Amorium in the Byzantine Dark Ages
(seventh to ninth centuries)

ERIC A. IVISON

In a pioneering article published in 1959, the great Byzantinist George Ostrogorsky remarked that, “[a]mong the fundamental problems of Byzantine history it would be hard to name one that has been studied less than has that of the cities”. Scholarship since 1959 has not neglected the subject of the Byzantine city and has access to considerably more sources. Nonetheless, the nature of urban life in medieval Byzantium remains a topic of controversy in Byzantine studies. This is especially true when considering the Byzantine cities of Asia Minor during the so-called ‘Dark Ages’ of the seventh to ninth centuries. The pioneering works of Clive Foss were the first to document much new evidence and combined the study of texts, historical geography and archaeology to produce histories of individual cities. Other historians such as Cyril Mango, Michael Angold, Wolfram Brandes, and John F. Haldon have created broader historical syntheses, seeking to use archaeological data with a more nuanced study of Byzantine texts. Key questions raised by these studies include the functions of cities, the causes of growth and decline, the urban economy and the nature of daily life, and even whether some settlements can be regarded as ‘urban’ or ‘cities’ at all. Given the continuing paucity of written sources it is to archaeological fieldwork, and specifically excavation, that future scholars must turn to expand the base of Byzantine urban history.

This paper is a contribution to this debate and will discuss aspects of the development and economy of the Anatolian city of Amorium during the period of the so-called Byzantine Dark Ages (seventh to ninth centuries). The Byzantine site of Amorium is located in the ancient region of Phrygia in Central Western Turkey, some 168 km south west of the modern capital of Ankara (Fig. 1). Historical sources attest that medieval Amorium was a major military and administrative center during this period, becoming

1 Ostrogorsky 1959, 47.
2 Foss 1976; idem 1977a, 27-87; idem 1989. For Foss’ thesis concerning the role of the Persians in the collapse of the cities in the early seventh century, see Foss 1975, 721-47; idem 1977b, 469-86. For a critique of Foss’ thesis, see Russell 2001, 41-71; see also Whittow 1996, 89-95 and notes.
the headquarters of the military district or theme of Anatolikon in the mid seventh century. Amorium thus played an important role in the events of the Dark Ages and was fortunate in its associations with a number of emperors. Two strategoi launched their successful bids for the throne from Amorium – Leo III in 717 and Leo V the Armenian in 813. A native of Amorium was emperor Michael II (820-829) who founded the Amorian dynasty (820-867). Constantine V sought refuge at Amorium from the usurpation of Artavasdus (742-743) where he drew upon the dynastic loyalty of troops based there to recapture the imperial throne. Anatolikon was also the flash point for a number of army revolts in the course of the seventh and eighth centuries. Due to its importance the city was the object of repeated Arab invasions and raids, notably for the years 644, 646, 666/667, 669/670, 707, 715/716, 779, and 796. The history of Dark Age Amorium came to an end with the sack and destruction of the city on August 12, 838 by the armies of the Abbasid Caliph al-Mu‘tasim after a siege of twelve days.\footnote{Brandes 1989, 133-135 with notes. Historical data on Amorium has been summarized by Belke/Restle 1984, 122-125, and by Lightfoot/Ivison 2002, 1-3.} This was not
the end of Byzantine *Amorium*, however, since a new city was to rise upon the ruins of its predecessor during the middle Byzantine period.

The first European traveler to visit and identify *Amorium* was William J. Hamilton in 1836, who later described the site as a ruin-field strewn with “fallen buildings” and substantial ruins, one of which he identified as a church. The founding of the village of Hisarköy in 1892 considerably speeded the robbing of these remains for construction, and consequently few significant ruins stand above ground today. But despite these modern deprivations, the outlines of buildings and streets are visible on the surface, and the medieval archaeology beneath remains well preserved to a depth of several meters. Unlike other important Byzantine sites, most of *Amorium* is not buried beneath modern occupation. The modern village of Hisarköy occupies only a small portion at the center of the site, which now has legally protected status as an archaeological reserve. *Amorium* therefore is one of the few places in Turkey where systematic excavations can be conducted to explore a thematic capital, thus making it a key site for the study of Byzantine urbanism. It was with these specific goals that excavations and survey began in 1987, 2004 being the seventeenth season at *Amorium*.

Before discussing the archaeological evidence from *Amorium* one must acknowledge that the excavations are ongoing and therefore new discoveries can and no doubt will change our current understanding. Indeed, part of the discussion below is based upon the most recent discoveries of the 2001-2004 seasons, the publication of which is still forthcoming. One must echo the cautious words of Wolfram Brandes that “… experience shows that data are often received and accepted too hastily, and without critical appraisal of what superficially looks like clear evidence”. This is especially true of the use of preliminary reports, which by their very nature trace the evolving knowledge of a site season by season. Historians can be all too eager to mine provisional data from such publications, despite the fact that later reports may offer radically revised interpretations. As this essay will show, scholarly understanding of Dark Age *Amorium* itself is a case in point. One must also appreciate that *Amorium* is a large site – the so-called Lower City alone comprises some 75 hectares. Under such circumstances a sampling strategy was adopted to target promising and representative areas considered critical for the history of the site. Thus although the excavations constitute only portions of the entire urban area, these strategic interventions, combined with intensive field survey, do

5 Hamilton 1842, 448-455.
6 I am grateful to my colleague, Dr. Christopher S. Lightfoot, the Director of the Amorium Excavations Project, for the opportunity to publish this paper and for the many fascinating years we have spent contemplating the ruins of *Amorium*. We would also like to thank the Turkish authorities for supporting the Amorium Project and in particular, to acknowledge an enormous debt of gratitude to the Directorate of Antiquities in Ankara and the staff of the Afyon Museum.
permit interesting observations on patterns of urban development between the seventh and ninth centuries. The Amorium Excavations Project has been publishing preliminary reports and scholarly articles since 1988, and two volumes of the final publication have recently appeared (2002 and 2003). Such publications will make more materials available to the scholarly community and will inevitably continue to shape our understanding of medieval Amorium. Thus although this paper cannot represent the final word on Dark Age Amorium, it can at least serve as a prolegomenon for discussion. This essay therefore presents an overview of relevant findings to date (2004) and proposes a conceptual framework through which to view Dark Age Amorium, so that its development can be related to the other cities of the Byzantine world. To these ends, I will focus on three aspects that I propose characterize the development of Amorium during the Dark Ages. First, I will examine continuity in the form of the late antique/early Byzantine fabric of the city; I will then turn to processes of change, adaptation, and urban evolution; finally I will discuss evidence of discontinuity. Throughout my paper I will emphasize the importance of the imperial government in preserving and stimulating urban life. Let us now consider the historical and social context of Dark Age Amorium before turning to the archaeological evidence.

