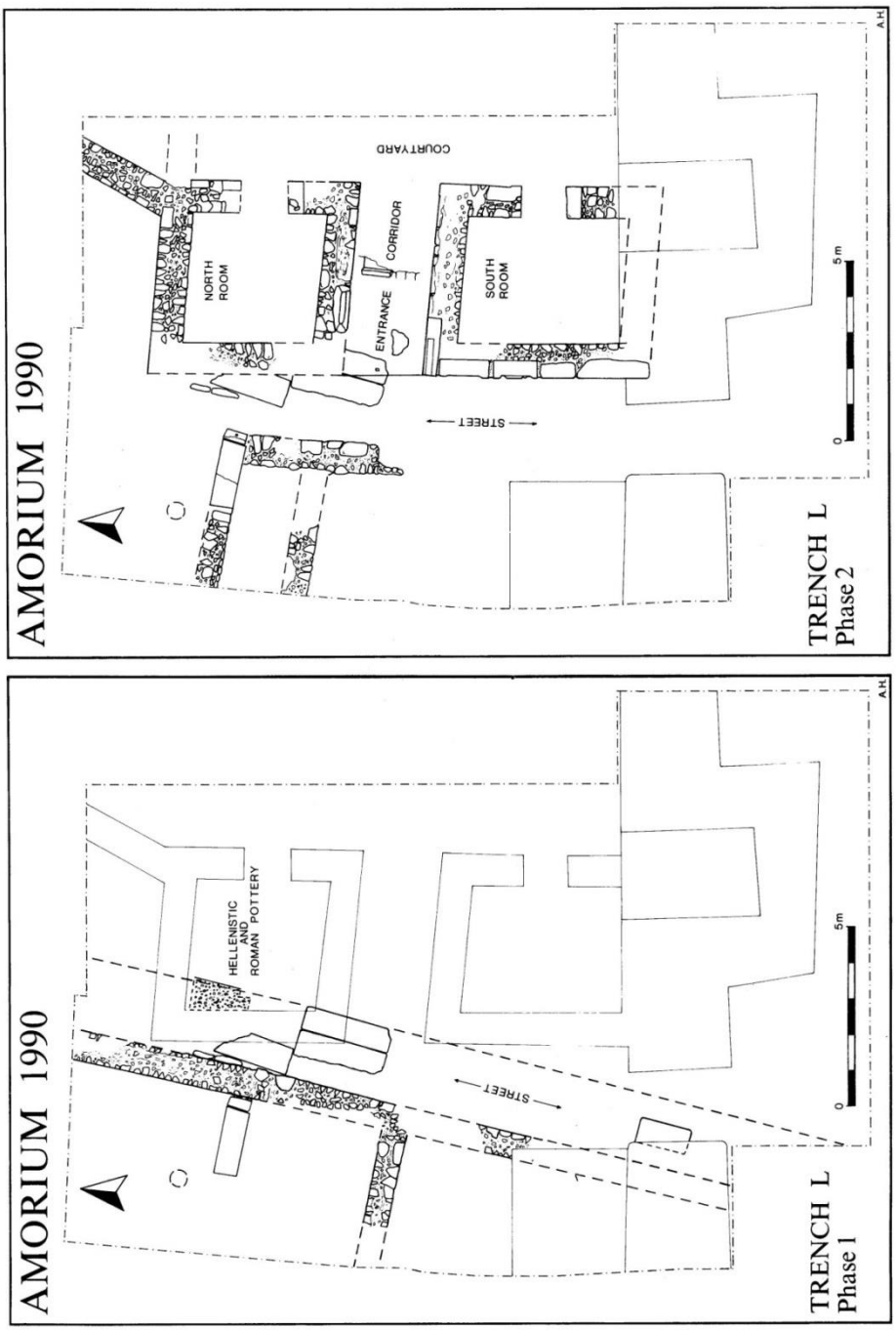


Figure 4.40. Plan of Trench L in the Citadel. (After Harrison 1991 p. 218, fig. 2).

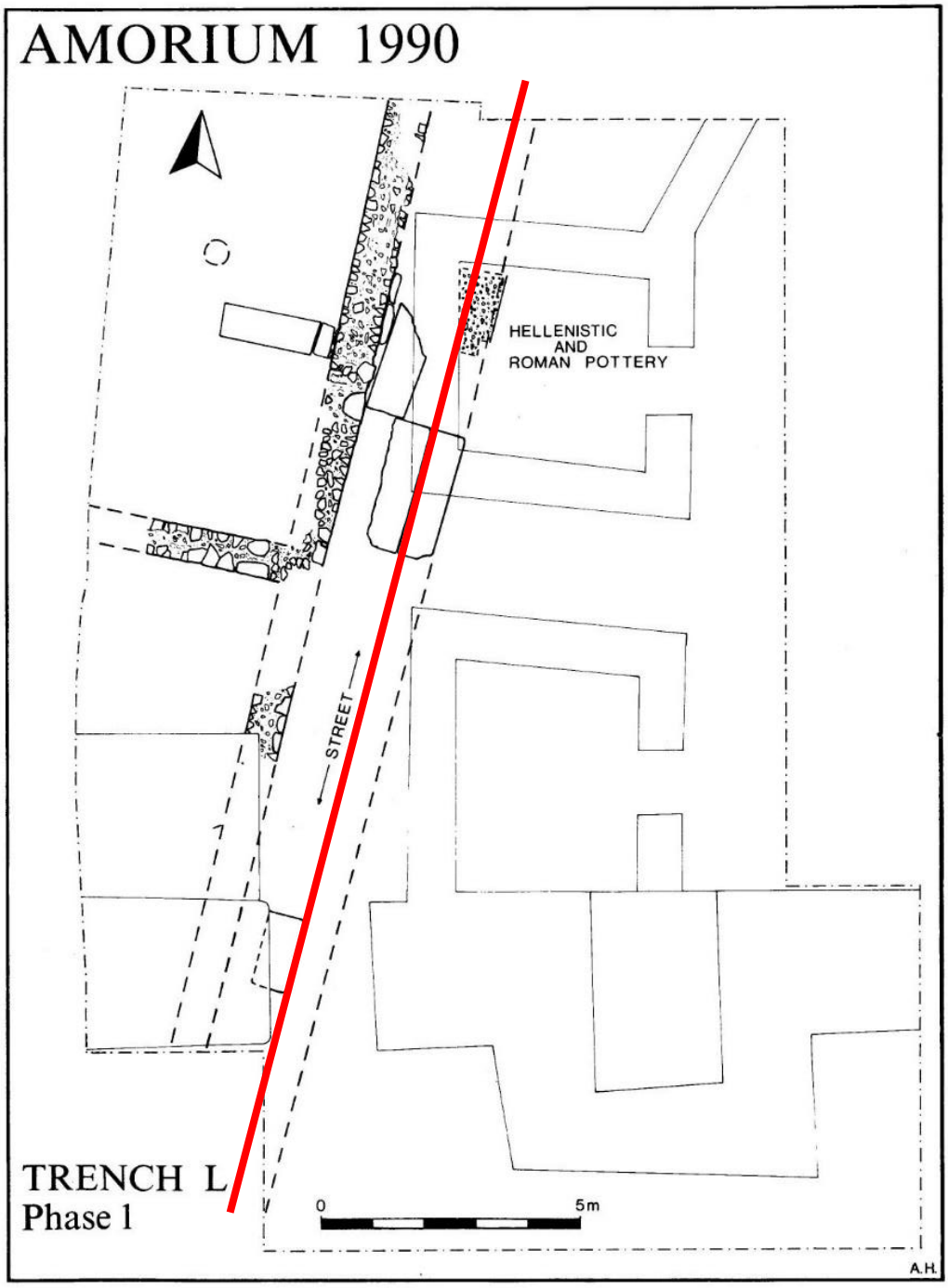


Figure 4.41. Plan of Trench L (Phase 1), the street is marked in red. (After Harrison 1991, p. 218, fig. 2)

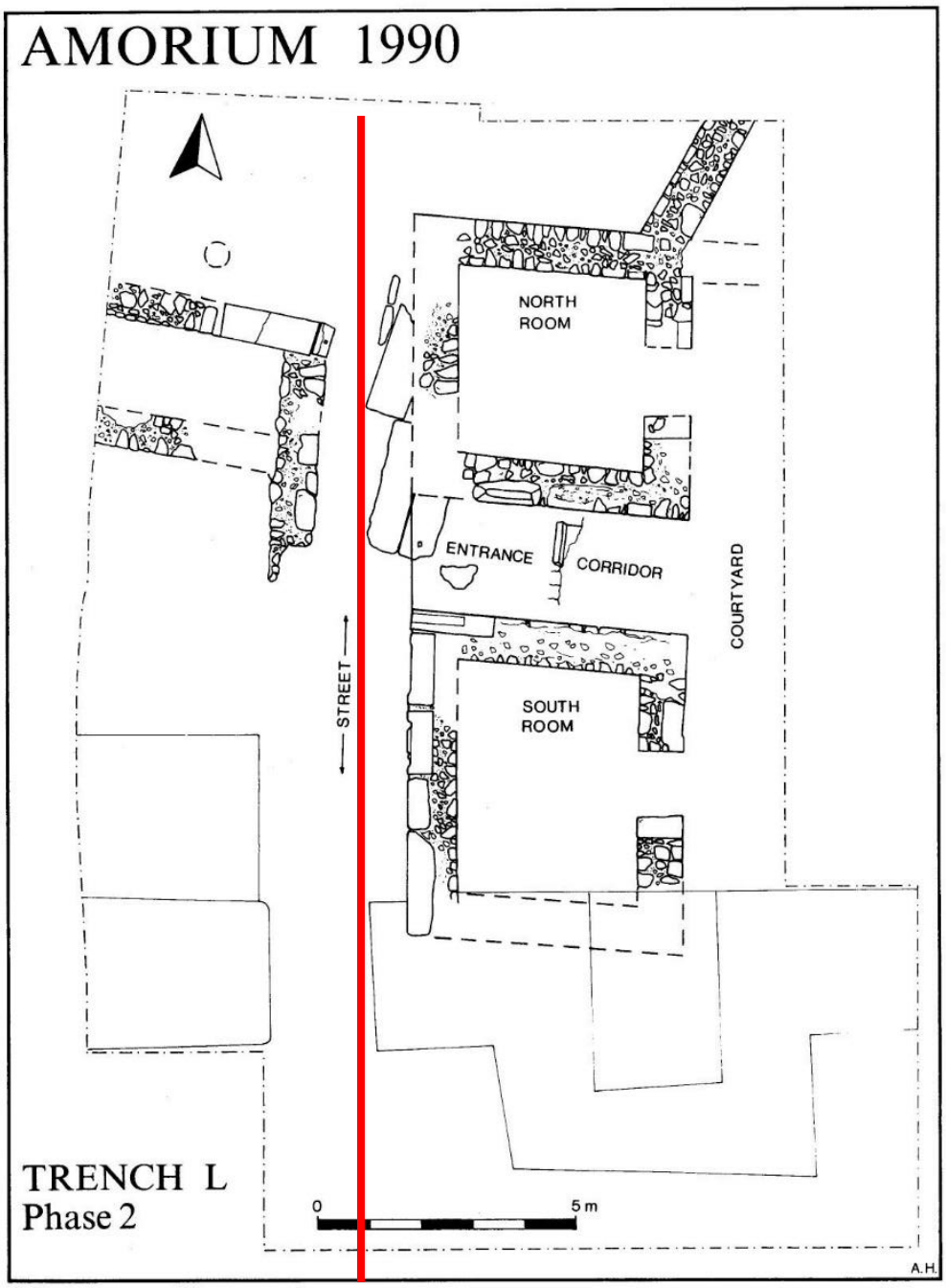


Figure 4.42. Plan of Trench L (Phase 2), the street is marked in red. (After Harrison 1991, p. 218, fig. 2).

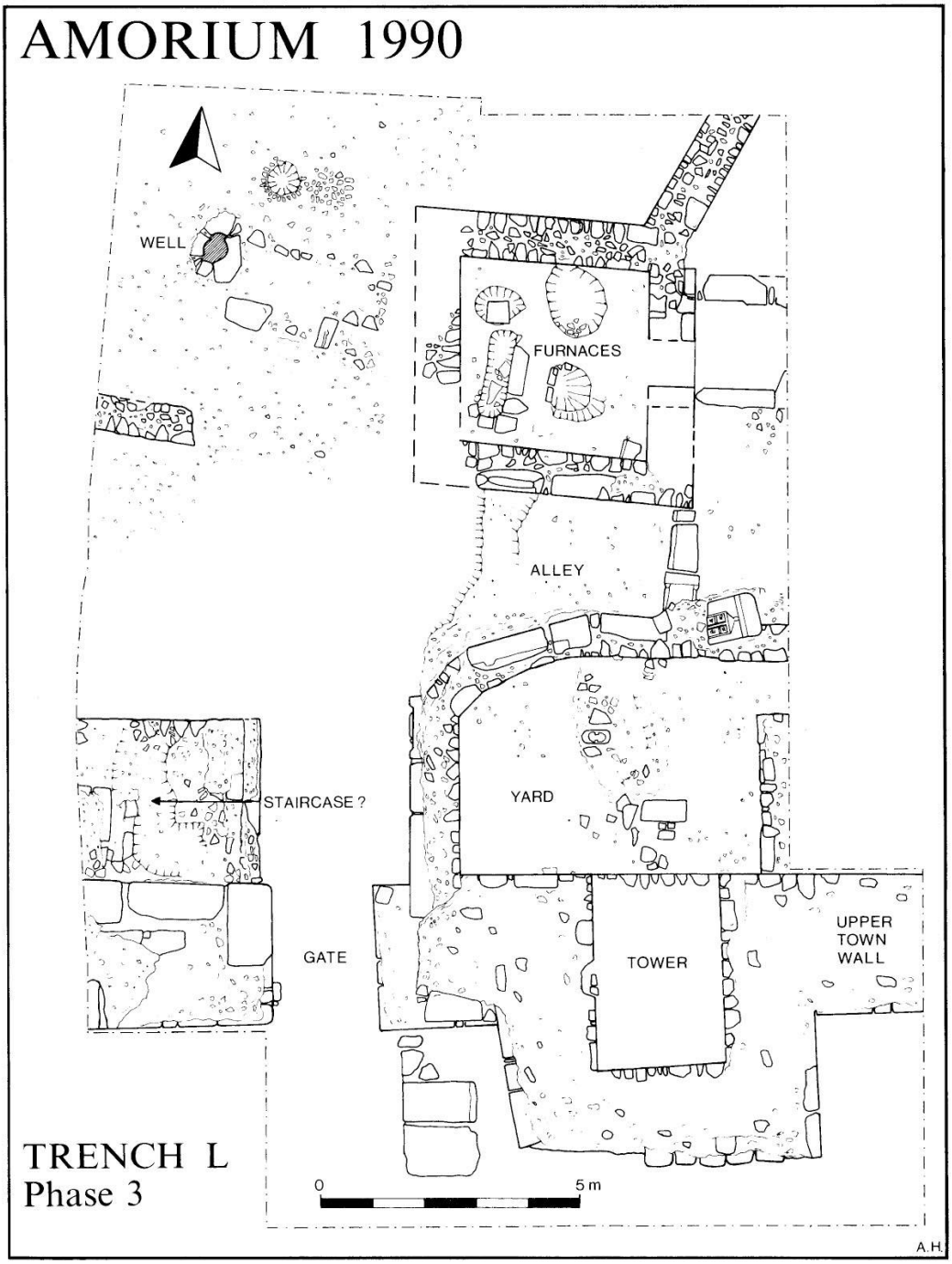


Figure 4.43. Plan of Trench L (Phase 3). (After Harrison p. 220, fig. 3).