State and society at Dark Age Amorium

The contraction of the imperial frontiers to the Taurus and Anti-Taurus ranges and the exposure of Anatolia to Arab invasion had a profound impact upon the life and development of Dark Age Amorium. The most important consequence was the withdrawal of the field army of the magister militum per Orientem from northern Syria and Mesopotamia and its settlement in Southern Central Anatolia. In Greek speaking Asia Minor this army of Oriens was translated into that of Anatolikon, and the Greek term thema (army) was soon applied to the entire region where it was based. The exact year when Amorium became the headquarters of the Anatolic thema remains unknown, but it must have occurred in the mid seventh century, following the withdrawal of the armies to Anatolia in the late 630s and the 640s. Amorium’s new role as a significant base of operations appears to be implied by the importance attached to its capture by Arab

8 Lightfoot/Ivison 2002, v, 5-6 (the history of the Project, sampling strategies, and methods of excavation and recording).
10 Haldon 1999b, 73-77; idem 1997, 113, 216.
armies, who began targeting the city in 644.\textsuperscript{11} The first clear reference to a formalized command structure of Anatolikon dates to 669/670.\textsuperscript{12}

Recent scholarship has emphasized the crucial role of the state in the survival and development of cities during the upheavals of the Dark Ages, and Amorium was no exception.\textsuperscript{13} In the late sixth and early seventh centuries Amorium appears to have been a civilian settlement with a social profile typical of many cities in Western Asia Minor. When St Theodore of Sykeon visited Amorium around 600 the most important persons were the illustri or landed ‘notables’ (local aristocrats who dominated the city’s public affairs) and the bishop. Theodore stayed at the suburban residence of the illustri Anastasius outside the city, where the saint healed the son of the illustri John in a private chapel of the Theotokos. Theodore was escorted into Amorium by a religious procession of the clergy and people and was invited to celebrate the liturgy in the cathedral by the bishop.\textsuperscript{14} The arrival of imperial administrators and the military commander or strategos and his staff in the mid. seventh century must have transformed the existing social hierarchy of the city, a process that was accelerated by the events of the Dark Ages. The repeated invasions and instability of the seventh and eighth centuries favored the militarization of provincial governance and by the later eighth century the civilian administration was being absorbed into the military command structure. By the mid ninth century, the strategos had assumed the powers of a military governor in charge of civil defense and administration and overseeing tax collecting and juridical matters, who was responsible only to the emperor himself. The strategos was assisted in this work by three senior officers or tourmarchai (sing. tourmaches) who commanded the three tourmai (sing. tourma) or army divisions of the thema. A lower tier of junior officers called drouggarioi led smaller subdivisions within each tourma termed drouggoi.\textsuperscript{15} It was 42 of these senior officers, the patrikioi, who were taken for ransom and later martyred following the fall of Amorium to the Arabs in 838. Accounts of the fall of the city and the Acta of the 42 Martyrs name some of the most notable, namely the strategos Aëtius, Theodore Krateros, Bassoes, Theophilos the patrikios and Constantine the drouggarios.\textsuperscript{16}

By reason of their positions and powers these patrikioi must have dominated the life of Amorium. One should expect that buildings were constructed or adapted for the use of the thematic administration in Amorium, although no such structures have yet been

\textsuperscript{11} Brandes 1989, 53-54, 133-34.
\textsuperscript{12} Haldon 1999b, 86.
\textsuperscript{13} For example Haldon/Kennedy 1980, 92-94; Ivison 2000, 1-46.
\textsuperscript{14} Vie de Théodore de Sykeon, §107 and No. 16. On the roles of the ‘notables’ in the cities of the sixth and early seventh centuries, see Liebeschuetz 2001, 110-120.
\textsuperscript{15} Haldon 1999b, 112-114. On the debate over the origins, organization and development of the themes, see also Haldon 1997, 208-253; idem 1993 1-67, esp. 2-11, and Whittow 1996, 96-133.
\textsuperscript{16} Theophanes Continuatus, 126; Acta martyr. Amor. 202-219; see also the discussion in Bury 1912, 267, No. 3, and 271, No. 3.
identified. Building inscriptions from other Byzantine sites make it clear that the construction and maintenance of city fortifications were one of the chief responsibilities of a thematic strategos and his senior staff. These building works would be carried out by troops or by imposing a corvée on the local population. Neglect of these responsibilities by the patrikios and strategos Aëtius in the summer of 838 was a major factor in the fall of Amorium to the Arabs. An inscription from nearby Sivrihisar, located some 50 km to the north of Amorium, shows that thematic patrikioi also acted as private patrons in the region. The inscription records the embellishment of a church of the Theotokos by one “Aëtius, the protospatharios and strategos of the Anatolics and his wife Ampelia …”, who has been identified with the strategos who conducted the unsuccessful defense of Amorium in 838. In this regard, Aëtius was following the pious example of the imperial family and other members of the ruling élite throughout the Empire. The actions of military officers and other thematic officials towards private patronage and the acquisition of landed property at Amorium should therefore not be excluded.

Members of the clergy, led by the bishop, would have constituted the other influential group in Dark Age Amorium. Amorium was a bishopric, rising in status from a suffragan see of Pessinus at the start of the seventh century to an autokephalos archbishopric by the early ninth century. Although never rivaling imperial officials in terms of power, Byzantine bishops were notable figures in urban society, promoting the imperial establishment and serving as local representatives. During the 838 siege, for example, the chronicler Michael the Syrian (twelfth century) records that the strategos Aëtius sent the bishop with three military officers on an embassy to Caliph al-Mu’tasim to negotiate for the safety of the inhabitants of Amorium if the city surrendered. In addition to pastoral work and politics one should expect that the bishopric also played a role in the local economy through its properties.

To date, at least four major churches have been identified at Amorium: the so-called Lower City Church, which is discussed below, and three unexcavated churches: two in the Lower City, and another church on the Upper City. It is yet uncertain whether any of these buildings can be conclusively identified as the cathedral, and further churches and chapels may yet await discovery. The pedestal of a monumental column discovered at the site of the Lower City Church bears an inscription dated to the sixth century that sheds
further light upon ecclesiastical arrangements at Amorium. The monument was dedicated to the martyr saint Konon and mentions a bishop Markos (presumably of Amorium) and one Christophoros, the hegoumenos or abbot of a monastery. This monastery was presumably located at or near Amorium although we have no indication of its location or dedication.26

Soldiers would have been a familiar sight in the streets of Amorium, and must have made up a significant portion of the population. Although originally these soldiers had come from Northern Syria and Mesopotamia, in the course of the eighth century thematic troops became increasingly localized as soldiers put down roots and came to be recruited locally. By the ninth century thematic forces had evolved into two major categories. The best trained thematic forces were salaried, standing troops that probably served as garrisons in forts and cities throughout the theme. The larger category consisted of part-time militia recruited locally that would muster for campaigns and were supplied largely in kind.27 The number of soldiers that formed the permanent garrison at Amorium itself must remain speculative, but according to Theophanes Confessor the future emperor Leo III defended the city against an Arab attack in 715/716 with only 800 troops. It remains open to question whether such purported numbers could adequately defend the 3 km of the Lower City Walls.28 Seasonal fluctuations of troop numbers should also be expected in response to the campaigning season and Arab attacks. From the mid eighth century élite tagmatic forces would accompany the emperor on campaign, and during the crisis of 838 three tagmatic regiments helped to defend the city.29 The presence of large numbers of troops would have served as a strong stimulus to the local economy in terms of goods and services requisitioned locally and by soldiers spending their pay.30 The billeting of troops may also have prompted the construction of military facilities such as barracks, stables, armories, and storehouses.

Less is known about the civilian population of Amorium during the Dark Ages, and numerical estimates in medieval sources must be treated with extreme caution. The Byzantine source Theophanes Continuatus, writing in the tenth century, reported that 70,000 were killed in the sack of Amorium in 838, whereas the Arab chronicler Masʿudi (c 896-956) reported that 30,000 perished. The Arab historian al-Tabari (838-923) informs us that 6,000 male captives were killed on the return march to Samarra.31 Although these figures give some idea of the magnitude of the event in the minds of

26 Anatolian Studies 42, 1992, 211, pl. XLVIII (a). To date, two other hegoumenoi of Amorium are known, suggesting that the monastery continued to function through the Dark Ages. See Prosopography of the Byzantine Empire I: entries for Elias 29 (seventh century) and Theodoros 96 (dated 787).
27 Haldon 1999b, 122-123; idem 1993.
29 Haldon 1999b, 77-78; Lightfoot 1998b, 61-62.
31 Theophanes Continuatus, 130; al-Masʿudi, 119 [1255]. Treadgold 1988, 444-45, No. 415, proposed a population for Amorium of 30,000 based upon these figures.
these authors, such numbers are inevitably prone to exaggeration and no great reliance should be placed upon them. One should also consider that the city’s population could fluctuate during Arab raids, either because the inhabitants of the locality sought refuge at *Amorium*, or due to the evacuation of non-combatants, as during the siege of 715/716. Whatever its true size, the civilian population of *Amorium* was certainly diverse enough to support a significant Jewish community and Christian heretical groups. Jews were apparently well established in the city, but we know little of the life of the community and no archaeological traces have yet come to light. Orthodox Christian writers closely associated the *Amorium* Jews with the heretical movement of the Athinganoi, the latter being regarded as the most notorious inhabitants of the region. The actual practices of the Athinganoi are difficult to reconstruct due to the deliberate conflation of their practices with other heresies by Orthodox authors. They were portrayed as a Judaizing group who adopted levitical codes of purity, kept a dual Sabbath and practiced astral magic. Emperor Nicephorus I (802-811) who came from Phrygia, and the Amorian emperor Michael II (820-829), were accused by hostile historians of being pro-Jewish or even crypto-Athinganoi by reason of their origins. Due to his provincial roots, Michael II was also depicted as an illiterate peasant unfit for the imperial office. According to Theophanes Continuatus:

> However, Michael [II] was well versed in his own pursuits: that is to say, he could tell of a litter of pigs which would grow up healthy and strong, and *vice versa*. He knew how to stand up close to a kicking horse, and to get out of the way of the heels of a kicking donkey. He was an excellent judge of a mule, and could tell you which was the better for a baggage-animal and which for a rider. He could distinguish between speed and stamina in a war-horse, and say which of your cows and sheep would be best for breeding or supplying milk .... Such were the tastes of his youth and age, and on these he prided himself in no small degree.

Such *ad hominem* attacks should be treated with skepticism, but they do suggest that *Amorium* enjoyed the popular reputation at Constantinople of a city that produced either spiritual deviants or country bumpkins. In fact, as the quotation of Theophanes Continuatus suggests, it seems likely that many of the inhabitants of *Amorium* were employed in supplying the thematic forces with livestock and agricultural produce, although archaeological evidence discussed below also indicates the presence of small-scale manufacturing.

---

32 Theophanes Confessor, 538-540, No. 386-391
35 Theophanes Continuatus, 43-44; English translation in Jenkins 1966, 140.
Rise to thematic capital: Amorium’s advantages

The historical record does not document the reasons for Amorium’s selection as a thematic headquarters, but like other sites, the answers must derive in part from the advantages offered by the city’s location and facilities. In terms of communications, Amorium was located at a strategic nexus of highways; the road to the northwest leads to Dorylaeum (modern Eskişehir), Nicaea (İzniğ), and so on to Constantinople; it continued in a south-easterly direction to Iconium (Konya) and thence to the Cilician Gates. Another road connected Amorium with Pessinus (Ballıhisar) and Ancyra (Ankara), and so on to Cappadocia and the east, while other routes led to Akroinon (Afyon) and thence to the Aegean coastal cities (Fig. 1).36 The location of Amorium astride these roads, especially those connecting the imperial capital with the new frontiers of the Caliphate along the Taurus mountains, can hardly have escaped the attention of military planners, and this fact is reflected in the documented movements of Arab armies and imperial forces. The landscape around Amorium also offered strategic advantages for its defenders (Fig. 2). The vicinity is characterized by low, rolling hills, cut by streams feeding the ancient Sangarius (modern Sakarya). As any modern visitor can attest, this