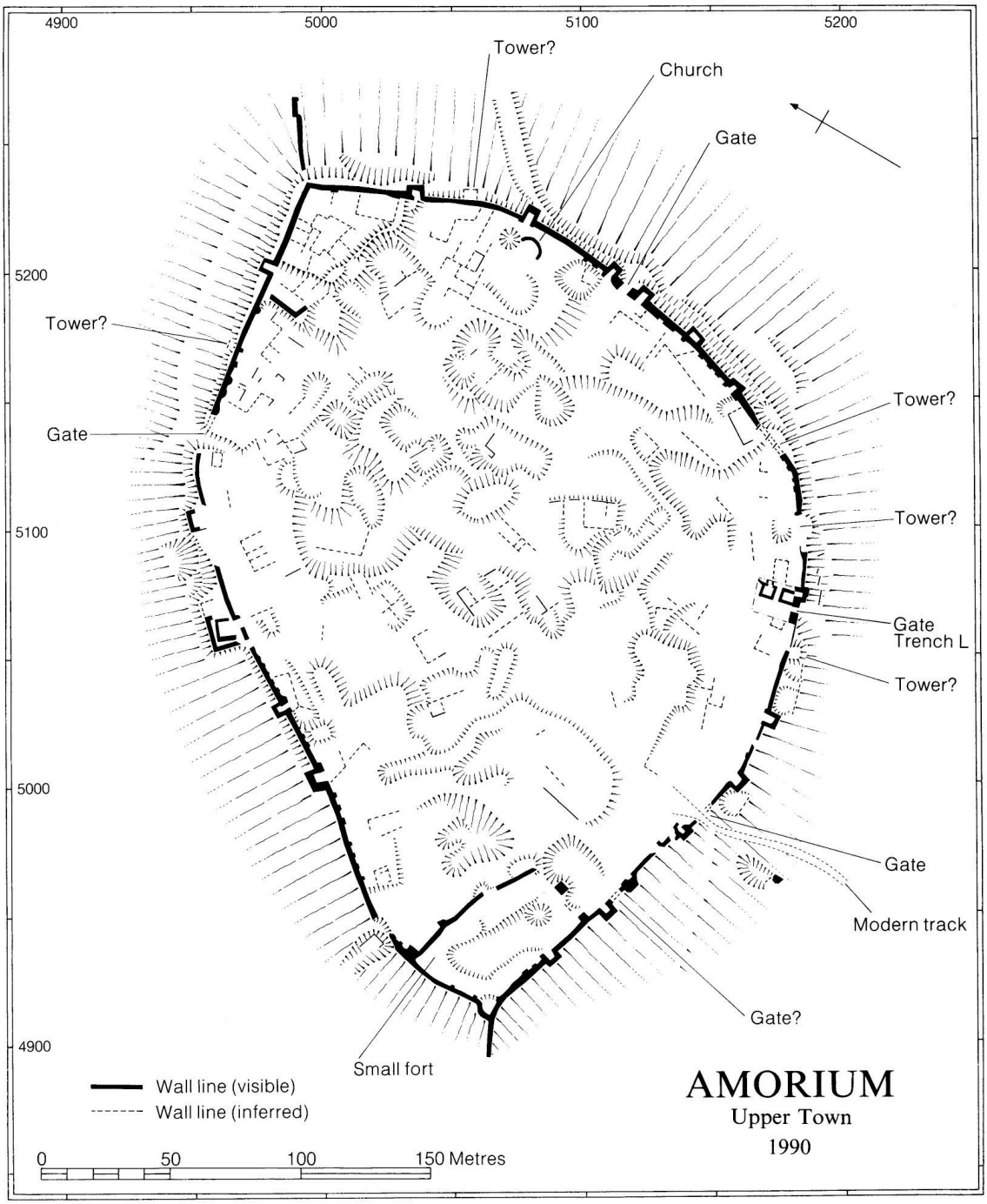


Figure 4.44. Plan of the Citadel post-838 CE. (After Harrison 1991, p. 217, fig. 1).

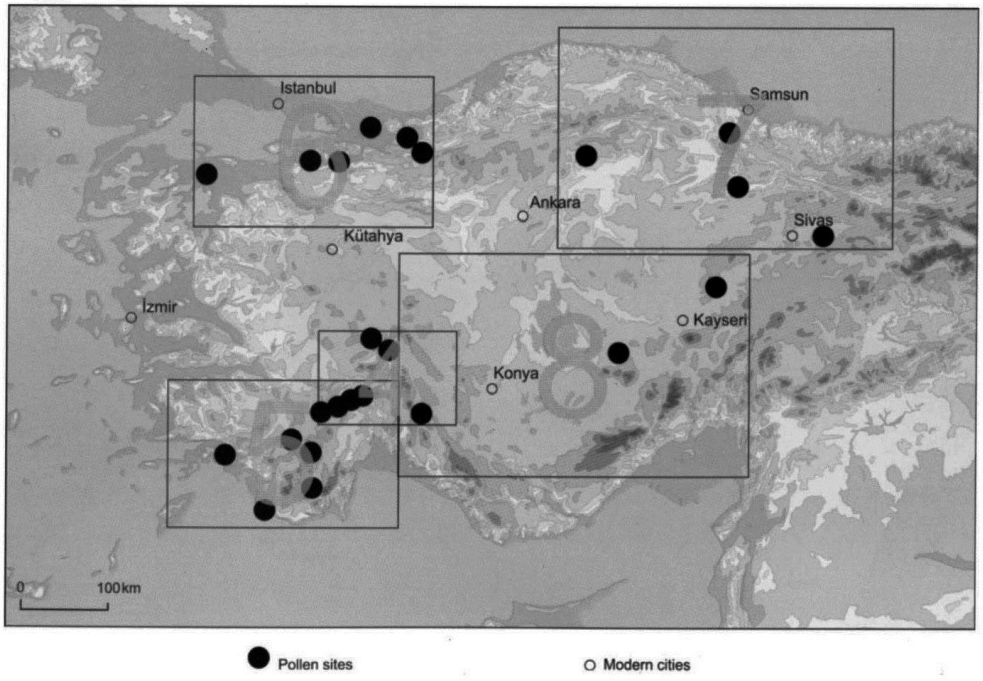


Figure 5.1. Map of the coring sites in Anatolia. (After Izdebski 2013, map. 3).

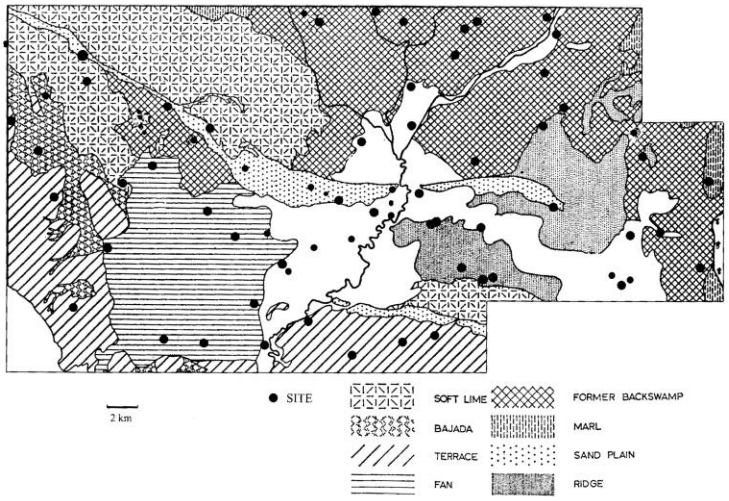


Fig. 6 Early Byzantine site distribution in relation to soil types.

Figure 5.2. Map of the surveyed sites in the Konya Plain in relation to soil types. (After Baird 2004, fig. 6, p. 135).

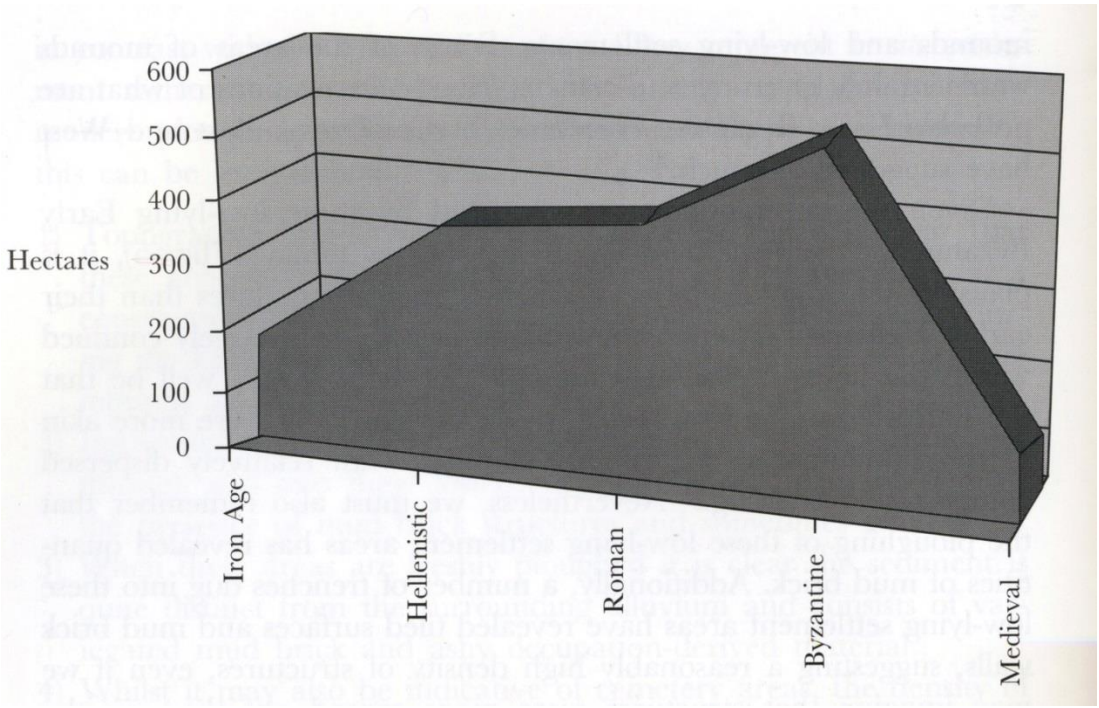


Figure 5.3. Aggregate site area over time in the Konya Plain. (After Baird 2004, fig. 4, p. 232).

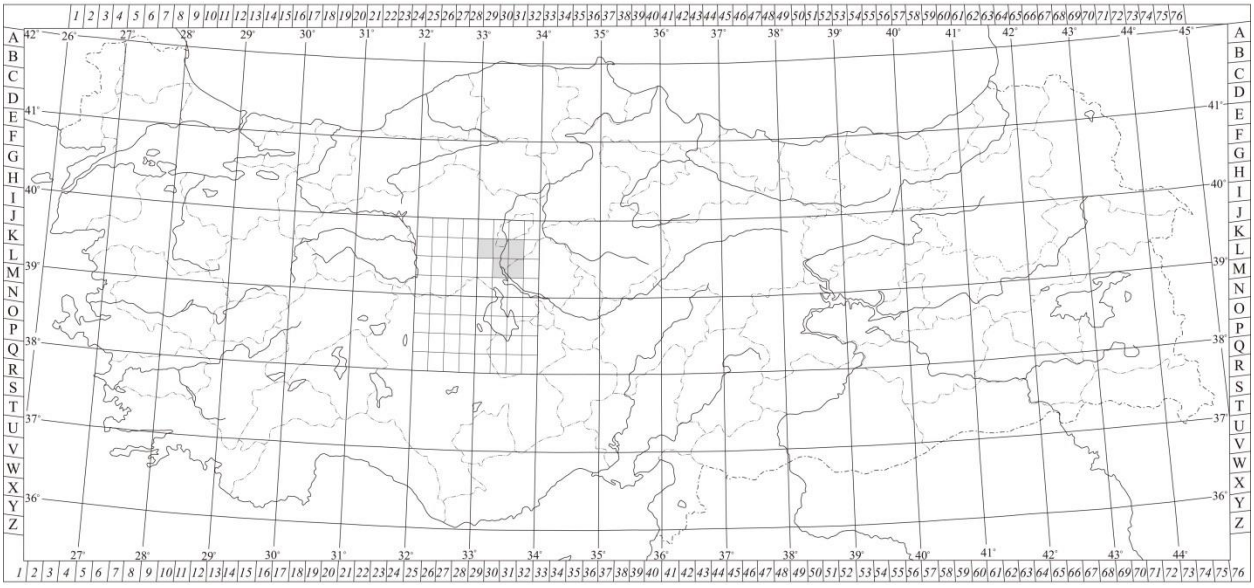


Figure 5.4. Area surveyed during the Archaeological General Survey in Central Anatolia (CAS) (Omura 2007, fig. 1 p. 57).

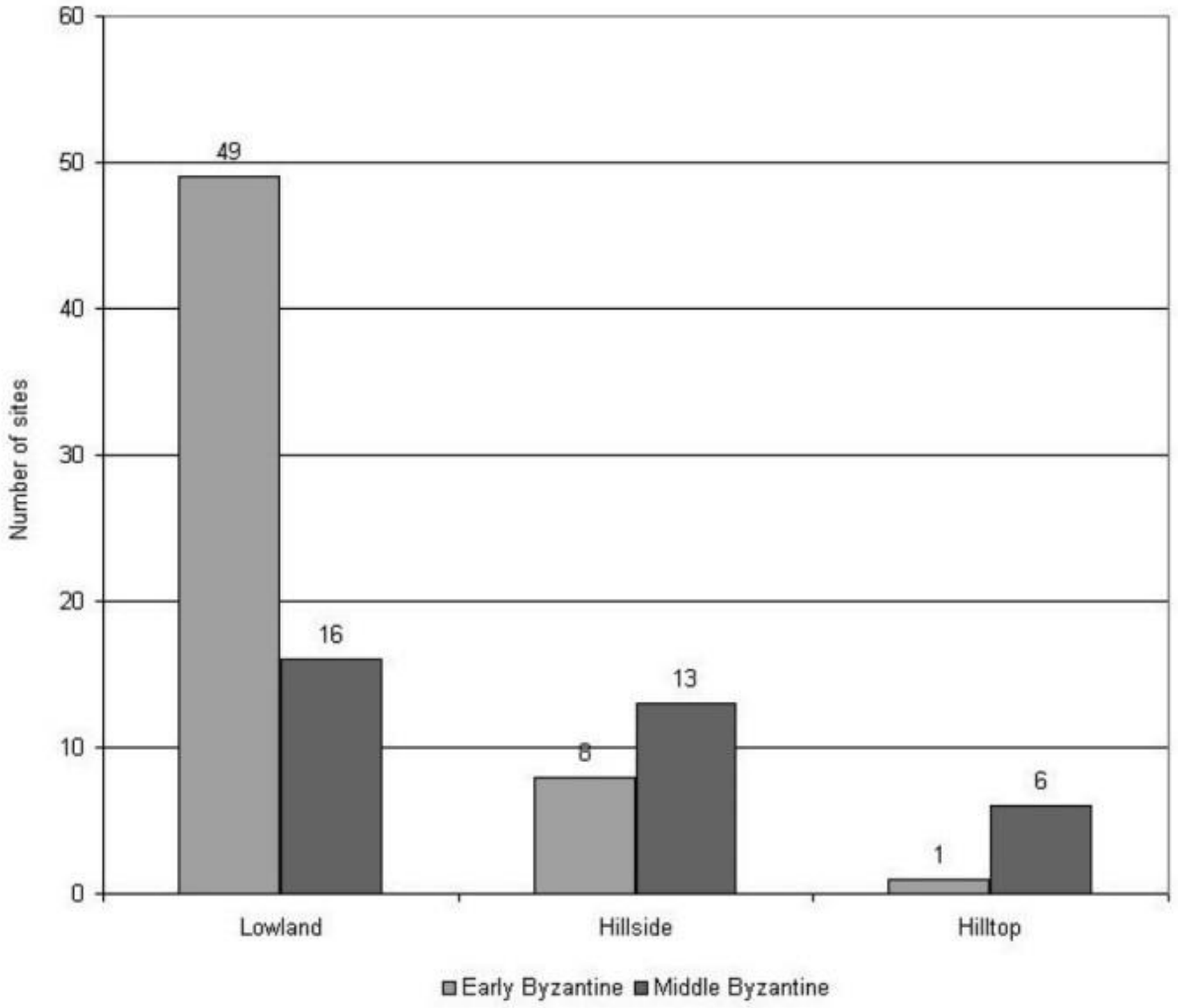


Figure 5.5. Diagram of the locations of Late Roman Site in the evidence from the Archaeological General Survey in Central Anatolia (CAS). (After Anderson 2008, fig. 5, p. 238).

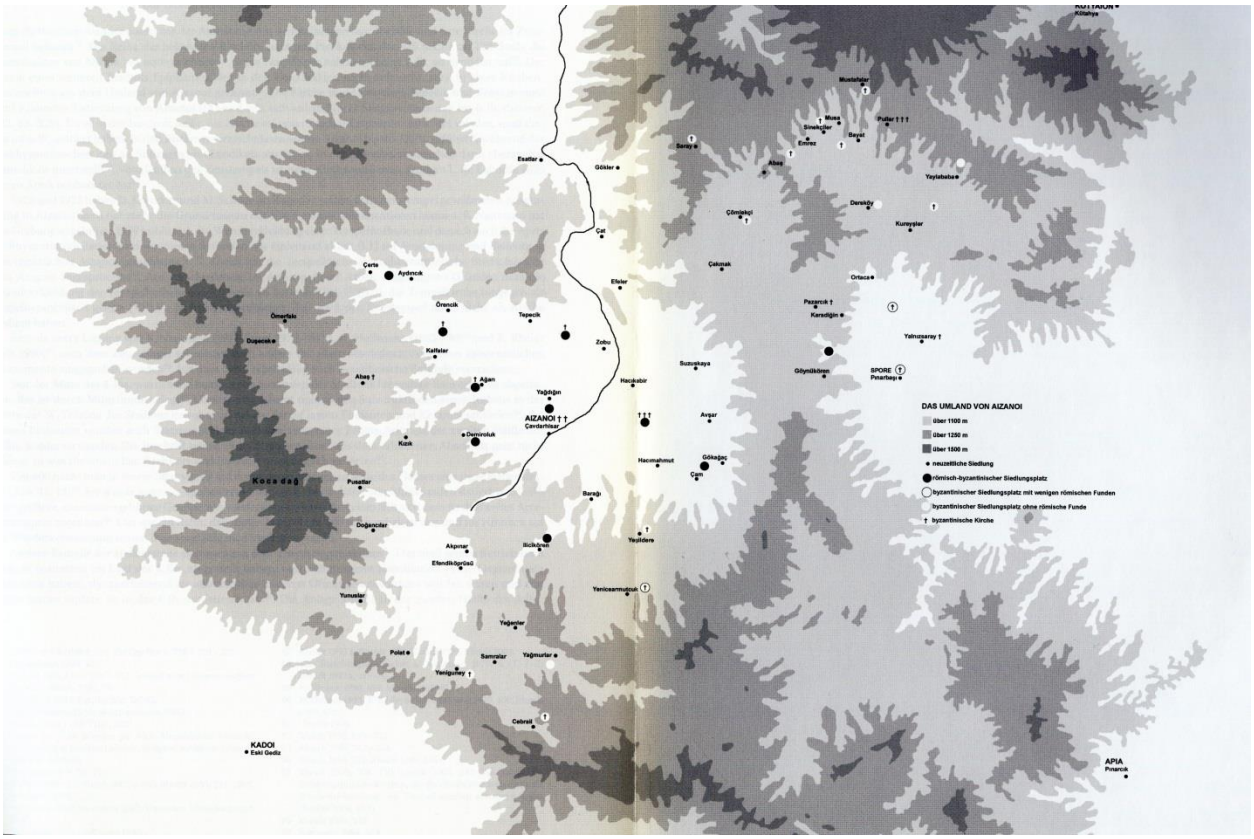


Figure 5.6. Surveyed area at Aizanoi. (After Niewöhner 2006, fig. 1, p. 244).