topography serves to conceal *Amorium*, the site of which only becomes visible within the last few kilometers. Conversely, the site of *Amorium* affords excellent views of the surrounding countryside in all directions, and on clear days up to a distance of 50 km away. The mountain range of the Emirdağları to the south also served to shield the city. Field surveys have discovered the ruins of small Byzantine towers in the mountains that could have served as advance warning stations for the city in the plain below. The Emirdağları mountains also served as a occasional refuge for the city’s inhabitants: Theophanes Confessor records that in 715/716 the *strategos* Leo (later emperor Leo III) sent non-combatants (largely women and children) together with the bishop to the mountains for safety during an Arab siege.\(^37\) A good water-supply and stockpiles of food and other materials were essential for a successful defense during such Arab attacks, and for the needs of the thematic troops. Byzantine *Amorium* was blessed with plentiful supplies of fresh water drawn from a water table some 8.50 m beneath the modern ground surface. Excavation shows that wells supplied the city’s needs during the medieval period.\(^38\) The inhabitants also had easy access to good food supplies from the fertile fields of the surrounding countryside. *Amorium* is situated at an elevation of c 925-945 m above sea level, and so shares the same climate and temperature as the rest of the Anatolian plateau, with cold, snowy winters and hot, arid summers. Floral and faunal remains excavated at the site reveal the presence of cereal crops such as barley, together with vegetables and fruits, as well as livestock such as cattle, sheep, goats, and other animals.\(^39\) Archaeological data and contemporary practice at modern Hisarköy suggest that conditions at Byzantine *Amorium* must have resembled those described by bishop Leo, metropolitan of *Synnada*, writing in the late tenth century:

> You see, we do not produce olive oil; this is something we have in common with all the residents of the *Anatolikon* theme. Our land does not yield wine because of the high altitude and the short growing season. Instead of wood, we use *zarzakon*, which is really dung that has been processed, a thoroughly disgusting and smelly business. All the other requisites for the healthy or infirm we solicit from the *Thrakesion* theme, from *Attaleia*, and from the capital itself.\(^40\)

Beyond the advantages endowed by nature, another major factor in the rise of *Amorium* must have been the impressive legacy of constructions that had expanded the city in Late Antiquity. Until the upheavals of the seventh century, *Amorium* does not appear to have been an imperial administrative center of much consequence. Ancient *Amorium* probably

---

38 Lightfoot/Ivison 2002, 1, 9.
40 *Leo Correspondence*, 68-71, No. 43.
lies beneath the mound or hüyük now designated the Upper City, which stands testimony to centuries of human occupation (Fig. 3). Recent survey suggests that the civic center of the Roman city may have stood at the foot of the southern slope of the mound in the area termed the Lower City, on the saddle where the modern village of Hisarköy now stands. Fragments of architecture indicate the existence of classical public buildings and civic shrines under the early Empire, as well as the growth of an extensive extramural necropolis. A major change in Amorium’s fortunes occurred in the later fifth and sixth centuries however, when the city was greatly extended and endowed with new public buildings. Excavations at the so-called Lower City Walls, the Lower City Church, the Large Building, a bathhouse and its surrounding district beneath the middle Byzantine structure termed the Enclosure have revealed evidence for this expansion (Fig. 3). These discoveries lend weight to the word of the later Byzantine historian Kedrenos, who states that Amorium was ‘built’ (ἐκτίσθη) by the emperor Zeno (474-491). Interestingly, an Arab tradition ascribes its construction to his successor the emperor Anastasius I (491-518). Archaelogical evidence discussed below further demonstrates that all of these structures were maintained through the Dark Ages into the early ninth century.

41 Kedrenos I, 615. For the Arab sources, see Belke/Restle 1984, 123, and No. 9-11.
A new set of defensive walls, the Lower City Walls, were constructed to the south and east of the Upper City and the old Roman city, thus increasing the size of the so-called Lower City to 75 hectares (Fig. 3). Within this circuit a new street system must also have been laid out or extended, along with entire new quarters of the city. The construction of these new fortifications was a massive undertaking, running for some 3 km and built *de novo*. The builders shrewdly took advantage of the topography, siting the defensive wall itself in the more defensible position on the crests of the low hills surrounding the Lower City, and utilizing seasonal *wadis* and earth dug ditches as a fosse below the walls. The wall was strengthened by circular and polygonal towers (remains of over 20 have been located by survey so far), and was pierced by at least four major gates flanked by towers. Excavations in Trench AB on the southern stretch of the circuit have revealed one of the city gates flanked by triangular towers (Figs. 3.1 and 4). At its footings, the mortared rubble core of the Wall was faced with courses of massive limestone blocks. Smaller courses of brick and stone blocks alternated above (Fig. 5). Dendrochronological evidence from Trench AB on the Lower City Walls provides a *terminus post quem* for construction of 487 CE, while comparable fortifications in the Roman East suggest a date in the later fifth to early sixth centuries.42 These rela-

---

tively new and state-of-the-art defenses must have been a decisive factor in the choice of Amorium as a thematic headquarters.

A similar date can also be proposed for the construction of the Christian basilica designated the Lower City Church (Figs. 3 and 6). The basilica was built in the same manner as the Lower City Walls, utilizing large ashlars for the lower courses, above which were courses of smaller stone blocks probably alternating with bands of brick. Recent study shows that the basilica and a connected ecclesiastical complex were initially built in one phase (‘Phase I’). Pottery from the foundations, the plan, and the interior decorations of the basilica indicate a construction date in the later fifth and early sixth centuries. A similar construction technique and dating has also been proposed for the so-called Large Building in the south sector of the Lower City. Only a small part of this structure has been excavated, and although its function remains unclear, it seems likely that it formed part of a more extensive complex, possibly of a public or official nature.

Since 2000 excavations beneath the middle Byzantine fortification termed the Enclosure has revealed a bathhouse and its surrounding district (Fig. 3). The bathhouse was built in one phase, consisting of a polygonal entrance hall or *apodyterium* (designated Structure 3, Fig. 7A) that led to a rectangular block (Structure 1) containing the bathing chambers (Fig. 7). The architecture and pottery from the foundation levels indicate a date in the sixth century for its construction, and attest to the splendor of its original form. The *apodyterium* was vaulted, with half domes over the recessed niches flanking a barrel-vaulted ambulatory. Six marble columns with basket capitals probably supported a shallow dome at center. The interior walls were sheathed with marble revetment, some of which was imported from Greece, including Thessalian

44 Lightfoot/Ivison 2002, 11, figs D-E; Anatolian Studies 39, 1989, 171-172 and pls XLVI (a-b) and XLVIII (a) showing a sixth century Ionic impost capital.
verde antico and marmor lacedaimonium from Laconia. The rooms of the bathhouse proper were similarly decorated, although as we shall see, these decorations were subject to extensive renovation during the eighth century. Given the urban context of the Amorium bathhouse there seems little reason to doubt that it was a public establishment. Although of small size compared with the great public thermae of earlier centuries, the Amorium bathhouse compares well with our knowledge of the smaller public baths of the sixth century.45

The late antique framework of public buildings, streets, and public and private spaces formed the grid within which the Dark Age city developed. In this respect Amorium follows a pattern observed at other cities of comparable rank and size.

---

during the Dark Ages. For example, the late antique city walls of Thessaloniki, its Roman grid and public spaces, and the city’s great Christian basilicas, such as those of Saint Demetrius and the Mother of God (modern Acheiropoitos), remained a dominating presence, shaping the development of the medieval city.\textsuperscript{46} Nicaea became the thematic capital of Opsikion, no doubt in part because of its inheritance of mighty city walls.\textsuperscript{47} And like Nicaea and Constantinople, the city walls of Amorium were clearly not deemed too extensive to be defended. In this light, perhaps we should consider that the large spaces such cities enclosed offered positive advantages for the imperial authorities and the inhabitants. Only portions of the Lower City at Amorium have been excavated so far, and so one cannot yet say whether all the area was intensively occupied. The model of Constantinople may offer a working hypothesis, however, by suggesting that unoccupied areas in Amorium, especially near the city walls, could have been utilized for market gardens, water storage, and cemeteries.\textsuperscript{48}

\textsuperscript{46} On medieval Thessaloniki, see the essay by Charalambos Bakirtzis in this volume; for the city walls, see Gounaris 1982, 13-15; for the basilica of Saint Demetrius, see Bakirtzis 1988.

\textsuperscript{47} Foss/Winfield 1986, 80, 100-102, 113.

\textsuperscript{48} Mango 1980, 76, and Mango 1990, 56-60.
The urban fabric in the Dark Ages: repairs, recycling and adaptation

The maintenance of older structures such as city walls and churches was of vital concern to the imperial authorities during the Dark Ages. These buildings were crucial bulwarks, defending against the enemy, be it the Arabs or demonic forces. These structures helped to preserve the state and its inhabitants, but also served ideological purposes, reminding the emperor’s subjects and his enemies of the power and majesty of the Empire.49 Excavations at Amorium have found evidence for the maintenance of such critical structures in the forms of the Lower City Walls, and the basilica of the Lower City Church.

The excavations at Trench AB prove that the Lower City Walls were in use and maintained through the Dark Ages up into the ninth century. This evidence lends new credibility to the Arab accounts of Amorium which emphasize the strength of the fortifications.50 The ninth century Arab geographer Ibn-Khordâdhbeh specifically mentions the height of the circuit wall, 44 towers and the presence of a moat, features that approximate to the Lower City Walls.51 Trench AB on the western stretch of the Lower City Walls exposed a gateway and associated street, with flanking triangular towers, as well as Dark Age occupation adjacent to the curtain wall later buried beneath domestic structures of the late tenth and eleventh centuries (Figs. 4 and 5). Excavation revealed that the massive curtain wall at Trench AB had been strengthened sometime between the sixth and ninth centuries with the addition of an inner skin and the construction of an forecourt to shield the gateway from attack. Occupation layers excavated within the basement of the south triangular tower also offer insights on the uses of such towers during the Dark Ages. The lowest occupation layers show that the basement was used as a refuse dump and latrine by the defenders. Large numbers of rodent skeletons were found in this organic layer, together with pottery of the sixth and first half of the seventh centuries. After this date, the basement was made serviceable by laying a fresh earth floor which was then strewn with straw.52 Despite such efforts to keep the walls in repair, the Arab historian al-Tabari records that erosion of the elements and poor maintenance were to blame for the weakness of a stretch of the walls targeted during the 838 siege. The wall failed and Amorium fell, suggesting that decrepitude and neglect were also characteristics of even vital structures of the Dark Age city.53

The Lower City Basilica was a major monument of the city, forming part of a larger complex of rooms and buildings that extend to the north and south (Fig. 6). The western part of the complex appears to be supported by an artificial terrace, while the

49 Ivison 2000.
50 Contra the comments by Brandes 1999, 38-40.
51 Ibn-Khordâdhbeh, vi, 77-80.
site commands an elevated position in the Lower City. This basilica was in use for over 300 years through the Dark Ages until its complete destruction by fire. During the Dark Age period efforts were made to keep the structure in repair. At both western and eastern ends of the nave arcades buttresses were constructed, artfully inserted between the pilasters and the adjacent column. Unlike the original walls, these buttresses were built of *spolia*, bonded with brick courses and timber lacing. As a result, painted wall plaster was sandwiched behind these constructions. These buttresses must have served to strengthen the arcades at their weakest points, a fact that is suggestive of ravages of old age. The persistence of such older church buildings through the Byzantine centuries, which were often subject to alteration and addition, links *Amorium* with Hagia Sophia at *Nicaea*, the basilicas of Thessaloniki, and the Cuman’in Camii at *Attaleia* (Antalya), and the many churches of Constantinople. 54

It would appear that the events of the seventh century did lead to some reorganization of urban space at *Amorium* however. Two of the most profound transformations were the fortification of the ancient mound, creating an inner citadel or Upper City, and the destruction and abandonment of the Roman extramural cemeteries. At present one can only speculate on the nature of occupation on the ancient mound of the Upper City before the seventh century (Fig. 3). Perhaps pagan shrines were located on this high place, but in any case, such cults must have been suppressed in the Christian *Amorium* of the fifth and sixth centuries. The surface remains of a late antique basilica on the Upper City would appear to confirm this supposition. 55 At the southern foot of the mound the walls and massive vaults of a major early Roman structure are visible, most probably of a civic complex. 56 The function and appearance of the Upper City was drastically altered by the construction of a new fortification encircling the top of the mound. Excavations in Trenches L and ST revealed remnants of this defensive wall containing large quantities of Roman *spolia*, particularly pagan funerary stelai. The *spolia* foundations of this wall can also be traced around the edges of the mound where erosion has exposed the blocks. Only the lowest courses of this first fortification have survived since the rest had been robbed away and backfilled before the construction of a later, middle Byzantine *enceinte* of quite different character. 57 Excavations in Trench L also revealed some structures (‘Phase 2’) associated with these *spolia* fortifications. A paved street east of the *spolia* wall has been assigned to the same general period, together with two rooms flanking a passage leading to a courtyard (Fig. 8). These structures also made extensive use of *spolia* gravestones. The fortification of the mound thus divided