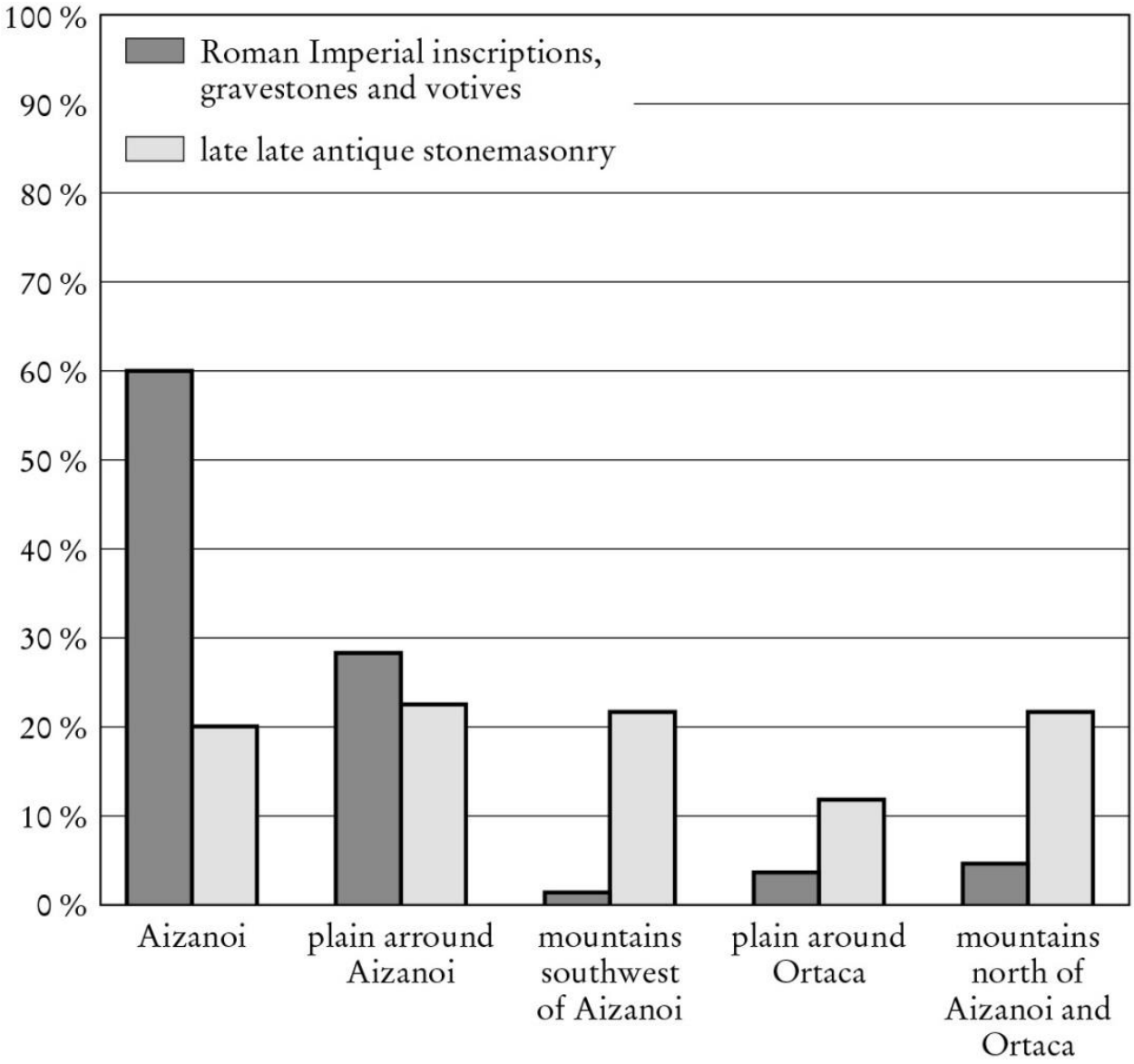
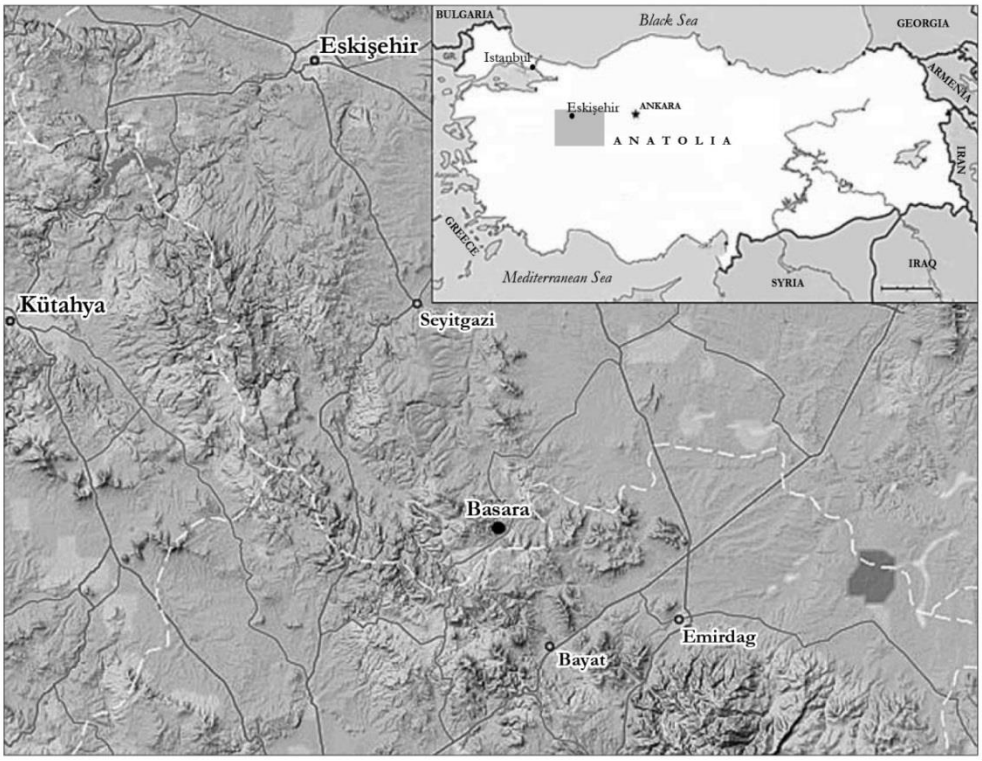


Figure 5.7. Diagram of stonemasonry over time at Aizanoi. (After Niewöhner 2006, fig. 2, p. 246).



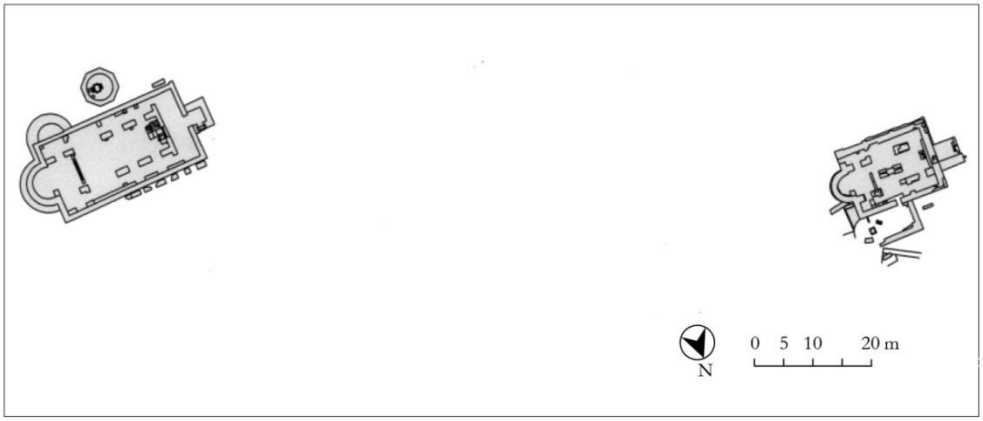


Figure 5.8. Plan of the churches at Başana. (Alp 2010, figs. 1-2, p. 5).

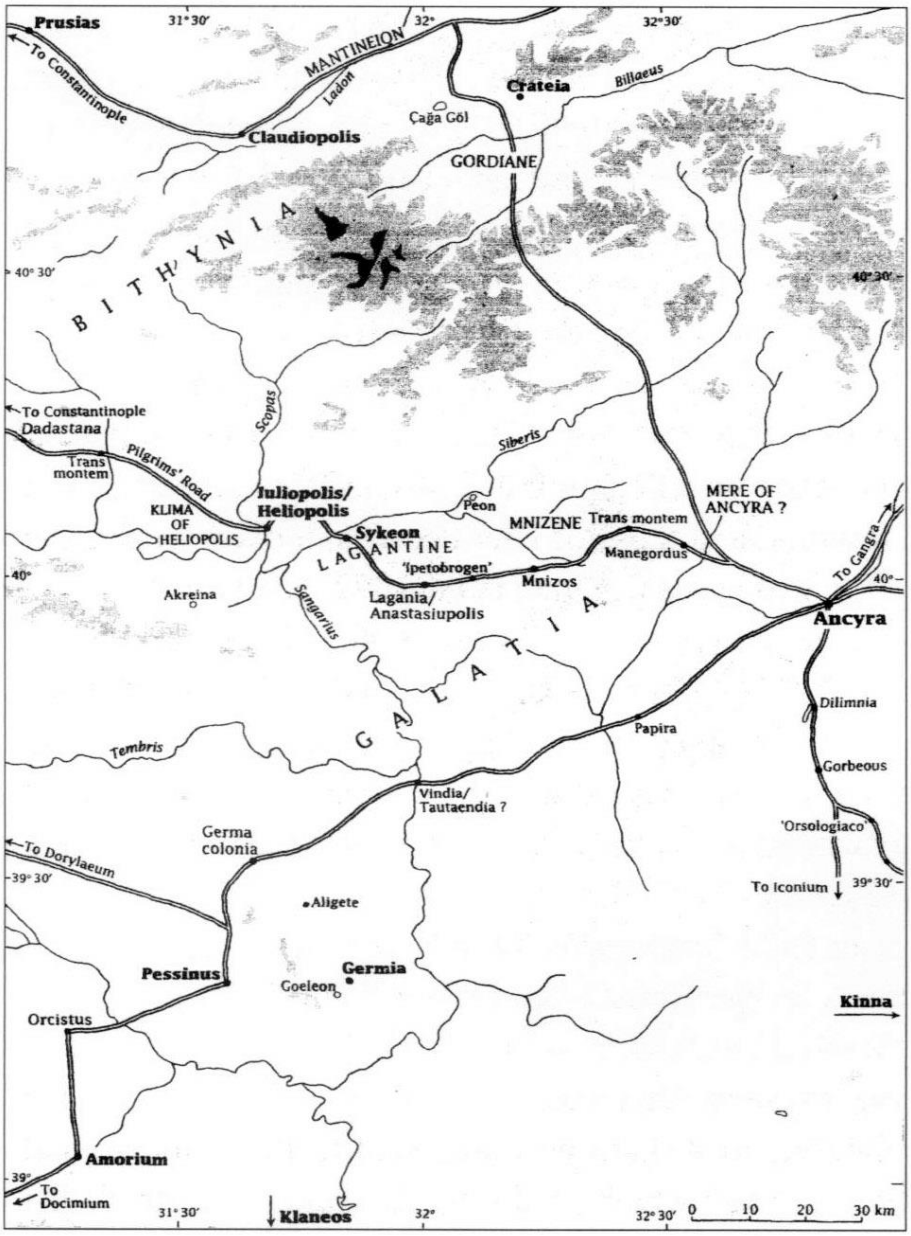


Figure 5.9. Location of Sykeon. (Barchard 2003, fig. 1, p. 177).

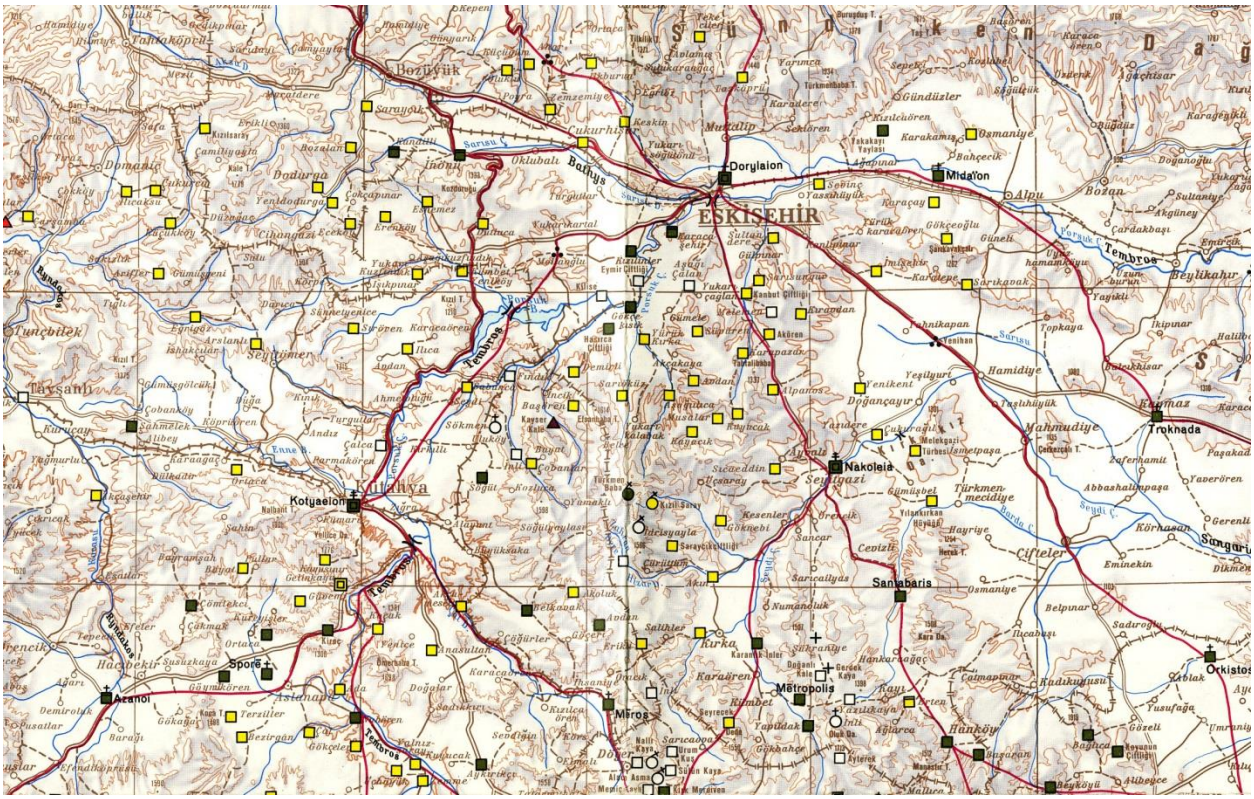


Figure 5.10. Dorylaion/Eskişehir, Late Roman sites are marked in yellow (Belke and Mersich 1990, map. 2).