54 Ivison 2000, 8, 19, 22-23 and No. 42-46; on Constantinople, see the *Vita Basilii*, 192-194 (Theophanes Continuatus, V, 321ff.).
Fig. 8. Plan of Upper City Trench L, 1990, ‘Phase 2’
Amorium into two zones – an Upper City or inner citadel, and a Lower or residential City. The stratigraphic level of the spolia fortification and the buildings in Trench L places these features well below the middle Byzantine strata of the tenth and eleventh centuries that sealed its remains. Given this terminus ante quem, it seems reasonable to assign these structures to the Dark Ages of the seventh to ninth centuries. The extensive use of spolia in the Upper City fortification (which are not found in constructions of the fifth and sixth centuries at Amorium) may also be directly compared with those at Ancyra, Sardis, and Ayasoluk at Ephesus, all of which have been assigned to the seventh or eighth century. On this basis, C.S. Lightfoot plausibly proposed a Dark Age date and function for the new wall:

The division of a number of Byzantine thematic cities into an upper and lower city would certainly suggest the application of some kind of zoning, perhaps in response to the needs of government. Further excavation is needed to clarify the nature of the Dark Age occupation on the Upper City, and to determine whether this citadel had a special function within the city, such as sheltering the offices of the thematic administration.

To judge from the very broken state of the small number of Roman sculptures and inscriptions found in medieval levels at Amorium it would appear that little sentiment was attached to visible remnants of the pagan past. Pagan temples, defunct civic structures, and abandoned pagan cemeteries were demolished at many sites in the Byzantine world in order to furnish stone for churches and fortifications during the seventh to ninth centuries. At Nicaea, for example, the Roman theater was amongst the structures stripped of its stones to restore the walls after the damaging Arab attack of 727. The same is true of the citadel walls of Ancyra. Amorium would seem to fit this pattern of recycling the older, redundant structures of the city to repair and change the urban fabric. The reuse of pagan tomb stelai in the fortifications of the Upper City clearly indicates the abandonment of the extramural cemeteries and the retreat of activity within the Lower City Walls (Fig. 3). This deduction is confirmed by survey: the

58 Lightfoot/Ivison 2002, 15-16, fig. J.
60 Lightfoot 1998b, 64-65.
62 Foss/Winfield 1986, 100, 133-37, 272, figs 28-29, 288-289, figs 11-12; Foss 2003, 252.
latest material from extramural suburbs dates to the early seventh century. Even the Christian extramural cemeteries were abandoned: the latest object from a tomb outside the west gate was a ‘Syracuse type’ belt buckle dating to the early seventh century.\(^{63}\) No cemeteries of the Dark Age have yet been discovered at Amorium, but it seems likely that burial had become associated with intramural churches, as has been documented at many other sites.

A short distance from the Lower City Basilica complex is the excavation area here termed the bathhouse district, which has provided important evidence of continuity and change in Dark Age Amorium (Fig. 3).\(^{64}\) On the southern side of the bathhouse there appears to have been a large courtyard, flanked by large buildings of the fifth to sixth centuries to the west and south. A street may be postulated to the east, facing the main entrance on that side. The bathhouse itself (Trench XC) apparently functioned through the seventh and first half of the eighth century, but underwent major changes in the later eighth century (see Fig. 7 for plan showing designated rooms). Upon excavation, the apodyterium (room A) was found to have been stripped to the bare masonry of all its marble fittings, even to the removal of pavements and water basins (Fig. 9). The shell of the apodyterium was then made inaccessible by walling up the doorways from the outside, and the connecting doorway into the bathhouse proper (Fig. 7). The interior was then apparently abandoned to decay and eventual collapse; the columns were found fallen over the stripped floors, surrounded by accumulations of rubbish and rubble (Fig. 10).\(^{65}\) Below these deposits and at the very bottom of a robbed water basin

---

63 Lightfoot 1998a, 303-304; idem 1998b, 60; Lightfoot/Ivison 2002, 7, 18; Anatolian Studies 46, 1996, 97-102, figs 3-6.


in the west niche were found a small group of coins, one of which could be identified as a class 2 follis of Leo IV, dated 778-780.\textsuperscript{66} This coin suggests a date for the robbing and abandonment of the apodyterium in the second half of the eighth century. The interior arrangement of the adjacent bathhouse rooms does not appear to have been altered during the seventh and eighth centuries. Instead, the rooms show careful repairs and adaptations. Some of the brick pilae of the hypocausts in the caldarium and tepidarium were supplemented and replaced by spolia blocks and reused terracotta waterpipes (Fig. 11). A replacement arch in the hot air flue between room L and the praefurnium was constructed of sixth century spolia, while further spolia were used to buttress the north-west corner of the building (Fig. 12).\textsuperscript{67} These repairs could have been piecemeal, implemented when necessary. Coins in the ash heaps of the praefur-

\textsuperscript{66} SF4500 identified by C.S. Lightfoot: AE follis, class 2 of Leo IV, dated 778-780; 24-22 mm; 4.40 g, 6h.

\textsuperscript{67} Dumbarton Oaks Papers 59, 2005, Trench XC and figs 3-6 of pilae and spolia (forthcoming); 25 Kazı Sonuçları Toplantısı, 1 (Ankara 2004), 2, 9, Res. 1-2, and 10-11, Res. 4-5.
nium (Constans II, dated c. 651/2), and the interior rooms (Michael II, dated 821-29) indicate that the bathhouse operated from the seventh through early ninth centuries.⁶⁸ A major renovation of the bathhouse appears to have taken place at the same time as the apodyterium was being stripped and abandoned in the late eighth century. This was proven by evidence that marble revetment slabs lining the interior of the bathhouse had originally decorated the apodyterium next door. A number of these revetment and floor slabs fitted settings preserved in the apodyterium and had clearly been carefully removed whilst still intact. Others had been cut down and sometimes reversed for use in the suspended pavements.⁶⁹ The installations found in Room La suggest that it served as a latrine (Fig. 7). Like elsewhere in the Byzantine world, however, the Amorium bath was not supplied by piped water in this period. A well was found in the V(estibule) room and so water must have been dispensed in buckets (Fig. 7). It therefore appears that the Dark Age inhabitants of Amorium continued to bathe like their ancestors, a fact corroborated for other cities by written sources.⁷⁰

The environs of the bathhouse were also the scene of considerable activity between the seventh to early ninth centuries.⁷¹ These contexts have been associated with a surprising number of coins from the period, including occupation layers excavated during the 2004 season containing copper alloy issues of Constans II (641-668) and Leo III (717-741). Excavation has shown that the open area to the south and west of the bathhouse was gradually filled in by smaller structures, constructed from spolia, cobble

---

⁶⁸ Constans II, dated c. 651/2, SF4462 identified by C.S. Lightfoot: AE follis, type 5; 25-18.5mm; 41.3 g; Michael II, dated 821-29, SF4182. Dumbarton Oaks Papers 58, 2004, 360 and No. 27, forthcoming.
⁷⁰ Bouras 2002, 525-526 with references.
Fig. 13. The bathhouse district: view of Structure 2 (foreground) looking north to the bath complex beyond (Structures 1 and 3).