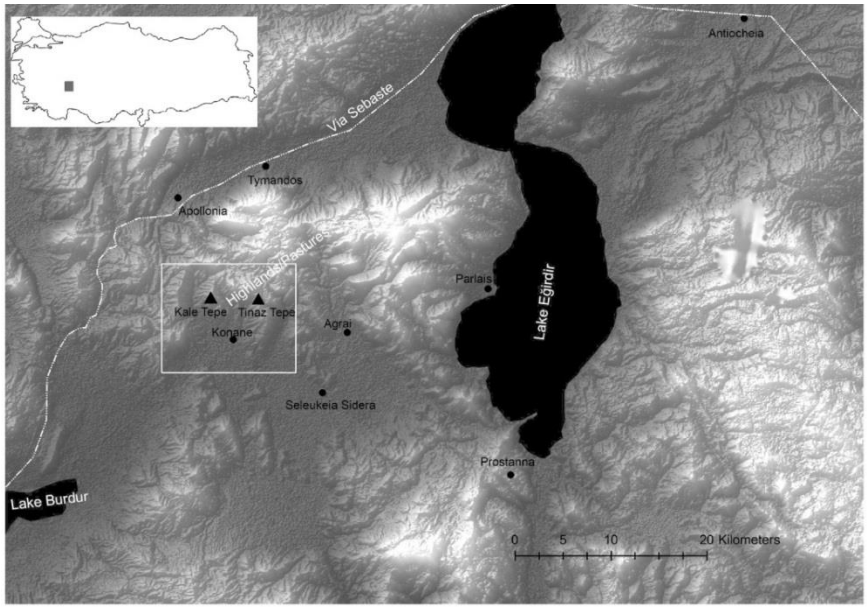


Figure 5.11. Location of the general area surveyed by the Isparta Archaeological Survey. (After De Giorgi 2014, fig. 1, p. 57).

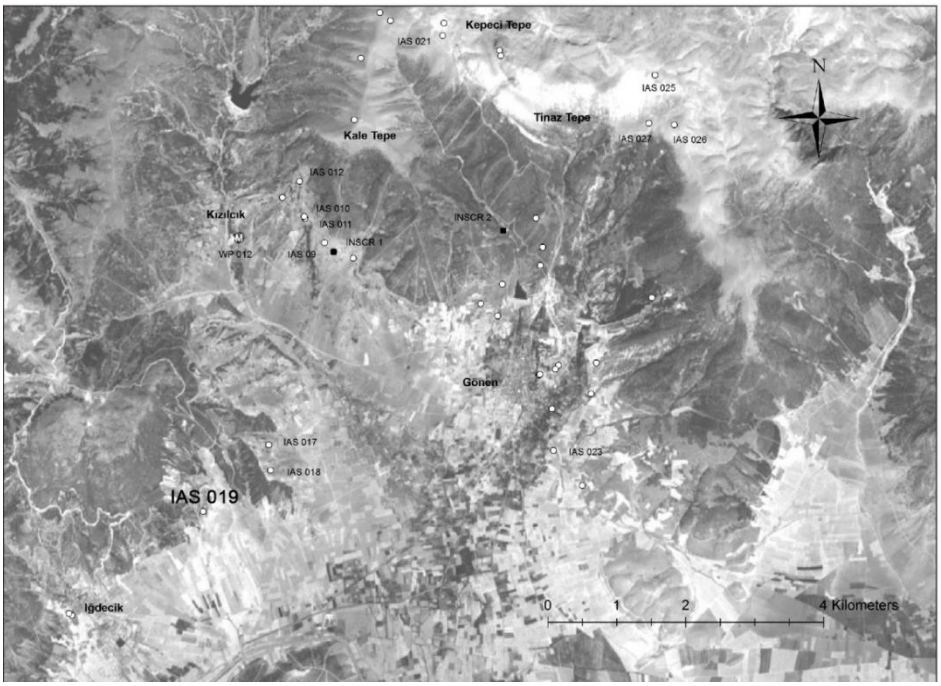


Figure 5.12. Sites identified in the Isparta Archaeological Survey. (After De Giorgi, 2014, fig. 2, p. 58).

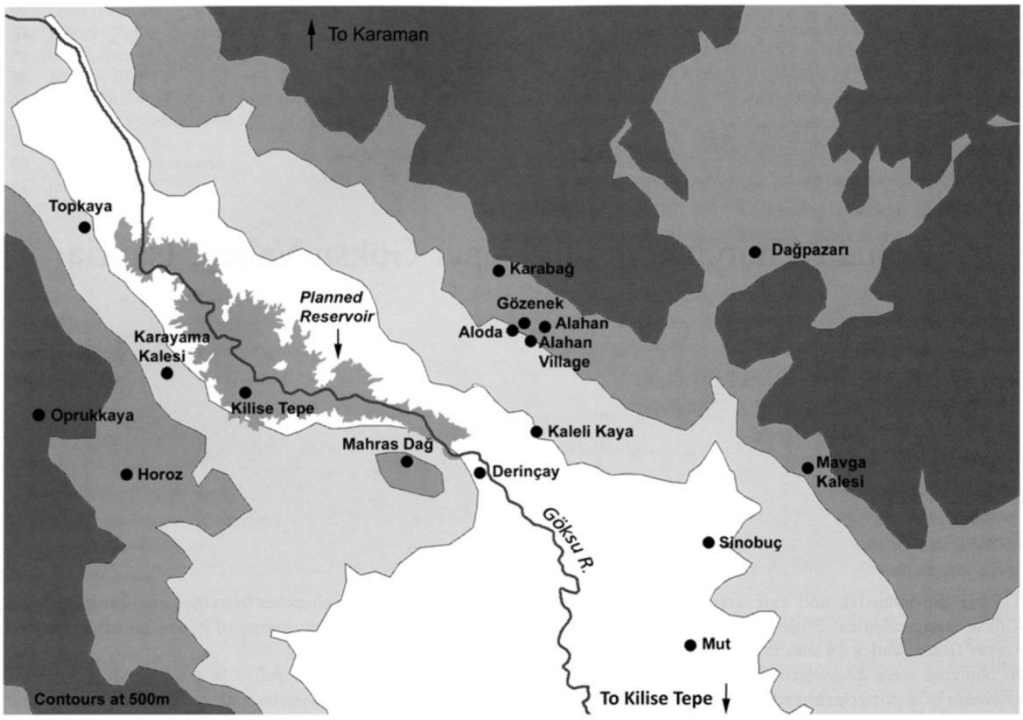


Figure 5.13. Surveyed area in the Göksu Archaeological Project, Isauria. (After Elton 2013, p. 234 fig. 19.1).

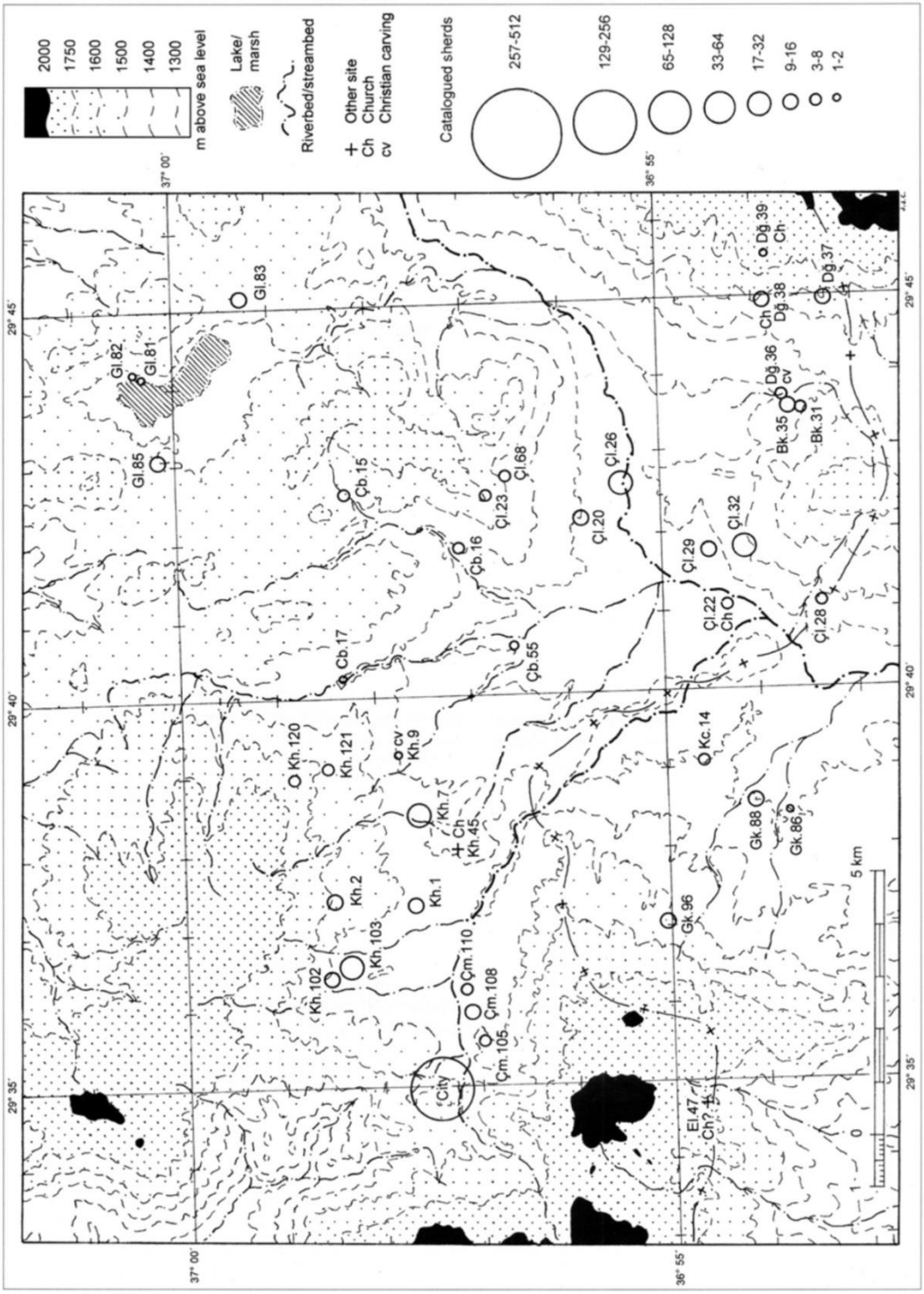


Figure 5.14. Balboura survey region, Late Roman sites. (After Coulton 2012. I, p. 172 fig. 7.3).

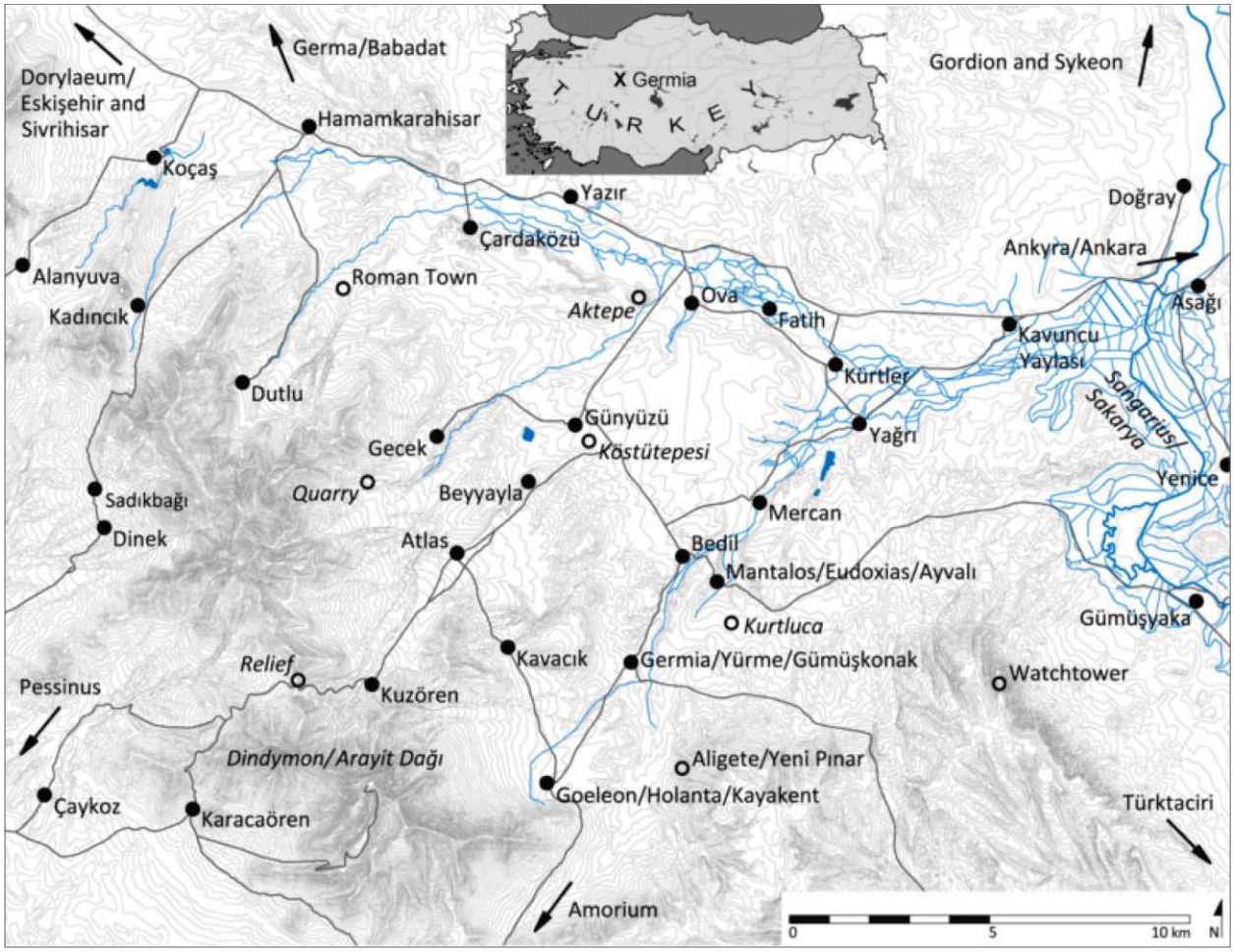


Figure 5.15. Germia, settlement pattern. (After Niewöhner 2013, p. 111, fig. 2).

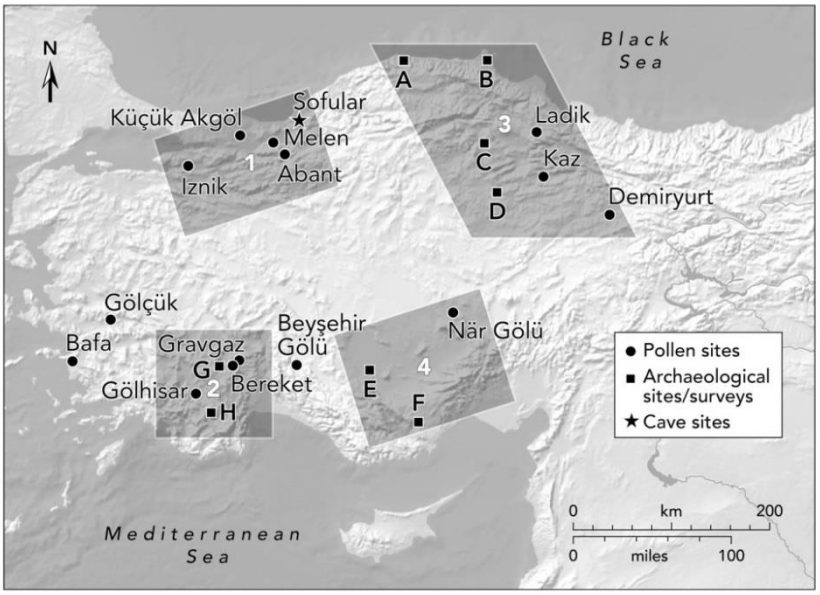


Figure 5.16. Map of the 4 sub-regions in Anatolia. (After Robert, 2018, fig. 1).

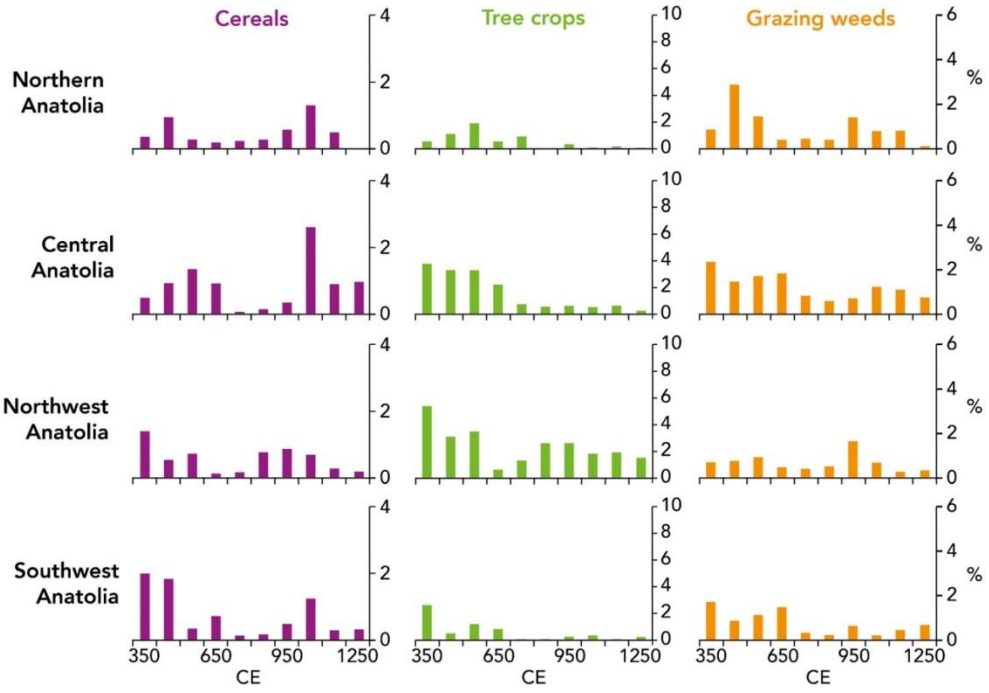


Figure 5.17. Diagram of pollen collection divided by region. (After Robert, 2018, fig. 3).

Figure 5.18. Amphora trade at Beirut. (After Pieri 2012, p. 35, fig. 2.7).

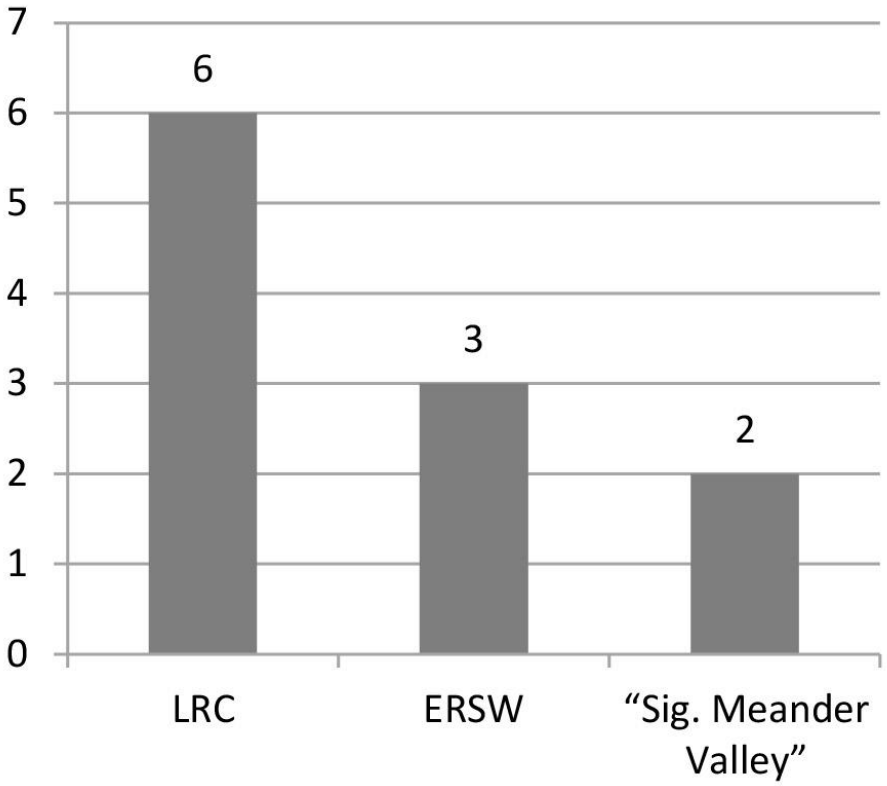


Figure 5.19. Late Roman fine ware at the Gymnasium of Vedius (Waldner and Ladstätter 2014, p. 52, fig. 6).

Bibliography:

Abadie-Reynal, C. (2010). "Les échanges interrégionaux de céramiques en Méditerranée orientale entre le IVe et le VIIIe s." In Kislinger, E., Koder, J., and Külzer, A. (eds.) Handelsgüter und Verkehrswege: Aspekte der Warenversorgung im östlichen Mittelmeerraum (4. bis 15. Jahrhundert), Veröffentlichungen zur Byzanzforschung 18. Vienna, pp. 25-44.

Ahmet, K (2001). "A Middle Byzantine Olive Press at Aphrodisias." In Anatolian Studies 51. Ankara, pp. 159-167.

Akok, M. (1955). "Ankara şehri içinde rastlanan ilkçağ yerleşmesinden bazı izler ve üç araştırma merkezi." Belleten, vol. 19, pp. 309-329.

Alcock, S. and Cherry, J. (2004). Side-by-Side Survey: Comparative Regional Studies in the Mediterranean World. Oxford.

Alp, A.O. (2010). "The newly Discovered Middle Byzantine Churches from Phrygia." In Architecture of Byzantium and Kievan Rus from the 9th to the 12th Centuries, Transactions of the State Hermitage Museum 53. St. Petersburg, pp. 9-20.

Anderson, W. (2013). "Fortification and Landscape Transformation in Late Antique Pessinus." Journal of Mediterranean Archaeology, vol. 26.1, pp. 75-96.

Anderson, W. (2008). "Settlement change in Byzantine Galatia: An assessment of finds from the General Survey of Central Anatolia." Anatolian Archaeological Studies: Kaman-Kalehöyük, vol. 17, pp. 233-240.

Anderson, W. Krsmanovic, D. Negus Cleary, M. (2012). "Ground survey in Pessinus and surroundings." In Tsetskhladze, G. *et alii* (eds) The Black Sea, Paphlagonia, Pontus and Phrygia in Antiquity, British Archaeological Reports 2432. Oxford, Appendix 1, pp. 307-311.

Ando, C. (2009). "Narrating decline and fall." In Rousseau, P. (ed.) A Companion to Late Antiquity. Chichester, pp. 59-76.

Armstrong, P. (2009). "Trade in the east Mediterranean in the 8th century." In Mundell Mango, M. (ed.) Byzantine Trade, 4th-12th Centuries: The Archaeology of Local, Regional and International Exchange. Farnham, Surrey, pp. 157-178.

Armstrong, P. (2006). "Rural settlement in Lycia in the eighth century: new evidence." In Dörtlük, K. *et alii* (eds) The IIIrd Symposium on Lycia 07-10 November 2005. Antalya, pp. 19-30.

Arslan, M. (2009). "Nymphe tasvirli ve hiç yayınlanmamış yeni Ankyra sikkeleri." In Anadolu Medeniyetleri Müzesi 2007-2008 Yıllığı. Ankara, pp. 15-81.

Arslan, M. (2004). The Coins of Galatian Kingdom and the Roman Coinage of Ancyra in Galatia. Ankara.

Arslan, M. (1997). "The Roman coinage of Ancyra in Galatia." In Nollé, J., Overbeck, B., and Weiss, P. (eds) Internationales Kolloquim zur kaiserzeitlichen Münzprägung Kleinasiens, 27-30, Nomismata vol. 1. München, pp. 111-136.

Arthur, P. (2006). Byzantine and Turkish Hierapolis (Pamukkale): An Archaeological Guide. Istanbul.

Ates, G. (2015). Die rote Feinkeramik von Aizanoi als lokaler Kulturträger. Untersuchungen zum Verhältnis von lokaler roter Feinkeramik und importierter Sigillata, Archäologische Forschungen 32, Aizanoi 2.

Avram, A. and Tsetskhladze, G.R. (2014). "A new Attalid letter from Pessinus." Zeitschrift für Papyrologie und Epigraphik, vol. 191, pp. 151–181.

Akalın, M., Arslan, M., Talaakar, A. (2010). "Roma Hamamı 2009." In Müze Çalişmaları ve Kurtarma Kazıları Sempozyumu. Ankara, pp. 343-361.

Akalın, M., Arslan, M., Talaakar, A. (2011). "Roma Hamamı 2010." In Müze Çalişmaları ve Kurtarma Kazıları Sempozyumu. Ankara, pp. 209-232.

Baird, D. (2004). "Settlement Expansion on the Konya Plain, Anatolia: 5th-7th Centuries AD." In Bowden, W., Lavan, L., Machado, C. (eds) Recent Research on the Late Antique Countryside. Leiden, pp. 219-246.

Ballance, M.H. (1971). "Galatia." In Reallexikon zur byzantinischen Kunst 2. Stuttgart, pp. 608–15.

Barchard, D. (2003). "Sykeon Rediscovered? A Site at Kiliseler Near Beypazarı." Anatolian Studies, vol. 53, pp. 175-179.

Bayburtlouğlu, I. (1987). "Ankara Antik Tiyatrosu." In Anadolu Medeniyetleri Müzesi 1986 Yıllığı. Ankara, pp. 9-23.

Belke, K. (2017). "Transport and Communication." In Niewöhner, P. (ed.) The Archaeology of Byzantine Anatolia. Oxford, pp. 28-39.

Belke, K. (2008). "Communications. Roads and Bridges." In Jeffreys, E., Haldon, J., and Cormack, R. (eds) The Oxford Handbook of Byzantine Studies. Oxford, pp. 295-308.

Belke, K. (1984). Galatien und Lykaonien. Tabula Imperii Byzantini 4. Wien.

Belke, K. and Mersich, N. (1990). Phrygien und Pisiden, Tabula Imperii Byzantini 7. Wien.

Bell, G.L., and Ramsay, W.M. (1909). The Thousand and One Churches. London.

Bennett, J. (2006). "The political and physical topography of the early imperial Graeco-Roman Ancyra." Anatoliaca, vol. 32, pp. 189-227.

Bennett, J. (2003). "Ancyra, Metropolis Provinciae Galatiae." In Wilson, P. (ed.) The Archaeology of Roman Towns. Studies in honour of J. S. Wacher. Oxford, pp. 1-12.

Blaauw, M. (2010). "Methods and code for the "classical" age-modelling of radiocarbon sequence." Quaternary Geochronology, vol. 5, pp. 512-518.

Boffo, L. (2007). "I centri religiosi d'Asia Minore all'epoca della conquista romana." In G. Urso (ed.), Tra Oriente e Occidente. Indigeni, Greci e Romani in Asia Minore. Pisa, pp. 105–128.

Boffo, L. (2001). "Lo statuto di terre, insediamenti e persone nell'Anatolia ellenistica. Documenti recenti e problemi antichi." Dike, vol. 4, pp. 233–255.

Boffo, L. (1985). I re ellenistici e i centri religiosi dell'Asia Minore. Florence.

Böhlendorf-Arlsan, B. (2012). "The Pottery from Destruction Contexts in the Enclosure." In Lightfoot, C.S. and Ivison, E.A. (eds) Amorium Reports 3: The lower City Enclosure. Finds Reports and Technical Studies. Istanbul, pp. 153-179.

Böhlendorf-Arlsan, B. (2007). "Stratified Byzantine Pottery from the City Wall in the Southwestern Sector of Amorium." In Böhlendorf-Arlsan, B., Uysal, A.O., Witte-Orr, J. (eds.) Çanak. Late Antique and Medieval Pottery and Tiles in Mediterranean Archaeological Contexts, Byzas 7. Istanbul, pp. 273-294.

Bonde, S. (1989). "Review of Foss, C. and Winfield, D. Byzantine Fortifications: An Introduction." American Journal of Archaeology, vol. 93, pp. 309-311.

Bonifay, M. (2005). "Observations sur la diffusion des céramiques africaines en Méditerranée orientale durant l'Antiquité tardive." In Baratte, F., Déroche, V., Jolivet-Lévy, C., and Pitharakis, B. (eds) Mélanges Jean-Pierre Sodini, Travaux et mémoires, Centre de recherche d'histoire et civilisation de Byzance, vol. 15. Paris, pp. 565-581.

Bonifay, M. (2005a). "Observations sur la typologie des amphores africaines de l'Antiquité." In Esparraguera, J.M.G., Buxeda Garrigós, J., Cau Ontiveros, M.A. (eds) LCRW I. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry, British Archaeological Reports, vol. 1340. Oxford, pp. 451-471.

Bosch, E. (1967). Quellen zur Geschichte der Stadt Ankara im Altertum. Ankara.

Botteri, P. and Fangi, G. (2002). "The Ancyra Project: The Temple of Augustus and Rome in Ankara." The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, vol. 34, pp. 84-88.

Bouersock, G.W. (1996). "The vanishing paradigm of the fall of Rome." Bulletin of the American Academy of the Arts and Sciences, vol. 49.8, pp. 29-43.

Brown, T. S. (1984). Gentlemen and Officers. Imperial Administration and Aristocratic Power in Byzantine Italy A.D. 554-800. Rome.

Buchwald, H. and Savage, M. (2017). “Churches.” In Niewöhner, P. (ed.) The Archaeology of Byzantine Anatolia. Oxford, pp. 129-147.

Buchwald, H. (1995). “Notes on the design of aisled basilicas in Asia Minor.” In Borkopp, B and Hallensleben, H. (eds) Studien zur byzantinischen Kunstgeschichte: Festschrift für Horst Hallensleben zum 65. Geburtstag. Amsterdam, pp. 19-30.

Campbell B.M.S. (2016). The Great Transition: Climate, Disease and Society in the Late-Medieval World. Cambridge.

Carrié, J.-M. (2003). “L’institution annonaire de la première à la deuxième Rome: continuité et innovation.” In B. Marin and C. Virlouvet (eds) Nourrir les cités du bassin méditerranéen. Antiquité – temps modernes. Paris, pp. 153-211.

Casson, L. (1980). “The Role of the State in Rome’s Grain Trade,” in D’Arms, J. and Kopff, E. (eds) The Seaborne Commerce of Ancient Rome: Studies in Archaeology and History. Rome, pp. 21–29.

Claerhout, I. and Devreker, J. (2008). Pessinus: Sacred City of the Anatolian Mother Goddess; an Archaeological Guide. Istanbul.

Cobet, J. (2007). “Das alte Ionien in der Geschichtsschreibung.” In Cobet, J., von Graeve, V., Niemeier, W. D. and Zimmermann, K. (eds) Frühes Ionien: Eine Bestandsaufnahme. Mainz, pp. 729–743.

Cohen, G. M. (2010). The Hellenistic Settlements in Europe, the Islands, and Asia Minor. Berkley.

Cook, J. M. (1973). The Troad. An Archaeological and Topographical Study. Oxford.

Cormack, R. (1990). “The Temple as the Cathedral.” In Roueché, C. Erim, K. T. (eds) Aphrodisias Papers. Recent work on architecture and sculpture, Journal of Roman Archaeology Supplement 1. Ann Arbor, MI.

Coşkun, A. (2009). “Der Ankyraner Kaiserkult und die Trasformation galatischer und phrygisch-galatischer Identitäten in Zentralanatolien im Spiegel der Münzquellen.” In Coşkun, A. Heinen, H. and Pfiffer, S. (eds) Repräsentation von Identität und Zugehörigkeit im Osten der grieschisch-römischen Welt. Bern, pp. 173-210.

Cottica, D. (2000). “Late Roman Imported and Locally Produced Pottery from Hierapolis (Pamukkale, Turkey).” Rei Cretariae Romanae Fautorum Acta, vol. 36, pp. 49-56.

Coulton, J. (2012). “Late Roman and Byzantine Balboura.” In Coulton, J. (ed.) The Balboura Survey and Settlement in Highland Southwest Anatolia, vol. 1, British Institute of Archaeology at Ankara monograph no. 43. Oxford, pp. 163-184.

Cross, T.M. and Leiser, G. (2000). A Brief History of Ankara. Vacaville CA.

Crow, J. (2001). “Fortifications and urbanism in late antiquity: Thessaloniki and other eastern cities.” In Lavan, L. (ed.) Recent Research in Late-Antique Urbanism, Journal of Roman Archaeology Supplement 42. Ann Arbor, MI, pp. 89-106.

Ćurčić, S. (2010). Architecture in the Balkans from Diocletian to Süleyman the Magnificent. New Haven, CT.

Dabrowa, E. (2013). “Ancyra: factors in the development of the city.” In Commentarii Societatis Philologae Polonorum (EOS), pp. 354-366.

Dagron G. (1979). “Entre village et cité: la bourgade rurale des IVe-VIIe siècles en Orient." Koinônia (Naples), vol. 3, p. 29-52.

Dally, O. and Ratté, C. (eds) (2011). Archaeology and the Cities of Late Antiquity in Asia Minor. Ann Arbor.

Dalgıç, Ö. and Sokolicek, A. (2017). “Aphrodisias.” In Niewöhner, P. (ed.) The Archaeology of Byzantine Anatolia. Oxford, pp. 269-280.

Dandrow, E. (in press). “The Coins of Pessinus (2009–11): A Catalogue.” In Tsetskhladze, G.R. (ed.) Pessinus, vol. 2, Colloquia Antiqua 22. Leiden.

Darbyshire, G., Mitchell, S. and Vardar, L. (2000). “The Galatian Settlement in Asia Minor.” Anatolian Studies, vol. 50, pp. 75-97.

Day, J. (2002). “A Note on Monetary Mechanisms, East and West.” In Laiou, A. E. (ed.) The Economic History of Byzantium: From the Seventh through the Fifteenth Century. Washington DC, pp. 967-972.

Dusinberre, E.R.M. (2013). Empire, Authority, and Autonomy in Achaemenid Anatolia. Cambridge.

De Dapper, M. (2003). “Geological and geomorphological framework and stratigraphy of the site.” In Devreker, J. Thoen, H. and Vermeulen, F. Excavations in Pessinus: The So-Called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 15-21.

Decker, M. (2009). Tilling the Hateful Earth: Agricultural Production and Trade in Late Antique East. Oxford.

Decker, M. (2007). “Frontier Settlement and Economy in the Byzantine East.” Dumbarton Oak Papers, vol. 61, pp. 217-267.