Fig. 14. The bathhouse district: view looking southwest of stone troughs standing against ruined wall (foreground) with drain and Structure 2 beyond. Note the Enclosure Wall (left) crossing the Dark Age remains.
stones, and mud brick, in marked contrast to the surrounding monumental architecture of Late Antiquity. Structure 2, the most substantial building to the south west of the bathhouse, was gradually subdivided with partition walls and floors and thresholds were raised over time (Fig. 13). More flimsy structures of cobble stones and mud brick were probably domestic housing and produced good quantities of plain and glazed tableware. The excellent stratigraphy of this area will make a notable contribution to the study of Byzantine pottery, currently being prepared by Prof. Dr. Beate Böhlendorf-Arslan (Onsekiz Mart University, Çanakkale, Turkey). A notable feature of the neighborhood is the presence of large numbers of shallow stone troughs, placed in lines beside walls, presumably fronting onto small courtyards and narrow alleys (Figs 14 and 15). These must have been supplied with water from wells discovered in the vicinity. Some units may have operated as small scale workshops. Fragments of glass cullet and waste indicate the presence nearby of a glass maker (Fig. 16). Overall then, the findings in the bathhouse district indicate a built-up urban environment supporting a range of public and private activities. It also suggests that occupation became denser over time, with the gradual filling in of older, monumental spaces, in favor of smaller subdivisions. Such activity raises questions of urban and demographic growth during the Dark Ages.
The end of Dark Age Amorium

The uncovering of dramatic evidence for the end of Dark Age Amorium is one of the most significant discoveries, since it links the different excavation areas and offers a datable horizon for the study of material culture. The use of the Lower City Walls came to an end with a catastrophic destruction and collapse caused by fire. This was evident from the massive jumble of masonry and charred beams found inside the interior of the triangular tower at Trench AB (Fig. 17). Mixed with this debris were coins, pottery of the eighth and ninth centuries (including brown glazed fragments) charred textile fragments, and ironwork, including several iron points of arrows and spears (Figs 18 and 19). Samples of ash produced a $^{14}$C date of c 800, while the latest coin (AE follis, SF1612) from the destruction dated to the years 829-830/831 of the emperor Theophilus. Excavation within the city immediately behind the curtain wall and tower in Trenches LC5-6 revealed similar fire-related destruction associated with coins of Nicephorus I (802-811) and Theophilus (dated 829/830). 72 The same destruction contained an important assemblage of pottery, still largely intact. These included globular cooking vessels and peculiar multi-handled jars. The interiors of these jars were made up of an inner and outer skin, much like a thermos flask, and were pierced at base and mouth with narrow holes (Figs 20 and 21). Despite many ingenious suggestions the function of these jars remains a mystery at present.73

Destruction layers like those encountered at AB and LC have also been excavated in the bathhouse district and again in association with coins of Theophilus and his immediate predecessors.74 An extensive destruction by fire was found in structures excavated in 2003-2004 to the south and west of the bathhouse. The severity of these fires could be gauged by the thickness of the ash layers and the charred remains of earth floors and stonework (Fig. 22). Evidence for the latest use of the bathhouse also dates to the early ninth century (coin of Michael II, dated 821-829, see above). However, substantial deposits of ash found in the hypocaust basements are accumulations resulting from heating the bath rather than evidence of a destruction. These layers were buried beneath debris resulting from the collapse of the suspended floors and upper walls of the bath after its abandonment.

---

74 Dumbarton Oaks Papers 59, 2005, “The Coins,” by C.S. Lightfoot, forthcoming. Sixteen copper alloy coins of Theophilus (829-842) had been found during the excavations up to the 2004 season. Coins from Trench XC include: SF4427, a decanummium of Constantine IV (668-685); SF4382, a follis of Justinian II (dated 705/6); SF4394, a follis of Constantine V (dated 751-769); SF4441, a follis of Nicephorus I (802-811); SF4421 and SF4386, two folles of Leo V (813-20); SF4361, a follis of Michael II (dated 821).
Fig. 17. Trench AB: destruction inside the triangular tower

Fig. 18. Trench AB: charred textiles recovered from the destruction in the triangular tower
Associated with the destruction layers excavated during the 2003 and 2004 seasons were considerable quantities of pottery, glassware, metalwork, and even human remains. The significance of these finds is considerable, given that little material culture of the early ninth century has been identified to date. Of exceptional interest was a copper alloy basin found in installations to the south of the bathhouse (Fig. 23). Also associated with the basin was a set of bone gaming pieces (Fig. 24). Another unusual find was a copper alloy weight inscribed with the words “Grace of God” (Χάρις Θεοῦ). On the burned floor of one room were found fragments of a dichroic glass vessel, partially melted by fire. Several fragments of dichroic glass have already been found at Amorium, and it can now be identified as a previously unattested type of Byzantine glass. This glass appears as a dull, opaque red fabric, but when viewed against the light it turns blue and purple. The pottery from these destructions is still being studied, but a jug from the bathhouse bears an inscription from Psalm 29:3: “… the voice of God upon the waters” (+ φωvή Κ(υρίo)υ επή τωv … [ύδάτωv]). Most of the pottery is made up of local plain wares, but there are also local glazed wares and fragments of Constantinopolitan White Wares. Some scattered human remains were also found in these destruction layers, offering a gruesome insight on the magnitude of the disaster.

The Lower City Basilica was also destroyed by fire. Badly charred sections of the walls were later hidden behind new walls and painted plaster when the church was reconstructed. Many fragments of the original marble furnishings, such as marble revetment and closure slabs, show signs of burning. The same is true of the fragments of Corinthian capitals from the nave arcades. These pieces were incorporated into the walls and floor beds of the new church that arose within the shell of the old basilica. Due to the clearance of debris in the process of reconstruction, no destruction layer has been excavated at the church. A *terminus ante quem* in the late ninth to early tenth century is provided by the proposed date for the reconstruction of the basilica as a domed, vaulted church. A date for the destruction of the basilica earlier in the ninth century is therefore likely.