Decker, M. (2001). “Food for an empire: wine and oil production in North Syria.” In Kingsley, S. and Decker, M. (eds) Economy and Exchange in the East Mediterranean during Late Antiquity. Oxford, pp. 69-86.

De Giorgi, A.U. (2014). “Between Continuity and Change: Northern Pisidia through Classical and Late Antiquity.” Istanbuler Mitteilungen, vol. 64, pp. 55-71.

DeLaine, J. (1997). The baths of Caracalla: a study in the design, construction, and economics of large-scale building projects in imperial Rome. Journal of Roman Archaeology Supplement 25. Ann Arbor, MI.

Demirel Gökalp, Z., Erel, C., Tsivikis, N. and Uygun, S. (2015). "2015 Yılı Amorium Kazısı." In Kazı Sonuçları Toplantısı, vol. 38.3, pp. 451-460.

Demirel Gökalp, Z. Erel, C., Tsivikis, N. and Yaşar, N. (2014), "2014 Yılı Amorium Kazısı." Kazı Sonuçları Toplantısı, vol. 37.3, pp. 199-214.

Demiral Gökalp, Z. (2013). Amorium Aşağı Şehir Kilisesi Bebek ve Çocuk Iskeleleri." In Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Dergisi 53. Ankara, pp. 349-364.

Devos, G. (2003). "The Pithoi." In Devreker, J. Thoen, H. and Vermeulen, F. Excavations in Pessinus: The So-Called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 369-374.

Devreker, J. and Waelkens, M. (eds) Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge.

Devreker, J. (1984). "L'Histoire de Pessinonte." In Devreker, J. and Waelkens, M. (eds) Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge, pp. 13-37.

Devreker, J. (1984a). "Les monnaies de Pessinonte." In Devreker, J. and Waelkens, M. (eds) Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge, pp.173-215.

Devreker, J. (1990). "Pessinus (Pessinonte) 1988: Rapport Provisoire." Kazı Sonuçları Toplantısı vol. 11, pp. 275-299.

Devreker, J. (1994). "The new excavations at Pessinus." In E. Schwertheim (ed.) Forschungen in Galatien, Asia Minor Studien 12. Gent, pp. 105-30.

Devreker, J., Bauters, L., Braeckman, K., De Clercq, W., Deschieter, J. and Dutoo, D. (2000). "Fouilles archéologiques de pessinonte (Turquie): La campagne de 1998." Anatolia Antiqua, vol. 8, pp. 105-17.

Devreker, J., Bauters, L., Braeckman, K., De Clercq, W., Devos, G., Dutoo, D. and Monsieur, P. (2001). "Fouilles archéologiques de Pessinonte (Turquie): la campagne de 1999." Anatolia Antiqua, vol. 9, pp. 61-72.

Devreker, J., Bauters, L., Braeckman, K. De Clercq, W. and Monsieur, P. (2008). "Fouilles archéologiques de Pessinonte: la campagne de 2006." Anatolia Antiqua, vol. 16, pp. 135-146.

Devreker, J., Bauters, L., Braeckman, K., De Clercq, W., Monsieur, P. and Van Peteghem A. (2004). "Fouilles archéologiques de Pessinonte: la campagne de 2002." Anatolia Antiqua, vol. 12, pp. 83-95.

Devreker, J., Bauters, L., De Clercq, W. and Braeckman, K. (2006). "Fouilles archéologiques de Pessinonte: la campagne de 2004." Anatolia Antiqua, vol. 14, pp.117-129.

Devreker, J., Bauters, L., De Clercq, W., Dhaeze, W., Braeckman, K. and Monsieur P. (2005). "Fouilles archéologiques de Pessinonte : la campagne de 2003." Anatolia Antiqua, vol. 13, pp. 145-159.

Devreker, J., Braeckman, K. and Dutoo, D. (1999). "Pessinonte 1997: rapport provisoire." Anatolia Antiqua, vol. 7, pp. 105-15.

Devreker, J., Devos, G., Bauters, L., Braeckman, K., Daems, A., De Clercq, W., Angenon, J. and Monsieur, P. (2003). "Fouilles archéologiques de Pessinonte: la campagne de 2001." Anatolia Antiqua, vol. 11, pp. 141-156.

Devreker, J., Devos, G., Bauters, L., Braeckman K. and Monsieur, P. (2002). "Fouilles archéologiques de Pessinonte: la campagne de 2000." Anatolia Antiqua, vol. 10, pp. 131-144.

Devreker, J., Hollevoet, Y. and Thoen, H. (1991). "Pessinus (Pessinonte) 1989." Kazı Sonuçları Toplantısı 12, vol. 2, pp. 269-299.

Devreker, J., Thoen, H. and Vermeulen, F. (eds) (2003). Excavations in Pessinus: The So-Called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent.

Devreker, J., Thoen, H. and Vermeulen, F. (1995). "The imperial sanctuary at Pessinus and its predecessors: a revision." Anatolia Antiqua, vol. 3, pp. 127-44.

Devreker, J., Thoen, H. and Vermeulen, F. (1992). "Pessinus (Pessinonte) 1990: Rapport provisoire." Kazı Sonuçları Toplantısı 13, vol. 2, pp. 341-75.

Devreker, J., Verlinde, A., Bauters, L., De Clercq, W. and Monsieur, P. (2010). "Archaeological Excavations in Pessinus (Turkey): The 2008 Campaign." Anatolia Antiqua, vol. 18, pp. 141-156.

Devreker, J.and Vermeulen, F. (1998). "Fouilles et prospections à Pessinonte: campagne de 1996." Anatolia Antiqua, vol. 6, 249-59.

Devreker, J. and Vermeulen F. (1997a). "Pessinonte (Pessinus) 1995: Rapport Provisoire." Kazı Sonuçları Toplantısı 18, vol. 1, pp. 499-512.

Devreker, J. and Vermeulen F. (1997b). "Fouilles à Pessinonte en 1995." Anatolia Antiqua, vol. 5, pp. 123-33.

Devreker, J. and Vermeulen F. (1996a). "Pessinus (Pessinonte) 1992: preliminary report." Anatolia Antiqua, vol. 4, pp. 67-81.

Devreker, J. and Vermeulen, F. (1996b). "The eighth excavation campaign in Pessinus." Anatolia Antiqua, vol. 4, pp. 81-97.

Devreker, J. and Vermeulen F. (1995a). "Pessinus 1993: Preliminary report." Kazı Sonuçları Toplantısı 16, vol. 2, pp. 75-94.

Devreker, J. and Vermeulen, F. (1995b). "Archaeological Work at Pessinus in 1993." Anatolia Antiqua, vol. 3, pp. 113-26.

Devreker, J. and Vermeulen, F. (1993). "Pessinus (Pessinonte) 1991: preliminary report." Kazı Sonçuları Toplantısı 14, vol. 2, pp. 261-88.

Devreker, J. and Waelkens, M. (eds) (1984). Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge.

Dey, H.W. (2014). The Afterlife of the Roman City: Architecture and Ceremony in Late Antiquity and the Early Middle Ages. New York.

Doonan, O. (2015). "Settlement and economic intensification in the late Roman/early Byzantine hinterland of Sinop, Turkey." In Winther-Jacobsen, K. and Summerer, L. (eds) Landscape Dynamics and Settlement Patterns in Northern Anatolia During the Roman and Byzantine Period. Stuttgart, pp. 43-60.

Doonan, O.P. (2004). Sinop Landscapes: Exploring Connection in the Hinterland of a Black Sea Port. Philadelphia.

Elton, H. (2013). "Late Roman churches in the upper Göksu valley, Isauria." In Hoff, M.C. and Townsend, R.F. (eds) Rough Cilicia: New Historical and Archaeological Approaches. Oxford, pp. 233-251.

Elton, H. (2006). "Göksu Archaeological Project 2006." Anatolian Archaeology, vol. X, pp. 19-21.

Elton, H. (2006a). "The Roman countryside at Alahan, Turkey." In Lewin, A. S. and Pellegrini, P. (eds) Settlement and Demography in the Near East in Late Antiquity. Rome, pp. 59-66.

Elton, H. (2005). "LR 1 Amphorae and the economy of southern Asia Minor." In Esparraguera, J.M.G., Buxeda Garrigós, J. and Cau Ontiveros, M.A. (eds) LCRW I. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry, British Archaeological Reports, vol. 1340. Oxford, pp. 691-695.

Erciyas, B. (2009). "Komane Pontike: A City or a Sanctuary?" In Højte, J. M. (ed.) Mithridates VI and the Pontic Kingdom. Black Sea Studies 9. Aarhus, pp. 289-312.

Erciyas, B. and Sökmen, E. (2010). "An Overview of Byzantine Period Settlements around Comana Pontica, in North-Central Turkey." Byzantine and Modern Greek Studies, vol. 34, pp. 118-141.

Ervynck, A., Van Neer, W. and De Cupere, B. (2003). "Animal remains from the Byzantine Castle." In Devreker, J., Thoen, H. and Vermeulen, F., Excavations in Pessinus: The So-Called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 375-382.

Ferrazzoli, A.F., and Ricci, M. (2007). "Un centro di produzione delle anfore LR1: Elaiussa Sebaste in Cilicia (Turchia. Gli impianti, le anfore." In Menchelli, S., Santoro, S., Pasquinucci, M. and Guiducci, G. (eds), LRCW 3: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean: Archaeology and Archaeometry: Comparison between the Western and Eastern Mediterranean, vol. 2, British Archaeological Report

International Series 2185. Oxford, pp. 815-826.

Fıratlı, N. (1951). "Ankara'nın İlkçağdaki Su Tesisatı." Belleten, vol. 15-57, pp. 349-359.

Fırat, N. (2000). "So-called 'Cypriot red slip ware' from the habitation area of Perge (Pamphylia)." Rei Cretariae Romanae Fautorum Acta, vol. 36, pp. 35-38.

Foss, C. (1977). "Archaeology and the Twenty Cities of Byzantine Asia." American Journal of Archaeology, vol. 81, pp. 469-486.

Foss, C. (1975). "The Persians in Asia Minor and the end of Antiquity." English Historical Review, vol. 90, pp. 721-747.

Foss, C. and Winfield, D. (1986). Byzantine Fortifications: An Introduction. Pretoria.

French, D. (2003). Roman, Late Roman and Byzantine Inscriptions of Ankara: A Selection. Ankara.

French, D. (1988). Roman Roads and Milestones of Asia Minor 2: An Interim Catalogue of Milestones, British International Reports 392. Oxford.

French, D. (1981). Roman Roads and Milestones of Asia Minor 1: The Pilgrim's Road, British International Reports 105. Oxford.

French, D. (1998). "Pre- and Early-Roman Roads of Asia Minor. The Persian Royal Road." Iran, vol. 36, pp. 15-43.

French, D. (1974). "A Study of Roman Roads in Anatolia: Principles and Methods." Anatolian Studies, vol. 24, pp. 143-149.

French, D. (1973). Ankara 50. Ankara.

Frey, J.M. (2016). Spolia in Fortifications and the Common Builder in Late Antiquity. Leiden.

Fyfe, R. *et alii* (2009). "The European Pollen Database: past efforts and current activities." Vegetation History and Archaeobotany, vol. 18, pp. 417-422.

Garmy, P. (2012). Villes, réseaux et systèmes de villes, contribution de l'archéologie. Paris.

Gibbon, E. (1776). History of the Decline and Fall of the Roman Empire. London.

Giese, S. (2013). 'The Church of Saint Michael' in Niewöhner, P. *et alii* "Bronze Age höyüks, Iron Age hilltop forts, Roman poleis and Byzantine pilgrimage in Germia and its vicinity. 'Connectivity' and a lack of 'definite places' on the central Anatolian high plateau." Anatolian Studies, vol. 63, pp. 127-128.

Gill, M. A.V. (2002). Amorium Reports. Finds 1: The Glass (1987-1997). Oxford.

Goldman, A.L. (forthcoming). "Investigating Roman Gordion: Report on 1993-2005 Excavations." American Journal of Archaeology.

Goldman, A. (in press). “Brief report of pottery study.” In Tsetskhladze, G.R. (ed.) Pessinus Studies, vol. 1. Leuven, pp. 117-118

Gorkay, K. (2006). “Ancyra’s unknown stadium.” Istanbuler Mitteilungen, vol. 56, pp. 247-271.

Greaves, A. M. (2011). “The Greeks in Western Anatolia.” In McMahon, G. and Steadman, S. (eds) The Oxford Handbook of Ancient Anatolia: (10,000-323 BCE). Oxford, pp. 501-511.

Grégoire, H. (1927-1928). “Inscriptions historique byzantine. Ancyre et les Arabes sous Michel l’Ivrogne.” Byzantion, vol. 4, pp. 437-468.

Grégoire, H. (1929-1930). “Michael III et Basile le Macedonien dans les inscriptions d’Ancyre.” Byzantion, vol. 5, pp. 327-376.

Gregory, S. (1995). Roman Military Architecture on the Eastern Frontier. Amsterdam.

Hadrien, B. and Labarre, G. (eds) (2013). L’Anatolie Des Peuples, Des Cités et Des Cultures: IIe Millénaire Av. J.-C.-Ve Ap. J.-C.: Colloque International de Besançon, 26-27 Novembre 2010. Besançon.

Haldon, J. (2016). The Empire that would not die. The paradox of Eastern Roman Survival, 640-740 CE. Harvard.

Haldon, J. (2000). “Production, distribution and demand in the Byzantine world, c. 660-840.” In I. L. Hansen and C. Wickham (eds) The Long Eighth Century: Production, Distribution and Demand. Leiden, pp. 225-64.

Haldon, J., Elton, H., and Newhard, J. (2017). “Euchaïta.” In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 375-388.

Haldon, J., Roberts, N., Izdebski, A., Fleitmann, D., McCormick, M., Cassis, M., Doonan, O., Eastwood, W., Elton, H., Ladstätter, S., Manning, S., Newhard, J., Nicoll, K., Telelis, I. and Xoplaki, E. (2014). “The Climate and Environment of Byzantine Anatolia: Integrating Science, History, and Archaeology.” Journal of Interdisciplinary History, vol. XLV:2 (Autumn, 2014), pp. 113–161.

Haldon, J. (2008), “Political-Historical Survey, 518–800.” In Cormack, R., Haldon, J., and Jeffreys, E. (eds.) The Oxford Handbook of Byzantine Studies. Oxford, pp. 251-262

Harrison, R. M. and Christie, N. (1993). “Excavations at Amorium: 1992 Interim Report.” Anatolian Studies, vol. 43, pp. 147-162.

Harrison, M. (1991). “Amorium Excavations 1990: The Third Preliminary Report.” Anatolian Studies, vol. 41, pp. 215-229.

Harrison, M. (1990). “Amorium Excavations 1989: The Second Preliminary Report.” Anatolian Studies, vol. 40, pp. 205-218.

Harrison, M. (1980). “Upland settlement in early medieval Lycia.” In Metzger, H. (ed.) Actes du colloque sur la Lycie antique. Paris, pp. 109-118.

Harrison, M. (1963). “Churches and chapels of central Lycia.” Anatolian Studies, vol. 13, pp. 117-52.

Hayes, J. (1997). Handbook of Mediterranean Roman pottery. London.

Hayes, J. (1972). Late Roman pottery. London.

Heather, P. (2006). The Fall of the Roman Empire: A New History of Rome and Barbarians. Oxford.

Hellenkemper, H. and Hild, F. (1986). Neue Forschungen in Kilikien. Wien.

Hopkins, K. (1983). “Models, Ships and Staples.” In Garnsey, P. and Whittaker, C.R. (eds) Trade and Famine in Classical Antiquity. Cambridge, pp. 84-109.

Humann, K. and Puchstein, O. (1890). Reisen in Kleinasien und Nordsyrien. Berlin.

Intagliata, E. (2017). “Palmyra and its Ramparts during the Tetrarchy.” In Rizos, E. (ed.) New cities in Late Antiquity. Documents and Archaeology. Paris, pp. 71-84.

Ivison, E.A. (2010). “Kirche und Religiöses leben im byzantinischen Amorium.” In Daim, F. and Drauschke, J. (eds.) Byzanz das Römerreich im Mittelalter. Köln, pp. 309-343.

Ivison, E.A. (2007). “Amorium in the Byzantine Dark Ages (Seventh to Ninth Centuries).” In Henning, J. (ed.) Post-Roman Towns, Trade and Settlement in Europe and Byzantium 2. Byzantium, Pliska and the Balkans, Millennium Studies 5.2). Berlin, pp. 25-59.

Izdebski, A. (2015). “The economic Expansion of the Anatolian Countryside in Late Antiquity: The Coast versus Inland Regions.” In Lavan, L. (ed.) Local Economies? Production and Exchange of Inland Regions in Late Antiquity, Late Antique Archaeology 10. Leiden, pp. 343-376.

Izdebski, A. (2013). Rural Economy in Transition: Asia Minor from Late Antiquity into the Early Middle Ages, Journal of Juristic Papyrology Supplement, vol. 18. Warsaw.

Jacobs, I. (2014). “Introduction.” In Jacobs, I. (ed.) Production and Prosperity in the Theodosian period Interdisciplinary Studies. Leuven, pp. 1-24.

Jacobs, I. (2013). Aesthetic Maintenance of Civic Space: The “Classical” City from the 4th to the 7th C. AD. Leuven.

Jacobs, I. (2009). “Encroachment in the Eastern Mediterranean between the fourth and the seventh century AD.” Ancient Society, vol. 39, pp. 203-243.

Jackson, M., Zelle, M., Vandeput, L., Köse, V. (2012). “Primary Evidence for Late Roman D Ware Production in Southern Asia Minor: A Challenge to ‘Cypriot Red Slip Ware’.” Anatolian Studies, vol. 62, pp. 89-114.

Jenkins, R.J. and Mango, C.A. (1956). “Date and Significance of the Tenth Homily of Photios.” Dumbarton Oaks Papers, vol. 9/10, pp. 125-140.

Jerphanion, G. de (1930). Mélanges d'archéologie anatolienne: Monuments préhelléniques, gréco-romains, byzantins et musulmans de Pont, de Cappadoce et de Galatie. Paris.

Kadıoğlu, M. (2004). "Ankyra Tiratrosu: Ön Rapor." In Çizmeli Öğün et *alii* (eds) Ulusal Arkeolojik Araştımalar Sempozyumu. Anadolu/Anatolia, pp. 123-140.

Kadıoğlu, M., Görkay, K. and Mitchell, S. (2011). Roman Ancyra. Istanbul.

Karagiorgou, O. (2009). "Mapping trade by the amphora." In Mundell Mango, M. (ed.) Byzantine Trade, 4th-12th Centuries: The Archaeology of Local, Regional and International Exchange. Farnham, Surrey, pp. 37-58.

Kassab Tezgör, D. (1998). "Prospection sous-marine près de la côte sinopéenne. Transport d'amphores depuis l'atelier et navigation en mer Noire." Anatolia Antiqua, vol. 6, pp. 443-449.

Kassab Tezgör, D. and Touma, M. (2001). "Amphores exportées de mer Niore en Syrie du nord." Anatolia Antiqua, vol. 9, pp. 105-115.

Katsari, C. (2012). "Table of Coins by Reign." In Özme, A. Katsari, C., and Lightfoot, C. S. (eds.) The Amorium Mint and the Coin Finds. Amorium Reports 4. Berlin, p. 98.

Kautzsch, K. (1936). Kapitellstudien. Beiträge zu einer Geschichte des Spätantiken Kapitells im Osten vom vierten bis ins siebente Jahrhundert. Berlin.

Kelp, U. (2013). "Grave monuments and local identities in Roman Phrygia." In Thonemann, P. (ed.) Roman Phrygia: Culture and Society. Oxford, pp. 70-94.

Keser-Kayaalp, E. and Erdoğan, N. (2017) "Recent Research on Dara/Anastasiopolis." In Rizos, E. (ed.) New cities in Late Antiquity. Documents and Archaeology. Paris, pp. 153-175.

Kingsley, S. and Decker, M. (2001). "New Rome, New Theories on Inter-Regional Exchange. An Introduction to the East Mediterranean Economy in Late Antiquity." In Kingsley, S. and Decker, M. (eds) Economy and Exchange in the East Mediterranean during Late Antiquity: Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999. Oxford, pp. 1-27.

Kingsley, S.A. (2003). "Late antique trade: Research methodologies & field practices." In Lavan, L. and Bowden, W. (eds) Theory and Practice in Late Antique Archaeology, Late Antique Archaeology 1. Leiden, pp. 113-38.

Klinkott, M. (2001). Die Byzantinischen Befestigungsanlagen Von Pergamon Mit Ihrer Wehr-Und Baugeschichte. Berlin.

Koder, J. (2012). "Regional Networks in Asia Minor during the Middle Byzantine Period, Seventh-Eleventh Centuries: An Approach." In Morrisson, C. (ed.) Trade and Markets in Byzantium. Washington, DC, pp. 147-176.

Koenigs, K. (2015). Der Athenatempel von Priene. Wiesbaden.

Kolb, F. (2008). Burg – Polis – Bischofssitz: Geschichte der Siedlungskammer von Kyaneai in der Südwesttürkei. Mainz.

Krause, J.U. and Witschel, C. (eds) (2006). Die Stadt in Der Spätantike: Niedergang Oder Wandel Akten des Internationalen Kolloquiums in München Am 30. Und 31. Mai 2003. Stuttgart.

Krautheimer, R. (1986). Early Christian and Byzantine Architecture. New Haven.

Krsmanovic, D. (in press). "The Excavations of Ghent University at Pessinus – A Conspectus of the Work by Pieter Lambrechts (1967–73) and John Devreker (1986–2008)." In Tsetskhladze, G.R. (ed.) Pessinus vol. 1, Colloquia Antiqua 22. Leiden, pp. 373-378, pp. 465-568.

Küncü, C. (2015). Evaluations on Roman Period fine wares obtained from Ankara colonnaded street excavations. Unpublished M.A. Thesis. Ankara, Gazi University.

Ladstätter, S. and Sauer, R. (2005). "Late Roman C-Ware und lokale spätantike Feinware aus Ephesos." In Krinzinger, K. (ed.) Spätantike und mittelalterliche Keramik aus Ephesos. Wien, pp. 143-201.

Coates-Stephens, R. (2003). "Attitudes to *spolia* in some Late Antique texts." In Lavan, L and Bowden, W. (ed.) Theory and Practice in Late Antique Archaeology. Leiden, pp. 339-358.

Lavan, L. (2009). "What killed the ancient city? Chronology, causation and trace of continuity." Journal of Roman Archaeology, vol. 22, p. 803–812.

Lavan, L. (2008). "The Monumental Streets of Sagalassos in Late Antiquity: An Interpretative Study." In Ballet, P., Dieudonné-Glad, N. and Saliou, C. (eds) La rue dans l'Antiquité. Rennes, pp. 201-214.

Lavan, L. (ed.) (2001). Recent Research in Late-Antique Urbanism, Journal of Roman Archaeology Supplement 42. Portsmouth, R.I.

Liebeschuetz, J.H.W.G. (2001). The Decline and Fall of the Roman City. Oxford.

Lightfoot, C.S. (2017). (ed.) Amorium Reports 5. A Catalogue of Roman and Byzantine Stone Inscriptions from Amorium and its Territory, together with Graffiti, Stamps, and Miscellanea. Istanbul.

Lightfoot, C.S. (2017a). "Amorium." In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 333-341.

Lightfoot, C.S. (2016). "Christian Burials in a Pagan Context at Amorium." In Brandt, J.R., Hagelberg, E., Bjørnstad, G. and Ahrens, S. (eds) Life and death in Asia Minor in Hellenistic, Roman, and Byzantine times: studies in archaeology and bioarchaeology. Oxford, pp. 188-195.

Lightfoot, C.S. and Ivison, E.A. (eds) (2012). Amorium Reports. 3, The Lower City Enclosure: Find Reports and Technical Studies. Istanbul.

Lightfoot, C.S., Ivison, E. Şen, M. and Yaman, H. (2007). "Amorium Kazısı 2007." Kazı Sonuçları Toplantısı, vol. 30.1, pp. 201-226.

Lightfoot, C.S. and Lightfoot, M. (eds) (2007). Amorium: A Byzantine City in Anatolia. An Archaeological Guide. Istanbul.

Lightfoot, C.S. Arbel, Y., Ivison, E.A., Roberts, J.A. and Ioannidou, E. (2005). "The Amorium Project: Excavation and Research in 2002." In Dumbarton Oaks Papers, vol. 20, pp. 231-265.

Lightfoot, C.S. and Ivison, E.A. (2002). "The Trenches." In Gill, M.A.V. (ed.) Amorium Reports. Finds 1: the Glass (1987-1997). Oxford, pp. 1-13.

MacDonald, W. L. (1982). The Architecture of the Roman Empire. New Haven and London.

Madden, A. (in press). "Inventory of Church Architectural Stones at Pessinus." In Tsetskhladze, G.R. (ed.) Pessinus vol. 2, Colloquia Antiqua 22. Leiden.

Mayer, E. (2018). "The Plateia of Pessinus." In Tsetskhladze, G.R. (ed.) Pessinus vol. 1, Colloquia Antiqua 22. Leiden, pp. 373-378.

Magdalino, P. (2016). "Sixty Years of Research on the Byzantine City." In Gruber, E., Popović, M., Scheutz, M. and Weigl, H. (eds) Städte im lateinischen Westen und im griescischen Osten zwischen Spätantike und Früher Neuzeit. Wien, pp. 45-62.

Mamboury, E. (1933). Ankara, Guide touristique. Ankara.

Mango, M.M. (2011). "Monumentality versus Economic Vitality: was a balance struck in the Late Antique city?" In Proceedings of the 22nd International Congress of Byzantine Studies, Sofia 22-27 August 2011. Sofia, pp. 239-262.

Mango, C. (1986). "The pilgrimage centre of St Michael in Germia." Jahrbuch der Österreichischen Byzantinistik, vol. 36, pp. 117–32.

Mango, C. (1985). Byzantine Architecture. New York.

Mango, C. (1984). "St Michael and Attis." Deltion tes Christianikes Archaiologikes Hetaireias, vol 4.12, pp. 39–62.

Mango, C. (1978). "The date of the Studius basilica at Istanbul." Byzantine and Modern Greek Studies, vol. 4, pp. 115–22.

Maranzana, P. (in press). "Fortifications at Pessinus: A Window into the Creation of a Late Roman City." In Tsetskhladze, G.R. (ed.) Pessinus vol. 2, Colloquia Antiqua 22. Leiden.

Marek, C. (2016). In the land of a thousand gods: a history of Asia Minor in the ancient world. Princeton.

Marksteiner, T. (2004). "Der Bonda-Survey: Archäologische Feldforschungen auf dem Territorium der ostlykischen Polis Limyra." In Kolb, F. (ed.) Chora und Polis. München, pp. 271-290.

Matthews, R. (2011). "A History of the Preclassical Archaeology of Anatolia." In McMahon, G. and Steadman, S. (eds.) The Oxford Handbook of Ancient Anatolia: (10,000-323 BCE). Oxford, pp. 35-62.

Matthews, R. and Glatz, C. (2009). At Empires' Edge. Project Paphlagonia: Regional Survey in North- Central Turkey. British Institute at Ankara Monograph 44. Ankara.

McCormick, M. (2015). "Tracking mass death during the fall of Rome's empire (I)." Journal of Roman Archaeology, vol. 28, pp. 325-357.

McLynn, N. (2006). "Curiales *into Churchmen*: The Case of Gregory Nazianzen." In Lizzi Testa, R. (ed.) Le trasformazioni delle elites in etá tardoantica. Perugia, pp. 277-296.

Meyza, H. (2007). Nea Paphos 5. Cypriot Red Slip Ware. Studies on a Late Roman Levantine Fine Ware. Warsaw.

Miller, K. (1916). Itineraria romana. Stuttgart.

Mitchell, S. and French, D. (2012). The Greek and Latin inscriptions of Ankara (Ancyra). Munich.

Mitchell, S. (1993). Anatolia: Land, Men, and Gods in Asia Minor. Oxford.

Mitchell, S. (1974). "Blucium and Peium: the Galatian forts of King Deiotarus." Anatolian Studies, vol. 24, pp. 61-75.

Momigliano, A. (1980). La Caduta senza rumore di un Impero nel 475 D.C. Napoli.

Mondin, C. (in press). "Pottery from the Pessinus Excavations." In Tsetskhladze, G.R. (ed.) Pessinus vol. 2, Colloquia Antiqua 22. Leiden.

Morrisson, C. (ed.) (2012). Trade and Markets in Byzantium. Washington, DC.

Mfiller, D. (1994). "Von Kritalla nach Doriskos." In Istanbuler Mitteilungen, vol. 44. Istanbul, pp. 17-38.

Müth, S., Laufer, E. and Brasse, C. (2016). "Symbolische Funktionen." In Müth, S., Schneider, P.I., Schnelle, M. and De Staebler, P.D. (eds) Ancient Fortifications. A compendium of Theory and Practice. Oxford, pp. 126-159.

Niewöhner, P. (2017). "Introduction." In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 1-8.

Niewöhner, P. (2017a). "Urbanism." In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 39-59.

Niewöhner, P. (2017b). "Germia." In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 342-348.

Niewöhner, P. (2016). "The End of the Byzantine City in Anatolia. The Case of Miletus." In Gruber, E. *et alii* (eds.) Städte im lateinischen Westen und im griechischen Osten zwischen

Spätantike und früher Neuzeit. Topographie-Recht-Religion (9.-19. Jahrhundert), Veröffentlichungen des Instituts für Österreichische Geschichtsforschung, vol. 66. Wien, pp. 63-77.

Niewöhner, P. (2016a). "The Byzantine Settlement History of Milteus and its Hinterland-Quantitative Aspects: Stratigraphy, Pottery, Anthropology, Coins, and Palynology." Archäologischer Anzeiger, vol. 2, pp. 225-290.

Niewöhner, P. (2013). "Phrygian marble and stone masonry as markers of regional distinctiveness in Late Antiquity." In Thonemann, P. (ed.) Roman Phrygia: Culture and Society. Oxford, pp. 215-248.

Niewöhner, P. (2007). Aizanoi, Dokimion und Anatolien. Stand und Land, Siedlung- und Steinmetzwesen vom späteren 4. bis ins 6. Jh n. Chr. Wiesbaden.

Niewöhner, P. (2007a). "Archaölogie und die "Dunklen Jahrhunderte" im Byzantinischen Anatolien." In Henning, J. (ed.) Post-Roman Towns, Trade, and Settlement in Europe and Byzantium, vol. 2. Berlin and New York, pp. 119-157.

Niewöhner, P. (2006). "Aizanoi and Anatolia. Town and Countryside in the Late Late Antiquity." Millennium, vol. 3, pp. 239-253.

Niewöhner, P. *et alii* (2013). "Bronze Age höyüks, Iron Age hilltop forts, Roman poleis and Byzantine pilgrimage in Germia and its vicinity. 'Connectivity' and a lack of 'definite places' on the central Anatolian high plateau." Anatolian Studies, vol. 63, pp. 97-136.

Niewöhner, P. *et alii* (2013a) "Neue spät- und nachantike Monumente von Milet und der mittelbyzantinische Zerfall des anatolischen Städtewesens." Archäologischer Anzeiger, vol. 2, pp. 165-233.

Noordegraaf, C. (1938). "A Geographical Papyrus." In Mnemosyne, vol. 6, pp. 273-310.

Omura, S. (2007). "Preliminary Report of the General Survey of Central Anatolia." Anatolian Archaeology Studies, vol. 16, pp. 45-92.

Ossi, A. and Harrington, M. (2011). "Pisidian Antioch: the urban infrastructure and its development." In Gazda, E.K. and Ng, D.Y. (eds) Building a New Rome: The Roman Colony of Pisidian Antioch (25 BC - 300 AD). Ann Arbor, pp. 11-32.

Ousterhout, R.G. (1989). "Review of Foss, C. and Winfield, D. Byzantine Fortifications: An Introduction." Journal of the Society of Architectural Historians, vol. 48, pp. 182-183.

Özme, A. Katsari, C., and Lightfoot, C. S. (eds.) The Amorium Mint and the Coin Finds. Amorium Reports 4. Berlin.

Özand, E. (1967). Ankara Şehri Su Tesisleri. Ankara.

Parrish, D. and Abbasoğlu, H. (eds) (2001). Urbanism in Western Asia Minor: New Studies on

Aphrodisias, Ephesos, Hierapolis, Pergamon, Perge and Xanthos. Journal of Roman Archaeology Supplement 45. Portsmouth, R.I.

Perrot, G., Guillaume, E. and Delbert, J. (1862). Exploration archéologique de la Galatie et de la Bithynie d'une partie de la Mysie, de la Phrygie, de la Cappadoce et du Pont: exécutée en 1861 et publiée, vol. 1. Paris.

Peschlow, U. (2017). "Ankara." In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 349-360.

Peschlow, U (2017a). "Nicaea." In Niewöhner, P. (ed.) The archaeology of Byzantine Anatolia. Oxford, pp. 203-216.

Peschlow, U. (2015). Ankara: die bauarchäologischen Hinterlassenschaften aus römischer und byzantinischer Zeit. Wien.

Pieri, D. (2012). "Regional and interregional exchanges in the eastern Mediterranean during the early Byzantine period: The evidence of amphorae." In Morrisson, C. (ed.) Trade and Markets in Byzantium. Washington, DC, pp. 27-50.

Pieri, D. (2007). "Les centres de production d'amphores en Méditerranée orientale durant l'Antiquité tardive: quelques remarques." In Bonifay, M. and Tréglia, J.-C. (eds.) LRCW 2: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean: Archaeology and Archaeometry, vol. 2, British Archaeological Reports International Series 1662. Oxford, pp. 611-626.

Pieri, D. (2007a). "Béryte dans le grand commerce méditerranéen. Production et importation d'amphores de la fouille du Centre ville de Beyrouth Bey 002. Étude préliminaire." In Sartre, M. (ed.) Productions et échanges dans la Syrie gréco-romaine. Actes du 2e colloque international sur la Syrie antique (Tours, 12-13 juin 2003), Topoï supplement 8. Lyon, pp. 297-327.