---

75 Gill/Lightfoot 2002, 253-258.
All the areas I have discussed above experienced a definite dislocation following the end of the Dark Age period. The inhabitants of the tenth and eleventh centuries either had to undertake major reconstruction, as at the Lower City Basilica, or built their structures over the buried remains, often following a plan utterly contrary to that of the earlier urban layout. This is particularly evident in Trenches ST and L, where the later Middle Byzantine city wall buried Dark Age structures, and in the bathhouse district, where some of the earliest reoccupation can be associated with the reign of Nicephorus II Phokas (963-969). Here the huge trapezoidal fortification termed the Enclosure ran over

---

the buried Dark Age remains (Figs. 14, 22). Coin evidence dates the construction of the Enclosure to c 1000. At Trench AB the Lower City Wall was left a burned out ruin. Limited occupation here resumed in the eleventh century, with the quarrying of the circuit wall and the construction of a residence over its leveled remains.

One must always be careful in linking archaeological and historical events, especially evidence of destruction. But given the preponderance of dating evidence it does seem likely that some of these destructions represent the legacy of the sack of *Amorium* by the Arabs on August 12, 838, in the reign of the emperor Theophilus (829-842). The sack of *Amorium* is well recorded in Christian and Arab sources. Al-Tabari, writing some decades after the event, records the sack and burning of the city, including the burning of a church together with its defenders. Medieval Arab historians even record the tradition that doors from one of the city gates of *Amorium* were removed as spoils of war to Raqqa. The general population suffered massacre, the survivors being enslaved and deported to a miserable death. A select number of the most important captives were taken back to *Samarra* where they were executed in 845, becoming the 42 Martyrs of *Amorium*.

---

82 Russell 2001, 41-71 offers a case in point.
83 *al-Tabari*, 115-117 [1252-1255]; see also the account of *Michael the Syrian*, 99-101.
84 Bosworth/van Donzel/Heinrichs/Lecomte 1995, VIII, 411. Dr. Christopher S. Lightfoot and I are grateful to Dr. Marilyn Jenkins-Madina for bringing this reference to our attention.
Conclusions: Dark Age Amorium – continuity and change

The Arab attacks on Amorium recorded for the years 644, 646, 666 and 707 appear to have left little if no trace in the archaeological record found to date. The same is true of a brief Arab occupation of the city that apparently lasted for a few months in the year 666/67. Amorium resisted successfully the Arab siege of 715/16 thanks to the leadership of the future emperor Leo III, then the strategos of the Anatolic theme. Two further brief sieges by the Arabs in 779 and 796 were also successfully repulsed. It would therefore appear that the disruptions caused by these attacks were short-lived and that the development of Amorium continued largely unbroken through the Dark Age. The archaeological evidence gathered so far suggests an evolutionary process characterized by a mix of trends: the maintenance of important structures, the dismantling of those no longer needed; the adaptation and renovation of others; the recycling of building materials; the continuing importance of the late antique urban framework; the redevelopment of formerly public space. This picture suggests evolution and transformation rather than discontinuity. Rather, it was the sack of 838 that marked the end of an era, bringing about large scale destruction and abandonment. No coins have yet been found at Amorium from the reign of Michael III, and there is historical evidence to suggest that the site was left in ruins for at least a generation. Large scale reconstruction took

87 Brandes 1989, 59-60 (assigned to the years 669/670); Theophanes Confessor 490, No. 351, 353 (assigned to AD 666/667).
89 Belke/Restle 1984, 123.
90 Lightfoot 1998b, 66. The thematic headquarters was temporarily transferred to Marj al-Shahm (“Meadow of Fatness”). This site has been identified either as Germia, located to the north of Amorium (Brooks 1899, 31 and note; Brooks 1901, 70; Haldon/Kennedy 1980, 95), or more convincingly, as nearby Polybotus, the modern Bolvadin (Treadgold 1988, 304 and 445, No. 418).
place only later. Apart from the reconstruction of ruined churches like the Lower City Church, the middle Byzantine reoccupation did not seek a total restoration. The new fortified city that rose above the buried ruins was confined only to the former citadel (Fig. 3). The return of the Byzantines to Amorium marked a break with the Dark Age past, the ruins of which were quarried, built over, and forgotten.91

Perhaps the most important discovery at Amorium is the fact that the Lower City remained an integral part of the walled city until the Walls were breached in 838 (Fig. 3). In 1980 Cyril Mango, referring to the Upper City, wrote that the site of the Byzantine city of Amorium “was quite a small place”92. The evidence discussed in this essay corrects past assumptions about the extent of the fortified city of the Dark Ages.93 Dark Age Amorium was not confined solely to a kastron on the Upper City mound, but rather “[a]t little over 1 kilometer across, Amorium was a big city by medieval Byzantine standards”94. Another important realization is that Dark Age Amorium does share common trends of development with other cities of comparable rank, size and function. On this basis, I would contend that Dark Age Amorium should now be added to Wolfram Brandes’ list of “Städte mit relativer Kontinuität”, and be compared with cities such as Nicomedia, Nicaea, Smyrna, Attaleia, Selge, and Trebizond.95 Future excavations at such sites should target not only civilian occupation, but also seek to identify structures with military and administrative uses. The adoption of a comparative method may permit us to discern better the local and national forces that were shaping the Byzantine city during the Dark Ages. By doing so, a better conceptualization of urbanism might emerge that would permit Byzantine cities to be more usefully compared with their Western European and Islamic counterparts.

---

91 Ivison 2000, 13-18, 27.
92 Mango 1980, 72.
94 Mango 2002, 200; Crow/Hill 1995, 263, fig. 3, showing the plan of Amorium compared at the same scale with those of Ancyra, Amaseia, and other thematic centers, although the shaded zone of occupation only encompasses the Upper City.
Bibliography


Kedrenos: Georgius Cedrenus, Compendium historiarum 1, ed. I. Bekker (=Corpus scriptorum historiae Byzantinae 32), Bonnæ 1838.


Leo Correspondence: The Correspondence of Leo, Metropolitan of Synada and Syncellus. Greek text, translation and commentary by Martha Pollard Vinson, Washington, D.C. 1985.