Poblome, J., Talloen, P., and Kaptijn, E. (2017), "Sagalassos." In Niewöhner, P. (ed.) The Archaeology of Byzantine Anatolia. Oxford, pp. 302-311.

Pobleme, J. and Fırat, N. (2011). "Late Roman D. A Matter of Open(ing) or Closed Horizons." In Cau, M.A., Reynolds, P. and Bonifay, M. (eds) LRFW 1. Late Roman Fine Ware; Solving Problems of Typology and Chronology. Oxford, pp. 49-55.

Ramsey, W. M. (1890). The historical geography of Asia Minor. London.

Ratté, C. (forthcoming). The Agora of Aphrodisias. Final Reports 7. Mainz.

Ratté, C. (2001). "New research on the urban development of Aphrodisias in Late Antiquity." In Parrish, D. and Abbasoğlu, H. (eds) Urbanism in Western Asia Minor: New Studies on Aphrodisias, Ephesos, Hierapolis, Pergamon, Perge and Xanthos. Journal of Roman Archaeology Supplement 45. Portsmouth, R.I, pp. 117-133.

Ratté, C. and De Staebler, P.D. (eds) (2012). Aphrodisias 5: The Aphrodisias Regional Survey. Mainz.

Rautman, M. (2011). "Sardis in Late Antiquity." In Dally, O. and Ratté, C. (eds) Archaeology and the Cities of Asia Minor in Late Antiquity, Kelsey Museum Publication 6. Ann Arbor, pp. 1-26.

Radt, W. (2011). Pergamon. Geschichte und Bauten einer antiken Metropole. Darmstadt.

Radt, W. (2001). "The Urban Development of Pergamon." In Parrish, D. and Abbasoğlu, H. (eds) Urbanism in Western Asia Minor: New Studies on Aphrodisias, Ephesos, Hierapolis, Pergamon, Perge and Xanthos, Journal of Roman Archaeology Supplement 45. Portsmouth, R.I., pp. 43-56.

Reynolds, P. (2005). "Levantine Amphorae from Cilicia to Gaza: A Typology and Analysis of Regional Production Trends from 1st to 7th Centuries." In Esparraguera, J.M.G., Buxeda Garrigós, J. and Cau Ontiveros, M.A. (eds) LCRW I. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry, British Archaeological Reports, vol. 1340. Oxford, pp. 563-611.

Rheidt, K. (2010). Aizanoi und Anatolien: neue Entdeckungen zur Geschichte und Archäologie im Hochland des westlichen Kleinasien. Mainz.

Rheidt, K. (2008). "Aizanoi in hellenistischer Zeit." In Schwertheim, E. and Winter, E. (eds) Neue Funde und Forschungen in Phrygien, Asia Minor Studien 61. Bonn, pp. 107-122.

Rheidt, K. (2001). Die Stadtgrabung 2. Die byzantinische Wohnstadt. Berlin.

Rizos, E. (2017). "New cities and new urban ideals, AD 250-350." In Rizos, E. (ed.) New cities in Late Antiquity. Documents and Archaeology. Paris, pp. 19-38.

Roberts, N., Cassis, M., Doonan, O., Eastwood, W., Elton, H., Haldon, J., Izdebski, A. and Newhard, J. (2018). "Not the End of the World? Post-Classical Decline and Recovery in Rural Anatolia." Human Ecology: An Interdisciplinary Journal, vol. 46.

Roller, L.E. (2011). "Phrygian and the Phrygians." In McMahon, G. and Steadman, S. (eds) The Oxford Handbook of Ancient Anatolia: (10,000-323 BCE). Oxford, pp. 561-578.

Rose, B. (2011. "Troy and the Granicus River Valley in Late Antiquity." In Dally, O. and Ratté, C. (eds) Archaeology and the Cities of Asia Minor in Late Antiquity, Kelsey Museum Publication 6. Ann Arbor, pp. 151-171.

Rumscheid, F. (1999). "Mylasas Verteidigung: Burgen statt Stadtmauer?" In Schwandner, E.L. and Rheidt, K. (eds) Stadt und Umland, DiskAB 7. Mainz, pp. 206–222.

Sanders, G.D.R. (1999). "A Late Roman Bath at Corinth: Excavations in the Panayia Field, 1995-1996." In Hesperia: The Journal of the American School of Classical Studies at Athens, Vol. 68, No. 4. Athens, pp. 441-480.

Saradi, H. (2006). The Byzantine City in the Sixth Century. Literary Images and Historical

Realty. Athens.

Scherrer, P. and Trinkl, E. (2006). Die Tetragonos Agora in Ephesos. Grabungsergebnisse von archaischer bis byzantinischer Zeit- ein Überblick. Befunde Klassischer Zeit, Ephesus 13, 2. Wien.

Scherrer, P. (2001). "The historical topography of Ephesus." In Parrish, D. and Abbasoğlu, H. (eds) Urbanism in Western Asia Minor: New Studies on Aphrodisias, Ephesos, Hierapolis, Pergamon, Perge and Xanthos. Journal of Roman Archaeology Supplement 45. Portsmouth, R.I., pp. 57-87.

Schmidt, A. (in press). "Pessinus: Advanced GPR Processing 2010–11. A Geophysical Survey Report." In Tsetskhladze, G.R. (ed.) Pessinus vol. 2, Colloquia Antiqua 22. Leiden.

Serin, U. (2014). "Bizans Akarası ve Kaybolan bir Kültür Mirası: 'St Clement' Kilisesi." METU Journal of the Faculty of Architecture, vol. 31.2, pp. 65-92.

Serin, U. (2011). "Late Antique and Byzantine Ankara: Topography and Architecture." In Brandt, O. and Pergola, Ph. (eds) Marmoribus vestitia. Miscellanea in onore di F. Giudobaldi, Studi di Antichitá Romana 63. Stato Vaticano, pp. 271-312.

Serin, U. (1998). "La Cittadella di Ankara dopo De Jerphanion." Mélanges de l'École française de Rome, vol. 110-2, pp. 953-970.

Sirks, B. (1991). Food for Rome: The Legal Structure of Transportation and Processing of Supplies for Imperial Distributions in Rome and Constantinople. Amsterdam.

Sivas, T.T. (2003). "Wine Presses of Western Phrygia." In Ancient West and East, vol. 2. Leiden, pp. 1-18.

Squatriti, P. (2014). "The vegetative Mediterranean." In Horden, P. and Kinoshita, S. (eds) A Companion to Mediterranean History. Blackwell, pp. 26-41.

Steskal, M. and La Torre, M. (2008). Das Vediusgymnasium in Ephesos. Archäologie und Baubefund. (Ephesus 14, 1). Wien.

Stoops, G. (1984). "The environment physiography of Pessinus in function of the study of the archaeological stratigraphy and the natural building material." In Devreker, J. and Waelkens, M. (eds) Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge, pp. 38-50.

Strobel, K. (2007). "Ist das phrygische Kulturzentrum der Matar mit dem hellenistischen und römischen Pessinus identisch? Zur Geographie des Tempelstaates von Pessinus." In Orbis Terrarum 9, pp. 207–228.

Strobel, K. (2002). "State Formation by the Galatians in Asia Minor. Politico-historical and cultural processes in Hellenistic Central Anatolia." Anatolica, vol. 28, pp. 1-46.

Strobel, K. (2000). Die Galater II, Untersuchungen zur Geschichte und historischen Geographie des hellenistischen und römischen Kleinasien II. Berlin.

Strobel, K. (1996). Die Galater. Geschichte und Eigenart der keltischen Staatenbildung auf dem Boden des hellenistischen Kleinasien I, Untersuchungen zur Geschichte und historischen Geographie des hellenistischen und römischen Kleinasien I. Berlin.

Strubbe, J. H. M. (2005). The Inscriptions of Pessinous. Bonn.

Talbert, R.J.A. (2017). Roman portable sundials: the empire in your hand. New York.

Talloen, P. and Vercauteren, L. (2011). "The fate of temples in Late Antique Anatolia." In Lavan, L. and Mulryan, M. (eds) The Archaeology of Late Antique Paganism, Late Antique Archaeology Series 7. Leiden, pp. 347-389.

Temizer, R. (ed.) Gesellschaft zur Förderung von Tourismus, Antiquitäten und Museen. Ankara

Texier, C. (1839). Description de l'Asia Mineure faite par ordre du gouvernement français de 1833 à 1837: Beaux-arts, monuments historiques, plans et topographie des cités antiques I. Paris.

Thoen, H. (2003). "Burial Goods." In Devreker, J., Thoen, H. and Vermeulen, F. (eds) Excavations in Pessinus: The So-Called Acropolis. From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 59-116.

Thoen, H. (2003a). "The Finds." In Devreker, J. Thoen, H. and Vermeulen, F. (eds) Excavations in Pessinus: The So-Called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 364-369.

Thoen, H. (2002). "Dating the Temple Area: the evidence of the finds." Anatolia Antiqua, vol. 10, pp. 145-154.

Tsetskhladze, G.R. (2013). "Pessinus in Central Anatolia: New Investigations." In Bru, H. and Labarre, G. (eds) L'Anatolie Des Peuples, Des Cités et Des Cultures: IIe Millénaire Av. J.-C.-Ve Ap. J.-C.: Colloque International de Besançon, 26-27 Novembre 2010. Besançon, pp. 41-80.

Tsetskhladze, G.R. (2009). "Notes on Phrygian Pessinus." In Saglamtimur, H. Abay, E. Derin, Z. Erdem, A.Ü. Batmaz, A. Dedeogly, F. Erdalkiran, M. Bastrük, M.B. and Konakci, E. (eds) Studies in Honour of Altan Cilingiroglu: A Life Dedicated to Urartu on the Shores of the Upper Sea. Istanbul, pp. 703-717.

Tsetskhladze, G.R. *et alii*. (2012). "Appendix 1. Pessinus in Phrygia: brief preliminary report of the 2010 field season." In Tsetskhladze, G.R., Erguen Laflı, E., Hargrave, J. and Anderson, W. (eds) The Black Sea, Paphlagonia, Pontus and Phrygia in antiquity : aspects of archaeology and ancient history, British Archaeological Reports International Series 2432. Oxford, pp. 294-327.

Tsetskhladze, G.R. *et alii*. (2012a). "Appendix 2. Pessinus in Phrygia: brief preliminary report of the 2011 field season." In Tsetskhladze, G.R., Erguen Laflı, E., Hargrave, J. and Anderson, W. (eds) The Black Sea, Paphlagonia, Pontus and Phrygia in antiquity : aspects of archaeology and ancient history, British Archaeological Reports International Series 2432. Oxford, pp. 329-356.

Tuna, N. (2007). "Research and Excavations at the Phrygian Necropolis in Ankara." In Sivas, H. and Sivas, T.T. (eds) Friglerin Gizemli Uygarlığı (The Mysterious Civilization of the Phrygians). İstanbul, pp. 99–113.

Varinlioğlu, G. (2013). "Rural habitat in the hinterland of Seleucia ad Calycadnum during late antiquity." In Hoff, M.C. and Townsend, R.F. (eds.) Rough Cilicia: New Historical and Archaeological Approaches. Oxford, pp. 199-209.

Van Dam, R. (2008). The Roman Revolution of Constantine. Cambridge.

Vanhaverbeke, H., Martens, F., Waelkens, M. and Pobleme, J. (2003). "Late Antiquity in the territory of Sagalassos." In Bowden, W., Lavan, L. and Machado, C. (eds) Recent Research on the Late Antique Countryside, Late Antique Archaeology Series 2. Leiden, pp. 247-290.

Vanhaverbeke, H. (2003). The Chora of Sagalassos: The Evolution of the Settlement Pattern from Prehistory until Recent Times. Turnhout.

Vardar L. & Vardar N. A., (1997), "Galatia Bölgesi Kaleleri/Yerlesmeleri Yüzey Arastırması: Ankara _li 1996." Arastırma Sonuçları Toplantısı, vol. 15.1, pp. 245-264.

Veikou, M. (2010). "Urban or rural? Theoretical remarks on the settlement patterns in Byzantine Epirus (7^{th}-11^{th} centuries)." Byzantinische Zeitschrift, vol. 103, pp. 171-193.

Veikou, M. (2009). "Rural towns and in-between or third spaces. Settlement patterns in Byzantine Epirus (7^{th}-11^{th} c.) from an interdisciplinary approach." Archeologia Medievale, vol. 36, pp. 43-56.

Verlinde, A. (2015). The Roman Sanctuary Site at Pessinus: From Phrygian to Byzantine Times. Leuvan.

Verlinde, A. (2010). "Monumental Architecture in Hellenistic and Julio-Claudian." BABESCH, Annual Papers on Mediterranean Archaeology, vol. 85, p. 111-139.

Vermoere, M. (2004). Holocene Vegetation Dynamics in the territory of Sagalassos (Southwest Turkey). A Palynological Approach. Turnhout.

Vermuleun, F. Devreker, J. and Demulder, G. (1998). "Urban developments of Early Byzantine Pessinus (Asia Minor)." Acta Traditionalis Archaeologiae Christianae, III. Vatican City-Split, pp. 787-796.

Vermeulen, F. (2003.) "Funerary and burial practice." In Devreker, J. Thoen, H. and Vermeulen, F. (eds) Excavations in Pessinus: The So-called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 39-59.

Vermeulen, F. (2003a.) "The Byzantine Fortress." In Devreker, J. Thoen, H. and Vermeulen, F. (eds) Excavations in Pessinus: The So-called Acropolis: From Hellenistic and Roman Cemetery to Byzantine Castle. Ghent, pp. 347-382.

Virgilio, B. (1981). Il "Tempio Stato" di Pessinunte fra Pergamo e Roma nel II-I secolo a.C.. Pisa.

Von Gerkan, A. (1935). Milet II 3: Ergebnisse der Ausgrabungen und Untersuchungen seit dem Jahre 1899. Berlin.

Vroom, J. (2006). "Some Byzantine Pottery Finds from Kaman-Kalehöyük." Anatolian Archaeological Studies, vol. 15, pp. 163-169.

Vroom, J. (2005). Byzantine to Modern Pottery in the Aegean: An Introduction and Field Guide. Utrecht.

Waelkens, M. (1971). "Pessinounte and et le Gallos." Byzantion, vol. 41, pp. 349-373.

Waelkens, M. (1986). "The Imperial Sanctuary at Pessinus: Epigraphical and Numismatic Evidence for its Date and Identification." Epigraphica Anatolica, vol. 7, pp. 37-72.

Waelkens, M. (1984). "La nécropole de l'est (Nécropole A)." In Devreker, J. and Waelkens, M. (eds) Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge, pp. 55-74.

Waelkens, M. (1984a). "Le système d'endiguement du torrent." In Devreker, J. and Waelkens, M. (eds) Les fouilles de la Rijksuniversiteit te Gent a Pessinonte, 1967-1973. Brugge, pp. 77-141.

Waldner, A. and Ladstätter, S., (2014). "Ephesus: local vs. import: The Early Byzantine fine ware." In Meyza, H. and Domżalski, K. (eds) Late Hellenistic to Mediaeval fine wares of the Aegean Coast of Anatolia their Production, Imitation and Use. Warsaw, pp. 49-58.

Waldner, A. (2013). "Pottery from the Roman settlement near Dutlu and a Byzantine monastery at Yeni Pınar." In Niewöhner, P. *et alii*, "Bronze Age höyüks, Iron Age hilltop forts, Roman poleis and Byzantine pilgrimage in Germia and its vicinity. 'Connectivity' and a lack of 'definite places' on the central Anatolian high plateau." Anatolian Studies, vol. 63, pp. 104-105.

Walker, J.T. (2003). "The Tahirler Project (Beypazarı Province) Preliminary Report for 2001 Season." Arastırma Sonuçları Toplantısı, vol. 21.2, pp. 101-110.

Ward Perkins, B. (2013). "Land, Labour and Settlement." In Cameron, A., Ward-Perkins, B., and Whitby, M. (eds) The Cambridge Ancient History. Cambridge, pp. 315-346.

Whittow, M. (1990). "Ruling the Late Roman and Early Byzantine City: A Continuous History." Past and Present, vol. 129, pp. 3-29.

Yegül, F.K. (1992). Bath and Bathing in Classical Antiquity. Cambridge, MA.

Young, S. (2018). "Pessinus in the 2nd century AD: A Monumental City with an Elusive City Plan." In Tsetskhladze, G.R. (ed.) Pessinus vol. 1, Colloquia Antiqua 22. Leiden, pp. 379-428.

Zanini, E. (2016). "Coming to an end: Early Byzantine Cities after the mid-6th c." In Proceedings of the 23rd International Congress of Byzantine Studies Belgrade, 22–27 August 2016. Belgrade, pp. 127-141.

Zanini, E. (2003). "The urban ideal and urban planning in Byzantine new cities of the sixth century AD." Late Antiquity Archaeology, vol. 1, pp. 196-223.

Zuiderhoek, A. (2009). The Politics of Munificence in the Roman Empire. Cambridge.